Pennsylvania Association of Public Employee Retirement Systems
PO Box 61543, Harrisburg, PA 17106-1543
Website: ***www.pa-pers.org***

Fall 2018

In This Issue

Guest Articles

Coming Up Spring 2019

15th Annual PAPERS Forum

May 29-30, 2019
(Wednesday-Thursday)
Hilton Hotel
Downtown Harrisburg

Philadelphia Hosts PAPERS 12th Annual Fall Workshop

Tuesday, November 27 – Wednesday, November 28, 2018

The Wyndham Philadelphia Historic District Hotel
400 Arch Street, Philadelphia, PA

For more Fall Workshop details, see inside:

- **Agenda & Miscellaneous Information – Pages 3-4**
- **Registration Form – Pages 5-6**
- **Fall Workshop Sponsors – Page 9**

A current (2018) PAPERS membership (Participating, Associate, Affiliate or Sustaining) is required to attend PAPERS conferences or to enroll in the new certification program. You'll find membership details on Page 9 and certification program details on Pages 7-8.

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From the Desk of PAPERS' Executive Director

Welcome to the Fall 2018 edition of the PAPERS newsletter.

I spent a lot of time on the road the last few months. From traveling throughout Pennsylvania to visit local government association events to flying to Illinois, Wisconsin and other states - all in an effort to learn best practices and to help PAPERS grow and meet the needs of our public pension plans. The amazing part of traveling to other states is how many people have connections back in Pennsylvania and their unselfish desire to help us meet our goals. As I visit the local government associations it is evident there is a thirst for basic knowledge for trustees of their fiduciary responsibility. It's with a lot of pride I can tell them the answers to their questions can be found in PAPERS as we truly are the leader in trustee education, but we only get that way with your help and support.

Several of the members of the inaugural class in our new certification program have already completed the on-line courses, the first step toward certification, and have received a proof of completion certificate. We are strongly encouraging everyone in the class to complete this step before our November Fall Workshop where enrollees enter the continuing education second step in the certification program. We look forward to introducing those people to you so you can hear in their own words the value of papers new certificate program. I hope to see you in Philadelphia in November!!

Warmly,

Karen Deklinski

PAPERS Executive Director

kdeklinski@msn.com
717-979-5788

PAPERS Pennsylvania Association of Public Employee Retirement Systems

12th Annual Fall Workshop Agenda

(As of 10/8/2018 – Tentative; subject to change)

The Wyndham Philadelphia Historic District

400 Arch Street, Philadelphia, PA 19106

Tuesday, November 27, 2018

9:00 a.m.-11:30 a.m. **Board/Corporate Advisory Committee Meeting .... Location to be announced**

11:00 a.m.- 5:00 p.m. **General Conference Registration.......................................Foyer**

12:00 p.m.- 5:00 p.m. **Platinum & Gold Sponsor Exhibits ....Foyer**

12:30 p.m.- 1:30 p.m. **Opening Luncheon .... Jefferson Room**

All workshop sessions take place in the Franklin Room.

1:45 p.m.- 2:30 p.m. ***Today's Key investment & Management Issues***
Chief Investment Officer Roundtable
Speakers.......................................Chris DiFusco, *City of Philadelphia*
.... James Grossman*, Public School Employees' Retirement System*
.......................................Bryan Lewis, State Employees' Retirement System

2:30 p.m.- 2:45 p.m. **....................................... Beverage Break**

2:45 p.m.- 3:30 p.m. ***Fee Productivity and Transparency of Pension Plan Assets***
Speakers.......................................Nathan J. DePierre, *BNY Mellon*
*.......................................*Frances Barney*, BNY Mellon*

3:30 p.m.- 4:15 p.m. ***10 Years After the Financial Crisis – Where We are Today***
Speaker ....Chet B. Waldman, *Wolf Popper, LLP*

4:15 p.m.- 5:00 p.m. ***Why You have Real Estates & RAEITs in Your Pension Portfolio*** *(fireside chat)*
Speakers.......................................Meredith Despins, *NAREIT*
....Andy Rubin, *Fidelity Investments*

6:00 p.m.- 8:00 p.m. **Evening Event** ... Reception/Private Tour at **Federal Reserve Bank of Philadelphia**
Ten Independence Mall *(corner of 6th & Arch Streets – two blocks from hotel)*

FEDERAL RESERVE BANK OF PHILADELPHIA

Visitors will have an opportunity to tour the Fed's acclaimed Money in Motion exhibit and hear a staff educator discuss the role of the Federal Reserve system, created by Congress in 1913 to serve as the central bank of the United States and to provide the nation with a safer, more flexible and more stable monetary and financial system.

(Continued on Page 4)

2018 Fall Workshop Agenda

(Continued from Page 3)

Wednesday, November 28, 2018

8:00 a.m.–12:00 p.m.	**General Conference Registration..Foyer**
8:00 a.m.-12:00 p.m.	**Platinum & Gold Sponsor Exhibits ....Foyer**
8:00 a.m. - 8:45 a.m.	**Breakfast.. Jefferson Room**

All workshop sessions take place in the Franklin Room.

