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The D.O. Wine Industry in Castilla-León (Spain)

by María del Valle Santos^a, María Teresa García^b and Ana María Ortega^c

Abstract

The present study is framed within recent works addressing the process of product portfolio renewal as a mechanism for organizational renewal, in that firms may use it to meet the challenge of a changing environment. Based on this theory, we build an analysis model linking product portfolio renewal to changes in external factors and apply it to D.O. wine companies in Castilla y León. We found that both the environment as well as firms themselves had been highly dynamic during the period analyzed vis-à-vis their product portfolios. The importance of issues related to organizational adaptation and adjustment, such as those tackled in our research, lies in their link to organizational survival, making them a focal point of managerial concern. The findings to emerge from our work throw up certain implications which may prove useful to managers. In dynamic environments, such as those in which many firms find themselves immersed, it is likely that a change in the initial external circumstances may lead to a certain lack of organizational adjustment. In this situation, managers should consider the need to implement adjustment mechanisms. One such mechanism, product portfolio renewal, has proven to be a valid alternative to help them find their way in a changing environment.

Keywords: product portfolio renewal, dynamic capabilities, wine industry.

^a Universidad de Valladolid, Facultad de Ciencias Económicas y Empresariales, Avenida del Valle Esgueva, 6, 47011 Valladolid, Spain. E-mail: mvalle@eco.uva.es

^b Universidad de Valladolid, Facultad de Ciencias Económicas y Empresariales, Avenida del Valle Esgueva, 6, 47011 Valladolid, Spain.
E-mail: temerino@eco.uva.es

^c Universidad de Valladolid, Facultad de Ciencias del Trabajo, Avenida de Madrid, 44, 34004 Palencia, Spain.

E-mail: anao@eade.uva.es

Introduction

Product portfolio renewal is currently viewed as a potential source of competitive advantage and as essential to guaranteeing enterprise success and survival, above all for those immersed in turbulent environments (Bowen et al., 1994: 110). Yet, despite the obvious need for this, research has highlighted the difficulties many organizations encounter when attempting to undertake this process (Dougherty, 1992: 77).

There is abundant literature dealing with the development of new products, focusing mainly on an analysis of the factors determining the success of new products and the development process itself. However, less attention has centred on analyzing the opportunities for organizational renewal to emerge from product innovation.

In this paper, product portfolio renewal is assessed as an internal process of change undertaken by organizations in response to the need for renewal imposed by the dynamics of the environment. Evolutionary approach together with dynamic capabilities provide the foundation for the analysis model, which in turn frames the process within the context of the mechanisms which allow adaptation and maintain the organization-environment fit.

The paper is structured as follows: After initial justification of the study, section two characterises product portfolio renewal as a process of organizational change and reviews some of the most relevant issues related to it: which factors may trigger it; how they impact organizational conditions –encouraging or discouraging firms when it comes to implementing it-; and what consequences emerge from product portfolio renewal. Joint consideration of all of these questions is reflected in a product portfolio renewal model. The third section presents the empirical application of the model to the *Denominación de Origen (Appellation d'Origin)* wine sector in the region of Castilla y León (Spain). Finally, the last section outlines some of the conclusions to emerge from the work, identifying some inherent limitations, and pointing to future extensions of the research as well as implications for management.

Product portfolio renewal: a model from the viewpoint of organizational renewal

Product portfolio renewal changes the company portfolio by removing certain products and/or introducing new ones. This focuses on the introduction of new

products, also known as *product development* or *product innovation*. Product development is defined as “*a practice comprising the creative link of commercial and technological possibilities in a general set of attributes*” (Dougherty, 1992: 78). This highlights the two key issues involved in the process: developing the product and selling it to certain consumers. It therefore seems clear that organizational capabilities play a part in product development, with regard to both the technological as well as commercial aspects.

