



State OF THE Harvest

VOLUME 3 • THIRD QUARTER, 2025

Welcome to our State of the Harvest Report

Our third Annual State of the Harvest Report provides an overview of selected commodity markets. In this issue, we examine the California wine grape market and analyze the factors impacting the performance of these permanent cropland assets and discuss our near- and long-term outlook for the sector.

Economic Overview

The Federal Government shutdown is in its fifth week. Aside from a September Consumer Price Index release, there is a virtual blackout of official data until Congress passes a spending bill. Therefore, the Federal Reserve Bank (Fed) has been operating without its typical price, wage, and employment statistics. While official September statistics were not available, the unemployment rate had been on the rise, from 4.1 percent in June to 4.2 percent in July and 4.3 percent in August. Additionally, several large employers, including Amazon and the United Parcel Service, recently announced large-scale layoffs of their corporate workforce.

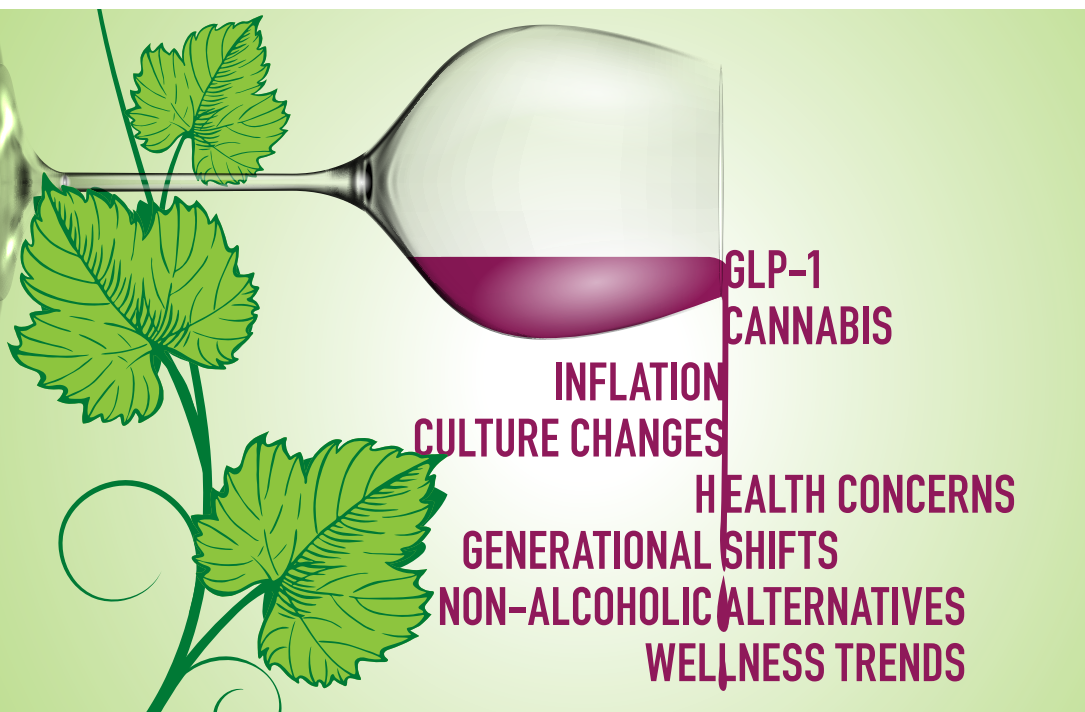
It came as no surprise when the Fed cut its policy rate by 25 basis points for the second consecutive month, bringing the target range to 3.75 to 4.0 percent. The lower policy rate signals that the consequences of weaker labor demand outweigh the slight increase in

IN THIS ISSUE

- Economic Overview 1
- Introduction 3
- Forces Reshaping the Wine Market 4
- Final Thoughts 9

ABOUT AGIS CAPITAL

AgIS Capital (AgIS) acquires and manages high-quality, investment-grade farmland assets. When opportunities exist to create and capture additional value for clients, we also invest in related operating companies involved in agricultural commodity processing. At present, AgIS Capital is emphasizing investments in U.S. permanent croplands because we believe that sector's value proposition is more consistent with the risk and return objectives of institutional investors. We also strategically review offshore opportunities that complement our investment operations in the United States.



inflation, which remains above the long-term objective of 2.0 percent. Fed Chair Jerome Powell said after the decision that, "A further reduction in the policy rate at the December meeting is not a forgone conclusion."

In international affairs, China recently ordered its first soybean shipment of the year after Chinese President Xi Jinping met with U.S. President Donald Trump. The post-meeting reports indicate both parties are moving toward de-escalating trade tensions and lowering tariffs, which could help the Fed on the inflation front.

