Sticky Fingers. The Investment Structure of the Spanish Oil Business

Sticky Fingers. Production et commerce de l’huile de Bétique

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Ancient economic history has come a long way. For more than a century, the discipline has been plagued by stubborn entrenchment in preconceived models of modernism and primitivism, an overenthusiastic search for parallels in highly developed economies and a patchy compilation of biased sources. One of the main subjects of debate was the question whether the Roman aristocracy made investments in trade and industry and if so, to what extent this money supply was able to support economic performance. Adherents to the traditional primitivist model were convinced that aristocracies simply refrained from investing in commercial sectors and that this absence of elite money explained the limited scale of exchange and production. The peer pressure of aristocratic ideology such as expressed by Cicero apparently was deemed sufficiently strong to persuade business-friendly elites with an aptitude for commerce and a desire for high profit margins to abstain from making money. The crucial flaws in this model have now largely been exposed: contributions from the field of archaeology and epigraphy in particular have shown the limitations of literary sources and the deliberate smokescreens designed by Roman elites to conceal the true investment strategies in their economic portfolio. Nevertheless, despite the general agreement that more elite money was fuelling the Roman economy than previously accepted, tracing actual personal engagement or investments through agency remains difficult. In this respect, the primitivist model and its focus on ideologies did provide a convincing explanation for the sheer invisibility (instead of absence) of aristocracies in business. Within the Roman framework of self-representation, explicit statements of personal involvement in business implied the need for practicing a trade instead of being able to enjoy the delights of aristocratic *otium* and
the absentee management of agricultural estates. Public documents such as inscriptions, which usually are the only sources offering some information on the organization of commerce, therefore remain silent on the economic investments of the elite and result in a completely biased picture of the origins of the money circulating in trade and industry, the identity of the people involved in financing and organizing trades and the eventual profits derived from making investments.

This paper will try to provide a tentative solution to the traditional limitations of inscriptive evidence, by confronting monumental epigraphy with texts on archaeological objects and modeling different investment strategies occurring in the Spanish oil business. I will argue that this approach allows us to detect both direct involvement by elites as well as echoes of various forms of major capital outlays in the oil industry (whether made by elites or wealthy entrepreneurs), viz. large-scale investments through agents and the creation of integrated enterprises. I first discuss some inherent problems to the use of epigraphy in economic analysis and challenge the primitivist assumption that only elite money is able to increase scale and performance in the Roman business world. Next, several case studies from the Spanish oil trade will be adduced to present the variety of investment strategies introduced to limit risks and uncertainties and increase profitability.

Local elites, professions and epigraphy

In this first section, I shall shortly discuss the limits of epigraphy in writing economic history, but at the same time the valuable information inscriptions have to offer on the sometimes difficult relationship between aristocratic ideology and actual identity construction.

When extrapolating the aristocratic ideology heralded by the senatorial elite to the local level of the municipal aristocracy, one expects the majority of the council members to closely imitate the values and habits treasured by the highest echelons in society. Their ideas of self-representation were determined, not by professions or sources of wealth, but by the much more honorable public offices they held or the services and donations offered to the community. The powerful attraction of imitation indeed resulted in a wide-spread silence on the economic background of local nobles (and the subsequent problems in reconstructing elite portfolios). Nevertheless, some minor differences with the traditional norms which are ubiquitous in Latin literature, can be noted.

