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LEARNING THAT MILK COMES FROM A COW: SUPPLY MANAGEMENT AND THE CHARACTER OF NEOLIBERALISM IN SPAIN'S DAIRY CHAIN

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**APRENDIENDO QUE LA LECHE VIENE DE LAS VACAS:
LOS MECANISMOS PARA LA GESTIÓN DE LA OFERTA Y EL CARÁCTER DEL NEOLIBERALISMO EN LA CADENA LÁCTEA ESPAÑOLA**

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ABSTRACT

This article takes Spain's dairy chain as a study case of the transformations in the political economy of the food system in the West since the Second World War. I find that there is much to support the prevailing narrative in food regime analysis: the organised capitalism of 1952-1986 was gradually weakened by a policy agenda of deregulation stemming from both internal and external pressures. I also find, however, a thread of continuity between the period 1952-1986and the post-1986 period – in both periods there were strategies of supply chain management by means of which the power of political or business elites joined the market as a mechanism for the coordination of decisions. I argue that there is a case for reassessing the degree up to which the term "neoliberalism" does a good job at describing the new historical era that started in the food system in the latter decades of the twentieth century.

Keywords: neoliberalism, organised capitalism, food regimes, supply chain management, dairy chain.

RESUMEN

Este artículo toma la cadena láctea española como caso de estudio de las transformaciones en la economía política del sistema alimentario desde la Segunda Guerra Mundial en adelante. Encuentro muchos puntos en común con la narrativa prevaleciente en el análisis de regímenes alimentarios: el capitalismo organizado de 1952-1986 fue gradualmente debilitado por una agenda desreguladora fruto de presiones tanto internas como externas. Sin embargo, también encuentro un hilo de continuidad entre ambos periodos en el hecho de que en ambos se dan estrategias de gestión de la oferta a través de las cuales el poder de elites políticas o empresariales se une al mercado como mecanismo de coordinación de decisiones. Argumento que hay motivos para reconsiderar el grado en que el término "neoliberalismo" es una buena descripción de la nueva era histórica abierta en las décadas finales del siglo XX.

Palabras clave: neoliberalismo, capitalismo organizado, regímenes alimentarios, gestión de la cadena de oferta, cadena láctea.

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LEARNING THAT MILK COMES FROM A COW: SUPPLY MANAGEMENT AND THE CHARACTER OF NEOLIBERALISM IN SPAIN'S DAIRY CHAIN

Introduction

In his highly influential essay on post-modernity, geographer David Harvey (1989: 173) wrote that "[the] transition from Fordism to flexible accumulation has […] posed serious difficulties for theories of any sort. […] The only point of agreement is that something significant has changed in the way capitalism has been working since about 1970". But, what (exactly) is it that has changed?

For most researchers on the political economy of food, the answer is clear. Following Friedmann and McMichael's (1989) seminal contribution, what has changed is that the "industrial-mercantile" food regime of the 1945-1973 period has broken down and been substituted with a neoliberal order. During the decades after the Second World War, a relatively coherent set of institutional arrangements emerged and provided a stable environment for investment and profit-making both in agriculture and in food processing, the latter of which became increasingly dominant within the chain. But this set of institutional arrangements began to break down in the 1970s as the bigger business groups in processing and retailing (the latter of which were to become increasingly dominant) pressed for a policy agenda of deregulation. Even though there is no agreement about whether a new, internally coherent food regime has emerged as a result (see Magnan, 2012, for a review of divergent opinions), everyone seems to agree that, paraphrasing Harvey, something significant differentiates the food system before and after the 1970s.

This article uses a case study of the political economy of Spain's dairy chain during the last eighty years in order to argue that, irrespective of the former, something significant has not changed and actually differentiates both the industrial-mercantile food regime and the current, so-called neoliberal era from previous eras. It has to do with the move away from the ideal types of the market economy and perfect competition, and with the role played by (public or private) strategies of supply chain management as mechanisms for the coordination of economic decisions.

The article is organised as follows. After this introduction, I review the state of the art on the political economy of the food chain in the West since the early twentieth century. After that I briefly present the theoretical notions that structure the analysis of the Spanish case. Such analysis is developed in two stages: first, I describe the evolution of the political economy of Spain's dairy chain between the early 1930s (well before the implementation in 1952 of a variety of "industrial-mercantile" regime) and the present; and, second, I discuss contrasts and continuities between the periods 1952-1986 and 1986-present. The conclusions in the last section do not put into question the importance of institutional divides in the recent history of the food system, but do call for a broader view that combines such divides with parallel divides in the domains of technology and demand.

The political economy of the dairy chain in the West

Between the 1960s and the 1990s, the dairy chains in most Western countries underwent through a major institutional divide. There were different variants and chronologies from country to country, but the nature of the divide was similar everywhere. Borrowing from Lash and Urry's(1988) terminology, the divide was the end of organised dairy capitalism.

