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Innovation under the protected label of origin: heritage, influence and expanding horizons in Cognac

Jerker Moodysson (jerker.moodysson@circle.lu.se)
CIRCLE, Lund University, Sweden

Lionel Sack (lionel.sack@circle.lu.se)
CIRCLE, Lund University, Sweden

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Centre for Innovation, Research and Competence in the Learning Economy (CIRCLE)
Lund University
P.O. Box 117, Sölvegatan 16, S-221 00 Lund, SWEDEN
http://www.circle.lu.se/publications

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ABSTRACT

Previous research has shown that firms react differently to the same institutional configurations due to their different backgrounds. This study examines a regional economy in France in which 300 firms are operating under the same framework conditions and have done so over a long period. From observations we argue that even when all previously respected factors and backgrounds are identical between firms, their responses to the institutional configuration will diverge and bring them on different development trajectories. We identify four distinct groups of observed trajectories, and argue for specific endogenous and exogenous factors that make firms from those groups within the institutional configuration react differently. The observed different responses to the established institutional framework are likely to be increasingly visible at times of or around major external change events affecting the industry as a whole (such as global financial crises, emergence or decline of markets etc.)

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Abstract

Previous research has shown that firms react differently to the same institutional configurations due to their different backgrounds. This study examines a regional economy in France in which 300 firms are operating under the same framework conditions and have done so over a long period. From observations we argue that even when all previously respected factors and backgrounds are identical between firms, their responses to the institutional configuration will diverge and bring them on different development trajectories. We identify four distinct groups of observed trajectories, and argue for specific endogenous and exogenous factors that make firms from those groups within the institutional configuration react differently. The observed different responses to the established institutional framework are likely to be increasingly visible at times of or around major external change events affecting the industry as a whole (such as global financial crises, emergence or decline of markets etc.).

Introduction

It is fairly well documented that firms (and other actors) in regional economies are likely to show different innovative responses to the same institutional configurations, as their individual challenges and constraints are highly diverse (Moodysson and Zukauskaite, 2012; Zukauskaite and Moodysson, 2013). These differences can in large parts be traced back to their variety of generic backgrounds (e.g. type of industry, size and dominant knowledge base). Among the most established explanations to differences in innovative capacity and modes of innovation is the sectoral approach (e.g. Pavitt, 2005; Malerba, 1996, 2002) in which industries are classified into certain categories based on some central characteristics, usually focusing on the output side (i.e. their core product). Recent research has however shown in a convincing way that such taxonomy-based classifications are less precise in the sense that modes of innovation, and thereby also the needs for supportive innovation policies and the inclinations and capacities to respond to changed institutional conditions, tends to differ substantially also between firms within the exact same sector and location (Leiponen and Dreijer, 2007; Shrolec and Verspagen, 2012)[1]. There is thus a need for alternative explanations to differences with regard to modes of innovation and firms' responses to institutional configurations and innovation policy measures in regional economies.

This paper takes on this explanatory challenge and analyzes how firms within the same industry with the same geographical backgrounds and the exact same institutional framework reveal a variety of different responses to external change events. The paper draws upon observations from the beverage industry around the town of Cognac in France, where strict and static regulations of production have been established for firms within the limited geographical area since the turn of the 19th century. These

[1] Their studies also show that there are large similarities between firms classified into different sectors, but this lies outside the scope of this paper.

regulations have created a highly homogeneous regional and industrial context, enforcing and enhancing distinct specialization by providing clear institutional boundaries for embedded firms. Firms have since the first establishment of explicit regulations been required to respect the set production laws in order for their products to be approved for the protected label of origin. In the past century however, a variety of developments among firms and inter-firm organizations within this setting has been observed. While the largest share of local firms stick to what they are renowned for, enhance the existing product within given regulatory boundaries and focus on their traditional core capabilities, certain counterparts in the system have diverged from traditional production and created new activities drawing upon recombination of local knowledge while operating outside (or at the fringe) of the traditional regulatory framework. Thus, while the majority of firms tend to contribute to retaining a conservative culture, some actors break with expected patterns and respond to initiatives and impulses aiming for renewal.

We ask ourselves why this is the case and what distinguishes those that initiate, stimulate and respond to change and renewal from those that do not. Two related research questions are addressed: (1) what characterizes the trajectories of firms affected by the institutional framework in Cognac over time, (2) what are the determinants for the firms to evolve along the framework and what makes some of them diverge from the established institutional configuration? Main attention is paid to comparisons between development of conformant and diverging firms. The cases are analyzed and specified group-wise representing four types of trajectories. The classification of trajectories is based on both qualitative and quantitative measures, by which the scope becomes more comprehensible. Besides being an interesting case in its own right, the Cognac region represents a laboratory-like illustration of a (regional) institutional framework from which insights on the preconditions for institutional dynamics could be derived and applied on studies of other industries and regional economies.