First, contrary to the top elite classes, inscriptions in which local elites indicate the trades they engage in, can regularly be found. In San Giovanni Incarico for instance, the epitaph of the decurio T. Elvius Fregellanus proudly states his involvement in the cattle trade and mentions his profession (negotiator iuvencorum) even before his office-holding. The inscription does not point out any contradiction between belonging to the local elite and gaining a living in the stock-phrase sordidae merces. It seems that the further one moves away from the senatorial and equestrian elites, the more likely it is that occupational status, instead of being ridiculed as a lamentable necessity for the poor and needy, becomes an acceptable part of identity construction. Second, breaking away from the regular epigraphic habit by including a profession is not limited to less Romanized provinces where the local elites might perhaps have been less familiar with the Roman aristocratic values as described by Cicero. Major concentrations of council members
explicitly naming their personal involvement in trade can be found in commercial hubs such as Ostia and Lyon.\textsuperscript{7} The fact that these cities offered excellent economic opportunities and chances for social mobility is no doubt closely related to this change in epigraphic habit. The interrelation of one’s occupational status and place among the local nobility clearly indicates professional success, wealth and personal accomplishments in an extremely competitive setting, so pride in one’s occupation was not out of place. The famous Cn. Sentius Felix for instance meticulously describes his municipal career, his personal role in Ostia’s wine trade, membership in collegia of shippers and wine merchants and finally his additional connections to other professional associations.\textsuperscript{8} This openly stated pride in his occupational success did not deter one of the oldest aristocratic families in Ostia, the Lucilii Gamalae, to allow Felix to adopt one of their members and thus forge a connection between commercial wealth and a traditional (but impoverished?) elite family. Moreover, it is important to note that many of this business-friendly elites in Ostia and Lyon were probably organizing the distribution of merchandize produced on their own estates. P. Aufidius Fortis, African grain merchant and member of the council in Ostia and his native city Hippo Regius, no doubt possessed agricultural domains in the near vicinity of the African town.\textsuperscript{9} Gallic wine merchants such as Maximius Paternus and Inthatius Vitalis probably commercialized vintages produced in their own vineyards.\textsuperscript{10} The explicit connection to their sources of wealth in the inscriptions can therefore reflect a more personal involvement in the organization of their business. Contrary to the senatorial elite whose political, administrative and military services to the empire forced them to leave the management of their estates and distribution of yields largely to bailiffs and other agents, the businessmen belonging to local elites at least had the ability to be more closely involved in the decision-making process on production and sales. This conclusion from the grain and wine trade provides an incentive to trace similar elite investment strategies in the Spanish oil business, because here the rich amphora epigraphy allows us to test and confirm the model developed below.

**Municipal politics: the nec plus ultra of respectability?**

Despite the fact that epigraphy offers at least some counterarguments against the primitivist paradigm that elites were completely absent from trade and industry, it is true that the available evidence such as presented above, remains particularly meager. Yet, the assumption that only the presence or absence of elite money in a trade is a decisive factor for the scale and profitability might be a misconception. We cannot safely exclude the possibility that some wealthy businessmen who qualified for membership into the local city council simply refused to start a career in politics and that therefore an additional pool of wealth may have existed, which could equally fuel the Roman economy. A career in politics, on whichever level, required a considerable capital outlay to finance all the munera and acts of munificence which the community expected the elite to perform. The everyday functioning of community life for a large part depended on the internal competition between elite members to outperform their peers in generosity, much to the detriment of aristocratic patrimonies. The well-documented refusal of wealthy families to take a seat in the city council during the late 3\textsuperscript{rd} and 4\textsuperscript{th} century offers a good example of the financial burdens decuriones would be confronted with.\textsuperscript{11} Even in the 1\textsuperscript{st} and 2\textsuperscript{nd} centuries AD, some people who controlled sufficient resources to have been eligible for a municipal office must have refused most politely to translate...
tangible wealth into costly recognition. In other words, *honor* cannot always have been able to counterbalance *munus*. Apuleius for instance describes how a wealthy money-changer simply refused to join the elite, because he feared office-holding and the many obligations attached (*metu officiorum ac munera publicorum*). Comparative evidence from other pre-industrial societies confirms that many merchants shunned away from politics, not because they lacked the required financial resources, but because the costs would not outweigh the gains. In the medieval Italian city states, wealthy businessmen frequently did not seek the honor of a career in politics, because the time and money spent to the community were a serious drain on personal resources. In a comparable way, the 18th-century merchant Robert Oliver, when giving advice to a young colleague making his way into business, firmly stated: “You can hardly fail to succeed, if you will abandon Politicks, think only of your business, follow it with unremitting industry and depend on yourself instead of others.”. Similar deliberate choices had been made by members of the most prominent Roman aristocratic families without social disapproval or ostracism. When defining the criteria for people who can be considered to possess the virtue of magnanimity (*magnanimitas*), Cicero obviously first mentions the political elite (*qui res publicas regant*), but immediately adds a category of individuals who according to aristocratic norms were living the life of a gentleman (*vita otiosa*) but only focused on the management of their personal affairs (*sesae suarum rerum finibus continerent*). In his own absurd and imaginary world, Trimalchio echoes this way of life, when he is boasting of his social prominence and wealth gathered in trade, yet at the same time wished to have engraved on his tombstone that he could have joined all *decuriae* in Rome (i.e. the ranks of the *apparitores*), but had deliberately decided to refuse. The conclusion must hence be that the apparent small numbers of elites personally engaged in trade have little to say on the scale of possible investments in the Roman economy. Even if the hypothetical number of aristocrats investing in trade and industry may be larger than the sources allow us to see, a guesstimate of elite involvement alone cannot be a robust criterion to make statements about the magnitude and origin of money supporting the Roman economy. The following section will discuss possible alternative criteria which try to move beyond the sole focus on elites and their economic interests.

