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State of the German and International Wine Markets

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1 International Wine Markets

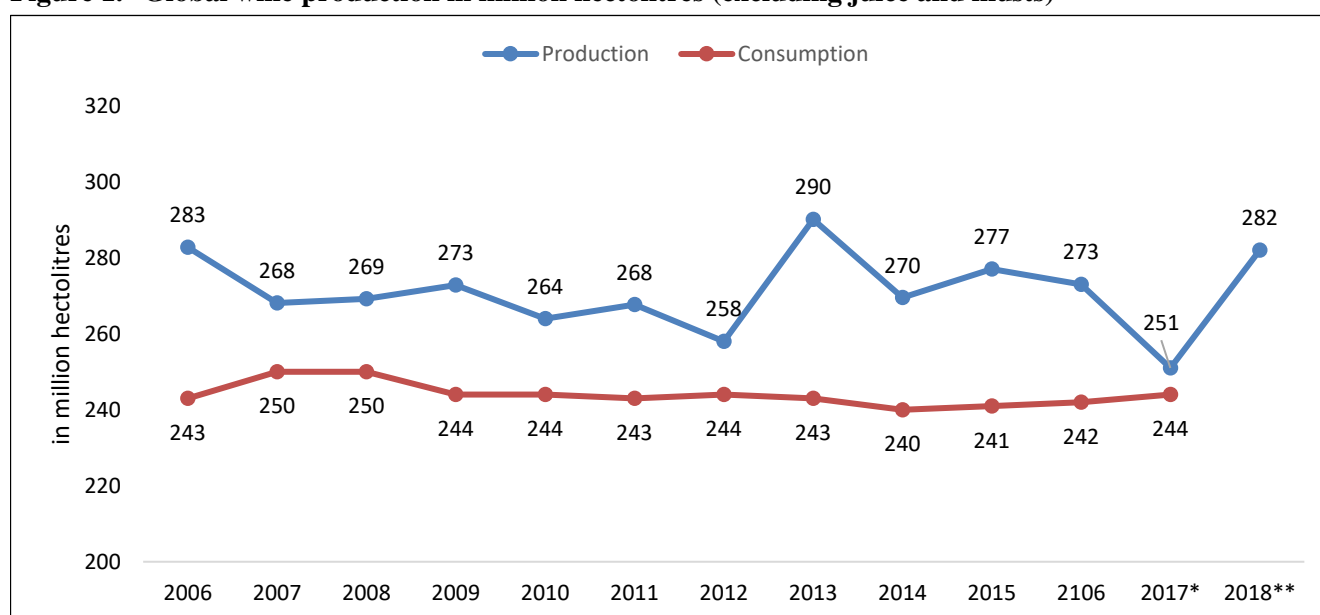
Large Harvests after Short Supply

In 2017, several below-average wine harvests in South America and Europe resulted in the lowest global wine production in over a decade (Figure 1). As a result, markets were short in supply, and international bulk wine prices increased significantly (Figure 2). Suppliers such as Chile, Italy and Spain reportedly sold out for some grape varieties in early 2018, and their wine exports decreased significantly because of limited availability (CIATTI, 2018). Eastern European countries such as Romania and Moldavia profited from the traditional producers' inability to deliver bulk wine and won large contracts from wine bottlers serving European supermarket chains. It remains to be seen whether the new wine producers can keep a foot in the market long-term.

In the Southern hemisphere, harvests in 2018 were mixed. After news about water restrictions and the countdown to "Day Zero" in Cape Town, South Africa in early 2018, many expected the South Afri-