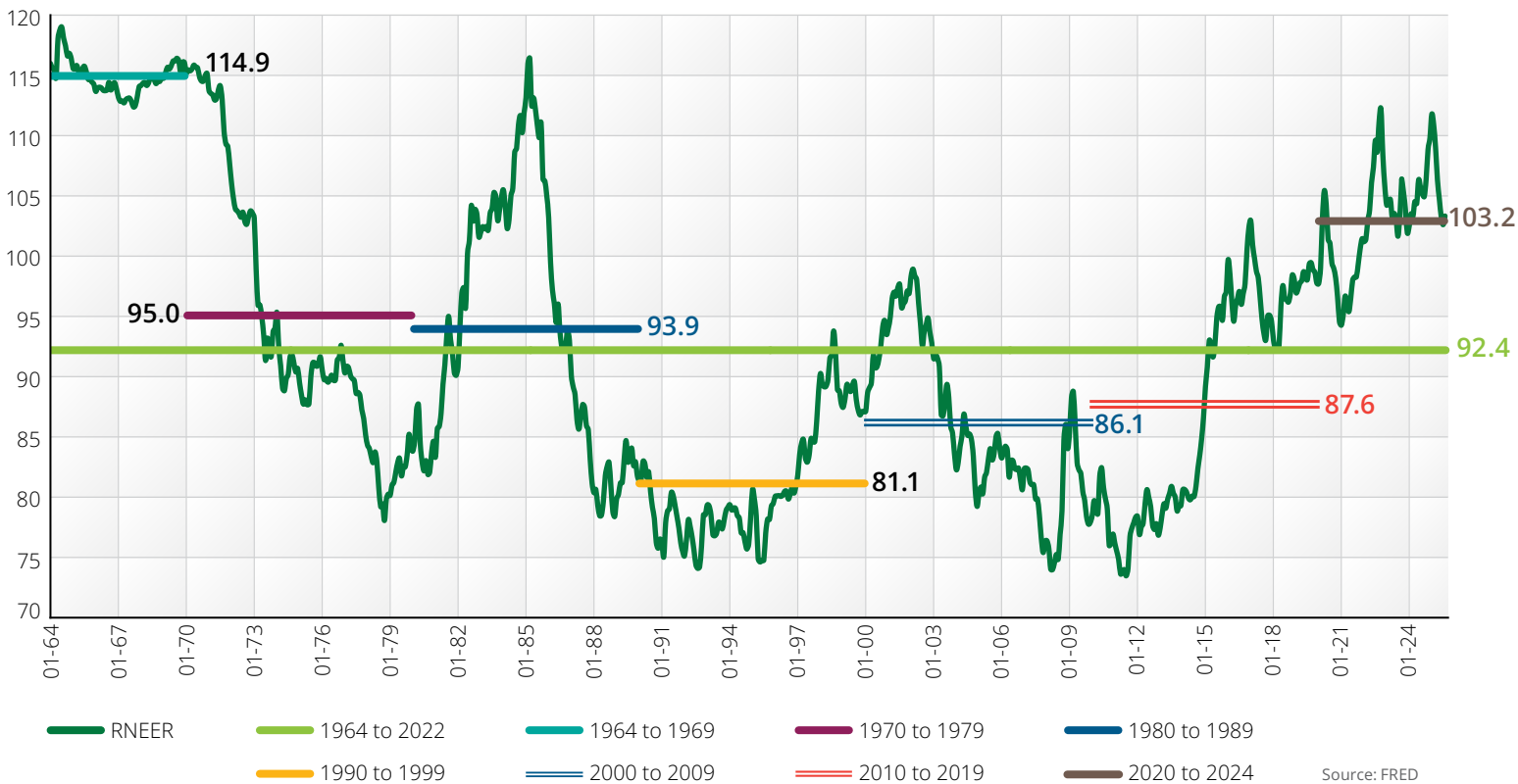
The strength of the U.S. dollar continues above its historical average. A relatively stronger dollar reduces U.S. exporters' competitiveness and foreign consumers' relative purchasing power, while increasing domestic wine importers' purchasing power. Given that over 35 percent of wine consumed in the U.S. by volume is imported, the strength of the U.S. dollar has had a considerably negative impact on domestic wine grape producers in California (see Figure 1).



Given that over 35 percent of wine consumed in the U.S. by volume is imported, the strength of the U.S. dollar has had a considerably negative impact on domestic wine grape producers in California.



Figure (1) Monthly Real Narrow Effective Exchange Rate of the U.S. Dollar: 01/1964 to 08/2025



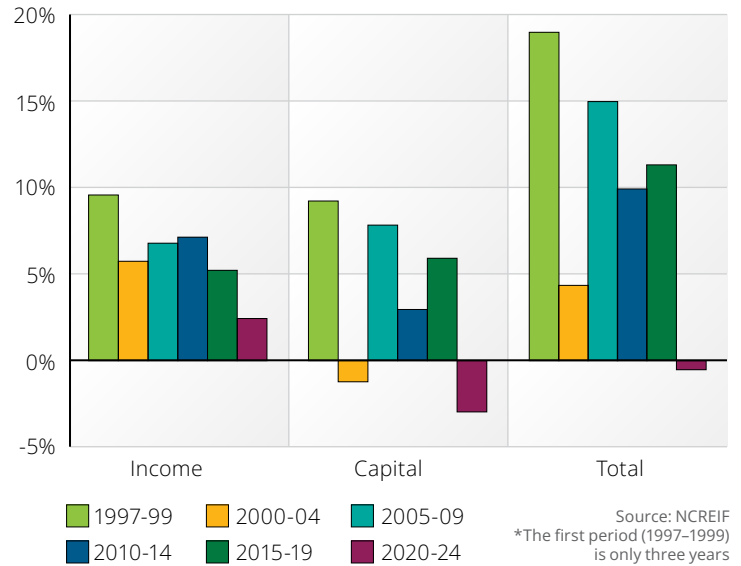
Introduction

The U.S. winegrape industry currently faces a myriad of headwinds. Cyclical factors, such as the decline in real disposable income following earlier inflation, reduce U.S. consumers' ability to purchase wine. At the same time, the consistently strong U.S. dollar makes imported wine more competitive. Additionally, structural shifts in consumer demand for alcohol appear to be occurring, which could significantly impact California wine grape growers.

These challenges have led to lower performance for institutional investors. For instance, Figure 2) shows that the five-year period from 2020 to 2024 produced the lowest annualized income, capital, and total returns of any five-year span since the inception of the NCREIF Winegrape Index in 1997. Figure 3) shows the ongoing trend of declining or flat capital values and unusually low income returns, with four of the past five years being among the lowest five income returns since inception.

Interestingly, the recent low returns were not caused by higher industry output suppressing prices and income, as seen in the almond, pistachio, and walnut sectors. Instead, these lower returns occurred during a period when wine grape production was significantly reduced. For example, the California wine grape crush averaged 4.0 million tons from 2012 to 2019, and 3.4 million tons from 2020 to 2024 (see Figure 4). The NCREIF Wine Grape Index posted an annualized income return of 6.3 percent between 2012 and 2019, and 2.5 percent between 2020 and 2024. Therefore, the 380-basis-point decrease in annualized income happened during a time when average California wine grape production fell 15.1 percent.