### The Spanish oil business: investment strategies and scale

In this section I intend to analyze the organization of production and distribution of oil on the Iberian peninsula. I shall first present the data on the actual involvement of Spanish elites in this trade, which may be untraceable in monumental epigraphy but can be detected by a comparison with inscriptions on archaeological artifacts. The list of municipal aristocrats with direct interests in the oil business will challenge the claim that elites refrained from personal engagement. Next, I propose two different indicators of large-scale investments, viz. involvement in production and the use of agents in the distribution process. Both criteria take into account the forms of business engagement beyond the personal level of involvement and are related to the creation of family firms: if a businessman or members of his family manage to control sources of production or employ large numbers of family agents in distribution, they must have possessed considerable wealth to invest, either in the purchase and management of oil-producing estates and amphorae workshops, or in the creation and maintenance of a body of agents.
These two indicators therefore suggest large capital outlays, irrespective of the businessmen’s status in the local community. Whether or not they belonged to the political elite is of no concern to the magnitude of their economic investments.

**Personal engagement of Spanish elites in the oil trade**

We already mentioned that due to the Roman epigraphic habit, there was little reason why elites would include a profession in an inscription. If for instance a funerary monument had been erected by the deceased or his family, they preferably stated his political career and acts of munificence rather than the sources of wealth financing his privileged position in society. Honorary inscriptions on the other hand only appear to include an occupation for an elite member when he had some professional connection to the initiator. Professional associations presenting an elite member with a statue for instance will invariably include his economic interests, for his prestige reflects on the other, more humble members of the collegium. However, if the statue had been dedicated by the citizens, city council or the members of an association the aristocratic businessman did not belong to, inscriptions usually highlight his acts of generosity but remain silent on his economic background. When the Gallic municipal aristocrat and oil merchant Sex. Fadius Secundus Musa was honored by an association of builders (fabri subaediani) he had showered with gifts but not joined as a member, they respectfully rendered thanks to their patron for his generosity but did not refer to his engagement in the oil business. They had no reason to elaborate on his occupation, for only the gifts mattered for the association, not the revenues supporting the patron’s munificence.

Nevertheless, despite these limitations, a comparison between monumental epigraphy on the one hand and the names of the oil merchants preserved in inscriptions on oil amphorae on the other (the so-called tituli) can substantially enhance our knowledge of the economic interests of municipal elites. What is more important however, is that all these individuals not only personally engaged in the oil trade, but also relied on their family members to assist in trade and to control other sectors of the oil industry, viz. the production of amphorae (indicated by their names on stamps) and oil (suggested by their names in the tituli). All relevant data have been summarized in Table 1 and Table 2.