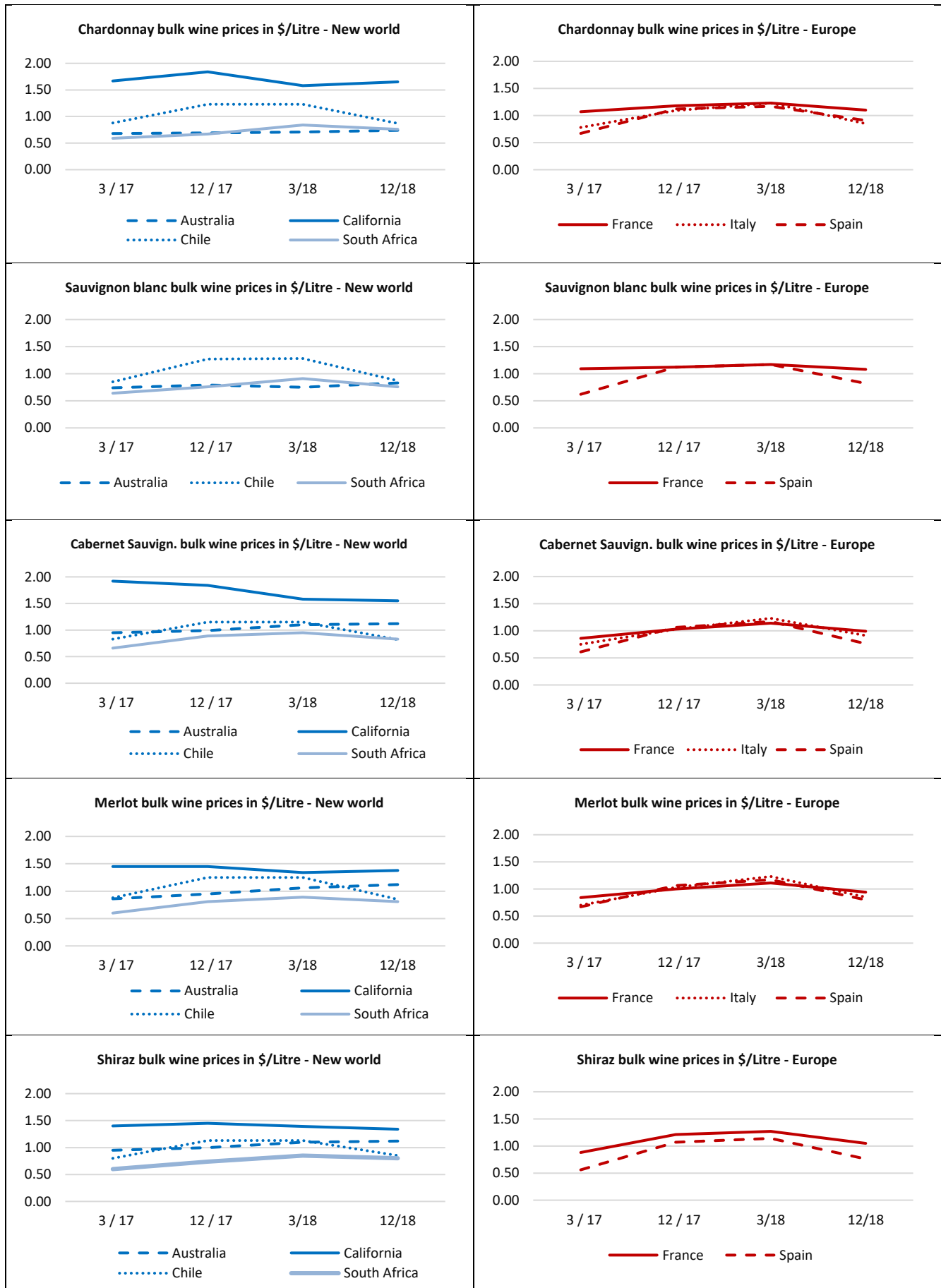
can wine harvest to drop by 25%. Those expectations turned out to be too pessimistic, as the South African harvest only fell short by 12% compared to 2017 (see Table 1). Similarly, drought in Australia resulted in a below-average harvest; the Australian supply was quickly picked up by Chinese wine importers because trade between these two countries benefited from a further reduction in trade tariffs. China now acquires 40% of Australian wine exports, followed by the US with 15%. Because of the strong international demand for Australian wine, exports increased to comprise two-thirds of the total Australian wine production. Contrary to South Africa and Australia, South American wine producers Chile and Argentina recorded above-average harvests that were 36% and 23% higher compared to 2017, respectively. Supply from these two countries was highly welcomed by international bottlers, and prices for Chilean bulk wine fell accordingly after the harvest in the second half of 2018 (Figure 2). Market observers expect further price reductions in an attempt to empty full wine tanks ahead of the new 2019 Chilean vintage (CIATTI, 2019).

Figure 1. Global wine production in million hectolitres (excluding juice and musts)



*2017 provisional data; **2018 forecasts
Source: OIV (2018)

Figure 2. Development of bulk wine prices for international grape varieties of different origins



Source of data: CIATTI (2017, 2018)

Unprecedented weather patterns during the European summer in 2018 made precise forecasts difficult. Ample winter rain in Spain filled up empty dams, allowing for the irrigation of vines. Meanwhile, Italy experienced unusual precipitation, resulting in disease pressure for vines. Germany endured an unparalleled drought between April and October, and water stress and low yields were expected before harvest. By the start of harvest in mid-August 2018, it became clear that most European producers were expected to harvest exceptionally large volumes. 2018 harvests in France and Spain were 25% higher than the year before, and reports about Italy's harvest differ between 14% and 31% higher yields. As a result of a series of strong harvests in the Northern and Southern hemispheres, total wine production in 2018 reached its second-highest level of the last decade (Figure 1).

Global wine consumption is currently estimated at 244 million hectolitres per year (OIV, 2018). Therefore, global wine consumption has slightly increased for the third year in a row. Economic recovery and increased interest in wine in new markets are responsible for this trend (HOFFMANN and LOOSE, 2017).

Development of Bulk Wine Prices

Over the course of 2018, international wine markets transitioned from a short position to a long position, from scarcity to ample availability. As expected, the increased availability of bulk wines had significant effects on wine prices. International bulk wine

markets are reported on a monthly basis by global wine broker Ciatti. The development of prices for international grape varieties from New World and European countries over the last two years are shown in Figure 2.

Price increases between March and December 2017 dominated for most grape varieties and origins after the small harvests. After the large harvests, prices began to soften in the second half of 2018. There are only a few differences between the countries of origin examined in Figure 2. Prices for Chilean wines reacted more drastically than those for Australian wines, which are still upward sloping. Because of uncertainty about the effects that drought had on wine supply, South African wine prices reduced later than Chile's. The new global oversupply somewhat negatively affected the prices of Californian wines, which are typically the highest in an international perspective.

