California Water and Infrastructure Report

Formerly, the "California Drought (and Flood) Update"

For September 13, 2018

by Patrick Ruckert

Published weekly since July, 2014

An archive of all these weekly reports can be found at both links below:

http://www.californiadroughtupdate.org

https://www.facebook.com/CaliforniaDroughtUpdate

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One important aspect about economics that modern day economists and journalists don't understand, is that the value of infrastructure is not primarily its ability to derive a monetary return; rather, it is infrastructure's role as a key factor in the development process of any modern economy, helping raise the productivity of the whole economy of a nation. The "return on investment" lies not in the fees forced upon users of the infrastructure utilities, but from the revenues of a productive industry and agriculture that uses these utilities.

Why China's 'Debtbook Diplomacy' is a Hoax

A Note To Readers

Our introductory quotation above, I hope, makes clear that the issue of infrastructure is not one of "making a profit," but one of creating the foundation for a fundamental upshift of the productive power of an economy. The study the is quote from is the subject of our Feature this week and is the last item of this report.

Again, like last week, it is a slow-news week for items on the subject of these reports. And here is what you will find below:

This Week's Report

The *U.S. Drought Monitor* this week shows that about one-half of the state is now in some degree of drought. And perhaps surprising is that the monitor shows the state of Oregon in a more severe drought than is California.

With no new major fires breaking out this past week, the focus of activity is the Delta fire that closed down 45 miles of I-5 for five days.

The Oroville Dam Update this week has just one new video to show.

Then the "water wars of California," for want of a better description of the continuing battle over who will win and who, or what, will lose as the already inadequate water flow in the state is fought over. Either next week or the week after this report will focus on really what must be done over the next decade or so to actually fix this problem. Just one item under this topic this week: Some excerpts from an interview with Congressman Jeff Denham. I find what he has to say interesting because he indicates he at least is thinking bigger than just the Central Valley he represents.

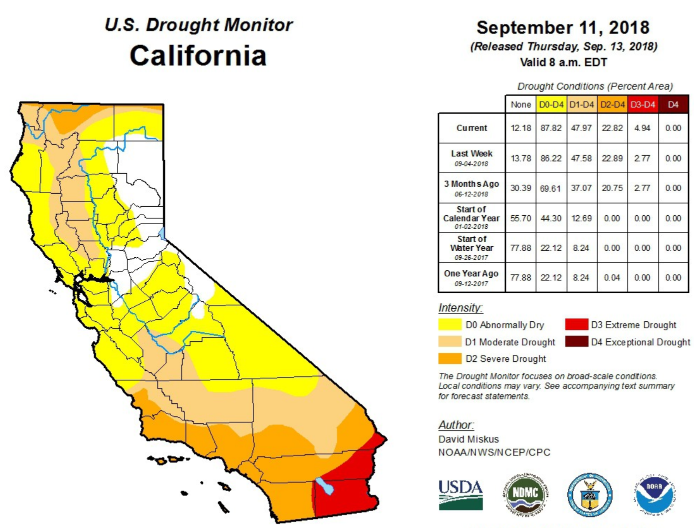
As I have stressed previously, the ignoring of the Colorado River by most water officials in California can in the next couple of years provide a very unwelcome surprise as rationing of its water can make a large dent in the water supply of the state. With more than 40 million people in the southwest dependent upon the waters of the Colorado River, including millions in California, and a very large part of the vegetable production, especially winter vegetables, of the nation dependent upon the Colorado, much more attention is warranted to the coming crisis of the river.

September 15 is the ten year anniversary of the beginning of the collapse of the financial system in 2008, setting off the worst financial crisis since the Great Depression. Did Wall Street learn a lesson from that disaster? Well yes, at least one, one that ensures a new crisis, one that is building up rapidly now will blow it all out once again: Their friends in the Congress and the White House will bail them out and none of the criminals will ever be charged.

Instead, as the National Association of Federally Insured Credit Unions (NAFCU) states, it is time for a serious promotion of restoring the Glass-Steagal banking law.

