

‘Tout-à-la-fois cultivateurs et commerçans’: smallholder and the Industrious Revolution in eighteenth-century Brabant*

by Johan Poukens

Abstract

Hitherto, pessimism about the material living standards of Belgian peasants during the eighteenth century has largely dominated the historiography. This article argues for a more positive outlook on the capacity of smallholders (*handwerkers*) to improve their standard of living. In the duchy of Brabant in the second half of the eighteenth century they could benefit from the rising grain prices by reserving part of their land for the cultivation of wheat for urban markets. The introduction of the potato was key to this process because it freed up land formerly reserved for growing food for household consumption. I argue that their market-oriented behaviour could be characterized as an Industrious Revolution because smallholders became consumers of urban luxury items such as colonial groceries. Innkeepers in particular played a pivotal role in the diffusion of these urban consumer practices throughout the countryside.

Travellers who visited the duchy of Brabant (one of the principalities in the territory of present-day Belgium) in the second half of the eighteenth century were impressed by the density of its population. Dérival de Gomicourt, who visited the province in 1782, noticed that the villages were ‘more populated and better built’ (*plus peuplés et mieux bâtis*) there than in his native France.¹ One of his countrymen had already noticed in 1768 that the entire province had the appearance of ‘a single city’ (*une seule et même ville*) because cities, towns and villages were so close together.² The Brabantine urbanization rates were indeed amongst the highest in Europe. In 1784, 33 per cent of the duchy’s population inhabited a town of at least 5,000 inhabitants (Figure 1). Dérival was also surprised by the general prosperity of its inhabitants, particularly those living in the countryside. They were truly, he wrote, ‘a happy

* Abbreviations: OA: Oud Archief [Old Archive]; OGB: Oud Gemeentearchief Buggenhout [Aldermen’s court archive, Buggenhout] RAB: Rijksarchief Beveren [State Archive, Beveren]; RAL: Rijksarchief Leuven [State Archive, Leuven]; SAL: Stadsarchief Lier [City Archive, Lier]; SGB: Schepengriffies arrondissement Brussel [Aldermen’s court archives, Brussels].

¹ Dérival de Gomicourt, *Le voyageur dans les Pays-Bas autrichiens, ou lettres sur l’état actuel de ces pays* (6 vols, 1782–83), I, p. 122.

² Quoted in B. Blondé, *Een economie met*

verschillende snelheden: Ongelijkheden in de opbouw en ontwikkeling van het Brabantse stedelijke netwerk (c.1750–c.1790) (1999), p. 21.



FIGURE 1. Population figures and urbanization in Brabant, 1709-1806

Source: P. M. M. Klep, *Bevolking en arbeid in transformatie: Een onderzoek naar de ontwikkelingen in Brabant, 1700-1900* (1981), pp. 412-13.

people' ('un peuple heureux').³ In his opinion, they owned their happiness to the advanced state of agriculture in the region. The Brabantine soil was not particularly rich, but fertile nonetheless and never left fallow because it was cultivated and manured with the greatest possible care.⁴ For Dérival, who was clearly influenced by his Physiocratic compatriots, rural opulence and dense urbanization were strongly correlated. Urban success was both dependent on and contributed to the prosperity of the Brabantine peasantry. The urban market provided the rural population with plenty of opportunities to sell animal products, grain, vegetables, and wood; in the words of Dérival, they were 'cultivators and merchants at the same time' ('Les habitants de ces villages sont tout-à-la-fois cultivateurs et commerçans').⁵

Dérival's observations have been reflected in recent studies of agricultural development in north-western Europe during the early modern era. Jan De Vries, a advocate of neo-Smithian interpretations of agricultural development, has summarized them by characterizing increased agricultural output as an endogenous response to market opportunities which were strongly correlated with urban developments.⁶ This response took the form of more work and harder work, and shifting the output-mix toward greater market production.⁷ Peasant households increasingly sacrificed leisure time, or devoted labour formerly engaged in producing non-agricultural goods and services for household use, to produce marketable food production or – alternatively – undertook proto-industrial work. For De Vries, this was a consumption-driven phenomenon; the peasants' incentive for market orientation came

³ Dérival, *Le voyageur*, I, pp. 9-10.

⁴ 'Les terres de Brabant ne se reposent jamais; elles ne sont pas généralement grasses, mais elles sont toutes fertiles, parce qu'elles sont toutes cultivées avec le plus grand soin & fumées avec le plus profusion'. Dérival, *Le voyageur*, I, p. 127.

⁵ Dérival, *Le voyageur*, I, p. 122; II, pp. 46-54.

⁶ J. De Vries, *The Dutch rural economy in the Golden*

Age, 1500-1700 (1974).

⁷ J. De Vries, 'Great expectations: Early modern history and the social sciences', in J. A. Marino (ed.), *Early modern history and the social sciences: Testing the limits of Braudel's Mediterranean* (2002), pp. 71-98. See also J. De Vries, *The Industrious Revolution: Consumer behaviour and the household economy, 1650 to present* (2008), pp. 92-6.

from their desire to incorporate not only basic necessities into their consumer pattern, but also the goods and commodities that are normally associated with an urban style of living. Together, these changes in household behaviour constituted an 'industrious revolution'.⁸

The *positive* effect of commercialization was first pointed out by De Vries in his study on the agricultural development of the Dutch Republic during its Golden Age.⁹ Market access stimulated Frisian peasants to give up their struggle for self-sufficiency; specialization and commercialization improved their material living conditions. Over the course of the seventeenth century, probate inventories from Frisian dairy farmers revealed their increasing possession of new types of furniture which provided greater comfort, new types of tableware made from porcelain and Delftware which were associated with the spread of coffee and tea drinking, and mirrors, clocks and paintings. In his recent book, Craig Muldrew has also argued that English agricultural labourers benefited from 'a more comfortable material standard of living' because farming improvements led to more demand for labour and increased real wages over the period from roughly 1650 to 1780.¹⁰

There is still much debate, however, on the impact of agrarian commercialization on the rural demand for consumer goods and services in the territory of present-day Belgium. In a recent contribution to the Brenner debate on the relation between social-property relations and agricultural development in the Low Countries, Robert Brenner was quite explicit on the possible positive effect of peasant-driven economic evolution on the standard of living of peasants in the inland southern Low Countries.¹¹ In his view, which closely echoed that of Erik Thoen in the same volume, the first and foremost objective of the rural household was survival.¹² All productive decisions were subordinate to the household's reproduction. Autarky and subsistence were the norm; peasant households only became *involved* in market-oriented production when external forces compelled them. By the end of the thirteenth century, peasants in the highly urbanized county of Flanders had developed a market-oriented survival strategy in response to the fragmentation of holdings and their consequent inability to produce sufficient food to ensure their survival and reproduction, as well as to increasing surplus extraction in the form of taxes and rent. In order to avoid *dependency* on insecure markets, their survival strategy was characterized by its unspecialized nature. It was based on the combination of highly labour-intensive agriculture which produced both basic foodstuffs for the household and industrial crops for the market, with intermittent wage labour and/or proto-industrial activities

⁸ J. De Vries, 'Between purchasing power and the world of goods', in J. Brewer and R. Porter (eds), *Consumption and the world of goods* (1993), pp. 85–132; J. De Vries, 'The Industrial Revolution and the Industrious Revolution', *JEcHist* 54 (1994) pp. 249–70.

⁹ J. De Vries, 'Peasant demand patterns and economic development: Friesland, 1550–1750', in W. N. Parker and E. L. Jones (eds), *European peasants and their markets: Essays in agrarian economic history* (1975), pp. 179–266.

¹⁰ C. Muldrew, *Food, energy and the creation of industriousness: Work and material culture in agrarian England, 1550–1780* (2011), p. 206.

¹¹ R. Brenner, 'The Low Countries in the transition to capitalism', in P. Hoppenbrouwers and J. L. Van Zanden (eds), *Peasants into farmers? The transformation of rural economy and society in the Low Countries (middle ages-nineteenth century) in light of the Brenner debate* (2001), pp. 275–338, repr. as 'The Low Countries in the transition to capitalism', *J. of Agrarian Change* 1 (2001), pp. 169–241.

¹² E. Thoen, 'A "commercial survival economy" in evolution: The Flemish countryside and the transition to capitalism (middle ages-nineteenth century)', in Hoppenbrouwers and Van Zanden (eds), *Peasants into farmers?*, pp. 102–57.

(especially linen weaving). In such a *commercial survival economy*, says Thoen, 'the impact of farmers and peasants on the consumption of commodities remained restrained and maybe even decreased' because the rise of land productivity to unprecedented levels came at the cost of declining labour productivity, poverty, and restricted rural markets.¹³

Consumer demand is the cornerstone of De Vries' theory of the industrious revolution. Opposing the neo-Marxist view that households were pushed to the market by increasing surplus extraction or by pure need (for survival), De Vries has forwarded the hypothesis that households were lured to the market by the attraction of certain incentive goods. Hence, the theory of the industrious revolution needs to be proven on the demand side of the equation. If naturally risk-averse peasants were willingly exposing themselves to the uncertainties of the market, we must find evidence of, for example, the consumption of colonial groceries in peasant households. If no evidence of incentive goods is found in probate inventories of peasant households, this supports the pessimists' case that peasants only entered the market for survival, not for improving their standard of living. In this article, eighteenth-century smallholders' households from the duchy of Brabant function as a test-case. The duchy of Brabant is an interesting case in this respect because its rural economy shared the features of a commercial survival economy, but it was also a highly urbanized area where elements of an urban consumer culture could trickle-down into the countryside.

I

When Dérival visited the duchy, small, if not tiny, holdings blanketed Brabant's countryside. Large farms were few, but these might occupy as much land as all of the peasants' holdings taken together. At the top of the rural social hierarchy in 1747/55 were the tenant-farmers or '*pachters*' as they were called in contemporary sources (Table 1).¹⁴ For contemporaries, virtually every farmer who worked his land with a horse was considered a *pachter*, whether or not he owned the lands he tilled. Most, however, leased their farms from an ecclesiastical or lay landlord.¹⁵ *Pachters* were independent farmers who generally made up about a fifth of households. In a mixed farming area like Brabant, possession of livestock was positively correlated to access to land.¹⁶ Farms of five hectares generally had one horse; two horses could be found on holdings of ten hectares. One- or two-horse farms could be tilled with family labour, although these households generally had one or two living-in servants and maids, and hired day labourers during harvest. According to the poll tax returns of 1747, only five per cent of the households owned three or more horses. Their farms were generally over 20 hectares and they regularly employed day labourers who were recruited from the households of the *handwerkers*.¹⁷

¹³ Ibid., pp. 145–6; Brenner, 'Low Countries', p. 200.

¹⁴ This paragraph is based on P. M. M. Klep, *Bevolking en arbeid in transformatie: Een onderzoek naar de ontwikkelingen in Brabant, 1700–1900* (1981).

¹⁵ M. Limberger, *Sixteenth-century Antwerp and its rural surroundings: Social and economic changes in the hinterland of a commercial metropolis (ca. 1450–ca. 1570)* (2008), pp. 200–6.

¹⁶ B. H. Slicher van Bath, *De agrarische geschiedenis van West-Europa, 500–1850* (1987 edn), pp. 309–10, 342; E. Vanhaute, *Heiboeren: Bevolking, arbeid en inkomen in de 19de-eeuwse Kempen* (1992), pp. 212–14.

¹⁷ J. De Vries and A. Van der Woude, *The first modern economy: Success, failure and perseverance of the Dutch economy, 1500–1815* (1997), p. 208.

TABLE 1. Social status of household heads in rural Brabant, 1747 and 1755 (per cent)

Category	1747	1755
<i>Pachters</i>	22	21
with ≥ 3 horses	5	–
with 1–2 horses	17	–
<i>Handwerkers</i>	54	52
[smallholders]		37]
[labourers]		15]
Craftsmen and retailers	24	27
TOTAL	100	100

Source: Klep, *Bevolking*, p. 293.

Half the number of household heads in the Brabantine countryside were classified as ‘*handwerker*’ in contemporary sources.¹⁸ The *handwerker* divide two ways. There are those who were prosperous, who owned one or more cows and worked a plot of land which generally did not exceed three hectares.¹⁹ They can best be characterized as smallholders, able to subsist on their own holding in good years, but who also relied on wage labour to supplement their income (especially in bad harvest years). There are then those without land. Klep provides no percentages for *handwerkers* without cattle or access to land. Based on the number of households which required permanent support by the parish, I would estimate the proportion of proletarian labourers in the total rural population at somewhere around 15 per cent. The remaining quarter of household heads practised some trade or craft, which was generally combined with small scale, subsistence agriculture.²⁰

Although Brabant’s social structure was polarized, the majority of its *handwerkers* were not fully proletarianized but had land and could achieve an element of self-sufficiency. The tripartite class division of the countryside into landlord, tenant farmer, and agricultural labourer was absent.²¹ Whereas in England, agricultural labourers had no land of their own and found employment in a single occupation only, a multiplicity of occupations remained the norm in Brabant. *Handwerkers*’ means of survival included not only their own labour and that of their wives and children, but if they were fortunate, their small plot of land. They covered their subsistence requirements through a multiplicity of gainful employments, raising cash crops on

¹⁸ This name literally refers only to the fact that they worked with their hands, but contemporaries commented that they ‘earned their living with daily work’ (‘hunnen cost met dagelijcx werck winnende’). In summer, they would be employed for weeding, mowing, harvesting, and threshing, whilst in winter they were occupied with digging, woodcutting, or making repairs on the farm.

¹⁹ In western Brabant, ‘*handwerkers*’ with two or more cows were called ‘*cossaerden*’ or ‘*huyslieden*’. Their

name referred to the cottages (‘*koten*’) they inhabited, but they were partly dependent on day labour nevertheless. See F. Vennekens, *La seigneurie de Gaesbeek (1236–1795)* (1935), pp. 134–6.

²⁰ My collection of probate inventories, which will be discussed at length below, shows 57 per cent of rural retailers and craftsmen were part-time agriculturalists.

²¹ M. Overton, *Agricultural revolution in England: The transformation of the agrarian economy, 1500–1850* (1996), p. 195.

their plots, selling dairy products (butter in particular), engaging in rural industry, in extractive activity such as woodcutting and quarrying, and in intermittent work for large farmers. Labour opportunities were probably sufficient to absorb the supply of labour in the western and southern parts of the duchy of Brabant, where large farms measuring 15–20 hectares or more occupied 50 to 75 per cent of the arable land and pasture.²² This specific social structure, however, generally had a detrimental effect on wages. The presence of a large, semi-landless peasantry is generally regarded as an incentive for intensification of agriculture. Peasant willingness to accept high rents and low wages under population pressure would have led to rising productivity of land at the expense of labour productivity during episodes of increasing population pressure. As Thoen has argued, this could lead to increased involvement in markets, but this involvement in markets was independent of market incentives and was always paralleled by decreasing standards of living. In this article, I will show how, next to producing for self-sufficiency, the market became a second driver of production on smallholdings and how increased commercialization of agricultural production allowed smallholders to expand their world of goods.

