

Introduction

The last decade brought a lot of challenges, changes and opportunities to the wine market. Low volume vintages like 2012 and 2017, climate change, pull out schemes in some parts of the world, growth in the new wine-producing countries, changing fashions, consumer preferences and many more. All of this has created interesting developments in the global wine market, one of them being the narrowing gap between the supply and demand. Figure 1 presents how the global production and consumption of wine have been changing in the last 10 years.

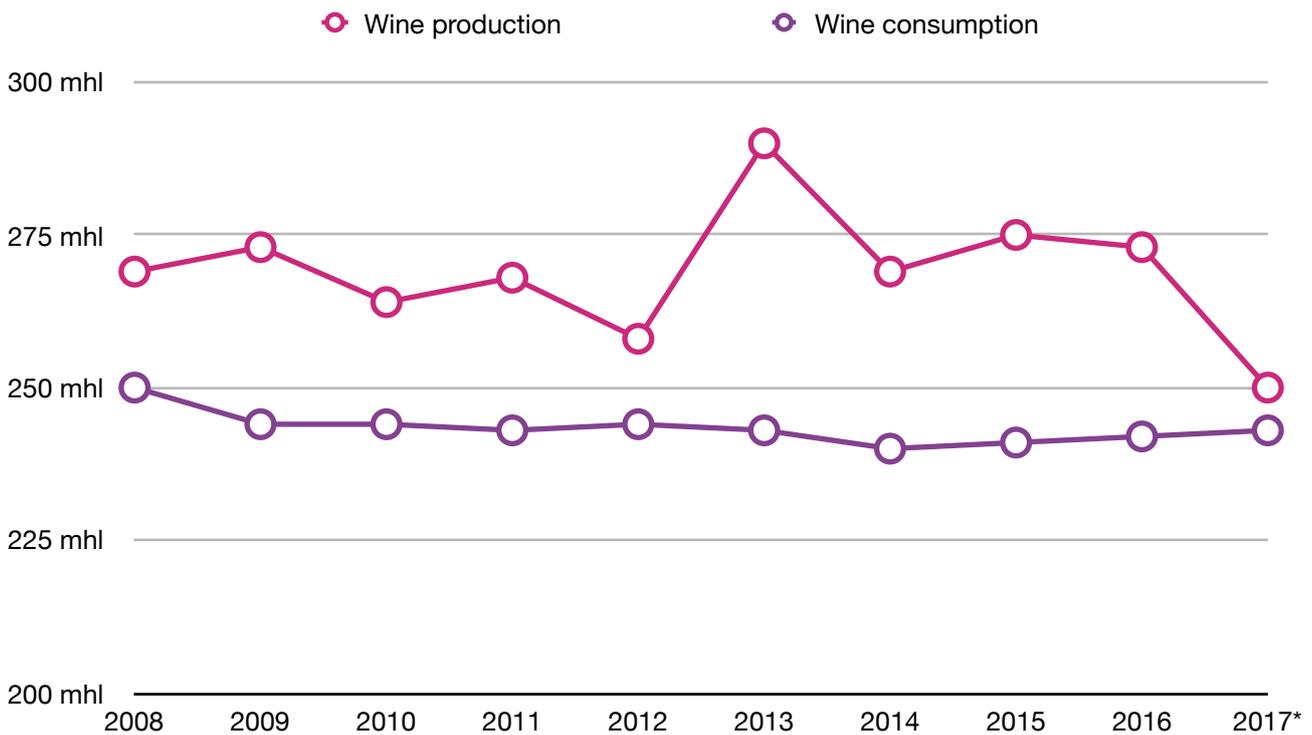


Figure 1 World wine production and consumption trends between 2008 and 2017* (OIV 2018a; 2018b)
* 2017 data is a forecast

As we can see, in 2017, the production and consumption numbers are very close. And if we take into account that the 2017 numbers for production are only a forecast (some wines have not been released yet), the prediction made by Losh (2017), reported by the *Just-Drinks* portal, can be very close to the truth: *“This year is significantly different for one key reason. For the first time in decades (maybe even since phylloxera) the world is set to drink more wine than it’s going to produce”*.

As we can see in Table 1 and Figure 2, three countries, Italy, France and Spain, dominate world wine production. And even pull out schemes (Veseth 2007) from the beginning of the 21st century targeted at so-called *“wine lake”* problem (Chrisafis 2006; Fotheringham 2010) did not change the situation much. However, new countries, like the USA or Australia, kept their development, gained new markets and produced more wine than ever.