Figure (2) Annualized NCREIF Wine Grape Index Returns in Five-Year Periods: 1997 to 2024*



WINE GRAPE HEADWINDS

- Cyclical factors, such as the decline in real disposable income following earlier inflation, which reduce U.S. consumers' ability to purchase wine.
- The consistently strong U.S. dollar makes imported wine more competitive.
- Structural shifts in consumer demand for alcohol.



Figure (3) Annual Income, Capital, and Total Returns from the NCREIF Wine Grape Index: 1997 to 2024

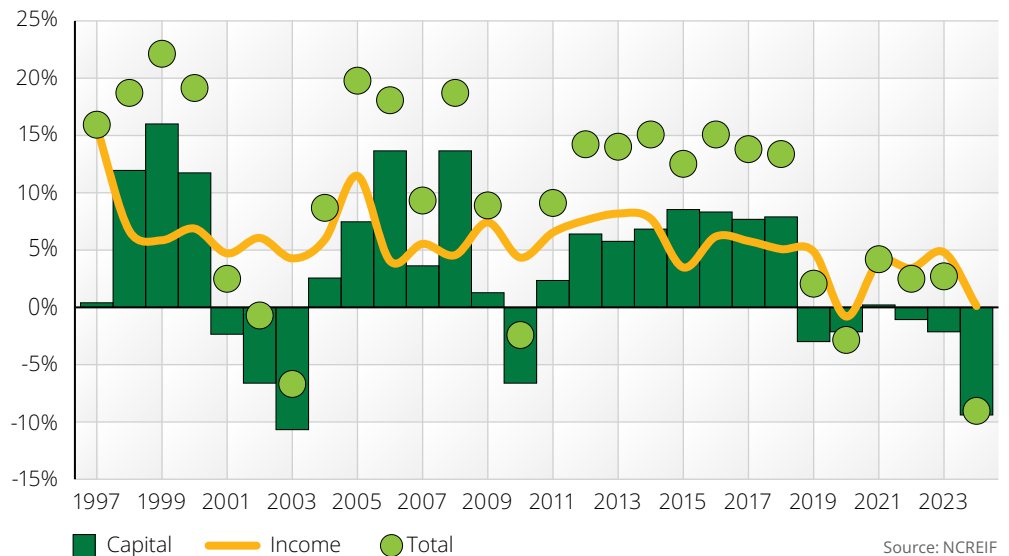
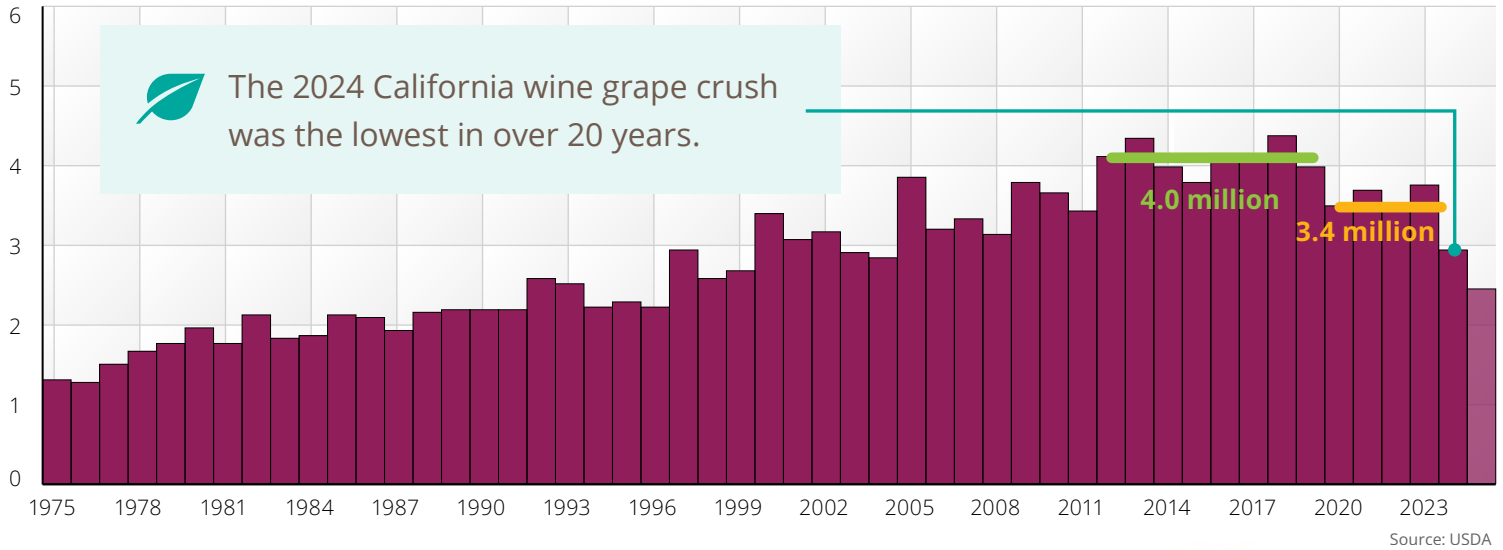


Figure (4) California Wine Grape Crush: 1975 to 2025, million tons



Forces Reshaping the Wine Market

The 2024 California wine grape crush was the lowest in over 20 years at just 2.88 million tons. It was also the fifth consecutive year below 3.8 million tons. Before COVID, these crop sizes would have instigated wineries to solicit long-term grape buying contracts and propelled grape prices higher. Instead, wineries are worried about selling current inventories, and growers are estimated to have left roughly 450,000 tons unpicked and on the vine in 2024, because they

