Napa Earthquake and the Wine Industry

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August 26, 2014

The August 24, 2014 Napa earthquake has garnered broad attention worldwide; potential effects on the wine industry and markets are particularly of interest. Reports in the *Wall Street Journal, Bloomberg Financial News, the New York Times* and other media raise questions about how the quake will affect the price of wine and the economics of wine markets.

In short, most wine prices will not be noticeably affected, although the quake may cause a small rise in the prices of very high-end wines. However, a significant rise in price for a very few specific high end wines is expected where wine spillage from recent vintages reduced supply of brands with dedicated buyers.

Although Napa is probably California's best-known wine region, it does not produce most of the wine volume in California. Its 45,000 bearing acres of grapes account for a bit less than ten percent of California's vineyard acreage and only about four percent of California grape production. Most wine produced in the United States comes from California's Central Valley, which produced 70 percent of California's winegrape harvest last year. So even if a significant portion of Napa's supply had been lost to the quake, the price of every-day wine would not have risen.

For several reasons, the loss of supply was localized and limited. First, the epicenter of the quake was in the marshland southwest of the city of Napa. Second, the earthquake was located on the West Napa fault and pushed north, into the Mayacamas range. Although there are some wineries in the nearby Carneros region, most Napa Valley wineries are located well north of the city of Napa, with the majority concentrated between Yountville and St. Helena. Distance from the quake limited the damage. Some historic wineries, such as Trefethen, built in 1886 and located just north of the city of Napa, sustained costly physical damage to structures. However, major wine storage and production was little affected.

Most Napa Valley wineries have been constructed in the past 30 years and were built in compliance with strict codes designed to withstand earthquakes. A bulk wine facility, Safe Harbor, located about a mile from the epicenter, lost only 200 gallons out of 6.5 million stored gallons when two sample valves opened in the quake.

The time of year also reduced potential loss, as the earthquake occurred just prior to the 2014 harvest, and wineries had previously bottled most of their 2012 red wines. Bottled wine, when stored in 56 interlocked cases on a pallet and stretch-wrapped for transit, can withstand significant shock. Much Napa wine is warehoused in American Canyon, south of Napa city, which was within a few miles of the epicenter. Biagi Brothers, which warehouses over 3.5 million cases of bottled wine for Napa Valley producers in American Canyon, reported a loss of 1,120 cases of wine. Other warehouses report similar proportional losses.

Pictures of barrels fallen on top of each other and broken bottles on the floor have been graphic illustrations of damage. But broken bottles were a tiny share of wine stored and many of the barrels were empty while being prepared for the coming harvest. Some barrels may have cracked staves, and might need to be re-coopered at significant cost, but most can be still be utilized. The majority of full wine barrels that fell during the earthquake did not spill wine. While moving wine from these barrels may be costly, the wine came through fine.

We expect price increases for sellers and buyers of Napa wine to be limited except for a few wine brands with the most dedicated customers. High end Napa wines compete with other Napa wines, especially among Cabernet Sauvignon. But, brands and specific labels that sustained some losses still compete in a market with most of the other Napa wines that sustained little or no losses. Moreover, most high-end consumers can readily buy from Sonoma, premium regions of the Central and South Coast, or from a world of imports, including famously the Bordeaux region of France.

The long list of potential, if imperfect, substitutes means even if the amount of lost Napa wine supply was to reach 0.5 percent, the average price of even the high-end wines is unlikely to rise by more than one percent. Most likely, however, supply shortages of a few hard hit wines will be rationed by price and non-price means (smaller allocations to wine club members, for example) and the rest of the market will notice no change.

Finally, we have seen no reports of significant vineyard damage, there seems to have been few if any significant injuries to employees or winery visitors, most of the capital structure is intact, the transportation infrastructure was little affected and wine tourism faces little disruption. As Alison Crowe, the director of winemaking at Plata Partners, a UC Davis trained winemaker, said succinctly: "It could have been a heck of a lot worse."

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