The final item is our Feature, excerpts from the study, *Why China's 'Debtbook Diplomacy' is a Hoax. The excerpted sections focus on the role of infrastructure in an economy and how to finance real economic development.*

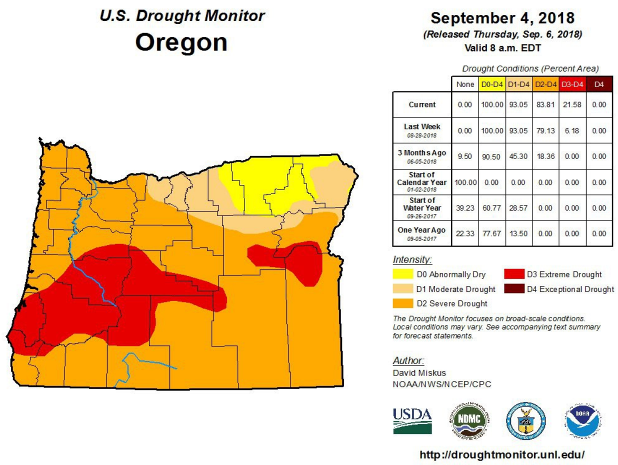
U.S. Drought Monitor



Oregon Reaches Critical Drought Levels After Driest Summer West of the Cascades in 40 Years

[By Elise Herron](#) |
Published September 8, 2018
https://www.wweek.com/news/2018/09/08/oregon-reaches-critical-drought-levels-after-driest-summer-west-of-the-cascades-in-40-years/

According to the National Integrated Drought Information System, 93 percent of the state is in a drought and 100 percent of the state is classified as abnormally dry.



Also, as the [latest water condition report from the Oregon Water Resources Department](#) notes, expanding drought conditions have pushed 70 percent of the state, [including Portland](#), into "severe" drought status.

Fires

With no new major fires breaking out this past week, the focus of activity is the Delta fire that closed down 45 miles of I-5 for five days.

Windy weather is a worry as Delta Fire reaches 54,000 acres

By Michael McGough

September 12, 2018 08:43 AM

https://www.sanluisobispo.com/latest-news/article218253255.html#storylink=cpy

The Delta Fire burning in Shasta County has reached 53,837 acres as of the latest mapping, with no overnight growth observed Wednesday morning, according to Cal Fire and U.S. Forest Service units.

The quick-spreading wildfire that erupted one week earlier 10 miles north of Redding is now 15 percent contained, Shasta-Trinity National Forest said in a brief update about 7 a.m. Wednesday.

Approximately 2,820 personnel remain assigned to the Delta Fire, a human-caused timber and brush fire burning near Lakehead, according to the blaze's Inciweb page.

Interstate 5 between Redding and Mount Shasta remains open, reduced to one lane each way for about

17 miles, the latest Cal Fire incident report notes.

The freeway had been closed for more than five days along a 45-mile stretch, until Caltrans and California Highway Patrol officials announced it was reopened with restrictions as of Monday morning. Flammable vehicles, such as gas tankers or trucks hauling lumber, are still not allowed on that stretch, and must divert to Highway 299.

Oroville Dam Update

Oroville Spillways Phase 2 Update September 6, 2018

California DWR

Published on Sep 11, 2018A worker maneuvers a crane as it flies in a concrete wall form while other workers secure the wall form into position. Crews continue to place permanent structural concrete sidewalls on the middle chute of the main spillway.

[*https://www.youtube.com/watch?v=BkR3mNhzUkQ*](https://www.youtube.com/watch?v=BkR3mNhzUkQ)

The California Water Wars

The following interview with Congressman Jeff Denham is of interest because he does at least mention the broader and more general infrastructure deficit the nation has beyond water management.

Exclusive Q&A with U.S. Rep. Jeff Denham: Fighting for California water storage

By [Kim Riley](#)
September 10, 2018
[*https://riponadvance.com/featured/exclusive-qa-with-u-s-rep-jeff-denham-fighting-for-california-water-storage/*](https://riponadvance.com/featured/exclusive-qa-with-u-s-rep-jeff-denham-fighting-for-california-water-storage/)

U.S. Rep. Jeff Denham (R-CA) thinks the next term of Congress will present an unprecedented opportunity for federal lawmakers to reshape the nation's critical infrastructure, especially regarding water, for generations to come.

He hopes to remain California's representative in the U.S. House to help make it all happen.

"As an almond farmer, I know firsthand how important a stable water supply is to staying in business and feeding families across the nation," Rep. Denham recently told The Ripon Advance.

Toward solving those challenges, Rep. Denham supports streamlining California's environmental reviews and permitting process to reduce bureaucratic red tape. In turn, critical improvements and expansion of the state's water storage and infrastructure could get underway more quickly and efficiently, the lawmaker said.

"That means … pressing refresh on our funding streams to get our major projects across the finish line faster and cheaper," noted the U.S. Air Force veteran.