During the interwar period, most countries had implemented active measures in order to manage the dairy chain. They had done so basically for two reasons. First, they wanted to ensure that consumers were able to access a regular, cheaply priced and safe (in health terms) milk supply. Once milk became a part of the "nutritional social contract" during the First World War (Valenze, 2011), governments intervened in order to prevent what until then had been pervading problems, such as shortages, price peaks and fraudulent behaviour. Alongside this consumer-centred motivation, governments also wanted to prevent deterioration in the living standard of dairy farmers. Especially in the 1930s, in country after country overproduction and decreasing farmgate prices were threatening the economic reproduction of the dairy family farm, and governments tried to do something about it. During the years after the Second World War, State intervention in the dairy chain continued, and it was even reinforced by the creation of the European Economic Community and its Common Agricultural Policy (henceforth, CAP).

The specific measures implemented by governments were of course very different from country to country. Still, we can discern five groups of measures which, combined in different proportions (and not necessarily all of them present in every country at the same time), formed the backbone of organised dairy capitalism (see Moser and Brodbeck, 2007, for Switzerland; DuPuis, 2002, for the United States; Just, 2009, Kjaernes, 1995, and Martiin, 2010, for Scandinavia; Vatin, 1990, for France and Germany; Orland, 2005, for Central Europe; den Hartog, 1998, for the Netherlands; Segers and Lefebvre, 2009, for Belgium; Felice, 2004, for Italy; and Freire, 2011, for Portugal).

First, governments implemented price policies in order to guarantee minimum farmgate prices, maximum consumer prices, or both of them. Such policies could be direct, as in the case of price fixing by the State, or indirect, as in the case of programmes for the immobilisation of surplus production (by means of, for instance, the transformation of potentially surplus milk –that is, milk the commercialisation of which could be expected to depress prices substantially– into powdered milk or butter). Second, governments used different instruments in order to subsidise farmers. Again, these instruments could be direct, as in the case of payments linked to technological modernisation or to public purchases of surplus production at guaranteed prices, or indirect, as in the definition of higher-than-equilibrium farmgate prices in the above mentioned price policies. Third, governments also used an array of protectionist instruments in order to preserve the national market for national producers or, at least, to make it more difficult for foreign producers to enter the domestic market.

Fourth, organised dairy capitalism also comprised measures set to guarantee quality standards for dairy products and for milk in particular. Milk has its own history as a commodity, and setting the biological and chemical standards that define what (exactly) could be considered (and sold as) milk was an important element in dairy policy. But, additionally, governments often went further and restricted business competition for alleged quality reasons. Some governments, for instance, regulated the creation of dairy processors which, in exchange for the concession of a local monopoly, supplied consumers in a given territory with processed milk. Others implemented a similar licensing system for the retailing link of the chain. There were also governments that allocated production quotas to farmers (in this case not so much on quality grounds but in an attempt to prevent overproduction).

Fifth and last, it was common for States to promote (again, directly or indirectly) advertising campaigns that would stimulate the demand for dairy products. At a time when nutritional discourse was dominated by the “newer nutrition” paradigm (see Biltekoff, 2012), with its emphasis on proteins, minerals and vitamins, these campaigns used to stress the health benefits that consumers could expect from drinking milk.

The United Kingdom provides an illustrative example. From the 1930s onwards successive governments managed a system of dairy political economy through the Milk Marketing Boards. These boards, agencies with monopsonistic powers that basically represented farm interests, were crucial in the definition and execution of the kind of integral intervention that has been described above, including the fixation of relatively high farmgate prices, purchase of surpluses at guaranteed prices, definition of composition standards and official quality grades, creation of processing companies, management of a highly organised system of home delivery and launching of high-impact promotional campaigns. The United Kingdom is also a good example of the eventual demise of the system. In this case it took place in the early 1990s as a result of the confluence of two factors: first, the progress of the conservative governments’ deregulation agenda; and, second, the pressure exerted by the European Union on the British government for the latter to remove restrictions to competition and market unification in the dairy chain (Fenton, 1995; Vernon, 2000; Atkins, 2010; Platt, 1979; Otter, 2012; Velten, 2010).

Internal and external pressures actually favoured deregulation of the dairy chain everywhere. Licensing systems and territorial monopolies were particularly unpopular among national business elites. As early as the 1960s, Swiss supermarkets, for instance, fruitfully invested many resources in political lobbying aimed at getting the federal government to terminate a system of retailing licenses that prevented them from selling pasteurised milk (Moser and Brodbeck, 2007). In the external arena, European integration was a powerful force against organised national capitalisms in the dairy sector. In the early 1970s, for instance, a sentence from the European Court of Justice forced Italy to dismantle its system of “milk centrals” endowed with monopolistic licenses for producing pasteurised milk in a local area (Felice, 2004). But the Swiss case shows that, even independently from European integration, pressure for dairy chain regulation intensified in the 1990s (Moser and Brodbeck, 2007). Even though both the European Union and Switzerland went on subsidising their dairy farmers, the bulkof organised dairy capitalism was discontinued.

Mechanisms of economic coordination

Before going into the Spanish case, it may be useful to present (even if briefly) the theoretical notions that will structure the analysis. These are inscribed in a broadly defined family of institutionalist economics, comprising (among other elements) Polanyi's (1944) well-known taxonomy of allocation systems and Galbraith's (1967) view of the coordination implications of the rise of large firms.

