

Pennsylvania Association of Public Employee Retirement Systems

PO Box 61543, Harrisburg, PA 17106-1543

Website: www.pa-pers.org

Spring 2020

In This Issue Annual Forum Announced1

Save the Date for This Conference

Membership/Sponsorship Info.....18

14th Annual Fall Workshop

Nov. 5-6, 2020

(Thursday-Friday)

Wyndham Philadelphia Historic Area

PAPERS is very much aware of the issues facing everyone right now with the Coronavirus pandemic. At the moment we are continuing to move forward with all plans for our May conference in hopes any travel restrictions will be lifted by that time and health concerns will have eased. Be assured that PAPERS will keep you informed of any necessary changes.

Annual Forum Coming Up!



An exciting new feature has been added to this year's PAPERS Forum. On the first morning (Tuesday, May 19th) there will be concurrent sessions offering a choice of topics and content to attendees. One set of four presentations – called the *Foundations Course* – features basic information helpful to pension plan trustees. At the same time, four more advanced presentations will be given for those already familiar with the basics.

Look inside for:

- Preliminary Forum agenda
- Driving directions and hotel details
 Hotel reservations made on or before 4/20/2020 receive a discounted conference rate.
- Conference registration form

 Early bird registration rates available on/before 4/20/2020

This year's evening social and networking event will be held Tuesday evening at the historic John Harris-Simon Cameron Mansion within walking distance of the Hilton Hotel.

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From the Desk of PAPERS' Executive Director

I heard a meteorologist recently say winter is just about over and spring will be coming soon.

Most of us in Pennsylvania had a very mild winter. I know I did a lot less snow shoveling this year than I have in the past but I'm looking forward to the official start of spring anyway. It marks



the new beginning of the seasons for me and I tend to celebrate different mile stones and anniversaries this time of year.

PAPERS is poised to celebrate a significant mile stone as well. The very first class of our new certification training program has completed all their course assignment and will be officially recognized during the Forum in Harrisburg May 19-20. These 10 individuals have demonstrated a commitment to advancing their expertise in their fiduciary responsibilities as public plan trustees. We are pleased to recognize their accomplishment and congratulate them on their achievement.

Another new addition to the May Forum will be the first ever concurrent workshops. What we originally titled the *New Trustee Workshop*, has been retooled as *Foundations of Fiduciary Responsibilities*. The first morning of the conference we have four presentations that will focus on basic trustee information. Concurrently, we will have four sessions for the more advanced participants. We are very anxious to hear your feedback on this structure.

And finally the sessions themselves; we continue to receive more requests than we have slots available for presentations. Thank you for all of those who have sent requests but were not selected this year. Please do not forget to consider the November workshop. In the meantime, I look forward to seeing everybody at the annual forum in Harrisburg, May. 19-20!

Warmly,

Karen Deklinski

PAPERS Executive Director kdeklinski@msn.com; 717-979-5788





Tentative Agenda for 16th Annual Forum

(As of 3/13/2020 - Subject to Change,

Harrisburg Hilton Hotel, One North Second Street

Monday, May 18, 2020

6:00-8:00 p.m	Registration (Outside Governor Room)
7:00 p.m	PAPERS Board Dinner Meeting (Governor Room)
(Board members &	staff only)

Workshop sessions on Tuesday and Wednesday will be held in the Juniata-Delaware Rooms on the second floor, with the exception of the Foundations Course on Tuesday morning which will be held in the U.S. Boardroom on the third floor.

Tuesday, May 19, 2020

7:30 a.m	Registration (PA Ballroom Pre-Function Area)
7:45-8:30 a.m.	Breakfast (Allegheny-Susquehanna Rooms)
8:00 a.m4:30 p.m	Sponsor Exhibits (PA Ballroom Pre-Function Area)
8:30 a.m. – 12:05 p.m	Concurrent workshops

The first morning's schedule of the Forum this year will be a bit different than in past years - please note that two concurrent tracks of workshops will be presented Tuesday morning. The "Foundations Course" covers basic pension topics and will be especially informative for new trustees and/or staff. The "Forum Sessions" for this morning will be more technical advanced subjects that are probably most useful to the experienced attendee.

