

David Schmittlein*John C Head III Dean, MIT Sloan School of Management*

David Schmittlein joined the MIT Sloan School of Management as John C Head III Dean in October 2007. His focus, since arriving on campus, has been to broaden MIT Sloan's global visibility, work with the faculty to create new high-quality management education programs, develop enhanced educational opportunities for current students, and develop and disseminate business knowledge that will make an impact and stand the test of time. He also has reached out to the many members of MIT's alumni community to gain their valuable insights into MIT Sloan and management education.

Prior to his appointment at MIT Sloan, Dean Schmittlein served on the faculty at the Wharton School of the University of Pennsylvania from 1980 until 2007. While at Wharton, he was the Ira A. Lipman Professor and Professor of Marketing. He also served as interim dean during July 2007 and as deputy dean from 2000 to 2007. In addition, he was chair of the editorial board for Wharton School Publishing.

Dean Schmittlein earned a PhD and an MPhil in business from Columbia University and a BA in mathematics from Brown University. His research assesses marketing processes and develops methods for improving marketing decisions. He is widely regarded for his work estimating the impact of a firm's marketing actions, designing market and survey research, and creating effective communication strategies.

Leonid Kogan, PhD '99*Nippon Telegraph & Telephone Professor of Management; Faculty Head, Finance Group, MIT Sloan School of Management*

Leonid Kogan is the Nippon Telegraph & Telephone Professor of Management and a Professor of Finance at the MIT Sloan School of Management. He currently serves as the Finance Group faculty head.

Prior to MIT Sloan, Kogan taught at the Wharton School of the University of Pennsylvania. During 2007–2008, he was a senior researcher at Lehman Brothers. His research interests include asset pricing theory, macro-finance, empirical asset pricing, and financial engineering. Kogan's recent research has focused on the links between economic activity of firms and their stock price behavior, the effects of investor heterogeneity on aggregate asset prices, and the computational aspects of option pricing and portfolio choice.

Kogan has published extensively in leading academic journals, including the *Journal of Finance*, the *Journal of Financial Economics*, the *Journal of Political Economy*, and *Operations Research*. He has won numerous professional awards, including the 1998 Lehman Brothers Fellowship for Research Excellence in Finance for his work on the asset pricing implications of investment irreversibility; the 2004 FAME Research Prize and the 2006 Smith Breeden Prize for his work on the price impact and survival of irrational traders; and the 2007 Crowell Memorial Prize for his work on output durability and stock returns. He is currently a research associate at the National Bureau of Economic Research.

Kogan holds an MSc in mechanics and applied mathematics from Moscow State University, a PhD in mechanics from Cornell University, and a PhD in finance from MIT.

Robert C. Merton, PhD '70*School of Management Distinguished Professor of Finance, MIT Sloan School of Management*

Robert C. Merton is the School of Management Distinguished Professor of Finance at the MIT Sloan School of Management, and the John and Natty McArthur University Professor Emeritus at Harvard University.

He was the George Fisher Baker Professor of Business Administration (1988–1998) and the John and Natty McArthur University Professor (1998–2010) at Harvard Business School. After earning a PhD in economics from MIT in 1970, Merton served on the finance faculty of the MIT Sloan School of Management until 1988, at which time he was the J.C. Penney Professor of Management. He is currently resident scientist at Dimensional Holdings, Inc., where he is the creator of Target Retirement Solution, a global integrated retirement-funding solution system.

Merton received the Alfred Nobel Memorial Prize in Economic Sciences in 1997 for a new method to determine the value of derivatives. He is past president of the American Finance Association, a member of the National Academy of Sciences, and a fellow of the American Academy of Arts and Sciences.

Merton is the author of *Continuous-Time Finance* and a coauthor of *Cases in Financial Engineering: Applied Studies of Financial Innovation*; *The Global Financial System: A Functional Perspective*; *Finance*; and *Financial Economics*.