According to Polanyi, the market is only one of several possible mechanisms of economic coordination. It coexists with alternative mechanisms such as redistribution and reciprocity in proportions that change from one historical era to the next. Redistribution, in particular, is an umbrella-like category that encompasses strongly heterogeneous variants, the most important of which is(for the present discussion) the intervention of the modern State in the economy. Polanyi's own historical argument in *The great transformation* is that from the late nineteenth century onwards a rise in State intervention led to a reduction in the role of the market in economic coordination (see also North, 1977).

But is the State really the main alternative to the market as a mechanism of economic coordination in modern societies? As Coase (1937) forcefully argued, the firm is also an alternative mechanism of coordination – one that exists in order to internalise within a single unit of centralised decision-making what otherwise would be exchanges with high transaction costs. Whether these internalised transactions belong (or not) to Polanyi's redistribution category (perhaps after such term is replaced by a more inclusive label) is beyond our interest now. What is relevant is that, since firm characteristics may have a profound influence on market structures, Coase's insight can have widely different implications for the study of the systems of political economy prevailing in each historical era. For instance, in a Smithian world of perfect competition and small, price-taking firms, the planning element involved in the workings of any firm does not prevent the market from playing a central role in the coordination of economic decisions. But, on the contrary, in a world of imperfect competition and large, price-making firms, the fact that these firms cannot function correctly without some notion of market discipline does not prevent business management to play an enormously important role in the coordination of economic decisions.

This is precisely Galbraith's (1967) starting point in *The new industrial state*. According to him, the central part of advanced capitalist economies would be coordinated in no small measure not by the market, but by decisions made by a "technostructure" willing to execute long-run plans and eliminate uncertainty. In the celebrated metaphor of business historian Alfred Chandler (1977), the visible hand of business management would have become an increasingly important element in the functioning of advanced capitalist economies from the late nineteenth century onwards. Arrighi (1994), in fact, draws from Braudel (1979) to differentiate between the market economy, understood as a decentralised world in which individuals and firms lack any direct influence on market structures and political decisions, and capitalism, understood as a more centralised world in which large firms exert market power and political influence. Mostly for the same reasons, Lazonick (1991) uses his historical study of business organisation models to talk about "the myth of the market economy".

In the particular case of the political economy of food, this line of analysis has been deepened by the introduction of the concept of supply chain management (see for instance Konefal*et al*., 2007, or Vorley, 2007). Within a given food chain, the influence of the most powerful actors is not limited to their respective spheres of activity, but is likely to reach other actors' spheres and eventually the whole of the chain. In the last quarter-century, for instance, supermarkets have increasingly used their oligopsonistic position to pursue price and standard policies set to condition the decisions made by processors and farmers. This is leading to increasing subordination of processors and farmers to retailers' strategies; subordination which, however, can be more rewarding for processors and farmers than losing access to supermarket shoppers, especially if such subordination is embedded in relatively stable partnership agreements.

Spain's dairy capitalism, 1930s-present

Three distinctive moments can be identified in the political economy of Spain's dairy chain in the last eighty years. The first moment is the situation in the early 1930s, when a market economy operating under conditions close to perfect competition prevailed. The second moment is the implementation by Francisco Franco's authoritarian regime of policies that went in line with what we have termed organised dairy capitalism and that contributed to processors becoming the key link in the chain during the period 1952-1986. Finally, a third moment is de-regulation after 1986, a period that was also witness to the substitution of processors for retailers as the most powerful link in the dairy chain.

The market economy of the early 1930s

In the early 1930s the market structure of Spain's dairy chain was close to perfect competition and there were not any major State regulations. At the start of the chain, dairy farmers were a small fraction of the country's agrarian population and concentrated mostly on a tiny strip of Atlantic regions in the northern part of the Iberian Peninsula, where environmental conditions were more suitable for the production of cow's milk under organic technologies (especially because high rainfall levels made it easier for farmers to secure feed for their animals). Very small farms employing almost exclusively family labour prevailed. Technology was rudimentary: even though since the late nineteenth century there had been a move towards more intensive rearing (through the partial substitution of extensive tendering with natural feeding within the barn) and biological innovation (through the incorporation of Swiss and Dutch high-yield breeds), by the Spanish Civil War (1936-39) extensive rearing and autochthonous, multi-functional (and, therefore, low-yield) breeds prevailed. These small family farms were clearly price-takers, and there were not any substantial barriers to entry to or exit from the sector (Domínguez and Puente, 1997; Simpson, 1995; Gallego, 2001).

Things were different at the processing link in the chain, but not significantly. The hard core of Spain's dairy manufacturing was a small group of large firms (some of them multinationals such as Nestlé) producing powdered and condensed milk. The market power held by these firms within their sourcing territory was evident, and had been a source of agrarian unrest since at least the 1920s. However, large-scale manufacturing had barely penetrated the sphere of liquid milk production, by far the most important component of demand. It is true that in the outskirts of large cities there were a few processors of pasteurised milk who exerted some oligopsonistic power on dairy farmers, but their share within total sales was fairly modest and, as a matter of fact, most consumer expenditure was absorbed by raw (rather than processed) milk (Domínguez, 2003; Domínguez and Puente, 2009; Hernández Adell, 2012).