What follows are quotations from the interview with Rep. Denham:

I recently authored two provisions that passed the U.S. House of Representatives as part of a Department of the Interior Appropriations bill. The first prevents the state from robbing water from the New Melones federal reservoir and protect it from being drained empty. The second positions my New WATER Act which finances water storage and actually builds projects that have been delayed for decades.

My New WATER Act would provide financing for water projects throughout the western United States, including new reservoirs, below ground storage projects, recycling, and desalination projects. The amendment I passed in the Department of Interior appropriations bill compliments my proposal by providing resources to an existing program, the Water Infrastructure Financing and Innovation Act (WIFIA), for the financing of the water supply projects that western states need.

I'm going to continue pushing to bring my New WATER Act across the finish line to address our critical water storage issues in the Central Valley. We have a once-in-a-lifetime opportunity to solve California's water storage needs, and I'm advocating for major water projects like the enlargement of Shasta Dam, construction of Sites Reservoir and Temperance Flat Dam, and expanding of Los Vaqueros Reservoir which, combined, would add at least 4 million acre-feet of available water for our state, help with flood control, ecosystem restoration and water quality, and generate more clean hydropower for our communities.

Here in the Central Valley, we feed the world, and without water, that can't happen. Our communities, our economy, and a large portion of our domestic agricultural production relies on California water resources to survive.

Without federal level changes to water policy, not only will we be left unprepared for the next drought with insufficient water storage and infrastructure, but the state's dangerous water grab will be allowed to continue, sending more of our supply into the ocean, crippling our Central Valley economy, farms and communities.

We need to make sure our infrastructure projects, across all modes, have access to financing programs. My WIFIA amendment ensures that certain water projects can receive financing, but we need to go further. WIFIA is for water, there is a surface financing program for highways and a railroad financing program, too. In effect, these programs act as infrastructure banks. Hard federal dollars are hard to come by because you either need to generate revenue or take money from another program. These financing programs will increase public-private partnerships, non-federal investment, and allow the Central Valley and the rest of the country to upgrade its infrastructure and bring it into the 21st century.

The Colorado River

With more than 40 million people in the southwest dependent upon the waters of the Colorado River, including millions in California, and a very large part of the vegetable production, especially winter vegetables, of the nation dependent upon the Colorado, much more attention is warranted to the coming crisis of the river.

Crisis at Lake Powell Looms Large as Long-Term Drought Reaches Upstream

By Matt Weiser

September 11, 2018

https://www.newsdeeply.com/water/articles/2018/09/11/crisis-at-lake-powell-looms-large-as-long-term-drought-reaches-upstream

Water shortages at Lake Mead have drawn all the attention in recent years. Now water rationing has reached far into the Colorado River's snowy headwaters, prompting concern about the long-term operation of Lake Powell.

In the Colorado River's more arid Lower Basin, the chronic drought has received plenty of attention due to the dramatic shrinkage of Lake Mead and the likelihood of water shortages for Arizona, Nevada and California in 2020. But drought in the Upper Basin has gone relatively unnoticed, and in many ways it will be a much tougher problem to solve.

Mead and Powell are the largest and second-largest reservoirs in the nation, respectively. They're linked by the Grand Canyon, one of the planet's most iconic geologic features. Yet while everyone has watched epic drought paint a giant bathtub ring around Lake Mead, Lake Powell has been shrinking, too.

The water elevation at Powell has sunk 94ft since 2000. A big reason is that Lake Powell has been used to keep Lake Mead from sinking to an elevation of 1,075ft, the point at which the federal government must declare a water shortage under a 2007 agreement. This would cause mandatory water delivery cuts to the Lower Basin states, triggering widespread water rationing.

A new report by a team of science and policy experts, known as the Colorado River Research Group, notes that continuing this practice will bring harm to Lake Powell. If the lake shrinks, it could compromise hydropower generation at Glen Canyon Dam and prevent Lake Powell from continuing to backfill Lake Mead.

