G Model RESPOL-3335; No. of Pages 14

ARTICLE IN PRESS

Research Policy xxx (2016) xxx-xxx

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Contents lists available at ScienceDirect

Research Policy

journal homepage: www.elsevier.com/locate/respol



Gradual catch up and enduring leadership in the global wine industry

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ARTICLE INFO

Article history: Received 26 March 2014 Received in revised form 11 December 2014 Accepted 7 January 2015 Available online xxx

JEL: F14 O30 Q1

Keywords: Wine industry Catch up Emerging countries Trade

ABSTRACT

The wine industry is an extremely interesting sector from a catch -up point of view because the latecomers in the international market have changed how wine is produced, sold and consumed and, in doing so, they have challenged the positions of incumbents. Until the end of the 1980s, the European countries, and particularly France and Italy, dominated the international market for wine. Subsequently, significant changes in the market, namely decreases in consumption by traditional consuming countries, the entry of new inexperienced consumers, and the increasing importance of large distribution have threatened this supremacy. Initially, the USA and Australia and later emerging countries such as Chile and South Africa, gained increasing market shares in both exported volumes and value, at the expense of incumbents. However, some of these newcomers (e.g. Australia) have shown slower growth, opening opportunities for newer entrants such as Argentina and New Zealand. At the same time, some of the incumbents (especially Italy) have innovated, challenging the leadership of France in key markets such as the USA. In this article we investigate the different catch-up cycles in the global wine sector that occurred between the 1960s and 2010, through a detailed analysis of export volumes, values and unit prices. We address issues related to the increasing share in the global market of latecomer countries and the relative decline of the incumbents, as well as possible changes in the market leadership within these two groups.

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1. Introduction

High-tech sectors such as electronics, software, pharmaceutical and telecommunications are usually the focus of catching-up studies on emerging countries. These industries are known globally for having sparked economic growth in selected countries, such as Japan and South Korea in the 1980s and 1990s, and India and China in more recent years. Nevertheless, there is little doubt that in a large number of developing countries the agro-food industry still contributes significantly to GDP. Though often depicted as low value-added and characterised by low levels of innovation, the agro-food industry is a sector with considerable opportunities for technological upgrades. UNCTAD (2009) identifies a group of dynamic and competitive middle-income countries, including Argentina, Brazil, Chile Thailand and Malaysia, which have become exporters of high quality, processed primary products. Some authors envisage an on-going process of *de-commodification*

http://dx.doi.org/10.1016/j.respol.2016.09.007 0048-7333/© 2016 Elsevier B.V. All rights reserved. of primary commodities, which is increasingly transforming standardized staples into high-quality, diversified, processed goods, with rising barriers to entry, high knowledge intensity and technological dynamism, high value-added content and export unit prices (Farinelli, 2012; Kaplinsky and Fitter, 2004; Kaplinsky, 2005; Perez et al., 2014).

Among the most dynamic primary industries is wine, which is an extremely interesting case from a catch-up point of view because the latecomers in the international market have changed how wine is produced, sold and consumed and, in doing so, they have challenged the position held by the incumbents (Giuliani et al., 2011). Until the end of the 1980s, the European countries, and particularly France and Italy, dominated the international market for wine. Subsequent changes to the market, namely decreased consumption of wine by traditional consuming countries, entry of new inexperienced consumers and the increasing importance of large distribution have threatened this supremacy. Initially the USA and Australia and later emerging countries such as Chile and South Africa gained increasing market shares in terms of exported volume and value, at the expense of the incumbents. More recently, due to the higher involvement of consumers and the increasing attention to variety and regional specificities in some market segments, the growth of some new producers, such as Australia, has

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slowed, opening opportunities for late followers such as Argentina and New Zealand as well as for incumbents (especially Italy), which have been able to innovate within their traditions (Mariani et al., 2012).

Furthermore, we can envisage new changes induced by the rapidly growing Asian markets, which currently represent a small share of global demand, but have the potential to become important wine industry actors.

In this article we investigate the different catch-up cycles occurring from 1960 to 2010 in the global wine sector, through a detailed analysis of export volumes, values and unit prices. We address issues related to the increasing share in the global market of latecomer countries, and the relative decline of the incumbents, as well as possible changes in the market leadership within these two groups.

Section 2 provides a brief account of the literature on catch up, with a focus on the wine industry since the 1960s. Section 3 presents an analysis of the evolution of the industry based on trade data. Section 4 provides a detailed analysis of the entry of the New World (NW) producers, explaining how market changes opened a window of opportunity, and induced transformations to the innovation and knowledge base and the institutional settings. Section 5 discusses the resurgence of Old Word (OW)¹ countries in the international market and Section 6 examines the rise of new actors among the latecomers. Section 7 proposes a new cycle following the emergence of Asia as both a rapidly growing market and a new source of production. Section 8 concludes.

