

- "M E D O C" model -

A system dynamic approach of the Bordeaux red wine market

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SUMMARY

To introduce system dynamic approach into interprofessional organisation to built a model about agricultural market is not so original. That's more interesting is the use of system dynamic to define what information system must be not only designed but scheduled to regulate the market.

Since July 1979, MEDOC gives some useful informations to people who have the difficult challenge to follow the Bordeaux wines market.

(A system dynamic approach of the Bordeaux red wines market)

Since 1962 by JARMAIN (1), 1967 by RAULERSON (2), the system dynamic approach is applied on agro-industry market, specially in US'citrus fruits sector. In France, this type of research was initialized by F. GUILLON (3) with a study about potatoes market (1975) and one another about chicken market (1976), and O. MARCANT (4) followed in 1979 with a thesis about Languedoc ordinary red wine market.

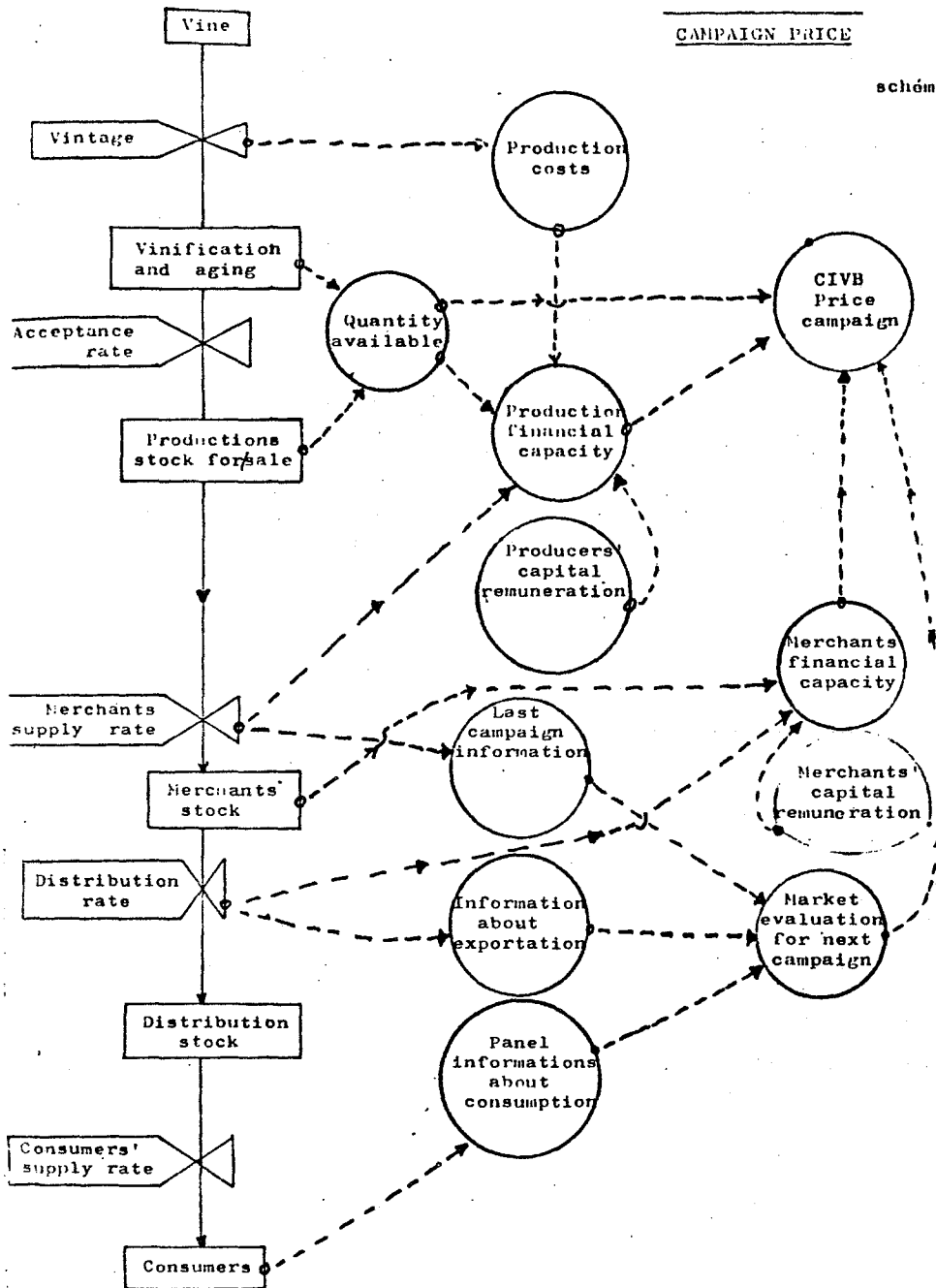
In 1973 even in United States newspapers, in spite of Watergate the Bordeaux price boom was noted with an evident displeasure. This crisis obliged all the Bordeaux market partners to reinforce an interprofessional organization, the "Conseil inter-professionnel des Vins de Bordeaux", (C.I.V.B.) to try to regulate the market.

From 1973 to 1978, CIVB is trying to built an information system about wine production by area (MEDOC, SAINT-EMILION for exemple) or by title (Bordeaux sup rieur), about transactions, and about consumer's attitude. But this information system was unable to explain fluctuation waves. Since September 1978, system dynamic thinking is introduced in CIVB Economic Office to try to understand the problem.