9:00 a.m.- 9:45 a.m.	***From Valeant to Cyan to Volkswagen….Shareholders Should Have the Opportunity to Obtain Effective Redress for Violation of Their Rights*** Speakers.....................................Laura Stein, *Robbins Geller Rudman & Dowd LLP* ....Robert Rothman, *Robbins Geller Rudman & Dowd LLP*
9:45 a.m. -10:30 a.m.	***The IRS Wants You! Are You in Compliance?*** Roundtable Speakers... Hank Stiehl, *Korn Ferry* *...* John A. Nixson*, Duane Morris LLP* *...*Karen Zangara*, Cheiron Inc.*
10:30 a.m.-10:45 a.m.	***Beverage Break***
10:45 a.m.-11:30 a.m.	**Avoiding Conflicts of Interest** Speaker ....Brian Jacisin, Esq., *Pennsylvania State Ethics Commission*
11:30 a.m.-12:30 p.m.	**Closing Luncheon... Jefferson Room**

More Fall Workshop Details

Registration – Complete and submit the 2-page registration form (see Pages 5-6) to PAPERS.   This form is also available on-line at: http://www.pa-pers.org/newweb/documents/Registrationform-fillable_000.pdf. After you access the form, a fillable version is available by opening in Adobe Acrobat Reader DC. **Please note early bird rates are available for registrations received or postmarked by 10/27/2018.**

Lodging – All room reservations must be made directly with the Wyndham Hotel. A special conference rate is available for reservations made on or before 10/27/2018. After that date, rooms may be reserved on an "as available" basis but the conference rate is not guaranteed.

Driving Directions – Will be sent upon submission of your conference registration and payment.

Parking – A special conference rate of $15/day in the garage next door to the hotel is available for both overnight guests attending the conference and commuting attendees.

Registration for 12th Annual PAPERS Fall Workshop
November 27-28, 2018

The Wyndham Philadelphia Historic District
400 Arch Street, Philadelphia, PA 19106

Each individual attending must submit a separate registration form.

Early Bird Conference Registration & Hotel Reservations Deadline – Oct. 27, 2018

Please indicate appropriate category (check one only):

Pension Plan Representatives

Public pension Plans with current (2018) PAPERS **Participating** Membership

___ First individual from pension plan – complimentary

Each additional individual:

___ $50 Early bird registration payment received or postmarked by 10/27/2018

___ $75 Standard registration payment made after 10/27/2018

Associate Member Representatives – *Firms providing investment management and legal services*

Current (2018) PAPERS **Associate** Membership required

___ $400 Early bird registration payment received or postmarked by 10/27/2018

___ $475 Standard registration payment made after 10/27/2018

Affiliate Member Representatives - *Firms providing consulting services, exclusive of investment/legal*

Current (2018) PAPERS **Affiliate** Membership required

___ $200 Early bird registration payment received or postmarked by 10/27/2018

___ $250 Standard registration payment made after 10/27/2018

Corporate Platinum Sponsors - Current (2018) PAPERS Associate or Affiliate Membership required

___ Four complimentary registrations

Each additional individual (refer to **Associate** or **Affiliate** Member rates above)

Corporate Gold or Silver Sponsors - Current (2018) PAPERS Associate or Affiliate Membership required

___ Two complimentary registrations

Each additional individual (refer to **Associate** or **Affiliate** Member rates above)

Registration form continues on reverse.

Individual's name ____

Preferred name for name tag ____

Representing (name of pension plan or firm) ______________________________

Mailing address ____

City, State, Zip ____

Telephone number (______) _____-________ E-mail address ______________________________

Please check below all Fall Workshop events you plan to attend

Tuesday, Nov. 27, 2018

___ Lunch

___ Afternoon sessions

___ Evening networking/social event
@ Philadelphia Federal Reserve Bank

Wednesday, Nov. 28, 2018

___ Breakfast

___ Morning sessions

___ Lunch

___ **Check if interested in PAPERS certification program**

Please include full payment of all fees due with this form.

Payment Methods:

1. ***To pay by check.*** Please make check payable to: **PAPERS** and return with this application to: **PAPERS, P.O. Box 61543, Harrisburg, PA 17106-1543**
2. ***To pay by credit card or PayPal.*** Please access the PAPERS website (www.pa-pers.org) and click on the "Fall Workshop" tab. Near the bottom of this page click on the drop down box, select the appropriate membership category/registration fee and follow the directions to pay the applicable amount electronically to PAPERS. To complete the registration process, this completed *Forum Registration* must be submitted and may either be mailed to: ***PAPERS, PO Box 61543, Harrisburg, PA 17106-1543*** or scanned, saved and e-mailed to: ***douglas.b@verizon.net***.
3. ***To pay by ACH transfer.*** Please contact PAPERS by e-mail douglas.b@verizon.net to request the bank account and routing information you'll need to pay by this method. If you require a signed form to initiate the ACH transaction, please send the form to this e-mail address and it will be completed/returned promptly. Then, submit your completed *Forum Registration* as note in #2 above so it can be matched with the ACH payment.

Special Hotel Conference Rate: $139/double or king + tax

Conference Rate Available for nights of 11/26 and 11/27

Pending room availability, guaranteed for Reservations made on or before 10/27/2018

For Reservations: Call toll-free 1-877-999-3223 **and reference "PAPERS"**

OR Reserve on-line at: https://aws.passkey.com/e/49577435

Certified PA Public Retirement Plan Professional

Course Design

The certification program provides participants with exposure to a diverse and comprehensive curriculum of pension topics in a three-part process:

- **On-line introductory education modules develop by Fi360, Inc.**
    - *The Role of the Retirement Plan Fiduciary*
    - *Creating a Comprehensive Fiduciary Process – Parts 1 & 2*
- **Attendance at PAPERS conferences**
- **Continuing Education** – additional on-line education modules; on-line library resources

Program Enrollment

Please visit the PAPERS website www.pa-pers.org to access the certification program application form. A link to this printable form may be found on the "Certification Program" page.

Submit the completed form either by mail or e-mail. See details below under "Program Cost" for more information about submitting the application and required payment.