II

Probate inventories are an indispensable source for historians who apply a micro-level, household-centred approach. They provide a view of both the material culture and production activities of a household. This article contributes to a continuing historiographical tradition which was established in the 1980s.²³ It is based on a database of 420 probate inventories made between 1691 and 1796 drawn from the archives of the Lier aldermen's court, whose jurisdiction included the hamlets and villages surrounding the town, and several local aldermen's courts in central Brabant. These documents were made when the deceased left minor or incapacitated children. Customary law required that an inventory was recorded within six weeks after death of a parent in order to ensure the correct division of the inheritance between the surviving parent and the children. The estate of the deceased was assessed by two aldermen and recorded by the court's secretary.²⁴ In these documents, we find information on movable property only. Household goods, farming implements, cattle, crops in the field, and debts owed by or to the deceased are all described and valued, but the ownership of land, houses, and '*constitutions de rente*' (a popular type of mortgage) are rarely mentioned and never valued. Inventories from central Brabant were usually more detailed than those from the surroundings of Lier (goods are described room by room, for instance), but three-quarters of the sample comes from the rural district of Lier. Almost no probate inventories were found for villages in central Brabant before 1760. To make up for this lack, I collected an additional sample of 60 documents listing the goods of a deceased person sold at auction.²⁵ Their content was very similar to that of probate inventories, except for the enumeration of debts.

²² S. Delaunois, 'Structure agricole d'un village Brabançon à la fin de l'Ancien Régime: Ittre' (unpublished MA thesis, Catholic University of Leuven, 1967); RAL, SGB, no. 9512.

²³ De Vries, *Industrious revolution*, p. 124.

²⁴ C. Casier, *Coutumes du pays et duché de Brabant:*

Quartier de Bruxelles, II, Coutumes diverses et turbes relatives aux coutumes de Bruxelles (1873), pp. 42–4; G. De Longé, *Coutumes du pays et duché de Brabant: Quartier d'Anvers, V, Coutumes de Kiel, de Deurne et de Lier* (1875), pp. 490–1, 578–83.

²⁵ I deliberately left out those auction lists which

These documents were categorized according to the categories outlined previously. I used the presence and the number of livestock to differentiate between *handwerkers*' and *pachters*' households because the occupation of the deceased was rarely mentioned in the inventory. The use of livestock as a criterion for categorization of probate inventories is certainly not new. It has already been used by De Vries. 'In a predominantly livestock-raising province [Frisia],' he argues, 'this seems a useful criterion for distinguishing the overall economic status of households'.²⁶ Is this criterion also usable in a region in which mixed farming rather than animal husbandry was dominant? The general literature on European agriculture suggests it is. Horses and oxen provided the traction required for ploughing, harrowing, and carting, while cattle provided the manure that was indispensable for fertilizing the land.²⁷ Especially on the smallholdings on which the vast majority of households in the district of Lier and central Brabant subsisted, intensive application of manure was necessary to maintain the soil's productivity. Consequently, the correlation between the size of the holding and the number of livestock, especially cows, was very high.²⁸ This close relationship has led previous historians to divide the agrarian population into categories based on the livestock they owned. There is consensus amongst those agricultural historians who have studied the sandy areas of the northern Low Countries that households who owned one or more horses can be equated with commercial holdings.²⁹ In the Campine region and the Flemish Sandy Region, the correspondence between the minimum size of a holding on which a horse could be sustained and the threshold size for a commercial farm suggests this rule also applied in the southern Low Countries as well. Thoen and Vanhaute have placed these thresholds at four or five hectares.³⁰

Ownership of horses and livestock was also an important criterion used by the local administrators responsible for drawing up tax lists and population censuses. This was formulated explicitly by the aldermen of Sint-Pieters-Leeuw, a village near Brussels, in a comment in the 1755 population census. *Pachters* (farmers), they said, possessed a horse. *Handwerkers* (smallholders) owned some cattle, but no horse. Those with two cows were called '*cossaerden*' or '*huyslieden*'. *Handwerkers* who owned one cow or no cattle at all, were considered 'the least amongst the villagers' ('de alderminste onder de gemeijntenaeren').³¹

Table 2 shows the distribution of the categories defined before in the probate inventories from

Note 25 continued

were clearly incomplete, as far as this could be judged from the complete absence of beds, chairs or other types of seating, chests or other types of storage furniture, cooking utensils and tableware. See also A. Schuurman, *Materiële cultuur en levensstijl: Een onderzoek naar de taal der dingen op het Nederlandse platteland in de 19de eeuw* (1989), pp. 63–5.

²⁶ De Vries, 'Peasant demand', p. 212.

²⁷ Slicher van Bath, *De agrarische geschiedenis*, pp. 309–10, 342.

²⁸ E. Thoen and E. Vanhaute, 'Handwerkers en peerdsboeren: De Vlaamse bouw op grote en kleine bedrijven in het midden van de 19de eeuw', *Bijdragen tot de geschiedenis* 83 (2000), pp. 70–1; Vanhaute, *Heiboeren*, pp. 211–14.

²⁹ Slicher van Bath, *De agrarische geschiedenis*, p. 343; B. H. Slicher van Bath, *Een samenleving onder spanning: Geschiedenis van het platteland in Overijssel* (1977), pp. 442–66; J. L. Van Zanden, *De economische ontwikkeling van de Nederlandse landbouw in de negentiende eeuw, 1800–1914* (1985), pp. 375–7; J. Bieleman, *Boeren op het Drentse zand 1600–1910: Een nieuwe visie op de 'oude' landbouw* (1987), pp. 142–3, 149–50; P. Brusse, *Overleven door ondernemen: De agrarische geschiedenis van de Over-Betuwe, 1650–1850* (1999), p. 61.

³⁰ Vanhaute, *Heiboeren*, pp. 212–14, 222–3; Thoen, 'A "commercial survival economy"', pp. 111, 146.

³¹ Quoted in F. Daelemans, 'Het Pajottenland in de 18de eeuw: Historisch-demografisch onderzoek', p. 64 (unpublished PhD dissertation, Vrije Universiteit Brussel, 1979).

TABLE 2. Number of probate inventories in sample, 1691–1796

<i>Period</i>	<i>Handwerker</i>	<i>Pachter</i>	<i>Crafts and retailing</i>	<i>Total</i>
1691–99	5	6	3	14
1700–09	9	9	3	21
1710–19	9	12	5	26
1720–29	18	23	12	53
1730–39	21	22	7	50
1740–49	23	21	13	57
1750–59	14	14	2	30
1760–69	21	17	7	45
1770–79	16	17	11	44
1780–89	30	52	13	95
1790–96	13	25	7	45
Total	179	218	83	480
%	37	45	17	100

Source: SAL, OASL, nos 1833–84; SAL, OGA, nos 72–4; RAL, SGB, nos 738–7909; RAB, OGB, no. 19.

both samples. Households engaged in crafts and retailing usually also worked a plot of land and owned some cattle, but were classified in a separate category because their activities were explicitly market-oriented. If we compare the distribution of the probate inventories from the last row of Table 2 to Table 1, we find that households from all layers of rural society are included, although *handwerkers* are under-represented. One has to keep in mind, furthermore, that the *handwerkers*' households represented in the sample are representative only of the upper echelons of this social group, the ones best described as smallholders and who contemporaries sometimes called '*cossaerden*'. The proletarianized household, without livestock or access to land, is nearly completely absent from the sample, but made up 18 per cent of the households in central Brabant and 9 per cent in the district of Lier. The inventory sample covers, in other words, only the more prosperous smallholder with some assets. This social bias is, of course, inherent to any sample of probate inventories, because the source naturally excluded those without possessions.

III

Dérival wrote positively of the prosperity of the rural population in Brabant and the state of agriculture in the duchy. The period after 1750 has been characterized as a period of strong agricultural revival.³² The positive effect of rising soil productivity and agricultural prices

³² H. Van der Wee, 'The agricultural development of the Low Countries as revealed by tithe and rent statistics, 1250–1800', in H. Van der Wee and E. Van Cauwenberghe (eds), *Productivity of land and agricultural innovation in*



FIGURE 2: Wheat/rye price and men's daily wage in agriculture in the city of Antwerp and its rural surroundings (1700–1815)

Sources: J. Craeybeckx, 'De prijzen van granen en van brood te Antwerpen van 1608 tot 1817', in C. Verlinden (ed.), *Documenten voor de geschiedenis van prijzen en lonen in Vlaanderen en Brabant* (1959) I, pp. 504–22. E. Scholliers, 'Prijzen en lonen te Antwerpen en het Antwerpse (16e–19e eeuw)', in C. Verlinden (ed.), *Documenten voor de geschiedenis van prijzen en lonen in Vlaanderen en Brabant* (1965), II, pp. 848–940.

for the smallholders who worked the land, however, has been questioned more often than not. Vanhaute, for instance, labelled the eighteenth century as an era of 'rich agriculture and poor farmers'.³³ Figure 2 indeed seems to support such a pessimist view. In the second half of the eighteenth century, nominal wage stability coupled with rising food prices – especially after 1780 – impaired the smallholder's ability to improve his standard of living through wage labour. But Dérival pictured the Brabantine peasantry not as buyers, but as sellers of agricultural produce. If smallholders were indeed able to enter the market as sellers, they could take advantage of rising grain prices.

Although much more research into crop diffusion and distribution at the level of the agricultural holding is necessary before this hypothesis can be confirmed, the assumption is made here that the spread of potato growing and consumption (at least temporally) improved a smallholder's capability to enter the agricultural product market as a seller. The potato conquered the southern Low Countries from the west. Although Emperor Charles V had

Note 32 continued

the Low Countries (1978), pp. 1–23; G. Dejongh, 'Tussen immobiliteit en revolutie: De economische ontwikkeling van de Belgische landbouw in een eeuw van transitie, 1750–1850' (unpublished PhD dissertation, Catholic University of Leuven, 1999).

³³ E. Vanhaute, 'Rich agriculture and poor farmers:

Land, landlords and farmers in Flanders in the eighteenth and nineteenth centuries', *Rural Hist.* 12 (2001), pp. 19–40. See also E. Vanhaute and L. Van Molle, 'Het einde van de overlevingslandbouw', in Y. Segers and L. Van Molle (eds), *Leven van het land: Boeren in België (1750–2000)* (2004), pp. 13–47.

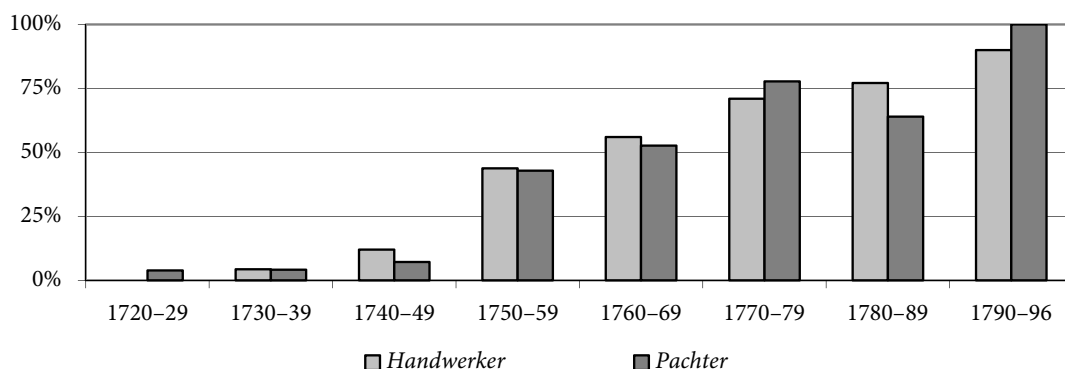


FIGURE 3: Presence of potatoes in probate inventories from rural Brabant, 1720–1796

Source: SAL, OASL, nos 1833–84; SAL, OGA, nos 72–4; RAL, SGB, nos 738–7909; RAB, OGB, no. 19.

decreed in 1520 that new crops were exempt from tithes, tithe collectors were determined to impose tithes every time a new crop became widely diffused. The first incidences of lawsuits regarding potato tithes in the duchy of Brabant were in the countryside surrounding Brussels in 1756–58. The area around Antwerp followed a few years later, in 1761–62. In 1770, potatoes were said to be planted every year by farmers, gardeners, and smallholders in the vicinity of Antwerp for their own consumption, although surplus produce was sometimes sold in nearby urban markets as well.³⁴ The diffusion of the potato is also evident in probate inventories (Figure 3). The first reference to the potato in a probate inventory comes in the inventory of Anthoni Vromans, a handwerker with two cows from the rural district of Lier, in 1716. It was not until the 1750s, however, that references to potatoes became more common. In the decades surrounding the tithe suits, potatoes were being mentioned in 50 per cent of inventories, either in storage or in the field. Potato growing and consumption gradually expanded during the 1770s and 1780s to become nearly universal by the end of the century. Both ‘*handwerkers*’ and ‘*pachters*’ seemed willing to add the potato to their crop rotation as well as to their diet. The diffusion of the potato was undoubtedly one of the most striking agricultural developments of the second half of the eighteenth and the first half of the nineteenth century.³⁵ The area planted with potatoes grew year by year, and by the middle of the nineteenth century, the cultivation of potatoes for household consumption was universally practised.³⁶

A small number of probate inventories from central Brabant offer insights into the acreage reserved for potato cultivation by both *handwerker* and *pachter* (Table 3). Inventories from the spring and summer, between planting and harvesting (May–September) probably give the best impression of the crop mix, but because they are few in number, I have also used inventories

³⁴ C. Vandenbroeke, ‘Cultivation and consumption of the potato in the seventeenth and eighteenth century’, *Acta historicae Neerlandica* 5 (1971), pp. 16–20; id., *Agriculture et alimentation dans les Pays-Bas autrichiens: Contribution à l’histoire économique et sociale à la fin de l’Ancien Régime* (1975), pp. 237–8, 638.

³⁵ M. Goossens, *The economic development of Belgian agriculture: A regional perspective, 1812–46* (1993), pp. 65–9, 84; Dejongh, ‘Tussen immobiliteit en revolutie’, p. 133.

³⁶ Thoen and Vanhaute, ‘Handwerkers en peerdsboeren’, p. 67.