**Table 1: Municipal aristocrats personally engaged in the oil trade**

<table>
<thead>
<tr>
<th>Name</th>
<th>Monumental epigraphy</th>
<th>Type of inscription</th>
<th>Amphora epigraphy</th>
</tr>
</thead>
<tbody>
<tr>
<td>L. Aelius Aelianus (Broekaert 2013, nr. 513)</td>
<td>CIL 2.1191</td>
<td>dedicatory</td>
<td>CIL 15.3693-3694</td>
</tr>
<tr>
<td></td>
<td>CIL 2.7.725</td>
<td>dedicatory</td>
<td></td>
</tr>
<tr>
<td>Sex. Fadius Secundus Musa (Broekaert 2013, nr. 732)</td>
<td>CIL 12.4393</td>
<td>honorary</td>
<td>CIL 15.3863-3873</td>
</tr>
<tr>
<td>C. Iuventius Albinus (Broekaert 2013, nr. 807)</td>
<td>CIL 2.1054</td>
<td>honorary</td>
<td>Liou 1992, nr. 4</td>
</tr>
<tr>
<td>C. Sempronius Sempronianus (Broekaert 2013, nr. 935)</td>
<td>CIL 2.3361</td>
<td>honorary</td>
<td>Carreras Monfort and Funari 1998, 39</td>
</tr>
<tr>
<td>C. Valerius Valerianus (Broekaert 2013, nr. 1007)</td>
<td>CIL 2.2098-2099</td>
<td>honorary</td>
<td>CIL 15.4025-4027</td>
</tr>
<tr>
<td>Name</td>
<td>Indicators of scale</td>
<td>Reference</td>
<td></td>
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<td>-----------------------------</td>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
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<tr>
<td>L. Aelius Aelianus</td>
<td>oil production</td>
<td>tituli picti of Aelia Aeliana: CIL 15.4049; Liou 1980</td>
<td></td>
</tr>
<tr>
<td></td>
<td>amphora production</td>
<td>e.g. the stamp LAEL: Remesal Rodríguez 1997, nr. 28; Chic García 1993 for the gens Aelia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>partnership with relatives in the oil trade</td>
<td>CIL 15.3693-3694</td>
<td></td>
</tr>
<tr>
<td>Sex. Fadius Secundus Musa</td>
<td>freedmen as commercial agents</td>
<td>Anicetus: CIL 15.3855-3861</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Antiochus: Rodríguez Almeida 1972, nr. 16</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Paon: CIL 15.3862</td>
<td></td>
</tr>
<tr>
<td></td>
<td>marital connection to the senatorial elite</td>
<td>clarissimum nepotem: CIL 12.4393</td>
<td></td>
</tr>
<tr>
<td>C. Iuventius Albinus</td>
<td>amphora production</td>
<td>e.g. the stamp CIA: CIL 15.2917; Berni Millet 2008, 398-402</td>
<td></td>
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<tr>
<td></td>
<td>oil production?</td>
<td>landownership because Spanish elite</td>
<td></td>
</tr>
<tr>
<td></td>
<td>relatives in the same trade</td>
<td>stamps QIC, QIAL and QIM; titulus of the merchant Q. Iuventius M[---]: Berni Millet 2008, 398-402</td>
<td></td>
</tr>
<tr>
<td>C. Sempronius Sempronianus</td>
<td>amphora production</td>
<td>e.g. the stamp CSEMPPOLYCLITI: Amar and Liou 1984, nr. 130</td>
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<tr>
<td></td>
<td>oil production</td>
<td>tituli picti of Sempronia Privata and the estate Sempronianum: Rodríguez Almeida 1980, nr. 37 and CIL 15.4319</td>
<td></td>
</tr>
<tr>
<td>C. Valerius Valerianus</td>
<td>amphora production</td>
<td>e.g. the stamp LVALERITERTI: CIL 15.3227a</td>
<td></td>
</tr>
<tr>
<td></td>
<td>oil production</td>
<td>e.g. the tituli picti of Valeria Patricia Philoga and the estate Valerianum: CIL 15.4224 and Rodríguez Almeida 1980, nr. 26</td>
<td></td>
</tr>
<tr>
<td></td>
<td>relatives in the same trade and freedmen as commercial agents</td>
<td>Alexander: CIL 15.4002-4011</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Cestus: CIL 15.4012</td>
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<td></td>
<td></td>
<td>Epagathus: CIL 15.4013</td>
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<td></td>
<td></td>
<td>Fronto: CIL 15.4015</td>
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<td></td>
<td></td>
<td>Linus: CIL 15.4021</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Onesimus: CIL 15.4022</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Paternus: CIL 15.4023-4027</td>
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<tr>
<td></td>
<td></td>
<td>Silvanus: CIL 15.4029</td>
<td></td>
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</table>
The data collections suggest two main conclusions. First, and consistent with the Roman epigraphic habit described above, the nature of the monumental inscriptions almost certainly precludes any details on the occupations of the elite members. Only by the presence of their names on amphorae, where the merchant’s name was required to identify the person responsible for the distribution process and the epigraphic habit was unable to distort the data on economic interests, are we now able to detect their sources of wealth. Given that only a fraction of the *tituli pictii* from Monte Testaccio has been published, future archaeological surveys may uncover similar close connections between the local elites and the Spanish oil trade. Second, all merchants appear to have made investments in the oil business to increase scale, either by integrating the production stage or engaging relatives and freedmen in the same trade. The first strategy evidently was applied quite regularly by Spanish elites, who probably all possessed oil-producing estates and amphorae workshops in the neighborhood of their native town. By exerting control over all different stages in the oil business, they hoped to accumulate information, reduce fraud and supply shocks and eventually increase efficiency and profit margins. The second strategy was available to Spanish aristocrats such as Aelius Aelianus to keep large-scale distribution within the family and hence reduce agency costs and risks of opportunism. Foreign elite merchants such as Fadius Secundus may have had fewer opportunities to invest directly in the production process (even though we do find Gallic families involved in amphora production, see below), but counterbalanced this restriction by stimulating his freedmen to follow him in the same trade. Through extensive cooperation, probably in a partnership, was Fadius Secundus able to launch his former slaves in the oil business and tap into a cheap labor pool of trustworthy agents to quickly increase scale.