We lack detailed studies of the retailing link, but it seems that its business structure was very fragmented. Small family shops and alternative networks such as farmgate transactions and itinerant urban sales by middlemen or by farmers themselves seem to have prevailed. Moreover, an unknown but probably significant share of demand was satisfied through self-consumption (see Collantes, 2015a, on the decentralised and heterogeneous structure of retailing as late as the early 1960s).

There were not any major State regulations in relation to these farming, processing or retailing activities. While most Western countries had shifted, or were by then shifting, to some variety of organised dairy capitalism, Spain featured a rather simple market economy – decentralised in business terms and little intervened in political terms. This did not change substantially even during the 1940s, when the newly established Franco regime implemented strongly interventionist measures that drastically restructured the political economy of most sectors in the Spanish economy. It is true that, as a part of that agenda, the State implemented some quantity-based controls in the sub-chains producing powdered milk and cheese. But, contrary to other major products, milk was not rationed and there was not any systematic milk price policy either. Nor were there subsidies to farmers or quality-oriented policies restricting competition in dairy farming, processing or retailing. Finally, even though physicians and local officers were spreading the message that milk consumption was good for health since the late nineteenth century (Nicolau*et al.*, 2010), the State was not involved in systematic, centralised propaganda efforts.

Organised capitalism and dairy industrialisation (1952-1986)

The move towards organised dairy capitalism took place in 1952, when the Franco regime issued a new dairy policy based on so-called “milk centrals”. At a time when the regime had a strong opinion that Spain’s low level of milk consumption (actually among the lowest in Europe) was detrimental to health, in every large and medium-sized city the State put local monopolies for the production of pasteurised milk to tender. Concessionary firms would be in charge of centralising the collection of raw milk from local farmers and processing that milk. Local monopoly would allow them to overcome the scale threshold beyond which milk could be supplied efficiently, cheaply and safely in health terms. These milk centrals would thus displace the until then dominant, highly decentralised networks for the commercialisation of raw milk for human consumption – networks in which supply was irregular, adulteration frauds were widespread and sanitary requirements were not observed (Langreo, 1995; Domínguez, 2003).

Milk centrals, a policy instrument set to guarantee quality standards through the restriction of competition, were the leading element in the Spanish version of organised dairy capitalism, but by no means the only one. During the period 1952-1986, Spain also implemented all other four pillars of organised dairy capitalism. First, prices all along the chain came to be fixed by the State. The State fixed the price at which farmers sold their milk to centrals, the price at which centrals sold their processed milk to retailers, and the price at which retailers sold processed milk to consumers. Second, subsidies were given to farmers and processors in order to support investment in technological modernisation (or, in the case of processors only, collaboration with State schemes for market management through surplus immobilisation). Such subsidies were created in the 1960s, and given a stronger and more consistent role by the early democratic governments' (so-called) structural regulations for milk production in 1981. Third, there was commercial protectionism, including the use of non-tariff instruments. And, fourth and last, the State became involved in an active effort to disseminate the message that a complete and healthy diet required the consumption of large quantities of milk and other dairy products. This effort included projects developed by sector-specific agencies (such as the National DairyCommittee –*Comité Nacional Lechero*–), but also by the Ministry of Health (with its programmes for general nutritional education). The school milk schemes implemented in the 1950s worked in the same direction (Briz, 1977;Langreo, 1995; Collantes, 2015b).

The rise of organised capitalism was parallel to a major restructuring of the dairy chain. Liquid milk processors, until then relatively irrelevant, became the core of Spain's dairy system. Especially from the mid-1960s, when State-fixed transference prices became higher and non-tariff commercial instruments ceased to obstruct the imports of processing machinery (as well as of other inputs), investment in liquid milk processing rocketed. Spain's dairy industry upgraded in technological terms and grew at an unprecedented rate. Processors became thus crucial for Spain's transition to a mass consumption model during this period – a transition largely driven by growth in the consumption of processed milk (Langreo, 1995; Domínguez, 2003; Collantes, 2014).

Furthermore, processors played a relevant indirect role as vertical coordinators of the chain. This was the case with milk centrals and the related local sub-systems for the production and commercialisation of pasteurised milk in the country's main cities. As the period went on, a relatively small number of processors began to play a similar role in the emerging, national sub-system for the production of sterilised milk. As a consequence, the production strategies of more and more farmers were more and more oriented towards (direct or mediated) sale to processors, and less and less towards (direct or mediated) sale of raw milk to consumers.