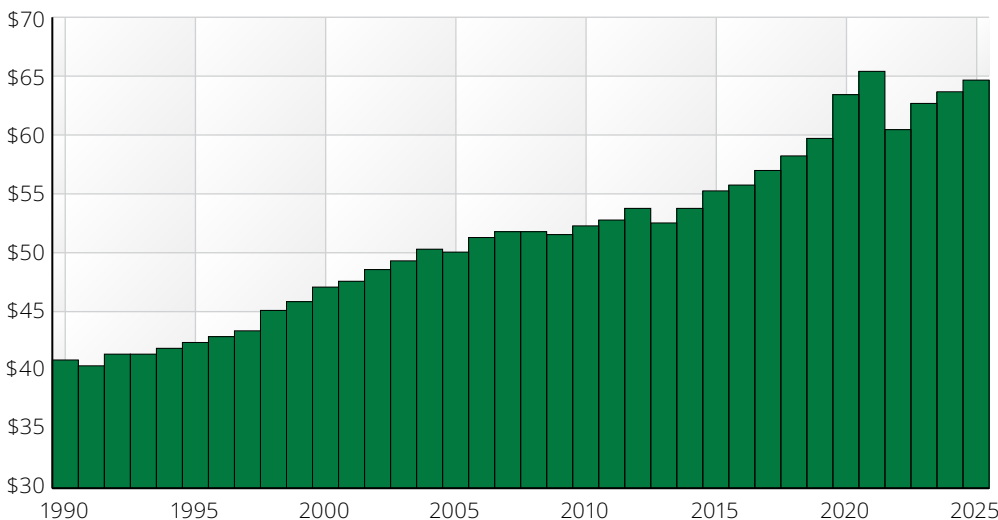
either could not sell the grapes or the offer price was below the harvest cost. The situation is not expected to improve this harvest: bulk wine inventories remain elevated, the 2025 wine grape crush is expected to be lower than 2024, the tons of unharvested grapes are expected to increase, and wineries are not issuing contracts except for special circumstances. Most importantly, U.S. wine consumption continues to decline. For institutional vineyard investors, the

pivotal question is whether this softness is merely a cyclical trough or the opening act of a more profound structural reset.



Short-term economic conditions have influenced consumption. Post-pandemic inflation has reduced real disposable income, and interest rates have increased. In real terms, by mid-2025, per capita real disposable income, after personal interest payments, was \$660 below the peak in 2021 (See Figure 5).

Figure (5) Real Disposable Personal Income, Less Real Personal Interest Payments: 1990 to 2025*, per capita, thousands, 2025 dollars



By mid-2025, per capita real disposable income, after personal interest payments, was \$660 below the peak in 2021.

U.S. wine consumption by volume also peaked in 2021 during the pandemic and has contracted each year since. Per-capita consumption slid from 3.16 to 2.65 gallons between 2021 and 2024, eliminating roughly 160 million gallons—or 16.1 percent—of total domestic volume (see Figure 6). From 1993 to 2021, the rising trend of wine consumption in the United States stood out among the major wine-consuming countries of the world (see Figure 7). China’s consumption soared until 2017, before collapsing, while France and Argentina have been experiencing a

Figure (6) Annual U.S. Wine Consumption by Volume: 1934 to 2024, billion gallons, gallons per person

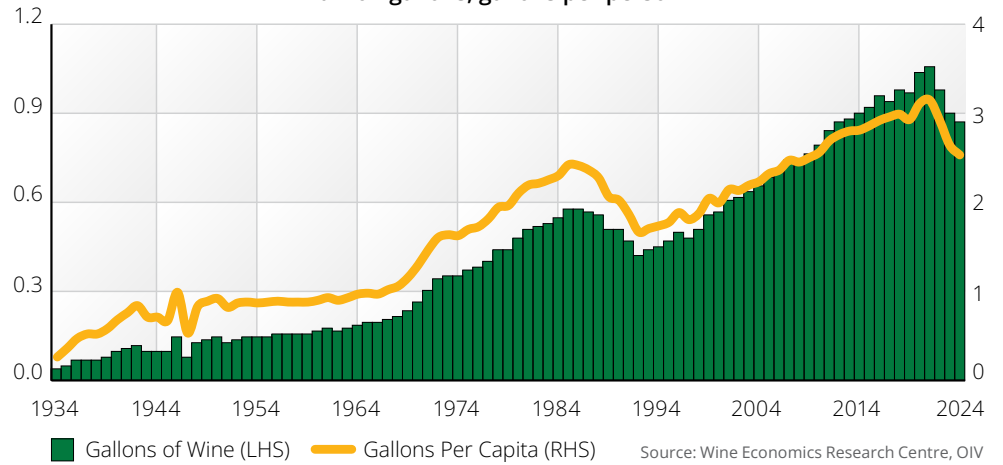
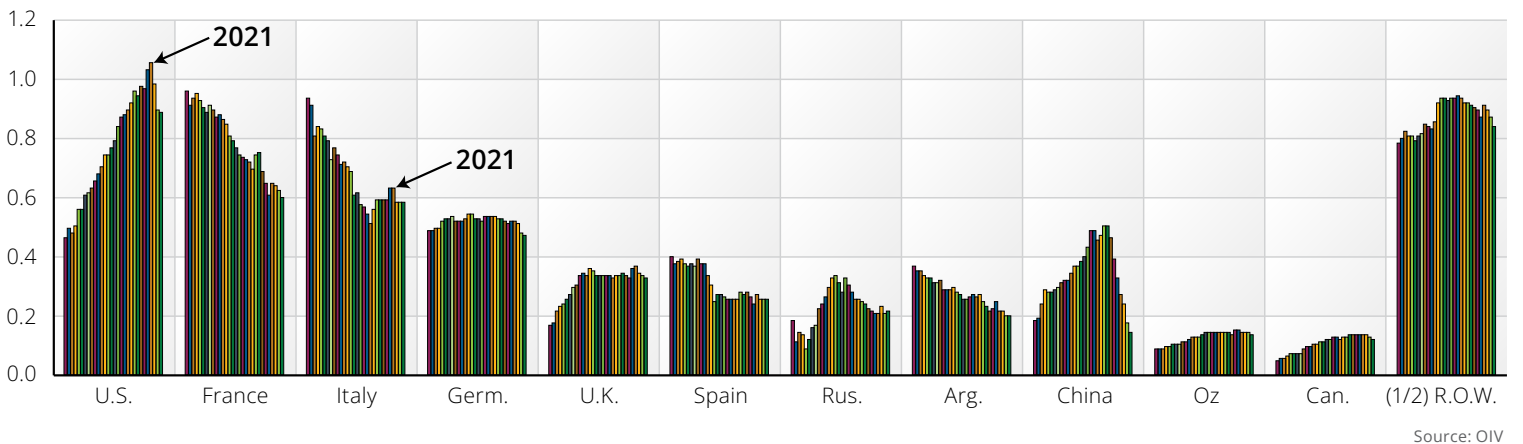
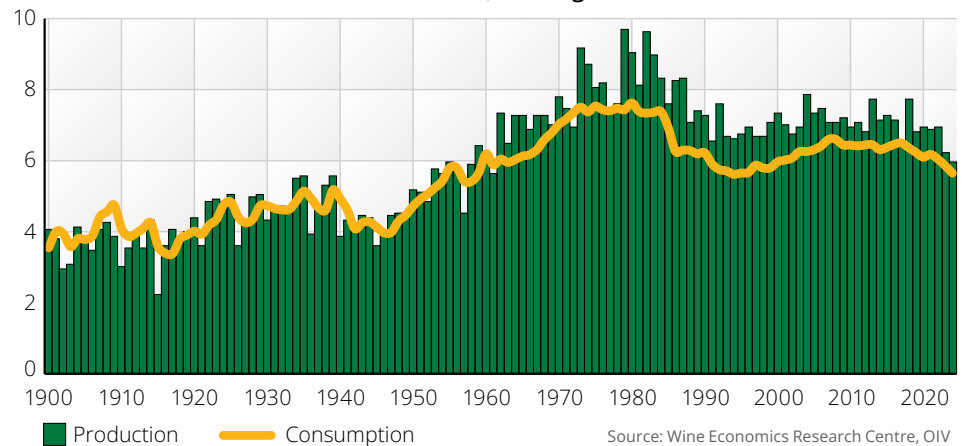