As the combined information from monumental and amphora epigraphy clearly indicate that these two indicators of large-scale investments were used by elites, I will in the next sections adduce further examples of the application of these techniques in the oil business, without however being able to identify the businessmen as members of the elite. Yet, as argued before, the absence of information on their civic status has no relevance for the scale of the investments they made: not only municipal elites were capable of making large-scale investments. The presence of large numbers of commercial agents all belonging to a single family and the vertical integration of production and distribution only point out the amount of money dedicated to the development of the oil trade. In the next sections, I discuss why these two strategies matter in the organization of business and how they can be traced in amphora epigraphy.

**Commercial agents in distribution**

I have argued elsewhere how a business family could try and optimize performance by employing their own freedmen as commercial agents, engaging them in all different stages of the trade the family specialized in and having them settled in different trade hubs along shipping routes. Here the focus is on merchant families who encouraged their freedmen to cooperate in the distribution of olive oil in order to increase scale. Most of them must already have been working in this trade before manumission, so the main advantage for the family to continue cooperation with the most trustworthy and talented freedmen was the preservation of experience, previous investments in training and the accumulation of individual information-gathering on optimal routes, reliable suppliers...
and regular customers. It is now impossible to establish the various ways in which the wealthy patrons buttressed the creation of a network of agents, but pecuniary support and the provision of goods and commercial infrastructure such as ships seem very plausible. We are not far away from Trimalchio’s business investments after he had retired from trade in person (*coepi per libertos faenerati*).\textsuperscript{23}

The main criteria to identify these merchant families are: a) the presence of several individual merchants sharing a *praenomen* and *gentilicium* in the *tituli* β; b) the engagement in trade within the span of two generations at most; c) a predominance of freedmen’s *cognomina*; and d) the absence of a clear connection to the production sector (viz. their names do not occur in stamps or *tituli* δ). The results of this enquiry are presented in Table 3.\textsuperscript{24}

<table>
<thead>
<tr>
<th>Family</th>
<th>Number of merchants</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>LL. Antonii</td>
<td>7</td>
<td>Broekaert 2013, nr. 548; 550-552; 555; 557-558</td>
</tr>
<tr>
<td>DD. Aticii</td>
<td>6</td>
<td>Broekaert 2013, nr. 569; 572; 574-577</td>
</tr>
<tr>
<td>DD. Caecilii</td>
<td>14</td>
<td>Broekaert 2013, nr. 604; 610-611; 614-616; 618-624; 626</td>
</tr>
<tr>
<td>CC. Consii</td>
<td>5</td>
<td>Broekaert 2013, nr. 672-676</td>
</tr>
<tr>
<td>CC. Crassii</td>
<td>4</td>
<td>Broekaert 2013, nr. 698-701</td>
</tr>
<tr>
<td>Gesatii</td>
<td>4</td>
<td>Broekaert 2013, nr. 739-742</td>
</tr>
<tr>
<td>QQ. Laberii</td>
<td>9</td>
<td>Broekaert 2013, nr. 810-818</td>
</tr>
<tr>
<td>LL. Memmii</td>
<td>8</td>
<td>Broekaert 2013, nr. 850-854; 857-859</td>
</tr>
<tr>
<td>PP. Olitii</td>
<td>2</td>
<td>Broekaert 2013, nr. 887-888</td>
</tr>
<tr>
<td>LL. Segolatii</td>
<td>6</td>
<td>Broekaert 2013, nr. 924-929</td>
</tr>
</tbody>
</table>