The amount of literature addressing product innovation has grown significantly in recent years, and has mainly dealt with an analysis of the factors determining the success of a new product (Brown and Eisenhardt, 1995). Issues which have aroused the greatest interest include questions linked to factors impacting successful process development –such as the presence of interfunctional teams, the role of the project leader and top-level management commitment- and the relation between the new product and entrepreneurial capabilities. Studies conducted consistently highlight the positive impact of product-firm capabilities synergy on new product results. Yet, while the literature addressing product innovation has delved deeply into the effect which the use of company resources and skills has had on the new product, far less attention has focused on analysing the opposite direction in this two way relation; namely the impact new products have on company capabilities and how the latter are renewed over time (Danneels, 2002: 1096). Recognising that a change in the product may bring about renewed capabilities implies considering it as a mechanism for organizational adjustment.

From the evolutionary viewpoint, organizational change is viewed as one of the mechanisms of adaptation aimed at re-establishing the balance between an organization and its environment, which might have worsened due to the appearance of changes in the environment. Within this particular perspective, there are approaches which differ in the degree to which they perceive firms’ ability to adapt (Santos and García, 2003): while evolutionary economics (Nelson and Winter, 1982) credits organizations with an ability to adapt which allows them to deal with internal adjustment, population ecology (Hannan and Freeman, 1984, 1989) maintains that inertia dominates the behaviour of organizations, which are incapable of handling adjustment processes. When referring to an organization’s product portfolio, applying these approaches will force us to question whether the appearance of environmental

changes really does lead organizations to make changes in their portfolio, thus demonstrating an ability to adapt, or whether they are unable to adjust the make-up of their portfolio due to inertia.

Contributions from evolutionary economics, together with those from resources and capabilities approach, have contributed to the development of the dynamic capabilities framework (Teece et al., 1997; Eisenhardt and Martin, 2000). This approach states that firm resources and skills evolve over time and that firms must perforce constantly renew them so as to keep pace with a shifting environment. Adopting this view, some works have highlighted that product development is a key factor in organizational renewal, as firms may use it as a foundation on which to cultivate new skills, processes and knowledge (Bowen et al., 1994: 111). Product development not only draws on organizational capabilities but also serves to expand firm competences so as to ensure future product development (Danneels, 2002:1115). Hence the inter-relationship between a firm's dynamic skills and product portfolio renewal, the latter proving a driving force in company updating and renewal. In order to gain an overall appreciation of this renewal process, we need to consider the main factors involved therein, some of which have thus far not merited sufficient attention in the literature. Some of the key questions to be addressed are those concerned with which factors trigger changes in the portfolio, how organizational features impact the adaptive response, and what consequences product portfolio renewal has on the firm.

Driving factors behind changes in product portfolio

From the evolutionary viewpoint, it is environmental evolution which is ultimately responsible for organizational change. Changes in external conditions vary enormously. Depending on how they impact an organization, they may be viewed as either threats or opportunities. Certain theories stress that organizations respond more keenly to threats than to opportunities (Chattopadhyay et al., 2001: 950), and more to the threat of losses than to a loss of control. When faced with opportunities, firms seem to display a more averse attitude to risk and greater inertia.

From a different standpoint, depending on which factors in the environment are affected, context changes may be seen as either institutional or ecological, depending on whether these affect the general environment or availability of resources which a certain type of organization (population) may need to survive. Institutional factors

which may trigger changes in product portfolios range from legal changes, such as deregulation in certain sectors (Haveman, 1993), to changes in technology through innovation (Tushman and Anderson, 1986), or factors of a socio-cultural and demographic (Kraatz and Zajac, 2001), or a macroeconomic or political nature (Haveman, 1992). With regard to ecological aspects, the abundance of a basic resource, clients, may be measured through the level of demand. Examples of change in demand which trigger changes in products may be found in numerous sectors, such as shipyards (Ruiz Navarro, 1998) or the wine industry (Delacroix and Swaminathan, 1991). Changes in product portfolio may also be a response to more intense competition (Kim et al., 2003), forcing firms to explore less saturated areas of the market.

Impact of organizational conditions

In product portfolio renewal it is interesting to analyze the impact of organizational characteristics or conditions. Although this is an issue which, in general, has not received much attention in the literature (Kraatz and Zajac, 2001: 633), the most frequently studied factors linked to a tendency to change are size, age, and experience in processes of change.