TABLE 3. Acreage reserved for various crops according to probate inventories from central Brabant, 1742–96 (per cent)

	<i>Handwerker</i>		<i>Pachter</i>	
	<i>May–Sept.</i>	<i>Oct.–Apr.</i>	<i>May–Sept.</i>	<i>Oct.–Apr.</i>
Inventories (n)	17	5	5	7
Winter type cereal (all)	60.3	60.4	58.2	56.8
Rye	26.7	24.5	17.7	37.7
Wheat	18.4	29.4	37.5	18.3
Maslin	15.2	6.5	3.0	0.8
Spring type cereal (all)	14.8	0.0	14.5	4.5
Buckwheat	8.4	0.0	2.1	0.4
Oats	3.0	0.0	11.4	2.5
Barley	3.4	0.0	1.1	1.6
Fodder crops	10.5	23.3	14.0	23.0
Industrial crops	9.5	3.3	9.9	7.9
Potatoes	5.0	3.3	1.1	1.6
Rest	0.0	9.8	2.2	6.1

Source: RAL, SGB, nos 738–7909; RAB, OGB, no. 19.

from the autumn and winter (October–April). Although few crops, apart from turnips and clover, were recorded during winter, these inventories often contain valuable descriptions like ‘land sown with wheat’.³⁷ Table 3 reveals that in the second half of the eighteenth century, the acreage planted with potatoes would have stood at five per cent amongst *handwerkers* and little over one per cent amongst *pachters*. In Brabant as a whole, the acreage planted with potatoes expanded from 1.3 per cent in 1760 to 5.8 per cent in 1812.³⁸ By adding potatoes to their diet, *handwerkers* were able to subsist on increasingly smaller holdings, because potatoes had a high nutritional value. They yielded at least twice the calorific value per hectare than cereal.³⁹ As a result, in the countryside of the southern Low Countries as a whole, consumption of grain was reduced by 30–40 per cent, from about 0.9–1.0 litre per day in the beginning of the eighteenth century, to about 0.6 litre in 1780 and 0.5 litre in 1812.⁴⁰ *Per capita* consumption of potatoes, on the other hand, can be estimated at 0.25 litre in 1760 and 0.5 litre in 1784. In 1812, it would have stood at 0.7 litre and in 1846 at 1.0 litre per person per day.⁴¹

³⁷ In these cases, the value of sowing seed and manure, as well as the cost for ‘labour’ (*labeur*: ploughing etc) was estimated by the appraisers.

³⁸ In absolute terms, there was a fivefold increase in acreage planted with potatoes from 3,664 hectares in 1760 to 17,980 in 1812. Dejongh, ‘Tussen immobiliteit en revolutie’, p. 133.

³⁹ Goossens, *Economic development*, pp. 66, 88.

⁴⁰ Vandenbroeke, ‘Cultivation and consumption’, pp. 25–9; id., *Agriculture et alimentation*, pp. 252–8.

⁴¹ Y. Segers, *Economische groei en levensstandaard: De ontwikkeling van de particuliere consumptie en het voedselverbruik in België, 1800–1914* (2003), pp. 258–9, 305; RAL, SGB, nos 738, 1,125, 5,752, 7,909.

After the introduction of the potato, land previously reserved for growing cereal for self-consumption could now be employed to produce cereal for sale at the market. On a holding of two hectares, a quarter of an acre planted with potatoes would yield 1,000–1,200 litre (800–950 kg) of potatoes annually or 200–240 litre per person in an average family of five. Given that 10 per cent would have been reserved as seed potatoes, about half a kilogram remained for daily consumption. This would yield 350 kcal per day. If we take into account that 80 percent of the calorific intake came from potatoes and bread, an average diet of 2,400 kcal per day would require an additional 1,570 kcal. This could be provided by half a kilogram of bread cereal per day or 875 kg for our average family of five. On an annual basis, their two hectare plot would produce 1,140–1,380 kg per year. With 10–15 per cent to be retained as sowing seed, they had a regular surplus of 125–350 kg. The actual surplus could even be greater, as we have not taken into account consumption of buckwheat. This was an important crop for subsistence farmers, especially on sandy soils where it would occupy at least 10 per cent of the acreage and could yield up to 50 per cent more than rye. On a daily basis, at least 0.2 litre was available per person. Without potato cultivation, a household such as this would have been balanced on the edge between entering the market as a seller or a buyer.

Other elements in the crop mix of *handwerkers* corroborate the hypothesis about increased commercialization of agricultural produce by smallholders. The relatively large part of the acreage reserved for wheat is striking. Unlike rye, wheat is generally regarded as a commercial crop when planted by farmers. Contemporary observations of rural diets stressed that smallholders only ate wheat bread on special occasions. They subsisted on rye bread and potatoes, while the majority of their wheat was sold in urban markets, where demand for wheat was rising in the second half of the eighteenth century.⁴² In Antwerp, the ratio of wheat to rye processed by the city's bakers was 40:60 in 1784–85, 65:35 in 1825–29, and 86:14 in 1850–54. In Mechelen, wheat outweighed rye 60:40 in 1825–29 and 71:29 in 1850–54.⁴³ For Mechelen, no eighteenth-century data are available, but in the similar-sized town of Leuven, in 1755, 85 per cent of the grain processed by the town's bakers consisted of rye.⁴⁴ Agriculture in general reacted favourably to these changes by expanding the acreage planted with wheat. Between 1760 and 1812, cultivation of wheat expanded with 5,500 hectares in the southern part of the duchy (+ 13.6 per cent).⁴⁵ Evidence from probate inventories from the district of Lier also shows that *handwerkers* effectively grew more wheat after 1760. The proportion wheat took up in the estimated value of winter crops in the last four decades of the eighteenth century was ten times greater than before 1760 (Table 4).

⁴² Dejongh, 'Tussen immobiliteit en revolutie', p. 140.

⁴³ Y. Segers, 'Oysters and rye bread: Polarising living standards in Flanders, 1800–1860', *European Rev. Economic History*, 5 (2001), pp. 320–1; Segers, *Economische groei*, pp. 305–8; B. Willems, *Leven op de pot: Krediet bij de Antwerpse middenstand in de achttiende eeuw*

(2009), pp. 185–6.

⁴⁴ B. Dewilde and J. Poukens, 'Bread provisioning and retail dynamics in the southern Low Countries: The bakers of Leuven, 1600–1800', *Continuity and Change* 26 (2011), p. 421.

⁴⁵ Dejongh, 'Tussen immobiliteit en revolutie', p. 131.

TABLE 4. Value of bread cereals according to probate inventories from the rural district of Lier, 1691–1796 (per cent)

	<i>Before 1760</i>		<i>After 1760</i>	
	<i>Handwerker</i>	<i>Pachter</i>	<i>Handwerker</i>	<i>Pachter</i>
Inventories (n)	8	29	12	19
Maslin	11.1	0.6	2.9	5.7
Rye	86.1	73.7	67.2	62.4
Wheat	2.9	25.7	29.9	32.0

Source: SAL, OASL, nos 1,833–84; SAL, OGA, nos 72–4.

IV

A glance at the occupational structure of rural Brabant offers a first appreciation of the effect of the increased commercial opportunities for smallholders. The eighteenth century in general was a period of expansion for the service sector in the countryside. Table 5, which details the presence of certain occupations in different regions within the duchy of Brabant, suggests an increasing reliance on the market to provide a range of goods and services which were no longer provided by the household for itself. Not only craftsmen whose activities can be linked directly to agricultural work such as blacksmiths and cartwrights, but also tailors, shoemakers, and shopkeepers had become part of the basic *outilage* of a Brabantine village by the middle of the eighteenth century. This might be an indication of growing rural demand for consumer goods supported by a temporary increase in real wages during the first half century (see Figure 2). The relative number of craftsmen and retailers in Brabantine villages, however, grew further between 1755 and 1796 during the period of agricultural revival.⁴⁶ Were new commercial opportunities for smallholders responsible for maintaining the relative growth of the rural service sector? Did, in other words, the growing demand for consumer goods extend beyond the ranks of the *pachters* into the *handwerkers*? In this section, I will confirm this hypothesis by scrutinizing the social diffusion of incentive goods in rural households as recorded in the probate inventories.

For De Vries, the appropriation of an urban, more refined style of living by the rural population was an important stimulus for the development of industrious, market-oriented behaviour because it boosted demand for certain 'urban' luxury products.⁴⁷ The process described by De Vries has a parallel in the civilization process described by the German sociologist Norbert Elias many years before.⁴⁸ In the course of the early modern period, behaving in a refined, polite manner increasingly required control of the body and of bodily

⁴⁶ Growth might have been even more pronounced than Table 5 suggests, because of the heightened under-registration of non-agricultural occupations in the 1796 census.

⁴⁷ De Vries, 'Peasant demand patterns', pp. 220–2, 235–6.

⁴⁸ N. Elias, *Über den Prozess der Zivilisation: soziogenetische und psychogenetische Untersuchungen* (1939).

TABLE 5. Craftsmen and retailers in villages east of Antwerp and between Antwerp and Brussels, 1702–1796

Occupation	Percentage of villages with occupation present					Number per 1,000 inhabitants		
	East of Antwerp		Antwerp-Brussels			Brussels-Antwerp		
	1755	1796	1702	1755	1796	1702	1755	1796
Number of villages	77	35	27	27	27			
Baker	42	69	44	56	63	1.4	2.0	1.9
Blacksmith	83	86	74	89	89	1.7	2.1	1.9
Butcher	22	20	7	44	52	0.2	0.7	0.8
Cartwright	75	83	59	82	79	1.4	1.7	1.4
Innkeeper	100	57	70	100	85	4.4	11.2	3.8
Shoemaker	91	94	56	82	74	1.5	3.3	3.9
Shopkeeper	87	100	52	85	82	2.2	4.5	4.9
Tailor	91	91	37	89	93	1.0	3.7	4.7
Weaver	–	89	52	74	89	1.5	6.1	11.4

Source: R. Van Uytven, 'Peiling naar de beroepsstructuur op het Brabantse platteland omstreeks 1755', *Bijdragen tot de geschiedenis* 55 (1972), p. 189; J. De Belder, C. Gijssels, C. Vandenbroeke and L. Van der Straeten, *Arbeid en tewerkstelling in Antwerpen, 1796: Een socio-professionele en demografische analyse* (n.d.), *passim*; G. Leenders, 'De beroepsstructuur op het platteland tussen Antwerpen en Brussel', in F. Daelemans and J. Craebeckx (eds) *Bijdragen tot de geschiedenis van Vlaanderen en Brabant: Sociaal en economisch* (1983), p. 225.

functions.⁴⁹ Knowing how to control one's behaviour became a mark of social and cultural distinction, drawing boundaries between both the urban and rural population, and the upper and lower regions of society. One of the domains in which the new, civilized manners were introduced, was in dining practices. The introduction of polite table manners was accompanied by an extensive material culture which can be traced through probate inventories. One of the items which can serve as an indicator for the refinement of rural dining practices is the fork.

Table 6 shows the urban, refined style of living rooted fairly well in the rural district of Lier, as the percentage of households owning forks steadily increased over the course of the eighteenth century. Households from the crafts and retailing category took the lead in the adoption of this new item before 1729. *Pachter* and *handwerker* households followed during the second period (1730–59). By the third period, forks were found in about half the inventoried households in these categories. In the cities of Lier and Antwerp, the advance of the fork had occurred a few decades earlier. Already 42 per cent of urban inventories from the archive of the Lier aldermen's court made between 1695 and 1729 listed forks. During the rest of the century, this was around 75 per cent.⁵⁰ In Antwerp, the habit of eating with a fork spread during the

⁴⁹ R. Muchembled, *L'invention de l'homme moderne: Sensibilités, mœurs et comportements collectifs sous*

l'Ancien Régime (1988), pp. 203–89.

⁵⁰ J. Poukens and N. Provoost, 'Respectability,

TABLE 6. Presence of forks in probate inventories from the rural district of Lier, 1695–1795 (per cent).

Category	1695–1729	1730–59	1760–95
<i>Handwerker</i>	0	26	56
<i>Pachter</i>	5	10	45
Crafts and retailing	27	35	67
Total	6	21	54

Sources: SAL, OASL, nos 1,833–84; SAL, OGA, nos 72–4.

second half of the seventeenth century and was already fairly widespread by 1730.⁵¹ In Flanders, too, the spread of the fork in households other than those engaged in crafts and retailing has to be located at the end of the eighteenth century.⁵² In the Holland countryside, the fork spread to the same degree as in the rural district of Lier during the second half of the eighteenth century. Johan Kamermans found evidence of forks in 23 per cent of inventories in 1700–29, 28 in 1730–64, and 45 in 1765–95 (this drops to 10, 15 and 40 per cent respectively if only those inventories with three or more forks are taken into account).⁵³

Various historians have pointed to improvements in rural living conditions in the course of the eighteenth century.⁵⁴ The general north-west European trend was for rural housing to become more comfortably furnished, and the households from the rural district of Lier and from central Brabant were no exception to this general pattern. A growing number of households possessed tables. Stools and benches were replaced by chairs. Walls were decorated with paintings and mirrors. Curtains and chimney cloths prevented draught from entering. However, the introduction of colonial groceries is very striking. Unlike most objects that improved comfort and convenience, tobacco, tea and coffee were novelties. Several economists and historians have argued that the spread of popular luxuries like colonial groceries deeply affected consumer aspirations and shopping practices. Tibor Scitovsky argued that the

Note 50 *continued*

material culture and an expanding middle class in times of economic crisis: The case of Lier in Brabant, 1690–1770', *J. Interdisciplinary History*, 42 (2011), pp. 176–7.

⁵¹ B. Blondé, 'Cities in decline and the dawn of a consumer society: Antwerp in the seventeenth-eighteenth centuries', in B. Blondé, E. Briot, N. Coquery and L. Van Aert (eds), *Retailers and consumer changes in early modern Europe: England, France, Italy and the Low Countries* (2005), pp. 43–4.

⁵² C. Schelstraete, H. Kintaert, and D. De Ruyck, *Het einde van de onveranderlijkheid: Arbeid, bezit en woonomstandigheden in het Land van Nevele tijdens de 17e en de 18e eeuw* (1986), p. 169.

⁵³ J. A. Kamermans, *Materiële cultuur in de Krimpenerwaard in de zeventiende en de achttiende eeuw: Ontwikkeling en diversiteit* (1999), pp. 112–14.

Incidentally, Kamermans rejects the assumption that the spread of the knife and fork and the potato were positively correlated because the possession of forks was limited to the elite whereas the potato was a distinctly plebeian foodstuff (pp. 181–2). I am inclined to agree with Kamermans, but only because in these pioneering days, potatoes were probably consumed as part of the *potagie*, a kind of broth in which potatoes replaced turnips and other roots, and which would have been eaten with a spoon. See also S. Pennell, 'Recipes and reception: Tracking "New World" foodstuffs in early modern British culinary texts, c.1650–1750', *Food and History* 7 (2009), pp. 18–19.

⁵⁴ R. Sarti, *Europe at home: Family and material culture, 1500–1800* (2002); De Vries, *Industrious revolution*, pp. 126–9; Kamermans, *Materiële cultuur*, pp. 312–15; Schelstraete, Kintaert and De Ruyck, *Het einde van de onveranderlijkheid*, pp. 194–6.

discovery of novelty gives pleasure to the consumer. In time, however, the novelty wears off (as a habit forms) and the consumer has to look elsewhere for a new source of novelty in order to regain the initial pleasure.⁵⁵ According to Anton Schuurman, colonial groceries were one of the novelties that stimulated demand for new and exotic products. So, through their consumption, the rural consumer might become imbued by the 'Spirit of Modern Consumerism'.⁵⁶ Carole Shammas argued that mass consumption of groceries proliferated with the growth of country shops.⁵⁷ De Vries too has attributed colonial groceries with a prominent place in his theory of the industrious revolution. According to De Vries, the 'plebeian consumer' (a category which certainly includes rural labourers and smallholders) was of central importance for the development of a market for mass-consumed commodities.⁵⁸ Hence, measuring the diffusion of colonial groceries in rural households of different categories provides an excellent starting point for an evaluation of the role the market played in their lives.

