

Commercial Real Estate Finance Disruption: Déjà Vu or Something New?

By CCIM Institute Chief Economist K.C. Conway, MAI, CRE



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Déjà Vu or Something New?

It's official: WeWork is New York's largest office tenant. The coworking giant's Manhattan portfolio now includes 50 locations totaling 5.3 million square feet — in addition to its ever-growing footprint worldwide of over 300 sites in 23 countries.

But have you asked a commercial real estate lender how they would underwrite a WeWork-occupied property today? I did, and the answers are unsettling.

In speaking with a cross-section of bank and non-bank permanent CRE lenders from Wall Street to Main Street, I discovered that no one had a definitive structure in mind regarding the financing of a building that was majority-occupied by a coworking business. What's more, their institutions currently don't have a lending policy or guidelines for coworking offices, co-warehousing facilities, or experiential real estate properties.

Even more concerning is that these types of innovations in commercial real estate — which will materially impact commercial real estate cash flow and value — are not on the minds of bank supervisors at the Federal Reserve or Office of the Comptroller of the Currency either. This tidbit was uncovered during my presentation to bank supervisors in Washington, D.C., in September.

In their defense, 2018 was a great year for commercial real estate finance. Why wouldn't 2019 and beyond be the same?

The fact is that there are new variables at play — possible game-changers. Debt capital has grown exponentially over the past seven decades. Technology is expanding just as quickly, if not more so. The U.S. economy is in the late stages of a decade-long recovery, while innovations in the industry are altering the design and use of commercial real estate. On top of that, commercial real estate professionals too often are afflicted by a belief that trends and patterns today will continue, a phenomenon known as recency bias. But if history has taught us anything, it's that these patterns of recovery and expansion are prone to disruption. And there's no shortage of possible disruptors right now — the aftereffects of the midterm elections, tariffs on \$200-plus billion of imported Chinese goods, and the third interest rate hike in 2018 by the Federal Reserve, just to name a few.

The question of the next commercial real estate finance (CREF) disruption is not a matter of when, but how. It will not be caused by a subprime mortgage crisis or overleverage in the commercial mortgage-backed securitization market (CMBS). The likely suspects this time around will be a combination of rising interest rates and a disruption in liquidity for commercial real estate lending as a result of accounting, regulatory, and financial product shake-ups. How did we get here? More importantly, where do we go from here? And how can you prepare yourself for the imminent disruption? Let's start at the beginning.

From Alternative Investment to Mainstream Asset

Commercial real estate finance has come a long way since 1955, when total debt capital invested was \$250 billion. By 1H2018, outstanding commercial and multifamily debt totaled \$4.1 trillion — a staggering 1,500-plus percent increase in less than seven decades.¹

No longer the alternative asset of the post-World War II era, commercial real estate is now deeply embedded in every debt and equity investment vehicle and structure. CREF sources also have steadily expanded over the decades, from primarily credit unions and regulated banks in the 1950s and 1960s; to pension funds and REITs in the 1970s; to hedge funds and mezzanine debt lenders in the 1990s; and to today's alternative lenders, finance companies, and crowdfunding platforms that emerged in the wake of the Great Recession.

The evolution of CREF structures and participants and advances in technology are inextricably tied. Specifically, technological advances in both data analytics and property cash flow software have

been critical catalysts, delivering the transparency required by regulated banks, institutional investment funds, and public finance companies to engage more broadly in real estate finance. Whether it's the impact of new and more sophisticated discounted cash flow software like Argus to value and underwrite more-complex lease structures; or smartphones and apps that provide access to data anytime, anywhere; or emerging transaction technologies like blockchain, technology remains the high-octane fuel in the industry's engine. These advancements in real estate finance have provided both:

1. Transparency into an asset class that was previously regarded as local and more owner-occupied/single-tenant in nature; and
2. Data analytics to slice and dice increasingly complex lease and capital structures into investment products that can be packaged and securitized to more investors in much the way CMBS has transformed real estate into a bond investment.

Watershed Commercial Real Estate Finance Events

How did CRE become the darling of mainstream investment?

1968

Conversion of Fannie Mae to a publicly traded company, which brought liquidity to single-family and multifamily loans that were previously limited.

