The wine sector is going through some very specific adjustments in the European Union setting. On the one hand there is the internal economic crisis and on the other, changes in CAP regulations are causing adaptive strategies that are directly affecting the sector’s macro and micro strategies by representative countries and businesses in the world market scene.

International wine commerce shows clearly differentiated blocks, even with substantive internal differences in them: on the side of exports, the European Union (especially France, Italy and Spain) versus the so-called emerging countries (USA, Chile, Australia, Argentina or South Africa), and on the side of imports, the European Union (especially Germany and the United Kingdom) again contrasts with emergent purchasing countries (USA, China, Russia).

In the past decade, the spectacular advance in international wine commerce hides profound changes and asymmetries in strategy and behavior: within the EU, France’s stance (specialization in high price ranges) has been very different from Italy’s and Spain’s (medium and low price segments and large volumes). In turn, the emergent countries from the Southern hemisphere have competed more gradually and segmentally, trying to penetrate all segments. But the US was the country that did it in the highest price ranges.

In general terms, the great elasticity-price of importations in worldwide wine commerce makes the recent economic crisis join the intrinsic erraticism that the wine producing
sector usually undergoes and has brought about great annual changes. (Viz. in the year 2012 with the spectacular rise in average prices of wine in origin in the EU)

The prior hypothesis is whether the economic crisis has affected the EU’s lead (in exports as well as imports) and whether there will be a long term balance in price level trends for the other producing and exporting countries. This analysis attempts to segment whether this happens to bulk wine (considered a commodity) as opposed to bottled wine. This will allow advancement in the knowledge of whether the current moment, in the year 2012, with rising prices, can ruin the export-led adaptive growth model experienced in this decade and based on low prices, and whether business performance could inoculate certain degrees of vulnerability in the sector, in the EU and globally. Or, on the contrary, is this a tendency in which the current moment is not going to ruin the general balance of internationalization, in such a globalized market with such dynamic commercialization.

To document the development of this paper the Co-integration technique was used, suitable for modeling some market responses to changes from other markets and to external shock. Co-integration will be expressed concretely in a VEC model using the Johansen approach (1988). A Vector Auto-regression (VAR) model will be specified with k delays whose expression is:

\[ P_t = A_1 P_{t-1} + A_2 P_{t-2} + \ldots + A_k P_{t-k} + \varepsilon_t \]  

where \( P_t \) is a vector of the \((p \times 1)\) order and \( \varepsilon_t \) is the random perturbation that is distributed as an \( N(0, \Sigma) \).

Equation (1) is re-parameterized as a VEC by carrying out a series of operations. It begins by subtracting the \( P_{t-1} \) matrix from both sides of equation (1):

\[ P_t - P_{t-1} = A_1 P_{t-1} - P_{t-1} + A_2 P_{t-2} + \ldots + A_k P_{t-k} + \varepsilon_t \]  

By grouping the terms in equation (2), the following expression is obtained:

\[ \Delta P_t = (A_1 - I) P_{t-1} + A_2 P_{t-2} + \ldots + A_k P_{t-k} + \varepsilon_t \]  

If \((A_1 - I) P_{t-2}\) is added and subtracted from equation (3) on the right side and the terms are grouped, the result is:

\[ \Delta P_t = (A_1 - I) P_{t-1} - (A_1 - I) P_{t-2} + (A_1 - I) P_{t-2} + A_2 P_{t-2} + \ldots + A_k P_{t-k} + \varepsilon_t = = (A_1 - I) \Delta P_{t-1} + (A_1 + A_2 - I) P_{t-2} + \ldots + A_k P_{t-k} + \varepsilon_t \]  

By repeating this process \( k \) times, model (2) would be expressed in terms of the differences of the different delays:

\[ \Delta P_t = (A_1 - I) \Delta P_{t-1} + (A_1 + A_2 - I) P_{t-2} + \ldots + (A_1 + A_2 + \ldots + A_k - I) P_{t-k} + \varepsilon_t \]  

On the other hand, if new matrices are created:
\[
\Gamma_i = -I + \sum_{j=1}^{i} A_i \quad \Pi = -I + \sum_{j=1}^{k} A_p
\] (6)

and they are substituted in equation (5), the model becomes a Correction Vector with the following analytical expression:

\[
\Delta P_i = \Gamma_i \Delta P_{i-1} + \ldots + \Gamma_{i-k} \Delta P_{i-(i-k)} + \Pi P_{i-k} + \varepsilon_i
\] (7)

Two models were posed using expression (7). One was for the analysis of the export setting where EU wine prices (from France, Italy and Spain) and those from emergent countries (USA, Chile, Australia, Argentina or South Africa) were used as variables. The other was for the side of imports where price variables will be from the European Union (Germany and the United Kingdom) and from emergent countries (USA, China, Russia).