FALL 2018

SACRS

STATE ASSOCIATION *of* COUNTY RETIREMENT SYSTEMS

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SAVE THE DATE

SACRS 2019 SPRING CONFERENCE

MAY 7-10, 2019 ◆ RESORT AT SQUAW CREEK ◆ LAKE TAHOE, CA

REGISTRATION OPENS JANUARY 2019

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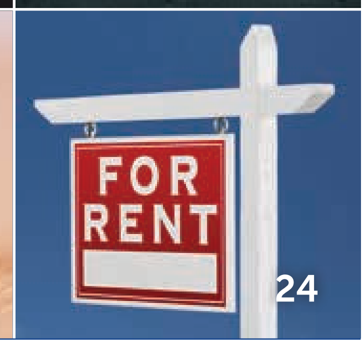
FALL 2018



SACRS

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sacrs.org

ARE YOU READY?

"If you haven't set your plans to come to warm and wonderful Indian Wells for SACRS Fall Conference, November 13-16, there is still time!"

Can you believe 2018 is rapidly coming to a close and the conference is just around the corner? If you haven't set your plans to come to warm and wonderful Indian Wells for SACRS Fall Conference, November 13-16, there is still time! Our location is the Renaissance Indian Wells Resort and Spa and we have a great program in store for you. Here are some highlights:

Great keynotes: We have an amazing line-up of top speaking talent. Turn to page 14 of this edition of SACRS magazine to see highlights that include the Honorable Willie Brown, Ben Stein, Jillian Manus, and Dr. Vikram Mansharamani.

Topical Breakout Sessions: Categories include Administrators; Affiliates; Attorneys; Disability; Trustee; Accounting/Internal Auditors; Investment; Ops/Benefit; and Safety. There really is something for everyone.

Networking Opportunities: Throughout the event, there will be networking breaks, meal functions, and receptions that allow for you to spend time with your fellow SACRS members. There are also two morning wellness sessions, and a special **SACRS' Grand Ole' West: Networking Night Event**. That's right, bring your boots and western wear; we're having a fall harvest party!

Our annual evening events are always highly anticipated, and this year will be no exception. There will be a hearty BBQ dinner, line dancing, and entertainment "cowboy" style. It will be a great way to mix and mingle in an informal setting.

This is just a sample of what you can experience in Indian Wells with us this fall. See the entire agenda on page 15 and register by visiting sacrs.org.

If you are on the fence about attending SACRS Fall Conference 2018, have a look at the Photo Gallery of SACRS Spring Conference on page 30 and see the great opportunities for networking and education attendees received.

Hope you enjoy this edition of SACRS magazine, and join us in Indian Wells!

Sulema H. Peterson

***Sulema H. Peterson**, SACRS Administrator, State Association of County Retirement Systems*

*P.S. This edition of SACRS magazine continues the tradition of articles shared by members. If you have ideas for a story, consider submitting an article! You can do that by contacting me at **sulema@sacrs.org**.*

Featured SACRS Board Members

Christopher Cooper

Marin County Employees' Retirement Association

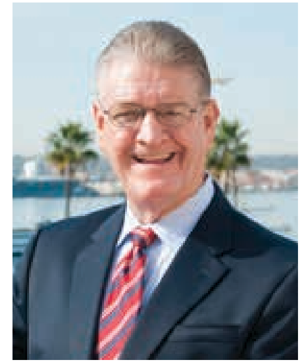
Chris Cooper is a Fire Captain/Paramedic with the City of San Rafael and has served on the Marin CERA Board since 2012. He serves on the Investment Committee and is Chair of the Governance Committee. Chris is a graduate of U.C. Berkeley and an Army Veteran. He has worked in a large corporation as a buyer and has owned a small retail business. A resident of San Rafael, Chris spends his time with wife Lisa and two children Calvin and Lucy (16,12). Contact Chris at *mceracooper@marincounty.org*

Roger Hilton

Orange County Employees' Retirement System

Roger Hilton was elected to the office of Safety Member on May 22, 2012. Roger has worked in law enforcement for more than 28 years and brings more than 20 years of working in leadership roles in employee labor organizations to his position on the OCERS Board of Retirement. Roger began his law enforcement career in 1988 as a deputy for the Los Angeles Sheriff's Department. In 1990 he made a lateral move to the Orange County Marshal's Department as a deputy marshal. In 2000, he joined the Orange County Sheriff's Department after it absorbed the Marshal's Department. He spent nearly eight years on the Board of Directors of the deputy marshals' association, serving as president, treasurer and director. He helped facilitate the merger of the two departments as his last presidential task. With the merger complete, he immediately went to work for the Association of Orange County Deputy Sheriffs (AOCDS), which represents 2,500 active and retired deputy sheriffs, district attorney investigators and probation officers. He currently serves as the First Vice-President of the AOCDS Board of Directors, which oversees the employee supplemental insurances plan. He is also chair of the Political Action Committee and a trustee of the AOCDS Medical Benefits Trust. In addition to his responsibilities with AOCDS, he is an active Orange County Deputy Sheriff currently assigned to the Training Division. Contact Roger at *rhilton@ocers.org*.

NEW GOALS.
NEW SACRS BOARD MEMBERS.



The lazy, hazy, crazy days of summer have come to an end, and while many people were soaking up the sun at the beach, your SACRS board was hard at work. Since the spring conference, your board has met three times - including a day long retreat - to lay out ambitious goals for the coming year. From those meetings, we targeted seven key areas where we want to improve the SACRS agenda. What follows is a list of key elements.

For instance, we are enhancing SACRS communication and marketing. In everything we do, we want to convey how SACRS advocates for its '37 Act county retirement systems. With new marketing strategies, we hope to leverage our new website to showcase accomplishments and provide educational opportunities. We also want to incorporate social media for the benefit of our member organizations.

Conference Fast Approaching

Our goals cannot be accomplished by the board alone. To continue to raise the bar, we need your help. I want to encourage each member to get involved with SACRS, beginning with our bi-annual conferences.

The next conference is November 13 to 16 at the Renaissance Indian Wells Resort and Spa. Remember, this is a perfect opportunity to earn those 24 credit hours of continuing education that is required for all '37 Act County trustees every two years. Register now at *SACRS.org*.

Where Education Meets Practice

Anyone who has attended the annual SACRS Public Pension Investment Management Program at UC Berkeley knows that this program is a winner. It does great things to enhance the education of public pension trustees throughout the state of California.

Our mission is to focus on the program and expand the network that knows about this so we can facilitate a healthy exchange of information for trustees overseeing these pension systems. Don't miss your chance to sign up next year for this enlightening experience. Registration is open. Read more about it on page 20 of this edition of SACRS Magazine.

"I want to give a special thanks to all our past board members and recognize the work they have done to make this organization the best it can be."

We Need Your Help!

We hope to increase committee and board participation whenever possible. Our Affiliate, Audit, Bylaws, Education, Legislative, Nominating and Program committees consistently need new volunteers to step up and take leadership roles, and in our outreach efforts, we hope to recruit bright new members for these positions.

Shout Out to Board Members

I want to give a special thanks to all our past board members and recognize the work they have done to make this organization the best it can be. To pick up that great work, we have our new SACRS board, elected this spring: Vice President Vivian Gray of Los Angeles County, Secretary Kathryn Cavness of Mendocino County, Treasurer Harry Hagen of Santa Barbara County, Immediate Past President Raymond McCray of San Joaquin County and Affiliate Chair Lesley Nettles of Fairview Capital Partners, Inc.

To help us achieve our new goals, we've added two new seats to the SACRS Board of Directors. I'd like to welcome our newest members, Trustee Christopher Cooper of Marin County and Trustee Roger Hilton of Orange County. The expansion of our board gives SACRS participants more opportunity to participate and will help the flow of new ideas into the organization.

As always, we're open to new and different ideas and program speakers. If you have any suggestions, we hope to hear from you.

Looking forward to seeing you all at our November conference!

Dan McAllister, *President of SACRS & SDCERA Trustee*

DRIVING CHANGE
ACROSS THE AUTO INDUSTRY

“With more than 95 million vehicles sold annually around the world and an overall profit pool in excess of $1 trillion, the automotive industry represents a massive ecosystem that involves the raw materials, industrial, technology, and consumer sectors.”

If you were to draw up the ideal scenario for active managers looking to generate alpha, you would start by identifying a systematically important industry that presents a massive, global opportunity set. You would also want an industry that is being reshaped by multiple, interrelated disruptive forces that are shifting profit pools across the value chain, resulting in many winners and losers. To top it all off, you would want the industry to be solving problems that have broad implications for society.

In short, you would be looking for the automotive industry.

We believe that today’s automotive industry—more than at any other time in its history—presents ample opportunities for active managers to uncover value for their investors. With more than 95 million vehicles sold annually around the world and an overall profit pool in excess of $1 trillion, the automotive industry represents a massive ecosystem that involves the raw materials, industrial, technology, and consumer sectors. The most intriguing aspect of the automotive industry for active managers, however, is the importance of being able to identify which parts of the value chain—original equipment manufacturers, integrators, suppliers, and raw materials producers—will be gaining and losing profitability over the next several decades, as well as the specific companies that are well positioned to capture that value.

“Three powerful trends—advanced driver-assistance systems (ADAS), ridesharing, and electric vehicles—are dramatically changing the trajectory of the industry.”

Three powerful trends—advanced driver-assistance systems (ADAS), ridesharing, and electric vehicles—are dramatically changing the trajectory of the industry. Each of these trends creates immense threats to established players and opportunities for incumbents and new entrants alike.

To excel in this environment, investors must think across sectors, have a global perspective, and focus on sustainable value creation—identifying companies that can generate excess returns on capital over time and reinvest those returns in growth projects that reinforce the company’s competitive advantage.

None of the three major trends can be viewed in isolation. They are evolving at different speeds and creating derivative effects across industries. To understand these complex dynamics, investors must think about the interconnectedness of industries. Investors also must think about how these trends are playing out differently in developed markets versus emerging markets and, more specifically, about how projections for volume growth and regulatory changes will play out in specific countries.

> “Capitalizing on long-term growth opportunities in the automotive industry while navigating near-term risks requires a disciplined, bottom-up approach and the ability to delineate between shorter-term, cyclical dynamics and more enduring, structural ones.”

In addition to understanding the long-term macro trends that are reshaping the entire automotive industry, investors also must identify the characteristics of companies that have a sustainable advantage—and those that are most at risk—within the shifting pools of profitability across the value chain. Capitalizing on long-term growth opportunities in the automotive industry while navigating near-term risks requires a disciplined, bottom-up approach and the ability to delineate between shorter-term, cyclical dynamics and more enduring, structural ones.

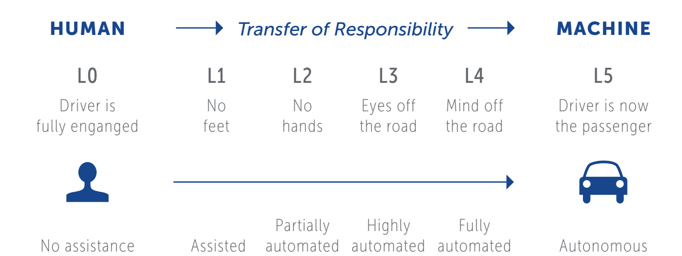
Analyzing the Human Element of Automobiles

One factor that makes analyzing the automotive industry even more complicated—and interesting—is the “human element.” The future of the automotive industry will have profound implications for human safety and productivity, environmental sustainability, and the next phase of industrialization in China and other emerging markets. In addition to these considerations, investors must also take into account the varying attitudes and personal connections that people have with their cars.

For example, in developed countries, automobiles have been an important—and, in the United States, often romanticized—part of consumers’ lifestyles for much of the past century. In emerging markets, owning a car is one of the landmark aspirational purchases of the rising middle class. These attitudes, as well as society’s views on safety regulations and the treatment of workers, will have a major influence on the adoption of new technologies and business models.