We draw on 300 cases of firms and entrepreneurs located in Cognac, of which samples have been selected according to their backgrounds and developments over the past decades. The firms are analyzed through a biographical approach in which their development trajectories are decomposed and described. A large bulk of traditional Cognac producers as well as (much fewer) new entrants with diverging production and development are included in the portfolio of cases. The cases are cross-compared in search for commonalities and differences and grouped into categories based in how they respond to (and possibly influence) the existing institutional configuration. Method-wise a combination of interviews, focus groups, document studies and statistical analysis is applied.

Conceptual framework

Institutions and regional economies

In the most basic definition, institutions are understood as the general behavioral guidelines in social systems, which influence and define the action of individuals and organizations in relation to each other in any society (North, 2006). Institutions thereby provide stability, transparency and predictability in interpersonal and inter-organizational relations and trade, but they also enable change and renewal to take place. Even though some institutions may appear as more or less globally uniform (e.g. common sense norms on honesty, law abidance etc.), there are studies indicating that some institutions with strongest influence on innovative capacity of firms and entrepreneurs are nationally, regionally and sometimes even sectorally specific (Moodysson and Zukauskaite, 2012). At the same time as such sectoral and geographical specificity can be identified, there are also strong arguments and indications claiming that actors tend to respond differently to the same set of regional institutions, even if they belong to the same sector and thereby share many such key characteristics (Shrolec and Verspagen, 2012).

The first step towards specifying which institutions matter in regional economies, and in what way similar actors may react differently to such institutions, would be to clarify the logical composition of an institutional framework and establish an “internal hierarchy” between the various institutional pillars composing the institutional framework of the regional economy. Scott (2008) specifies three interdependent pillars of institutions under the labels regulatory, normative and cultural-cognitive institutions. Regulatory institutions are legally sanctioned and most often territorially confined. Instrumentality and conformity to rules are the main coercive mechanisms. Normative institutions are morally governed and sustained trough appropriateness and social obligations in ongoing systems of social relations (such as families, communities, business networks, etc.). These are not necessarily territorially confined, but maintained through continuous interaction in networks and other forms of social groups, with varying spatial configuration. Cultural-cognitive institutions are sustained by the logic of orthodoxy and taken-for-grantedness. Similar to normative institutions, the territorial dimension of these institutions are not always possible to specify (Scott, 2008, p. 57). Some would argue that the cultural-cognitive dimension is the “deepest”, since it rests on preconscious, profoundly accepted understandings within their institutional layer (and surrounding social context). It is however important to note that the regulatory dimension in some respects has very strong coercive power and might, thus, shape the normative and cognitive dimensions, at least when, as in the case presented in this study, the regulatory dimension remains stable through many generations.

Institutions may either constrain or facilitate innovativeness (Hollingsworth, 2000). In a previous paper, Moodysson and Sack (2013) provide a reflection upon this double-edged attribute of institutions: they argue that constraining effects of restrictive institutions in the short term may lead to enabling effects for innovation in the long run. Based on the logics of conformity to rules (Scott, 2008), regulative institutions can be seen as factors regulating what is not allowed. Likewise, through the logics of appropriateness and obligations, norms very much impose constraints on social behavior. Cultural-cognitive institutions, drawing on the logics of orthodoxy and taken-for-grantedness, also largely work as conserving selection mechanisms. Yet, at the same time, they encourage and enable social action, and they can therefore explain renewal as much as lack of renewal (Scott 2008). As stressed by Gertler (2010) there is a dangerous tendency to just 'read off' individual and organizational behavior from institutional structures, while neglecting individual and organizational agency in response to the existing institutional configuration. Also Staber (2010, p. 222) highlights the risk of "relegating the human actor to a residual category". There are logical arguments supporting those positions. Without a deeper understanding of actors' different reactions to influence institutional persistence and change, the usefulness of institutional approaches for advising policy will be limited.

When analyzing institutions and their role for economic change, Strambach (2010) argues that the 'interpretative flexibility' differs with regard to different kinds of institutions, and that differences in this respect are defined by the forms and strength of sanctions for deviation. Institutions with fixed and explicit enforcement characteristics such as legal sanctions provide less interpretive flexibility, while institutions primarily enforced by social obligation provide a wider room for flexible interpretation. This would indicate that institutional reconfiguration and reinterpretation would most likely start with the normative dimension. It would also indicate that such reconfiguration is more easily initiated by outsiders or newcomers in a community since these have less at stake in the established structure. They have therefore less to risk by challenging established normative institutions. However, apart from these obvious conclusions, the question of individual differences within actor categories (e.g. new entrants vs.

incumbent firms, natives vs. foreigners etc.) still remains unanswered (as discussed by e.g. Rodriguez-Pose and Von Berlepsch 2012, Rodriguez-Pose 2013, Isaksen [forthcoming]).