He also has been recognized for translating finance science into practice. Merton received the inaugural Financial Engineer of the Year Award from the International Association for Quantitative Finance (formerly the International Association of Financial Engineers), which also elected him a Senior Fellow. He received the 2011 CME Group Melamed-Arditti Innovation Award and the 2013 WFE Award for Excellence from the World Federation of Exchanges. A Distinguished Fellow of the Institute for Quantitative Research in Finance ("Q Group") and a Fellow of the Financial Management Association, Merton received the Nicholas Molodovsky Award from the CFA Institute. He is a member of the Hall of Fame of the Fixed Income Analyst Society, *Risk* magazine, and *Derivatives Strategy* magazine. Merton received *Risk's* Lifetime Achievement Award for contributions to the field of risk management and the 2014 Lifetime Achievement Award from the Financial Intermediation Research Society.

His research focuses on finance theory, including lifecycle and retirement finance, optimal portfolio selection, capital asset pricing, pricing of derivative securities, credit risk, loan guarantees, financial innovation, the dynamics of institutional change, and improving the methods of measuring and managing macro-financial systemic risk.

Merton earned a BS in engineering mathematics from Columbia University, an MS in applied mathematics from California Institute of Technology, a PhD in economics from MIT, and honorary degrees from 19 universities.

Antoinette Schoar

Michael M. Koerner (1949) Professor of Entrepreneurship, MIT Sloan School of Management

Antoinette Schoar is the Michael M. Koerner (1949) Professor of Entrepreneurship and a Professor of Finance at the MIT Sloan School of Management.

An expert in corporate finance, entrepreneurship, and organizational economics, Schoar researches venture capital, entrepreneurial finance, corporate diversification, governance, and capital budgeting decisions in firms. She has received the Fellowship of the George J. Stigler Center, 1997–1999, and the ERP Doctoral Scholarship of the German Ministry of Trade, 1995–1997.

Schoar holds a diploma in economics from the University of Cologne, Germany, and a PhD in economics from the University of Chicago.

Mohamed A. El-Erian

Chief Economic Advisor, Allianz

Mohamed A. El-Erian is Chief Economic Advisor at Allianz, the corporate parent of PIMCO, where he formerly served as chief executive and co-chief investment officer. He is a columnist for Bloomberg View and a contributing editor at the Financial Times, and serves on several advisory committees and boards.

He first joined PIMCO in 1999 and was a senior member of PIMCO's Portfolio Management and Investment Strategy group. He rejoined the company at the end of 2007 after serving for two years as president and CEO of Harvard Management Company, the entity that manages Harvard's endowment and related accounts. Before coming to PIMCO, El-Erian was a managing director at Salomon Smith Barney/Citigroup in London, and before that he spent 15 years at the International Monetary Fund in Washington, D.C., where he served as deputy director before moving to the private sector.

El-Erian served as chair of President Barack Obama's Global Development Council from December 2012 to January 2017. He has published widely on international economic and finance topics. His 2008 book, *When Markets Collide*, was a *New York Times* and *Wall Street Journal* bestseller, won the Financial Times/Goldman Sachs Business Book of the Year award, and was named a book of the year by The Economist and one of the best business books of all time by the

Independent (UK). He was named to *Foreign Policy's* list of "Top 100 Global Thinkers" for four years in a row. Since 2014, he has been serving on the jury for the *Financial Times/McKinsey* Book of the Year award. His most recent book, published in January 2016, *The Only Game in Town: Central Banks, Instability, and Avoiding the Next Collapse*, was a *New York Times* bestseller.

El-Erian has served on several boards and committees, including the U.S. Treasury Borrowing Advisory Committee, the International Center for Research on Women, the Peterson Institute for International Economics, the Carnegie Endowment for International Peace, the IMF's Committee of Eminent Persons, and the New York Fed's Investor Advisory Committee on Financial Markets. He is currently a board member of Under Armour, the National Bureau of Economic Research (Executive Committee), Berggruen Institute (Executive Committee), KAUST, and other educational institutions. In 2018, he was appointed to the International Monetary Fund's External Advisory Group on Surveillance and the MIT Visiting Committee for the Department of Economics. He is a member of the Council on Foreign Relations, the Investcorp external advisory committee, and other government advisory committees. Since 2007, he has been chair of Microsoft's Investment Advisory Board and co-chair of the Capital Campaign for the University of Cambridge and its Colleges.