As far as the first two are concerned, the literature reflects the opposing views which may be found. Hannan and Freeman (1984) hold that inertia increases with age and size, a view supported by Delacroix and Swaminathan (1991) in the wine sector. However, certain authors believe that the older an organization, the greater the accumulated environmental change will be with the resulting lack of adjustment and a potentially greater tendency towards change (Boeker, 1989). Moreover, the wider resources available to larger organizations afford them a better chance to implement change (Barnett and Freeman, 2001). With regard to the existence of prior changes, the likelihood of implementing a specific type of organizational change increases with the number of similar changes previously initiated, those which were implemented early on having a greater impact, although such a possibility is less likely due to age and the time elapsed (Amburgey et al., 1993).

Another organizational factor which may impact product change and its outcomes is the endowment of resources, the literature again providing conflicting viewpoints. There are examples of sectors in which the endowment of resources linked to

competitive advantage lessens the tendency to change and appears to curb the need for it (Kraatz and Zajac, 2001). By contrast, generic resources such as capital and technological skills, which are more easily applied to new goals, may increase the propensity to change.

Finally, another variable affecting the readiness to renew product portfolios is the diversity of the initial portfolio. Generalist organizations or with a high degree of diversification tend to be more inclined to institute changes in their portfolio than those organizations with a high level of specialization, since they are able to draw on a wider range of routines (Boeker, 1989: 490).

To round off this section, we should mention that closely lined to the issue we have dealt with is the analysis of sources of resistance to change (Rumelt, 1995). This is the term used to refer to any phenomenon which hinders a process of change when it is initiated or when it is already underway, in an effort to maintain the previous situation (Pardo and Martínez, 2005:61). These sources include a distorted view of the situation, an inability to respond creatively to the speed and complexity of the context, deep-rooted values and the lack of the skills required to face up to change, factors linked to a large extent to specific characteristics inherent in the organization.

Effects of product portfolio renewal

The effects of organizational change have mainly been measured through financial outcomes or survival rates. When viewing product portfolio renewal as a means to organizational renewal, the development of the capabilities it generates should also be considered as an effect of the process in question, despite the difficulties inherent when measuring it (Perks, 2004).

Analyzing the effects to emerge from change processes is one of the issues which have received most attention in research. Carrying on with evolutionary approaches based proposals, we are faced with two opposing standpoints: the adaptive perspective, which views change as non-problematic and beneficial, and organizational ecology which perceives change as difficult and perilous. Several works have appeared over the last few years aimed at contributing to the discussion as to whether it is possible for both viewpoints to be partially right under differing conditions (Delacroix and Swaminathan, 1991). The difficulty separating the effects of the *content* of change and the effects of the *process* of change in itself, linked to the

fact that specific organizational conditions behave as moderating factors, may account for the contradictions thrown up by the various studies (Barnett and Carroll, 1995). Whatever the case, many of the works analyzed seem to evidence a positive link between changes in product portfolio and outcomes or survival. This seems to be particularly true when the change occurs due to a sudden and dramatic transformation in the context (Haveman, 1992), in the case of highly dynamic industries (Cottrell and Nault, 2004), or in the face of fierce competition and simple or specialized resources (Kraatz and Zajac, 2001). In certain sectors, the frequent introduction of slight changes in the portfolio, does not impact survival to any significant degree (Delacroix and Swaminathan, 1991). It has also been confirmed that perturbations caused by innovation initially increase extinction rates, but that this negative effect is mitigated over time (Barnett and Freeman, 2001).

By jointly considering the issues raised in this section we outline the product portfolio renewal model shown below (figure 1) and posit a series of related proposals.

Proposal 1: Product portfolio renewal is sensitive to changes in factors in the competitive environment.

Proposal 1.1.: Product portfolio renewal is interdependent with organizational conditions and capabilities.

Proposal 1.2.: Product portfolio renewal impacts outcomes to different dimensions.