The table clearly indicates that, first, the technique of introducing several freedmen to a single trade was a standard strategy to increase scale in shipping and selling oil amphorae, and second, it was used by Spanish and foreign merchant families alike. The Gesatii and Segolatii were, given the Celtic origin of their *gentilicia*, no doubt Gallic business families who, in a similar way to the commercial organization of the Fadii as discussed above, specialized in the large-scale shipping of Spanish oil to Gaul and Italy. Yet, as far as the available evidence allows us to conclude, none of these families can directly be connected to the municipal aristocracy in the Spanish or Gallic provinces. The important conclusion however must be that whatever the social status of these families may have been, they were at least able to make investments in the oil trade similar to or even above elite level.

**Vertically integrated family firms**

The final section discusses the possession or management of production infrastructure, viz. amphorae workshops and oil-producing estates. The main advantages of employing family members and freedmen in distribution can now be extrapolated to the production
stage. Through the technique of vertical integration, many Spanish and foreign business families integrated production and distribution into a single large-scale economic specialization. To visualize these diverse business interests, I compare the names of the merchants (tituli β) with, first, persons involved in the production of amphorae (stamps), and second, those connected to the production of oil (tituli δ, presenting either a name in the genitive case identifying the owner of the oil consignment or the name of an estate derived from the owner’s gentilicium). Corresponding gentilicia in stamps and tituli can hence identify traces of vertically integrated family firms. All relevant data have been collected in a separate appendix.

From a theoretical point of view, several categories of vertically integrated enterprises can be distinguished, most of which can indeed be traced in amphora epigraphy.

1. A single name occurs in the stamps and in both types of tituli. On a personal level, a merchant then owns his proper estate and is personally responsible for the production of amphorae. This level of integration requires major investments and a perhaps unreasonably high amount of personal involvement in production and distribution. It therefore seems very unlikely that one individual would be able to organize and undertake all different stages of the oil business and, indeed, to my knowledge not a single case can be adduced where we can ascribe all three stages to one and the same entrepreneur. Businessmen clearly needed the assistance of others, i.e. family members, to allow this level of control and organization. When moving from the personal to the family level, many case studies clearly establish the close family connections in the organization of production and distribution. The family of the Aelii, which specialized in all aspects of the oil business from the late 1st until the early 3rd century, offers a good example. Some members, such as Aelius Faustus and Aelius Severus, only occur in the tituli β, but no doubt benefitted from their relatives’ engagement in amphorae and oil production: they might have been able to purchase merchandize and containers at reduced tariffs or family members may have given them priority in sales and shared information on production levels and yields. Others, such as the previously mentioned Aelius Aelianus, combined production and distribution of oil, or produced their own amphorae in which they would then transport the oil. The names of Aelius Fabianus, Aelius Lupatus and Aelius Optatus all feature in both stamps and tituli β. Very similar organizational features can be detected for the family firms of the MM. Aemilii, MM. Annii, Attilii, Aurelii and Caesii. It should be noted however that due to the limited number of published tituli δ and their fragmentary nature, many Spanish family firms still defy analysis. One can safely assume that families whose members can be linked to the production of amphorae and the distribution of oil and shared a gentilicium with local aristocracies, were also responsible for or were related to people engaged in the production of oil. The case of Iuventius Albinus can be instructive here. None of the tituli δ identifies him or his family as oil producers, yet as a member of the municipal nobility, his property must have included oil-producing domains. Future publications of tituli will therefore increase the number of Spanish families who successfully integrated all different sectors of the oil business.

2. A name can only be found in the tituli picti β and δ, but not in the stamps. The possession of an oil-producing estate is combined with engagement in the distribution process, but the entrepreneur’s domain either did not include a personal workshop, or his production output was too limited for the oil produced and he purchased amphorae from other workshop owners. On a personal level, this organization type can probably be
applied to the business interests of Lucretius Optatus, Ovius Avillianus and Testius Titullus. Families with a similar business strategy include the Antistii, Aponii, Attii and Calpurnii.