Tuesday, May 19, 2020 (continued)

	Foundations Course (3 rd Floor U.S. Boardroom)	Forum Sessions (2 nd Floor Juniata-Delaware Rooms)
8:30 - 9:20	Public Pension Plan 101	ESG: Why Are We Still Talking About This?
a.m.	Speaker:- Dana Descavish - Cambria County Controller's Office	Speakers: Robin Wehbe & Frances Barney - BNY Mellon
9:20-10:10	What Did My Actuary Say?	Private Equity Co-Investment Funds
a.m.	Speaker: Bryan Falata - Aon	Speaker: Patrick McCauley - Capital Dynamics
10:10- 10:25 a.m.	Break – Outside U.S. Boardroom	Break – PA Ballroom Pre-Function Area
10:25-	Current Trends in Asset Allocation	Trends in Pension Investment Management
11:15 a.m.	Speakers: Chris Brokaw & Tim Walters - AndCo Consulting	Speaker: Ignacio Saralegui - Vanguard
11:15 a.m	Fiduciary Matters & Governance	One Size Does Not Fit All
12:05 p.m.	Speaker: Steve Vaughn - PMRS & PAPERS	Speakers: Rich Hazzouri - Morgan Stanley Gregory Stump - Boomershine Consulting
	p.m	ns ing Role in Investment Management
Moderat Panelist	orSusan Oh – P	ublic School Employees' Retirement System Diana Tidd - MSCI Meredith Jones - Aon To be determined - BlackRock To be determined - Bell Partners Karen Sihra - CPPIB
2:10-3:00	p.mAssessing the	e Health of Your Retirement System
Speaker	·	Mark Meyer - Aon
3:00-3:15	p.mBı	reak (PA Ballroom Pre-Function Area)
Speaker	'S	rging Risk Facing Retirement Plans Mark Schlegel - Emerald Advisors Craig Moyer, EmStone Advisors, LLC
4:05-4:55	p.m	Defining Risk Within Management

Speaker Frank Galdi - Palisade Capital Management

Tuesday, May 19, 2020 (continued)

6:00-8:00 p.m. - Reception/Private Tour at the Harris-Cameron Mansion

219 S. Front Street, Harrisburg, PA (3 blocks from hotel)

Home of Harrisburg founder John Harris and later of Civil War Senator Simon Cameron; now the headquarters of the Historical Society of Dauphin County

Guides will be available to provide tours of the Harris – Cameron Mansion during your visit. A gala food and beverage buffet will be provided.



Wednesday, May 20, 2020

7:30 a.m	Registration (PA Ballroom Pre-Function Area)
7:45-8:30 a.m.	Breakfast (Metropolitan Room)
8:00 a.m1:00 p.m	
Panelists	
10:10-10:25 a.m.	Break (PA Ballroom Pre-Function Area)
10:25-11:15 a.m	Utilizing Electronic Document Management (EDM) to Improve Processes and Support Your Membership
Speaker	Kathy Convery - Levi, Ray & Shoup
11:15-11:30 a.m	Closing Remarks/Announcements
11:30 a.m12:15 p.m	Lunch (Metropolitan Room)

Save these Dates for PAPERS Fall Workshop

November 5-6, 2020 in Philadelphia

2020 PAPERS Forum

Directions/Hotel Information

The 2020 PAPERS Forum returns to the Harrisburg Hilton on Market Square in downtown Harrisburg. The hotel is conveniently located at One North Second Street just steps away from Harrisburg's "Restaurant Row".

From New York/New Jersey

Take the George Washington Bridge to I-80 West, take 287 South to I-78 West to I-81 South, Exit 66. Take Front Street south approximately 5.5 miles to Market Street. Turn left onto Market Street; the hotel entrance is one block on the left just after crossing Second St.

From Philadelphia

Take PA Turnpike 76 West, get off at Exit 247, take I-283 North to I-83 south to Exit 43 (Second Street-Capitol complex). At the fourth traffic light, turn right onto Market Street and the hotel entrance is on the left.

From Baltimore/Washington

Take I-83 North to Exit 43 (Second Street-Capitol complex). At the fourth traffic light, turn right onto Market Street and the hotel entrance is on the left.

From Pittsburgh

Take PA Turnpike 76 to Exit 242, Take I-83 north to Exit 43 (Second Street-Capitol complex). At the fourth traffic light, turn right onto Market Street and the hotel entrance is on the left.

Parking - To access the Walnut Street Parking Garage connected to the hotel, travel on Market Street just past the hotel, turn left onto Court Street and follow the signs to enter the garage.