El-Erian holds a master's degree and a doctorate in economics from Oxford University and earned an undergraduate degree at Cambridge University. He is an Honorary Fellow of Queens' College, Cambridge University.

Heidi V. Pickett

Assistant Dean, Master of Finance Program, MIT Sloan School of Management

Heidi V. Pickett is the Assistant Dean of the MIT Sloan Master of Finance program with responsibility for developing and implementing new programming, engaging external stakeholders, and executing strategies supporting the mission of producing the next generation of global financial leaders. She also serves on the policy committees for the Master of Finance Program and Sloan Undergraduate Education.

With more than 20 years' experience in financial services, Pickett has expertise in corporate development, business strategy, and global operations. Prior to joining MIT Sloan, she served as senior managing director at State Street Global Markets, where she managed global business integration and led the sovereign wealth fund initiative. In March 2011, Pickett was named Malone Fellow in Arab and Islamic Studies, and spent time in Oman during a period of turmoil, protests, and profound change throughout the Middle East. She has focused on Arab cultural, economic, political, and social diversity.

Leveraging her experience at MIT and in financial services, she is a board advisor to InvestAcure, a spare change investment platform empowering those impacted by Alzheimer's disease to invest in companies working on a cure.

Her interests include a global and local community focus on the education and well-being of women and girls. She is the president of the Verrill Foundation, as well as a member of the board and co-chair of the development committee for Invest in Girls.

Pickett holds a BS in finance from Bryant University and an MS in accountancy from Bentley University McCallum Graduate School of Business, and completed the Executive Development Program at the Wharton School of the University of Pennsylvania.

Kapil Dilwali, SB '09, MFin '10

Vice President, Investment Banking – Corporate Finance Advisory, J.P. Morgan

Kapil Dilwali is a vice president in J.P. Morgan's Corporate Finance Advisory (CFA) team within the Investment Bank. He covers a variety of topics for corporate clients including capital structure, distribution policy, emerging trends, and financing solutions. Prior to joining the CFA team, he specialized in fixed income security structuring within J.P. Morgan's debt capital markets team, in both London and New York.

Diwali holds an SB in finance from MIT and a master's in finance degree from the MIT Sloan School of Management.

Matthew Rothman*Senior Lecturer, MIT Sloan School of Management; Managing Director, Goldman Sachs*

Matthew Rothman is currently a managing director at Goldman Sachs leading the Data as a Service Initiative as well as a Senior Lecturer in Finance at the MIT Sloan School of Management.

Rothman has held a variety of positions both in academia and industry. Prior to joining Goldman Sachs, he was the global head of Quantitative Equity Research at Credit Suisse. Immediately prior to that position, Rothman was the director of Global Quantitative Macro Research at Acadian Asset Management in Boston. Earlier in his career, he was the global head of Quantitative Research at Lehman Brothers and then Barclays Capital, following the Lehman bankruptcy.

Rothman previously taught in the economics department at Brown University and the Samuel C. Johnson School of Business at Cornell University. He serves on the board of directors of the Society of Quantitative Analysts and on the advisory board of the Center for Accounting Research and Education at the University of Notre Dame. Previously, Rothman served on the board of directors of the International Association of Financial Engineers.

He earned a BA in philosophy from Brown University, an MA in statistics from Columbia University, and a PhD in finance from the University of Chicago Booth School of Business.

Armen Avanesians, SB '81*Chief Investment Officer, Goldman Sachs Asset Management*

Armen Avanesians is Chief Investment Officer of the Goldman Sachs Asset Management (GSAM) Quantitative Investment Strategies team, overseeing a platform spanning both quantitative alpha strategies (long-only equity and macro) as well as advanced beta strategies (hedge fund replication, smart beta, customized beta, and tax-efficient portfolios).