1970

Creation of Freddie Mac, creating much-needed competition in the mortgage market.

1971

Issuance of Freddie Mac's first mortgage-related security planted the seeds for the modern-day CMBS.

Early 1990s

Creation of modern-day CMBS mirrored the model pioneered by Fannie Mae and Freddie Mac, but for commercial real estate.

Additionally, expanded market data analytics, like those provided by Trepp, EDR, Reis, and MetroStudy, provide capital sources the confidence to venture increasingly into secondary and tertiary metropolitan statistical areas (MSAs). Bottom line, without this technology, CREF would never have expanded to the \$4.1 trillion market it is today.

For example, in 1Q2018 CREF rebounded with the strongest 1Q since the Great Recession, representing three consecutive quarters of growth, according to Jamie Woodwell, MBA's VP of Commercial Real Estate Research. The CMBS market powered the CRE mortgage debt increase, adding \$6 billion to its balance sheet — a sharp contrast to the \$21 billion decline over the same period in 2017. “Strong property fundamentals and property values continue to support mortgage borrowing and lending... and property owners have multiple sources of capital from which to get financing,” says Woodwell.²

Diving deeper, finance companies saw the largest growth, increasing their holdings by 5 percent, compared to the largest decrease by pension funds at 4.8 percent. This shift to more lending by CMBS and less by life companies is another signal of an impending inflection point in CREF. With loan-to-values on the rise as well as capital sources with a greater appetite for risk stepping up (alternative lenders, mezzanine debt firms, and CMBS), more conservative capital sources are pulling back from the frothiness of this market cycle.

CREF is now too big and systemic to be put back into the alternative asset bottle. While the increased level of liquidity for CRE assets is good for the health of the commercial real estate industry, it is not without risks. Many of these risks are re-emerging approximately one decade since our last major recession and real estate finance disruption — aligning with history's schedule of economic disruption every decade since the 1850s.³

Mid-2018 Stratification of CRE Mortgage Debt Outstanding (\$ millions)

	Mortgage Debt Outstanding				Change		Sector Share of \$ Change
	2018 Q2		2018 Q1				
	(\$millions)	% of total	(\$millions)	% of total	(\$millions)	Percent	
Bank and Thrift	1,303,534	39.8%	1,279,615	39.7%	23,919	1.9%	45.7%
Agency and GSE portfolios and MBS	631,441	19.3%	616,927	19.2%	14,514	2.4%	27.8%
Life insurance companies	486,200	14.9%	475,595	14.8%	10,605	2.2%	20.3%
CMBS, CDO and other ABS issues	452,239	13.8%	446,490	13.9%	5,749	1.3%	11.0%
State and local government	107,086	3.3%	109,122	3.4%	-2,036	-1.9%	-3.9%
REITs	89,216	2.7%	88,104	2.7%	1,112	1.3%	2.1%
Federal government	86,614	2.6%	86,310	2.7%	304	0.4%	0.6%
Nonfarm noncorporate business	31,553	1.0%	30,862	1.0%	691	2.2%	1.3%
Finance companies	30,929	0.9%	32,361	1.0%	-1,432	-4.4%	-2.7%
Private pension funds	21,834	0.7%	21,812	0.7%	22	0.1%	0.0%
Other insurance companies	18,936	0.6%	18,699	0.6%	237	1.3%	0.5%
Nonfinancial corporate business	11,014	0.3%	11,197	0.3%	-183	-1.6%	-0.4%
Household sector	1,128	0.0%	1,111	0.0%	17	1.5%	0.0%
State and local government retirement funds	476	0.0%	1,711	0.1%	-1,235	-72.2%	-2.4%
TOTAL	3,272,200		3,219,916		52,284	1.6%	

Source: MBA, Federal Reserve Board of Governors, Wells Fargo Securities, LLC, Intex Solutions, Inc. and FDIC

Note: Beginning with the Q2 2014 release, MBA's analysis of mortgage debt outstanding modifies the data from the Federal Reserve's Financial Accounts of the United States with respect to loans held in commercial mortgage-backed securities (CMBS) and by real estate investment trusts (REITs). The corrections create differences with previous releases and with the Federal Reserve data. For more information, please see the Appendix to this report.