Prices for Italian and Spanish wines reacted more sensitively than prices for French wine, which were usually the highest in Europe. The scarcity of Italian and Spanish bulk wine led to price parity for white wine between the three countries by the end of 2017. For the key red grape varieties, Cabernet Sauvignon and Merlot, prices for Italian and Spanish wine even surpassed their French counterpart, which was unprecedented. The pre-existing price variance between the countries was reinstated after the large harvests in 2018.

Table 1. Wine production 2013-2017 in million hectolitres (excluding juice and musts)

Rank		2014	2015	2016	2017*	2018**	2017/18 variation in volume	2017/18 variation in %
1	Italy [#]	44.2	50.0	50.9	42.5	48.5	6.0	14%
2	France	46.5	47.0	45.2	36.6	46.4	9.8	27%
3	Spain	39.5	37.7	39.7	32.5	40.9	8.4	26%
4	United States	23.1	21.7	23.7	23.3	23.9	0.6	2%
5	Argentina	15.2	13.4	9.4	11.8	14.5	2.7	23%
6	China	11.6	11.5	11.4	10.8	unknown		
7	Chile	9.9	12.9	10.1	9.5	12.9	3.4	36%
8	Australia	11.9	11.9	13.1	13.7	12.5	-1.2	-9%
9	Germany ⁺	9.2	8.8	9.0	7.5	10.7	3.2	43%
10	South Africa	11.5	11.2	10.5	10.8	9.5	-1.3	-12%
OIV	World Total	270	277	273	251	282	31.0	12%

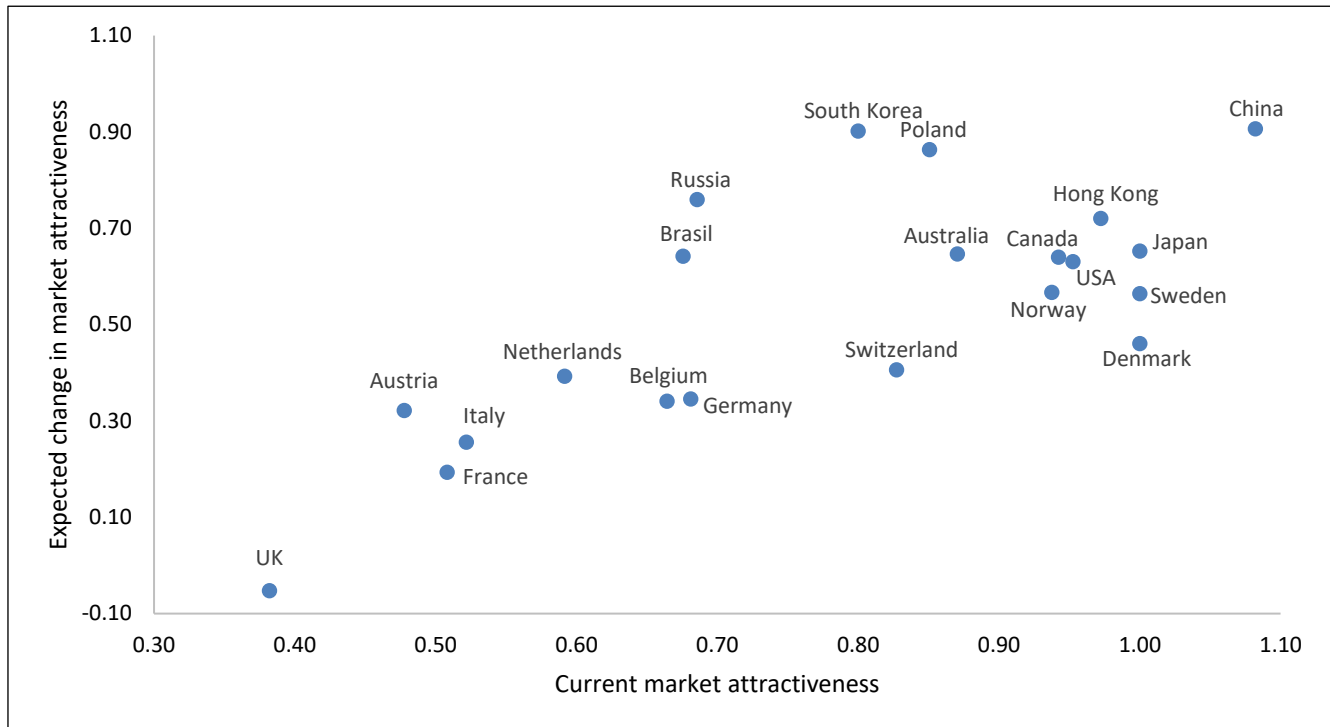
*2017 provisional data; **2018 forecasts

[#]Reports for 2018 from the Italian oenologist association, Assoenologi, differ with an estimated Italian volume of 55.8 million hectolitres.

⁺Corrected German estimates according DESTATIS (2019).

Source: OIV (2018)

Figure 3. Current and future market attractiveness (n=696 international wine producers and exporters)



Source: LOOSE and PABST (2018b)

The imminent harvests in Australia, Chile, and South Africa in early 2019 promise above-average volumes. Market observers therefore expect further significant bulk wine price reductions in the event that European vines promise a rich harvest after a successful bloom in late spring 2019.