Strambach (2012) also differentiates between cumulative and combinatorial dynamics in the process of institutional change and in respect to the development of knowledge and changed practices among firms and other organisations. While in cumulative dynamics new knowledge and practices build on further development of existing knowledge and already established institutional interpretations (e.g. routines), combinatory dynamics are characterized by the creation, exploitation and new combinations of knowledge and practices that are sourced from heterogeneous institutional configurations. Those configurations often have their origin in different technological, sectoral and regional contexts. In this framework, cumulative dynamics thus largely stand for specialization and standardization, while combinatory dynamics implies more radically changed practices which may lead to diversification and new path creation.

Inspired by previous research, the study reported in this paper specifically addresses the question what actor-specific (individual) characteristics influences the inclination and ability to comply with or diverge from long established regulatory, normative and cognitive institutions in a traditionally homogeneous regional economy. The analysis reveals how evolution, renewal and stability in Cognac is carried out and shaped by different actors, all belonging to the same industrial sector and geographic location. However they reveal some crucial differences in individual characteristics, social positions and history, which can contribute to the explanation of pursued trajectories as responses to the intended (and unintended) incentives provided by the institutional framework.

Incentives and various responses to institutions

To reach a better understanding of actors' differences with regard to their reactions to and influence on persistence and change, a conceptual framework is based on previous research in organization studies and new institutional theory (Scott, 2001; DiMaggio, 1988; Battilana, 2009; Mahoney and Thelen, 2010). Some of these theories have had an influence also in economic geography, but it seems like they still largely represent a parallel track from which there is unused potential for learning. While there is a stream of literature in innovation studies and economic geography ascribing institutions high explanatory value for economic behavior, "the actual actors have remained in the shadows" (Sotarauta and Pulkkinen, 2011, p. 97).

Before proceeding with a discussion on individual differences in reactions to (and potential influence on) persistence and change, an overview of various modes of actions for influencing and relating to institutional change would be useful. Mahoney and Thelen (2010, p. 16) specify four ideal-typical situations of how agents influence and relate to institutional change and how they adapt their practices due to changed preconditions. *Displacement* refers to situations when existing institutions are replaced with new ones. These are usually slow-moving processes, but radical reforms may also exist for instance triggered by exogenous shocks, even if this is rare. More common than radical displacement are situations of *layering*, when new institutions are added to existing ones. This may eventually lead to displacement through incremental selection processes. A third situation of institutional change is referred to as *drift,* when institutions remain the same but external conditions influence their workings and consequences. Finally, *conversion* refers to situations when institutions remain formally the same but when they are reinterpreted and thus their impact on behavior changes. All these situations will eventually lead to institutional change, unless counterforces of preservation also are in place.

The next question is then what actor-specific characteristics determine who will occupy the role of change agents and with what consequences for the community and its various actors. While this issue, with some exceptions (e.g. Maskell, 2007; Sotarauta and Pulkkinen, 2011; Gertler, 2010), has been largely neglected in economic geography, it has been a large topic for discussion in organization studies and new institutional theory. According to DiMaggio (1988) new institutions emerge when organized actors with sufficient resources identify new opportunities. If existing institutions are perceived as constraints for realizing such opportunities, they will start acting as entrepreneurs (Scott, 1987; Meyer & Rowan, 1977). While Mahoney and Thelen (2010) mainly base their elaboration on different individual incentives, Battilana (2006) seeks explanations in actors' and organizations' different positions in society, and their different degree of "institutional embeddedness". While these two perspectives cannot be completely separated, we would argue that actors' position in society, and their institutional embeddedness, is likely to influence their incentives for contributing to institutional change or preservation. We thus consider Mahoney and Thelen's (2010) categorization of various change agents to be largely a consequence of their positions as specified by Battilana (2006).

Battillana (2006) raises a number of propositions on inclinations and abilities to act as change agents. First, focusing on organizations' position in networks, she argues that a high status in a community also implies a high degree of institutional embeddedness, which may imply preservation of existing institutions. Lower status implies lower degree of embeddedness, which in turn would imply a higher inclination to contribute to change because these actors are in a challenger position and have less to lose by social deviance. A similar argument is made with regard to social group status. High social group status would indeed imply influence and possibility to contribute to change, while it also implies high stakes in the current situation. However, this is only part of the proposition. In addition to organizational status and individual position in social groups, individuals' formal and informal position in organizational hierarchy and the degree to which they are embedded in networks with individuals at other positions would also have an impact. Finally, the degree of inter-organizational mobility is expected to influence inclination to contribute to institutional change positively, while the degree of stability with regard to position is assumed to have a negative impact on institutional entrepreneurship (Battilana, 2006).