FIGURE 1 | Levels Of Driving Autonomy

Fully autonomous vehicles (L5) are grabbing headlines today, but the widespread deployment of this technology is still 10 to 15 years away. In the meantime, the growing adoption of L2 ("hands off" partial automation involving steering and acceleration) and L3 ("eyes off" conditional automation in more predictable settings) represents a pure growth story and should drive increasing profitability across the value chain.



Source William Blair, as of June 2018.

Will Transportation Become Commoditized?

Electric vehicles, ridesharing, and eventually fully autonomous vehicles all have elements that suggest that consumers may begin to view transportation as a commodity. In this scenario, consumers would make their transportation decisions based on utilitarian factors and stop viewing vehicles as essential to their lifestyle.

If original equipment manufacturers (OEMs) shift toward a subscription-based model where individuals don’t own the car, it is easy to see how the car’s design and performance features would be less important. If people are purely passengers in vehicles rather than sitting behind the wheel, the vehicle’s ability to handle corners smoothly is less valuable. If most new cars have an electric powertrain rather than an internal combustion engine, the speed at which the car can accelerate from 0 to 60 miles per hour stops being a differentiating factor.

While these concerns are valid and directionally true, the idea that transportation will become largely commoditized is overblown.

Whether purchased as a product or a service, transportation is still a consumer transaction, and premium options exist in every part of the consumer industry. People will always want to have options, and as a result, brands will always matter. There is a reason why people buy luxury watches that are no better at telling time than cheaper options. Airlines are continually developing new fare classes that allow passengers to upgrade to larger seats with more amenities. The creation of premium service levels has already occurred in the ridesharing industry, with Uber and Lyft offering black car and other tiers of service.

Undoubtedly, the rise of electric vehicles, ridesharing, and autonomous vehicles will cause some commoditization. This will force OEMs, platform providers, and other consumer-facing players in the industry to adapt their brands and value propositions. But there will continue to be premium choices, and brands will always matter. As a result, premium OEMs are in a much better position to navigate these changes than more economy-focused ones.

D.J. Neiman, CFA, *is partner, director of research, for the Global Equity team at William Blair Investment Management. He is also a global research analyst covering small-cap financial stocks. Before joining Investment Management in 2009, D.J. was an analyst in the firm’s sell-side research group, covering the financials sector with a focus on the asset-management and advisory investment-banking industries. Previously, D.J. was a senior accountant with William Blair Funds and a fund analyst at Scudder Kemper Investments. He is a member of the CFA Institute and the CFA Society of Chicago. He received a B.S. from Miami University and an M.B.A., with high distinction, from the University of Michigan’s Ross School of Business.*

This article is adapted from the William Blair white paper, “Investment Outlook for the Automotive Industry: How Advanced Driver-Assistance Systems, Ridesharing, and Electric Vehicles are Driving Change Across the Industry.”

"While AI as a field was officially born in 1956 and much of the early developments occurred in developed markets, the progress and impact AI has, and will continue to make, in emerging markets cannot be overlooked."

ARTIFICIAL INTELLIGENCE:

What It Is and Why It Matters to Emerging Markets and China

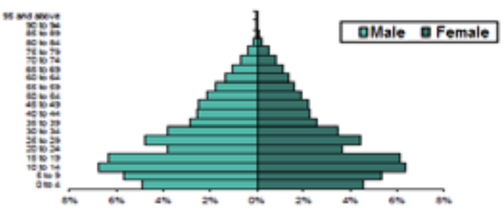
Artificial Intelligence, or AI, describes a set of computational technologies inspired by the ways human sense, comprehend, and take actions. Klaus Schwab, the founder of the World Economic Forum, emphasized AI as a crucial driver of the fourth industrial revolution underway currently. AI is responsible for transforming "entire systems of production, management, and governance."[1] While AI as a field was officially born in 1956 and much of the early developments occurred in developed markets, the progress and impact AI has, and will continue to make, in emerging markets cannot be overlooked.

Why Do Emerging Markets Need AI?

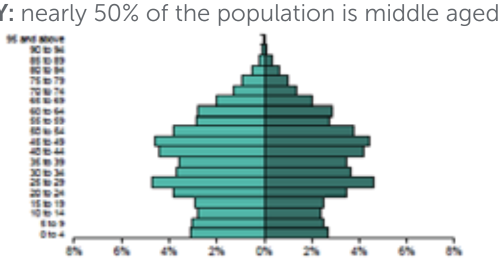
Emerging markets stand to benefit more significantly from AI for demographic and economic reasons. China has historically relied on its vast labor market and heavy capital investment to sustain economic growth. However, these factors are now generating diminishing returns. [Figure 1] In 1982, about one-third of the Chinese population was under the age of 15. Today nearly 50 percent of the population is considered middle age. There is also an expected net 37 million reduction in the labor force between 2013 and 2026. In addition, resources are lacking in some critical professions such as education and healthcare. On average, there are only 5.4 teachers per 100 students in China, compared with 6.1 in the United States and 7.4 in Europe. Such a gap is even more pronounced between urban and rural areas. AI in the long term can help mitigate this loss in labor force without compromising productivity. Specific domain knowledge can also be trained to fill the gap in expertise.

FIGURE 1

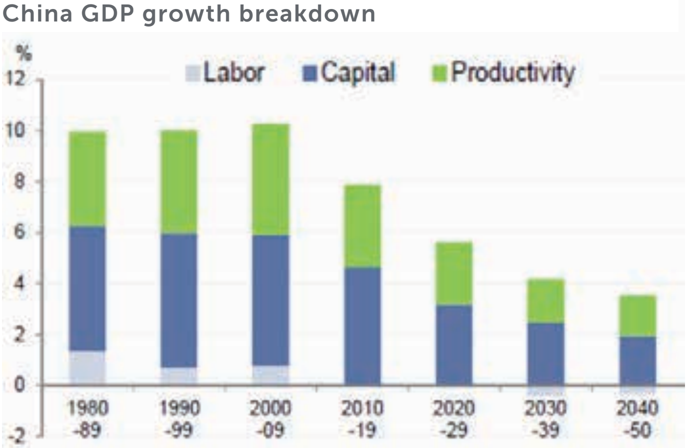
1982: 1/3 of the population was under age of 15



TODAY: nearly 50% of the population is middle aged



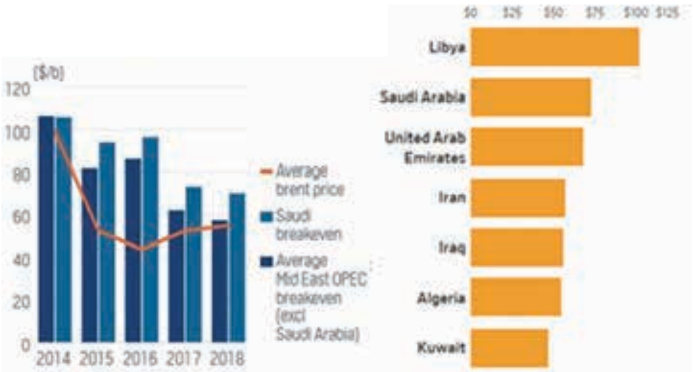
China GDP growth breakdown



Source: NBS, Haver, and Bernstein Analysis, January 2018

Similarly, in the Middle East, economic dependence on energy is pushing governments to diversify and leverage technology more. After the oil price collapsed from its peak 2014, many countries adapted by cutting costs, yet most gulf countries today still have fiscal breakeven oil prices above the average price of Brent. [Figure 2] In the case of Saudi Arabia, foreign exchange reserves collapsed from a peak of $750 billion USD in 2014 to below $500 billion USD in 2017, as the government had to draw down the reserves to cover budget deficits caused by low oil export receipts.

FIGURE 2 | Opec Fiscal Breakeven Oil Prices In Middle East



Source: IMF, 2018

> *"Apollo OS is the autonomous driving platform with 116 partners around the world. One of its Apollo partners just announced volume production of China's first L4 (High Automation) autonomous bus in June 2018. Apollo hopes to achieve full autonomous driving solutions by 2021."*

Role of Large Technology Platforms and Other Examples of AI Adoptions

Large technology companies boast economies of scale, access to talent and resources, as well as first-mover advantage. This holds true in emerging markets. In China, for example, the three technology giants, Tencent, Baidu, and Alibaba utilize AI in myriad applications. Tencent leverages AI to optimize advertising placement, customize content delivery and assess risk for financial products. Baidu is heavily involved in academic research including R&D for AI chips. Baidu Brain, the core AI engine, supports the core business by optimizing search and advertising. For its AI operating systems, Baidu adopts an open-source

approach, thereby reducing the application development cycle and increasing the probability of rapid adoption. DuerOS is the conversational AI system used in many consumer applications. Apollo OS is the autonomous driving platform with 116 partners around the world. One of its Apollo partners just announced volume production of China's first L4 (High Automation) autonomous bus in June 2018. Apollo hopes to achieve full autonomous driving solutions by 2021. Alibaba was China's biggest R&D spender ($2.6 billion USD) in 2017. Its main areas of AI deployment to-date include targeted marketing solutions, payment, supply chain management, cloud and smart city. AI is used for the whole customer sales cycle, including product discovery, purchase decision, delivery, and after-sale service. Alibaba's affiliate Ant Financial developed a system that uses facial recognition, or Face ID, for opening and verifying accounts. Ant Financial also pioneered a credit score system based on one's online presence called Sesame Credit. This innovation has helped advance the development of a country-wide credit system.

In Russia, the country's leading Internet search company, Yandex, has been working with industries to provide AI solutions. An agreement was signed with Gazprom Neft, an integrated oil and gas company in Russia, on co-developing Russia's first integrated platform for the processing and interpretation of seismic data through the entire cycle. AI helps cut down the significant costs that are typically incurred in managing disjointed data and modules. The end goal of the platform is to develop cognitive assistants that will provide engineers with pre-prepared solutions for further action. In addition, Yandex is also developing modules to prevent fraudulent transactions. The model analyzes transactions and returns a response defining the probability of the transaction being fraudulent.

Throughout emerging markets, examples of AI adoption are increasing across markets and industries by companies of every size. [Figure 3]

FIGURE 3 | AI Applications Across Sectors

Country	Company Name	Description
Logistics		
China	Meituan	Real time logistic dispatch system that uses predictive modeling to generate the most time efficient delivery routes for millions of orders between merchants and customers.
Peru	Chazki	Built a robot that learns the coordinates of delivery addresses and essentially built a new postal map, including destinations where no formal address previously existed.
Agriculture		
Brazil	Raizen / Space Time Analytics	Use AI to forecast, up to one year in advance, the size of the sugarcane harvest
Professional Services		
Russia	Strafory (Vera)	A robot (Vera) selects resumes, calls people about open roles, and interviews top candidates.
Financial Services		
Russia	Sberbank	Automated decisions on loans, biometrics factors for transactions
Consumer		
India	Flipkart	Intelligent merchandising, advertising, marketing, logistics and customer service
Korea	LG	Airport guide robots at the 2018 Winter Olympic games
Russia	Damate	Automated system for quality and sanitary control, and regulatory compliance
Healthcare		
China	PingAn Doctor	Remote access to medical needs; AI+ Brain to generate disease and pandemic forecast
Korea	Seegene	Developed new molecular in vitro diagnostic tests using a newly created AI based system
Telecommunication		
Indonesia	Telkomsel	Chatbots used to answer 96% of customer inquiries
Security		
China	Alibaba (City Brain)	Manage traffic data and analyze footage

"While electric vehicle adoption is still nascent, investment and consolidation in the metal industry have picked up significantly."