Figure (7) Historical Wine Consumption by Volume of Major Consumer Nations: 1995 to 2024, billion gallons



downward trend for over half a century. Italy, Spain, and Russia briefly stabilized their long declines, but all three have recently resumed their downward trend. All major wine-consuming nations are experiencing a decrease in their wine consumption. The International Organization of Vine and Wine (OIV) pegged 2024 global consumption at 5.6 billion gallons, the lowest since 1994, and 2025 consumption should be even lower, reaching levels not seen since 1959. Global production is also expected to reach 5.9 billion gallons in 2024, the lowest amount since 1961 (see Figure 8).

Figure (8) Global Wine Consumption and Production by Volume: 1900 to 2024, billion gallons



While U.S. wine consumption by volume dropped 17.9 percent since its peak in 2021, wine consumption by value increased 2.4 percent, after adjusting for inflation, or 18.5 percent, nominally (see Figure 9)). Specifically, off-premise (at-home) consumption by volume fell 21.2 percent since 2021, while on-premise consumption has increased 2.7 percent (see Figure 10). Over the same period, the real value of off-premise consumption decreased by 3.9 percent, whereas on-premise consumption increased by 17.6 percent. Figure 11 portrays the real price of a bottle of wine off and on-premise.

There is no question that the quantity of wine consumed in the U.S. from 2021–2024 decreased because the average real price of a bottle of wine rose 25.2% and because real disposable income after interest fell 2.6%.

There is no question that the quantity of wine consumed in the U.S. from 2021 to 2024 decreased because the average real price (combined off and on-premise) of a bottle of wine rose 25.2 percent (or 45.0 percent nominally!) and because real disposable income after interest fell 2.6 percent. In fact, the own price effect of the increase in wine likely accounts for well over half (and perhaps even three quarters) of the 18.3 percent reduction in consumption volume between 2021 and 2024. Additionally, given that wine and spirits are substitutable goods, and the real price of an on-premise serving of spirits fell 3.2 percent from 2021 to 2024, consumers may have substituted away from wine and towards spirits (see Figure 12).

Figure (9) Off- and On-Premise Wine Consumption by Volume: 1960 to 2024, millions of 9-liter cases

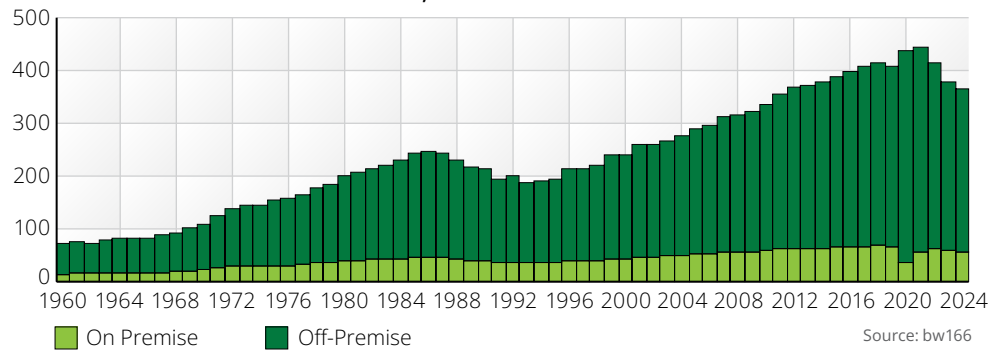


Figure (10) Real Value of Off- and On-Premise Wine Consumption in the U.S.: 1960 to 2024, billion, 2024 dollars