Probate inventories provide abundant evidence for hot drink consumption through references to the utensils used for their preparation and serving, such as infusers, pots, cups, and saucers. Because they were new and exotic, they caught the eye of the appraisers and were consistently listed. As Figure 4 shows, the consumption of hot drinks spread, especially during the last four decades of the eighteenth century, in rural households in Brabant. Before the 1760s, their popularity was very limited. As far as the agricultural population goes, coffee or tea was drunk only by a handful of farmers. A few more households from the crafts and retailing category seemed to have enjoyed caffeinated drinks in the 1740s and 1750s, but these figures have to be interpreted with caution because they were based on a very small number of observations. It was not before the 1760s that hot drink consumption began to spread to households in the *handwerker* category. There is a slight and unexplained fall back in the 1770s, but the long term trend is very clear: ownership of utensils for hot drinks grew steadily amongst *handwerkers* from less than 10 per cent of inventories in the 1750s to just over 70 per cent in the 1790s. Compared to the *pachter* category, ownership of these utensils seems to have spread somewhat more slowly amongst *handwerkers*, but after 1790 they caught up with the *pachters*. Given the fact that some teapots or coffee cups were described under general headings like 'tin work' or 'earthenware', we can safely assume they were present in the homes of the entire sampled population. The majority of households in every category owned utensils for hot drinks at the end of the eighteenth century. Incidentally, the bulk of these referred to teapots, infusers, and tea wares, but it is possible that these were used for serving coffee as well. Import figures suggest coffee was more popular than tea after 1770.⁵⁹

In the Brabantine towns of Lier and Antwerp, utensils for hot drinks were already found in

⁵⁵ T. Scitovsky, *The joyless economy: An inquiry into human satisfaction and consumer dissatisfaction* (1976); S. A. T. Rizvi and R. Sethi, 'Novelty, imitation and habit formation in a Scitovskian model of consumption', in M. Bianchi (ed.), *The active consumer: Novelty and surprise in consumer choice* (1998), pp. 199–202.

⁵⁶ C. Campbell, *The romantic ethic and the spirit of modern consumerism* (1987); A. Schuurman, 'Aards geluk: Consumptie en de moderne samenleving', in

A. Schuurman, J. De Vries and A. Van der Woude (eds), *Aards geluk: De Nederlanders en hun spullen van 1550 tot 1850* (1997), pp. 22–5.

⁵⁷ C. Shammas, *The pre-industrial consumer in England and America* (1990), pp. 259–60.

⁵⁸ De Vries, *Industrious revolution*, pp. 149–85.

⁵⁹ Vandenbroeke, *Agriculture et alimentation*, Fig. XXVIII.

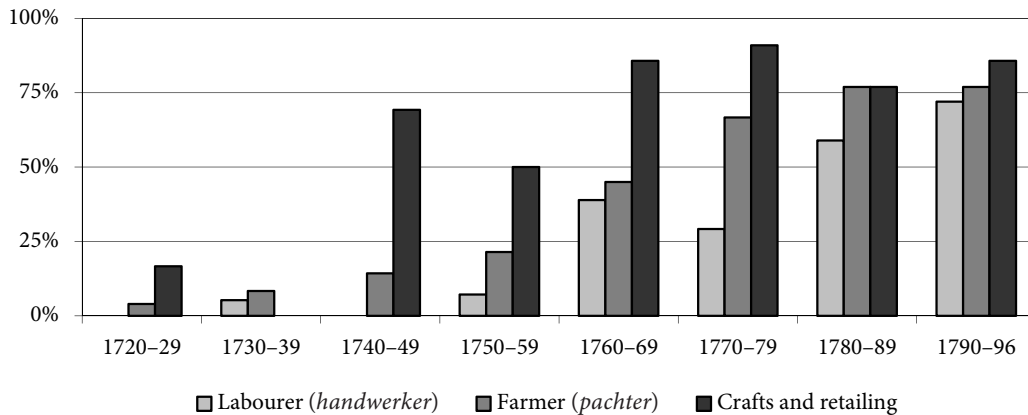


FIGURE 4: Presence of utensils for hot drinks in probate inventories from rural Brabant, 1720–1796

Source: SAL, OASL, nos 1833–84; SAL, OGA, nos 72–4; RAL, SGB, nos 738–7909; RAB, OGB, no. 19.

the majority of households in the 1730s and became nearly universal in the second half of the eighteenth century.⁶⁰ In the Flemish countryside, the introduction of hot drinks coincided with their spread in the rural district of Lier and central Brabant, but ownership of utensils for hot drinks was not taken up as widely.⁶¹ In the Land of Alost, 25 per cent of all probate inventories provide evidence for the consumption of tea and 5.3 per cent for the use of coffee around 1790.⁶² Outside the Austrian Netherlands, hot drinks spread earlier and more widely. Among the inhabitants of rural areas in Holland for example, utensils for the consumption of tea and coffee were already nearly universal in the middle of the eighteenth century. In the Krimpenerwaard, utensils for tea and coffee were present in 43 and 23 per cent respectively of inventories in 1700–29, 88 and 55 per cent in 1730–64 and 95 and 85 per cent in 1765–95.⁶³ In Weesperkarspel, evidence for the consumption of tea and coffee was present in about 40 per cent of all inventories in the 1710s. By the 1740s, this percentage had risen to nearly 100 per cent.⁶⁴

V

In the previous sections, I have shown that in the wake of a more refined, urban style of living, popular luxuries such as colonial groceries entered the consumer pattern of rural households. The last question that remains to be explored concerns the channels through which knowledge of innovations trickled down to rural households. Thijs Lambrecht and Reinoud Vermoesen

⁶⁰ B. Blondé and I. Van Damme, 'Retail growth and consumer changes in a declining urban economy: Antwerp, 1650–1750', *ECHR* 63 (2010), p. 645; Poukens and Provoost, 'Respectability', pp. 171–75.

⁶¹ Schelstraete, Kintaert and De Ruyck, *Het einde van de onveranderlijkheid*, p. 169.

⁶² R. Vermoesen, 'Markttoegang en commerciële

netwerken van rurale huishoudens: De regio Aalst, 1650–1800', (unpublished PhD dissertation, University of Antwerp, 2008), pp. 319–27.

⁶³ Kamermans, *Materiële cultuur*, pp. 117–21.

⁶⁴ H. Koolbergen, 'De materiële cultuur van Weesp en Weesperkarspel in de zeventiende en achttiende eeuw', *Volkskundig bulletin* 9 (1983), pp. 27–9.

have shown that farmers functioned as rural go-betweens.⁶⁵ For example, they collected agrarian output from smallholders (often in exchange for ploughing and carting services) and brought it to the urban market. As a result, direct contact between the urban world and the peasant household is likely to have been limited. Instead, we can speculate that innkeepers functioned as rural 'fashion brokers', and influenced consumer aspirations of rural households. They were an avant-garde in the appropriation of novel products. The first teapot in the inventory sample was found in the household of an innkeeper in 1704. Seventeen years later, the first owner of coffee wares was a victualler as well. In 1695–1729, one in five innkeepers from the rural district of Lier owned utensils for hot drinks, in 1730–59 one in two, and in 1760–95 every single one of them. In central Brabant, three-quarters of all innkeepers owned utensils for hot drinks. In the tavern, rural households could come into contact with new life-styles and innovations: not only because innkeepers invested increasingly in furnishings and decorations, but also because the tavern was the place where rural households met each other and their urban counterparts.

Often situated in the centre of the village, close to the church, the tavern was at the heart of rural social life.⁶⁶ Table five shows that more than one tavern was often found in each village. All contemporary observers agreed that the inhabitants of the southern Low Countries enjoyed frequent and long visits to their local tavern, especially on Sundays and Holy Days.⁶⁷ As opposed to what seventeenth-century genre-paintings from Antoon Brouwer or David Teniers the Younger might lead us to believe, probate inventories reveal that eighteenth-century rural taverns were comfortably furnished with tables and chairs, and also often decorated with paintings, mirrors, and chimney cloths. Tea pots, cups, and saucers frequently occupied a visible place in the tavern's interior. In some inventories, these objects were present in quite high numbers, which suggests tea and coffee were served to customers as well.

New consumer aspirations spread through imitation. Imitation is a powerful driver of innovation in consumer behaviour. People not only have an innate desire to 'imitate and conform to the behaviour of a group', but imitation can also serve an informational purpose.⁶⁸ In the tavern, the novelty-seeking individual could observe the choices of others, not only of the innkeeper, but also of other customers. In this respect, it is very relevant to consider that rural taverns were not only frequented by villagers, but also by townsfolk. For fiscal reasons, townspeople often preferred to drink outside the towns' walls.⁶⁹ There, beer and gin were exempt from town assizes. Although the number of taverns had declined by that time, the

⁶⁵ T. Lambrecht, *Een grote hoeve in een klein dorp: Relaties van arbeid en pacht op het Vlaamse platteland tijdens de 18de eeuw* (2002); T. Lambrecht, 'Reciprocal exchange, credit and cash: Agricultural labour markets and local economies in the southern Low Countries during the eighteenth century', *Continuity and Change* 18 (2003), pp. 237–61; R. Vermoesen, 'Paardenboeren in Vlaanderen: Middelaars en commercialisering van de vroegmoderne rurale economie in de regio Aalst, 1650–1800', *Tijdschrift voor sociale en economische geschiedenis* 7 (2010), pp. 3–37.

⁶⁶ Muchembled, *L'invention*, pp. 205–15; id., 'De kroeg als trefpunt', in P. Janssens (ed.) *België in de*

17de eeuw: De Spaanse Nederlanden en het prinsbisdom Luik, Cultuur en leefwereld (2 vols, 2006), II, pp. 355–62.

⁶⁷ Derival, *Le voyageur*, I, pp. 157–8; IV, p. 153; R. Van Damme, 'De Zuid-Nederlander in reisverhalen in de tweede helft van de achttiende eeuw' (unpublished MA thesis, Catholic University of Leuven, 1964), p. 124.

⁶⁸ Scitovsky, *Joyless economy*; Rizvi and Sethi, 'Novelty', p. 201.

⁶⁹ M. Leon, 'De visie van buitenlandse reizigers op het kerkelijk leven in de Oostenrijkse Nederlanden: Een bijdrage tot de religieuze geschiedenis van de XVIIIe eeuw' (unpublished MA thesis, Catholic University of Leuven, 1982), pp. 94–5.

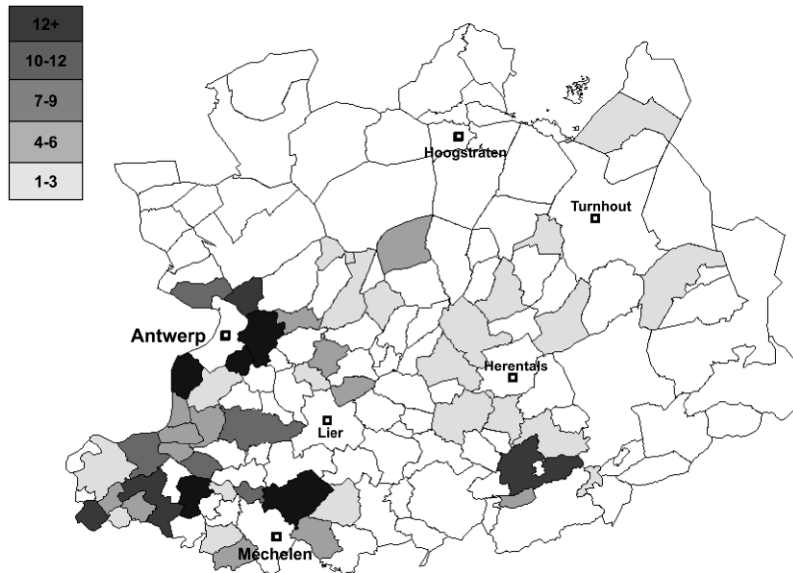


FIGURE 5: Number of taverns per village in the province of Antwerp, 1796

Source: J. De Belder, C. Gijssels, C. Vandenbroeke and L. Van der Straeten, *Arbeid en tewerkstelling in Antwerpen, 1796: Een socio-professionele en demografische analyse. Werkdocumenten* (undated), *passim*.

population census of 1796 still reflects this practice (Figure 5). The number of taverns in villages around Antwerp and Mechelen (13.6 and 8.5 taverns per 1,000 inhabitants respectively) was three to five times higher than the number of taverns in villages that did not share a border with a city (which was 2.7 taverns per 1,000 inhabitants). The number of taverns per 1,000 inhabitants for the entire province of Antwerp was 4.1. Increased transport on paved roads might also have intensified contacts between inhabitants of towns and villages in taverns. The increase of the number of taverns in the village of Kampenhout, situated in the middle of the triangle formed by Brussels, Leuven and Mechelen, is illustrative in this respect. In 1747, the village had five taverns.⁷⁰ In 1794, after the construction of the paved road and the canal that connected Leuven and Mechelen, this number had increased to 20.⁷¹ Seven of these taverns were situated in the village and seven along the paved road and the canal (the other six were situated in various hamlets). Hence, the rural tavern functioned as an outpost of urbanity in the countryside. Through observation and conversation, villagers could acquaint themselves with new, urban forms of behaviour and consumption.

VI

In this article, I have shown that demand for tea and coffee spread to rural households in two areas in the duchy of Brabant after 1760. Utensils for the consumption of hot drinks were not only found in the probate inventories of market-oriented farmers who possessed one or more horses, but also in half of those households of *handwerkers* who possessed a few cows. Consumption of colonial groceries was presented here as a *pars pro toto* of new consumer aspirations which had

⁷⁰ State Archive Anderlecht, Staten van Brabant: Supplement, no. 810.

⁷¹ RAL, SGB, no. 2,549.

already spread to the urban population by the middle of the eighteenth century and in which the pursuit of novelty took a prominent place. One might call this the seeds of consumerism in the countryside.⁷² I have argued that the spread of so-called urban 'luxury' items could have been induced by the spread of a more urban-like style of living. The increased presence of forks, which can serve as a proxy for the diffusion of more refined manners, was evident in rural households from all categories from 1760 onwards. In the absence of modern retailing techniques, information about new commodities and desirable behaviour was probably spread through imitation. The local tavern was the obvious location for this exchange of information. Nearly every village had at least one tavern, and visiting the tavern was the favourite Sunday pastime of the rural population. Not only were innkeepers amongst the first rural consumers of novelty items, but the urban population also frequently visited taverns in the surrounding countryside and doubtless brought their expectations of civil consumption with them.

The diffusion of new consumer aspirations was accompanied by the breakthrough or consolidation of agricultural innovations which can be characterized as part of a process of commercialization. The introduction of the potato on a large scale c.1760 was pivotal in this process. Potato growing secured the household's subsistence, even at a time when holdings were shrinking due to population pressure. This was illustrated by the high percentage of smallholders' inventories with potatoes present. Land which was previously tied up in providing the household with bread cereal could now be used to grow crops for the market. The extension of wheat cultivation was one of the most conspicuous changes in the crop mix. Because of rising urban demand for high quality bread, this was a highly market-oriented produce. Together with steadily rising agricultural prices in the second half of the eighteenth century, these changes could have generated the necessary income to support their new consumer aspirations, which in turn resulted in the expansion of crafts and retailing activity in the Brabantine countryside as well as in cities and towns during the eighteenth century.