Figure 1 about here

Empirical application

The Denominación de Origen Wine Sector in Castilla y León

The tradition of wine growing dates back a long way in the region of Castilla y León, and has led over the years to the offer of a wide range of products. Of the thirteen registered wine-growing areas, the most prominent are the five *Denominaciones de Origen [D.O]* (“Appellation d’Origin”), together with another five designated as *Vinos de la Tierra* (Wines from the Land or Region), giving an idea of the weight of this sector in the regional economy. Setting up of the D.O. has

contributed enormously to consolidating the wine industry. The oldest D.O is Rueda, which was established in 1980 and currently spans over 40 wineries. This was followed by Ribera de Duero, the largest, comprising some 200 wineries. Toro, Bierzo and Cigales cover almost 50 wineries each. A summary of the main characteristics of each D.O. wine are shown in Table I.

The wine industry has witnessed major changes over the years, bringing it to where it stands today. Due to the size of the firms making up the sector (particularly, small and medium) it may be regarded as fairly representative at a regional and even national scale. This, together with its long-standing tradition and importance, makes it a highly appealing sector for analyzing organizational change.

Bierzo	Together with Rueda, it is the D.O. with the widest range of products: whites, rosés, reds, sparkling wines, and so on. Its speciality is the Mencía red wine.
Cigales	Traditionally known for its rosé wines. These have more recently been joined by the production of red wines (young and vintage). Very little white wine.
Ribera de Duero	D.O. specializing in reds. Famous for its vintage wines. Rosés have somewhat lost ground (whites are not authorized by the Regulating Council).
Rueda	When we were concluding this work, a change issued by the Regulating Council, subsequently repealed, allowed production of rosés and reds, in addition to the traditional whites (including sparkling wines). It is therefore one of the D.O. offering the widest range of products.
Toro	Although allowed by the Regulating Council to produce all types of wines, the specialities are the Tinta de Toro red, young wines and, increasingly, vintage wines.

Table I: *Denominaciones de Origen* in Castilla y León.

Methodology

In order to test the validity of the proposed model, we set up a panel comprising experts from different areas, all of whom have a profound knowledge of the sector. The validity and reliability of the results obtained were ensured by the diversity and know-how of the experts on the panel, as can be seen in the Table II. Many of the ten people finally chosen hold positions of responsibility in the Regulating Councils governing the same number of D.O. (specifically, Cigales, Rueda and Toro) and are considered inside observers.

These experts were sent a questionnaire, which was used as the basis for a subsequent personal interview, conducted between February and July, 2006. The questionnaire covered the last five years (2001-2005) and through a series of closed questions successively dealt with the questions included in our model. The questionnaire was structured in two main blocks (Table II):

Section 1: Environmental dynamics	- Degree to which external factors are modified. - Influence on survival and behavior of the wineries.
Section 2: Response from the wineries	- Changes in the product portfolio. - Influence of organizational characteristics and resistance to change. - Effects of change.
List of experts:	
1. Director of the Castilla y León Wine Research Facility. 2. In charge of wines and food at EXCAL (Regional Government office for promoting export). 3. President of Castilla y León Association of Sommeliers. 4. Professor of Oenology. The University of Valladolid. 5. Wine journalist in Castilla y León. 6. Commercial director of Frutos Villar Wine Company, present throughout the whole region. 7. Wine grower. 8. Technical Director- Regulating Council for D.O. Cigales wines 9. Secretary- Regulating Council for Rueda wines. 10. Manager- Regulating Council D.O. for Toro wines.	

Table II: Structure of the questionnaire and panel of experts.

Results

Section 1: Environmental dynamics

In order to analyze environmental dynamics, experts were asked to what degree a series of representative factors linked to the competitive environment in the wine industry had changed over the period studied. The responses given showed fairly unanimously that three factors had undergone the most significant changes (Table III): competition within the sector, the possibilities for exporting and technological renewal.

	Mean	SD		Mean	SD
Regulation within the sector	3.7	1.48	Competition within the sector	4.5	0.5
Social appreciation of wine	3.6	1.01	Influence of leading companies	3.2	1.32
Possibilities for exporting	4.2	0.6	Technological renewal	4.2	0.84
Size of local market	2.4	1.01	Relations with distributors	2.7	1.13
Size of national market	3.3	1	Relations with suppliers	2.8	1.09
Clients' preferences	3.4	0.66	Set of external factors	3.39	0.42
Threat from substitutes	2.5	1.38			

Table III: Level to which external factors have changed (1: little change; 5: significant).