To sum up and synthesize, one could argue that one precondition for institutional entrepreneurship in the first place is a certain degree of dissatisfaction with the current state of affairs. Actors who do well under the current institutional framework, to whom the institutional framework even serves as an asset, are not very likely to contribute to deviation. Rather they would most likely aim for continuous preservation. Furthermore, actors who are firmly established (embedded) in the community and occupy positions in the higher level of organizational and societal hierarchies might have better possibilities of achieving an impact, but they also have more to lose by doing so, which in most cases would indicate that they aim for at least some degree of preservation rather than change. This is what Battilana and D'Aunno (2009) refer to as the paradox of embedded agency (also discussed e.g. by Garud et al. 2007, Green et al 2009). Linking this with Strambach's (2012) conceptualization of the coevolution of institutions and innovation, we assume that combinatorial dynamics – which are crucial for renewal and diversification – are foremost based on initiatives and activities by actors in the mid layers of organizational hierarchies and social groups. A certain degree of influence and power is necessary, but also a certain degree of dissatisfaction with the current situation and incentives to embrace alternative interpretations and exploit opportunities for divergence from the mainstream. We also assume that such combinatorial dynamics require, or at least are accentuated by, exogenous factors affecting the regional economic reality at large (such as globalization, financial crises, environmental concerns, prices on raw material etc).

In the following, those assumptions are assessed on the change agents in Cognac, as well as on those actors and processes that strive for preservation of the current institutional framework

Research design and methods

Reflections on data

The firms in Cognac have a strong common history and are connected by numerous inter-firm organizations which have kept fairly good track of developments over time. Ideally, one could thus compare different quantitative measures (turnover, number of employees, financial performance) of involved firms over time and deduce valuable findings from those in order to answer parts of the research question. In reality however, Cognac and its institutional context have been more stable than many measurable external (national) and internal factors in the observed time period: currencies have changed and disappeared, firms have been merged with counterparts, have given birth to new firms under different names or have been acquired by international corporations. Output measures of local firms are sometimes kept in numbers of bottles produced, in amount of hectoliters distilled or in barrels shipped – depending on the type of market they have been operating on. Comparing those measures in a linear way in order to trace trajectories of firms would in many cases result in explanatory nonsense.

What we found more valuable was to use combinations of available quantitative and qualitative data about firms in order to get a solid overview over the setting today and developments throughout the past. By triangulating different data sources (e.g. current and past financial company outputs, datasets of inter-firm organizations, and interviews with current and previous managers) we could understand their status quo, trace important events at several points in the past, and relate those to the original background of the firm. This method allowed us to define four qualitatively dissimilar groups of development trajectories within the local setting. Those groups not all-encompassing or definite but they do serve as solid exemplification of diverse developments among local firms that have – in the observed time period – been affected by and influenced the same institutional configuration.

Given this selection process some main characteristics were similar within the groups, such as types of strategic positioning, organizational structures, size and (export) market orientation. Firms within those groups have thus had similar challenges and opportunities at different points in time during the observed period. In search for explanations to their various development trajectories, despite those similarities, we assessed a selection of firms in more detail through tracing individual biographies of firms' development trajectories within those groups. The biographies are based on data collected through in-depth interviews with managers and employees that had fairly good insight in the history of their firms (and often of their counterparts) and cross-verified through document studies and interviews with other actors in the region (such as representatives for business and local policy organizations). Our main focus was set on how the firm evolved within the given time period, in what way this development was similar to other firms in the setting and, importantly, on which dimensions it was different. We then asked where the differences emerged from, whether they were triggered by specific external events, and which specific constellations within the firm or the local setting led them to the observed action/reaction.

What we found particularly interesting were periods of major change events in the past, of which all local actors were concerned simultaneously. Such events are for instance major global economic shifts like the Oil Crisis of 1974, the East Asian crisis 1991 or the recent rapid growth of upper middle classes in China and East Asia. All of those had significant impact on Cognac export rates and put firms into similar struggles or opportunities. As firms in Cognac are often family driven and many developments in the local setting are strongly connected to each other (by competition and cooperation), local actors keep good memory of such events. Despite different strategic consequences for firms in the different situations, the replies of our respondents seemed relatively coherent to the groups we created, and allowed us to trace biographies along the institutional configuration over a reasonable amount of time.

Analysis

The Cognac wine growing area is located in the Poitou-Charentes region in Western France and has a diameter of roughly 150 km. The majority of firms are concentrated in the center of the area around three small towns of which one carries the name ‘Cognac’. Today, the region hosts about 300 major trade firms and distilleries, and a large number of vineyards (about 5000) supplying the grapes for distillation. The product ‘Cognac’ was developed in the 17th century by Nordic and British traders in cooperation with local vineyards, cooperage firms and first distilleries. From its very beginning, it was exported mainly to the countries of origin of the traders (Great Britain, Netherlands, and Scandinavia) and to their regular trade destinations (mainly North America, Far East, British and Dutch colonies).