By the end of the eighteenth century, a larger proportion of agricultural produce was probably sold in the market, and a larger proportion of consumption was purchased. Van der Wee has already credited craftsmen and retailers with an important role in this process of rural commercialization.⁷³ I have shown that demand for their goods and services extended to the lower steps of the rural social ladder. This questions the pessimistic conclusion of neo-Marxist historians who have argued that consumption beyond the mere satisfaction of the needs of physical subsistence was absent in peasant households and commercialization in peasant households was inversely correlated to their standard of living. Based on these findings, we can offer a degree of confirmation of De Vries' hypothesis that market-oriented behaviour in rural households might have been induced by the desire for urban luxury goods. Although the possession of teacups and teapots cannot resolve the question of whether peasants were pushed or lured to the market, it is evident that the presence of these items makes the second option – that peasants were willing participants in the market for their own advantage – the more likely of the two.

⁷² Stearns defines consumerism as 'a society in which many people formulate their goals in life partly through acquiring goods that they clearly do not need for subsistence or for traditional display. They become enmeshed in a process of acquisition – shopping – and

take some of their identity from a procession of new items that they buy and exhibit'. P. N. Stearns, *Consumerism in world history: The global transformation of desire* (2001), p. ix.

⁷³ Van der Wee, 'Agricultural development'.

The management of agricultural estates in Catalonia in the nineteenth and early twentieth century*

by Ramon Garrabou, Jordi Planas and Enric Saguer

Abstract

The aim of this article is to analyse the management of agricultural estates in Catalonia during the nineteenth and the first half of the twentieth century, mainly through the analysis of the landlord expenditure recorded in estate accounts. The data comes from eight private archives, from which we have constructed ten series of accounts which describe groups of farms spread throughout the main agricultural zones of Catalonia. The changes in the contributions made by the landowners towards the running costs can help us to understand their role in the processes of growth and intensification of agricultural production. We show that, while the level of investment they made was modest, the landowners did not behave like absentee landlords who showed no interest in maximizing the productive potential of their estates.

What role did landowners play in the agricultural transformations of the nineteenth and early twentieth centuries? How rational were their decisions in view of the prevailing social and environmental conditions on their estates? Did they behave like absentee landlords careless about the management of their farms? Did their approach to management and the forms of land tenancy they employed hinder technological progress? In this article we try to answer these questions through an analysis of the management of rural estates in Catalonia, a Mediterranean region in the north-east of the Iberian Peninsula, during the nineteenth century and the first half of the twentieth.

During this period, agriculture in Catalonia underwent a substantial transformation as industry and urbanization took on increasing importance in the regional economy. Although the results were not necessarily spectacular in terms of labour productivity or yield per unit area (especially when compared to Atlantic regions with fewer problems of water supply), agriculture showed a notable dynamism and responded to the stimuli generated by the phases of expansion and contraction. Overall, the evolution of Catalan agriculture does not conform to the general image of backwardness one associates with Spanish agriculture at this time, and

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the region's economic results were far better than those obtained in the interior and south of the peninsula. During the period examined in this article, the area under fallow fell considerably, the irrigated area increased 3.4 times to reach 16 per cent of the cultivated area despite the limitations imposed by climatic conditions, and livestock production expanded, becoming ever more integrated into the agricultural system and with major changes in the varieties bred.¹ But among all the changes, the greatest impact was due to the expansion of viticulture, which was clearly geared towards trade and export. The expansion of the vineyards began in the eighteenth century and intensified during the second half of the nineteenth century due to the phylloxera crisis in France. In the early twentieth century viticulture accounted for a third of the total value of agricultural production.² From the late nineteenth century onwards horticultural crops also progressed, so that by the 1930s vines and vegetables formed 55 per cent of the total value of agricultural production. Although certain labour-saving tools were introduced, mechanization had not progressed as much as in other European regions; nevertheless, in global terms the agricultural sector recorded a notable set of changes in line with the demand from a growing urban population, which in 1900 amounted to around 35 per cent of the total of Catalonia.

The available statistical information gives us a broad idea of the extent of this transformation. Considerable efforts have been made to reconstruct the process at both the regional level and for Spain as a whole.³ However, it is not easy to explain precisely how these changes took place, or to identify the social groups which took part in them, or how they did so. The answers to these questions must be sought in sources that are often highly idiosyncratic and difficult to extrapolate to other settings. Clearly, this raises the question of how representative they are, but in general they are a useful complement to the macroeconomic data.

The accounting records of agricultural holdings are a notable example of such sources. These documents provide invaluable information on the different forms of administration, details of tenancy practices, the techniques used, the changes in production, the level of wages and the different ways in which people were employed, how closely the holdings followed market trends, the degree to which the landowner shared in the expenses and investments, and so on.

Obviously, the evidence the accounting records offer is based on individual cases, and we cannot treat the particular characteristics of one estate as if they were representative of general practices. It must also be borne in mind that the keeping of accounts was never widespread,

¹ R. Garrabou and J. Pujol, 'El canvi agrari a la Catalunya del segle XIX', *Recerques*, 19 (1987); J. Pujol, 'Les transformacions del sector agrari català entre la crisi finisecular i la Guerra Civil' (Ph.D. thesis, Universitat Autònoma de Barcelona, 1988); id., 'Especialització i canvi tècnic en l'expansió del sector ramader català entre 1880 i 1936', *Recerques* 37 (1998), pp. 31–56; 'Cap a una nova interpretació del capitalisme agrari a Catalunya fins a la guerra civil', *Estudis d'Història Agrària* 15 (2002), pp. 19–56.

² On the expansion of viticulture in Catalonia, see E. Giralt, 'La vinya i el vi durant l'edat moderna', in E. Giralt (ed.) *Història agrària dels Països Catalans*

(4 vols, 2004–8), III, pp. 295–460; J. Pujol, 'Les transformacions del sector agrari'; J. Colomé, 'L'especialització vitícola a la Catalunya del segle XIX. La comarca del Penedès' (Ph.D. thesis, Universitat de Barcelona, 1996); E. Tello, M. Badia-Miró, X. Cussó, R. Garrabou and F. Valls, 'Explaining vineyard specialization in the province of Barcelona (Spain) in the mid-nineteenth century', *Working Paper* 08/201 (UB, 2008).

³ On the possibilities and use of Spanish statistical sources relating to the agrarian sector, see Grupo de Estudios de Historia Rural, *Estadísticas históricas de la producción agraria española, 1859–1935* (1991).

and the existence of these documents may produce a distorted view of the society as a whole because they were kept only by a certain type of landowner or farmer. Even so, with these provisos in mind, it is reasonable to assume that the accumulation of cases and the repetition of patterns and developments in the analysis of these documents can allow us to draw general conclusions.⁴

Among the many types of document that could be described as 'agricultural accounts', we shall only be concerned with the ones that provide information on major landowners. Our intention is to analyse the management of rural estates in Catalonia during the nineteenth century and the first half of the twentieth century using the expenditure registered in this type of documentation. The information collected comes from eight private archives,⁵ and from them we have reconstructed a total of ten series of accounts which describe groups of farms spread throughout the main agricultural zones of the region.⁶ As these series overlap, we have data covering the period from 1821 to 1945. As a result, in our opinion, our sample is large enough, and diverse enough, to support a study of this kind.

I

The organization of agricultural work has been considered one of the basic issues in the development of the sector. Adam Smith and many nineteenth-century economists held that the different forms of tenancy were crucial in boosting capital investment and in the adoption of more productive technical innovations. In accordance with these principles, it was believed

⁴ A number of Spanish historians have made use of estate accounts in recent years, amongst them M. T. Pérez Picazo, 'Riqueza territorial y cambio agrícola en la Murcia del siglo XIX. Aproximación al estudio de una contabilidad privada (1800-1902)', *Agricultura y Sociedad* 61 (1991), pp. 39-95; J. Carmona, 'Las estrategias económicas de la vieja aristocracia española y el cambio agrario en el siglo XIX', *Revista de Historia Económica*, Año XIII (1995), pp. 63-88; J. Pujol 'Trabajo asalariado y actividad agraria en Can Codorniu: un caso excepcional de la explotación del viñedo catalán durante el primer tercio del siglo XX', in A. Carreras *et al.* (eds), *La industrialització i el desenvolupament econòmic d'Espanya* (2 vols, 1999), II, pp. 479-506; P. Pascual, *Els Torelló. Una família igualadina d'advocats i propietaris* (2000); J. Carmona, *La aristocracia terrateniente y el cambio agrario en España en el siglo XIX: la casa de Alcañices, 1790-1910* (2001); H. Casado and R. Robledo (eds), *Fortuna y negocios: formación y gestión de los grandes patrimonios (siglos XVI-XX)* (2002); R. Robledo and S. López (eds) *Interés particular, bienestar público? Grandes patrimonios y reformas agrarias* (2007).

⁵ These archives correspond to the Sentmenat, Coll, Nuix, Bru, Negre, Maspons, Riba and Güell families,

covering different types of major landowners. They include estates that had their origins in the feudal nobility, such as that of the marquis of Sentmenat, estates belonging to the lesser nobility of the region (Nuix, the barony of Perpignan), properties acquired by public officials (Coll) or families of peasants which emerged as a dominant group in many areas during the eighteenth century (known as *hisendats*).

⁶ Previous studies have made use of these accounts, namely: R. Garrabou, E. Saguer and P. Sala, 'Formas de gestión y evolución de la renta a partir del análisis de contabilidades agrarias: los patrimonios del Marqués de Sentmenat en el Vallés y Urgell (1820-1917)', *Noticiario de Historia Agraria* 5 (1993), pp. 97-125; R. Garrabou, J. Planas and E. Saguer, 'Sharecropping and the management of large rural estates in Catalonia, 1850-1950', *J. Peasant Studies* 28 (2001), pp. 89-108; R. Garrabou, J. Planas and E. Saguer, *Un capitalisme impossible? La gestió de la gran propietat agrària a la Catalunya contemporània* (2001); J. Planas, 'Agrarisme i gestió de la propietat al primer terç del segle XX', *Estudis d'Història Agrària* 10 (1994), pp. 57-83; E. Saguer, 'La Acció Social en casa. Gestión patrimonial de un dirigente sindical (Pelayo Negre Pastell, 1924-1936)', in Robledo and López (eds), *Interés particular*, pp. 281-303.

that a large estate which was administered directly by the landowners or leaseholders using salaried labour was the best way to stimulate agricultural growth. Sharecropping, by contrast, was regarded as a less efficient contractual arrangement and its continued existence an obstacle to the development of the rural economy, given that the peasants lacked the capital and the knowledge required to introduce innovation.⁷

Agricultural literature and the press in Catalonia did much to spread these ideas and landowners certainly debated the ways to increase the yields of their lands by changing the form of production and farming directly.⁸ However, no major modifications in the forms of tenancy used on large rural estates have been detected, and while direct farming of the estate was never entirely absent (especially in woods and grazing land, but also in some cultivation plots), sharecropping and other indirect forms of exploitation were invariably predominant throughout the nineteenth century. None of the landowners studied here moved decisively towards the direct farming of their estates with wage labour, and the overwhelming majority of their estates were leased in the traditional manner to sharecroppers, sometimes under the control of an estate steward.

The persistence of sharecropping in a dynamic agricultural system such as the one we find in Catalonia raises many questions. At a general level, many theoretical and empirical works have discussed the apparent inferiority of sharecropping in relation to other forms of land tenancy. Following Cheung's book, published in 1969, sharecropping returned to the attention of many economists concerned with agricultural development, especially in the third world, and this interest produced a literature largely dominated by neoinstitutionalist approaches, far removed from the assumption of a perfectly competitive market where a reasonable allocation of resources was supposedly achieved.⁹ Much of this literature concludes that although sharecropping has achieved remarkable levels of efficiency, it was nonetheless a *second best*.¹⁰ Moreover, understanding the preference of landowners for this land tenancy system also requires us to take into account the economic and social context in which this option was taken. This consideration is common in Marxist approaches¹¹ and, to some extent, coincides with neoinstitutionalist approaches which highlight the need to understand an institution in its socioeconomic context.¹²

⁷ See N. Koning, *The failure of agrarian capitalism: agrarian politics in the UK, Germany, the Netherlands and the USA, 1846-1919* (1994).

⁸ R. Garrabou, J. Pujol, J. Colomé and E. Saguer, 'La crisi finisecular i la recomposició del món rural a Catalunya', *Recerques* 26 (1992), pp. 107-34.

⁹ The evolution of economic literature on sharecropping can be found in H. Binswanger and M. Rozenzweig, *Contractual arrangements, employment, and wages in rural labor markets in Asia* (1984), J. Roumasset, J.-M. Broussard and I. Singh (eds), *Risk, uncertainty and agricultural development* (1979), S. N. S. Cheung, *The theory of share tenancy* (1969), P. Bardhan (ed.), *The economic theory of agrarian institutions* (1989) and J. Ph. Colin, *Figures du métayage. Étude comparée de contrats agraires au Mexique* (1995).

¹⁰ R. Garrabou, J. Planas and E. Saguer, 'Sharecropping and the management of large rural estates', pp. 89-108.

¹¹ See, for example, R. Pearce, 'Sharecropping: Towards a Marxist View', *J. Peasant Studies* 10 (1983), pp. 42-70; T. J. Byres, 'Historical perspectives on sharecropping', *ibid.*, pp. 7-40; J. Roemer, *A general theory of exploitation and class* (1982); E. Royce, *The origins of southern sharecropping* (1993).

¹² See D. G. Newbery and J. E. Stiglitz, 'Sharecropping, risk sharing and the importance of imperfect information', in Roumasset, Broussard and Singh (eds), *Risk, uncertainty and agricultural development*, pp. 311-39; P. K. Bardhan, *Land, labor, and rural poverty. Essays in development economics* (1984).