The Upper Basin of the Colorado River has begun experiencing water shortages due to a 19-year drought. A new research report says it might be time to stop thinking of the river as two separate basins. (IMAGE CREDIT: U.S. Geological Survey)

It could also touch off an ugly dispute between the two basins. To reach agreement on the 1922 Colorado River Compact, Upper Basin states committed to send the Lower Basin states a certain amount of water. As measured at Lee's Ferry, just below Lake Powell, those water deliveries must achieve a 10-year running average of 75 million acre-feet. If not, the Lower Basin states can declare a *"compact call," triggering negotiations that could subject the Upper Basin states to water rationing. That prospect, long considered remote, may now be looming.*

A Tenth Anniversary That Should Never Have Been

Our section on the economy this week begins with noting that it was September 15, 2008 that the first hedge fund collapse set off the worst financial crisis since the Great Depression. Did Wall Street learn a lesson from that disaster? Well yes, at least one that ensures a new crisis that is building up rapidly now: Their friends in the Congress and the White House will bail them out and none of the criminals will ever be charged.

Instead, as the National Association of Federally Insured Credit Unions (NAFCU) states, it is time for a serious promotion of restoring the Glass-Steagal banking law.

A Decade Since Lehman Brothers Collapse Sparks Coverage on New Crash, Corporate Debt

Sept. 12 (EIRNS)—Of numerous warnings of a new financial crash, written under motivation of the Sept. 15 tenth anniversary of Lehman Brothers' implosion, a Bloomberg piece on Russia stands out. It places Russian sovereign and corporate debt—despite Russia's large foreign currency reserves and earnings and its modest government debt—as the potential focus of contagion of the current "emerging market" currency crisis into the major bond markets and banking systems. The trigger: any possibility of passage of the Graham-Menendez anti-Russian sanctions bill, known by the acronym DASKA (Defending American Security from Kremlin Aggression).

Bloomberg describes why Russia has been the target of a substantially larger carry trade than Turkey, Argentina, Indonesia, even India: Because it has a very high interest rate on sovereign and corporate debt, but plentiful backing with foreign reserves, oil revenues, etc. DASKA can produce a thorough reversal of that carry trade, more explosive for the trans-Atlantic financial markets than any other.

There were other warnings. A CNBC TV video report Sept. 11 of a Moody's Investor Service report, "Is Another Corporate Debt Crisis Lurking?" included a rare acknowledgment of the huge bubble of U.S. corporate debt. It has risen beyond its 2007 peak of $12.7 trillion to $15.9 trillion now. Worse, Triple-B debt (junk plus one grade) has gone from $700 million to $3 trillion—nearly half of all bonds, and one-quarter of bank lending—and this is seriously dangerous, the report says. "The bag is not being held as much by the banks as it used to be," but by shadow banks. But all of the subprime-type practices have returned, by these shadow banks and their bank backers.

The New York Times Sept. 12 published "The Next Financial Calamity Is Coming. Here's What To Watch": namely, corporate debt. "[T]he borrowing binge may have gone too far.... In the past, such indebtedness has always been followed by a rise in defaults. ... Developing economies are looking shakier—and, again, a main culprit is corporate debt."

Credit Unions' Mobilization for Glass-Steagall Picks Up

Sept. 12 (EIRNS)—About a week after issuing a white paper, "Modernizing Financial Services: The Glass-Steagall Act Revisited," and committing to the reenactment of Glass-Steagall, the National Association of Federally Insured Credit Unions (NAFCU) has another piece out promoting Glass-Steagall, in the Washington, D.C. newspaper, The Hill. In the intervening days there have also been *articles on the credit unions' "mobilization" for Glass-Steagall in the Credit Union Times, the Credit Union Journal and Credit Union Insight portal, if not others.*

In The Hill op-ed by Carrie Hunt, the focus is on the 21st-Century Glass-Steagall Act Bill in the Senate; the piece is headlined, "Updated Glass-Steagall Would Make Banks Put People Before Profits." Author Carrie Hunt is executive vice-president and general counsel of the NAFCU.

Updated Glass-Steagall would make banks put people before profits

By Carrie Hunt, opinion contributor — 09/11/18
http://thehill.com/opinion/finance/406101-new-age-glass-steagall-would-make-banks-put-people-over-profits

(Carrie Hunt is the executive vice president of government affairs and general counsel of the National Association of Federally-Insured Credit Unions.)

A 21st-century Glass-Steagall Act would promote a more competitive marketplace and a safer and more sound financial system. Building a firewall between investment and commercial banking would ensure these two segments of banking stay mutually exclusive.

It would also ensure Wall Street banks can no longer gamble with American consumers' personal savings on the trading floor.

As is the nature of economic cycles, ups and downs are constant, but some downs are worse than others. "Too big to fail" institutions, coupled with excessive, unbridled risk-taking, will have a catastrophic impact on the American economy and wreak havoc on consumers' financial well-being. A new policy approach to Glass-Steagall, however, could help mitigate the damages incurred by American consumers.