3. A name occurs in the tituli β and in the stamps. Here a merchant probably purchases the oil and either possesses his own workshop or temporarily leases a figlina to produce the containers, but is in no way connected to the production of oil. So far amphora epigraphy does not provide an example of a single merchant combining these sectors, but the business interests of the CC. Antonii can be a case in point, where C. Antonius Quietus is producing the amphorae and C. Antonius Balbus is organizing the distribution.

With this set of organizational structures in mind, we can now analyze the investment strategies from a chronological perspective in order to detect recurring long-term perspectives. Despite the methodological problems and limitations of amphora epigraphy, some general tendencies can be established.

First, on the level of the family, the clear majority of the major Spanish gentes, such as the Aelii and Aemilii simultaneously invested in all sectors alike. Sufficient stamps and tituli survive to suggest that the creation of large integrated family firms allowed these families a large-scale engagement in the oil business and a close monitoring of different stages. Nevertheless, the involvement in amphorae production can usually be traced from the late 1st century onwards, while estate ownership and distribution can generally only be established during the 2nd century. One could argue that due to the nature of the documents, viz. the high survival rate of stamps in comparison to tituli, this chronology may be biased towards an early involvement in amphora production. As most of the families who controlled the resources to create vertically integrated firms and maintain them for several generations must have initiated amphora production in the workshops on their own estates, it seems indeed highly likely that a majority must already have combined investments in all sectors from an early stage. The simultaneous involvement by individual businessmen in amphora production and distribution (Aelius Fabianus and Aelius Lupatus) or oil production and distribution (Aelius Aelianus and Cassius Apolaustus) are then only isolated glimpses of a more fully integrated, large-scale family enterprise. Nevertheless, the more reliable data on the investments made by smaller families or branches within the major families, such as the Iuventii, the Aelii Optati and the Aemilii Rustici, for whom close relationships can be established with greater confidence, present a slightly adjusted image of investment strategies. It seems indeed that for all these families, the involvement in amphora production predates personal engagement in distribution by one or two generations. The change to a combined control over production and distribution might have been initiated by the increasing demand for Spanish oil in Rome from the early 2nd c onwards and the stimuli offered by the Roman government to ensure a stable supply. These families may have decided that it was far more profitable to take control of distribution as well, instead of producing merchandize and selling the final products to merchants. By cutting out the middlemen and monitoring the process from workshop to market, they were able to fully reap the benefits of a more integrated business.

Second, a smaller number of families seems to have followed a different strategy, for their presence in the distribution sector clearly predates any involvement in the production of oil or amphorae. The Alfii, MM. Anni, Mevii and Vibii all appear to have started out as merchants, only to make the transfer to the production sector during the next generation(s). The case of the Mevii is very illustrative. During the final quarter of the Republican
era, L. Mevius Rufus was specializing in the fish sauce trade. One generation later, the names of a certain L. Mevius Faustus and Q. Mevius appear in stamps on fish sauce and oil amphorae. During the next generation, a P. Mevius Faustus is now distributing olive oil. Onomastics suggest that all these Mevii most likely belonged to one and the same family. If this hypothesis holds true, one can assume that Rufus first encouraged his family members to invest in the production of fish sauce amphorae, to reduce dependency from non-related managers of workshops and at the same time recognized the opportunities a combined engagement in the promising oil business had to offer. Two generations later, the family firm had evolved into a better integrated, more independent enterprise with a focus on the more profitable oil trade. This small dossier can be compared to the business organization of a Gallic family, the Urittii. From the early decades of the Imperial age, they exported Spanish fish sauces to Gaul and Italy. In the mid of the 1st century, Urittius Revocatus decided to diversify his supplies and included oil to the merchandize he specialized in. At the same time, somewhere between 40 and 80 AD, the very rare gentilicium Urittius also occurs in several stamps on oil amphorae, always followed by an abbreviated name, probably identifying the family slaves who were responsible for running the day-to-day organization of the amphora workshop. For a Gallic family of merchants in particular, who must have been less familiar with the supply of oil amphorae and less well embedded in local communities of producers, integrating part of the production process and deliberately investing in the personal management of a figilina seriously reduced dependency from Spanish workshop owners. In conclusion, the investment structure of these families’ portfolio somehow resembles Cicero’s famous adagio, that trade can only be considered socially acceptable when the profits are transferred to estates and agricultural production. It is important however to consider this diversity of investments, not as an attempt to conform to the aristocratic model of economic respectability, but rather as a risk-reducing strategy. Comparative economic history abounds with case studies of entrepreneurs who initially only focused on trade but slowly started to invest in landholding as well...without however totally retiring from the commercial sector. During the 17th and 18th century for instance, no less than 60% of the merchants in the sugar trade gradually converted commercial profits into the ownership of plantations and domains.