The records analysed here allow us to approach these issues from the perspective of the economic performance of landowners and the management of large agricultural estates. Although sharecropping had a long history in Catalonia, it was used not simply due to the weight of tradition, but because it also offered advantages. The Coll estates are a good example of this. Tomàs Coll was a customs official in Barcelona who bought a number of farms after the ecclesiastical confiscations (*desamortización*) of the early nineteenth century. He was, therefore, a new landowner for whom tradition counted for little; as such he was in a position to choose the form of land tenancy that would provide him with the greatest return on his investment. He initially considered the option of direct farming of the estates with wage labourers, only to decide, after examining the alternatives, that 'the desire and necessity of increasing income' obliged him to maintain the sharecropping system.¹³

Attempts to apply direct farming to an estate, or even part of it, produced poor results. Convinced that close supervision would yield better results than the sharecropping system, the marquis of Sentmenat tried to introduce direct farming on his estates in Urgell. But the experience did not bear out his expectations: gross income rose, but expenses more than quadrupled since permanent and temporary labourers had to be hired, and work animals and agricultural implements (production factors that in the traditional system were provided by the sharecropper) had to be purchased. As a result, the outcome of the seven-year experiment (1873–79) was a loss of 12,000 pesetas, and Sentmenat returned to the old system of tenancy. The Maspons family's experiment with direct farming also ended in failure. In 1912 the landowner planted fruit trees (especially almonds and hazelnuts) in the expectation of high profits, and employed farm workers in some of their plots. The results were disappointing: the landowner himself, after analysing his accounts, noted that his profits would have been greater had he leased out the land, and decided that the cause of his failure had been the cost of the wages.¹⁴

Experiences like these can explain why sharecropping and other forms of indirect exploitation not only persisted after the crisis at the end of the nineteenth century but actually strengthened their position as basic systems for managing large estates.¹⁵ This situation is confirmed in several reports commissioned by the authorities and by an abundance of literature from the mid-nineteenth century onwards discussing the best system of tenancy for large estates.¹⁶

In our view, the fundamental reason for the continued reliance on sharecropping was technological. As long as agricultural production continued to be heavily labour-intensive, landowners farming directly were unable to provide their workers with significantly better equipment than that available to tenants or sharecroppers. And in the absence of higher technology, the theoretical advantages of direct farming would be outweighed by problems in the control and organization of labour. Since sharecroppers' remuneration depended upon the crop yield, they were clearly interested in putting in all the work needed to achieve the expected income. Moreover, efficient management of the estates could be hampered by

¹³ Arxiu privat família Fina, Correspondència de Tomàs Coll.

¹⁴ Pascual, *Els Torelló* describes a similar experience.

¹⁵ An exception that can be attributed to the

integration of a farm in an agro-industrial business in Pujol, 'Trabajo asalariado'.

¹⁶ Garrabou, Planas and Sagner, *Un capitalisme impossible?*, pp. 15–62.

distance or by ignorance of the social conditions and techniques used in exploiting the land, and in some cases efficient control of work processes proved impossible.¹⁷ But even in those cases where the landowner was technically proficient and aware of the social situation of the workers, or delegated the running of the estate to an able, honest administrator, the expense of maintaining permanent and temporary labourers placed such a burden on the current accounts that direct farming was not a viable option.

The use of sharecroppers provided the landowner with sufficient manpower while reducing the cost of administration and without requiring the landowner to forego his capacity to dictate farming practices. These forms of contractual farming entailed a certain degree of external control, for while the greater part of the day-to-day decisions were taken by the farmer, they also provided many opportunities for intervention: the landowner could decide on the use of the land, the technical means available for carrying out the tasks, whether to maintain or increase the productive capacity of the estate, and so on. Some sharecropping contracts clearly stated not only the varieties that the farmer had to plant (and prohibited those not wanted by the owner) but also prescribed in detail the operations that the farmer had to carry out and when. Clauses requiring the maintenance of the productive capacity of the farm were also common. The agroecological context also favoured the preferences of landowners for sharecropping, since it allowed the risk to be shared; throughout the period analysed the yields fluctuated considerably, especially in the south-west of Catalonia.

The making of leases of farms for money rents was practically unknown in Catalonia. The income registered in the account books under this head usually comes from the lease of small plots, the rent paid by the sharecropper for his home, grazing lands or activities not related to agriculture such as quarries. Sharecropping continued to form the backbone of the management of large landholdings until the implementation of a new technological model based on mechanization, agricultural chemistry and genetic innovation from the 1950s onwards.

II

In Catalonia there were two forms of sharecropping, which correspond with the environmental and agricultural conditions (Figure 1). In the north-eastern zone excluding the Pyrenean area, annual rainfall varies between 600 and 800 mm and the natural conditions are relatively favourable for arable crops, although the land is mountainous and there are few plains of any size. By contrast, the south-western zone has large plains, but its rainfall is low (400–500 mm) and is highly seasonable. Consequently, we start by distinguishing between the estates located in the areas of Catalonia with more rainfall (Gironès, Plana de Vic, Vallès Oriental, Vallès Occidental, Baix Llobregat), where the typical form of rural settlement was the isolated farmhouse (*mas*) and the most common type of contracts were those of *masoveria*, a form of sharecropping that included housing for the tenant, in which the landowner received one

¹⁷ On the importance of efficiency in control and organization of labour for economic growth, see L. Toharia, 'Extracción de trabajo y cambio técnico: el caso de la fábrica McCormick de Chicago, 1880–1900', *Revista de Historia Económica* 2 (1984), pp. 105–26.

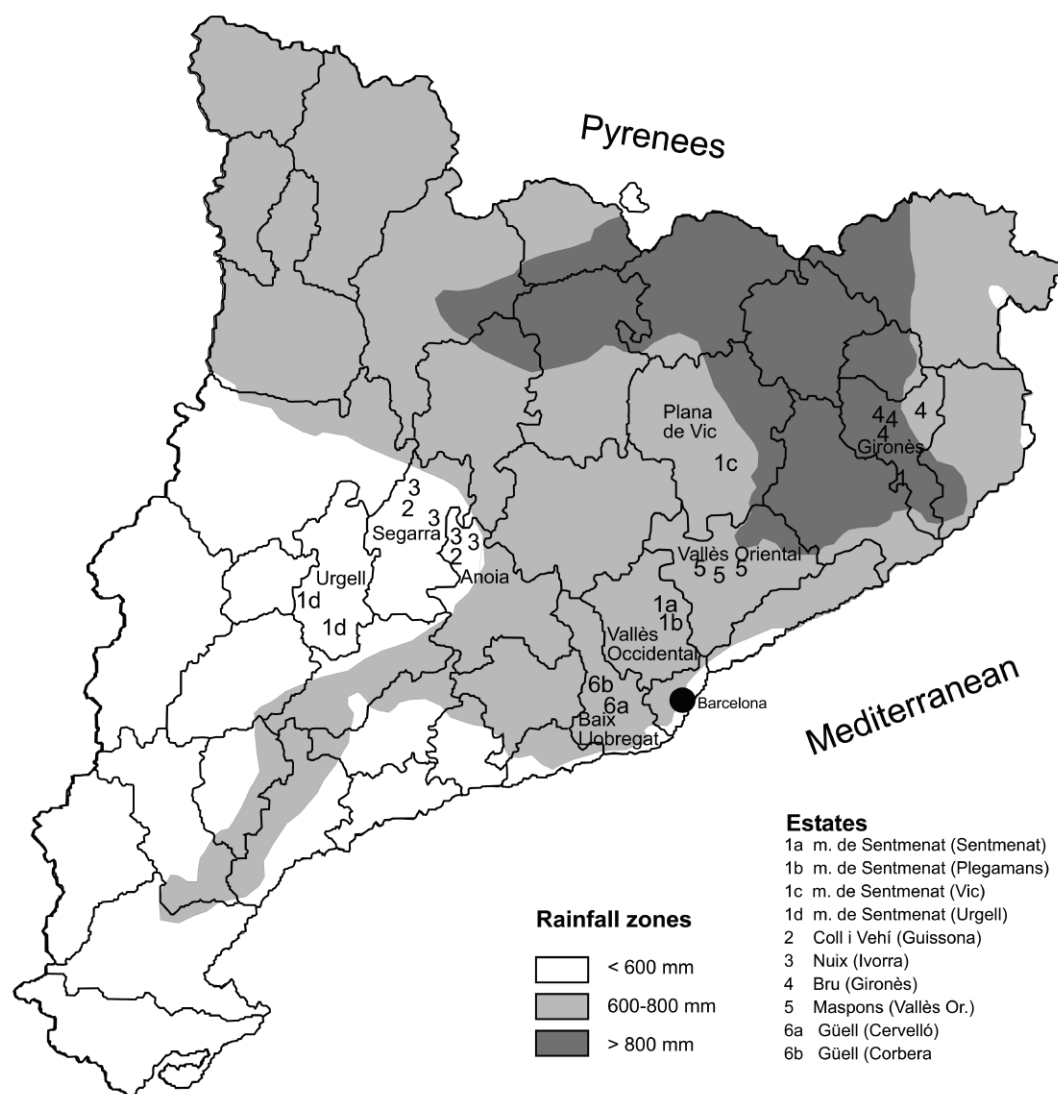


FIGURE 1. Location of the estates analysed

third of the harvest but played little part in the cost of running the farm, and the estates in the dry areas (Urgell, Segarra, Anoia) where settlements were more concentrated in villages. The form of sharecropping practised here was called *mitgeria*, a reference to the fact that the landowner received half of the harvest. In this case, because of the lower productive capacity of the land, the landowner had to take on a larger share of the running costs in order to achieve an acceptable return. Sharecropping contracts were a central element of all these estates, and the account books register only the parts of the running costs of which the landowner paid a share. They omit the most important production costs, especially those related to labour and basic inputs such as seeds and fertilizers, which were usually provided from the reuse of farm produce.

Even so, the landowners made regular financial contributions, although the sums involved were usually small. One part of these payments went towards what we could call the current expenditure, while the other part, which we call extraordinary expenses (the maintenance and investment expenditure), was spent on the upkeep and expansion of the productive capacity of the farms. The remainder consisted of tax payments, land charges and loans to sharecroppers, which we will disregard for now.

The changes in the subventions provided by the landowners towards the running costs can help us to understand their role in the processes of growth and intensification of agricultural production. The evolution of the running costs is shown in Figure 2, and reveals a number of common features despite the diversity of conditions and characteristics of each estate. There is a clear correspondence between the series during the nineteenth century, with a sequence of peaks and troughs that reflect the expansion and contraction of agricultural production in Catalonia.

We can identify the following phases:

1. An early period that stretched as far as the middle of the nineteenth century, when the crisis affecting the old social order was most severe and the new liberal institutions were established. The dominant characteristic of this period is the tendency of landowners to reduce costs by sustaining or reducing their contributions.
2. A second period of higher expenditure, with a major increase in the 1870s coinciding with a great expansion of vineyards in Catalonia.
3. A new cycle of reduction of landowners' contributions which lasted until the beginning of the twentieth century, reflecting the crisis in agriculture from the end of the 1880s onwards, when landowners once more reduced their expenditure in line with their falling income.
4. A period of moderate recovery of expenditure during the first third of the twentieth century, although with interruptions, and without reaching the level of the pre-crisis years.

We can safely assume that the periods of expansion led to a greater degree of liquidity due to the increase in gross income, which disposed the landowner to take on a greater share of the costs, but that this expenditure would shrink as income fell in periods of contraction. We see a spectacular increase in the running costs on the estate of the marquis of Sentmenat in Urgell during the 1870s, when viticulture was in expansion, because at the time the marquis was experimenting with the use of wage labour. However, with the crisis of the end of the century, the expenditure on the estate fell sharply and remained low until the early 1900s. The estates of the Güell family also registered a decline in expenditure in the 1920s which can be interpreted as a strategy to sustain income in a period of falling agricultural prices (especially severe in the case of wine) when there was little margin for increasing revenue from land. In some cases, the landowner withdrew gradually from direct involvement in the management of his estates, limiting his activity to collecting rents and maintaining the value of the land. In other cases, such as the Bru family, the landowner had to increase expenditure to counter the effects of the crisis.

A second observation can be made with regard to the scale of the financial resources

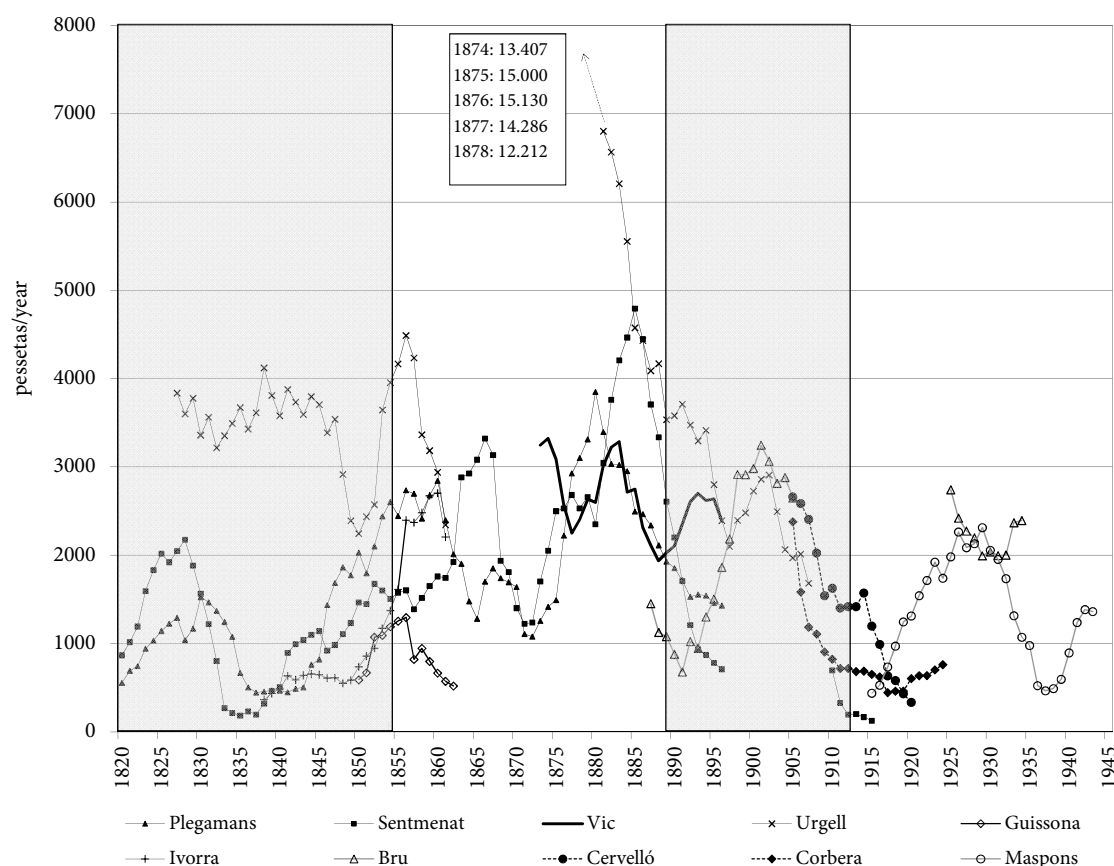


FIGURE 2. Evolution of total running costs (five-year moving averages in 1913 pesetas)

Sources: Palau, Sentmenat, Vic and Urgell: Arxiu de la Corona d'Aragó, Patrimonials, Sentmenat, Documentació contemporània; Guissona: Arxiu privat família Fina; Ivorra: Arxiu Històric Comarcal de Cervera, fons Nuix, sense classificar; Bru: Arxiu privat família Masó; Cervera i Corbella: Arxiu Històric Nacional de Catalunya, fons Casteldosrius, inv. 167, caixes 53, 153, 154, 155 and 156; Maspons: Arxiu privat de can Maspons de la Vall

that landowners provided. While these might increase substantially in periods of expansion, occasionally doubling or tripling the amounts from previous periods, they continued to be relatively modest. There is nothing from the records of this period to suggest any spectacular shift that might have led to radical change in the tenancy regime. The annual expenditure of most of the estates analysed varied between 1,000 and 2,000 pesetas (at 1913 value), and only rose as high as 3,000 or 4,000 pesetas in exceptional circumstances.¹⁸ These figures represent a relatively small outlay when compared with the gross income (20 to 30 per cent in the wetter areas and 40 to 50 per cent in the arid areas), as we can see in Table 1. This seems to confirm that the landowners' basic management strategy consisted in avoiding most of the running costs.