A 21st-century Glass-Steagall would:

- *protect consumers against future financial crises;*
- *ensure traditional depositories can continue to thrive in a stable financial marketplace; and*
- *reduce the competitive inequalities and moral hazard that arises when large banks take risks on consumer deposits to generate profits.*

Over the past decade, consolidation has taken root throughout the financial services industry. The total number of credit unions have dropped by nearly 30 percent, furthering the dominance large institutions have on the market.

Should Wall Street banks' risky investment practices go awry, will American consumers be required to foot the bill?

Without Glass-Steagall, the Federal Deposit Insurance Corporation's (FDIC) insurance fund can now be used to back up big banks' risky trading activities, thereby holding American public responsible for losses. Separating commercial and investment banking activities would make sure American taxpayers do not subsidize big banks.

A modern Glass-Steagall could also reduce the risks posed to the U.S. economy by "too big to fail" institutions. A study by the Government Accountability Office found big banks and their shareholders benefited by up to $70 billion between 2011 and 2012 by virtue of their "too big to fail" status, as investors believed the federal government would provide taxpayer-funded bailouts during a crisis.

A modern approach to the law would restrict banks' ability to make risky bets with consumers' savings and reduce their overall size, thereby limiting the likelihood of future bailouts and economic turmoil.

Today's political environment is ripe for action. There have been recent bipartisan efforts in the Senate to enact a 21st-century version of the Glass-Steagall Act.

In addition, both Republicans and Democrats agreed in their 2016 party platforms that reinstating Glass-Steagall could bring much-needed security and stability to our economy and help protect consumers.

Reforming our financial system and reinstating a modernized Glass-Steagall Act would allow credit unions and other institutions to compete and reduce the prevalence of "too big to fail" financial institutions.

Congress should debate this reform and help steer the banking industry back to a culture where people come before profit.

Feature: Cutting Through Bullshit and Lies While Providing An Economic Lesson

Excerpts from the study by Hussein Askary and Jason Ross of the onslaught of propaganda attacking China's investment of tens of billions of dollars building infrastructure in African nations. The entire study is well worth reading. But, what I have excerpted below focuses on the principle of economics and the role of infrastructure in an economy.

Why China's 'Debtbook Diplomacy' is a Hoax

by Hussein Askary and Jason Ross, co-authors of *Extending the New Silk Road to West Asia and Africa*

August 30, 2018

https://schillerinstitute.com/why-chinas-debtbook-diplomacy-is-a-hoax/

"*And why beholdest thou the mote that is in thy brother's eye, but considerest not the beam that is in thine own eye? Or how wilt thou say to thy brother, "Let me pull out the mote out of thine eye"; and, behold, a beam is in thine own eye? Thou hypocrite, first cast out the beam out of thine own eye; and then shalt thou see clearly to cast out the mote out of thy brother's eye."* (*Matthew 7:3-5,* KJV).

One important aspect about economics that modern day economists and journalists don't understand, is that the value of infrastructure is not primarily its ability to derive a monetary return; rather, it is infrastructure's role as a key factor in the development process of any modern economy, helping raise the productivity of the whole economy of a nation. The "return on investment" lies not in the fees forced upon users of the infrastructure utilities, but from the revenues of a productive industry and agriculture that uses these utilities.

Productive Credit vs Debt

According to American economist Lyndon H. LaRouche true economic value lies not in money or in natural resources, but rather in the creative, productive power of labor, and in increasing this power through scientific and technological advancements. All policies in society, including the issuance of money and credit should be geared towards improving the productive powers of labor, which includes financing and building a platform of basic economic infrastructure (transport, power generation, water management, healthcare, and education, including science-driver programs such as nuclear technology and space exploration programs).

The correlation between the development of advanced infrastructure and the increase in the productivity of the economy is thoroughly proven from studies conducted on the U.S. economy itself.