AI Investment Opportunities Outside of Technology Platforms

Semiconductor -- With more data collection, demands for computing power and storage memory are skyrocketing. Within driverless cars, Google and Intel estimate that there will be 4 TB of raw data, or 400 GB of compressed data, collected for an average 1.5-hour driving day. AI also increases demand for servers to store and process data at low latency. Alliance Bernstein estimated last year that within DRAM memory alone, revenue derived from assisted driving and data centers will increase from around $2 billion in 2016 to $24 billion by 2030[2]. Memory is just one example in the downstream semiconductor sector that is set to gain from the AI revolution. All parts of the value-chain, including wafer, chips, and foundry, will benefit from the megatrend. Semiconductor strongholds Taiwan and Korea, and even newcomer China, should gain.

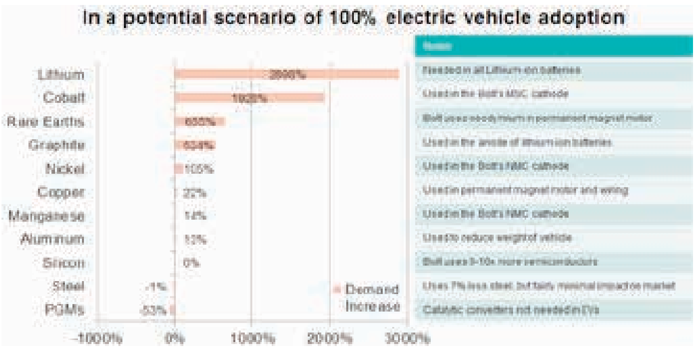
Metal -- One of the most exciting AI applications is the eventual shift to autonomous driving. Electric vehicle trends represent evolving ideals towards full autonomy both from an environmental and an engineering standpoint. Should the world reach 100 percent electric vehicle adoption, demand for many metals will skyrocket. [Figure 4] These estimates do not yet include the additional demand created from complementary applications, such as grids and charging infrastructure, applications that will only cement the trend for explosive metal demand. While electric vehicle adoption is still nascent, investment and consolidation in the metal industry have picked up significantly.

Cobalt, an essential metal in cathodes, is constrained by supply in tonnage and origin. The price of cobalt has nearly tripled in the last two years, surging 129 percent in just 2017. Players along the value chain are scrambling to secure additional supplies. GEM, a China-based battery producer and recycler, struck a deal in March this year to buy a third of cobalt output from projects owned by Glencore over the next three years.

On the lithium front, even though it is not as supply-constrained as cobalt is, suppliers accelerated the pace in reaching ever greater concentration in an already oligopolistic market. In May this year, China-based Tianqi Lithium agreed to buy a 23.8 percent stake in Chile's Sociedad Quimica y Minera for $4 billion USD. The acquisition will boost Tianqi's global share of the metal's output to 18 percent from 13 percent.

In addition to cobalt and lithium, other EM mining firms, such as Norilsk Nickel (Nornickel) in Russia and Vale in Brazil, are leading the industry as they race for new growth opportunities tied to electrification. Nornickel is the world's leading producer of nickel, palladium and copper. Vale is the largest producer of iron ore and nickel in the world. It is also an important producer of manganese, copper and cobalt.

FIGURE 4 | Electric Vehicles



Source: UBS Evidence Lab, September 2017.

Telecommunication -- For most emerging countries, especially in Latin America, South East Asia and India, digitalization and 4G are still novel concepts. For example, the average 4G penetration in Latin America is just 17 percent and only 26 percent of total subscribers are on post-paid plans[3]. However, as the economy in the region recovers and as the rollout for end-applications using digital services accelerates, growing evidence shows that customers are willing to pay more for better connectivity and network coverage. As 4G penetration deepens, the percentage of postpaid subscribers should therefore rise, enhancing the value proposition of telecom operators and their monetization. In more advanced emerging markets, China and Korea, operators are moving into 5G deployment and value-added services, such as payment, e-commerce, Internet of Things and data center, riding the AI growth wave.

> *"Most emerging markets have favorable policies toward AI adoption."*

Why Are AI Investment Opportunities in Emerging Markets Unique?

Most emerging markets have favorable policies toward AI adoption. According to SAP, more than half of the 1,500 AI research projects in Russia in the past decade were paid for by the state[4]. Hungary and Poland have actively supported the growth of start-ups by setting up special economic zones, investing in infrastructure, and providing tax breaks. Poland, similar to the UK, announced plans last year to turn its universities into innovation hubs. In the UAE, the government just appointed its first minister for AI in October 2017 and it launched a $270 million Dubai Future Endowment Fund in the same year. Saudi Arabia shares similar ambition through the announced National Transformation Program 2020 and Vision 2030 Program last year. In November 2017, Saudi Arabia's Crown Prince also pledged $500 billion to build a new, high tech city called Neom on the Kingdom's Red Sea coast. In February this year, Indian Finance Minister Arun Jaitley told parliament that the government think-tank, Niti Aayog, will spearhead a national program on AI. Budget allocation for Digital India was almost doubled to Rs 3,073 crore ($477 million) this year.

Besides favorable government policy, the demographics in emerging markets have also acted as a tailwind for AI. The median age in most emerging countries is around 30 years old, compared with above 40 years old in developed markets, suggesting a greater willingness among the former to accept new technology. Increasingly cheaper smartphones have also enabled emerging markets to leapfrog the desktop age, straight to mobile adoption. Statistics have shown that Asia and Latin America have consistently led developed markets in terms of digital and social media penetration in the last few years, despite delayed rollout. Strong trends towards digitalization are key for AI because data collection, which allows for insights to be extracted and inferences made, forms the foundation upon which the AI framework is built and its potential maximized.

In addition to favorable age dispersion, another important demographic dividend is the size of emerging market populations. China and India together account for 36.4 percent of the world's population. As Sachin Chitturu, a partner at the McKinsey Digital Labs based in Singapore, said in an interview last year, "Value increases as scale does. [...] The economies of scale and the cost improvement are so much better."[5]

China is a classic example of policy and demographics creating a tailwind for AI development. The government wants to be the global leader in AI in 2030. The country boasts unmatched data, with over 900 million smartphone users. In mobile payments alone, transaction value in China is more than 10 times that of the U.S. China also has a lot of engineering talent available at low cost. Every year, there are 3 to 4 million students graduating from math, science and engineering disciplines, compared with just fewer than 600,000 in the U.S. Its large economy and booming business environment mean that technology companies in China can go shoulder to shoulder with western firms in hiring the most talented engineers.

Challenges Faced by Emerging Markets as AI Rises

Many key industries in emerging markets are labor intensive and therefore are susceptible to job loss as technology and automation advances. A McKinsey report estimates that 50 percent of work tasks in China could be replaced by AI[6]. Second, technology is developing at such a rapid speed that it may be threatening the rise of emerging markets' middle class which compromises the benefit of a large population, if labor does not get the chance to move up the industrial value chain. Third, many emerging markets still lack key technology building blocks, such as semiconductors and advanced telecom networks, which could increasingly become an issue as nationalism percolate globally. Fourth, developed markets tend to have more comprehensive innovation ecosystems. They are home to not only the leading technology firms, but also world class universities and research institutions. Finally, rapid technological advancements could make it increasingly difficult for governments to adjust legal and social systems. Social issues, like income inequality and discrimination, could only worsen if emerging markets do not adjust their legacy models.

Future Development

While lack of talent is the most commonly cited reason for the gap in AI that exists between developed and emerging markets, many countries also lack infrastructure investment, which is why the long term cost-benefit of AI for emerging markets should be considered. China already spends more than the EU on research and development, and the spending gap with the U.S. continues to narrow. China has invested about USD $10 billion in AI since 1999 and it has 600 AI start-ups, second only to the U.S. Domestic technology leaders are also emerging. These firms are making substantial investments not only in China, but also around the globe. Already over 50 percent of their investments are made in overseas markets. Elsewhere in emerging markets, many foreign owned companies have long deployed resources in the regions. In India, 58 percent of the companies are using AI, mostly developed by large global technology companies, at scale. We see foreign influence to be an important step to AI adoption, as these companies help raise awareness and educate the local workforce. Ana Paulas Assis, General Manager of IBM Latin America, said last year that as China was becoming a more important trade partner for Latin America, the region must increase its technology adoption and digital transformation significantly. McKinsey also noted that, "one-third of major corporations in Southeast Asia mentioned terms such as 'AI' and 'machine learning' in their annual financial reports last year. By contrast, only 6 percent of them did so in 2011."[7] In short, despite the challenges, we expect AI to create many opportunities in the emerging markets.

ENDNOTES

1 Schwab, Klaus. "The Fourth Industrial Revolution." *World Economic Forum*, 14 Jan. 2016, www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/.

2 Newman, Mark, et al. *A.I. and Leading Edge Semiconductor Manufacturing: Part VIII – Deep Dive into Memory Needs*, Alliance Bernstein, 2017.

3 Aragao, Diego, et al. *The Era of Digitalization*. Goldman Sachs, 2018.

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***Michelle Fan, CFA**, is an Analyst for the Global Emerging Markets Equity team at BNP Paribas Asset Management. She focuses on Technology, Healthcare and Telecom. BNP Paribas Asset Management is the investment management arm of BNP Paribas, one of the world's major financial institutions. Managing and advising on assets of EUR 560 billion as of June 30, 2018, BNP Paribas Asset Management offers a comprehensive range of active, passive, and quantitative investment solutions covering a broad spectrum of asset classes and regions. With more than 700 investment professionals and around 400 client servicing specialists, BNP Paribas Asset Management serves individual, corporate, and institutional investors in countries around the world. Since 2002, BNP Paribas Asset Management has been a major player in sustainable and responsible investing.*

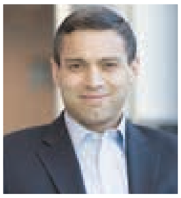
November 13-16, 2018

SACRS

2018 FALL CONFERENCE

Renaissance Indian Wells Resort and Spa • Indian Wells, CA

CONFERENCE HIGHLIGHT: **HEAVY-HITTER KEYNOTES**

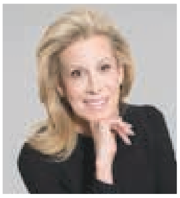


WEDNESDAY, NOVEMBER 14

8:45 AM – 9:45 AM | **GENERAL SESSION**

Navigating Global Economic Uncertainty: An Unconventional Approach

Dr. Vikram Mansharamani, a global trend-watcher who shows people how to anticipate the future, manage risk, and spot opportunities, offers a stimulating and entertaining talk to help shed light on the underlying drivers of populism and rising protectionism, as well as provide a roadmap of how the future may unfold. Attend and find out why *Worth Magazine* profiled Dr. Mansharamani as one of the 100 most powerful people in global finance.



THURSDAY, NOVEMBER 15

9:00 AM – 9:50 AM | **GENERAL SESSION**

Don't Waste An Opportunity

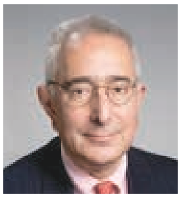
Jillian Manus is Managing Partner of Structure Capital, an early stage Silicon Valley tech fund, branded as The Architects of the Zero Economy. As the third investor in Uber, Structure seized upon the opportunistic innovations of the Sharing Economy. Yet, as technology has progressed exponentially we can monetize not only the assets we shared, but also those we discarded. In this keynote, Ms. Manus will take us through a compelling perspective of purpose and high profitability through a unique lens.

WEDNESDAY, NOVEMBER 14

11:15 AM – 12:15 PM | **GENERAL SESSION**

Midterm Elections With The Honorable Willie L. Brown, Jr.

Two-term Mayor of San Francisco, legendary Speaker of the California State Assembly, and widely regarded as the most influential African-American politician of the late twentieth century, Willie L. Brown, Jr., has been at the center of California politics, government, and civic life for an astonishing four decades. Today, he heads the Willie L. Brown, Jr., Institute on Politics and Public Service, where this acknowledged master of the art of politics shares his knowledge and skills with a new generation of California leaders. In this session, he offers his insights to SACRS Fall Conference attendees.