Prior to joining GSAM in 2011, Avanesians served as head of Strats, a global group responsible for the application of mathematical, quantitative, and algorithmic approaches to revenue activities in the Securities, Investment Management, and Investment Banking divisions. In over two decades in this role, he was instrumental in developing the teams, practices, and platform (SecDb) that collectively drive the commercial application of analytics across most of the firm's activities today. Avanesians also served on the Securities Division Executive Committee from 2003 to 2011. He joined Goldman Sachs in 1985 as a foreign exchange strategist and became a partner in 1994. Prior to joining Goldman Sachs, he was a member of the technical staff at Bell Laboratories in Murray Hill.

Avanesians is a trustee of Columbia University and chairs its Audit Committee, and is also co-chair of the Columbia University Data and Society Council. He is a member of the MIT Investment Management Company (MITIMCo) Board, the MIT Sloan Finance Group Advisory Board, the MIT Corporation Department of Economics Visiting Committee, and the Steering Committee of the Master of Financial Engineering Program at the University of California, Berkeley-Haas School of Business. He also serves as a board member of Fund for Armenian Relief and NYC For Inspiration and Recognition of Science and Technology.

He earned an SB in electrical engineering from MIT and an MS from Columbia University.

Cheryl M. Duckworth, CFA, SM '94*Partner and Senior Managing Director; Director, Global Consultant Relations, Wellington Management*

As Director of Global Consultant Relations, Cheryl Duckworth is responsible for a global team of professionals who develop and enhance the Wellington's working relationships with investment consulting firms. The dedicated team requires close engagement with their investment and client-facing teams as they interact with the consultant community.

Prior to her current role in Boston, Duckworth spent five years in Singapore as the head of the Singapore Office and associate director of Research, where she was responsible for the management and regulatory oversight of the business activities of the office and oversaw the firm's investment resources across the Asia region. In her tenure as associate director of research prior to Singapore, Duckworth managed a number of the global industry analysts and was responsible for the firm's suite of diversified and sector analyst-managed investment approaches, acting as a representative for these products

with clients and prospects. She spent the early part of her career at Wellington as an investment director and as the director of International/Global Equity Product Management, working with investment groups to design and develop international and global equity products. Before joining Wellington Management in 1994, she gained experience in the investment industry at Massachusetts Financial Services from 1988–1992.

Duckworth is a member of the WM Singapore and HK Boards, the Asia Pacific Compensation Committee, Compensation Committee II, and the Strategic Relationship Advisory Committee.

She holds an SM from the MIT Sloan School of Management and a BA in economics and art history from Duke University. Additionally, she holds the Chartered Financial Analyst designation, and is a member of the CFA Institute.

Joseph Naggar, MBA '96

Partner and Head of Structured Products, GoldenTree Asset Management

Joseph Naggar is a Partner and Head of Structured Products at GoldenTree Asset Management. In addition, Naggar is a portfolio manager at GoldenTree Loan Management. He is a member of GoldenTree Asset Management's Executive Committee and chairs the firm's Risk Committee. GoldenTree expanded its investing efforts in Structured Products in 2007 with the hiring of Naggar, who has been instrumental in building the firm's structured products investment team. Under his direction, GoldenTree built highly sophisticated, proprietary systems to analyze opportunities in structured products, which integrate the firm's proprietary knowledge of single name credits into the analysis of structured products investments.

Prior to joining GoldenTree, Naggar was a managing director at Morgan Stanley in its Global Fixed Income Division and Global Principal Credit Group. He is a member of the MIT Sloan Americas Executive Board supporting engagement in North America and Latin America. He also serves on the advisory board of the MIT Golub Center for Finance and Policy.

He holds an MBA from the MIT Sloan School of Management with a concentration in financial engineering and a BS from the Pennsylvania State University in mechanical engineering through the University Scholars Program.

C.S. Venkatakrisnan, SB '86, SM '89, PhD '91

Chief Risk Officer, Barclays

C.S. "Venkat" Venkatakrisnan is responsible for helping to define, set, and manage the risk profile of Barclays. He has more than 20 years of financial market and risk management expertise. Venkatakrisnan worked at J.P. Morgan Chase, most recently as head of Model Risk and Development and Operational Risk. Prior to this, he worked in fixed income structuring at the J.P. Morgan Investment Bank. This followed upon 14 years in J.P. Morgan Asset Management, where he held senior positions in the Global Fixed Income business.