Dairy farming actually underwent an equally unprecedented transformation during this period (Briz, 1977; Calcedo, 1997a; Domínguez, 2001; Domínguez and Puente, 2009; Langreo, 1995). It was now when the process of substituting autochthonous, multi-functional breeds with foreign, higher-yielding (mostly Frieisian) breeds developed fully. This was joined by other productivity-enhnacing innovations, such as the use of milk-substituting industrial products for the feeding of calves (with a subsequent rise in mother cows' net milk yield) and the introduction of milking machines. This move towards a more intensive, technologically-upgraded livestock farming paradigm was closely tied to the rise of organised capitalism and the latter's subsidies for farm modernisation. And, as in other branches of the Spanish (and Western) food system, the move entailed much internal restructuring. With more than 80 per cent of farms having less than 10 cows still by the end of the period, Spanish dairy farms never ceased to be small for Western European standards, but their average size did grow. At a time of rapid expansion in urban labour demand and accelerated rural depopulation, most of the smallest-scale farmers left the sector. Others were unable to find a successor and closed their farms after retirement. If, in a famous speech delivered in the early 1950s, minister of Agriculture Rafael Cavestany (1955) had proposed a future in which there would be "less farmers and better farming", Spain's dairy farming clearly evolved along those lines.

Compared to these major changes in processing and farming, changes in retailing were more modest, especially before the 1980s. Supermarkets and hypermarkets began to appear in the country's largest cities, but their market share was still not enough to allow them to exert a relevant impact on the business decisions of processors or farmers. Moreover, consumers seemed to be strongly identified with producer brands, which limited both supermarkets' inclination to creating their own brands and (later on) the degree of success of such brands. Finally, as late as 1980 still almost 40 per cent of the milk consumed in Spain was raw milk commercialised mostly by smaller shops, itinerant urban middlemen or farmers themselves. All this made retailers dependent on processors, both in the sense that their advance depended on processors' capacity to expel raw milk from the consumer market and in the sense that their supply of processed milk had to remain strongly linked to producer brands (Collantes, 2015a).

Deregulation and retail-led restructuring (1986-present)

In the 1980s, organised dairy capitalism began to be the subject of deregulation pressures. At the internal level, successive democratic governments actively pursued a policy agenda of liberalisation in response to the many, complex and dubiously effective regulations that for nearly four decades of dictatorship had consolidated in Spain's political economy (Maluquer de Motes, 2014). This was the context in which the policy of State-fixed dairy prices, which had already been made more flexible(by means of the implementation of price bands and geographical differentials) during the late part of the Franco regime, was abolished. At the external level, entry to the European Economic Community (henceforth, EEC) in 1986 implied dismantling protectionism in relation to Spain's main foreign competitors, which were quickly able to increase their exports to a market where national producers (both in farming and in processing) were relatively uncompetitive (Briz*et al.*, 1999). Moreover, it also implied dismantling the political economy of milk centrals, which was viewed by the EEC as a competition-distorting instrument and an obstacle in the way of market unification (Langreo, 1995). To this deregulation pressures we should add the fact that from the 1980s and 1990s onwards the State has ceased to be so enthusiastic and active about the potential health benefits of dairy consumption. By means of their advertising campaigns food processors have actually become more important in the definition of the social images of products (Collantes, 2014).

The only one of the five pillars of organised capitalism that survived was farm subsidies. Entry to the EEC took place at a time when the latter was about to shift from a system of indirect, price-based support to a system of direct, payment-based support. In fact, after 1986 Spanish dairy farmers were able to apply for the same kind of subsidies linked to technological upgrading that had been available at a national level in the years before 1986; and to this they eventuallyaddeddirect subsidies dependent on farm characteristics –CAP’s main policy instrument after the MacSharry reform of the early 1990s (García Grande, 2005).

Spanish dairy farmers, however, faced entry to the EEC with great unrest because of the way in which they were integrated into the quota system that the EEC, in an effort to prevent overproduction, had implemented in 1984. The quota system implied the concession to each country, and to each dairy farmer within any given country, of a license to produce a given quantity of raw milk (and no more). Spain was given a quota that amounted to barely 80 per cent of its production in 1986: not only was the EEC unwilling to tolerate an eventual conversion of Spain into an overproduction country (as it could be feared from impressive production growth in the two decades before 1986), but it also de facto reserved 20 per cent of the Spanish market for surplus producers from other member States. Deeply dissatisfied with this, the Spanish Ministry of Agriculture refused to apply the quota system and managed to gain a moratorium until 1993. Even after 1993, and up to the early 2000s, it behaved in an overtly passive way in relation to the (widely known) circulation of “black milk” (milk produced without a quota license) along the dairy chain (Langreo, 2005).

These major changes in the regulation of the dairy chain were joined by major changes in its morphology and structure too. In the 1980s and 1990s, a “retailing revolution” turned supermarkets and hypermarkets into the main actors in the chain. Smaller retailers and the traditional alternative networks were nearly expelled from the market, while food service outlets forextradomestic consumption played a minor role as a potential counterweight to the increasing power of retailers. Today large retailers, highly concentrated on a small number of business groups (some of them foreign, especially French; some others based on national capital), channel a share in the sales of dairy products as high as 82 per cent – the highest share in any branch of the Spanish food system. The retailing revolution resulted from the confluence of at least three factors: first, a (pure) scale effect by means of which supermarkets used market power to exert a strong downward pressure on both sourcing and consumer prices; second, the execution of active strategies of supply chain management that increased such pressure on prices by means of the establishment of stable sourcing networks and the launch of own brands; and, third, the congruence between the commercial strategies of supermarkets and consumer behaviour, which was crucial for instance in the important process of identification of milk to ultra-high-temperature processed milk (Collantes, 2015a).