Attraction and Risk of International Wine Markets

The globalisation of the wine trade has further intensified, according to producers' and experts' opinions collected in the most comprehensive global trend barometer of the international wine business, the Pro-Wein Business Report (LOOSE and PABST, 2018b). Eight out of ten international producers plan to expand their export activities to new markets over the next three years. The domestic markets of the biggest wine producers (Spain, Italy, France) are saturated with a rather declining trend in consumption. Therefore, exporting to new growth markets is the only way for these producers to compensate for losses and generate growth. This change also means that the international wine trade will continue gaining in volume and importance. This raises the question of whether or not this growth will level off in the long term, as the new wine markets may build and/or expand their own wine production, as is the case in China.

When asked about the current attraction of markets, 696 exporters and wine producers rated China as the most attractive export market globally, followed by Japan, Hong Kong, Scandinavia, the US and Canada (horizontal axis in Figure 3). Compared to results from 2017, China has moved from ninth place up to the top. This subjective assessment of market players corresponds to the reports about China's rising import demand and the high increases in volume and value of exports to China, especially from Australia, France, and Chile. Two other Asian markets, Japan and Hong Kong, are the second and third most attractive markets, followed by Scandinavia, the US, Canada and Australia. Saturated European wine markets with highly priced competitive food and wine retailers – Germany, Belgium, and the Netherlands – only have a mid-level market attractiveness. Traditional wine-producing countries bear low attractiveness because of the decline in wine consumption and the dominance of local producers.

Exporters and producers expect that by 2021, market attractiveness will increase the most for China, South Korea and Poland, followed by Russia, Hong Kong, Japan and Australia (vertical axis in Figure 3). These top markets are followed very closely by the two important North American markets, the US and Canada, where wine consumption continues to rise.

According to producers' and exporters' opinions, China's wine market has the highest current and expected future market attractiveness, but this development is associated with high risk and uncertainties. Wine imports to China are expected to grow by 8% in 2019 (IWSR, 2018) but could fall short if economic conditions in China, among others affected by the trade war with the US, deteriorate further. Producers and exporters find that the perceived risk in market development by 2021 is highest for two BRIC markets, Russia and Brazil, due in part to political and economic instability. These high-population countries of the BRIC group hold an extraordinarily high potential for wine exports.

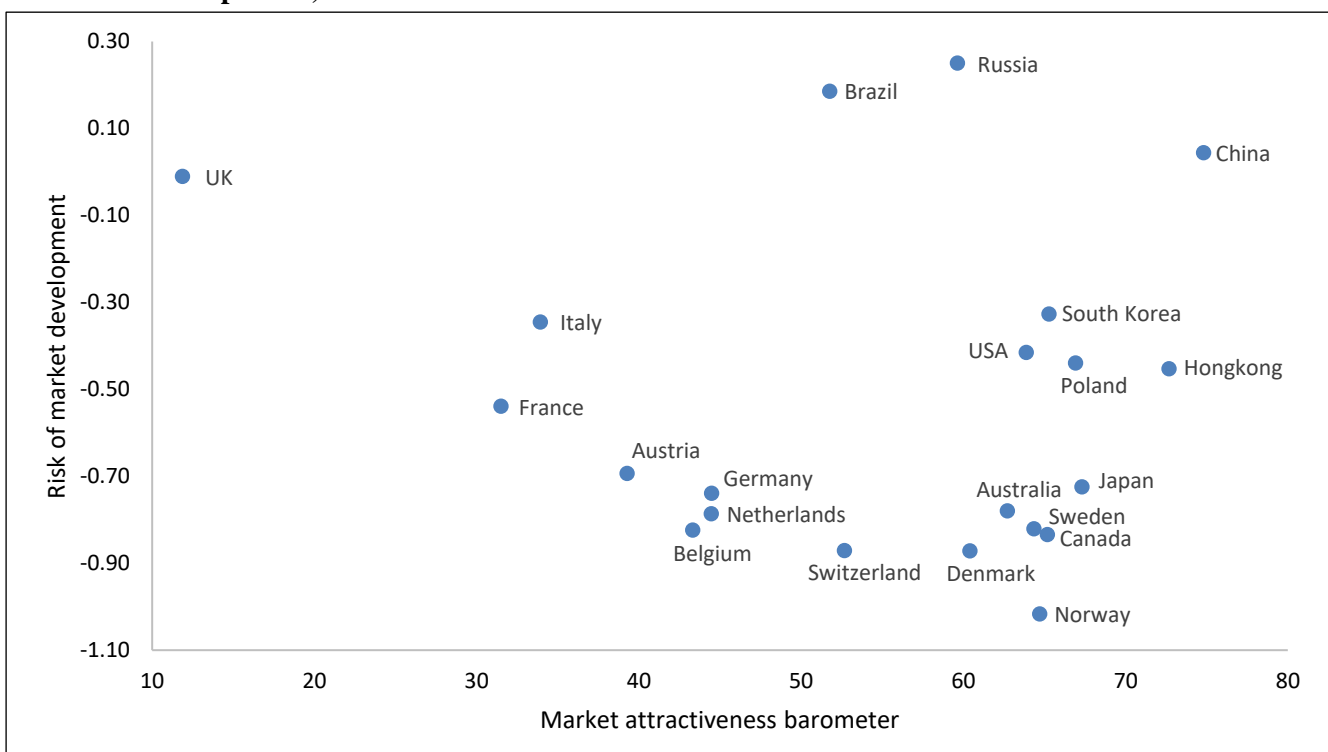
The attractiveness of the UK wine market is low and has deteriorated further since 2017, while the perceived risk has increased (Figure 4). The UK is also predicted to have the worst expected development by 2021. This weak position is due to several factors, including the constantly rising alcohol tax and the loss of shelf space for wine due to competition between established retail formats and discount stores, which makes this market increasingly difficult for producers to break into. Add to this the economic and legal uncertainties caused by the imminent BREXIT, the modalities of which have still not been clarified.