If you're interested in overnight lodging for the Forum

Harrisburg Hilton Hotel

One North Second Street (Market Square), Harrisburg, PA

Single or double rate - \$144/night plus tax

The 16th annual PAPERS Forum will begin with breakfast on Tuesday, May 19, 2020 and continues through lunch on Wednesday, May 20, 2020. PAPERS has arranged a special room rate for attendees at the Forum who desire overnight lodging on May 18th and/or 19th. A group rate of \$144 per night is available for reservations are made on or before April 20, 2020.

To make room reservations on-line, log onto:

https://secure3.hilton.com/en_US/hi/reservation/book.htm?inputModule=HOTEL&ctyhocn=MDTHHHF&spec_plan=EPAP R&arrival=20200518&departure=20200520&cid=OM,WW,HILTONLINK,EN,DirectLink&fromId=HILTONLINKDIRECT

To make room reservations by phone, please call Harrisburg Hilton at 888-370-0980, select Option 1 and provide the group code EPAPR

For more information (driving maps, parking information and hotel details), click on www.Harrisburg.Hilton.com.



2020 PAPERS Forum Registration

May 19 20, 2020 at The Hilton Hotel in downtown Harrisburg, PA

Each individual attending must submit a separate registration form.

The Forum this year begins with breakfast on Tuesday, May 19th and continues through noon on Wednesday, May 20th. Please note important change this year: two concurrent tracks will be offered on the first morning. In addition to the usual conference workshops, a series of introductory presentations designed especially with new trustees in mind will be available. Please indicate on your registration form which series you plan to attend.

Please indicate appropriate category (check one only):

Pension Plan Representatives - Current (2020) PAPERS Participating Membership required
Each individual from pension plan
\$125 Early bird registration payment received or postmarked by 4/20/2020
\$150 Standard registration payment made after 4/20/2020
Associate Member Representatives – Current (2020) PAPERS Associate Membership required Firms providing investment management and legal services
\$750 Early bird registration payment received or postmarked by 4/20/2020
\$825 Standard registration payment made after 4/20/2020
Affiliate Member Representatives - Current (2020) PAPERS Affiliate Membership required Firms providing consulting services, exclusive of investment/legal
\$375 Early bird registration payment received or postmarked by 4/20/2020
\$425 Standard registration payment made after 4/20/2020
Sustaining Members - Current (2020) PAPERS Sustaining Membership required Available 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
\$75 Early bird registration payment received or postmarked by 4/20/2020
\$100 Standard registration payment made after 4/20/2020
Platinum Sponsors - Current (2020) PAPERS Associate or Affiliate Membership required
Four complimentary registrations
Each additional individual from firm (refer to Associate or Affiliate Member rates above)
Gold or Silver Sponsors Current (2020) PAPERS Associate or Affiliate Membership required
Two complimentary registrations
Each additional individual from firm (refer to Associate or Affiliate Member rates above)

Registration form continues on reverse.

Individ	ual's name	
Preferr	ed name for name tag	NC 72
Repres	enting (name of pension plan or firm)	
Mailing	address	
City, St	tate, Zip	
		E-mail address
	Please check all Forum e	vents that you plan to attend
Tu	uesday, May 19, 2020	Wednesday, May 20, 2020
	Breakfast	Breakfast
	Morning sessions (choose only one)	Morning workshops
	Foundations Courses	Lunch
	Workshops	
	Lunch	
	Afternoon workshops	
	Reception/Tour – Harris-Cameron Mansic	on
	Check if interested in Certified P.	A Public Retirement Plan Professional Program
P	lease include full paymen	t of all fees due with this form.
Payme	ent methods:	
1.	To pay by check. Please make check pays PAPERS, P.O. Box 61543, Harrisburg, PA 1	able to: PAPERS and return with this application to: 7106-1543
2.	on the "Spring Forum" tab. Near the bottom o appropriate membership category/registration electronically to PAPERS. To complete the re	e access the PAPERS website (<u>www.pa-pers.org</u>) and click f this page click on the drop down box, select the fee and follow the directions to pay the applicable amount egistration process, this completed <i>Forum Registration</i> must APERS, PO Box 61543, Harrisburg, PA 17106-1543 or Pyerizon.net.

Register early to save on both registration fees and hotel rates.

To pay by ACH transfer. Please contact PAPERS by e-mail <u>douglas.b@verizon.net</u> 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

3.

with the ACH payment.

The PAPERS Forum group rate for overnight lodging of \$144 plus tax at The Harrisburg Hilton is available for reservations made on or before 4/20/2020 (subject to remaining availability).