Growth Drivers and Keeping Pace

If growth in CRE debt volume were the only metric to gauge the health of CREF, this paper would need to go no further. However, it is much more complex than that, and CREF debt volume is more effect than cause. What's driving this CRE finance activity? And what are new risks to be aware of?

Technology is by far the greatest driving force behind the growth of CREF. Gone are the days of VisiCalc, LOTUS 123 spreadsheets, and HP12c calculators. Today is the era of financial apps on smartphones; portfolio cash flow analyses that can roll up hundreds of discounted cash flow analyses; big data-driven underwriting and validation models like those used in bank stress tests, blockchain public ledgers; and Smart Finance.

With these changes in financial technology, there are trade-offs to consider along with all the good it brings to the commercial real estate industry. The good:

1. Artificial intelligence and blockchain are eliminating expensive and inefficient processes, replacing them with more transparent and efficient ways of transacting commercial real estate;
2. More capital to fund the growth and innovation of commercial real estate in secondary and tertiary markets as data analytics affords these areas the same market transparency as large primary MSAs; and
3. New property types with more complex income streams like seniors housing and care facilities, experiential retail, e-commerce fulfillment centers, adaptive reuse redevelopment, and coworking office.

Looking ahead, the CREF evolution continues as evidenced by new alternative capital sources — from crowdfunding to mezzanine debt lending to Smart Finance and SALT (Secured Automated Lending Technology). Considered the next big thing in CREF, Smart Finance incorporates artificial intelligence to automate the underwriting and credit scoring processes — thus speeding up approvals and closings while simultaneously documenting regulatory records and preloading all required information for annual Dodd-Frank-mandated stress testing.

SALT, on the other hand, layers in blockchain technology, allowing cryptocurrency asset holders to use their digital assets as collateral for cash loans. By eliminating the need to liquidate holdings, a digital-asset-backed lending market is on the rise. SALT is already in use in CRE.

But what will happen once regulatory and legislative bodies turn their attention to these new technologies? The worst-case scenario is a time-out period while legislation and regulation catch up to the technology in the short term. Technology always moves faster than regulatory and legislative bodies. The knee-jerk reaction is to fear the unintended consequences of a new technology like this — particularly the impact on real estate asset values.



The best-case scenario is one where both industry and regulatory bodies embrace the technology, and the latter quickly establishes effective controls to mitigate damages when any unintended consequence rears its head. If this should happen, both the adoption by the industry and the positive impact of these technologies on CREF would occur much faster.

The discussion thus far underscores an important shift in the skill set of CRE professionals going forward. Accurately reading and anticipating this ever-changing landscape is what will separate the winners from the losers in terms of asset prices and the skilled CREF professional, like a CCIM, from your typical broker. To remain competitive, CRE professionals need to

expand their skill set beyond just market knowledge. The evolution in CREF is forcing commercial real estate professionals to become less broker-centric and more adviser-centric. In a blockchain economy that is more efficient, transparent, and fast-paced than ever, it's imperative that CRE professionals incorporate accounting, tax, data analytics, alternative finance, and valuation expertise into their skill sets to navigate these waters and continue to flourish. Simply put, to succeed in 2019 and beyond, participants need to be more forward thinking and combat complacency during the good times. In other words, avoid recency bias.