New Emerging Wine Markets

Three in four international producers and exporters see a potential for their entry into new emerging wine markets (LOOSE and PABST, 2018b). When asked about the highest potential for new wine markets in the coming five years, wine exporters mentioned Singapore, the Czech Republic and Taiwan most often (Figure 5). The list of new emerging wine markets is headed by small, easily governable, and easy-to-build markets that are relatively developed and stable in economic terms. In contrast, fewer exporters see imminent potential for Vietnam, India, Thailand, Malaysia, the Philippines, and Indonesia. These countries share a bigger market size and a lower economic development status and are more difficult to penetrate. The portion of the population that can afford wine is smaller in these markets than in more developed countries. A long-term perspective is needed to overcome existing barriers (e.g. taxes on wine imports, diversity of regional laws).

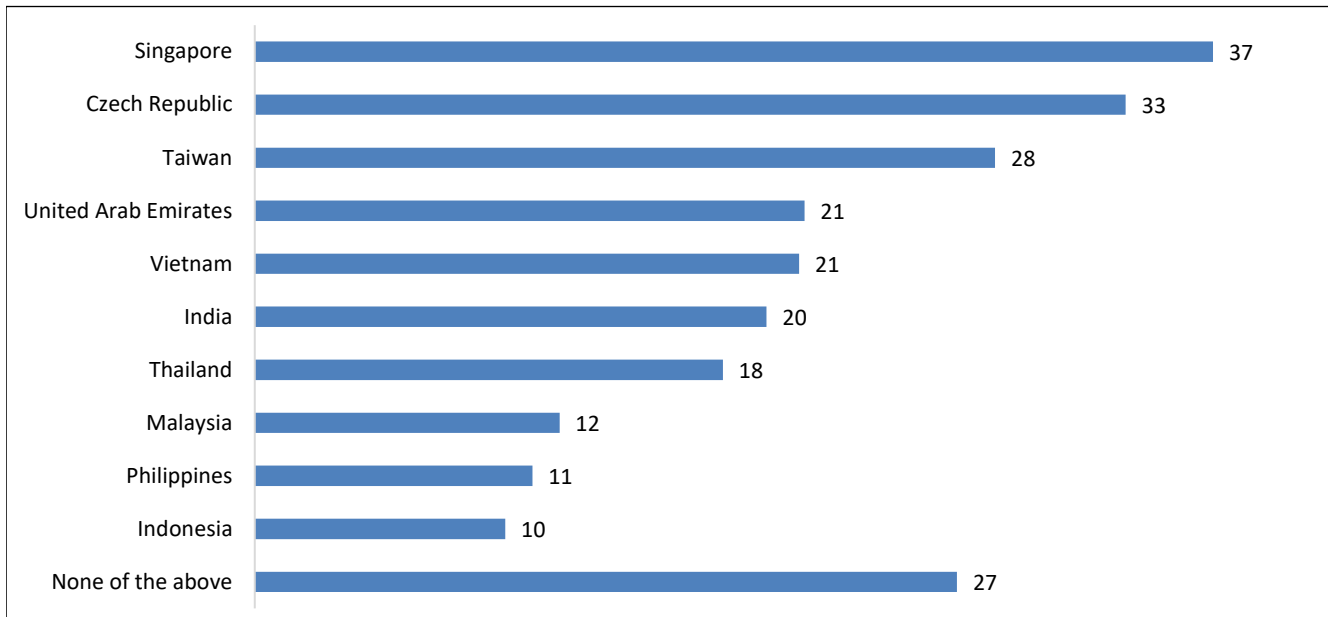
It may come as a surprise that the United Arab Emirates (UAE) ranks fourth among the emerging wine markets. This position illustrates the rising importance of wine, high-quality food, and delicatessens for both tourists and expatriates on the Arabian Peninsula. This positive ranking is in line with other indica-

Figure 4. Market attractiveness and risk of market development (n=696 international wine producers and exporters)



Source: LOOSE and PABST (2018)

Figure 5. Emerging markets (n=696 international producers and exporters)



Note: percentage of wine exporters who see potential in the following export countries for their company within the next five years.
Source: LOOSE and PABST (2018b)

tors, such as the number of participants in Wine and Spirits Education Trust (WSET) courses from the UAE. India is number one among the emerging export markets for wine producers from Australia, the US and South Africa, all members of the Commonwealth. The common language and the cultural links in the Commonwealth make it easier for these countries to develop the Indian market.

Overall, Asian and Eastern European countries in particular will gain further importance in international wine consumption. Successfully handling the geographically and culturally distant markets in Asia will prove to be a major challenge for European wine producers in the coming years.