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.papers.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 email. 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.papers.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 emailed 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.



S Application Form

Certified Pennsylvania Public Retirement Plan Professional

Participant Information:

Name:		Date:		
(Please <u>print</u> your name	the way you would like it o	n your final cert	ification)	
Organization:				
Address:				
City:		State:	Zip:	
Telephone:	E-Mail:			
Payment Information:				
he one-time registration fee is \$499.	Please fill out the following	only if differ en	t than above:	
Billing Name:				
Billing Address:				
City:	State:	Zip:		

Payment methods:

- 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

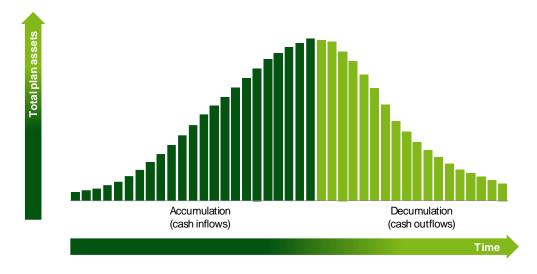
It's Time to Revisit Liquidity Management Solutions

By: BNY Mellon

Negative cashflows pose a number of challenges to pension plans, but a cashflow-driven investment (CDI) strategy may help overcome them.

Pension plans accumulated assets in their younger days through contributions and asset returns. Now, however, many plans are paying out more than they are taking in as payments come due, while still trying to earn sufficient returns to meet the 'pension promise'. In the corporate DB market, for example, Insight Investment estimates that 90% of plans were cashflow negative in 2019¹.

Figure 1: Plans are moving from accumulation to decumulation – and turning cashflow negative²



What challenges do negative cashflows pose?

- 1) As the asset portfolio shrinks, so do the dollar investment returns.
- 2) The timing of investment returns may not match the timing of obligations, challenging near-term liquidity.
- 3) Investors may be forced to sell their return-seeking assets to meet an obligation, potentially compromising their ability to reach fully-funded status without further funding contribution.

CDI is a potential solution

A dedicated CDI strategy has the potential to effectively shield a plan's return-seeking portfolios from cashflow obligations. This is because CDI strategies can focus on generating 'high-certainty' sources of contractual investment income. This can help solve all three challenges by efficiently matching the timing of cash inflows to outflows to manage

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¹ Insight calculations based on 100 largest US corporate defined benefit plans by pension benefit obligation. Net cash flow estimated by difference between GAAP deficit and expected 5-year benefit payments.

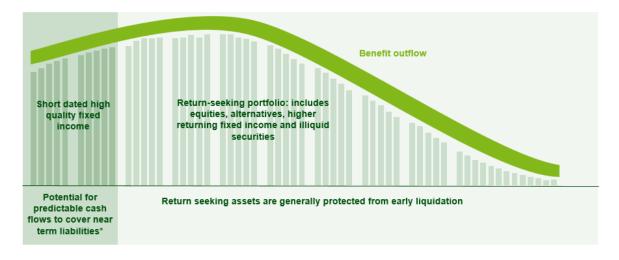
² For illustrative purposes only.

It's Time to Revisit Liquidity Management Solutions

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liquidity and potentially avoid 'forced selling' of return-seeking or hedging assets. Similarly, aiming to achieve a target yield with low turnover and flexibility can enhance the strategy profile. Figure 2 provides an illustration of how CDI assets can be structured with the aim of matching outflows.

Figure 2: A potential CDI portfolio structure at-a-glance³



Finding reliable cashflows in a low yield world

With US Treasury yields touching all-time lows, finding predictable and sustainable sources of cashflow is, of course, easier said than done.

However, it can be facilitated by evaluating assets based on the level of certainty they offer. Fixed income assets provide regular contractual cashflows, and the highest-certainty assets either have high credit ratings and/or structural protections, such as debt covenants or security against collateral. This makes the structured credit market (which can offer a complexity premium above corporate bonds of equivalent credit ratings) an example of a potentially prime candidate for CDI strategies.

Liquidity is also a crucial component of CDI strategies. Consequently, with a CDI strategy in place return-seeking portfolios can potentially be less liquid themselves and often higher return-seeking by construction, supplementing the path toward a fully-funded status.

Maintaining the 'pension promise'

Delivering on cash obligations cuts to the heart of the 'pension promise'. As such, investors may want to consider a CDI portfolio to complement a plan's entire investment strategy and maximize the certainty that it will reach its desired outcomes.