Program Cost

The one-time enrollment fee of $499 is payable by three methods:

1. ***To pay by check.*** Please make check payable to: **PAPERS** and return with application to: **PAPERS, P.O. Box 61543, Harrisburg, PA 17106-1543**
2. ***To pay by credit card or PayPal.*** Please access the PAPERS website www.pa-pers.org and click on "Certification Program". Near the bottom of this page click on the drop down box and follow the directions to pay the registration fee. If a completed application has not already been submitted, please do so either by mail to: ***PAPERS, PO Box 61543, Harrisburg, PA 17106-1543*** or scanned, saved and e-mailed to: ***douglas.b@verizon.net***.
3. ***To pay by ACH transfer.*** Please contact PAPERS by e-mail douglas.b@verizon.net to request the bank account and routing information you'll need to pay by this method. If you require a signed form to initiate the ACH transaction, please send the form to this e-mail address and it will be completed/returned promptly. Then, submit your completed membership application as note in #2 above so it can be matched with the ACH payment.

Process

After submitting a course enrollment form and payment of the one-time fee, individuals will receive an authorization code giving access to the on-line modules. Modules may be taken at one's leisure to be completed within six months of enrollment.

At the conclusion of each module, participants will take an on-line test to check their understanding of the material. The test may be re-taken any number of times until a passing grade is received.

Participants will receive written notification upon successful completion of the three on-line modules. The next step in the certification process is attendance at three of the next four PAPERS conferences (held each spring and fall). After attending the required number of conferences, participants will be awarded the *Certified PA Public Retirement Plan Professional* designation. Public recognition of this achievement will be provided at PAPERS conferences, on the website and in newsletters.

Continuing education will be required to maintain this designation.

PAPERS Application Form

Certified Pennsylvania Public Retirement Plan Professional

Participant Information:

Name: ____ Date: _____________

(Please **print** your name the way you would like it on your final certification)

Organization: ____

Address: ____

City: _______________________________________ State: ________ Zip: ___________

Telephone: ______________________ E-Mail: ________________________________

Payment Information:

The one-time registration fee is $499. Please fill out the following only if different than above:

Billing Name: ____

Billing Address: ____

City: _________________________________ State: ________ Zip: ______________

Payment methods:

1. ***To pay by check.*** Please make check payable to: **PAPERS** and return with this application to: **PAPERS, P.O. Box 61543, Harrisburg, PA 17106-1543**
2. ***To pay by credit card or PayPal.*** *(this function available after 6/1/2018)* Please access the PAPERS website www.pa-pers.org and click on "Certification Program". Near the bottom of this page click on the drop down box and follow the directions to pay the registration fee. If a completed application has not already been submitted, please do so either by mail to: ***PAPERS, PO Box 61543, Harrisburg, PA 17106-1543*** or scanned, saved and e-mailed to: ***douglas.b@verizon.net***.
3. ***To pay by ACH transfer.*** Please contact PAPERS by e-mail douglas.b@verizon.net to request the bank account and routing information you'll need to pay by this method. If you require a signed form to initiate the ACH transaction, please send the form to this e-mail address and it will be completed/returned promptly. Then, submit your completed membership application as note in #2 above so it can be matched with the ACH payment.

Please submit this completed application and payment to:

PAPERS, PO Box 61543, Harrisburg, PA 17106-1543

Becoming a PAPERS Member

For details, check the membership section of the PAPERS website **www.pa-pers.org** or contact:

PAPERS, PO Box 61543
Harrisburg, PA 17106-1543

Douglas A. Bonsall
Phone: 717-921-1957
E-mail: douglas.b@verizon.net

PAPERS Membership Categories

- **Participating** ($95/year) - *Public employee retirement systems (pension funds)*
- **Associate** ($1,000/year) - *Corporate providers of legal and investment services to pension plans*
- **Affiliate** ($500/year) - *Corporate providers of other services, exclusive of legal and investment services, to pension funds.*
- **Sustaining** ($75/year) - *Individual membership open only to those persons with an interest in public pensions but not affiliated with an organization which qualifies for group membership in any other category above*

Corporate (Associate & Affiliate) Members also have the additional opportunity to become sponsors for PAPERS' two annual conferences. Sponsors receive recognition in the printed and on-line materials produced for the conferences and also receive priority consideration to provide speakers and/or make presentations. The three categories of sponsorships for each conference are:

- **Platinum** - $5,000
- **Gold** - $3,000
- **Silver** - $2,500

See the next column for the names of firms that have already committed to becoming a sponsor for the upcoming Fall Workshop. Contact PAPERS (see above) if your firm wishes to become a sponsor.

2018 PAPERS Fall Workshop Sponsors

(as of 10/8/2018)

Platinum Sponsors

BNY MELLON

T.RowePrice
INVEST WITH CONFIDENCE

Gold Sponsor

Robbins Geller Rudman & Dowd LLP

Silver Sponsors

Fidelity INVESTMENTS

Nareit. Real estate working for you

Dedicated Managed Accounts: Made to Measure for Smart Investors

By: Andrew Lapkin, Chief Executive Officer, HedgeMark

Mr. Lapkin is responsible for overall management of HedgeMark, a wholly-owned subsidiary of BNY Mellon. Prior to joining HedgeMark in 2011, Mr. Lapkin was the Co-Founder, President, and Chief Operating Officer of Measurisk, a JP Morgan company that was formerly affiliated with The Bear Stearns Companies. Prior to forming Measurisk, Mr. Lapkin was a Vice President at Bankers Trust in charge of the development of BT's comprehensive market risk management system. Prior to that he was a senior consultant at Andersen Consulting. Mr. Lapkin received an M.B.A. in Finance and Management from Columbia University and a B.A. in Economics from Lafayette College.