Increased competition is not only the most outstanding factor but also the one which leads to greatest agreement. This factor mainly refers to the presence of new competitors in the sector, some of whom are from emerging countries, and who offer highly competitive prices in an increasingly wider market. As regards the other two factors, both exports (to the USA, Germany, the UK, Scandinavia, Japan, Mexico or Canada, among others) as well as investment in technology – the spread of new wine-making techniques implemented by skilled professionals-, have grown considerably over the period mentioned. At the other end of the scale, factors which have changed least over the last five years are the size of the local market and the threat from

alternative products, followed by relations with distributors and suppliers, although the spread of responses is fairly wide. Overall, external factors have undergone a change of 3.39 on the previous scale, reflecting the dynamic nature of the competitive environment in which these firms are immersed.

To what degree does the environmental dynamics impact survival and behavior of wine companies? The answer from the experts consulted is clear: modification of external factors greatly impacts wineries' survival and how they build their product portfolio. In fact, with very little dispersion in the responses, values of 4 and 3.95 respectively were reached, on a scale similar to the previous one (from 1 –little impact- to 5 –significant-). Therefore, in the experts' view, the occurrence of changes in the environment leads to certain decisions related to product portfolio composition and renewal being taken.

Amongst all the factors analyzed, observers were asked to pinpoint those which had had the greatest impact on changes in wineries' product portfolios and say whether these factors had had a positive or negative effect. Attention focused on those which had undergone the most significant changes: possibilities for exporting and technological renewal, factors of an institutional nature, with positive effects; followed by competition within the sector – an ecological factor-. The latter highlighted the negative effects to emerge from increasingly fierce competition, yet also drew attention to some positive effects to emerge in that it had forced firms to streamline their operation and remain more alert to the environment. It should be pointed out that overall it was felt that the changes which had taken place in the external factors had had more positive than negative effects on the wineries. Factors which had least influenced the decision to renew the portfolio were those which had hardly changed over the period analyzed, evidencing the fact that the more dynamic the change in the factors in the environment, the greater their capacity to provoke changes in the product portfolio and vice-versa.

In order to gain a deeper insight into the impact of environmental changes, we attempted to pinpoint what kinds of firms are most affected by them: generalist or more specialized firms or those with an intermediate range of products. However, we were unable to detect any clear pattern of responses to this question.

Section 2: Wineries' response to a changing competitive environment.

Having outlined the evolution of the environment, we turned our attention to analyzing how wine companies reacted to this shifting environment. Within a specific D.O area, we observed how although each firm builds its own portfolio, most tend to cover a wide range, as far as the possibilities allow (various types of wine, different vintages...). Starting out from the initial portfolio, we defined the following possible changes: the introduction of new types of wine (NW), eliminating certain types of wines (WE), introduction/elimination of new levels of vintages in certain types of wines (LVC), the inclusion/elimination of new varieties of grape so as to produce the usual wines (GC), brand changes (BC), minor changes in the wines on offer (MC), the introduction of products other than wines (NP) and other changes (O). Figure 2 shows the changes reported by the wineries in each D.O. considered.

Figure 2 about here

The chart shows how the change which has most often been marked in all the D.Os is brand change, closely followed by the introduction of minor changes in the wines usually offered. Indeed, wineries seem to have been particularly dynamic when it comes to launching new brands onto the market which complement the already existing ones. By doing so they aim to convey a modern image linked to quality, reflected in the carefully designed labels. Yet, it has also proved common practice, included in minor changes, to keep red wines in oak barrels for less time than is actually required for vintage wines, thus endowing them with fresh characteristics and a higher consideration. In the section dealing with small changes there are also references to the production of ecological wines.

Other types of change also highlighted to the same degree as the previous two although in only a few D.O. are: the introduction of new kinds of wine, a more deep-rooted change than those declared previously; the introduction of new levels of vintage wines and the introduction of new products other than wine, such as some from the food sector (beverages or cheeses), or even from other sectors (cosmetics), although the new activity *par excellence* is wine tourism, as has already occurred in countries such as the USA or France. At the other end of the scale, the least common

changes are linked to the type of grape used and the elimination of certain types of wine, marked only once in four of the five D.Os.