Opinions expressed herein are current opinions of Insight Investment and are subject to change without notice. Insight assumes no responsibility to update such information or to notify a reader of any changes.

³ For illustrative purposes only. * May reflect scheduled plan sponsor contributions.

Valuing Equities in a Low-Growth World

By: Mark Phelps, AB (AllianceBernstein)

As we enter a period of lower growth globally, investors have given higher valuations to companies that can achieve consistent growth. This seems logical, but are we in danger of overpaying?

That is a legitimate concern. But there is a way to avoid overpaying, in our view. Investors must apply a stringent analytical process to derive a fair value for the level of growth that a company can sustain over the coming years. After all, what good is owning a growth company in a low-growth world, if paying too lofty a multiple means that its stock price could be hit by the slightest bump in the road?

Three Steps to Estimating Value

Assessing value starts with growth forecasts. Step one is to build a five-year model of a company's growth prospects that best reflects factors including the nature of its business, prevailing market conditions and the competitive environment. This gives us an earnings number in five years' time.

The next step is to consider what multiple the market will likely attach to those earnings, which is almost always lower than the current value. We take the earnings number, multiply it by the company's prospective value, and add dividend payments to determine a total value five years forward.

Then, we discount that number back to today to derive a current target price. The discount rate is the required rate of return we believe is necessary to justify an investment. This discount rate is composed of: a risk-free rate, usually the 10-year government bond yield; an equity risk premium, which is the excess return required by equity investors to justify the increased risk of owning a stock over a bond; and finally, a stock-specific risk to reflect the differing nature of companies.

Conservative Multiples Are Vital

Based on our experience, this valuation method works in various market environments. For it to be effective, we believe relatively conservative multiples should be assigned to companies and the discount rate should also reflect normalized conditions. However, in a world of consistently low growth and exceptionally low interest rates, it may be appropriate to consider whether our discount rates are too high.

Consider the following example of a high quality European staples company. Over the next five years, we believe this company can grow its earnings by about 10% per year, made up of a combination of 5%–6% revenue growth and 1%–2% margin improvement, some acquisitions and some buyback accretion. When we add in its 2% dividend yield, we believe the stock's total value in five years' time will be about 65% higher than today.

For this company, we currently use a very conservative discount rate of 8%, made up of a risk-free rate and an equity risk premium. Given the company's stability, the nature of its business and its rock-solid balance sheet, we don't believe it requires a high stock-specific risk premium. Historically, the 8% reflects a risk-free rate of between 2% and 4% and an equity risk premium of between 3.5% and 5%.

But does that make sense today? With European bond yields near zero or even negative, the 8% discount rate in our example is made up almost entirely of an 8% equity risk premium. In today's uncertain environment, perhaps a higher equity risk premium is warranted. But at 8%, the discount rate is about twice the historic level, which seems overly prudent for such a stable business.

Lowering the Discount Rate Leads to a Higher Target Price

Why does this matter? Because it significantly changes the target price. Using an 8% discount rate, the fair value of the company today is broadly in line with its current price, suggesting that the expected return over the next 12 months would be broadly in line with earnings growth—approximately 10%. However, when using a 6% discount rate—still reflecting a historically high equity risk premium—the fair value of the company is more than 12% higher, offering a potential return of almost 23% (*Display*).

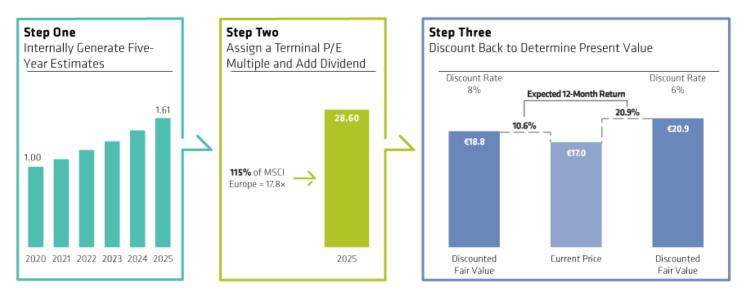
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Valuing Equities in a Low-Growth World

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Calculating Present Value by Forecasting Future Growth

Hypothetical Stock Example



For illustrative purposes only.