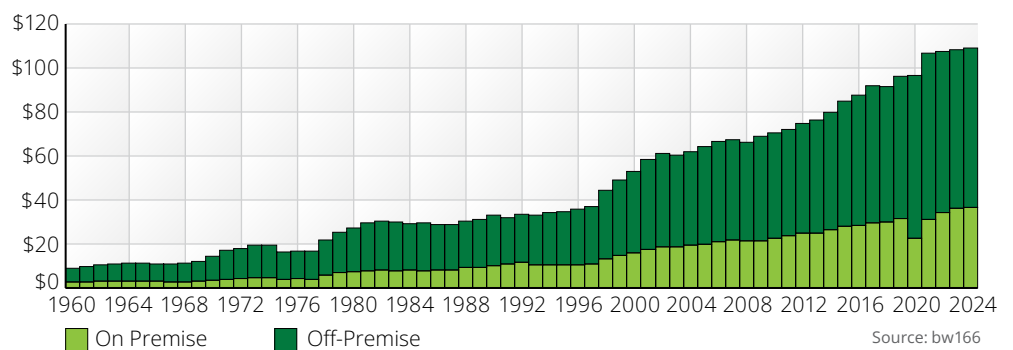


Figure (11) Average Real Price of a Bottle of Wine Off- and On-Premise: 1960 to 2024, 2024 dollars

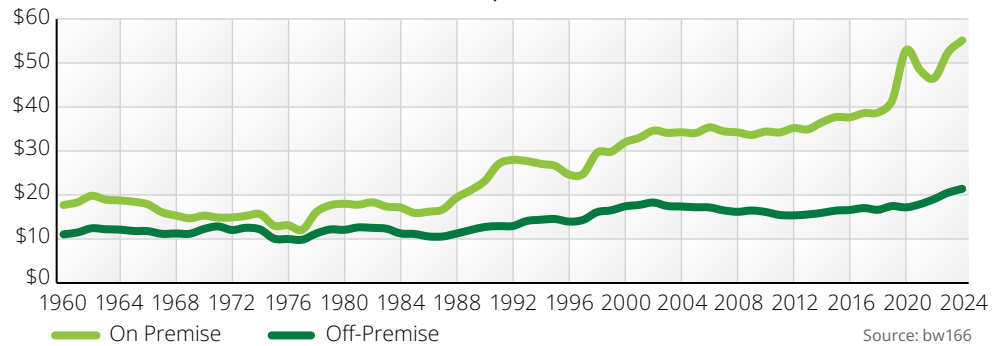
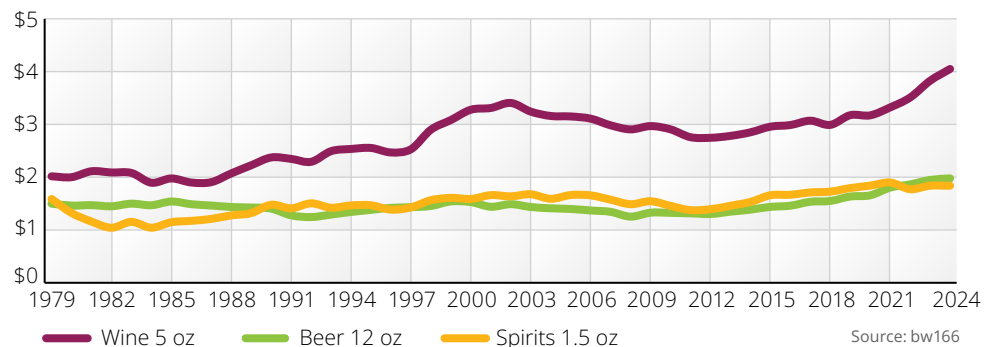


Figure (12) Real Off-Premise Cost per Serving of Wine, Beer, and Spirits: 1979 to 2024, 2024 dollars



Growth driven by price hikes that surpass quantity declines is not a sustainable long-term approach. The alcoholic beverage industry may have collectively expected wine consumption to decrease if prices had remained steady, leading to a focus on short-term profits through premiumization. Alternatively, the industry might have believed that the price increases were necessary and justified, given the recent poor harvests. Regardless of the reason, a significant portion of the California wine grape crop is expected to go unharvested again this year, the market is flooded with cheap bulk wine, retail prices are high, and consumption is rapidly declining.

Beyond the boring, straightforward, common-sense economic explanations lies a tangled smorgasbord of potential factors awaiting causal attribution for structural changes in wine and alcohol consumption. Among the many potential suitors, the messaging surrounding health, wellness, and alcohol consumption is a likely causal factor.

Historically, peer-reviewed research articles have found moderate wine

consumption correlated positively with health outcomes. For almost thirty years, federal dietary guidelines have indicated that it's safe for men to consume up to two drinks per day and for women to have up to one. Emerging research, however, has begun to counter that narrative, which led to the United States Department of Agriculture updating in 2021 its dietary guidelines for Americans to include, "Alcohol has been found to increase the risk for cancer, and for some types of cancer, the risk increases even at low levels of alcohol consumption (less than one drink in a day). Caution, therefore, is recommended."¹ The World Health Organization issued a news release in January 2023 titled, "No level of alcohol consumption is safe for our health."² Finally, in 2025, the U.S. Surgeon General recommended updating the

warning label on alcohol-containing beverages to include a warning about the risk of cancer associated with alcohol consumption.³ Recent research continues to find evidence that moderate wine consumption benefits health, particularly in terms of cardiovascular outcomes.

However, this resurgent "neo-prohibition" narrative—amplified by the WHO's assertion that there is "no safe level" of alcohol—has pushed wine into the same public health crosshairs once trained on tobacco, raising the specter of tighter marketing and labeling restrictions, which seems to weigh heavily on the minds of U.S. consumers. For example, Gallup polling data portray a clear, recent trend that U.S. adults increasingly perceive alcohol to be bad for their health (See Figure 13).