THURSDAY, NOVEMBER 15

11:10 AM – 12:10 PM | **GENERAL SESSION**

New York Times Best Selling Author & Emmy Winner Ben Stein

Ben Stein, a powerful speaker on economics, politics, education, and history, has written or co-written about 30 books, most of which concentrate on investing, and many of which are *New York Times* bestsellers. Widely considered one of the great humorists on political economy, in this session Mr. Stein will highlight the funniest and most influential trends in current history.

Dynamic Speakers. Valuable Trustee Training. Shared Best Practices.

sacrs.org/events/fall-conference » ***REGISTER NOW***

Tuesday, November 13

1:00 PM – 6:30 PM **SACRS Registration**

3:00 PM – 5:00 PM **New/Advanced Trustee Training**
I Got It! Now, What Is It That I Do As A Pension Fund Trustee?
SPEAKERS: Dan McAllister, SACRS President, Vivian Gray, SACRS Vice President, Julie Wyne, Sonoma CERA, Tim Price, Contra Costa CERA, J.J. Popowich, Los Angeles CERA and Lori Nemiroff, Ventura CERA
MODERATORS: Gabe Rodrigues, Contra Costa CERA and Rich White, SACRS Past President

3:00 PM – 5:00 PM **Disability/Ops**
The Heart, Cancer, Blood-Borne Infectious Diseases, and Biochemical Substances Presumptions Under CERL
SPEAKER: Frank Boyd, Los Angeles CERA
MODERATOR: Tamara Caldwell, Los Angeles CERA

5:30 PM – 6:30 PM **SACRS Welcome Reception**

Wednesday, November 14

6:30 AM – 7:30 AM **SACRS Wellness Session: Morning Yoga**

7:30 AM – 8:30 AM **SACRS Breakfast**

7:30 AM – 5:00 PM **SACRS Registration**

8:30 AM – 8:45 AM **General Session & Welcome Remarks**
SPEAKER: Dan McAllister, SACRS President

8:45 AM – 9:45 AM **GENERAL SESSION**
Navigating Global Economic Uncertainty: An Unconventional Approach
SPEAKER: Vikram Mansharamani, Yale Professor
MODERATOR: Frank Mottek, Broadcast Journalist, CBS Stations KNX 1070 Newsradio

9:45 AM – 10:15 AM **SACRS Networking Break**

10:15 AM – 11:10 AM **GENERAL SESSION**
MODERATOR: Frank Mottek, Broadcast Journalist, CBS Stations KNX 1070 Newsradio

11:15 AM – 12:15 PM **GENERAL SESSION**
Midterm Elections
SPEAKER: Honorable Willie L. Brown, Jr.
MODERATOR: Frank Mottek, Broadcast Journalist, CBS Stations KNX 1070 Newsradio

12:15 PM – 1:45 PM **SACRS Lunch & Motivational Presentation**
SPEAKER: Ramsey Jay, Jr. (12:30 PM - 1:30 PM)

2:00 PM – 5:00 PM **CONCURRENT SESSIONS**

- **Ops/Benefits Breakout AND Disability Breakout (Consolidated Session)**
  MODERATOR: Kathy Regalia, Sacramento CERS
- **Affiliate Breakout**
  MODERATOR: Lesley Nettles, Affiliate Committee Chair
- **Attorney Breakout**
  MODERATOR: Karen Levy, Contra Costa CERA
- **Internal Auditors Breakout**
  MODERATOR: Harsh Jadhav, Alameda CERA

Wednesday, November 14 CONTINUED

- **Administrators Breakout**
  MODERATOR: Dominic Brown, Kern CERA
- **Investment Breakout**
  MODERATOR: Donald Pierce, San Bernardino CERA
- **Trustee Breakout** – How Boards Can Work Through Challenging Meetings Together
  SPEAKER: Dr. Jere Thrasher, Leadership Clearinghouse
  MODERATOR: Kathryn Cavness, SACRS Secretary and Mendocino CERA
- **Administrative Staff Breakout**
  MODERATOR: Aimee Morton, Kern CERA
- **Safety Breakout**
  MODERATOR: Gabe Rodrigues, Contra Costa CERA

6:30 PM – 10:00 PM **SACRS Annual Wednesday Night Event**
SACRS Grand Ole' West: Networking Night Event

Thursday, November 15

6:45 AM – 7:45 AM **SACRS Wellness Session: Fun Run**

7:30 AM – 8:30 AM **SACRS Legislative Committee Meeting**
SPEAKERS: Trent Smith and Mike Robson, SACRS Legislative Advocates

7:30 AM – 8:30 AM **SACRS Breakfast**

7:30 AM – 5:00 PM **SACRS Registration**

8:45 AM – 9:00 AM **GENERAL SESSION**
Welcome & Veteran's Day Recognition
SPEAKER: Dan McAllister, SACRS President

9:00 AM – 9:50 AM **GENERAL SESSION**
Don't Waste An Opportunity
SPEAKER: Jillian Manus, Structure Capital
MODERATOR: Frank Mottek, Broadcast Journalist, CBS Stations KNX 1070 Newsradio

10:00 AM – 10:50 AM **GENERAL SESSION**
More People, More Jobs, More Market Volatility, More Tariffs: Why Real Estate, Why Now In Your Portfolio
SPEAKERS: Doug Lawrence, Five Stone Real Estate, Steve Mastrovich, UBS and Geoff Dohrmann, Institutional Real Estate, Inc.
MODERATOR: Frank Mottek, Broadcast Journalist, CBS Stations KNX 1070 Newsradio

10:50 AM – 11:10 AM **SACRS Networking Break**

11:10 AM – 12:10 PM **GENERAL SESSION**
SPEAKER: Ben Stein, Actor and Political Satirist
MODERATOR: Frank Mottek, Broadcast Journalist, CBS Stations KNX 1070 Newsradio

12:15 PM – 1:30 PM **SACRS Lunch**

1:30 PM – 2:30 PM **CONCURRENT SESSIONS**

- **Concurrent Session A**
  SACRS Legislative 2018 Update
  SPEAKERS: Trent Smith and Mike Robson, SACRS Legislative Advocates
  MODERATOR: Roger Hilton, SACRS Board of Director and Orange CERS

Thursday, November 15 CONTINUED

- **Concurrent Session B**
  Investing In A Low-Return, Rising-Rate Environment
  SPEAKERS: Jason M. Kellman, Pinnacle Asset Management, L.P. and Satya Kumar, Allianz Global Investors
  MODERATOR: Sam Austin, NEPC
- **Concurrent Session C**
  Real Talk: Developing & Retaining The Next Generation Of Leaders
  SPEAKER: Shawna Ferguson, Wellington Management
  MODERATOR: Gabe Rodrigues, Contra Costa CERA

2:30 PM – 3:00 PM **SACRS Networking Break**

3:00 PM – 4:00 PM **CONCURRENT SESSIONS**

- **Concurrent Session A**
  Sleeping Tiger - Growing Importance Of China A Shares
  SPEAKER: Vivian Lin Thurston, William Blair
  MODERATOR: Daryn Miller, Kern CERA
- **Concurrent Session B**
  Block Chain / Bit Coin - Handle With Extreme Care! Cryptocurrencies
  SPEAKER: Dennis Gibb, Sweetwater Investments
  MODERATOR: Robert Harkins, Montana Endowment Trustee
- **Concurrent Session C**
  Real Talk: Developing & Retaining The Next Generation Of Leaders
  SPEAKER: Shawna Ferguson, Wellington Management
  MODERATOR: Russell Baldwin, Orange CERS

4:00 PM – 5:00 PM **Education Committee Meeting**
MODERATOR: JJ Popowich, Los Angeles CERA

5:00 PM – 6:00 PM **SACRS Reception**

Friday, November 16

7:30 AM – 8:30 AM **SACRS Breakfast**

7:30 AM – 9:30 AM **SACRS Registration**

8:45 AM – 9:00 AM **GENERAL SESSION**
Welcome
SPEAKER: Dan McAllister, SACRS President

9:00 AM – 9:50 AM **GENERAL SESSION**
Cyber Security at the Retirement System
SPEAKERS: Felipe Chee, San Diego County District Attorney Office; Sergeant Mark Varnau, San Diego County Sheriff's Department and James P. Brekk, Los Angeles CERA

9:50 AM – 10:00 AM **SACRS Break**

10:00 AM – Adj **SACRS Business Meeting, Breakout Reports And Committee Reports**
SPEAKERS: SACRS Board of Directors, Committee Chairs and Breakout Moderators

Is Your Portfolio Prepared for **Renewed Volatility?**

The equity market environment of 2017 and the lengthy bull market that preceded it lulled many investors into complacency. Sharply rising markets coupled with declining volatility created a false sense of security that's simply inconsistent with holding equity shares over the long term. Volatility returned during first quarter 2018 and caught many investors by surprise.

The question now is how to respond. For investors concerned about volatility and general market drawdowns, hedging may not be the answer. It may be worth exploring non-traditional strategies in order to have a portfolio structured to better weather future equity market volatility, while still working toward the same long-term objectives.

Volatility is no longer something you need to fear—now it's something you can harness.

A LOOK BACK AT 2017

In many ways, 2017 was the ideal market environment for equity investors. The S&P 500 Index, for example, produced a total return of 21.83 percent. As equally impressive, the index produced a positive return in every calendar month—and it did so in an environment of lower-than-expected volatility. How much lower? The S&P 500 Index typically exhibits annual volatility in the 15 percent to 18 percent range, in 2017 the index's one-month rolling realized annual volatility ranged between just 4 percent and 10 percent.

These suppressed volatility levels may have been a result of accommodative monetary policies in the United States, the United Kingdom, Europe, and Japan, which provided a significant tailwind in 2017 for equity investors. Additionally, robust economic growth, blockbuster corporate profits, strong consumer confidence, and U.S. tax cuts added more momentum to the market, helping push stocks to a strong finish at year-end.

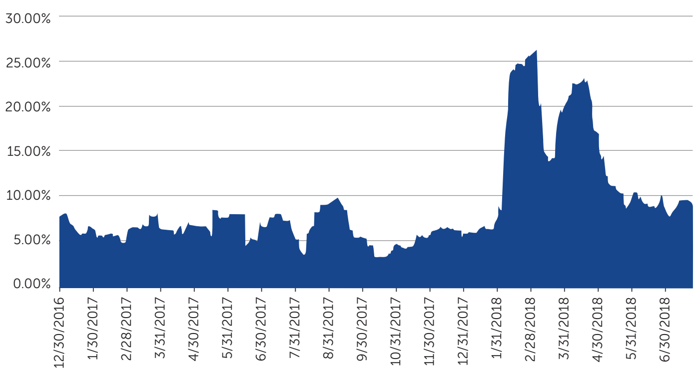
> *"There's simply too much uncertainty in the world to sustain the placid equity market we witnessed in 2017."*

Although Parametric never attempts to predict the future, we can look at developments in the macroeconomic environment and see that changes in equity volatility are likely. We believe volatility will return to more "normal" levels in the coming quarters. There's simply too much uncertainty in the world to sustain the placid equity market we witnessed in 2017. The ultra-low volatility we experienced last year is unlikely to return soon. In fact, in 2018 the picture changed rapidly.

THE RETURN OF VOLATILITY

The first quarter of 2018 was a dramatic reversal from 2017. After hovering below 10 percent for all of 2017, realized one-month S&P 500 volatility jumped closer to 25 percent in February and finished the quarter at 26 percent, as seen in Figure 1.