The evaluation of internal observers concurs with that of other observers when highlighting the same kinds of change, while adding a few others. This might indicate that those who are inside the governing councils perceive changes which may not prove so evident to those outside.

The results reveal how over the period analyzed different types of change in product portfolios have taken place in the wine companies in all the D.O. Rueda and Cigales, followed by Bierzo stand out for the variety of changes implemented, some of which have been profound. When evaluating the behavior of wine companies with regard to changes in their product portfolio, observers view them overall as dynamic organizations, awarding them a mean rating of 1.5 on the scale: 0 (stable/fixe); 1 (flexible) and 2 (highly dynamic). It should be highlighted that among internal observers, these companies are unanimously regarded as being highly dynamic.

Analyzing the impact of organizational characteristics when implementing changes in product portfolio was another goal of our research. The areas we explored were age, size, level of brand knowledge and tradition, origin, portfolio diversity and experience in change processes. Mean values are shown in Table IV.

	1	2	3	4	5	
The youngest		2.4				The oldest
The smallest			3.5			The largest
Those offering the most limited range of products			3.75			Those offering a wider range of products
The least well-known for their brands and tradition		2.8				The most widely known for brands and tradition
Those of family origin			3.4			Those of non-family origin
Those which had previously made changes of this kind.		2.2				Those which had not previously made changes of this kind.

Table IV: Impact of organizational characteristics on the tendency to change.

1: Far more changes situated to the left. 2: Slightly more changes on the left. 3: Similar changes in both cases. 4: Slightly more changes situated to the right. 5: Far more changes situated to the right.

We noted a tendency towards central positions in the responses which, as certain interviewees explicitly pointed out, is indicative of the fact that initiating change has been widespread and common to all kinds of wineries. A more detailed look at the results reveals certain traits: changes in product portfolio are found to a slightly higher degree in younger and relatively large, non-family companies, of a more general

nature. Changes are implemented both by companies which are well known for their brands and tradition –a highly valued resource-, and by other less well known ones. It was also noted that wineries which had previously implemented changes were also more likely to do so again.

When observers were asked as to which factors might have hindered possible changes in the range of products on offer –sources of resistance to change-, several began by pointing out the difficulty involved in the question, since the processes of change had varied greatly from one wine company to another. When evaluating obstacles from 1 to 5, a mean of 3.2 was obtained. Although responses were fairly disperse, the major handicap seemed to be deciding in which direction to change when faced with the rapid pace of a shifting environment, followed by the costs involved in interrupting the day-to-day running, and the difficulties inherent when attempting to modify values and how things are usually done. Delving more deeply into the issue of cost, some of those interviewed pointed to financial constraints as the main obstacle to implementing this kind of change. At the other end of the scale, it was surprising to note that very little importance was attached to previous changes that had failed.

The presentation of the main findings to emerge from our research concludes with the results arising from the impact of change in product portfolio. As can be seen from Table V, effects impact both financial results as well as the likelihood of survival and the acquisition of new capabilities.

	Mean	Deviation	
Sales	1.65	0.47	1: Sharp increase
Profit margin	2.3	0.62	2: Slight increase
Market share	1.7	0.62	3: No increase and no drop
Likelihood of survival	1.8	0.41	4: Slight drop
Acquiring skills and knowledge	1.5	0.68	5: Sharp drop
Total Effects	1.79	0.37	

Table V: Evaluation of the impact of change in product portfolio.

Those interviewed attributed clearly positive effects to the introduction of changes in product portfolio, one of the most striking features being that none of them felt that change had led to even a slight fall in any of the indicators. The most positive effects to emerge were related to the acquisition of new skills and knowledge, closely followed by increased sales. The indicator which yielded the lowest increase was profit margins. Although sales figures have risen as indeed has market share, this has

doubtless been offset by fiercer competition. Finally, with regard to the disruption which the process of change causes on organizational behaviour, the vast majority felt that at first this might prove significant but that it was short-lived, particularly as regards those changes which led to only minor variations in the existing portfolio.

