

# **Global Warming's Impact on the Wine Industry in the European Union**

by

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Wine grapes are arguably one of the most climate sensitive crops exhibiting extraordinarily large annual variations in quantity, quality, and price in response to weather conditions. This makes them an excellent object to study the economic effects of (even substantial) global warming.

It is apparent that global warming will induce major changes not only in the techniques but also in the geography of viticulture. There are regions that will suffer from further warming while others will benefit. Despite its economic relevance and the fact that changes in viticulture are already happening, there is little or no research on the economic impact of global warming on the wine industry.

Our project is aimed at quantifying the impact of global warming not only on wine production and profits but also on their components such as various cost and public support measures. We draw on annual panel data from 1989 to 2008 from the *Farm Accountancy Data Network* of the European Union (FADN). FADN collects accountancy data from a sample of agricultural holdings in the European Union and aggregates them on a district level. For wine grape growers, we will include 63 districts in seven countries (Austria, France, Greece, Germany, Italy, Portugal, Spain).

Our analysis will provide a clear geographical picture of the viticultural winners and losers of climate change and will shed light on the climate-induced movement of professional viticulture towards higher, northern latitudes.