During the last quarter-century, the retailing revolution has allowed supermarkets to displace processors as vertical coordinators of the dairy chain. Supermarkets have actually transmitted upstream the same kind of competitive pressure that prevails in their own sector: through aggressive price policies, they have downsized the profits made by processors, who have done the same in relation to farmers. Both processors and farmers have been involved in a drastic process of concentration, including mergers, inter-firm purchases, orsimply the disappearance of uncompetitive plants and farms.

Processors, ever more concentrated on a small number of key companies (with the five largest of them absorbing more than 40 per cent of sales by the turn of the century), have tried to maintain their profit rate with two different manoeuvres. With an eye on downstream developments, they have shifted from their traditional path of process-oriented innovation to product-oriented innovation. By starting a new cycle of dairy products (with a wide variety of refrigerated desserts playing a prominent role), they have aimed at diversifying sales towards niches that are less mature than that of liquid milk (a niche that has been in contraction since the 1990s) and less exposed to price pressure from supermarkets. Still, product diversification has progressed less than in other European Union countries and, furthermore, supermarkets since the turn of the century have been increasingly active (and rather successful) at creating their own brands (and, therefore, at capturing a substantial share of the space for processing-related profit-making) even for these novel products (Langreo, 2003, 2005).

In the meantime, processors have consistently adopted a second manoeuvre, upstream this time: they have increased their price pressure on farmers. Given the low profit left for farmers, some 90 per cent of the dairy farms existing in 1986 have disappeared. The remaining 10 per cent have increased their size and have made substantial investments in order to continue technological modernisation (for instance, through the installation of refrigerated tanks), but still fall short of the productivity results prevailing in North-western Europe and lack any capacity to respond (even if defensively) to downstream pressure (Cabo, 2004; Calcedo, 2004; Langreo, 2005). The current end of the EU quota system may accelerate farm restructuring even more, both because it eliminates obstacles to size increases in the largest farms (which will not need to buy quota from other farms – a barrier than in Spain was amplified by the existence of territorialised quotas at the regional level; see Calcedo, 1997b) and because it may favour that foreign (French, in particular) farmers increase their size with an eye on displacing Spanish farmers from the milk collection networks of Spanish processors.

The character of neoliberalism: a discussion

Is it true that, as the literature on food regimes would make us expect, that the political economy of Spain's dairy chain has gone through two distinct phases in the last few decades? Basically yes, with the only qualification that, in our study case, the divide was not in the early 1970s but in the mid-1980s. Is this sequence consistent with the conventional wisdom that organised capitalism gave way to a neoliberal order? Again, basically yes. Between 1952 and 1986, there was indeed a system of political economy that comprised price policies, subsidies to producers, commercial protectionism, concession of licenses and monopolies, and demand-side State initiatives. And after 1986 there was a process of deregulation that was driven by both internal and external factors and that dismantled four of these five policy instruments (farm subsidies being the exception). A closer look at the evidence, however, reveals not so sharp a discontinuity: the market was not so absent during the first of our periods, and nor has it been so present during the second of them.

The active state policies of the period 1952-1986 allow us to talk about organised dairy capitalism, but even so a large part of the sector remained almost exclusively market-coordinated. As late as 1980, almost 40 per cent of the milk consumed in Spain was still raw milk (Collantes, 2014). The regulations over milk centrals were applicable only in large and medium-sized cities, which made the sale of raw milk for human consumption perfectly legal in small cities and rural areas (a decreasing but far from insignificant proportion of the population in a late urbanising country such as Spain). Even in larger cities, networks for the commercialisation of raw milk persisted throughout the period. Their activity was illegal (if a milk central was operating successfully in their area) or para-legal (if the State's plan to create a milk central in the area was not progressing), but many consumers prized raw milk's lower price and fuller taste (Collantes, 2015a). Along this sub-chain there were not any State regulations over prices or production licenses. Nor were there processors with oligopsonistic powers. Raw milk was produced by farmers in conditions close to perfect competition, and sold by those same farmers or by middlemen in conditions that were also close to perfect competition.

Moreover, even along the processed milk sub-chains the specific design of organised capitalism favoured the reactivation of market mechanisms through the back door. Policymakers focused on pasteurised milk, for which they designed price policies and a network of licensed local monopolies. For sterilised milk, however, only price policies (and not any kind of territorial monopoly) were implemented – and these price policies were less rigid than those applied for pasteurised milk. This asymmetry was to play a key role in the evolution of Spain's dairy capitalism. As soon as the technology of sterilisation and packaging mitigated some of the flavour problems that had originally harmed the reputation of sterilised milk among consumers, emergent processors began to reallocate resources from the production of pasteurised milk to the production of sterilised milk. In the domain of sterilised milk, a more flexible price policy allowed for higher profit rates and the absence of territorial licenses allowed for longer-range business strategies (both for the collection of raw milk and, especially, for the commercialisation of processed milk) (Langreo, 1995). In other words, although regulation fixed prices along the two sub-chains producing processed milk, it did not comprise any mechanism to prevent resource transfers from one sub-chain to the other.