At the same time, the trends in consumptions have been transforming. It can be observed from Table 2 and Figure 3 that traditional wine-drinking countries, like France, Spain and Italy, have

Table 1 Wine production (in mhl) between 2008 and 2017* in top 10 countries (OIV, 2018; 2018b)
 * 2017 data is a forecast

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
Italy	46.9	47.3	48.5	42.8	45.6	54.0	44.2	50.0	50.9	42.5
France	42.6	46.2	44.3	50.7	41.5	42.1	46.5	47.0	45.4	36.7
Spain	35.9	36.0	35.3	33.3	31.1	45.3	39.5	37.7	40.0	32.1
United States	19.3	21.9	20.9	19.1	21.7	24.4	23.1	21.7	23.6	23.3
Australia	12.4	11.8	11.4	11.2	12.3	12.3	11.9	11.9	13.0	13.7
Argentina	14.7	12.1	16.2	15.5	11.8	15.0	15.2	13.4	9.4	11.8
China	12.6	12.9	13.0	13.2	13.5	11.8	11.6	11.5	11.5	10.8
South Africa	10.1	9.9	9.3	9.7	10.5	11.0	11.5	11.2	10.5	10.8
Chile	8.7	10.0	8.8	10.5	12.6	12.8	9.9	12.9	10.1	9.5
Germany	10.0	9.2	6.9	9.1	9.0	8.4	9.2	8.9	9.0	7.7