FIGURE 1 | Rolling 1-Month S&P 500 Volatility



Source: Parametric, Bloomberg Date created: March 31, 2018. Index performance provided for illustration purposes; it is not possible to invest directly in an index. Indexes are unmanaged and do not reflect the deduction of fees or expenses and include the reinvestment of dividends, income and other distributions. Past performance is not indicative of future results.

What's causing this rise in volatility? And will it last? Obviously there are many factors that drive equity markets, including economic growth and inflation expectations. However, this year the most notable factor is the slow reversal of quantitative easing globally and the movement toward the "normalization" of monetary policy.

If quantitative easing provided a tailwind for equity investors, it seems reasonable to argue that its reversal will create a headwind. As a result, we do not believe we will see a transition back to the ultra-low volatility environment of 2017 anytime soon. A far more likely outcome for investors is that the volatility we experienced in first quarter 2018 will be more the norm.

INVESTING THROUGH VOLATILITY

Increased volatility, erratic markets, more uncertainty—what's an investor to do? There are two common challenges institutional investors face during such market environments. The first is how to meet high return targets despite muted return expectations. The second is helping to mitigate portfolio volatility or large drawdowns. Meeting both challenges is possible, so let's examine them further through the eyes of a hypothetical plan sponsor.

The first challenge, similar to where the market stands today, deals with equities entering the tenth year of a bull market recovery having returned nearly 17 percent per annum. The plan sponsor reads an article about "stretched valuations" and what it means for forward-looking returns. Then, they review their first-quarter allocations and see the real-life consequence of stretched valuations—equities and fixed income were both negative for the quarter, which had not happened since 2008. Where can the plan find additional return opportunities?

In the second challenge, the plan sponsor is concerned about a significant market decline (-20 percent or more) during the next several months. The plan does not want to change their entire asset allocation because equity exposure is critical in order to meet the required return expectations. Should they consider insurance to "protect" the portfolio against extreme market moves?

In both challenges, volatility is the key driver—and an increase in volatility frequently leads to talk of hedging. Investors hope that by purchasing protection through a long option position, they can: reduce volatility, reduce their maximum drawdown and potentially increase their risk-adjusted returns all while not losing money.

However, hedging has a cost—and over time this cost reduces a portfolio's return. So, while hedging may solve the drawdown-risk challenge, our second challenge, it may do so at the expense of our first challenge, maintaining required return expectations.

What's more, hedging decisions are complex and have to be ongoing. For example, when do you enter and exit the hedge? How do you pay for the hedge—write a check or sell another option? The answers to these questions are unique to each plan and they can be a struggle to address, particularly because answers may change over time. For these reasons, hedging can be considered complicated, and often result in unwanted outcomes for many investors.

> *"What if plans approached hedging from a different angle and changed their view on volatility to something that could be harnessed rather than fought?"*

THE VOLATILITY RISK PREMIUM

What if plans approached hedging from a different angle and changed their view on volatility to something that could be harnessed rather than fought? Then the overall goal would be to capture the benefits of volatility to help satisfy both challenges—maintaining return expectations and helping mitigate the impact of drawdowns. By doing so, plan sponsors can own less risk and "sell the hedge".

At Parametric, our approach is to harness volatility and take advantage of an alternative risk premia. We have found that this embedded risk premium — called the volatility risk premium (VRP) — creates an opportunity to enhance return through option selling. The VRP is what index option buyers pay index option sellers to induce them to enter the market. The VRP is evidenced by the observed phenomenon that option-implied volatility tends to systematically exceed the realized volatility of the same underlying assets.

Options are financial instruments used by investors to create asymmetric return profiles and allow for sophisticated risk management and flexible exposures. Please see sidebar for a refresher on options.

Our investment thesis includes three primary pillars: index options may be thought of as insurance contracts, option buyers pay a premium (the VRP) for this insurance, and the VRP is meaningful and likely to persist. As mentioned, option contracts may be viewed as insurance contracts where investors can buy (hedge) or sell (underwrite) financial insurance as shown in Figure 2.

FIGURE 2 | Options May Be Thought Of As Financial Insurance Contracts

	POSITION	RISK	EXPECTED RETURN LONG-TERM
Option Buyers	Insurance Buyer	Known	Negative
Option Sellers	Insurance Underwriter	Unknown	Positive

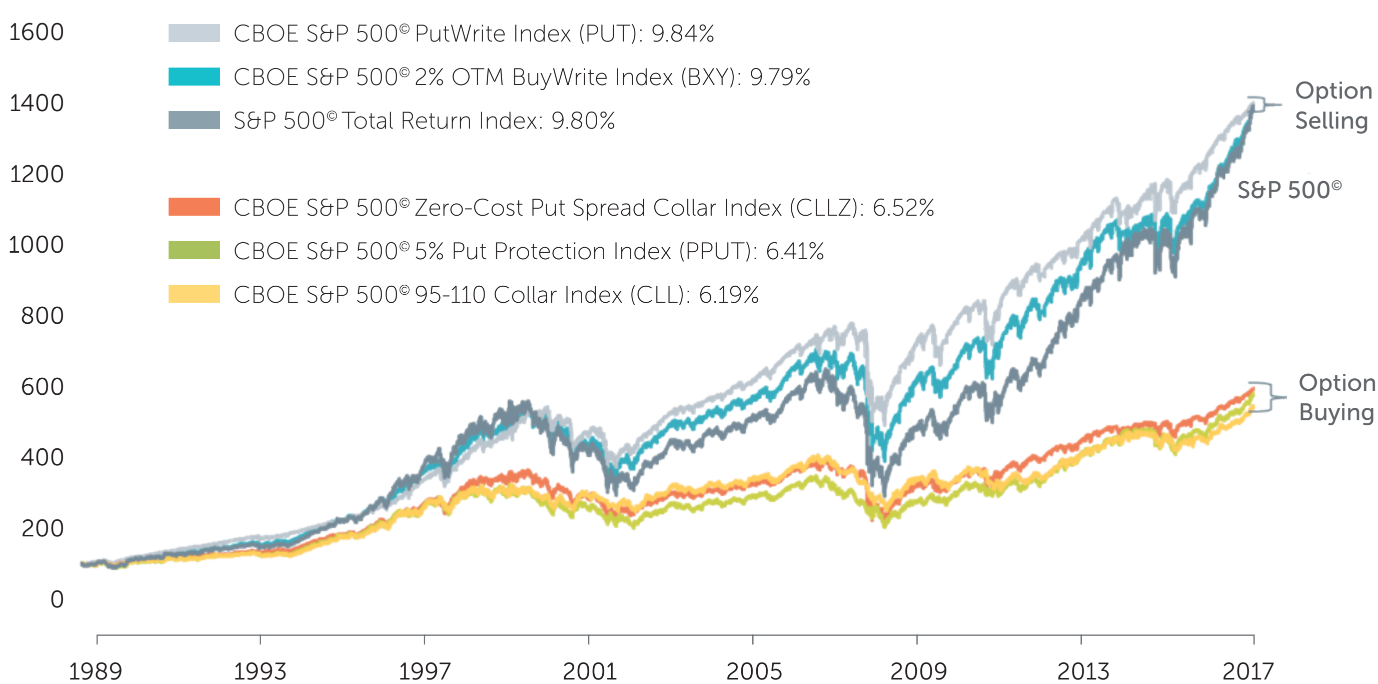
By systematically selling options, an investor with a strong capital base may capture a diversifying risk premium, as shown in Figure 3, while maintaining a position that can support the risk of an option payout to the option buyer.

OPTIONS REFRESHER

Here are the common terms and definitions related to options:

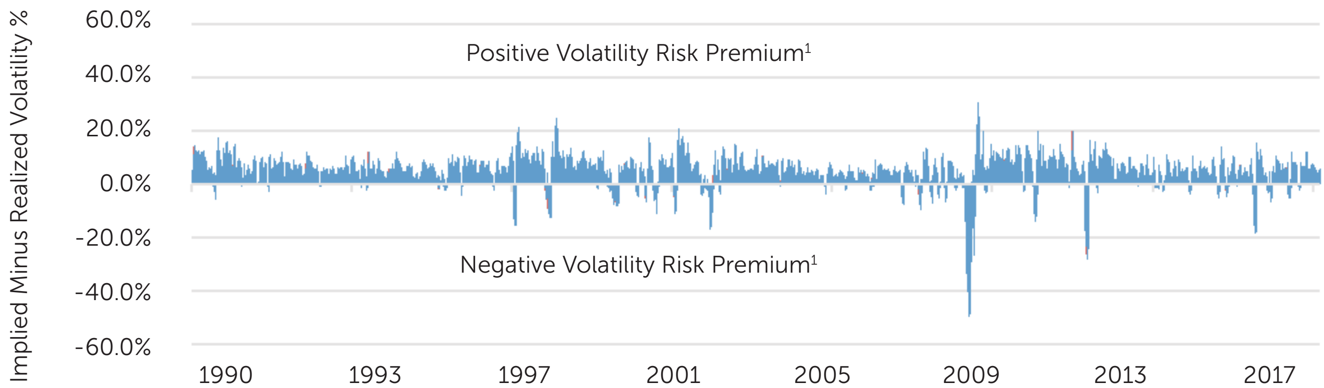
- **Premium:** An option's price
- **Strike price:** The specified purchase or sale price for the underlying asset (set price)
- **Expiration date:** The day which the final option value is determined or underlying asset is exchanged
- **Call option (upside insurance):** Owner has the right, but not the obligation, to purchase an asset at a set price at a future point in time. In this instance, the owner is anticipating the underlying asset may rise in value.
- **Put option (downside insurance):** Owner has the right, but not the obligation, to sell an asset at a set price at a future point in time. In this instance, the owner is anticipating the price of the underlying asset may decline in value.

FIGURE 3 | Option Prices Contain A VRP Paid By Option Buyers To Option Sellers
Growth of $100: CBOE Option Indices (12/31/1989 – 12/31/2017)



Source: Parametric, CBOE Date created: December 31, 2017. Index performance provided for illustration purposes; it is not possible to invest directly in an index. Indexes are unmanaged and do not reflect the deduction of fees or expenses and include the reinvestment of dividends, income and other distributions. Past Performance is not indicative of future results.

FIGURE 4 | The VRP Is Meaningful And Likely To Persist



Source: Parametric, Bloomberg; Date created: December 31, 2017.

[1]1990 to present represents longest period from which reliable data is available and accessible for S&P 500 Volatility Index. S&P 500 Index options relative valuation measured by taking daily observations of Implied Volatility (as measured by VIX Index) and subtracting the subsequent Realized Volatility of the S&P 500 over the following 30 days. Options have historically traded about 4.3 volatility points above subsequent realized volatility. Said another way, the option market tends to overestimate future volatility, which translates directly into higher prices for both puts and calls. VIX is the Chicago Board Options Exchange volatility index. VIX is calculated constantly throughout each trading day by observing the implied volatility derived from actual market prices of a wide array of put and call options with an average maturity of 30 days to expiration.

For informational purposes only. Past performance not indicative of future results. Not able to invest directly into indexes. All investments subject to losses.

Equity Index options have historically traded with an embedded Volatility Risk Premium and we expect this to continue. Since 1990, S&P 500 Index options have traded with a positive volatility risk premium over 85 percent of the time. Figure 4 shows 30 day implied volatility versus subsequent realized volatility. Approximately 85 percent of the time the implied volatility that is assumed in the price of S&P 500 index options exceeds the subsequent realized volatility. To us, this is indicative of a market in equilibrium, where option buyers are paying option sellers a premium to enter the market.