To ensure coherent quality, production norms were developed and imposed by the trade firms. They did so by comparing the outcomes of different production techniques and using the best practice as guidelines for new vineyards, distilleries and aging cellars. Although this is an ongoing process in nuances even today, the main institutional configuration for local firms was made explicit in 1909, when the label Cognac was one of the first French alimentary products to receive formal AOC protection (‘Appellation d’Origine Contrôlée’, ENG: ‘designated label of origin’). Since that year, firms were by regulation forced to source their grapes from the limited growing area around Cognac, and to process them according to clearly defined production stages. Those are as detailed in their requirements as defining the exact material and shape of the distilling pots, the origin of the wood used for the barrels or the time periods of the year at which distillation of the liquid is allowed. Those measures are to ensure quality of the final product, but are certainly not in favor of efficient production or innovation. By this regulation, firms in the area have been operating within a highly homogenous and static institutional configuration over a long time period. Despite – or thanks to – their negative implications for “efficient” production or innovation, those regulations are seen as one of the main factors behind the success of the cognac product. As stated by one of the managers interviewed in this study:

> "The AOC protection from 1909 is the best thing that could ever happen to Cognac. Those that took the decision at the time were very visionary if they understood the full extent and consequences of what they had created. Had there been no protection of the label, many things would have developed very differently. This old regulation still has a strong impact on the competitiveness of the local industry today."

However, the interpretation of this regulation and its consequences has evolved. Some actors have largely served as preservers, while others have served as change agents. In the following we analyze those different trajectories in relation to the given institutional context. From the observed cases we find the following factors most relevant for explaining diverging trajectories between the identified groups of firms:

- Firm's position in 'system hierarchy'
- Strategic push and pull by new opportunities
- Managerial drive from within the firms
- Serendipity / chance events

In line with the main arguments by Battilana (2006) and Mahoney and Thelen (2010) it seems that actors at the top of the hierarchies in the industry, those who can exercise most institutional power on others due to their hierarchical position and size, are those that contribute most to preservation of status quo, while the small and less powerful agents are those that engage in reinterpretation of institutions. In Cognac it is a handful of large players that impose the production laws on all other firms, as they have power over the regulatory boards. Smaller firms may feel disadvantaged in that game, although they know that they are strongly dependent on the large players (e.g. for developing and protecting the 'brand' *Cognac* on foreign markets over the past centuries).

This unbalanced power distribution creates incentives for the small and less powerful actors to seek stability by other means. At least three possible reactions can be identified: (a) they obey the decisions of the large players and stick to the setting; (b) they try to cooperate with peers that are in similar situations in order to gain power in 'institutional negotiations', or even create new institutional layers; (c) they may reinterpret existing institutions in order to overcome the situation. Institutional displacement is not an incentive, neither for the large and powerful actors, nor for the smaller and more dependent actors. The reason for this is that the formal regulation very much represents the identity of cognac and has built a distinct competitive advantage towards outsiders; without this regulation all actors would lose a natural monopoly they have built up over centuries. However, while some players thus would strive for complete institutional preservation, others would strive for either layering, drift or conversion (Mahoney and Thelen, 2010).

The organizational slack created by the enforced time limit of the distilling period is an example of a concrete opportunity for entrepreneurs aiming for drift or conversion. Professional distilleries that intend to use their production capacity and workforce throughout the year cannot do so, as it is forbidden by established regulations. They can only distill in the period from harvest to march 31. This obstacle has been used as an enabler by actors trying to apply their knowledge on related but unregulated products during the rest of the year.

An example and illustration of layering is the increasing importance of large international conglomerates which implies that firms are operating in two distinct institutional layers: the local and the corporate. While their local position would encourage them to impose institutions in a certain (conservative or reinforcing) way, the strategic intent of the owning MNC may be disconnected from this thinking. One of the interviewees, a communication manager between one of the MNCs and a subordinate brand explained:

> "Some of the most important shifts in our business come along when the opinion or leadership of the corporate headquarters change. In the early 1990s for instance, it was decided by our relatively new owners to vertically disintegrate all the brands of the corporation and make them pure production units. This meant that strategic decision making about our brand and marketing, but also about many other issues in our daily activity was moved away from the local site. We increasingly had to adjust to decisions that were in line with all other units within the corporation, but that were not always compatible with the issues that we need to respect regarding the specificities of our own product."

This type of divergence would eventually lead to drift and conversion, since these actors are increasingly influenced by alternative normative and cognitive impulses that are taking place in the entire industry. However, as stated above, since these large companies also have the highest stakes in preserving the status quo of the current institutional configuration in Cognac, there are little signs of such layering promoting change and renewal. On the contrary, local firms which are not part of conglomerates have also shown tendencies of intentionally creating new institutional layers: initially driven by packaging firms in the region, there have been attempts to support the new wave of product diversification in different dimensions.

Besides the hierarchical position or strategic pressures of firms in their industries, we argue that the internal organizational structure and personal drive of managers will play a strong role in the interpretation and use of existing institutional configuration. Although firms are in corresponding situations in terms of hierarchies and strategic limitations, only some engage in the shift or conversion of institutions. We argue that the background of the managers and the access to tools and knowledge they have within their firms will be a determinant for those diverging developments. Some firms in Cognac have shown a repeated desire for change, while others seem to prefer stability and continuity. This may be a consequence of their education or general background – taken for granted that this type of disposition is not purely genetic. In this sense it seems important to see the determinants not only on system-level observations, but to break them down to individual characteristics of firms and their management.