Current and Future Importance of Online Wine Sales

International markets differ in the relative importance of online sales, although only a few official statistics are available. China, France and the UK have the largest online alcohol sectors, with further growth expected (IWSR, 2018). In France and the UK, large retailers dominate online wine sales; in Germany, specialist wine retailers and Amazon hold the larger share of online wine sales (IWSR, 2018).

International producers and wine specialty retailers were asked about current and future online sales (LOOSE and PABST, 2018b). The percentage of producers and specialist wine retailers who run their own web shops for wine is 38% and 40%, respectively.

However, the relative sales generated by these web shops differ significantly. On average, wine specialist retailers sell more than one-fourth of their products online (28%), while producers only handle 5% of their sales online. This difference can be attributed to the strengths of wine specialist retailers, including the wider portfolio of wines, the special focus on end consumers, and the expert use of online marketing. By comparison, only one in five producers uses online portals (e.g. Amazon and other portals specializing in wine, such as Vicampo) to reach end consumers.

Both producers and wine specialist retailers expect online sales of wine to increase further over the next years (Figure 6). They rate the growth opportunities for retailers' and producers' web shops as comparable to the growth of portals (e.g. Amazon, Ebay). While general portals have gained market shares for other product groups, industry experts regard emotionally appealing solutions as necessary for the demanding product of wine. The overwhelming majority of specialist wine retailers agree that the operations of their online shops involve a lot of work and that comparability of prices online will make profits dwindle even more. Consequentially, an increase in online wine sales is viewed as more critical by wine retailers than by producers, who are supposedly not so aware of the workload associated with online marketing yet. Specialist wine retailers, however, have already largely exploited the available potential and can only realise increased sales at high costs.

Figure 6. Assessment of the future development of online sales



Note: n=397 international producers and n=487 international specialty retailers; agreement in percent
Source: LOOSE and PABST (2018b)

2 German Wine Market

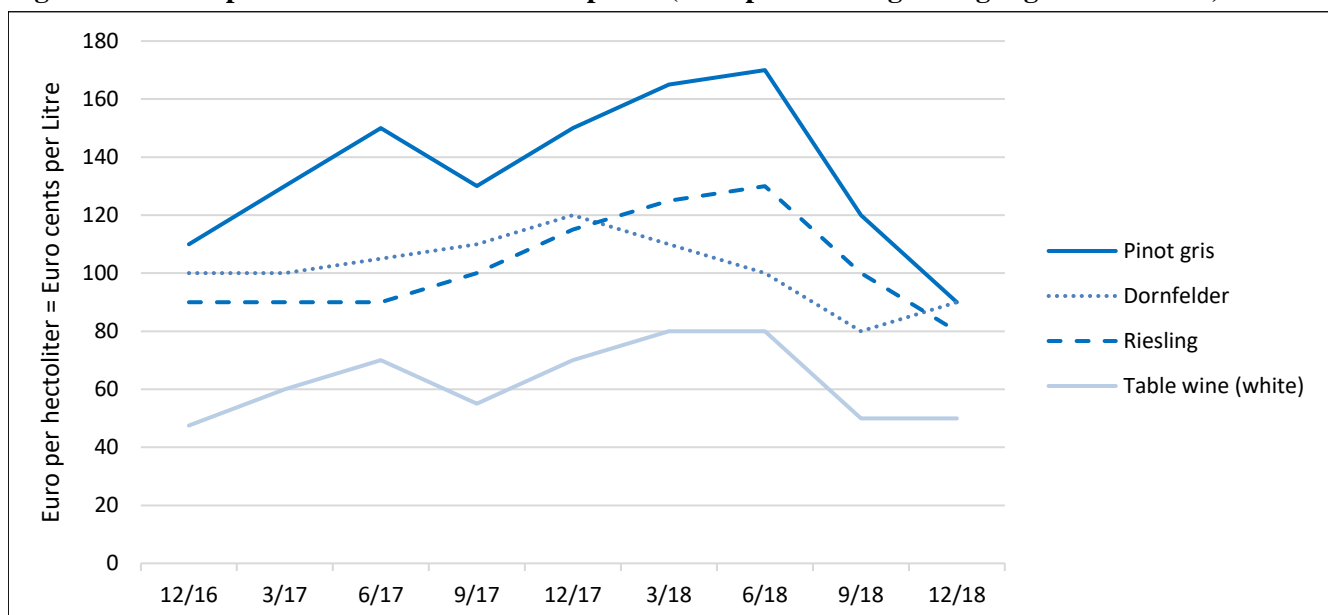
German Wine Production

German agriculture suffered from an unusual drought between April and October 2018. Considering early news about the negatively affected grain and hay harvests, German vintners expected drought damage to their vines and were surprised by the high yields they actually harvested. The drought scare explains why bulk wine prices were still rising in June 2018 and strongly declined immediately after the harvest (Figure 7). By the end of 2018, bulk wine prices reached levels comparable to 2016 before the small, frost-

reduced harvest of 2017 pushed prices up. In an international context, the contrast between the harvests of 2017 and 2018 was the most prominent for Germany, where the volume in 2018 was 41% higher than that of 2017. Because of limited rainfall in Germany in the summer of 2018, grapes were particularly healthy and rarely affected by pests or diseases. The exceptionally warm summer resulted in exceptionally high sugar content in grapes, while acid levels were much too low. Acidification of wines was therefore required, which is otherwise only common in Southern Europe.