Discussion

The present study is framed within recent works addressing the process of product portfolio renewal as a mechanism for organizational renewal, in that firms may use it to meet the challenge of a changing environment. Based on this theory, we build an analysis model linking product portfolio renewal to changes in external factors and apply it to D.O. wine companies in Castilla y León. We found that both the environment as well as firms themselves had been highly dynamic during the period analyzed vis-à-vis their product portfolios. There had been a marked increase in competition in the sector, added to which is the pressure exerted by competitors from new countries. However, thanks to a large extent to support from public administration, exports have risen sharply. This has also been helped by the improved quality of the wines due to the application of the latest technology. Experts found a clear link between changes in these and other institutional and ecological factors and in wine firms' decisions to implement changes in the product portfolios. Wine companies introduce changes in response to an evolving environment, particularly where factors linked to greater dynamism are concerned. We are thus able to confirm the main proposition of our research: namely that product portfolio renewal constitutes a tool for organizational adaptation in that it provides a response to environmental dynamics. The frequency and diversity of the changes implemented bears out these organizations' ability to adapt and rules out the hypothesis of inertia. Despite moving in a context which has witnessed certain opportunities, and contrary to what certain studies seem to indicate, wine firms have not remained idle. However, although few threats may have appeared, their intensity may have influenced the decision to adopt a policy of change.

Changes which wine companies have opted for in an effort to face up to new challenges have varied, although in all the D.O. these have mainly been linked to constantly creating new brands and the introduction of slight changes in ageing in oak barrels, without reaching vintage maturation status. Together with these changes,

some D.O. have initiated other more deep-rooted innovations, by including new types of wine or levels of vintage in their traditional portfolio, or diversifying the portfolio to embrace new activities to complement wine making, particularly wine tourism.

The differences detected among the various firms in terms of the tendency to institute changes in their product portfolio are not too significant and do not allow us to confirm Proposition 1.1. We find rather that the firms we analyzed, whilst displaying widely differing organizational patterns, evidence a general disposition to change in dynamic contexts. As is reflected in the literature, experience in this type of change does seem to favour undertaking fresh innovations. Amongst the hurdles which need to be overcome when implementing change, the main one seems to be determining which direction change should take, followed by the cost and the financial difficulties which putting these initiatives into practice entails.

Greatest agreement amongst experts is found with regard to the ensuing effects of product portfolio renewal, thus confirming proposition 1.2, since this practice impacts outcomes in many directions. It is linked to a fairly significant growth in sales and market share and, despite increasingly tough competition, helps to maintain and even boost profits slightly. It also enhances the chance of survival and, what is most striking for observers, helps in the acquisition of new skills and knowledge, thus supporting our supposition that it favours organizational renewal. It is not felt that implementing these changes causes any significant disruptions, partly because many of them do not entail major changes to the previous portfolio. Overall, these findings substantiate the positive link between changes in product portfolios in specific circumstances and outcomes, link to emerge from many of the works reviewed.

Our research provides an initial approach to exploring product portfolio renewal from the viewpoint of organizational renovation, although all of the issues raised require further and more detailed investigation. Our model may be enhanced through the inclusion of other questions, such as those related to possible variations in organizational response depending on how innovative the products included are and their different effects, or the moderating role organizational conditions might play on such effects. Considering the influence exerted by the creation of successive D.O.s on attitudes to changes would also contribute to enriching the model, as we must admit that by providing both material and institutional resources, the latter have generated an environment which has stimulated innovation.

Managerial implications.