It seems like managers which have abilities that are unexploited for institutional constraints are more inclined to act upon the established institutional configuration. Illustrations of this are the consequences of when the four largest Cognac firms were bought out by global conglomerates from the beverage industry between the 1960s and 1980s. At this time all the sales and marketing departments that were previously included in company headquarters on site were moved to the respective corporate headquarters in Paris or elsewhere. This forced a large workforce in Cognac to either pursue their career in the new headquarters or to do something else locally. Many of those employees that followed the latter path are today in managing positions of the medium sized local firms that have since the 1990s been innovating and involved in new product development. Others have returned from duties in food and beverage companies abroad and gained important experience that could not be fully exploited in the regulatory frame of the Cognac industry. Nearly all initiating cases of conversion or drift can be tracked back to such impulses of spinoff professionals, local-returners or entirely new foreign entrants.

Below follows a more detailed overview of four different development trajectories.

Trajectory A: **Conservative Cognac trading firms with no or little reorganization**

To trajectory A we assigned firms that have been sticking to the conservative production of cognac until today. Those firms are still mainly family-owned and generally of rather small size (5-50 employees).Most of them operate on a handful of national export markets and do not have as broad visibility as firms in group B (below). By their size and hierarchical position in the local system, which is inferior in terms of decision-making to that of the much larger corporate-owned brands, they do not have much direct influence on the institutional configuration. Some of them have previously had more relative stake in the local system, while many have grown along general cognac sales, experiencing the effects of alternating demand on export markets. Over the past century, the firms in group A have been operating quite strictly along the lines of the imposed institutional framework, and were by their (hierarchical) position critically exposed to institutional decisions of the leading firms in the setting (group B). Small shifts on export markets, which the larger firms can compensate for due to their size and corporate back-up, have heavy effects on firms in this group. For this reason, it has been common that firms that would be assigned to group A have died in previous demand and supply crises, while new ones have emerged. This is also due to the industry-specific phenomenon of heavy long-term investments in the aging process of the cognac. More than half of the firms' structural funds are often tied to raw materials that are being bought with a selling horizon of 10-15 years. A drastic reduction in the number of cognac brands can, for instance, be observed for the global economic crises of 1929 and 1974, and to some extent for more localized crises as that of Japan and East Asia in the early 1990s, when demand dropped and the value of stored cognac collapsed within few years.

Apart from the exposure to larger counterparts, firms in group A have developed qualities which make them competitive in the niches they inhabit. They have developed refined contract and value chain systems with their local suppliers, with less vertical integration of some of the production steps. In terms of production, they profit from collective scale advantages by using professional distilleries or storage capacities. Even a central trade organization for cognac has been founded in order to stabilize trade prices mainly for this group of firms. As a result, the firms have fewer investments in-house and can put more effort on their core strategic activities: maintaining and enhancing their position on niche export markets and controlling for product quality. As they are not so much relying on scale in production, they can use small vintages or special reserves for their final products. As a result, their product quality is often rated better than that of larger counterparts. The firms in Group A are quite large in numbers, but only produce less than 20% of the total volumes exported.

The above are all examples for institutional layering within the system. The firms in group A are doing their best given the institutional framework (innovate in the non-constrained organizational and market dimensions). They do not transform or reinterpret the institutional configuration as such, but create internal institutional layers in order to compete on the basis of their traditional core competences. This is partly due to external hierarchies and scale games which arise and become a competitive factor in this type of preconfigured institutional setting.

Trajectory B: Conservative Cognac trading firms significantly reorganized

Just as firms in group A, those in trajectory B have existed long before the production rules were established in 1909. They descend from trading firms that were established in the 18^{th} and 19^{th} centuries and endured many of the crises before the institutional configuration (AOC) was formalized. They were among those local firms that were able to gain significant market share on the largest export markets while other cognac firms stagnated or disappeared in returning crises. Firms generally disappeared not because they were selling the wrong product (as everyone was producing approximately the same), but much more commonly due to too heavy investments in cognac storage before times of demand crisis.

With growth, firms in group B developed well organized sales and marketing departments, disconnected many of the operations from their original founding families, and built up sales offices on their core export markets. This was their articulate reaction to the predefined institutional configuration (no product or process innovation allowed; focus of all investments on markets and organizational development). They stuck to the rules and norms in the setting, and put in place measures to improve their own positioning on export markets. Consequently, they put much effort on gaining market power. This was mainly doable by reorganizing their own organizational structure and integrating in international conglomerates. By their size they gained legitimacy and became leaders within the region. They also made important contributions on the large export markets, where they promoted the category of 'Cognac', a development of which all firms are still strongly profiting from today.

The firms in group B have sizes between 100 and 800 employees. While the firms had interest in a specific institutional configuration in the local context, the norms and cognitive perceptions in their owning corporations diverged, and sometimes forced them to adapt their strategies to the interests of the corporate owners. The shift in ownership structure also had an impact on the workforce and on the tasks in the local branches. Marketing and sales departments with their market knowledge and creativity were moved to the corporate headquarters in Paris or other international cities, while the local part of the firms became mainly responsible for production and quality control. In total, the few firms in group B are today responsible for more than 80% of all 'cognac' labeled volumes shipped from the region and are the clear leaders in terms of size and institutional power.