European staples company, assuming 10% annual EPS growth. Source: MSCI and AllianceBernstein (AB)

This is a conundrum that investors are facing across the world as interest rates remain extremely low. We think maintaining a conservative approach is certainly warranted, as we believe that lower global growth will impact the vast majority of businesses over time. However, if we assume that interest rates are set to stay low, then a modest tweak to the discount rate in the model is appropriate. This still looks very conservative relative to 10-year government bond yields and its implied risk-free rate, but we believe it better reflects the low growth world we are all living in.

Equity investors should prepare for a bumpy ride as current valuations do not provide much of a cushion for disappointment, but higher multiples and lower discount rates are not inconsistent with a low growth world. Paying close attention to the price tag for companies delivering consistent growth should underpin an equity investing strategy through challenging times ahead.

The views expressed herein do not constitute research, investment advice or trade recommendations and do not necessarily represent the views of all AB portfolio-management teams and are subject to revision over time. AllianceBernstein Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom.

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Mark Phelps is Chief Investment Officer of Concentrated Global Growth. Prior to joining AB in December 2013, he was president and managing director of Global Investments at W.P. Stewart & Co. From September 2008 to June 2013, Phelps also served as W.P. Stewart's chief executive officer. He originally joined W.P. Stewart & Co. (Europe) in February 2005 as a global portfolio manager. Prior to that, Phelps held senior positions with the Kleinwort Benson/Dresdner Bank organization in London and San Francisco, most recently serving as CIO for Global Equities at Dresdner RCM in San Francisco. He holds a BA (Hons) in economics from the University of York and completed graduate studies at the Royal Military Academy Sandhurst. Phelps served in the British Army from 1981 to 1984, achieving the rank of Captain. Location: London

Why Farmland Now?

A durable and consistent investment with upside growth potential Submitted by: Nuveen

SUMMARY

- Increased market volatility has forced investors to search for assets that will be resilient
 throughout the economic cycle. Unexpected market events are seemingly becoming more
 common, requiring investors to revisit their asset class allocation strategies in order to meet
 their long-term return targets at an acceptable level of volatility.
- Farmland is gaining more mainstream acceptance as an institutional asset class, providing
 attractive long-term annualized returns that are uncorrelated to traditional financial products
 such as fixed income and global equities, and low correlation to other real assets. Farmland
 returns are extremely resilient and consistent throughout the economic cycle.

WHY FARMLAND NOW

Farmland continues to provide strong and consistent risk-weighted returns relative to other asset classes. Farmland's performance is unique relative to other financial products due to its relatively low volatility, negative correlation with equities, and consistent performance throughout economic cycles. Farmland has a history of preserving capital in times of economic downturns, and is currently delivering annual income returns above government bond yields in developed countries.

The current low interest rate environment is a function of poor economic growth and a low inflationary environment. Government bond yields in all major developed economies have declined in recent decades. Due to the reduction in bond yields, investors have increasingly begun to seek returns elsewhere. This fact, coupled with the low cost of borrowing, which is also a product of a low interest rate environment, has significantly increased investor demand for real assets (real estate, infrastructure and farmland). The increased demand for these assets has resulted in strong value appreciation in recent years, which in certain cases has outpaced the asset's earnings potential and has resulted in yield compression. However, despite this compression, farmland yields remain attractive relative to other financial products.

When evaluating an investment, it is important to consider the return volatility in addition to expected return. In comparing the volatility of U.S. farmland returns to the S&P 500 and U.S. 10-year bonds over an 18-year period from 2000 – 2018, U.S. farmland returns have experienced a similar level volatility as U.S. 10-year bonds and, significantly lower volatility than equities. Despite its comparable return volatility, farmland has consistently outperformed 10-year bonds, delivering significantly higher yields.

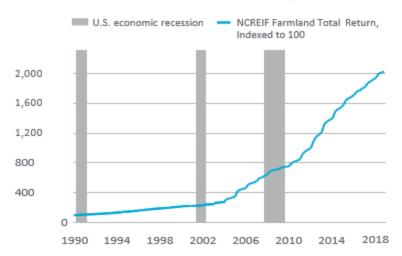
As a result of its superior risk weighted return, one can view farmland as a powerful diversifier within an investment portfolio. Farmland's low volatility becomes particularly valuable in periods of financial uncertainty. In periods of economic adjustment, the asset, unlike other financial products, has proven to be extremely resilient, outperforming all other assets classes. Chart 1 demonstrates the resilience of farmland returns over four decades despite periods when the U.S. and/or global economy was in recession.

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Why Farmland Now?