¹⁸ The properties belonging to the marquis of Sentmenat in Urgell registered much higher expenditure in 1870s due to the experiment with hired labour described above.

TABLE 1. Total running costs as a percentage of gross income

	Marquis of Sentmenat			Coll i Vehí	Nuix	Bru	Maspons	I. Güell López		
	Sentmenat Plegamans	Vic	Urgell					Cervelló	Corbera	
1820–49	23	23	52	52	19					
1850–89	30	39	28	59	39	61	16			
1890–1913	23	15	20	38			22	4	38	48
1914–45		4					31	37	13	21



Masoveria area

Mitgeria area

Sources: See Figure 2

Although the criteria underlying our classification might be open to criticism, we have categorized individual items of expenditure in order to highlight the role of the landowner in the organization of the production process. First of all, we have grouped the items of current expenditure together, including wages and productive inputs for which the farmers were not liable, administrative costs (steward's fees, technical and legal services that were requested, and so on) and a number of other payments for luxury items, charitable causes, or religious concerns, although these were never large items of expenditure. These payments formed part of the paternalist role that many great landowners adopted (donations to charity, support for religious celebrations, local festivals, etc.) and may not have had any direct relation to production costs, but they reinforced the social standing of the landowner and contributed to the smooth running of the estate.

Although expenditure on maintenance and investment are clearly defined in the analysis, they are hard to distinguish in the account books, and so we have decided to include them together as extraordinary expenses.¹⁹ Adding these extraordinary expenses to the current expenditure gives us the total running cost of the estate. As Figure 3 shows, the most important part of the landowner's contribution lies in the current expenditure. Throughout the nineteenth century, current expenditure accounted for between two-thirds and three-quarters of the total costs, gradually declining in the early years of the twentieth century. If we consider that the total running costs did not increase in the first third of the twentieth century, this decline in current expenditure might indicate the withdrawal of rural landowners which we mentioned above, and which was noted by contemporary observers.²⁰ The reduction in expenditure should be seen as a response to the conditions of the agricultural sector in the aftermath of the crisis of

¹⁹ It was common for these two concepts to be combined in private accounts and in official documents (R. Perren, 'The landlord and agricultural transformation, 1870–1900', *AgHR* 18 (1970), pp. 36–51) as well as in the reconstructions carried out by historians (Pascual, *Els Torelló*).

²⁰ On this question see J. M. Lana, '¿Rutina, esquizofrenia o racionalidad? Los negocios agrícolas de los condes de Murillo en Navarra, 1712–1913', *Revista de Historia de la Economía y de la Empresa* 6 (2012), pp. 361–86.

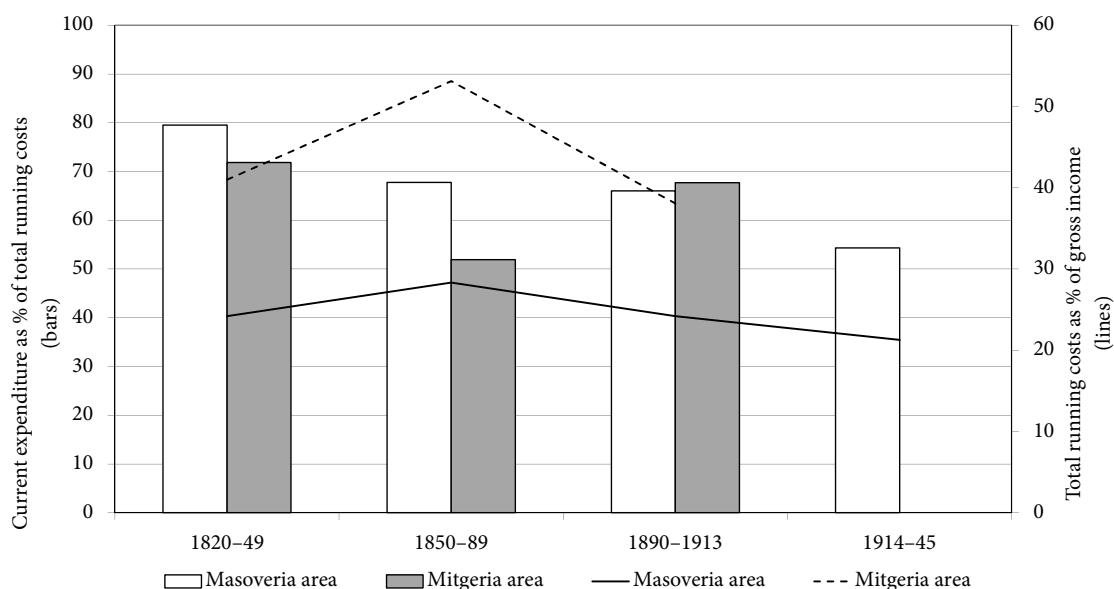


FIGURE 3. Current expenditure and total running costs

Sources: See Figure 2.

the turn of the century, with overproduction and a tendency for prices of agricultural produce to remain stable or fall.

Figure 3 shows that the decline in current expenditure is significant in the estates in both the *masoveria* area and the *mitgeria* area. However, the difference between the two areas is also significant: the evolution of current expenditure in the estates in the wetter area fell from 20 to 10 per cent of gross income, whereas in the estates in the dry area the fall was from 30 to 25 per cent (Figure 4). Again, because of the lower productivity of land, a greater contribution of landowners towards running costs was necessary.

(a) Wage costs

Although wage costs amounted to a significant part of the current account expenditure on some estates, they were always small in absolute terms. The fundamental premise underlying the dominant form of tenancy was that it avoided the problems of hiring and supervising the workforce, although this premise was applied in many different ways. As Figure 4 shows, the landowners who possessed properties in the areas where *mitgeria* was predominant had to assume a greater burden of wage costs. Contracts in these areas systematically included clauses which established that the landowner would contribute to the payment of labour costs during the harvest and sowing seasons. The wages for sowing, threshing, grape harvesting and wine decanting made up the largest portion of the wage costs that the landowner had to provide.

In the areas where *masoveria* was predominant, the cost of farm labour rarely fell on landowners and the overall expenditure on wages was vastly reduced. Most of the salary costs were associated with the attempts to apply direct farming already mentioned, or the

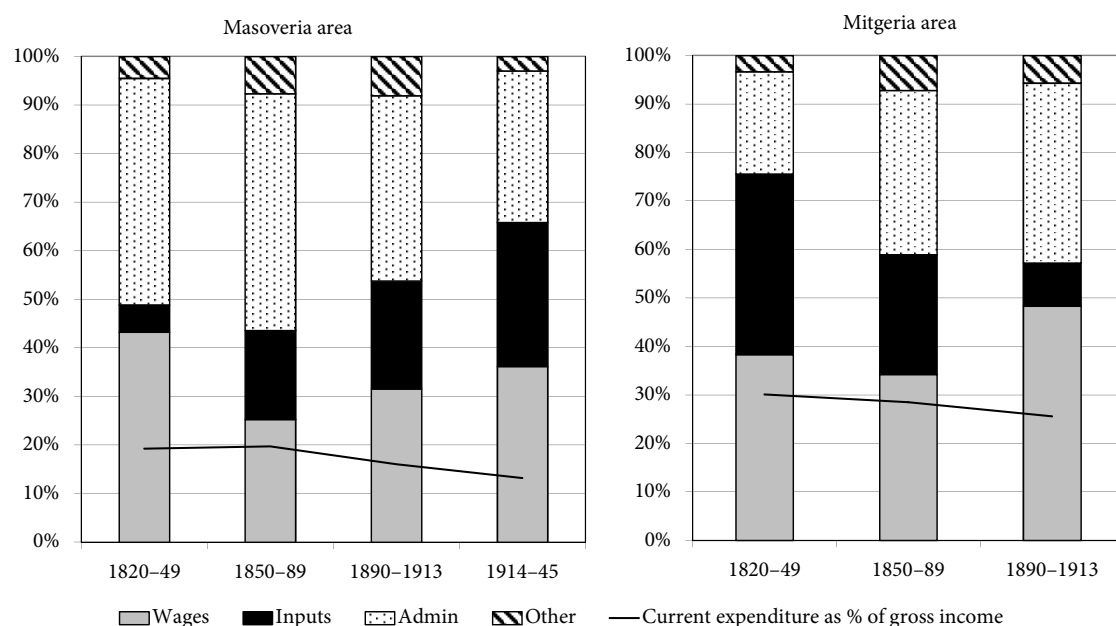


FIGURE 4. Composition of current expenditure

Sources: See Figure 2

management of non-agricultural resources such as woodlands (which, on the Maspons estate, for example, amounted to 46 per cent of the running costs).

There was a steady rise in wage costs in absolute terms from the middle of the nineteenth century until the 1870s and 1880s, but this increase does not indicate significant changes in the share of these wages that the landowners paid. In general, this increase was related to attempts to expand and intensify the specialization in wine growing. Instead, there was a tendency for landowners to contain and reduce these expenses in the aftermath of the crisis. If we take into account the inflation and spectacular increase in wages after World War I, on the one hand, and the need to intensify production on the other, we must conclude that the landowners passed the burden of these increased production costs onto the farmers.²¹ Thanks to these indirect forms of land tenancy, the landowners could let the producers take the strain of adjusting to these new market conditions in which wages rose sharply, but were not balanced by a corresponding increase in prices for agricultural produce.

²¹ On the changes in agricultural wages during the nineteenth century and the first third of the twentieth, see R. Garrabou, J. Pujol and J. Colomé, 'Salaris, ús i explotació de la força de treball agrícola (Catalunya, 1818-1936)', *Recerques* 24 (1991), pp. 23-51; R. Garrabou and E. Tello 'Salario come costo, salario come reddito: il prezzo delle gironate agricole nella Catalogna contemporanea (1727-1930)', *Meridiana* 24 (1995), pp. 173-202; R. Garrabou, E. Tello and A. Roca, 'Preus del blat i salaris agrícoles a Catalunya (1720-1936)', in Carreras *et al.* (eds.) *La industrialització*, I, pp. 422-60.

(b) *Expenditure on material inputs*

As Figure 4 shows, this category of expenditure is much smaller than the previous one. Although these expenditures grew in periods of expansion and shrank in recessions, in both absolute and relative terms, they were of little significance. Again, the estates in the arid area of Catalonia showed a higher level of expenditure than the area of *masoveria*.

The *mitgeria* contracts established that the landowner would provide a part of, or, in some cases, all of the seed corn. While the usual practice was to use seed from the previous year's harvest, occasional poor harvests, poor quality seed or the advisability of renewing the seed stock sometimes made it necessary to acquire seed in the market. These purchases could represent a significant outlay, as on the estates that the marquis of Sentmenat possessed in Urgell in 1840, 1849, 1855 and 1882, when the cost of seed made up more than 90 per cent of the cost of inputs. The purchase of seed is also noticeable in the accounts of the Guissona and Ivorra estates. These purchases could be interpreted as an expression of the owner's interest in improving productivity by following the recommendation of the nineteenth-century agronomists to renew the seed stock on a regular basis. By contrast, during the nineteenth century expenditure in fertilizers was much more modest, and it was only after the beginning of the twentieth century that the purchase of mineral fertilizers by landowners came to be of importance. The system of contracts used in the arid areas of Catalonia did not prevent the introduction of this decisive technological innovation.²²

In the areas of *masoveria*, expenditure on material inputs was far lower and was almost entirely related to the expansion of viticulture and wine production. In contrast, the landowner took hardly any responsibility for the costs of cereal production, in the same way as we saw in the case of wage costs. On the marquis of Sentmenat's estates in Vic, for example, where environmental conditions were unsuitable for vine growing, landowners' expenditure on material inputs was insignificant. On the Bru family estate there was a sharecropping contract for livestock that entailed successive purchases of cattle for breeding or fattening. In this case expenditure on inputs was more than half of the current costs for the landowner and it could easily reach 70 per cent of current costs. But this was a relatively rare endeavour among the large Catalan landholders.

(c) *Administrative costs*

Although all forms of tenancy shared the common purpose of transferring the cost and control of the workforce onto the farmers themselves, the landowners had to establish mechanisms of supervision. As they were only resident on their estates for short periods of the year, they were, on the whole, obliged to rely on their stewards.²³ It was the steward's job to ensure that the work of the tenant farmers and sharecroppers was satisfactory, to choose trustworthy

²² J. Pujol, 'La difusión de los abonos minerales y químicos hasta 1936: el caso español en el contexto europeo', *Historia Agraria* 15 (1998), pp. 143–72; id., 'Los límites ecológicos del crecimiento agrario español entre 1850 y 1935: nuevos elementos para el debate', *Revista de Historia Económica* 3 (1998), pp. 645–75.

²³ On the activities of the stewards, see J. Carmona, 'Las estrategias económicas'; id., *La aristocracia*

terrateniente; R. Garrabou, J. Planas and E. Sagner 'Administradores, procuradores y apoderados: Una aproximación a las formas de gestión de la gran propiedad agraria en la Cataluña contemporánea', in Casado and Robledo (eds), *Fortuna y negocios*, pp. 301–21; J. Carmona and J. Simpson, *El laberinto de la agricultura española. Instituciones, contratos y organización entre 1850 y 1936* (2003), pp. 191–202.

men to watch over the harvest, to collect emphyteutical and other rents and to create a close relationship with the local community in order to prevent conflicts. The documents confirm the presence of a landowner's agent on many of the estates studied.

The employment of a steward was relatively costly, as he would generally receive 10 per cent of the ordinary gross income. In certain cases, he would receive a lower fee, for example, for the sale of timber or in the collection of *laudemium* or unpaid rents. The remainder of the administrative costs comprised payments for legal services or an occasional technical report, insurance policies or small expenses such as visits to the estates by the steward or the landowner, or the building and conservation of boundaries to define the limits of the property.

Administrative costs were among the most important expenditures on many of the estates analysed, in some cases amounting to over 50 per cent of the total current expenditure. Although the percentage was lower in the area of *mitgeria* due to the greater importance of wage costs, the amounts paid under this heading were still relatively large, which confirms the importance that the landowners assigned to it.

Administrative costs remained relatively constant until the twentieth century, even in years of recession and reduction of the landowners' expenditure. They then began to decline or even practically disappear, especially on moderately sized estates where the landowner assumed the task of supervision, as the Bru or the Maspons families did from 1880s onwards. This shift in the landowner's behaviour coincided with a tendency to convert the *masoveria* contract into a leaseholder arrangement, so that the owner could reduce his involvement in managing the farm.