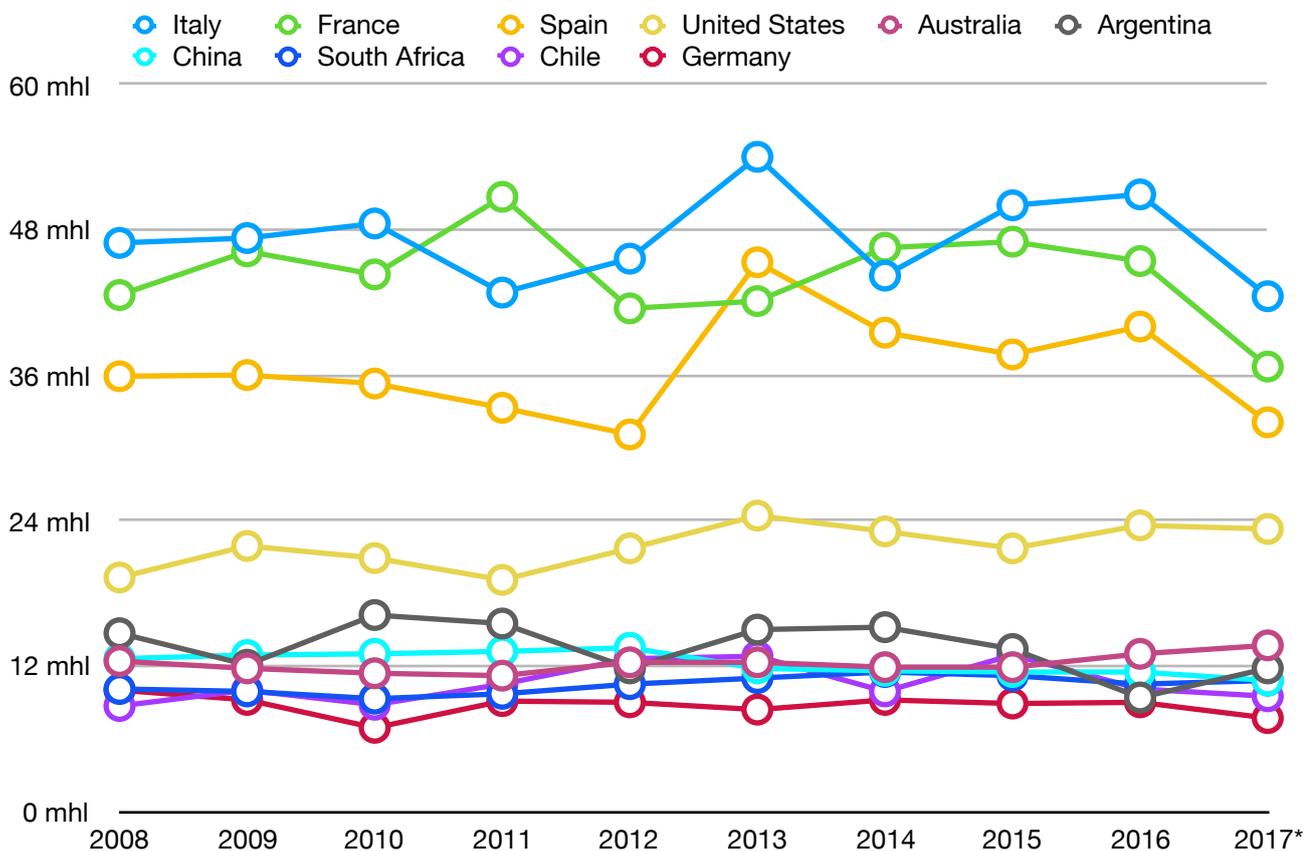


Figure 2 Wine production between 2008 and 2017* in top 10 countries (OIV 2018a; 2018b)
 * 2017 data is a forecast

changed their preferences and moved away from wine, often towards beer and soft drinks. On the other hand, countries like the USA and China developed taste for wine and are now drinking more and more wine and their preferences start to shape global trends. These shifts in the USA and China markets are key, especially if we take into account that over 20% of the world population lives in these countries. It's natural that any fashion and preferences towards wine in these nations form the foundation for the trends in wine demand worldwide.

Table 2 Wine consumption (in mlh) between 2008 and 2017* in top 10 countries (OIV, 2018; 2018b)
* 2017 data is a forecast

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
United States	27.7	27.2	27.3	29.0	30.0	30.8	30.6	30.9	31.7	32.6
France	30.8	30.2	29.3	28.3	28.0	27.8	27.5	27.3	27.1	27.0
Italy	26.2	23.0	23.5	22.0	21.6	20.8	19.5	21.4	22.4	22.6
Germany	20.7	20.2	20	19.7	20.3	20.4	20.2	19.6	20.1	20.2
China	14.5	15.0	15.6	16.9	17.7	17.0	16.0	16.2	17.3	17.9
United Kingdom	13.5	12.7	12.9	12.9	12.8	12.7	12.6	12.7	12.9	12.7
Spain	12.2	11.3	10.9	9.9	9.8	9.8	9.8	10.0	9.9	10.3
Argentina	10.7	10.3	9.7	9.8	10.0	10.3	9.9	10.3	9.4	8.9
Russia	12.9	11.9	12.0	12.2	11.3	10.4	9.5	9.2	9.1	8.9
Australia	5.0	5.1	5.4	5.4	5.4	5.4	5.4	5.5	5.5	5.8