2. The theoretical framework

2.1. Catch up and windows of opportunity

According to Abramovitz (1986), catch up is a process going far beyond the mere adoption of new technologies, and depends on the ability of countries to build some 'technological congruence' with leaders as well as on their own 'social capabilities'. The first concept indicates the conditions that latecomers need to share, at least to a certain degree, with leaders in order to adopt their models. These might refer to economic factors such as market size, availability of inputs and consumer tastes. The second concept refers to issues such as technical competence, education infrastructure and the broader institutions supporting the building up of technological capabilities.

Following Abramovitz's pioneering contribution, the literature on innovation systems in developing countries has shifted the emphasis in the catch-up debate from resource endowments and comparative advantages, to institutional variables, capabilities, and the dynamic creation of competitive advantage (Lundvall et al., 2009). In this literature, catch up is more than simply copying new technologies; it requires creative adaptation and innovation along and beyond the pathways followed by forerunners. Therefore, in their catching up effort, latecomers do not simply follow the technological paths of the advanced countries; they may skip some stages or create their own individual paths (Lee and Lim, 2001).

Late entrants build on existing knowledge, but eventually depart from it to follow their own development trajectory. Perez and Soete (1998) and Lee and Malerba (2016) suggest that departure occurs with the opening of windows of opportunity. These opportunities may emerge as a result of changes to the prevailing techno-economic paradigm, because of a business downturn cycle characterized by abrupt changes in market demand and by the rise of new consumers, or because of major modifications in

government regulations or policy interventions. At such turning points, overtaking becomes possible because the incumbents are locked into existing technologies, management practices, labour skills, markets and institutional routines. The burden of previous investments makes it difficult for them to appreciate the changes taking place in the external environment and to endorse them. This eventually hampers and slows the adoption of new technologies, adaptation to new market characteristics, new regulations and institutional frameworks of the leaders, while for countries not constrained by the old technology, traditional markets and the related institutional context, the opportunities abound.

Given the existence of windows of opportunity, a variety of catch-up experiences can be identified across countries and sectors. The approach based on the sectoral systems of innovation provides a useful framework for an empirical investigation of this experience. It stresses the need to take account of the coevolution of markets, technologies, production modes and organizational forms whose determinants and influences cut across national boundaries, and also idiosyncratic elements that might explain the capacity of specific latecomers to take advantage of technological and/or market opportunities (Malerba, 2002; Malerba and Mani, 2009). A sectoral perspective is relevant to analyse the determinants of the catch-up process because it identifies the different key elements that are specific to each industry, and emphasizes the international, national and local conditions that may amplify or hinder sector-specific evolutionary mechanisms.

This is the perspective adopted in this article to investigate developments in the global wine industry, which represent a case of catch up in which the latecomers follow a path-creating strategy and the incumbents, instead of disappearing, react to the challenge and creatively adapt to the new emerging path.

2.2. Catch up in the wine industry

In the wine industry, catch up began in the mid-1990s when latecomers, such as Australia and USA, followed by emerging economies including Argentina, Chile and South Africa, took advantage of changing needs in the international market. These countries experimented with new pathways of technological modernization, product standardization and market innovations, which mostly diverged from the established business models characterizing the OW countries. In contrast to what Lee and Ki (2016) envisage for a very diverse sector such as the steel industry, in the wine case, the initial competitive advantage of latecomers was not primarily cost, but rather innovation in products and processes and the establishment of a conducive institutional set up (Giuliani et al., 2011). Cost advantages did play a role, although complementary to innovation and technological change in successive stages of catch up, as firms from latecomer countries consolidated their positions in the international market. Wine production in countries such as Australia, Chile and South Africa, benefited from the availability of inputs (e.g. land), economies of scale and, in some cases, cheap labour. Successively, the new paradigm in the wine industry, based on a market-driven scientific approach to wine production, influenced the industry knowledge base and the relevant industry actors (e.g. universities, regulatory bodies, companies) among OW producers. In the wine industry, in contrast to Lee and Malerba's (2016) prediction that no one lasts forever, and despite the decline in their market shares over the last 30 years, the incumbents (i.e. the top EU producers) have been able to sustain their leadership.

To understand why in this particular industry, newcomers are still at a stage of a gradual catch up and the incumbents have not lost their market leadership, we propose several idiosyncratic reasons. First and most importantly, the wine industry, like other agricultural sectors, can be classified as a typical 'supplier dominated' sector (Pavitt, 1984), characterized by slow and gradual technical

Please cite this article in press as: Morrison, A., Rabellotti, R., Gradual catch up and enduring leadership in the global wine industry. Res. Policy (2016), http://dx.doi.org/10.1016/j.respol.2016.09.007

¹ The terms *Old World* and *New World* are commonly used to distinguish traditional European wine producers and latecomers in the international market.

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