Inevitable Disruption

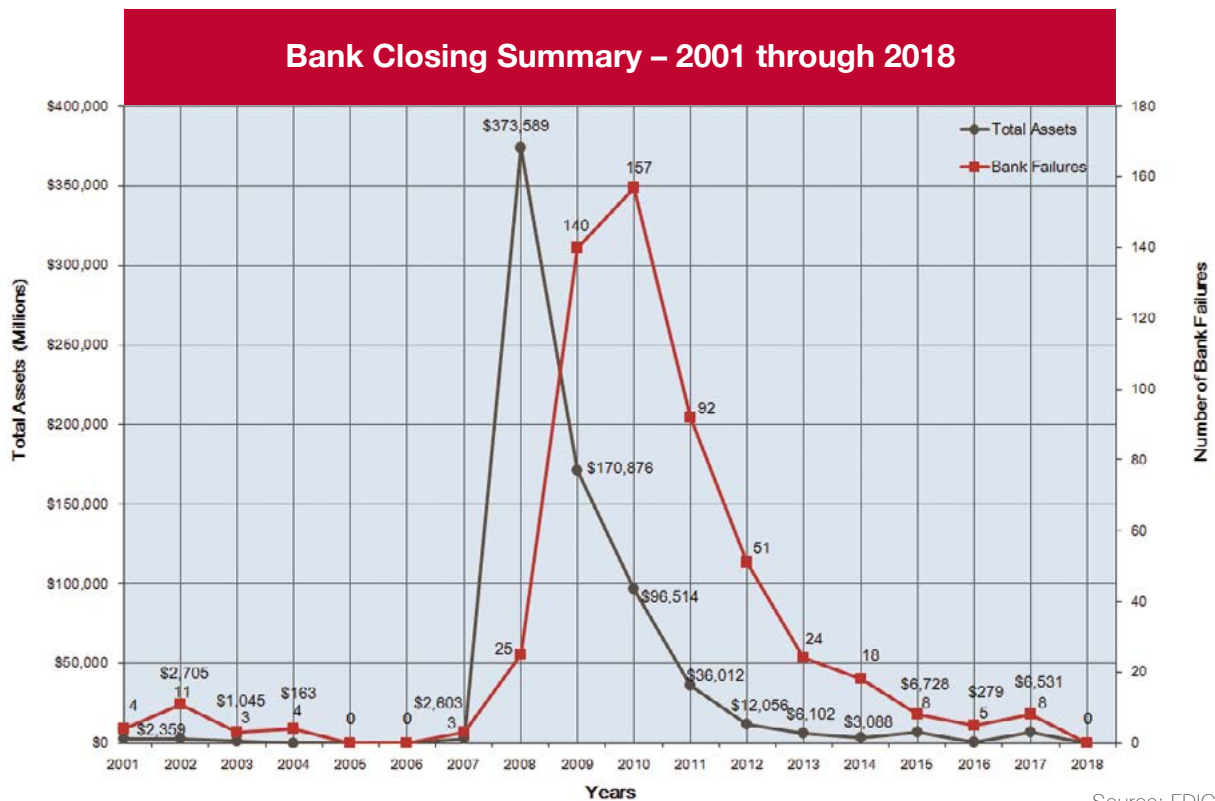
Real estate is not immune from business cycles, economic recessions, or disruptive “Black Swan” events — such as a trade war, currency crisis, or cyber terrorism. In fact, the probability of a CRE finance disruption in the next six to 18 months is as elevated as it was prior to 2007-2008. As mentioned previously, rising interest rates and a disruption in lending liquidity for commercial real estate will be at the epicenter of this quake.

Moreover, history is not on our side. According to National Bureau of Economic Research (NBER), recessions have become less frequent, but more severe. The adverse impact from these less-frequent-but-more-severe economic disruptions is a more severe disruption and value volatility in CREF —

cases in point are the S&L crisis of the late 1980s and most recently the 2008-2009 financial crisis.