Institutional investors have an increasing appetite for managed accounts. Our Race for Assets survey found that 50% of respondents expected their allocation to managed accounts to increase by the fall of 2018, with the proportion of hedge fund allocations to this type of structure increasing from 17% at the end of 2017 to 22% by the fall of 2018. And our survey also reveals that demand is being driven by larger investors with more significant assets to deploy: those with US$51bn+ AUM intend to invest up to 30% of their hedge fund allocation through managed accounts.

While hedge fund managed accounts have been available for some time now, the market has evolved rapidly over the last few years to make the dedicated managed account structure a desirable option for institutional investors. In the past, those interested in using a dedicated managed account had to build internal teams and take on many non-core operational functions. However, today's landscape is very different.

It's now possible to outsource the set-up and day-to-day operations of a managed account. A few managed account platform providers have emerged to meet the market demand for outsourced services. The largest institutional platform providers have invested significantly in the latest technology and benefit from economies of scale combined with specific operational expertise. These firms are able to offer the significant support needed to institutional hedge fund investors seeking to outsource the set-up and operations of managed accounts while also keeping costs low.

Top three takeaways:

1. Increased outsourcing enables the successful implementation of managed accounts. Establishing and running dedicated managed accounts requires significant investment via technology and skilled staff. Investors seeking to invest in managed accounts should look to outsource to larger institutional platform providers that offer comprehensive managed account capabilities. This will help ensure a successful implementation and minimize internal costs and additional burdens on staff.
2. Dedicated managed accounts overcome challenges. Dedicated managed accounts allow investors to retain control of their investments and gain increased transparency—with exposures, risks and performance reported on a daily basis. Additionally, investors obtain greater negotiating power with managers over fees and structures.
3. The market needs to evolve further. Hedge funds are responding to this trend, with most looking to cater to managed account structures. Fund managers now need to look to the benefits—these structures can enhance their access to institutional capital, increase the "stickiness" of institutional investments and free up managers to focus on their core skill of investing. Managers less inclined to offer these structures may find their ability to attract capital from major institutions becoming more limited. Additionally, the market now needs to evolve so smaller investors can also start to take advantage of the benefits offered by managed accounts.

This fourth issue in The Race for Assets report series, in partnership with FT Remark, continues BNY Mellon's coverage of the alternative assets landscape by delving deeper into one of the key insights drawn from our survey of 350 large institutional investors and 100 alternative fund managers.

For the latest content in this series, please visit bnymellon.com/raceforassets.

How Companies Can Survive the New Industrial Revolution

By: Dave Dowsett, Invesco

Dave Dowsett is Global Head of Strategy and Innovation for Invesco. In this role, he focuses on augmenting Invesco Technology's core roadmap with emerging financial technology in the marketplace. His role includes overseeing the identification of business needs through capabilities work, modeling strategic intelligence scenarios, and facilitating the movement of innovation and disruptive technology pipelines across the organization. Prior to joining Invesco, Mr. Dowsett lived and worked across Africa, Europe and North America, with 22 years of combined experience in applications, technology infrastructure management and digital transformation for organizations like Fidelity Investments, Unilever and Global Crossing (Level 3).

A new industrial revolution fueled by data and artificial intelligence is rapidly changing the global economy and the world in which we live. Dave Dowsett, Global Head of Strategy and Innovation for Invesco, shares five steps organizations can employ to ensure they reap the benefits of this new technological wave. Encouraging curiosity, risk-taking and effective collaboration are foundational to staying abreast of the latest advances.

A new industrial revolution fueled by data and artificial intelligence is rapidly changing the global economy and the world in which we live. That's according to Dave Dowsett, Invesco's head of strategy, research and development. "The speed of companies coming and going has advanced. Organizations must understand where the competition is coming from - that is fundamental," he says.

Financial services companies especially need to find a way to navigate disruptive technology particularly as artificial intelligence and machine learning creates new ways of doing business and engaging with customers. Doing so, however, remains a challenge for large organizations accustomed to moving slowly and avoiding risk.

To reduce the risk of missing out on the tech revolution underway, Dowsett says companies should follow these 5 suggestions for survival:

1. ***Understand the impact of machine learning***
   Artificial intelligence and machine learning can remove bias in decision-making and lead to faster and more accurate results – for financial services companies, this is a huge opportunity. Fintech, and the firms that offer machine learning solutions to companies, are rapidly changing how financial services are structured, provisioned, and consumed. From agriculture, to transportation, to healthcare, AI and machine learning are changing the landscape.

2. ***Expand your ecosystem***
   Fintech companies are quickly changing how consumers interact with financial services, but they're also startups that lack a focus on enterprise-wide challenges. "Fintech startups find a gap on the value chain and they relentlessly go after it," says Dowsett. "They aren't trying to go after enterprise problems. They're going to go after a specific solution, like payments." Therein lies a natural fit for large organizations to partner with startups and to tap into how they think and solve problems. "The competitive advantage will not be determined by the organization alone but by the strength of the partners and ecosystems you choose," he explains.

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How Companies Can Survive the New Industrial Revolution

(Continued from Page 11)

3. ***Collaborate***
According to an Accenture survey, 75% of executives agree that their competitive advantage won't be determined alone but through collaboration. Says Dowsett: "You have to collaborate now to compete, you can't just go away, think you'll build a five-year initiative, build some code behind closed doors and then come out and be the best." Collaboration is key. This could be achieved by shifting away from traditional workplaces and into shared spaces that foster collaboration, like labs and campuses that identify synergies by putting startups next to enterprise organizations.