SOLVING PLAN SPONSOR CHALLENGES

Circling back to our hypothetical plan sponsor, facing the two challenges, they have two main choices: a traditional hedging approach that holds risk and purchases options or a non-traditional approach that holds less risk and sells options. Here are the points of consideration for each:

Traditional approach (or buying financial insurance)

- Provides downside protection while preserving an existing portfolio allocation
- Reduces long-term risk, *but* also reduces return expectations
- Requires timing decisions to properly achieve downside protection

Non-traditional approach (or selling financial insurance)

- Provides implicit downside protection achieved through asset-allocation decisions
- Reduces long-term risk *and* may increase expected return if historical options pricing patterns persist
- Provides some upside potential and, versus a fully invested portfolio, can help mitigate the impact of drawdowns in many market environments.

While all investors have unique challenges, after nine years of stock market gains, many investors have tempered their return expectations and are focusing their attention on the best ways to achieve equity-like returns with less risk. Public plans are especially susceptible because they are continually striving to meet challenging return targets. However, there can be significant road blocks to taking a non-traditional approach including: cost, liquidity concerns, complexity, and potential tax consequences.

Investors with long-term investment horizons, including institutional investors, who are willing and able to bear the unique risks involved may be in a good position to try a non-traditional approach. By doing so, they can take advantage of the volatility risk premium, and other options strategies, to potentially harvest higher, risk-adjusted, long-term returns for their portfolios.

One solution: properly implemented options strategies offer transparency, liquidity, and lower average costs. For plans seeking to efficiently generate incremental returns over the long term, these solutions can help without sacrificing well-thought-out asset allocations.

Thomas Lee, CFA, is Managing Director, Investment Strategy and Research for Parametric Portfolio Associates LLC and leads the investment team that oversees investment strategies managed in Parametric's Minneapolis and Westport Centers. In his current position, Mr. Lee directs the research efforts that support existing strategies and form the foundation for new strategies. He is also chair of the Investment Committee that has oversight of these strategies. He has co-authored articles on topics ranging from liability driven investments to risk parity. Parametric is a leading global asset management firm, providing investment strategies and customized exposure management directly to institutional investors and indirectly to individual investors through financial intermediaries.

Berkeley Executive Education Partners with SACRS to

EDUCATE TRUSTEES

The Public Pension Investment Management Program

In the summer of 2010, U.C. Berkeley Executive Education and the State Association of County Retirement Systems (SACRS) launched the inaugural Public Pension Investment Management Program, beginning a partnership that has spanned 10 years and transformed roughly 300 participants.

> *"Ten years ago, Berkeley Executive Education and SACRS started a partnership to create a customized program called the Public Pension Investment Management Program (PPIM), with a specialized curriculum that covers hot topics, new investment strategies, and theory."*

The State Association of County Retirement Systems (SACRS) is a nonprofit association comprised of 20 retirement systems in California that are county sponsored. These counties, back in 1937, decided not to be a part of the standard State of California CalPERS retirement system. Instead, each retirement system is run locally by a local board of trustees and manages multi-millions of dollars of retirement funds. Many trustees have day jobs such as being a county Sheriff or general service employee of the county. Trustees might work in the County Auditor Controller's Office or a trustee can be an appointed local member of the community. Many of them came into their 3-year trustee role as valued members of the community, but without an investment background. Currently, trustees are required to have 24 hours of investment education. As an association, SACRS was created so that trustees from the 20 member retirement systems could network and share information, create opportunities for education and learn to fulfill their fiduciary responsibilities. SACRS' main focus is to educate all types of trustees and staff members or people who are interested in their retirement system's funding.

Although SACRS holds two bi-annual educational conferences, they realized they had members who were newer trustees that lacked basic knowledge on public pension investing, as well as trustees that had been on the board for a while that needed a refresher. SACRS decided to raise the bar and give trustees a more intense, focused opportunity for members to gain new in-depth investment knowledge on current, successful investment models and strategies from an academic point of view. Ten years ago, Berkeley Executive Education and SACRS started a partnership to create a customized program called the Public Pension Investment Management Program (PPIM), with a specialized curriculum that covers hot topics, new investment strategies, and theory.

During PPIM, SACRS members spend four intense days updating their investment savvy, gaining new knowledge, following trends, integrating new methods into their current plan administration and growing relationships with their peers. The trustees enjoy the classroom setting at the Haas School of Business as it gives them the ability to ask individualized questions directly to world-renowned U.C. Berkeley faculty, as opposed to a more impersonal large conference setting. After attending PPIM, trustees are able to make much better-educated investment decisions as they apply their program training to their county retirement funds.

"Our ten-year partnership with Berkeley Executive Education gives us a way to create aha moments where things start to click. By the fourth day of PPIM, it's great to see trustees able take the information that they've gained and equate it to something that they're doing at their own board level back home. That part, those moments, are really rewarding," proudly says SACRS Administrator, Sulema Peterson.

"We just completed another great experience with SACRS. The SACRS trustees take their roles seriously and are enthusiastic about learning about best practices and asset management. Sulema Peterson goes out of her way to make sure her attendee's every need is anticipated and well cared for," adds Kristina Susac, Vice President for Berkeley Executive Education.

Over the years, SACRS and Berkeley have evolved PPIM into a program with two levels. One year focuses on more beginner-level topics designed for newer trustees and the following year shifts to more advanced topics aimed at attendees who have served multiple trustee terms or have previously attended PPIM.

"With a group between 30-40 trustees, we love the relationship component that trustees build while they're at Berkeley. We all stay at the same hotel. Every evening we have a reception that gives people an opportunity to talk about the day, and then we go to dinner together. There's no planned dinner, it's all impromptu, and we either walk or ride-share to dinner. That's where the networking and relationship bonding happens," shares Sulema. "Trustees appreciate the relationships that they build here. Then, when those trustees come to our SACRS conference later in the year, they already have established relationships with people who went through the Public Pension Investment Management Program together."

Adds Sulema, "The partnership between SACRS and Berkeley is thriving. Year after year, we keep coming back to U.C. Berkeley because it's a great program. Professor Greg La Blanc and his team are phenomenal at what they do. It's convenient and affordable. We like having a reasonable travel option for most of the trustees that attend. It's a flight to San Francisco instead of spending their retirement fund money to travel to the East Coast for training. Additionally, we believe since we're a California nonprofit association we should keep our dollar in California and use it to support a public school."

"In the future, due to the high quality of the training, I could see us making this program available to non-SACRS board members that don't have an investment background," believes Sulema. "Other trustees who sit on boards also need investment information. They need to be here, in the classroom... learning, so they can make the best-educated decisions with their funds on behalf of their members."

"We are thrilled to be partnering with Berkeley Executive Education to be offering education for trustees who are making huge decisions on behalf of retirees in the counties of Alameda, Contra Costa, Fresno, Imperial, Kern, Los Angeles, Marin, Mendocino, Merced, Orange, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa Barbara, Sonoma, Stanislaus, Tulare, and Ventura," says Sulema. "Every year a new trustee or maybe even an advanced trustee tells us: I saw that, but I didn't know what that was and now I do. U.C. Berkeley Executive Education is a great place to help deepen our trustee's financial backgrounds and bring new insights into investing," Sulema concludes.

> *"With a group between 30-40 trustees, we love the relationship component that trustees build while they're at Berkeley. We all stay at the same hotel. Every evening we have a reception that gives people an opportunity to talk about the day, and then we go to dinner together."*

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THE CONFUSION
Surrounding the Letters

At a time when investing with a long-term horizon is rightly popular, and the effective analysis and management of investment risk has seldom been more important, the call for asset owners to incorporate environmental, social, and governance (ESG) factors into investment decisions is understandable. But there is also potential for significant misunderstanding.

"It's time investors and regulators tweaked their approach to environmental, social and governance issues, which have become vague and open to interpretation."

Risk management already has a long and tortured history. Its initial focus was on profits and cash flow, but steadily became more complex. Over time, complexity led to complacency, as illustrated by the stock market crashes of 1987 ("Black Monday") and the bursting of a bubble in technology stocks in 2000.

The financial crisis a decade ago provided a graphic illustration of how ineffective risk management had become. The boards of multiple large financial institutions had underestimated systemic risk, while many central bankers had failed to integrate the effects of financial markets on their top-down economic models. Many have identified governance issues such as conflicts of interest, lop-sided compensation packages and lack of boardroom diversity (an indicator of narrow thinking) as contributors to the collapse.

AN ANTIDOTE?

In hindsight, it's no surprise that ESG has been put forward as an antidote to poor investment practice. Investment risk analysis could clearly be improved, if it took a longer-term, broader view. The introduction of more structure would also help: as a parallel, the systematic approach that pilots take to checking their plane and plans before leaving the gate has been developed over more than half a century in which the investigation of accidents and near misses has been thorough and well publicized.

Yet, by itself, ESG has the potential to trip us up for three reasons.

First, it lacks a clear definition: most commentators attempt to explain each of the three factors without justifying the way they are put together. Second, ESG is an incomplete framework: "governance" is an internal issue, while "environmental" and "social" are merely two of the many external issues facing the company. Lastly, it can be used in widely different contexts – by some to challenge an asset owner's investment beliefs, but by others to comment on risk or investment opportunities. One investor for example might use it to argue that poor working conditions may lead to extended labor disputes, which hit corporate profitability, while another, citing ethical concerns, might see the issue as a reason not to invest in the company at all.

There are signs that these misunderstandings can trigger a backlash. For example, in April this year the U.S. Department of Labor said investments based on ESG issues aren't always a "prudent choice" and such factors shouldn't "too readily" be considered. This was an about turn from the DoL's 2016 guidance, under a previous administration, which said that investors could consider ESG factors without violating their fiduciary duty.

But let's not throw the baby out with the bathwater. ESG analysis remains a powerful idea and its use should be encouraged. However, we recommend three improvements.

First, that ESG is fully incorporated into the mainstream investment process as a proxy for "smarter thinking", particularly taking a longer-term, broader view. Second, regulators should not make it an explicit requirement in market standards, but rather emphasize the need for regulated firms and persons to take a comprehensive view of risk – it's not a straightjacket and there should be room for interpretation. Finally, materiality is vital – investment analysis is complex, so analysts should focus on what's important and not waste their time producing "check the box" reviews of every conceivable risk issue.

Perhaps then ESG will start to mean something more tangible and useful once again.

Ian Simm *is the Founder and Chief Executive of Impax Asset Management Group plc and has been responsible for building the company since its launch in 1998, and continues to head the listed equities and real assets investment committees. Prior to Impax, he was an engagement manager at McKinsey & Company advising clients on resource efficiency issues. In 2013 Mr. Simm was appointed by the Secretary of State (Senior Minister) for Business, Energy and Industrial Strategy as a member of the Natural Environment Research Council (NERC), the UK's leading funding agency for environmental science. He has a first class honors degree in physics from Cambridge University and a Master's in Public Administration from Harvard University.*

This article is adapted from the Impax whitepaper "Beyond ESG: Investment risk through a lens," and is for informational and educational purposes only and not intended as investment advice or a recommendation to buy or sell any security.

RENT CONTROL CHANGES in California Posing Significant Uncertainty

"Just over a dozen cities in the state of California have rent control laws that include limiting how much owners of those properties can increase their rent in a given year."

California is once again at the forefront of a nationwide attempt to address the shortage of affordable housing. Following Los Angeles voters' 2016 approval of measure JJJ requiring developers to use union labor, a statewide measure to repeal the Costa Hawkins Rental Housing Act "Costa Hawkins" made it onto the 2018 ballot. Costa Hawkins was passed in 1995 and placed limits on municipalities' rent control policies. Its primary provisions are: (a) Ensure landlords' right to raise rents to market levels after a tenant moves out and (b) Restrict rent control policies to buildings built before 1995.

While repealing Costa Hawkins would allow cities to pursue more restrictive rent control policies, cities would still need to enact legislation implementing any proposed changes in rent control, something that has not always been successful. Given that existing rent control policies already vary widely across California cities, the potential repeal of Costa Hawkins creates the possibility of even greater divergence in rent control policies from one city to the next, something that could materially impact how investors view investments across California cities.