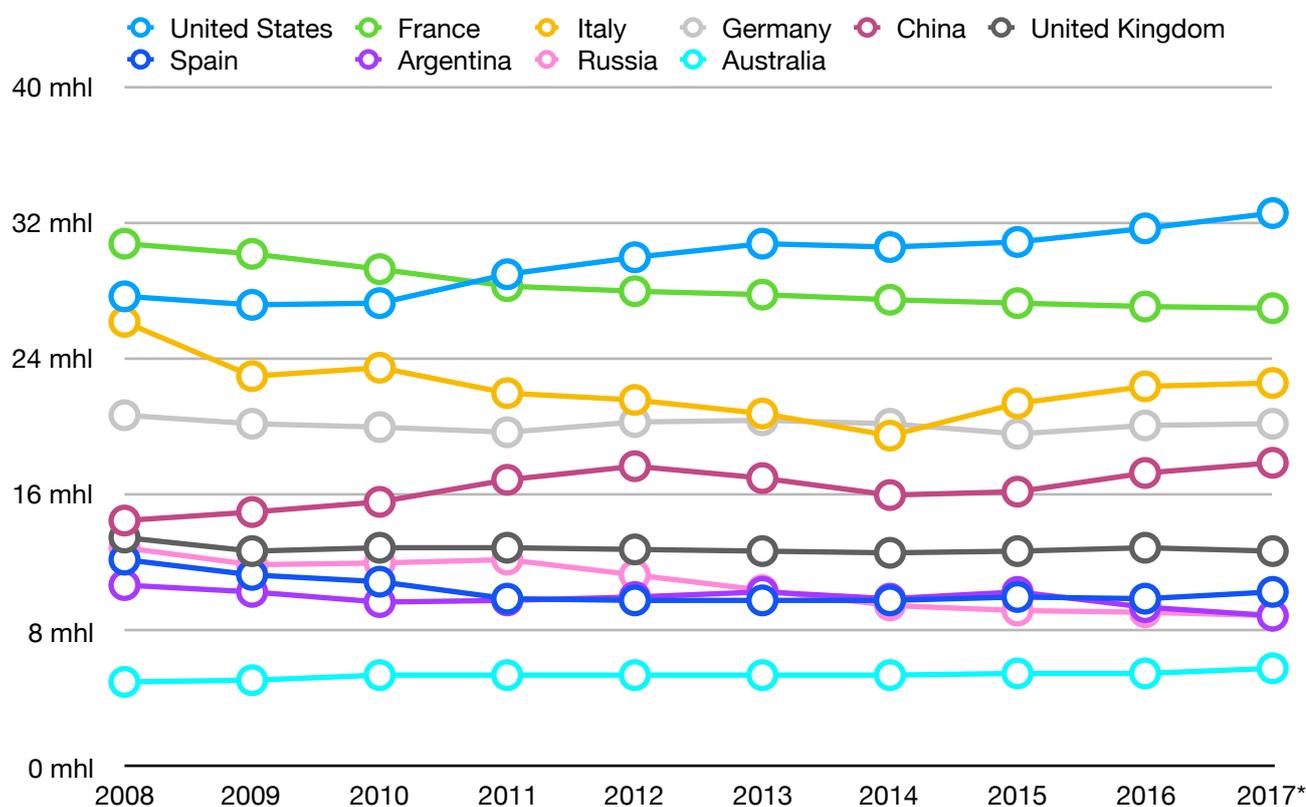


Figure 3 Wine consumption between 2008 and 2017* in top 10 countries (OIV 2018a; 2018b)
* 2017 data is a forecast

The 2017 vintage

The year 2017 brought some of the smallest harvests in recent history, leading to an overall 8% decrease in wine production (Losh 2017; Puhak 2017; Conboye 2018). Moreover, that year was exceptional as it impacted all three countries which are the biggest producers of wine in the world. Italy, France and Spain together produce over 50% of the global wine output. Usually when one of these countries had a bad vintage, one of the other could fill the gap. However, 2017 was

different - all of the biggest wine regions reported poor vintages in terms of quantity, which had an impact on the supply of grapes and wine around the world. What were the reasons? As Losh (2017) from *Just-Drinks* said: “a year that had a lot of weather - often at the wrong time”.

The following sections look at the weather in the most important wine producing countries in 2017 and how it impacted the quantity of grapes harvested and wine produced.

Italy

In recent years, Italy has been the biggest wine producing country in the world (OIV 2018a). Therefore it's easy to imagine how a 17% drop (OIV 2018a) in Italian grape crops would impact the global wine supply. The main cause of such a significant decrease was a series of spring frosts, which happened between April 17th and 19th and which hit a number of Italian regions, including Veneto, Piemonte, Tuscany, Marche, Abruzzo, Franciacorta, Gavi (Jefford 2017), and even usually very warm regions like Sicily (Speller 2017). The April frost struck the vineyards from which 2 Italian best-sellers are produced - Prosecco and Pinot Grigio (Losh 2017). Piemonte, the source of another phenomenon, Moscato d'Asti, lost about 10-15% of the crop because of the frost during the bud-break period. Freezing spring days were not the only problem that affected Italy. Summer of 2017 was one of the driest in recent history. The central and southern parts of the country did not see any rain for months since May. The heatwave, called *Lucifer*, caused fires, created heat and water stress conditions and made the growers pick the grapes much earlier (Eads 2017; Mercer 2017). Franciacorta had to start their harvests 12 days earlier than usual and reported loss of 30% of the crop, Tuscany lost about 20-30% due to the heatwave as well. Other regions were affected as well, contributing to the overall 17% decrease in the production across the country.

France

France was not immune to the weather conditions in 2017 and it lost 19% of its overall crop (OIV 2018a). It started with the spring frost that hit different parts of the country between April 20th and 27th (Jefford 2017). Bordeaux, the largest producer of the AOC-level wines in France, was hit primary on April 27th. It's been estimated that the region could lose up to 45% of the volume, a scenario that has not happened since the vintage of 1991 (Quinney 2017). Not all the parts of the region were affected to the same extent though. Most of the grapes from the top estates were not impacted, however, the vineyards further away from the river, the ones responsible for most of the volume, suffered large losses (Rand 2017).

Rhône Valley, another large region in France, suffered from a number of conditions. Condrieu AOC suffered from cold weather during flowering which caused coulure and resulted in 50% loss of the Viognier grapes. Similar conditions occurred in the Southern Rhône affecting Grenache and Syrah (Walls 2017).