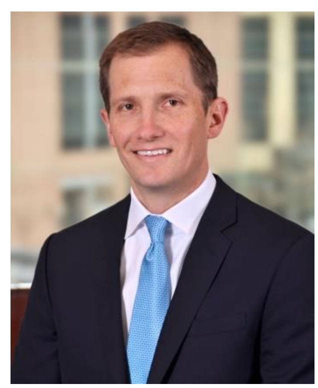
4. ***Embrace failure***
"When you want to deal with disruption, you've got to think big. And that's generally quite hard for financial companies," says Dowsett adding that large financial services organizations tend to play it safe and "increment" their way forward. But in fintech, he says, big bets are critical – and they generally fail. "You've got to be prepared for that failure and have support when you do fail because if you don't, people don't want to do that again."

5. ***Change happens from the top***
Dealing with disruption requires top down sponsorship says Dowsett. "You can't bring in a consultant to innovate for you. You have to do it yourself. You have to find where your gaps are," he says. Dowsett recommends leaders ask people in their organization to identify where the problems lie. "You might need help on delivery but you don't need help with consultants identifying your problems."

The Limits of Duration Risk:

An Argument for Diversification in Fixed Income

By: Joseph M. Graham, CFA, Lord Abbett



Joseph Graham leads the efforts of Lord Abbett's Investment Strategists. In addition, Mr. Graham is responsible for providing the portfolio management teams with investment insight and relevant market information for the firm's fixed income strategies and Calibrated equity strategies. Mr. Graham joined Lord Abbett in 2015. Prior to joining the firm, he was a Founder and CIO at HudsonView Capital Management and Route 3 Capital; Vice President and Analyst at Millennium Partners; Analyst and Associate Portfolio Manager at LibertyView Capital Management; and Investment Banker at Morgan Keegan. Mr. Graham earned a BS in finance and philosophy from Washington University and an MBA from the Wharton School of Business at the University of Pennsylvania..

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The Limits of Duration Risk: An Argument for Diversification in Fixed Income

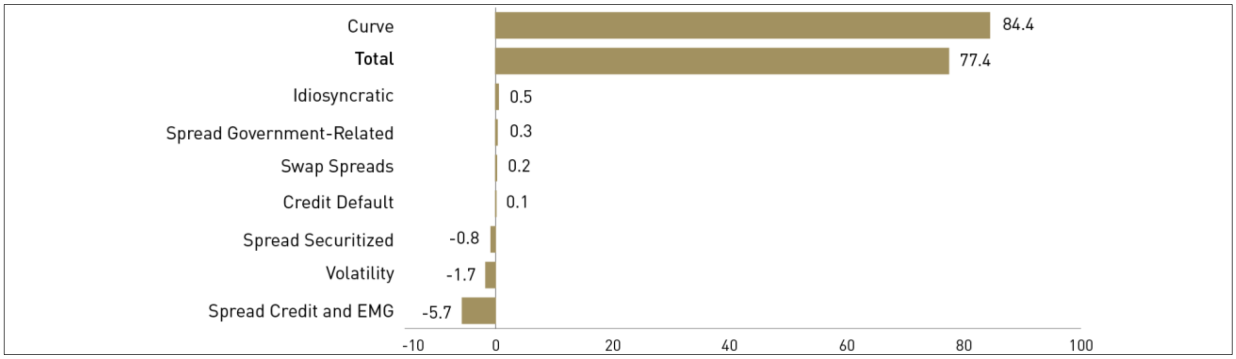
(Continued from Page 12)

THE RISK IN CORE

Over the last decade, the addition of a tremendous amount of Treasuries and mortgages in the core fixed income benchmark, the Bloomberg Barclays Aggregate Bond Index ("Aggregate Index") has resulted in a substantial increase in duration without a commensurate increase in yield over the past few years. This interest rate risk now constitutes more than all the variance in index returns, with other risks in the Aggregate Index acting as diversifiers to curve risk, as shown in Chart 1.

CHART 1. SOURCES OF VARIATION IN RETURNS FOR CORE FIXED INCOME*

Variance in returns relative to cash, as of June 30, 2018

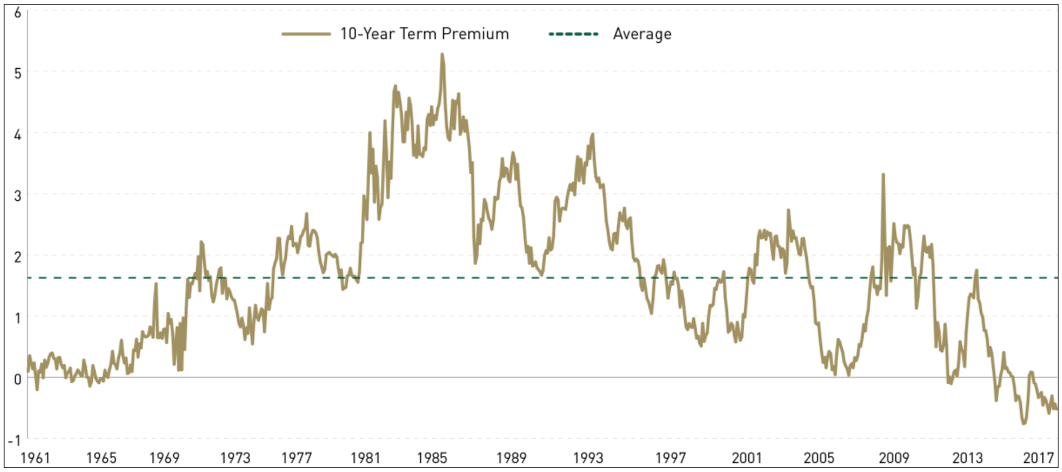


Source: Bloomberg and Barclays. *Core fixed income represented by the Bloomberg Barclays U.S. Aggregate Bond Index.
Past performance is not a reliable indicator or guarantee of future results. For illustrative purposes only and does not represent any specific portfolio managed by Lord Abbett or any particular investment. Indexes are unmanaged, do not reflect the deduction of fees or expenses, and are not available for direct investment.**THE PRICING OF DURATION RISK**

Today, according to the ACM model shown in Chart 2, the term premium is negative, meaning the market is not rewarding investors with any premium to extend duration risk. In fact, investors are paying for the privilege of taking that risk.