The firms in group B reorganized and integrated in conglomerates because they had become large; but they only became large due to previous size and network advantages. This brings up an issue that seems likely to emerge in such a confined institutional configuration. When product and process innovation are restricted, the flexibility that small firms often have in terms of innovation becomes less important.

Simultaneously it becomes increasingly important to dominate markets and to be able to undergo organizational change within the firm, which only the larger players within the system can achieve. In this way, the strict institutional configuration will lead to 'scale games', in which slightly larger firms will grow even more, while slightly smaller firms will stagnate or try to establish themselves in unexploited niche markets.

Trajectory C: Cognac firms and suppliers diversifying into <u>related</u> products and technologies

Group C is mainly composed of firms that have been trading or distilling cognac for the export brands in groups A and B. Those firms have slightly diversified from traditional cognac production at several occasions in the past, to then clearly diversify in a distinct movement after the emergence of Grey Goose, a local lead case of product innovation in the 1990s.

Larger distilleries and raw material traders only emerged in the cognac system with time. Previously, it was the vineyards that harvested grapes in spring and summer and distilled cognac in small batches in winter. For this, the vintners had to acquire the knowledge and production material for two very distinct professions which required highly different skills. The vineyards were previously also responsible for trading the produced liquid with the cognac brands which was not an easy task due to the interdependent nature of the local industry, and the need for scale. As a consequence, firms emerged that were able to specialize on the distilling and trading tasks. This was also encouraged by the large cognac firms, as it allowed for scale advantages in production and easier quality control. Most of the large cognac brands vertically integrated large distilleries that were either full part of the mother company, or tied to them with very strict contracts. Those contracts guaranteed the distilleries fairly stable prices at times of crisis.

The distilleries working with small-sized cognac firms (those of group A) had much weaker, but more flexible trade ties. This allowed them to balance the lack of stability that one single small firm could provide, and ideally allowed them to be resilient at times of crisis on one single market. But the nature of the contracts still exposed them very much to larger fluctuations on the export markets. At times of crisis they had oversupply of raw material from the vineyards, and on the other hand demand from the trading brands was low. As a reaction, those firms were, in some periods mainly since the 1980s, the main agents to sell overproduction labeled as 'brandy'.[2] The distilleries were able to do so if they were not directly tied to large cognac brands with strong institutional (and contractual) power. One of the interviewed firms in the sample was tied to a leading cognac firm when trying to diversify in the 1980s. This diversification was not appreciated by the contracting cognac brand and led to an immediate trade rupture which the firm suffered from for several years.

A further institutional pressure for the firms in group A-C is that by cognac regulation they cannot use their production capacity throughout the year. Cognac production laws impose that the fermented grape juice can only be distilled in the period between harvest and the 31st of March of the following year. This means that expensive production capacities and a highly skilled labor force is unused during the spring and summer months. This type of enforced 'organizational slack' got stronger over time with growing importance of contract distilleries, and led to endogenous pressures that encouraged firms from group C to diversify into similar but different products. Yet, most attempts of diversification beyond brandy sale were of little success before firms started to cooperate with firms from group D (below) in the 1990s.

[2] Brandy is the overarching category for cognac (similar to sparkling wine for champagne) and has much less regulation to respect in terms of production and labelling. But selling the liquid as brandy also decreases the value of it significantly by up to 80%.

Trajectory D: External firms using local firms as suppliers of knowledge, goods and labels

Group D is the youngest of the four. It is composed by firms that are not direct part of the local system, but that operate in export markets as trading brands with ties to local firms. Firms in group D use local skills and production capacity for the products that they distribute on their target markets. Initially, these types of firms were attracted by the cognac label and its knowledge and production structure. They wanted to sell cognac with its price premium, but had to rely on vineyards and distilleries that were embedded in Cognac. Hence, the firms in group D generally have had no own production units in Cognac, but have been tied to local suppliers by contracts. Some brands have been built like this since the beginnings of cognac trade, and are normally visible only on markets without any physical presence in Cognac. This position is reflected in their local institutional power. As they are generally not part of local inter-firm organizations, they have to cope with decisions that are made by local firms. When using the AOC-protected label, they have to stick to these regulations. They are operating on their own (market specific) institutional layer and are only indirectly connected and bound to that of cognac. They are in some cases represented in local boards by their strongest local contacts (generally firms from group C). But it is mainly the firms from group B that make important decisions based on local perceptions and norms. Still, with their cognitive distance and resulting independence they have some indirect influence on cognitive and normative institutions. They can interpret taken-for-granted aspects of Cognac differently and use, for instance, the label and its symbolic value in a different way. As a result, the firms from group D are often very successful in finding new designs for cognac bottles on specific markets which exactly respond to the taste of the respective target customers. The newly developed design styles are then embraced by locally embedded cognac firms which sometimes have weaker access to this external institutional layer.