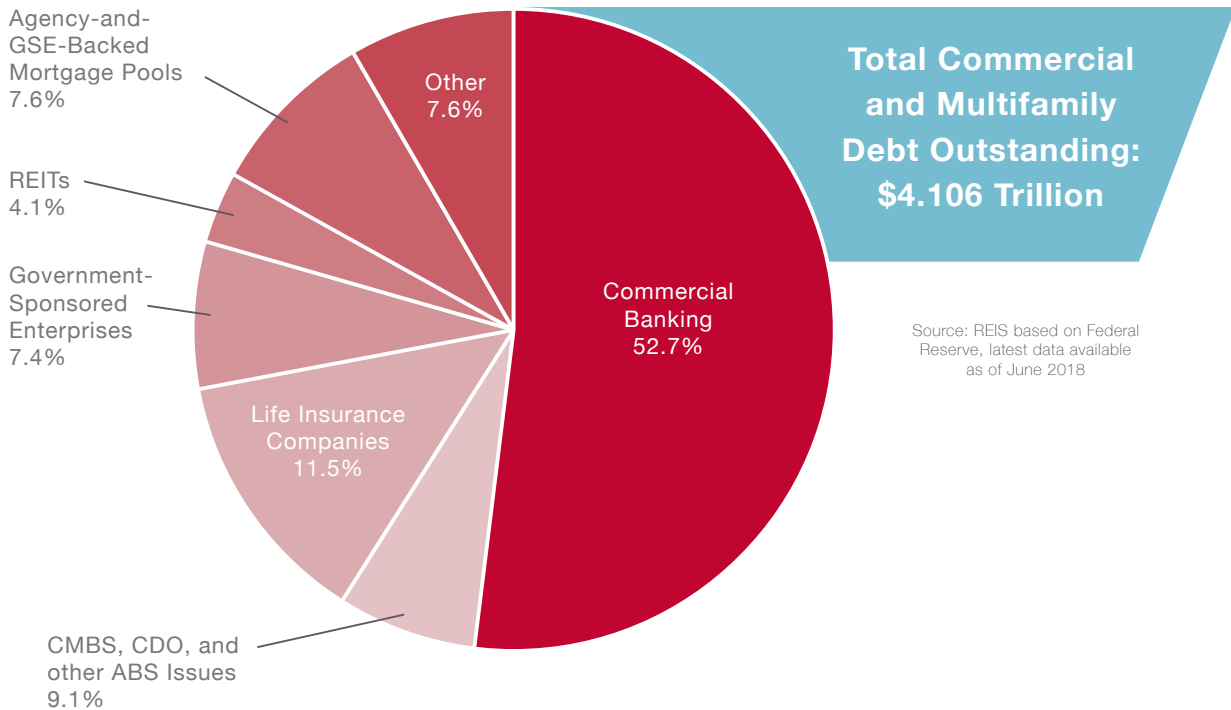
If the current economic expansion continues beyond 2Q2019, it will be the first time since 1857 that the United States did not experience a recession in a decade. Only time will tell, but there are some very real risks at play that could derail that milestone.

High on that list is CRE concentration risk. The contraction in the number of financial institutions over the past three decades, coupled with exponential growth in debt capital, has created a concentration the likes of which we have never seen in history. Banks continue to garner the largest share of this growth and total debt, despite the Federal Reserve’s enhanced supervisory authority or bank stress tests, Dodd-Frank legislation,



CRE Debt Concentrations at Mid-2018

Commercial and Multifamily Mortgage Debt Outstanding



and the real estate lending market modifying behavior after 500 bank failures (2009-2017). Combine that with assets being priced for perfection at record-low average cap rates of below 6 percent, and you have an environment with simply no margin for error.

Additionally, the ongoing concern around interest rates is a cogent one; the Federal Reserve has been raising them directly for last two years — and indirectly by means of selling down its \$4.2 trillion balance sheet accumulated during the financial crisis. From an interest rate perspective alone, CREF faces a headwind in 2019.

The market is not prepared for the effects of a 3.5 percent 10-year Treasury on cap rates and commercial property valuations — let alone 4 or even 5 percent. Not so long ago in 1Q2004 and 2Q2006, the Federal Reserve raised interest rates 16 times before the onset of the financial crisis a full 18 months later. Properties purchased in 3Q2018 assuming a 2.75 percent 10-year Treasury could justify a sub-6 percent cap rate, but properties purchased in 2019 in a 3.5 percent to 4 percent 10-year Treasury rate environment cannot justify a price based on anything below a 7 percent cap rate.

Compounding this problem are the new finance structures and products that financial institutions are engaging in. These include:

1. Expanded lines of credit to real estate investment trusts (REITs);
2. Commercial and industrial lending to businesses in which the repayment of the loan is tied more to the “going-concern” of the enterprise than the underlying real estate, such as seniors housing and health care;
3. Alternative finance companies underwriting smaller real estate loans banks don’t do directly anymore due to bank regulation, making these deals too expensive or burdensome; and
4. More multifamily loans, fueled by the insatiable appetites of Fannie Mae and Freddie Mac, that exceed the agencies’ maximum lending limits almost annually.