CHART 2. ACM* TREASURY TERM PREMIUM

Data as of May 31, 2018



(Continued on Page 14)

The Limits of Duration Risk: An Argument for Diversification in Fixed Income

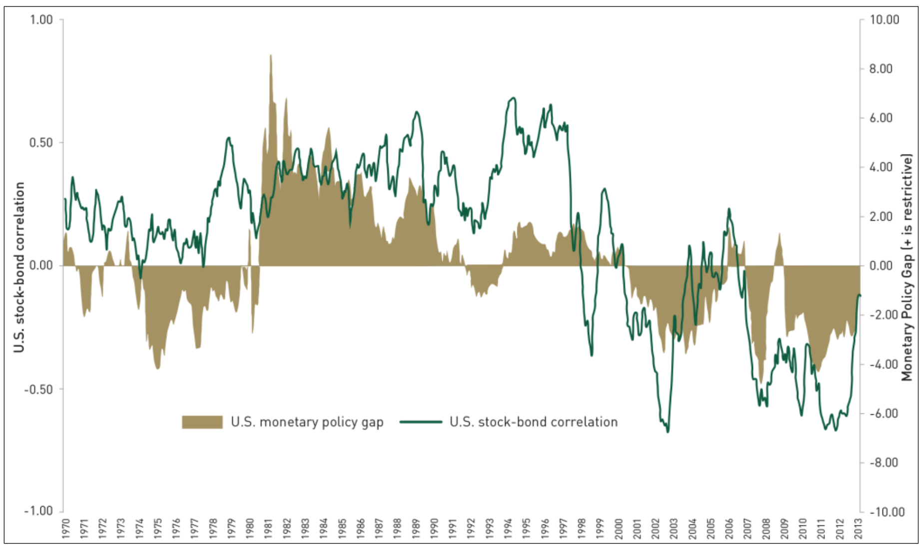
(Continued from Page 13)

Source: Federal Reserve Bank of New York. As represented by ACMTP10. *Named after New York Fed economists Tobias Adrian, Richard Crump, and Emanuel Moench (or "ACM"), which present Treasury term premia estimates for maturities from 1–10 years, from 1961–2017. **Past performance is not a reliable indicator or guarantee of future results.** For illustrative purposes only and does not represent any specific portfolio managed by Lord Abbett or any particular investment. Indexes are unmanaged, do not reflect the deduction of fees and expenses and are not available for direct investment.

DURATION AS A DIVERSIFIER

A curious reader might ask: why would investors pay to take duration risk? Investors can justify a negative expected return on incremental term risk because that risk has been a diversifier for the dominant risk in portfolios: equity beta. Chart 3 shows the correlation between bond and stock returns pre-1998 is actually much more often positive than negative and the flip in sign is generally coincident with monetary policy regime.

CHART 3. U.S. STOCK-BOND CORRELATION VERSUS U.S. MONETARY POLICY GAP



Source: Lieven Baele and Frederiek Van Holle, "Stock-Bond Correlations, Macroeconomic Regimes, and Monetary Policy," October 1, 2017. **Past performance is not a reliable indicator or guarantee of future results.** For illustrative purposes only and does not represent any specific portfolio managed by Lord Abbett or any particular investment. Indexes are unmanaged, do not reflect the deduction of fees and expenses and are not available for direct investment.

NEW DIVERSIFIERS

The takeaway for portfolio builders is that investors likely will need diversifiers beyond duration and equity beta to achieve their risk and return goals. Examining periods of rising rates, we find that credit sensitive strategies generally do well because those periods coincide with economic expansion. Even when inflation spikes, credit can thrive as the real value of debt erodes. In today's environment, many portfolios can achieve a better balance of risks by adding credit exposure.

This commentary has been prepared exclusively for use by institutional investors and their consultants. It is not intended for, and should not be used with, small plan sponsors, plan participants, or the public in written or oral form or for any other purpose.

The above article is a summary of a more detailed research paper available at:

http://www.pa-pers.org/newweb/documents/Fall2018-LordAbbettwhitepaper.pdf

2008-2018-2028: The Dissolving Divides that Will Shape the Post-Crisis Investment Era

Submitted by: Neuberger Berman and Authored by:

Joseph V. Amato,
President & Chief Investment Officer—Equities

Erik L. Knutzen, CFA, CAIA,
Chief Investment Officer—Multi-Asset Class

<u>Overview</u>

As the summer of 2018 ends, our minds turn back to the financial crisis of a decade ago. Those events were so momentous in their impact on the global financial markets, economy and society that we still feel the aftershocks today. Investors and policymakers are still grappling with the effects of the crisis and the unprecedented response.