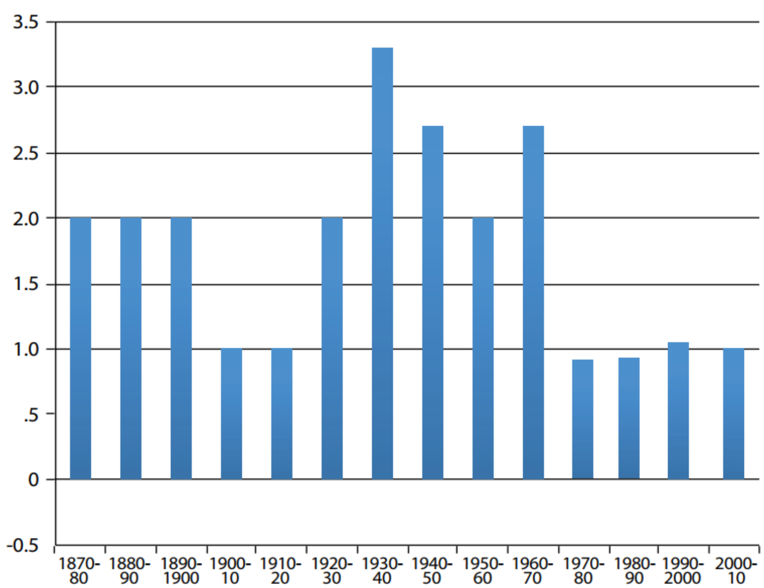
When discussing any issuance of money/loans, the real question that has to be asked is not the terms of the loan (interest rates, grace periods, or repayment duration) but rather, what the purpose it is issued for. It is, therefore, most important to distinguish between "money" and "credit." To understand the difference, it is crucial to consider the ends to which new supplies of financing or debt are applied. This can be brought into view by reviewing the current, disastrous monetary and financial policy of the trans-Atlantic.

The "big three" central banks of the United States (Federal Reserve), Europe (European Central Bank) and Japan (Bank of Japan) have created, by rough estimates, $13-14 trillion equivalent in money since late 2008 (by "quantitative easing" programs), and have issued temporary liquidity loans to banks in the many trillions of dollars equivalent in addition. **But none of that money—new currency and electronic entries—has been created for an *economic* purpose, nor for a *trade* purpose. It has all been created for a strictly *financial* purpose:** providing the largest banks in these countries enough capital and liquid reserves to survive massive losses and bad debts.

On the other hand, credit issued by governments is a debt those governments assume, which will be "paid back" with "interest" by the greater overall productivity of a future generation. *Essentially, growing future productivity is the security for the issuance of credit.*

Total factor productivity

FIGURE 3
Total Factor Productivity in the U.S. Economy
(Annual Growth by Decade)



Source: NBER, Congressional Research Paper "Total Factor Productivity Growth in Historical Perspective", 2013

There is a strong relationship between credit issued for projects of new infrastructure and multi-factor (or, total factor) productivity. This latter parameter attempts to measure that rate of growth of an economy due to technological advance. The highest annual rate of growth of American productivity, thus measured, occurred in the periods in which the greatest investments were made in new infrastructure that required new technologies—road, canal, rail, and later space transportation technologies, electric power technologies, water management and flood control technologies, and communications. The most rapid growth of multi-factor productivity was the 3.30% annual rate of the 1930s, under President Franklin Roosevelt's New Deal re-employment and massive "Four Corners" infrastructure programs, According to a 2005 report by the U.S. National Bureau of Economic Research.

For the those with an imperialist leaning and education, their narrative of "China's debt trap" is based on prejudice against the Chinese on the one hand, and most dangerously on the phenomenon of projection, as in "psychological projection," where the accuser projects his own ill intentions or acts upon someone else. Those who project these attributes upon China believe, blindly, in one and only one system of international relations and governance, which is that of the hegemonic empire. According to their belief, any emerging power will necessarily behave as the Roman or the British empires did. Accordingly, any other arrangement, such as win-win cooperation or mutual benefit among nations, is either mere utopian idealism or a trick.

Therefore, the only rational path the U.S. and Europe should take is the one outlined most clearly and for a long time by Lyndon and Helga-Zepp LaRouche, Chairman of the Schiller Institute, that is to join the new paradigm of economic, industrial development, best exemplified by the BRI. In light of this, the Schiller Institute has launched an urgent international petition drive, seeking a conference of the United States, Russia, China, and India, to establish a new fixed exchange rate system for world trade and development, modeled on Franklin Roosevelt's concept of the Bretton Woods system. This "new Bretton Woods system" would be the right context for these forces joining hands in the BRI to solve the many economic, social and political problems that have engulfed large parts of the world in the past years, including saving the very economies of the U.S. and the EU countries themselves.

It is only by changing its own axioms that the West will be enabled to see China's policies for what they truly are, and to recognize that its own best interests lie in a world of shared prosperity.