As a result, any disruption in CREF in 2019 or 2020 — whether from higher interest rates impacting refinance risk, tariffs, currency crises among major trading

partners in Europe and Latin America, and/or a reversal of 2017 Tax Act benefits after the November midterms — will likely disrupt the permanent debt markets. CRE concentrations in the banks will only increase as maturing commercial real estate construction and “mini-perm” loans back up into the banks absent a fluid permanent CREF market. The resulting severe CRE concentration crisis would not be too dissimilar to the 2008-2009 disruption that shut down the CMBS market.

So back to my original question asking how a CREF lender would finance a WeWork office building. Let’s add the “Amazon Effect” on retail and distribution facilities; co-warehousing as an off-chute to co-officing; and growth in adaptive reuse projects in response to a return-to-the-city trend by millennials to the mix, as well. These unaccounted-for emerging dynamics are altering the CRE landscape — and present another distinct threat unto themselves if not addressed effectively. The industry needs to properly define these new property classes and underwriting requirements sooner rather than later to allow capital to flow as it does with other well-established CRE categories. By doing so, possible disruption is avoided and growth opportunities expanded to further bolster commercial real estate.



Photo credit: WeWork

Preparing for the Unknown

For all that is known about the current conditions, there are also some unknowns. Other possible CREF disruptors on the horizon in the next three years include the sunset of London Interbank Offered Rate (Libor) in 2021, the current expected credit loss (CECL) model for banks in 2020, and lease accounting for all public companies that engage in any form of real estate finance activity.

What will replace Libor after December 2021? A total of \$350 trillion in debt instruments currently use Libor as the benchmark rate. What happens if a suitable replacement is not found for this staple for interest

rate swaps and all adjustable-rate financial products including construction loans? Secured Overnight Financing Rate (SOFR) currently is the front runner, with Fannie Mae successfully issuing several SOFR securities in 2018. Let's hope the benchmarking of this critical market index or another suitable substitute continues.

Will CECL result in banks reducing real estate lending volumes as they build up additional capital reserves in 2020-2022 due to the increased expected credit loss methodology that spans the entire life of a loan?

CECL Explained

In June 2016, the Financial Accounting Standards Board (FASB) published its Accounting Standards Update on Financial Instruments – Credit Losses (Topic 326). In it, the current standards for loss accounting, known as FAS-5 & FAS-114, are replaced with the new CECL model. Beginning Dec. 15, 2019, financial institutions will be required to estimate the expected loss over the life of the loan. To ensure compliance, this change in how banks estimate losses in their allowance for loan and lease losses (ALLL) will require substantial changes in data analytics and financial methodologies.⁴ The following timeline provides an overview for preparing for CECL compliance:



And what impact will lease accounting have on long-term lease structures critical to the triple-net lease market (NNN) and permanent debt investors (e.g., REITs and life companies) that rely on matching their longer-term liabilities to assets with long duration cash-flow assets?

Beginning in 2019, the new FASB accounting standard for leases (ASC 842) mandates that both lease assets and liabilities are recorded on a company's balance sheet — without any grandfather provisions. This is a material occurrence. According to Moody's, this new FASB lease accounting standard will add as much as \$1 trillion in liabilities to corporate balance sheets. Compounding the issue are the right-of-use asset calculations set forth to mitigate this added liability. In those calculations, the corresponding asset value is not determined or based on market values. The resulting decline in a company's net value and credit rating poses a real

threat to the future of longer-term leases, leaving the NNN lease market particularly vulnerable. This disruption should be on everyone's radar.

If that's not enough, a disruption in 2019 also could occur due to other risk factors, including but not limited to:

1. An emerging markets debt crisis that triggers a U.S. recession in 2020; or
2. A U.S. fiscal crisis triggered by unrestrained fiscal spending and the interest on that deficit.⁵

This forecast is by no means a doomsday message. The cycle of CREF has ebbed and flowed since its inception. Knowledge — and adaptability — is power. With open eyes and a proactive approach to meeting the needs of the industry, you can lessen the impact of the inevitable downturn.



What are your thoughts?