<u>A Look Back</u>

The 2008 – 09 crisis shocked stock markets, but its impact on debt markets was unprecedented. The 55% plunge in world equity markets was extremely painful, but within historical experience. By contrast, the catastrophe in credit markets—beginning in U.S. subprime mortgages, sending high-yield credit spreads above 2,000 basis points, and culminating in a European sovereign defaulting on an IMF payment—was an unparalleled and scarring experience.

Policymakers' responses to the crisis were equally unprecedented. Major central banks adopted vast quantitative easing programs and, in some cases, negative interest rates. Regulatory authorities overhauled swaths of banking and market regulation. Government balance sheets groaned under the weight of trillions of dollars of debt taken on from the imperiled private sector. Some, such as the U.S. and China, added substantial fiscal stimulus. Others implemented austerity measures, which in the case of the euro zone revealed structural weaknesses that remain unaddressed.

U.S. GDP contracted by more than 4% in the 12 months to the second quarter of 2009. Even the global economy shrank by 2% that year. Over the next five years unemployment peaked at 10% in the U.S. and 11% in the European Union. Youth unemployment in the EU hit 24%.

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The Dissolving Divides that Will Shape the Post-Crisis Investment Era

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A Look Forward

We imagined ourselves 10 years from now. What are the forces that would still be driving the investment world, and what would have been dismissed as mere noise? We agreed that four big trends will still be shaping the economic and financial landscape:

1. The explosion of debt throughout the world, taken on by both sovereign and corporate borrowers.
2. The transition from the east-west world order of the 20th century, and the north-south arrangement of the past 30 years, to the genuinely global, and yet also more fractious multipolar world order of the future.
3. The restructuring of financial and capital markets, a wave of disintermediation of the banks and public equity and bond markets that dominated the past century.
4. The growing economic importance of technology.

We argue that all of this has propelled us into a new era in which some longstanding divides are being dissolved: divides between governments and markets, between the emerging world and the developed world, between the public markets and the private markets, between human and machine. Those dynamics lead us to our 10 key investment implications and five guiding principles for investors that we set out at the end of this project.

1. Readying for the cyclical opportunity in corporate-debt downgrades
2. Rethinking risk diversification in long-term investment portfolios
3. Sharper distinctions between passive, smart beta, quantitative and active management
4. Emerging markets will go mainstream
5. The Great Disinflation is likely over
6. Private assets are becoming more essential—and more flexible
7. Diminished banks mean more opportunities for long-term investors
8. Thematic analysis will be more important for active investors
9. Big data will define our economic ecosystem and transform investing
10. ESG analysis will be more fully integrated into investment processes

From these specifics, we believe that there are five guiding principles to take away:

1. Accept the new reality of lower market return outlooks, higher volatility and higher correlations
2. Pursue the full passive-to-active spectrum
3. Embrace private as well as public markets
4. Create an institutional governance structure that enables nimble opportunism
5. Look for more from asset managers

To read more about the four trends that we believe will be shaping the economic and financial landscape ten years from now, visit: https://www.nb.com/pages/public/global/four-trends-for-the-next-ten-years.aspx.

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The above article is a summary of a more detailed research paper available at:

http://www.pa-pers.org/newweb/documents/Fall2018-NeubergerBermanwhitepaper.pdf

The Supreme Court Rules in Favor of Investors

By: Robbins Geller Rudman & Dowd LLP

On March 20, 2018, the U.S. Supreme Court issued a unanimous opinion in *Cyan, Inc. v. Beaver County Employees Retirement Fund*, No. 15-1439, holding that state courts continue to have jurisdiction over class actions asserting violations of the Securities Act of 1933. The Court's ruling secures investors' ability to bring 1933 Act claims in either state or federal court when companies fail to make full and fair disclosure of relevant information in offering documents. The Court confirmed that the Securities Litigation Uniform Standards Act of 1998 ("SLUSA") was designed to preclude securities class actions asserting violations of state law – not to preclude securities class actions asserting violations of federal law brought in state courts.

In the underlying case, Cyan, a telecommunications company, allegedly made false statements in its offering documents about the company's customer base and likely future sales. When the truth was subsequently disclosed, Cyan's stock lost almost half of its value. Consistent with state courts' longstanding jurisdiction, investors brought a class action in San Francisco Superior Court alleging that Cyan's false statements made in connection with its initial public offering violated Section 11 of the 1933 Act. Cyan moved to dismiss the case on the ground that SLUSA eliminated state court jurisdiction for such class actions. The trial court rejected this contention, relying on an earlier California Court of Appeal decision holding that the SLUSA provisions do not preclude the ability of state courts to hear 1933 Act class action cases – SLUSA's purpose, rather, was to thwart securities fraud class actions brought under state law that were being pursued as a way to evade certain restrictions imposed by the Private Securities Litigation Reform Act of 1995.

Cyan challenged the trial court's ruling by filing a writ in the California Court of Appeal and a petition for review in the California Supreme Court, both of which were rejected. It then sought review before the U.S. Supreme Court.

Through the opinion, the Supreme Court reaffirmed the ability of state courts to adjudicate 1933 Act class action cases, holding that "SLUSA did nothing to strip state courts of their longstanding jurisdiction to adjudicate class actions alleging only 1933 Act violations."

At the time of its enactment, President Franklin D. Roosevelt explained that the 1933 Act was designed to "bring back public confidence" in securities offerings by "put[ting] the burden of telling the whole truth on the seller" in such offerings. Congress implemented this objective by allowing injured investors to file private actions under the 1933 Act in either state or federal court. The decision has affirmed the ability of investors to rely on state courts, as well as federal courts, as a legitimate forum for pursuing class action remedies when companies provide false and misleading information to investors.