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Chart 1: Resilience to the economic cycle



The 2008 financial crisis caused severe and prolonged recessions in many of the world's leading economies. In the U.S., the negative consequences of the financial crisis were experienced across most sectors of the economy. However, this period was relatively profitable for the agricultural sector, resulting in strong farmgate profitability and higher agricultural land values. Kuethe et al. demonstrated that in the four-year period leading up to the 2008 financial crisis and the four-year period after the crisis, farmland consistently produced positive returns, outperforming U.S. treasuries, the Dow Jones, and the S&P 500 over the 8-year period.1

Farmland's asymmetric return profile presents a compelling case to invest during instances of economic uncertainty. U.S. farmland has delivered only one quarter of negative returns since 1999 (-0.01% in the first quarter of 2002). Importantly, during periods in which the S&P 500 declined, farmland delivered positive returns. The durability and negative correlation of farmland returns to economic cycles is driven by the consistent requirement of a growing population to eat from a limited land resource base.

Agriculture has experienced a continuous wave of new technologies being introduced over many decades, resulting in productivity improvements. These improvements typically result in improved yields and/or a lower cost of production, positively influencing farmer profitability and underlying land values. Global agricultural total factor productivity (TFP), which measures the changes in the efficiency by which inputs are transformed into outputs, doubled in the 1990s to just over 1.5% per annum relative to what was achieved in the 1970s and 1980s. Importantly, TFP has remained at this higher pace since the 1990s through to today, supported by technology adoption. Tractors were first introduced in the U.S. in 1910 and took almost 50 years to replace horses in agriculture, reducing labour and increased efficiency of planting. In 1996, the introduction of herbicide-tolerant corn in the U.S. took less than 20 years to be adopted. The acceleration of technology adoption is a trend witnessed across many industries and will support productivity growth in agriculture.

Examples of new technologies being introduced include drones and satellite imagery, improved genetics and increased data collection and analysis. These new technological and genetic advances will help reduce the environmental impact of modern agriculture making it more sustainable, helping to produce more with less.

The durability and consistency of returns is unparalleled across other investment alternatives. Fundamental farmland return characteristics remain intact, with upside potential on the horizon in the form of productivity advancements. Farmland possesses a number of unique characteristics, including: strong yields, low volatility, negative correlation to equities, and a resilience to economic cycles. These factors create a compelling case for the inclusion of the asset class in a diversified investment portfolio.

For more information, please visit our website, nuveen.com/westchester.

ALLOCATIONS TO CONCENTRATED EQUITY STRATEGIES

By: Dan Veru, Palisade Capital Management



Dennison "Dan" T. Veru joined Palisade in 2000 and has over 30 years of experience. He serves as Palisade's Chief Investment Officer and is a member of the Firm's Investment Committee, Operating Committee, and is Co-Chairman of Palisade's Board of Directors. In this capacity, he has oversight responsibilities for all of Palisade's investment strategies that trade publicly traded securities. A graduate of Franklin & Marshall College, Dan has appeared as a guest on CNBC, Bloomberg News, and Fox News. He also contributes market opinions to various financial publications.

The paragraph below summarizes a much longer research paper that may be found at:

http://www.pa-pers.org/newweb/documents/Concentrated%20Equity%20Strategies%20-%20Palisade%20Capital%20Management.pdf

As investors search for solutions to help meet their risk and return objectives in these uncertain times, Palisade believes concentrated equity portfolios of high-quality issuers offer a compelling approach to achieve long-term investment objectives. Investors should not underestimate the role of individual companies within a portfolio or believe all risk can be avoided through diversification. Instead, investors seeking long-term return should consider allocating some portion of their assets to concentrated strategies that allow individual companies to drive portfolio performance. For further information regarding this white paper or about Palisade Capital Management, please contact us at info@palcap.com

REITs - A Fresh Look

Adelante Capital Management

The paragraph below summarizes a much longer research paper that may be found at:

http://www.pa-pers.org/newweb/documents/REITs%20A%20Fresh%20Look%20-%20Adelante%20Capital%20Management.pdf

Commercial real estate has been broadly embraced by institutional, sovereign global, and individual investors. At the same time, equity REITs have matured and grown well beyond the "small-cap" generalization contained in many academic studies over the last two decades. With the Global Financial Crisis ("GFC") a decade past and negative interest rates prevalent in many global markets, a fresh look at the benefits of an institutional REIT allocation is warranted.

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