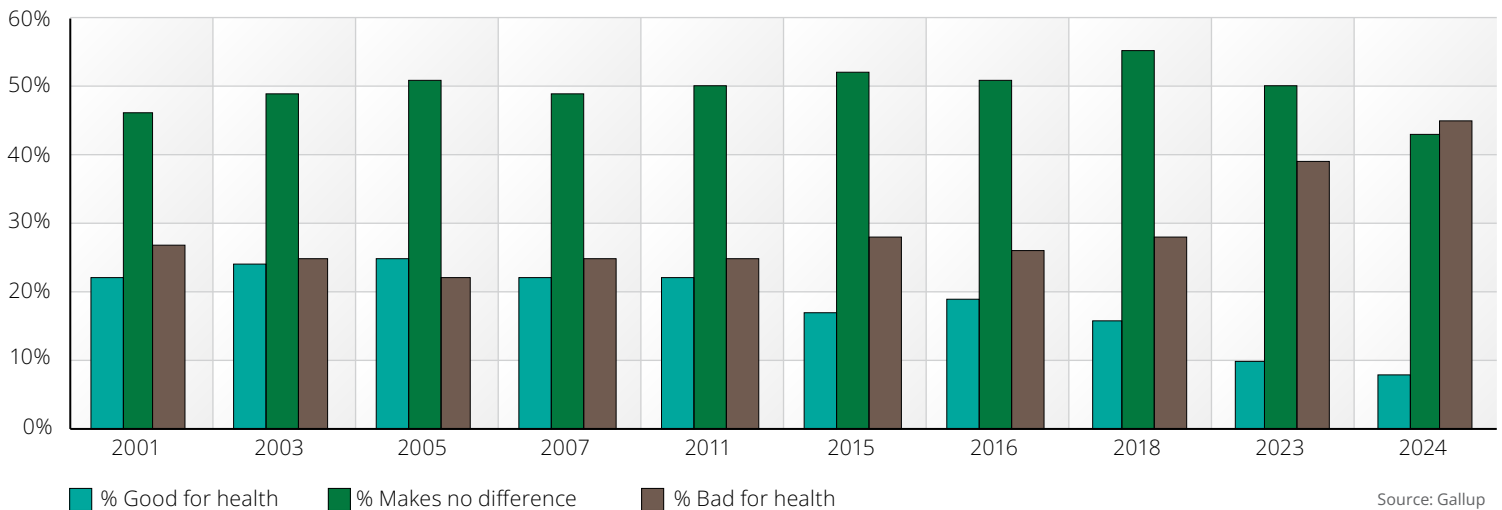
 This resurgent "neo-prohibition" narrative has pushed wine into the same public health crosshairs once trained on tobacco, which seems to weigh heavily on the minds of U.S. consumers.

Figure (13) U.S. Adult Perception of Alcohol and Health: Gallup survey from 2001 to 2024

Question: Do you, personally, think drinking in moderation — that is, one or two drinks a day — is good for your health, makes no difference or is bad for your health?



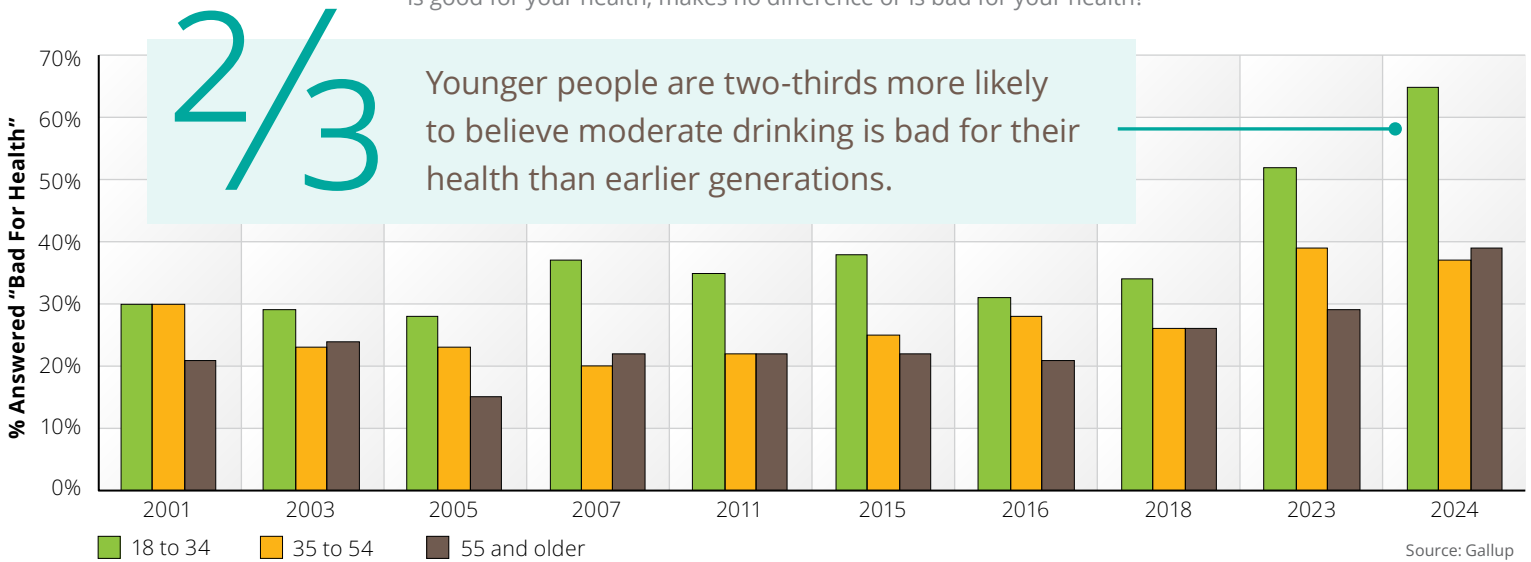
1 Dietary Guidelines for Americans, 2020-2025: https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_for_Americans-2020-2025.pdf

2 World Health Organization: No Level of Alcohol Consumption is Safe for Our Health: <https://www.who.int/europe/news/item/04-01-2023-no-level-of-alcohol-consumption-is-safe-for-our-health>

3 The U.S. Surgeon General's Advisory: Alcohol and Cancer Risk: <https://www.hhs.gov/sites/default/files/oash-alcohol-cancer-risk.pdf>

Figure (14) U.S. Adults Who Believe Moderate Drinking is Detrimental to Health by Age: Gallup survey from 2001 to 2024

Question: Do you, personally, think drinking in moderation – that is, one or two drinks a day – is good for your health, makes no difference or is bad for your health?