"The Supreme Court's unanimous opinion makes clear that investors continue to have an important remedy in state courts when companies fail to come clean in connection with public offerings," noted Robbins Geller partner Andrew S. Love, who represented plaintiffs Beaver County Employees Retirement Fund, Retirement Board of Allegheny County and Delaware County Employees Retirement System in the U.S. Supreme Court and in the California appellate courts.

Robbins Geller attorneys Darren J. Robbins, James I. Jaconette, James E. Barz, Andrew S. Love and Kenneth Black are counsel to the plaintiffs/respondents in *Cyan Inc. v. Beaver County Employees Retirement Fund*.

Impact Investing:
Solutions for People and Planet

By: Rekha Unnithan, CFA, CIMA - Nuveen

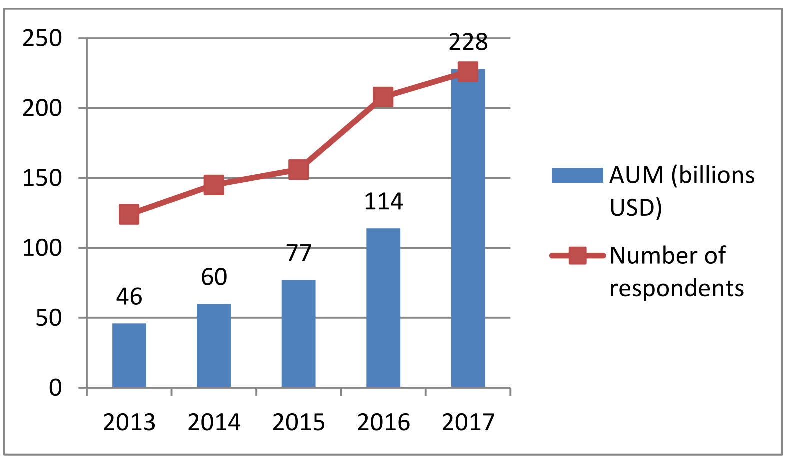
Rekha Unnithan, CFA, CIMA, is responsible for determining Nuveen's Impact Investment strategy. She originates, underwrites and manages impact investments to execute Nuveen's commitment across thematic areas of affordable housing, inclusive finance and resource efficiency. She also oversees a multi-asset class impact portfolio which includes private equity, private real estate, mortgages and fund investments. Rekha holds a BA in economics from Yale University and an MBA with a specialization in financial instruments & markets, and social innovation & impact from New York University's Stern School of Business.

Impact investing is growing rapidly from specialty niche toward the mainstream. Responsible investment programs are expanding to embrace impact strategies that produce direct benefits for people and the planet. Leading the way are institutional investors who have become one of the largest sources of impact investment capital. Pension plans, insurance companies, banks and other financial institutions account for 40% of the capital managed by impact funds in 2017, according to industry research.[i] Three trends are motivating institutions to go beyond their traditional emphasis on rating companies for social responsibility. First, there is growing client demand for investments that produce measurable results in advancing the U.N.'s Sustainable Development Goals (SDGs). Second, various studies provide evidence that impact investments can achieve market-rate returns for fiduciaries. Finally, institutional investors are finding opportunities in scalable businesses, such as affordable housing, microfinance and environmental technology.

Impact investing grows rapidly and becomes more mainstream

The impact investing market is growing rapidly. Reported assets under management increased from $46 billion in 2013 to $228 billion in 2017, while the number of organizations reporting increased from 125 to 229, according to annual surveys by the Global Impact Investing Network (GIIN)[ii] (Exhibit 1). Although the GIIN survey is not comprehensive and AUM partly reflect the increase in organizations reporting, the market's expansion is clearly accelerating.

Exhibit 1: Impact investing is growing rapidly



Note: Reported AUM include an increasing number of survey respondents. Source: 2018 GIIN Annual Impact Investor Survey.

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Impact Investing: Solutions for People and Planet

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There is growing interest from a variety of investors. The share of institutions already invested or starting to develop an impact strategy ranges from nearly 40% for pension plans and insurance companies, to almost 60% of banks and nearly 90% of foundations.[iii]

Impact market evolves to meet the needs of institutional investors

The market's evolution has increased the range of opportunities meeting institutional investors' desired risk/return profile. Nearly two-thirds of impact investors target risk-adjusted, market-rate returns. More than 90% report that impact investment results — financial and social — matched or exceeded expectations.[iv] Nearly three-quarters of investors found impact investments financially attractive compared to other opportunities, and more than half cited diversification benefits for the broader portfolio.

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[i]Source: 2018 Annual Survey by the Global Impact Investing Network (GIIN) https://thegiin.org/assets/2018_GIIN_AnnualSurvey_ExecutiveSummary_webfile.pdf. This report captures data from 229 impact investors, including Nuveen, collected via a survey distributed during January and February 2018. Respondents answered questions regarding their impact investing activities and allocations, their future plans, and their perceptions on key industry issues and trends. All respondents represent impact investing organizations, not individual investors. To ensure that respondents have had meaningful experience managing impact investments, survey-eligibility criteria required that respondents either: (1) have committed at least USD 10 million to impact investments since their inception or (2) have made at least five impact investments, or both. The GIIN defined impact investments as investments made into companies, organizations, and funds with the intention to generate social and environmental impact alongside a financial return.

[ii]GIIN, annual impact investor surveys published in 2014 and 2018. The increase in reported AUM for the five-year period, 2013-2017, partly reflects the increase in the number of survey respondents.

[iii]GIIN, Annual Impact Investor Survey 2017. Data reflect impact fund managers' perceptions of investor interest.

[iv] Ibid.

Risks and other important considerations

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