A Brief History of Rent Control Policies in California

Many of the rent control laws on the books at cities across California were enacted in the late 1970s and early 1980s in response to the same driver as today's concern -- a lack of affordable housing units -- but most continue to apply to pre-1980 vintage stock today. During the late 1970's, rising real estate values and near-record high interest rates made single family homes in California less affordable. As a result, apartment rents were driven up by increased demand, inflation was high, and wage growth was not keeping pace. This environment helped propel a surge of tenant activism leading to increased rent control regulations – the majority of which are still on the books today. The passage of Costa Hawkins in 1995 was an attempt to blunt the movement towards a more robust rent control model.

Expanded Rent Control or Not?

When rent control policies were first enacted, they applied to most of the existing rental stock, with new development not impacted. In the event of a repeal of Costa Hawkins, this could have a significant impact on all stock and this risk should be considered in the analysis and underwriting of potential acquisitions, ongoing developments, and pricing of existing assets.

However, a Costa Hawkins repeal does not automatically mean there will be new rent control policies enacted across the state -- recent efforts in Pasadena, Inglewood, and Long Beach to put local rent control measures on ballots all failed to garner enough signatures suggesting mixed support for these regulations. Inglewood and Long Beach are especially instructive as the political compositions of each and, to a lesser degree, percentage of renters fit the profile of cities where rent control would be expected to have a higher probability of being enacted.

So, the jury is still out on what political influences may lay on the horizon. In that context, let's look in more detail at rent control policies currently in place, how much of the market is already affected and the impacts.

Rent Control Takes Many Forms

Most rent control laws have two basic components that determine what a building owner can charge in terms of rent: (1) the Annual General Adjustment (AGA) is the percent by which an owner can increase rent every twelve months, and (2) when a tenant vacates a unit, rent for that unit can be marked up to market rate. The structure of the AGA varies dramatically from city to city. San Francisco, for example, has a very restrictive AGA that allows building owners to increase rents by 60 percent of CPI every 12 months. Alternatively, rent control in Los Angeles is somewhat more forgiving allowing for the higher of a 3 percent increase or increases tied to CPI up to 8 percent.

The table next page offers a simple hypothetical example for how rent growth under a rent control policy could stack up against longer run rent growth in a market (Q1 2000 – Q1 2018). In markets with lower longer run rent growth and flexible AGAs, such as Beverly Hills or Los Angeles, if an existing asset were

Existing California Rent Control Policies				
City	**Rent Cap**	**Avg. Implied Rent Control Growth Rate (Q1 2000 - Q1 2018)**	**Q1 2000-Q1 2018 Rent Growth (CoStar - All Properties)**	**Difference**
Berkeley	65% of CPI	1.8%	3.3%	-1.6%
Beverly Hills	3 percent or CPI, whichever is higher	2.6%	2.6%	0.0%
East Palo Alto	CPI or 10% whichever is lower	2.7%	2.7%	0.0%
Hayward	5 percent	3.1%	3.1%	0.0%
Los Angeles	3 percent or CPI up to 8% whichever is higher	3.3%	3.5%	-0.2%
Los Gatos	75% of CPI or 5% whichever is lower	2.0%	2.2%	-0.2%
Oakland	CPI or 10% whichever is lower	2.7%	2.9%	-0.2%
Palm Springs	75% of CPI	1.9%	2.9%	-1.0%
San Francisco	60% of CPI	1.6%	3.2%	-1.5%
San Jose	5 percent	2.8%	2.8%	0.0%
Santa Monica	75% of CPI	1.9%	2.5%	-0.6%
West Hollywood	75% of CPI	1.9%	3.1%	-1.2%

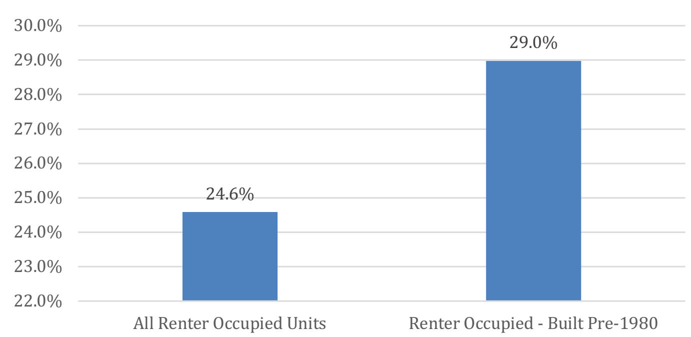
Source: CoStar, California Municipalities, Bureau of Labor Statistics

to fall under rent-control valuations, it wouldn't necessarily be significantly impaired. The same cannot be said for Berkeley and San Francisco, where rents in rent-controlled buildings would almost immediately fall behind market rents. If Costa Hawkins is repealed, policies more akin to those in Los Angeles would be much less damaging to current owners than the policies in place in major Bay Area cities.

Few Cities Have Rent Control, But They Are Some of the Bigger Ones

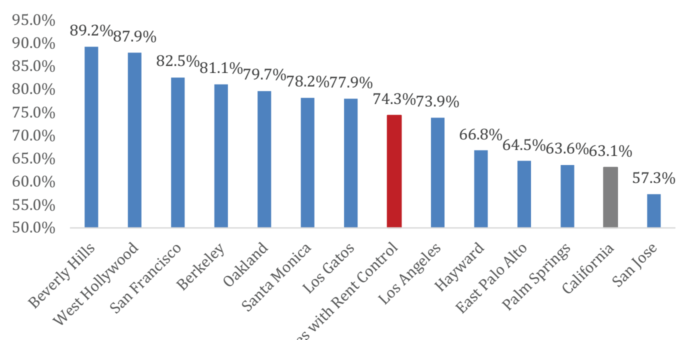
Just over a dozen cities in the state of California have rent control laws that include limiting how much owners of those properties can increase their rent in a given year. However, these include a number of the largest cities in the state (Los Angeles, San Diego, San Francisco, Oakland). As a result, a substantial amount of the state's renter occupied housing stock is affected.

% of Renter Occupied Units in CA Located in Cities with Rent Control



Source: Census Bureau

% of Renter Occupied Stock Built Pre-1980

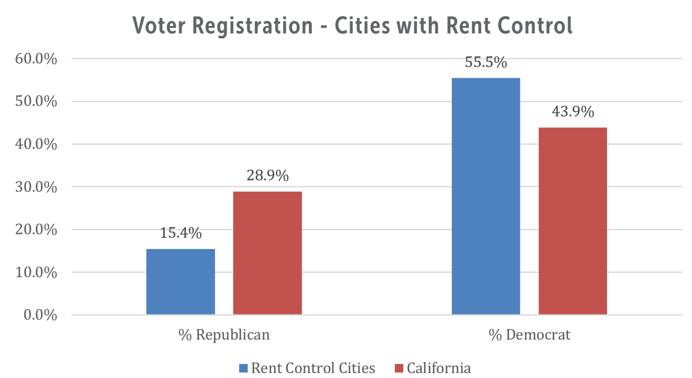


Source: Census Bureau

Most of the rent-control laws in California cities apply to properties built before 1980, which accounts for roughly three-quarters of the renter-occupied stock in these cities. Despite this apparent constraint, investors have been able to earn respectable returns. Thanks to the scale of these markets, there were still more than 370,000 investable market rate units as of 2016, a reminder that even if we end up in a future with broader controls, there will still be compelling investment multi-family opportunities, and every major California city with rent control has had index-beating returns[1] on average since 2000.

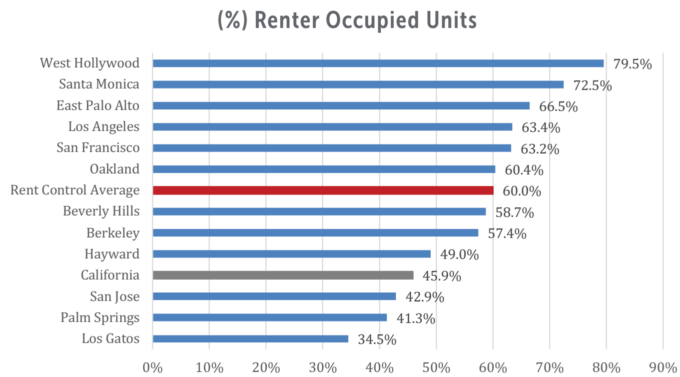
Politics Matter

Rent control is not a purely economic issue. It is also a legal, cultural, and political one. The voter base in cities with existing rent control policies leans considerably more Democrat and less Republican, even when compared to the over-all blue-tint to California politics as a whole.



Source: California Secretary of State Report of Registration

The percentage of voters who are registered either Democrat or Republican has been a significant predictor of ensuing rent control policy. Center-to-right leaning regions of California are much less likely to have these controls in place. In addition, the number and percentage of residents in a city who are renters has a potential impact. In Municipalities with higher percentages of renters, the passage of tenant friendly legislation would be expected.



Source: Census Bureau

Orange County and San Diego

Relative to Los Angeles and the Bay Area, other So Cal metros have traditionally had a more moderate-to-conservative leaning voter mix and higher rates of home ownership. As a result, these metros may benefit in a Costa-Hawkins repeal scenario as they would be expected to be less exposed on average to the risks present in Los Angeles and the Bay Area. Additionally, these markets have historically performed well and are positioned for strong performance moving forward, thanks to desirable geographic locations, good weather, higher density, regulations that limit excess supply growth, and competitive industry clusters, such as biotech in San Diego and high-end business services in Orange County.

County	% Democrat	% Republican	% Homeownership	% NPI Beat 2000-2017
Orange	31.7%	41.8%	56.6%	78.0%
San Diego	35.3%	33.9%	52.1%	72.0%
San Jose	45.6%	21.7%	56.4%	73.0%
Los Angeles	51.1%	21.6%	44.6%	61.0%
San Francisco	55.6%	8.6%	37.9%	72.0%

Source: California Secretary of State Report of Registration, Census Bureau, NCREIF

Focus on Development and Newer Properties

If cities elect to increase rent control, it is less likely local leaders would include all vintages of stock under the ordinance -- after all, new development means more jobs and taxes. In Los Angeles, a more measured scenario being proposed would have rent control ordinances extended to cover all properties built before a certain vintage (pre-2005 as an example). Under this scenario newer properties and new construction will remain exempt, allowing investors to continue to make investments in core assets, development, and even value-add opportunities with this additional consideration.

Investment Conclusions

San Francisco has much more restrictive rent control policies than Los Angeles. Annual rent increases are capped at 60 percent of CPI for the former and can range from 3-8 percent for the latter. Under the different existing rent control scenarios, should a property fall under rent control in San Francisco, the likely negative impact to total return potential would be greater than in the Southland. In Los Angeles, with elevated supply levels and currently moderating returns, investors face less risk from stricter rent control policies, even if current restrictions were extended.

In the end, while one can bracket the potential rent control outcomes if Costa Hawkins were to be repealed, the range of potential outcomes is wide and highly uncertain. In this type of environment, investors would be wise to first familiarize themselves with the current status of rent controls in each local market, as well as weigh the likelihood and risks of outcomes from potential changes and then decide how big a commitment they want to make.

ENDNOTES

1 Based on the average number of years properties in these markets earned a better return than the NPI Apartment sub-index.