Venkatakrisnan holds SB, SM, and PhD degrees from MIT.

Lawrence D.W. Schmidt

Victor J. Menezes (1972) Career Development Professor of Finance; Assistant Professor, Finance, MIT Sloan School of Management

Lawrence D.W. Schmidt is the Victor J. Menezes (1972) Career Development Professor of Finance. and assistant professor in the MIT Sloan Finance Group whose research is at the intersection of finance and macroeconomics. Prior to joining the faculty at MIT Sloan, Schmidt was an assistant professor in the Kenneth C. Griffin Department of Economics at the University of Chicago and a senior consultant at Navigant Consulting, Inc.

His research combines theory and applied econometric approaches to offer a richer picture of the risks faced by financial market participants—households, institutional investors, and financial intermediaries—and sheds new light on underlying economic mechanisms linking financial markets with the real economy. Schmidt's research is particularly interested in understanding the factors that are associated with the risk and return to investments in human capital (that is, the present discounted value of labor income), and how frictions that limit risk-sharing in the labor market affect asset prices and macroeconomic dynamics. In addition to studying the risk factors and behavior of households, his work also studies the

behavior of institutional investors during financial crises. His research has appeared in the American Economic Review, the Journal of Applied Econometrics, and the Journal of Mathematical Economics, and he has won multiple awards including the 2015 AQR Top Finance Graduate Award.

Schmidt holds a BA from the University of California, Santa Barbara, and PhD and MA degrees in economics from the University of California, San Diego.

Gary Gensler

Senior Lecturer, MIT Sloan School of Management; Senior Advisor to the Director, MIT Media Lab; Co-Director of Fintech, CSAIL

Gary Gensler is a Senior Lecturer at the MIT Sloan School of Management, a Senior Advisor to the Director of the MIT Media Lab, and chairman of the Maryland Financial Consumer Protection Commission. He was chairman of the U.S. Commodity Futures Trading Commission from 2009–2014, leading the Obama administration's reform of the \$400 trillion swaps market. During the Clinton administration, he was Under Secretary of the Treasury for Domestic Finance and Assistant Secretary of the Treasury. He was the chief financial officer for Hillary Clinton's 2016 presidential campaign.

Gensler was a partner at Goldman Sachs, where he led fixed income and currency trading in Asia and served as co-head of Finance. He is a recipient of the 2014 Tamar Frankel Fiduciary Prize.

He earned his MBA and BSE from the Wharton School of the University of Pennsylvania.

John A. Thain, SB '77

Life Member, MIT Corporation; Former Chairman and Chief Executive Officer, CIT Group Inc.

John A. Thain was Chairman and Chief Executive Officer of CIT Group Inc., and Chairman and Chief Executive Officer of Merrill Lynch & Co., Inc., one of the world's leading wealth management, capital markets, and advisory companies, from December 2007 to January 1, 2009.

From June 2006 to December 2007, Thain served as chief executive officer and a director of NYSE Euronext, Inc. following the NYSE Group and Euronext N.V. merger. He joined the New York Stock Exchange in January 2004, serving as chief executive officer and a director.

Before joining the NYSE, Thain was the president and chief operating officer of Goldman Sachs Group Inc. He had been president and co-chief operating officer from May 1999 through June 2003. He was president and co-chief operating officer of Goldman Sachs Group, L.P. in 1999. From 1994 to 1999, Thain served as chief financial officer and head of Operations, Technology, and Finance. From 1995 to 1997, he was also co-chief executive officer for European Operations.

Thain is a lifetime member of the MIT Corporation and a member of the Dean's Advisory Council of the MIT Sloan School of Management and the U.S. National Advisory Board of INSEAD. He serves on the board of managers of the New York Botanical Garden, is a member of the board of directors of the French-American Foundation, is a trustee of New York-Presbyterian, and is a member of the board of directors of Lincoln Center.

He holds an MBA from Harvard University and an SB degree from MIT.