This report is intended to start a dialogue.
Share it with clients and colleagues, and
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Endnotes

¹ The total amount of commercial and multifamily debt outstanding in 1H2018 was \$4.1 trillion, of which \$1.2 trillion is agency multifamily debt and \$900 billion is construction loans in regulated banks. (MBA, REIS Capital Markets, and Federal Reserve)

² Jeremiah Jensen, “MBA: Commercial/Multifamily Outstanding Debt Posts Largest Q1 Increase Since Recession” (HousingWire, June 26, 2018)

³ National Bureau of Economic Research (NBER): The U.S. has experienced 33 recessions since 1857. On average, a recession occurs every 4.9 years and lasts 17.5 months. There has been at least one recession in every decade.

⁴ Michael Gullette, “CECL: What You Need to Know Now” (ABA Banking Journal, Aug. 29, 2016)

⁵ The two charts below drive home the fragility of U.S. deficit spending and the risk that rising interest rates pose to CREF. Take a closer look at the one line item causing the most turmoil in the U.S. budget – interest on our mounting deficit. While receipts are up over 4 percent for FY 2018, outlays/spending are up by a greater total amount due mainly to “Net Interest on Public Debt.” This increase of more than 19 percent is a direct result of both rate hikes by the Federal Reserve and uncontrolled deficit spending. Unfortunately, this scenario never ends well and eventually extracts capital from the market to finance corporations and CREF. (Congressional Budget Office, August 2018)

The 2017 Tax Act, Budget Deficits—Monthly Budget Review for August 2018

Receipts, October–August (Billions of Dollars)

Major Program or Category	Actual FY 2017	Preliminary FY 2018	Estimated Change	
			Billions of Dollars	Percent
Individual Income Taxes	1,422	1,523	101	7.1
Payroll Taxes	1,066	1,070	4	0.4
Corporate Income Taxes	234	163	–71	–30.4
Other Receipts	245	229	–16	–6.4
Total	2,966	2,985	19	0.6
Memorandum: Combined Individual Income and Payroll Taxes				
Withheld taxes	2,182	2,214	32	1.5
Other, net of refunds	306	379	73	23.9
Total	2,488	2,593	105	4.2

Sources: Congressional Budget Office; Department of the Treasury

The 2017 Tax Act, Budget Deficits — Monthly Budget Review for August 2018 *(cont.)*

Outlays, October–August (Billions of Dollars)

Major Program or Category	Actual FY 2017	Preliminary FY 2018	Estimated Change	Estimated Change with Adjustments for Timing Shifts	
				Billions of Dollars	Percent
Social Security Benefits	855	918	63	39	4.6
Medicare ^b	518	563	46	22	4.0
Medicaid	343	356	13	13	3.8
Subtotal, Largest Mandatory Spending Programs	1,716	1,837	121	74	4.2
DoD — Military ^c	515	552	37	33	6.4
Net Interest on the Public Debt	288	343	55	55	19.2
Other	1,121	1,148	27	10	0.9
Total	3,640	3,880	240	172	4.7

Sources: Congressional Budget Office; Department of the Treasury. DoD = Department of Defense; FY = fiscal year.

a. Adjusted amounts exclude the effects of shifting payments that otherwise would have been made on a weekend or a holiday. If not for those timing shifts, total outlays would have been \$3,681 billion in fiscal year 2017 and \$3,853 billion in fiscal year 2018.

b.. Medicare outlays are net of offsetting receipts.

c.. Excludes a small amount of spending by DoD on civil programs.

Author Bio and Acknowledgements



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CCIM Institute Chief Economist Kiernan “K.C.” Conway is the director of research and corporate engagement at the Alabama Center for Real Estate (ACRE) housed within the University of Alabama’s Culverhouse College of Business.

Conway is a frequent speaker for the Federal Reserve, FDIC, FHLB, state bank commissioners, academic groups, professional organizations, and industry associations. He previously served as chief economist for Colliers International – US.

In addition to being a frequent lecturer at international conferences, Conway has consulted with major governmental agencies, most notably briefing former Federal Reserve Chairman Ben Bernanke and the Board of Governors on the burgeoning subprime lending and housing crisis and its impact on the commercial real estate industry.

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