Because of maximum yield restrictions, a considerable number of wineries left fruit unharvested. Wine

Figure 7. Development of German bulk wine prices (example of wine growing region Palatinate)



Source: WEINWIRTSCHAFT (2017-2018)

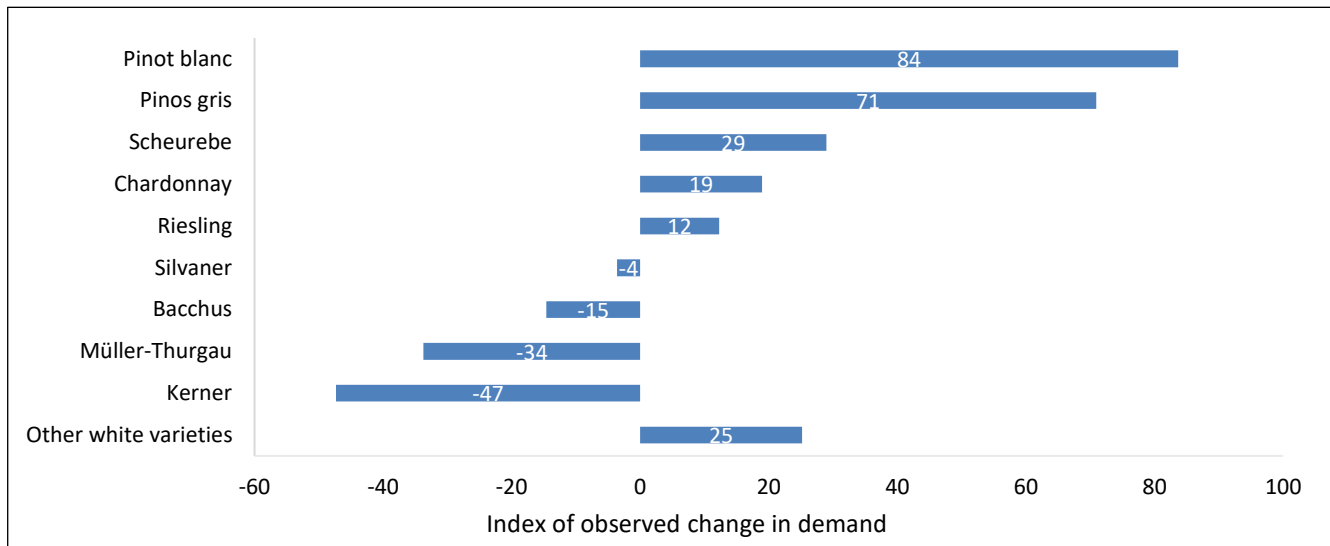
had to be graded down from quality wine to table wine when volume caps for quality wine were exhausted. Such a downgrading was met with critiques because these wines were actually of high quality by the standard of sugar content used in the German wine law. Considering the strong harvest fluctuations in recent years, producers also openly questioned whether the existing wine law is still suitable under the situation of climate change and its adverse effects on wine production.

Change in Demand for Grape Varieties

Price differentials between grape varieties (shown in Figure 7) reflect changes in consumer demand and agree with observations reported by German wine

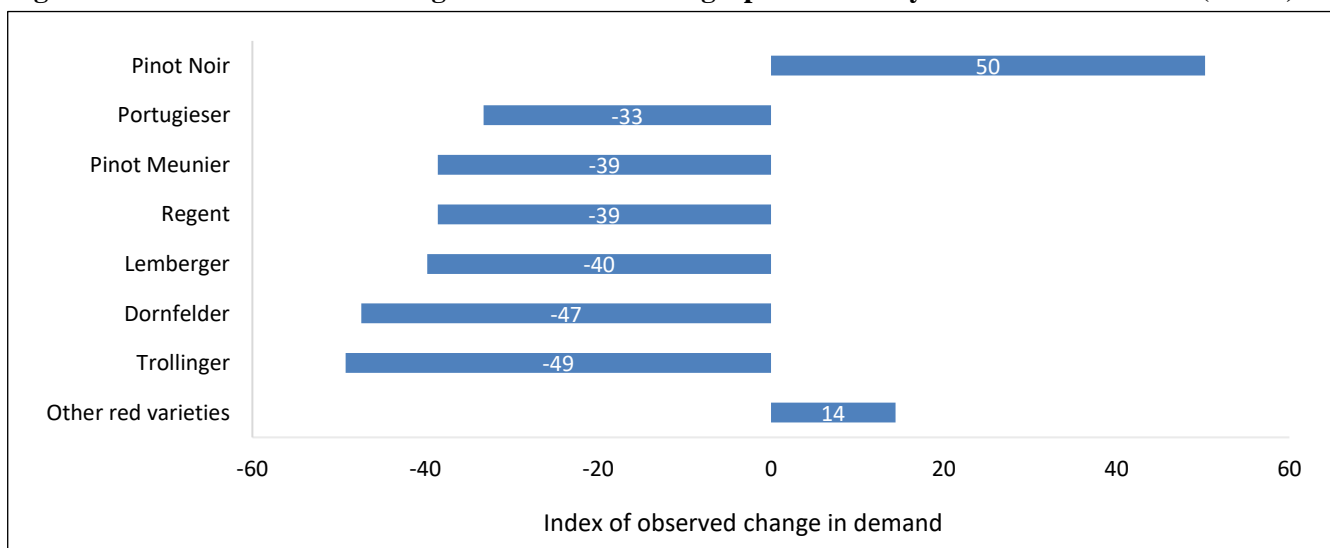
estates (Figure 8 and Figure 9). Overall, there is a trend towards white wine consumption in Germany, while the consumption of red wine has declined slightly. Except for Pinot Noir and other international red varieties, the demand for German red wine has strongly decreased (Figure 9). While the demand for German white wine has generally increased, there is a great variety in popularity for specific types. Softer international white wines from the Pinot family (Pinot blanc, Pinot gris, Chardonnay) with lower acidity and mild aromas are currently in vogue. In contrast, traditional German white wines such as Kerner or Müller-Thurgau have rapidly lost consumer interest (Figure 8). There is strong heterogeneity in the reported demand for Germany's most famous grape variety, Ries-