In the 1990s, a new series of firms emerged that can be assigned to group D, but with a distinct difference. This movement was attracted not by the protected label of origin, but by the different skills that had emerged within the cognac system and its strict quality-related boundaries. The main skills (and production capacities) these firms were looking for were those of professional distillers and aroma specialists. They were less interested in the label 'Cognac', and thereby were in no direct way bound by the local institutional configuration. By their external and independent position, they could allow themselves to do things in an utterly different way. Their trade contacts (mainly firms from group C) were, in institutional terms, fairly independent, especially in the 1990s when cognac sales were in crisis. Large cognac firms had at this time very little institutional legitimation for preventing their suppliers from diverging, and the strategic pressures of distilleries (i.e. due to yearly time restrictions in distillation) made them very receptive for the needs of the arrivals from group D. One of the products developed in the mid-1990s by a firm from group D was highly successful[3] and sold to a conglomerate in the industry after just 8 years for a value of 2.2 Bn USD. This rapid growth served as a lead case and drove many other local firms into similar projects in subsequent years. Today more than 60 products of this nature can be identified, and contribute to almost 50 % of local production (in volumes) in 2012. This new development was initially regarded by the large cognac firms (group B) as highly disrespectful and led to institutional ruptures between different parts of the local network (and corresponding inter-firm organizations) that are still ongoing.

[3] Grey Goose Vodka, created by Sidney Frank and the US distribution company of the same name in collaboration with firms in Cognac.

Conclusions

We find that despite the similar institutional conditions and same innovation input and output measures among firms in the Cognac region and the cognac industry, firms do diverge and react differently to external change events. In fact we argue that the protected label of origin – established to guarantee the stability and quality of the cognac product – is the root of four different development trajectories among firms in Cognac. While many actors comply with the established institutional framework, some actors, which initially may have complied with the institutional framework, gradually diverge onto different paths. They thus do not respond to the same institutions in the same way, and this divergence becomes increasingly visible over time. We find that it is not the largest or most powerful firms that trigger significant change processes, but that relatively marginal actors or firms that more recently entered the setting are the first movers in terms of reinterpretation of old institutions.

In general, the identified trajectories follow two broad types of dynamics: cumulative and combinatorial (Strambach, 2012). We use these terms to outline the main paths. In the cumulative groups (trajectories A and B) hierarchies and scale seem to matter more. This is true both for production and distribution networks, which are strongly interconnected for a non-changing product like cognac. In the combinatorial groups (trajectories C and D) much more diverse factors based on external influences from trade networks and other forms of collaboration matter.

The majority of firms in the Cognac region are contributing to preserving the culture built up in the regional economy over several centuries. This is an important factor for stability. Changes are mainly of incremental nature, advance rather slowly and firms have a high degree of resilience. This could be devastating in the long run, but the Cognac industry is based on tradition and conservation, where this resilience to change is even a desired competitive advantage. On the other hand, there is a group of change agents that are diverging and reinterpreting the institutional configuration, thereby also contributing to institutional change through drift or layering (even if such ‘institutional entrepreneurship’ may be an entirely unintended side-effect of their divergence). Those firms are significantly more inclined to support change, more absorptive of new developments, and they show more openness towards opportunities going beyond the established institutional configuration and take on new paths. Doing this, they accept the uncertainty that more radical change can bring, and the resulting risk of failure. They can do this since they have less at stake in the current institutional configuration. New opportunities that may arise from institutional reconfiguration are of a higher potential value to them then a stability that the current institutional configuration would guarantee. Despite some failures, there have been a high proportion of successful new developments which now contribute (after 20 years of actively following this new path) to almost 50% of local production volumes. These developments started with few individual firms seeking for opportunities at the early stage, and were then, after some successful examples, adopted by local followers.

An important aspect of the present study is the comparability and applicability of results for other institutional and industrial settings. The most obvious are other products that are protected by a designated label of origin. In France alone there are more than 300 of such labels for wine, and about the same amount for food products. We expect the basics of the study to be highly applicable to firms in those settings. In other national settings the enforcement and design of the designated labels of origin may be slightly different and in some cases more flexible. We expect this to lead to similar effects and trajectories, but to a less accentuated extent. We also expect that even if firms have not yet taken on such trajectories in respective settings yet, there are strong arguments for why specific agents could do so in future external change events. It is equally interesting to compare and reflect upon the case in the frame of other luxury goods industries, where conditions are slightly different. In industries as diverse as high-end watches, perfumes or photography, one can equally find strict patterns of standardized design and quality requirements that have been set long time ago. However, the institutional configurations around the products will be less focused on their geographic origin or the technique by which they are produced. We still expect that the characteristics of institutional change agents within those industries at times of external shocks will be comparable, although blurred and less sharply observable due to different industry locations and different time lapses between change events. In this sense the present study and the observed patterns reported in this paper open up for further analysis and comparison to other institutional change processes.

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