***Stanley L. Iezman** is Chairman and Chief Executive Officer of American Realty Advisors and is responsible for the strategic planning and direction of ARA's investing and operational activities. He is a member of the firm's Investment, Management, and Operations Committees and the Board of Directors. A noted speaker on real estate investment, he has also authored numerous articles on related issues for real estate, pension, and legal industry publications. Mr. Iezman is an Adjunct Professor at the University of Southern California's Sol Price School of Public Policy, where he teaches real estate asset management in the Master of Real Estate Development Program and is a member of the Executive Committee of the USC Lusk Center for Real Estate.*

***Christopher Macke** is Managing Director, Research and Strategy for American Realty Advisors and is responsible for leading the firm's research efforts and working closely with the firm's Investment and Portfolio Management Teams in developing investment analysis to support acquisitions and strategy implementation. He also serves as a member of the firm's Investment Committee. Prior to joining ARA, Mr. Macke was a Senior Research Strategist with CB Richard Ellis Global Research & Consulting as part of the firm's macroeconomic, property market, and capital market outlook and strategy efforts for clients.*

***Maximilian Saia**, Vice President, Research and Strategy, American Realty Advisors.*

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS

LEGISLATIVE REPORT

The Legislature adjourned its 2017-2018 Legislative Session just before midnight on August 31, having passed 1,562 bills to the Governor in the final months of the legislative session. The Governor had until September 30 to sign or veto all the bills before him. At the time of this writing, the Governor has yet to act on about half of the bills before him.

Members of the Legislature, in the meantime, have returned to their districts to campaign for re-election, travel, meet with constituents, and begin preparing for the 2019 Legislative Session. The Legislature will return briefly on December 3 to swear-in members elected in November.

The following is a brief recap of the 2018 Legislative Session as it applies to the State Association of County Retirement Systems (SACRS).

SACRS SPONSORED LEGISLATION

SB 1270 (Vidak) – County Retirement System Personnel – Signed by Governor

At the 2018 Spring Meeting, SACRS voted to co-sponsor SB 1270 with the Tulare County Retirement System. SB 1270 is authored by Senator Andy Vidak and would authorize a county retirement board to appoint an assistant administrator and chief investment officer to serve at the pleasure of the appointing board. This authority would be granted subject to the approval and adoption of a resolution by the relevant County Board of Supervisors for that system.

SB 1270 is consistent with the long-standing SACRS goal of providing retirement boards the tools needed to best manage and recruit talented and skilled employees in order to protect the assets of retirees and to fulfill the fiduciary responsibility of the retirement systems. SB 1270 is structured so that retirement boards and the boards of supervisors work collaboratively in this regard.

There are already five county retirement systems with this authority granted by the Legislature. SB 1270 puts in place a statutory mechanism that will save future retirement systems and counties from coming back to the Legislature each time a local agreement on these personnel matters is made.

Governor Brown signed this bill into law on July 16.

OTHER COUNTY RETIREMENT LEGISLATION

AB 2076 (Rodriguez) – LACERA – Signed by Governor

This bill will authorize LACERA to correct a prior board decision determining the date of retirement for a member permanently incapacitated for disability that was made between January 1, 2013, and December 31, 2015, and was based upon an error of law existing at the time of the decision. The bill would further authorize a member seeking correction under these provisions to file an application with the board no later than one year from the date these provisions become operative.

Governor Brown signed this bill into law on July 16.

SB 866 and SB 846 – Budget Trailer Bill and Trailer Bill Cleanup – KCERA

The Legislature passed and the Governor signed a budget trailer bill that, among other things, required the Kern County Hospital to enroll all new hires in the Kern County Employee Retirement Association (KCERA). That bill, SB 866, was negotiated by the public employee union representing hospital workers in Kern County, the Legislature, and the Governor's office in the final days leading to adoption of the state budget and had no substantive public review. It became apparent to KCERA, after the fact, that the wording in the newly adopted law could jeopardize KCERA's tax status with the Internal Revenue Service.

KCERA's General Counsel, Executive Director, and outside counsel reached out to the legislative team to seek guidance and help on how to rectify this problem during the short window remaining in the 2018 Legislative Session.

We helped by providing strategic guidance on working with the public employee union and brought the issue to the attention of the Governor's Office and the Legislative Leadership. We were able to secure important phone calls between KCERA and staff within the Governor's office. Further, KCERA provided us with a suggested legislative fix that we shared with the Assembly and Senate budget staff and the Governor's office.

Working with the KCERA team, we were able to secure a budget trailer cleanup bill that was heard in committees of both houses and voted on the floors of each house -- all within the course of just one month.

We are pleased to report that SB 846 is currently awaiting action by the Governor and we expect it will be signed.

RETIREMENT LEGISLATION OF INTEREST

AB 1912 (Jones-Sawyer) – JPA Liability for Retirement

As originally introduced, this bill would have required member agencies of a Joint Powers Agency to be jointly and severally liable for the retirement obligations of its employees. This bill arose out of the dissolution of a JPA in Los Angeles that resulted in the JPA's insolvency and inability to pay retirement contributions to PERS. As it passed the Assembly, it applied to all JPA's contracting with a retirement system. AB 1912 was strongly opposed by cities, counties, and special districts and it did not appear likely that it would pass the Senate policy committee. Prior to the hearing in the Senate Public Employment and Retirement Committee (PE&R), an agreement was made to amend the bill to require proportional liability for JPA's that become insolvent. With that amendment, local government associations removed their opposition and the bill passed both policy committees and the Senate.

At the time of this writing, the bill is awaiting action by the Governor.

AB 3084 (Levine) – OPEB Funding

This bill would have required all state and local retirement systems to describe contribution, funding and investment progress of other post-employment benefits (OPEB) in the audited financial statements of the system. The SACRS Legislative Committee opposed this bill due to the fact that most OPEB plans are sponsored and financed by an entity other than the retirement system and it would be inappropriate and confusing to make the retirement system responsible for reporting on OPEB liabilities. Armed with that information, we successfully lobbied the author to remove the reporting obligation placed on retirement systems.

The amended bill passed its first policy committee, but was held in the Assembly Appropriations Committee due to the cost on the government employer.

PENSION REFORM

The 2018 Legislative Session commenced concurrently with the release by the League of California Cities' Retirement System Sustainability Study. This report gained a lot of media and public attention and highlights local government's concern that funding for pensions is impacting funding for existing services. This report and others like it help to drive legislative efforts on pension reform.

The 2018 Legislative Session yielded a handful of introduced bills that would be labeled "pension reform" by the authors and proponents. Generally, these bills are characterized as a means to reduce or eliminate long-term pension liabilities of government agencies. These bills tend to try to change public retirement from defined benefit programs to defined contribution programs and are typically introduced by Republicans. Most of these bills do not even get set for hearings. Below, however, are bills that were heard, voted on, and defeated in legislative committees.

SB 1031 (Moorlach) – Cost of Living Adjustments

This bill would prohibit a cost of living adjustment to beneficiaries or survivors, if the unfunded liability for that retirement system is greater than 20 percent. Senator Moorlach is an Orange County Republican who believes that his efforts are in the long-term interest of public employees. This bill was supported by the Orange County Cities Association and opposed by a coalition of public employee unions.

It failed on a 1-3 vote in committee.

> *“While there are a lot of California Congressional seats ‘in play’ for the General Election that could tip the balance of power in Washington DC, there will be no partisan shakeup in the California Legislature.”*

SB 1149 (Glazer) – PERS Defined Contribution Plan

This bill would create an optional defined contribution plan for new state employees who are eligible to become members of PERS and who choose not to make contributions into the defined benefit program under PERL.

Senator Glazer, a Democrat from Contra Costa County, argued that his bill recognizes the changing demographic nature of the state workforce, who are now trending younger and less likely to spend their whole career in state civil service. He believes these employees want and need portable retirement benefits.

SB 1149 was opposed by a coalition of public employee unions and it failed passage in the Senate PE&R Committee on a 1-3 vote.

SCA 8 (Moorlach) – Constitutional Amendment: Benefit Reductions

This constitutional amendment would allow a government employer, including a county, to reduce retirement benefits on work not yet performed. This would mean that the employee's defined benefit could be changed mid-career. Senator Moorlach argued that he is protecting retirees from the actions of a judge who may do something worse in the case of an insolvent retirement system. The public employees opposed the bill arguing that benefits can be reduced through bargaining.

The bill failed passage in the Senate PE&R Committee on August 13 on a 2-3 vote.

SCA 10 (Moorlach) – Constitutional Amendment: Voter Approval of Benefits

This constitutional amendment would prohibit any government employer from approving a retirement benefit increase unless that increase is approved by a two-thirds vote of the electorate of that government jurisdiction. This bill was heard in committee on August 13. Senator Moorlach argued that this method of approving benefits works in San Francisco and should work for the state. The public employee unions argued that this undermines collective bargaining.

The bill failed on a 2-3 vote.

NOVEMBER ELECTION

The November election will be held on November 6. While there are a lot of California Congressional seats "in play" for the General Election that could tip the balance of power in Washington DC, there will be no partisan shakeup in the California Legislature. Nor will Republicans gain any statewide elected offices.

Most political pundits agree that the only statewide partisan seat that is competitive will be the race for Insurance Commissioner, which pits Democrat State Senator Ricardo Lara against former Insurance Commissioner Steve Poizner, who is no longer registered with a political party.

Governor

It is widely expected that the current Lt. Governor, Democrat Gavin Newsom, will prevail in the race for Governor against Republican John Cox. If that occurs, this will be the first time since the 1990 election that a new Governor will be from the party of the departing Governor.

Legislature

As noted above, there are only a handful of competitive legislative seats. The only electoral suspense will be whether Democrats in the Senate regain the two-thirds supermajority that it lost in 2018 and whether Democrats in the Assembly hold or build on their existing supermajority.

We look forward to discussing all of this and more at the SACRS Conference in November.

__Michael R. Robson__ has worked since 1990 in California politics and has been lobbying since 2001 when he joined Edelstein, Gilbert, Robson & Smith LLC. Prior to joining the firm, he began a successful career with Senator Dede Alpert as a legislative aide soon after she was elected to the Assembly in 1990. He became staff director/chief of staff in 1998, while the Senator served in the position of Chair of the Senate Appropriations Committee. He is experienced in all public policy areas with particular expertise in environmental safety, utilities, revenue and taxation, local government finance, education, and the budget.

__Trent E. Smith__ worked for over 12 years in the State Capitol prior to joining the Edelstein, Gilbert, Robson & Smith LLC. He started his career in 1990 working for the well-respected late Senate Republican Leader Ken Maddy. He was later awarded one of 16 positions in the prestigious Senate Fellowship Program. Upon completion, he started working in various positions in the State Assembly. He worked as a Chief of Staff to Assembly Member Tom Woods of Redding and later to Orange County Assembly Member, Patricia Bates, who served as Vice Chair of the Assembly Appropriations Committee. In this position, he gained a unique and valuable knowledge of the State budget and related fiscal policy matters. In addition, he has extensive experience in numerous policy areas.



SACRS 2018 SPRING CONFERENCE

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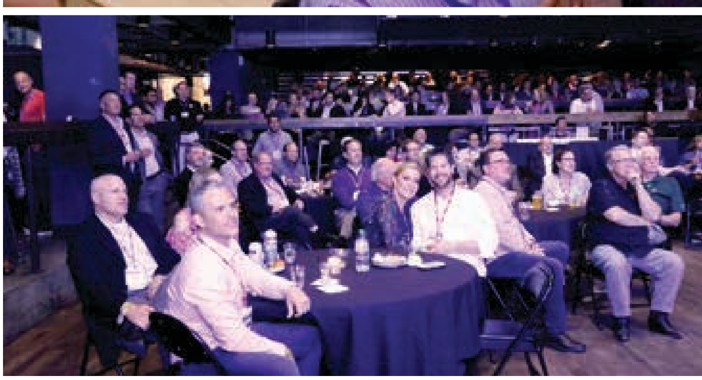
The SACRS 2018 Spring Conference took place in Anaheim, California May 15-19 and included presentations, training sessions, breakout sessions, and concurrent sessions covering a variety of topics. Here's a fond photographic look back at a few of the activities and events.



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May 12-15, 2020
Paradise Point Resort & Spa
San Diego, CA

FALL 2020
November 10-13, 2020
Renaissance Indian Wells
Resort & Spa
Indian Wells, CA