Generational shifts are also likely to lead to structural changes in wine consumption. The Baby Boomer generation was between the ages of 27 and 45—in their prime working and consuming years—in 1991 when 60 Minutes aired its “French Paradox”⁴ segment. The paradox entails the observation that French people have relatively low rates of heart disease despite a diet rich in saturated fats, such as cheese, butter, and red meat. It was hypothesized that polyphenols in red wine, such as resveratrol and flavonoids, reduce the risk of cardiovascular disease. It was music to the masses’ ears: Boomers could throw away I Can’t Believe It’s Not Butter!, Crisco, and Lite Mayo and eat like the French, so long as you drank

wine like the French! The paradox had an immediate impact on wine sales, and it was thought to have instigated the aforementioned bull run in U.S. wine consumption that ended in 2021.⁵

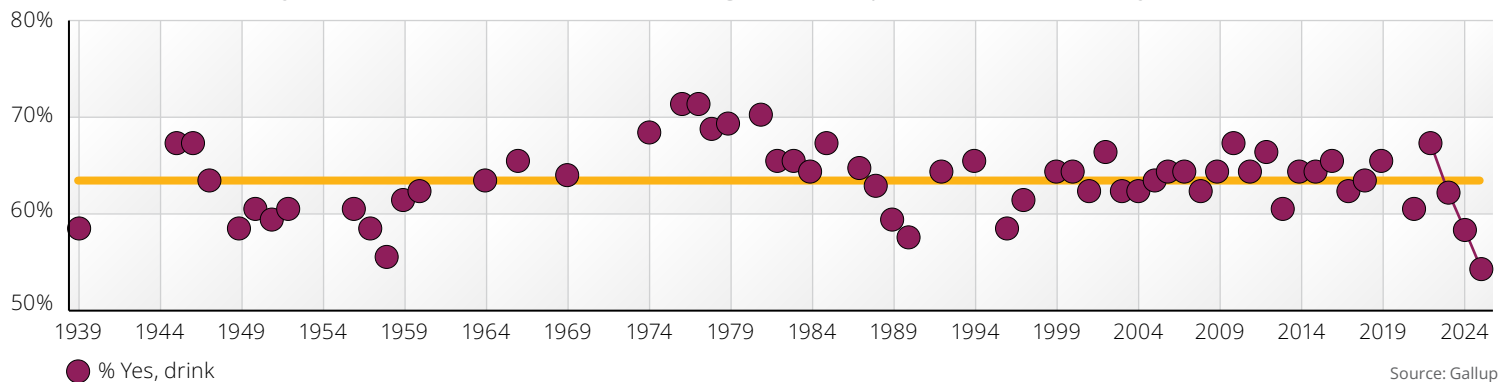
Gen Z elders were 28 years old in 2025. They grew up in the ‘no safe level of alcohol’ era, and Gallup polling indicates younger people are two-thirds more likely to believe moderate drinking is bad for their health than earlier generations (see Figure 14). Culturally, in aggregate, wine carries less cachet: a generation whose social life revolves more around smartphones and online gaming than around the dinner tables tends to engage less in the communal ritual of sharing a

bottle of wine. The oft-cited Gallup survey found that only 54 percent of U.S. adults do not abstain from drinking, the lowest level recorded since the survey began in 1939 (see Figure 15). Still, the decline is concentrated among Millennials and Gen Z, who increasingly view even moderate drinking as unhealthy and are gravitating toward spirits-based RTDs, tequila, bourbon, cannabis, and alcohol-free alternatives.

Compounding these shifts, early clinical evidence suggests that the blockbuster GLP-1 weight-loss drugs (e.g., semaglutide) materially suppress alcohol cravings, pointing to yet another drag on future consumption.

Figure (15) Percentage of U.S. Adults Who Drink: Gallup survey, various years between 1939 and 2025

Question: Do you have occasion to use alcoholic beverages such as liquor, wine or beer, or are you a total abstainer?



4 The French Paradox: <https://www.youtube.com/watch?v=njm1LkXP2sg>

5 Another Look at the Red Wine Flap: <https://www.latimes.com/archives/la-xpm-1992-03-26-fo-6243-story.html>

Final Thoughts

The convergence of economic pressures, retaliatory tariffs, health messaging and consequent lifestyle changes, demographic turnover, and the expansion of beverage substitutes lends credence to the notion that the downturn in wine consumption by volume is not merely cyclical. However, given the significant increase in wine prices, the worsening value proposition of wine cannot be ruled out as the primary driver of the downturn in consumption. The wine industry has thus far been unwilling to lower prices to gain back consumers. As a result, wine grape growers at the primary stage of production are mothballing vineyards in droves. Without lowering prices, marketing breakthroughs, or new research findings, wine consumption is likely to trend lower as Boomers continue to age.

While wine consumption may wane, there will inevitably always be consumers of wine. Investors wanting to capitalize on the calamity at the primary stage of production must be patient and wait for the right vineyard opportunities. As with most cycles in the wine market, the supply side reaction will go too far and reduce production too fast, which will benefit remaining vineyard owners.



AgIS Capital vineyard

Contact

AGIS CAPITAL LLC

601 Cleveland Street, Suite 330
Clearwater, Florida 33755

515-903-4655
agiscapital.com

For questions and more information on this analysis, please contact:

Cody Dahl, Ph.D.
Vice President of Acquisitions and Strategy
217-840-2639
cdahl@agiscapital.com

For more information on the investment services offered by AgIS Capital LLC, please contact:

Stephen Kenney
Vice President of Business Development
515-903-4655
skkenney@agiscapital.com

Disclaimer: Our belief of future market performance is based on expectations that may or may not come true. Investors should perform their own due diligence before undertaking farmland investments. This material is copyrighted by AgIS Capital LLC and cannot be duplicated or used for any purpose without prior approval from AgIS Capital LLC.