Languedoc-Roussillon, which is responsible for 5% of total wine production (Miquel 2017a), had to deal with extreme circumstances as well. First of all, the frost attacked the vineyards in April and later in the season the vignerons were fighting with severe drought. According to the estimates, the region might have lost up to 40% of the grapes (Nutter 2017).

Loire Valley, which vineyards are very sensitive to the weather conditions, suffered just like the other French regions. Spring frost was especially severe in Savennières, which lost 90% of the crop and Pouilly-Fumé which reported a loss of 40% of the crop (Jefford 2017).

Champagne also suffered from the spring frost losing about 20% of the young buds (Comité Champagne 2017; Robinson 2017).

Spain

Similarly to France and Italy, many Spanish regions were affected by the spring frost, including Castile and León, Alta and Alavesa parts of Rioja (Wines of Spain Fair 2018), Valencia and Catalonia (Foods and Wines from Spain 2017). Castilla-La-Mancha, the biggest source of grapes in Spain, avoided the spring frost but suffered from hot weather and severe droughts (Cervera 2017). Overall, Spain lost about 20% of its annual crop (OIV 2018a).

Other parts of Europe

Other European countries also experienced bad vintages. Germany reported a 15% decrease in grapes harvested, Russia 10%, Serbia 21% and Bulgaria 2% (OIV 2018a). However, there were also countries that reported increased harvest level, e.g. Portugal with +10%, Romania +31%, Hungary +8%, Greece +2%, Austria +23% (OIV 2018a).

New World

The 2017 vintage was not as uniformly bad in New World countries as it was in Europe. South America can be a good example of this. Brasil reported a 169% increase comparing to 2016 vintage (OIV 2018a). Argentina also recorded increase when compared to 2016, however, the 2016 vintage was one the smallest in Argentina's latest history, so even though 2017 allowed to increase the crop level, the harvest can be described as relatively low (OIV 2018a). The main reasons were late spring frost and reduced yields (Barnes 2017a). Chile, on the other hand, decreased the harvest by 6% and it was one of the lowest crop levels in the last decade (OIV 2018a). This was due to a series of disastrous conditions, including floods (Morale 2017), fires and high temperatures (Barnes 2017b).

Another country that suffered a number of taught conditions was the USA. Americans had to deal with hailstorms, floods and wildfires (Yarrow 2018). The biggest danger came from the fires that went through California in autumn. However, the fires did not impact the vintage numbers very much as by the time the fires came about 90% of the grapes had already been harvested (Schiessl 2017).

For Australia, the 2017 vintage was rather stable, with about a 1% increase in production (OIV 2018a). It's neighbour, New Zealand, reported a decrease of 9% comparing to the high numbers of 2016. The drop was associated with cool spring temperatures, which resulted in the variable fruit set, and with 2 cyclones that went over the country bringing rainfall late in the season (Brown 2018).

The supply crunch

As discussed in the Introduction, the supply and demand gap is becoming very narrow and it looks that the times when there was much more wine produced than consumed might be over. And this could bring a number of implications for both producers and consumers.

Prices

Supply and demand are the main forces of the economy and the main factors behind the prices of any product, and wine is no different. Less wine available with increasing consumption will mean higher prices (Burrows 2017; Sage and Kington 2017; Walls 2017). This is especially true in the lower-end part of the market, which was most affected by the low harvest of 2017. As we could see in the previous section, in most places, quantity suffered much more than quality. And if we take into account that bulk wine is responsible for the 38% of the volume of wine produced worldwide (Miquel 2017b), we can expect that the price of the lower tier wines will increase the most (Sage and Kington 2017). Moreover, producers of lower-priced wines have less room to adjust their prices (Losh 2017). Most of them have already cut their costs as much as they could and they operate on very thin margins in order to be able to compete with other producers of inexpensive wines. They might have no choice other than increasing their prices. Some of these changes are already visible. Financial Times reported a 17% increase in bulk price index from 112 points to 131 points between half of 2017 and Feb 2018 (Conboye 2018). Rabobank report documented an increase in the prices in the last months of 2017 and in the first quarter of 2018 (Rannekleiv and Castroviejo 2018). The last report from the European Commission, published in September 2018, indicated increased prices of the basic red wines (European Commission 2018). According to this report, prices in Italy raised by 64.1%, in Spain by 59.4% and in France by 0.9% when compared to the three years average (2015-2017).