CAMPAIGN PRICE

schéma N

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I - Some precisions about Bordeaux red wines market

Bordeaux red wines have a peculiarity. It's necessary to wait the second year after the vintage to bottle them and it's better to wait again before to drink of course. A such peculiarity is sufficient to explain the real fastening degree of the spot market. To penetrate into, only one solution, to buy a Bordeaux wines merchant. That's the solution choiced by the main distribution firms to get vivification and aging know-how.

Viticulturists are 25 000 but 5 000 represent more than 60 % of the production. In front 300 wines merchants but less than 40 represent 80 % of the purchases and among them 12 are U.S. or English groups. Cooperative movement produces 30 % of wines, but it's not in conflict with wines merchants who commercialize also this production. Nevertheless 30 % of the production are sold directly by producers, specially since 1973-1974 crisis.

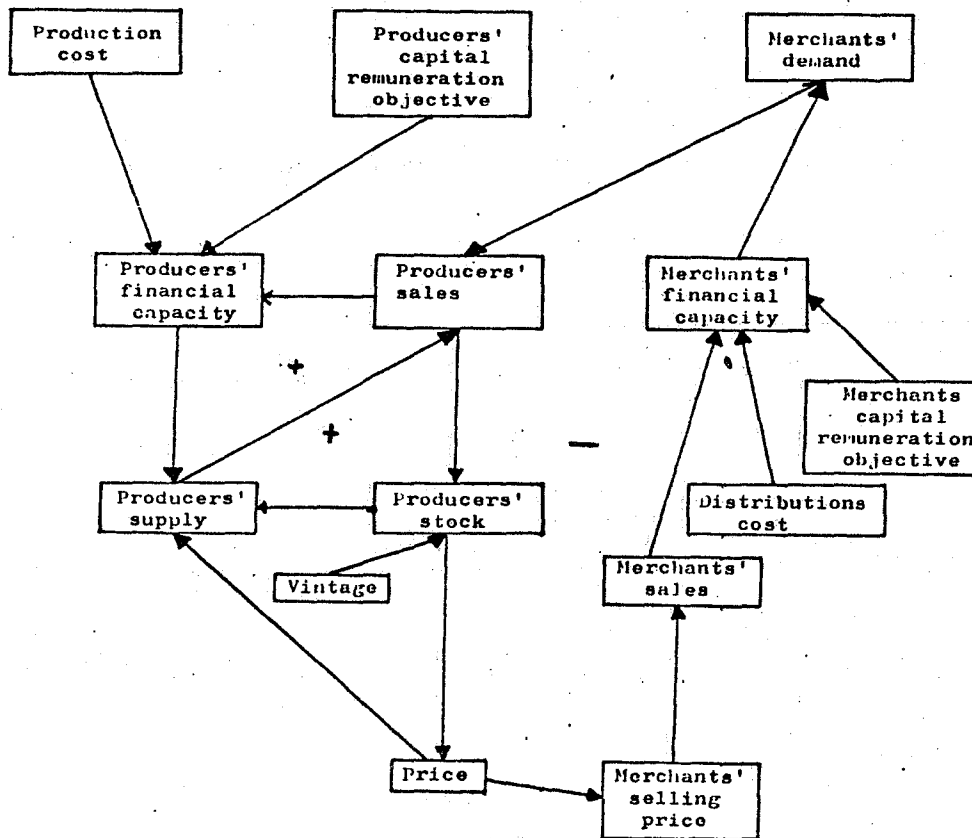
One another partner in Bordeaux wines market is the broker. He is the old information system between producer and merchant. That's a long time he was running cellars to found and taste wines and to confront supply and demand. Now it's finish, less than ten brokers deal with 80 % of the wine business by phase.

In France, wine competitors are "Côtes du Rhône" and ever "Corbières", but only when the final price of Bordeaux generic is climbing up \$ 2.25 (\$1 = 5 F) the 0,75 l bottle, that's the situation when producer's price is below \$ 0.80 for 1 litre not bottled.

At this price level, for the vintage Bordeaux generic, nation and international market is around 600 000 hl ; that's the annual production mean. For all the Bordeaux red wines the production is 2 500 000 hl versus 1 000 000 for all the Bordeaux white wines.

DYNAMIC OF THE BORDEAUX WINE PRICE BEHAVIOUR

schéma N°2



II - Where is the trouble ?

For a vintage, the campaign price is given after a bargain between producers and merchants, under CIVB authority, two or three months after the vintage date.

What are the available informations at this moment ?

- 1 - Vintage
- 2 - Producer's stock level
- 3 - Merchant's stock level
- 4 - Transactions of the last campaign
- 5 - Consumption evolution in France, Belgium, England by panel
- 6 - Exportations evolution by country
- 7 - Vintages of competitors.

Scheme n° 1 using system dynamic tool presents the structural analysis of the campaign price fixing system and scheme n°2 the behaviour of this system.

As the lecturer can see, it was difficult to CIVB to facilitate the bargain between producers and merchants because CIVB had no informations about financial aspects of the question.

Our own research explains Bordeaux red wines prices waves by the introduction of such variable and with only stock level, vintage, and merchants financial capacity we are able in MEDOC model (MEDOC for "Modèle Economique D'Organisation Concertée") to retrieve the past evolution and, since 1979, to give a good idea of the campaign price level.

III - The future

MEDOC model is now developed not only for the short range but also for middle and long range because it's necessary when we work with perennial production around 50 years. Especially during the twelve last years, a large part of Bordeaux white vineyards is changed on red wine without studies about middle range evolution of the consumption. That's a difficult question. We hope to explain our solution on october 1981 in Rensselarvil