(d) Expenditure on maintenance and investment

Channelling the flow of economic resources into the improvement of productive capacity, increasing the fixed capital, and introducing new crops and new technologies are some of the ways in which contemporary agriculture has grown. One way of measuring the efficiency of a tenancy regime is to gauge the incentives or discouragements that exist for investments in productivity. It has been said that sharecropping in all its forms did not encourage the farmers to invest, as the benefits would not be felt in the short term. The length of their contracts was uncertain, and there was no legislation to ensure compensation for any improvements that they undertook. The logic of the system, at least from this point of view, meant that the responsibility for investments fell on the landowners. What can the accounting records tell us about the behaviour of the landowners with regard to this vital aspect of the management of agricultural estates?

Figure 5 shows the main trends. In most of the estates analysed there is a clear tendency for investments in fixed capital assets to increase from the middle of the nineteenth century. In some cases, the amounts doubled or tripled compared with the beginning of the century, but in the last decade they suffered a sharp decrease. Even so, in absolute terms the amounts were always modest, and there was no significant variation in the relative size of this expense in overall running costs. These expenditures barely reached 10 or 15 per cent of gross income, and only in very few cases reached 20 per cent. They fell sharply after the late nineteenth-century depression.²⁴

²⁴ Some studies of Victorian England and Ireland indicate that this behaviour on the part of the investor was not an isolated historical quirk: J. V. Beckett, *The aristocracy in England, 1660–1914* (1986), pp. 171–82; B.A. Holderness, 'Landlord's capital formation in East Anglia, 1750–1870', *EcHR* 25 (1972); C. O'Grada 'The investment behaviour of Irish landlords, 1850–1875: some preliminary findings', *AgHR* 23 (1975), pp. 139–55.

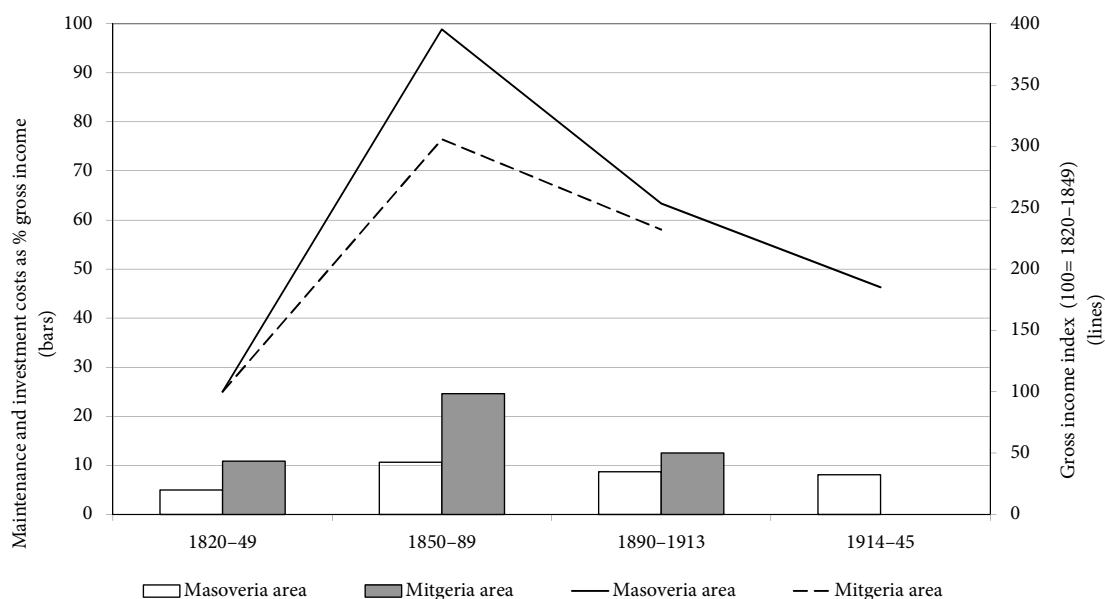


FIGURE 5. Maintenance and investment expenditure

Sources: See Figure 2.

The overall tendency and fluctuations of this expense closely mirror the development of vine growing. The expansion in the early phases recorded in Sentmenat, Plegamans, Guissona, Ivorra and, to a lesser extent, in Urgell, was closely related to the cost of planting vines. In Sentmenat, from 1851 to 1860, the cost of planting vines represented 80 per cent of all investment and, after a brief period of inactivity, rose again to 60 per cent of the total in the years between 1881 and 1890. The purchase of barrels, presses and other equipment for the production of wine and the construction of cellars also formed a significant part of the investment on estates that specialized in wine production. The prospects of the wine market generated huge expectations and the expansion of wine production continued to absorb a large part of the investment made until the 1880s.

After the late nineteenth-century depression, the amounts invested were smaller. This coincided with the tendency by landowners to diversify their investments (by the purchase of industrial or financial assets) as a response to the loss of profitability of agricultural investments, to spread risk and ensure greater stability of income. In places where investment in the farms continued to be significant, the money was used principally to improve housing and had little effect on production. On the Maspons estate, for example, maintenance and investment expenditure accounted for over half of the total running costs, but the greater part of this (53 per cent) went on renovating the landowner's farmhouse. While the value of the property increased, it had only a slight effect on the productive capacity of the estate, underlining its function as a reservoir of value. The owner of the Goy family estate spent a large part of the total income (about 35 per cent of the gross income) on maintenance and investment at the end of the 1920s and at the start of the turbulent 1930s. This amount was mostly spent on improving

the housing conditions of the tenants (*masovers*) and on building stables for livestock, from which the estate received no income.²⁵ In this case, the social and political context was probably a major influence, as was the ideology of the landowner, who had links with the currents of social Catholicism.

In the accounts analysed, there was hardly any investment in agricultural machinery except for the occasional purchase of a grape press or of tools for the mill. During the nineteenth century there was no guarantee that machinery would offer any great return, and in any case the reliance on sharecropping meant that the need for machinery to replace manual labour was low. As long as the farmers were responsible for nearly all the labour costs, landowners were understandably reluctant to pay for machinery which would yield little in the way of profit.

One final observation: a high percentage of the expenditure on investment and maintenance consisted of wages paid to farm labourers, builders, workmen and carpenters, and only a small proportion was spent on materials and tools. The increase in wages from 1914 onwards helps to explain why investment was so constrained during the first third of the twentieth century. The fact that most of the spending on investment was on labour costs meant that there was actually a greater likelihood that investment would be made on peasant holdings, where labour was relatively abundant and, to a limited degree, circumstances favoured improvements based on the use of the workforce.

III

We have seen that landowners preferred sharecropping and other forms of land tenancy to direct farming. Furthermore, the evolution of their expenditure shows that they were reluctant to spend anything other than modest amounts. This behaviour could lead to a situation where the resources available for farming were inadequate and less efficient than they might have been if other available technologies had been employed. All this might lead us to conclude that the landowners had little entrepreneurial spirit, and to associate sharecropping with outdated systems in which the lack of capital investment led inevitably to stagnation. However, no significant differences have been detected either in the technologies used or in the levels of productivity between sharecropped estates and those farmed directly by the landowner using family members or hired labourers. This suggests that the level of capital available for investment was sufficient to implement agricultural practices which were at least on a par with those in common use and which were considered most appropriate for each area.

It must be borne in mind that after the liberal reforms of the mid-nineteenth century, the ecclesiastical institutions were not replaced by an equivalent banking system and, therefore, the capital market was underdeveloped. Much of the credit was channelled through informal networks where high interest rates prevailed.²⁶ But again, it should be reiterated that the main

²⁵ The Torelló family estates provide another example: the expenditure on maintenance and investment shrank considerably in the beginning of the twentieth century, and was concentrated on improvements in the housing conditions of the sharecroppers (Pascual, *Els Torelló*, II, p. 196).

²⁶ The consequences of the weakness of the Spanish credit market in the development of some agricultural products has been highlighted by V. Pinilla and M. A. Ayuda, 'Foreign markets, globalisation and agricultural change in Spain, 1850–1935', in V. Pinilla (ed.), *Markets and agricultural change in Europe* (2009),

component in many investments was labour: the work to improve the land devoted to vines and other shrubs or trees, which represented the main investment in the period examined, required inputs of labour and, to some extent, animals. Therefore, the lack of capital or its high cost did not prevent the transformation of farms. In this regard, sharecropping was a highly functional tool for reducing monetary expenditure, shifting labour costs to the sharecropper.

Between 1820 and 1940, agriculture in Catalonia developed in a context of a certain rigidity of labour markets. The level of proletarianization or dependence on monetary wages of agricultural labour force was limited, since many families had small farms, either owned or rented as leaseholders or sharecroppers, which provided some economic autonomy. The wage earners who depended entirely on their earnings were mainly children or youths in the early stages of their working lives.²⁷ In addition, the emergence of modern industry in the region created a competition for labour and affected the wage level in agriculture.²⁸ In these conditions, the use of hired labour or the lease of large estates to a single farmer created formidable difficulties. On the one hand, few leaseholders possessed sufficient resources to run a large estate; on the other, labour became more expensive, and any improvement in productivity gained through direct farming by the landowner was outweighed by the costs of labour and problems of supervision.

The introduction of machinery to reduce labour costs also came up against technical and financial problems. On the technical side, the introduction of large-scale mechanization onto the farms was not really viable until the twentieth century was well underway.²⁹ On the financial side, the low income from agriculture meant that the return on capital invested in machinery would probably be lower than that obtained in other sectors. So, in order to obtain the best return on capital, investors would naturally direct their funds to sectors that offered higher

Note 26 *continued*

pp. 173–199. On the credit market in rural Spain, see also A. Sabio, *Los mercados informales de crédito y tierra en una comunidad rural aragonesa (1850–1930)* (1996); A. P. Martínez Soto, ‘Las vías de financiación de la agricultura murciana entre 1870–1936: el problema del crédito agrícola’, *Agricultura y Sociedad* 84 (1997), pp. 49–106; P. Carasa Soto, ‘Proyectos y fracasos del crédito agrícola institucional en la España contemporánea’, *Areas: Revista de ciencias sociales* 21 (2001), pp. 95–122; Carmona and Simpson, *El laberinto de la agricultura española*, pp. 261–300; E. Tello, ‘La transformació del crèdit hipotecari rural, entre els mercats del diner i de la terra’, in Giralt (ed.) *Història agrària*, IV, pp. 325–43; R. García Orallo, ‘El Registro de la Propiedad i la informació: el miratge de la modernització institucional espanyola (1861–1950)’, in R. Congost (ed.), *Dels capbreus al Registro de la Propiedad. Drets, títols i usos socials de la informació a Catalunya (segles XIV–XX)* (2008).

²⁷ R. Garrabou and E. Sagner, ‘Capitalisme agraire sans prolétarianisation. Les salariés agricoles en Catalogne (XIX–XXe siècles)’, in R. Hubscher and J. C. Farcy

(eds), *La Moisson des Autres. Les salariés agricoles aux XIXe et XXe siècles* (1996), pp. 57–75; P. Roca Fabregat, ‘¿Quién trabajaba en las masías? Criados y criadas en la agricultura catalana (1670–1870)’, *Historia Agraria*, 35 (2005), pp. 49–92.

²⁸ R. Garrabou, E. Tello and A. Roca, ‘Preus del blat i salaris agrícoles a Catalunya (1720–1936)’ in Carreras et al. (eds), *La industrialització*, I, p. 422–60.

²⁹ D. Gallego, ‘Transformaciones técnicas de la agricultura española del primer tercio del siglo XX’, in R. Garrabou, C. Barciela and J. I. Jiménez Blanco (eds), *Historia agraria de la España contemporánea*, III, *El fin de la agricultura tradicional (1900–1960)* (1986), pp. 171–229; R. Garrabou, ‘Sobre el atraso de la mecanización agraria en España, 1850–1933’, *Agricultura y Sociedad* 57 (1990), pp. 41–77; J. I. Martínez Ruiz, ‘La mecanización de la agricultura española: de la dependencia exterior a la producción nacional de maquinaria (1862–1932)’, *Revista de Historia Industrial* 8 (1995), pp. 43–63; J. I. Martínez Ruiz, *Trilladoras y tractores. Energía, tecnología e industria en la mecanización de la agricultura española (1862–1967)* (2000); J. Simpson, *Spanish agriculture: the long siesta, 1765–1965* (1995).

returns than agriculture. Sharecropping and other indirect forms of land tenancy required minimal capital outlay from landowners and represented an efficient way of employing labour with low supervision costs.

Although these forms of tenancy placed the burden of the running costs on the shoulders of the farmers, landowners were willing to increase their share of the expenditure when the occasion demanded it, as happened on the marquis of Sentmenat's estates in Urgell. This landowner not only provided the money for the seed corn and a part of the labour costs, but often gave loans to his sharecroppers for the purchase of work animals or to pay harvesters. Moreover, he adopted farming with wage labour for a few years when the area under vines was being extended, but the experiment ended in failure.

The intensification of vineyards and orchards proved to be the most efficient way of increasing productivity in large areas of Catalonia in the latter half of the nineteenth century. It was not only the vineyards that enjoyed a spectacular expansion, but also the plantations of olives, almonds, hazelnuts and carobs. The expansion in this sector called for significant investment which sharecroppers and tenant farmers were rarely willing to undertake. This attitude is perfectly comprehensible when we take into account that their contracts, while always renewable, were usually valid for between one and five years, and offered no guarantee that they could recover the value of any investments they made. In these circumstances, the landowners had two possible courses of action. Firstly, they could pay all the costs of planting, or secondly, they could use longer contracts of 20 years or more that passed the costs of planting on to the farmers. We have seen from the account books that a significant part of the investments made in estates in vine-growing areas was due to the planting of new vines, but most of the landowners preferred to use long-term contracts such as the *rabassa morta*³⁰ (which terminated either after 50 years or when two thirds of the original vines had died) when they wanted to increase the area dedicated to these crops. We can deduce from this that the landowners sidestepped the limitations inherent in some forms of sharecropping by adopting other types of contract which were already in use in rural Catalonia.

This would seem to confirm the hypothesis that whilst the level of investment they made was modest, the landowning families did not behave like absentee landlords who showed no interest in maximizing the productive potential of their farms.³¹ The examples we have analysed have given us some insight into the rationale behind some of the landowners' decisions and the diverse responses that they adopted according to the circumstances and the prevailing social and environmental conditions on their estates.

³⁰ J. Ferrer Alòs, *Pagesos, rabassaires i industrials a la Catalunya central (segles XVIII-XIX)* (1987); J. Colomé, 'Les formes d'accés a la terra a la comarca de l'Alt Penedès durant el segle XIX: el contracte de rabassa morta i l'especialització vitivinícola', *Estudis d'Història Agrària* 8 (1990), pp. 123-43; F. Valls-Junyent, *La dinàmica del canvi agrari a la Catalunya interior.*

L'Anoia, 1720-1860 (1996); J. Carmona and J. Simpson, 'The "Rabassa Morta" in Catalan viticulture: the rise and decline of a long term sharecropping contract, 1670s-1920s', *JECH* 59 (1999), pp. 290-315.

³¹ As a contrast, see J. Martínez Alier, *La estabilidad del latifundio* (1968).