Figure 8. Index of observed change in demand for white grape varieties by German wine estates (n=284)



Source: LOOSE, PABST and ROHRMÜLLER (2018b)

Figure 9. Index of observed change in demand for red grape varieties by German wine estates (n=284)



Source: LOOSE, PABST and ROHRMÜLLER (2018b)

ling, which has an above-average acid content. Some wine estates have reported an increase in demand, while others have observed a decline in consumer demand, resulting in an overall medium score.

About two-thirds (64%) of the wine estates plan to plant more of the grape varieties that are in higher demand, and it will be at least three years before the first of those grapes can be harvested. To react quicker to market changes, some wineries plan to buy fruit (41%) or bulk wine (24%) from other producers, driving bulk wine prices upwards.

Challenges for German Wine Producers

When asked about foreseen challenges and problems that German wine producers will face over the next five years, there was general agreement between wine estates and cooperatives, both of which grow grapes and market wine (Table 2). Bureaucracy is perceived as the most important problem by wine estates and the second most important problem by cooperatives. Regulations related to agricultural market control, employee protection, and environmental laws require extensive documentation. The time required to document all steps of the supply chain from grape production to vinification to sales is a major effort and burden for the highly fragmented and small producers with few staff members (LOOSE and PABST, 2018a). The wine sector should therefore assess the benefits and costs of various self-elected regulations to potentially decrease that burden on small producers.

Extreme weather events such as drought (2015), rainy summers with disease pressure (2016) and late

frost events (2017) strongly reduce harvest volume and producers' incomes. Climate change makes these extreme weather events more likely and therefore poses a serious risk to producers' economic sustainability. Climate change ranks as the second most important challenge by wine estates and third most important challenge by cooperatives.

Several years of economic growth in Germany increased demand for labour, and wages rose accordingly. The imminent retirement of the large baby boomer generation born in the '50s and '60s will further reduce staff availability. Competing for qualified staff with other industries, the wine sector struggles to keep up with wage increases, restrained by its low profitability (HEITLINGER, FLEUCHAUS and LOOSE, 2019).

Strategically, cooperatives are caught in the middle between privately owned wine estates and large, efficient bottlers because their market orientation can suffer from organisational problems (HANF and SCHWEICKERT, 2014). These challenges result in cooperatives perceiving that high-price pressure in competitive retail environments combined with high expenditures for sales and marketing will lead to a decrease in added value and profits.

Because of the timing of the survey in mid-2017, the ranking of problems by large bottlers, who depend on buying bulk wine, partially deviates from the other producers. At that time, the market still suffered from short supply, and bottlers found it hard to source wine to fulfil retailers' wine orders. The importance of this problem will have decreased due to the large harvest in 2018, with ample bulk wine available.

Table 2. Importance of challenges to German wine producers over the next five years (n=457)

	Wine Estates		Cooperatives		Large Bottlers	
n	395		39		23	
hectares	7,046		13,981		320 Mio €	
turnover						
	average	rank	average	rank	average	rank
Bureaucracy	7.5	1	6.8	2	5.5	5
Extreme weather events due to climate change	7.5	2	6.4	3	7.3	1
Rising staff costs	7.0	3	6.2	4	5.2	7
Staff shortage	6.4	4	5.9	6	6.4	4
Price pressure, high expenditures for sales and marketing, low added value	6.3	5	7.4	1	6.5	3
Change in customer structure, decline in direct sales	5.3	6	6.0	5	5.2	6
Situation of bulk wine market	4.6	7	5.2	7	6.6	2
Investment backlog	3.9	8	3.5	8	4.3	8

Note: elicited on a 10-point scale in July 2018. For information on population of the three types, see LOOSE and PABST (2018).

Source: LOOSE, PABST and ROHRMÜLLER (2018a)

Consumption, Imports and Exports

Wine consumption in Germany fell by 2% between August 2017 and July 2018 (DWV, 2019). This decrease is attributed to the long heatwave in the summer of 2018, when consumers deviated to beverages with little to no alcohol. Bottlers report a record demand for Spritzer (a mix of sparkling water and wine) up until late September. Additionally, wine punch was only supplied to retailers in November when the weather finally cooled down, which was two months later than usual. A similar low wine consumption can be expected for the August 2018 to July 2019 period to be published in 2020, which covers the second part of the hottest German summer ever recorded. The fall in consumption slightly decreased imports to Germany, while German wine exports increased by 4% and surpassed the critical mark of one million hectolitres.

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