In consequence, in the real world the major policy instrument of Franco's organised dairy capitalism, the network of licensed local monopolies, never became as extraordinarily important as it was in political discourse or legislation. At the start of the period, the scheme progressed very slowly because in many cities there were not many industrial entrepreneurs (or farmers' cooperatives) who were willing to undertake the required investments under the price conditions (and, therefore, the implicit profit rates) fixed by the State. Only after these conditions were revised upwards in the mid-1960s was there substantial progress. By then, however, processors had already found an even more effective way of increasing their profits: reallocating resources towards the production of sterilised milk. Sterilised milk became thus more important than pasteurised milk in both the acceleration of growth in Spain's production of processed milk and the subsequent transition towards a mass model of milk consumption (Collantes, 2014).

But nor has the market been as present in the post-1986 real world as it might seem from a reading of political discourse or legislation. To start with, the farming link in the chain became framed within the complex regulatory structure of EU's CAP. Milk quotas, the most characteristic element in that structure for dairy matters, were after all a license system that aimed at preventing overproduction in a way that implied a restriction of competition. In other words, they belonged to the same family of policy instruments as the milk centrals that (on the basis of different criteria) the Spanish government was forced to dismantle in 1986: they would not have been out of place in the previous era of organised dairy capitalism. On the other hand, and as it was commented above, for Spanish dairy farmers incorporation into the CAP meant that from the early 1990s onwards they were given the right to receive direct payments, a policy instrument that belonged to the same family than the indirect subsidies that had been implicit in pre-MacSharry price policy. Both milk quotas and subsidies have been exposed to remarkable pressure for elimination (in the first case) or market-friendly reform (in the second case); outcomes which are gradually happening. Still, in a sequence that brings Polanyi's (1944) famous "double movement" to mind, this move towards the market seems to be joined by a parallel move towards new forms of public intervention in the dairy chain. In the current decade, both the "dairy complex" implemented by the Spanish government (Royal Decree 1363/2012, *BoletínOficial del Estado*, 2 October 2012) and the new CAP for the period 2014-2020 are clear, explicit signs of a new direction in dairy policymaking – one in which policymakers search for instruments that improve farmers' bargaining position within the chain in ways that call for a lax interpretation of competition legislation.

And, more importantly, the market has not played a coordinating role as important as (say) in the 1930s because the largest retailers and processors have deliberately sought to move away from the market in their upstream relations along the chain. It is not only that, in line with Galbraith or Chandler above, the main retailers and processors have become so large that they internalise a substantial share of economic decisions under one single vector of managerial planning, in contrast to the 1930s Smithian world of small, single-function business units. It is also that retailers and processors have implemented strategies of supply management in order to condition upstream decisions in a way that is functional to them.

Supermarkets, for instance, have used their considerable market power to fix prices and standards for their industrial providers. During the last quarter-century, these price and standards policies have gradually narrowed the scope for processors' business autonomy. The trend has reached a peak after the turn of the century, when retailer brands have eventually become able to capture a substantial share of the markets for liquid milk and refrigerated desserts. As a matter of fact, the case of Spain's leading retailer (the Spanish-owned chain of medium-sized supermarkets Mercadona) shows that the capacity to create relatively stable networks of industrial providers giving up their own brands and becoming fully subordinated to retailer demands, specifications and strategies has become one of the major sources of competitive advantage within the retailing sector (Collantes, 2015a).

This semi-internalisation of upstream providers has been replicated by processors in relation to farmers. Given the pressure that supermarkets exert upon processors, processors have sought to secure a strongly oligopsonistic position in relation to farmers, so that they are able to transmit at least part of the pressure further upstream. In order to achieve that, processors have renounced to price warfare one against the other and have reinforced their traditional lack of transparency in their relations with farmers (Langreo, 1997). The Spanish Commission for Markets and Competition considers it proved that in the early years of the twenty-first century processors operated as a cartel: they reached agreements over the price that they would pay farmers for their raw milk and over immobilising their respective milk collection networks (so that a processor would not accept within its network a farmer who had been traditionally part of another processor's network) (Noceda, 2015). These voluntary agreements for the restriction of competition can be read as a new (even if illegal) version of one of the traditional pillars of organised dairy capitalism. The very reaction of Spain's Ministry of Agriculture after competition authorities imposed a heavy fine on most of the country's leading processors because of cartel formation –a reaction that stressed the Ministry's fear of the consequences that such fine could have on the viability of the dairy system as a whole (*EP*, 2015a)– reflects the real limits of the spread of neoliberalism among policymakers.