The importance of issues related to organizational adaptation and adjustment, such as those tackled in our research, lies in their link to organizational survival, making them a focal point of managerial concern. The findings to emerge from our work throw up certain implications which may prove useful to managers. In dynamic environments, such as those in which many firms find themselves immersed, it is likely that a change in the initial external circumstances may lead to a certain lack of organizational adjustment. In this situation, managers should consider the need to implement adjustment mechanisms. One such mechanism, product portfolio renewal, has proven to be a valid alternative to help them find their way in a changing environment. Such a process of renovation is, however, closely linked to organizational capabilities, capabilities which will shape changes in the product portfolio. Renewing the product portfolio will, nevertheless, in turn lead to capabilities evolving. Therefore, any decisions on the product portfolio must keep a close watch on the competitive environment, on the one hand, and the range of organizational capabilities on the other. Managers must be fully aware of the difficulties this process entails and the effort required in seeking new products with which to meet new demands. However, it is essential that they view this as a unique opportunity to learn and update capabilities. Our research bears out these findings and highlights that firms which initiate this type of change, even when experiencing certain disruptions, may benefit from them. Therefore, particular importance should be attached to the search for new ways in which the organization's product portfolio renewal may be implemented.

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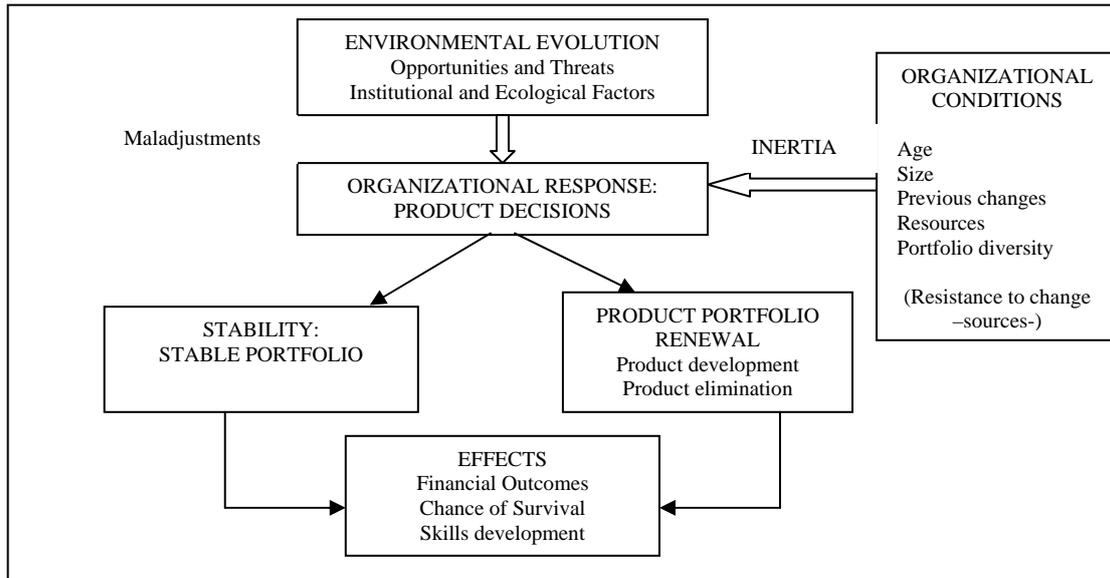


Figure 1: Model of Product Portfolio Renewal.

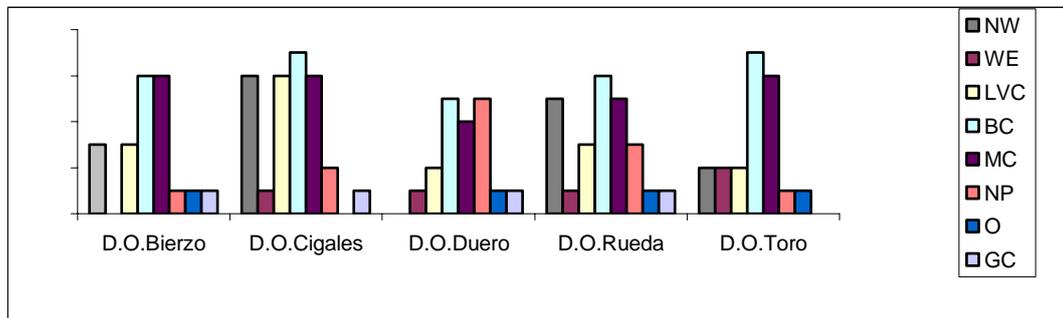


Figure 2: Types of change by D.O.