What could be the consequences of the increased prices? Some authors suggest that this could force the consumer to finally start paying fair prices for the wines (Losh 2017). Financial Times suggests that this price increase might help consumers to get used to paying higher prices for their wines, which may increase the interests in the middle and premium segments (Conboye 2018). And while this scenario would be very desired by the producers, it needs to be confronted with the possibility that some consumers might start buying less wine in order to stay within their budget. This can be destructive for the markets, especially those which have been declining in recent years.

Market structures

Another changes that the industry is facing, due to the narrowing gap between supply and demand, are the changes in the market structures. Some authors suggest that the poor vintage of 2017 will lead to bankruptcies of many estates (Losh 2017). It is not surprising if we take into account that many of the smaller estates might have lost a major part of their crop in 2017. And even if they had savings that could allow them to survive, they might start losing many important markets if they are not able to provide the usual quantities of wine. Financial Times also suspects that this could lead to many mergers and acquisitions of producers, distributors and importers, changing the structures of the wine markets in many countries (Conboye 2018).

Opportunities for other regions

The drop in supply from the main producing countries can be an opportunity for the less known regions and countries. With less wine from Castilla-La Mancha, Languedoc and Veneto, countries like Romania, Bulgaria or Moldavia could fill this gap and become better recognisable in the mature markets. Just Drinks has already reported a 50% increase in the prices of Romanian wines comparing to the previous year (Losh 2017). Skilful promotion and creation of new distribution channels can be beneficial for many upcoming regions and countries. After all, about 30% of the consumers buy the same wines all the time. And if these wines are not available, they would have to start trying other wines.

Personal Commentary

The diversity of the wine market, different cultures and histories make it really interesting to look into the possible developments in the business.

As discussed before, the narrowing gap between supply and demand will lead to increased prices, especially at the lower end of the market. This means that consumers would need to change their preferences. They might start increasing their wine budget, which is a possibility in the countries with developing wine cultures, like the USA, China and India. Consumers may also buy less wine or buy it less often, and I expect this to happen in the countries which have been drinking less wine in recent decades, like France or Spain. These consumers would change inexpensive wines to beer, cocktails and soft drinks. As a consequence, we might start seeing an even stronger shift towards countries like USA and China dictating what is produced in France, Italy and Spain. This could also be a wake-up call in some of the markets, especially those where consumers are used to paying unrealistic low prices, these markets could possibly collapse.

On the producers' side, there are multiple ways how they could respond to these changes of supply and demand. One way is to use the opportunity to increase the focus on quality in order to be able to justify increasing prices. However, consumers need to be aware that there is another approach producers can take - fraud. In the past, we could see producers mixing wines from other regions in order to increase the quantity, quality and styles of their wines. Pressure from the narrowing gap between supply and demand can encourage this kind of behaviours. Fortunately, many regions have quality checks in place, so I hope that this risk would not materialise.

We also cannot forget about climate change which was probably one of the reasons behind the poor vintage of 2017. It could be a warning sign for many producers, making them pay more attention to these changes and getting prepared for them. Investing in new viticulture techniques, using more sustainable methods, trying new grape varieties, changing wine laws and looking for new land with more suitable climate may be some ways to respond to the climate change and a way to mitigate the supply decrease in the future. For the consumers, this also means that they need to be more open to wines from new places and to wines made with unusual grapes from the well-known appellations.

As China is becoming more and more important producer and consumer of wine, it is interesting to see how these changes could affect them. Chinese producers buy a lot of foreign wine to blend it with their wines (Adams and Franson 2013; Siddle 2018). With the decreasing gap between supply and demand on the global scene, China may need to be forced to change how they operate. They can either start paying more for the external wines and increasing their prices. They could also start investing in their own production. This could mean plantings on new vineyards, investments in research, new technologies and higher quality. Taking into account the speed of Chinese development in a wide spectrum of areas (e.g. transportation, manufacturing, online business) I am expecting the latter scenario to take place and I would not be surprised to see good quality Chinese wines (produced with 100% Chinese grapes) starting to enter global markets.

Even though supply and demand forces can be very strong, however, we cannot forget about other factors influencing wine markets. We can already see some nervousness in the markets around Brexit and Trump's new policies (Cooper 2017; Coldiretti 2018). For sure, the future holds a lot of interesting developments for all the parts of the wine market. I would not be surprised to see new wine regions emerging (like China and India), well-established wineries diversifying their productions and releasing more brandies and other spirits, and consumers paying more attention to the quality/price ratio.

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