In sum, not only two of the three main links in the dairy chain are operating under imperfect (mostly monopolistic) competition, but relations between links have been commonly coordinated outside (even if complementarily to) the market. This suggests that, in a way, the difference between the political economy of the dairy chain before and after 1986 is less abrupt than it might seem at first sight. In both cases we find a combination of market, on the one hand, and supply management strategies, on the other. In both cases such strategies are consciously implemented by elites – political elites in the first case, business elites in the second. In both cases, supply management is an instrument that elites use in their pursuit of their objectives – political legitimacy in the first case, profitability in the second.

And, in both cases, the design of supply management can work if it shows some coherence with the prevailing technological conditions and (there where they are present) market signals. Supply management has been consistent with a context in which scale matters (for the production of processed milk, first; for the retailing of dairy products, later) and, therefore, technical conditions are propitious for a movement away from perfect competition and towards monopolistic competition, oligopoly and/or cartel formation. On the other hand, viable supply management strategies must be able to redefine their parameters in response to market signals, whether this means making State price-fixing more flexible (as in the revision of dairy price policy that took place in 1966) or constantly changing the products, standards and prices involved in the sub-chain producing supermarkets' own brands. In both cases, however, trends in consumer demand are far from completely exogenous: public promotion of consumption was an element in organised dairy capitalism, while processors and supermarkets have later on developed their own (advertising and communication) initiatives in order to condition demand in a way that is favourable for their supply management strategies.

Conclusion

This article, with its case study of the Spanish dairy chain, has not tried to put into question that the political economy of the food system in the West underwent an important institutional divide in the latter part of the twentieth century. It was then, in our case especially after Spain's entry to the European Economic Community in 1986, when the progress of a deregulation, neoliberal-oriented agenda dismantled most of the policy instruments that had previously composed a variety of organised capitalism. The elimination of State price-fixing and of the licensing of local monopolies for the production of pasteurised milk (the milk centrals scheme) are strong proofs of the relevant institutional divide that undoubtedly separates the present time from the period 1952-1986. Put shortly, in the present time the State has come to play a diminished role as a coordinator of the food system.

What the article has put into question, however, is that this institutional divide has consisted in the simple substitution of the State for the market that is commonly associated (by both advocates and critics) to the neoliberal project. Actually, part of the institutional divide has consisted in a transition from a public, State-run system of supply chain management to a private, business-run system of supply chain management. When, in a recent interview the president of Spain's largest retailer declares that "We are learning that milk does not come from a brik, but from a cow" (*EP*, 2015b), he is adopting a perspective that would have been perfectly understandable for the policymakers that gave birth to organised dairy capitalism in 1952 (with the qualification that the latter, belonging to a nearly preindustrial era in the dairy chain, would have declared to be learning that milk does not come from a cow, but from a pasteurising plant). For both the policymakers of the past (with the aim of promoting milk within the Spanish diet) and the leading company directors of the present (with the aim of securing a profit-making space vis-à-vis other monopolistic competitors), using power to coordinate the chain seemed and seems more promising than remaining attached to the textbook idea of the self-regulating market.

In sum, a part of the institutional divide has not consisted in the substitution of the State for the market as much as in the substitution of political power for business power as the element that joins the market in the coordination of economic decisions. The institutional divide is unquestionable, but some continuity between the two periods separated by the divide can be perceived too, and such continuity separates both periods (and not just the first of them) from the Smithian world of decentralisation and perfect competition of the 1930s.

Perceiving this thread of continuity may have important implications for the development of future research. The literature on food regimes implicitly tends to accept the unexamined assumption that institutional divides structure the recent history of the food system, but, once the characterisation of such divides becomes softer, the way is free for a reassessment of other kinds of divide. In our study case, for instance, the technological divide that also took place in the latter part of the twentieth century, involving the emergence of the information and communication technology cluster (with its great impact on the development of the retailing revolution and the subsequent subordination of processors to retailers; see Lescent-Giles, 2005) and the move of processors from process innovation to product innovation, may have been as important as the institutional divide. In other words, what Schumpeterian economists call "techno-economic paradigms" (Freeman and Louça, 2001) may have been at least as important as food regimes. Also, and to put just one final example, transitions between what some agri-food economists call “food consumption models” (Malassis, 1997) may have also been as important as the supply-side transitions referred to above. In our case, in the last two decades of the twentieth century there was a relevant transition from an expansive to a contractive model as a consequence of the deteriorating social image of whole milk (see Collantes, forthcoming, for a systematic account). This led Spain’s dairy chain tothe same situation that had been the case for other countries a few decades earlier – a situation of latent excess capacity that put the pre-existing business structures and institutional arrangements under strong pressure. From this point of view, the transition towards a biologically satiated consumer may have been as important a conditioning factor in the recent history of the food system as the transitions that were simultaneously taking place in food regimes or techno-economic paradigms.

Back to the initial quote from Harvey, maybe it is not that something significant has changed in the way (food) capitalism has been working from the latter decades of the twentieth century onwards. Maybe it is that several significant things have changed at roughly the same time. That is whytheir historically contingent combination has driven an irreversible transition towards a different historical era – one that the term “neoliberalism” captures only in a partial and imperfect way.

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