Conclusion

This paper has argued that the question for elite involvement in Roman business is not a very promising approach to the ancient economy. The nature of the sources we are forced to work with, in particular the absence of personal archives and accounting, will continue to obfuscate the diversity of investments made by the elite, and to underestimate the potentially large-scale involvement by non-elites. I therefore suggest that we better opt for a structural approach to business organization, trying to discover how entrepreneurs attempted to reduce risks and increase profits, and do not let the focus on elite investments dominate the analysis of the Roman economy. By introducing this focus on structure instead of on ideology, we can slowly move away from ancient economic history distorted by unrealistic models from sociology or contemporary economics, but instead give the Roman business world its due place in the longue durée of pre-industrial economies. In this paper, I have applied this approach to the Spanish oil business and identified two major business strategies (agency by family members and vertical...
integration) employed by both elites and non-elites alike. The evidence available at present does not even allow us to recognize a major difference between elites and non-elites in the scale at which these strategies were used. In other words, non-elites were no less successful in establishing merchant families or controlling production and distribution. The paramount objective now is to know who these wealthy non-elites were. I have adduced ancient and comparative evidence to suggest that we may encounter here wealthy entrepreneurs, from an economic point of view not inferior to the political elite, but less interested in (or perhaps able to?) translating wealth into social prestige. The conclusion however must be that their contributions to the Roman economy are equally important (if not more) than that of the elites, which for too long have been the major focus of attention.

Appendix

To visualize the connections between oil trade, oil production and amphora production, I present all data for the families or family branches discussed above in single figures. For full reference to all stamps and tituli on which these figures have been based, I refer to the discussion in Broekaert 2013.

The boxes in solid lines present the name of the oil merchants referred to in the analysis above. Boxes in dotted lines give the names of possible family members engaged in the production sector.

The first line presents the engagement of the family in the distribution sector (white) and a guesstimate of the time during which the members were active in this trade. In other words, this line gives the various periods during which *tituli* β with the name of a family member have been discovered.

The following lines offer similar dates for stamps (brown), the possession of oil as indicated by names in the genitive case in the *tituli* δ (green) and the possession of oil-producing estates, as represented by domain names in the *tituli* δ (yellow).

Straight lines indicate personal connections (e.g. an individual whose name occurs in both *tituli* and stamps), while dotted lines represent possible family connections.

Fig. 1 : L. Aelius Aelianus (Broekaert 2013, nr. 513)
Fig. 2 : C. Aelius Fabianus (Broekaert 2013, nr. 515)

Fig. 3 : L. Aelius Lupatus (Broekaert 2013, nr. 518)

Fig. 4 : L. Aelius Optatus (Broekaert 2013, nr. 519)
Fig. 5 : M. Aemilius Cutianus (Broekaert 2013, nr. 526)

Fig. 6 : M. Aemilius Rusticus (Broekaert 2013, nr. 531)

Fig. 7 : Alfii (Broekaert 2013, nr. 537)
Fig. 8 : MM. Annii (Broekaert 2013, nr. 540 and 542)

Fig. 9 : L. Antistius Rusticus (Broekaert 2013, nr. 546)
Fig. 10 : C. Antonius Balbus (Broekaert 2013, nr. 549)

Fig. 11 : M. Aponius Pitidus (Broekaert 2013, nr. 559)

Fig. 12 : Atilii (Broekaert 2013, nr. 578; 580-581; 1230)
Fig. 13 : Attii (Broekaert 2013, nr. 584-588)

Fig. 14 : MM. Aurelii (Broekaert 2013, nr. 591-594)

Fig. 15 : Caesii (Broekaert 2013, nr. 630-635)
Fig. 16: Calpurnii (Broekaert 2013, nr. 636; 638-639)

Fig. 17: Cassii (Broekaert 2013, nr. 644-651)

Fig. 18: Iuventii (Broekaert 2013, nr. 807-808)
Fig. 19 : M. Lucretius Optatus (Broekaert 2013, nr. 837)

Fig. 20 : Mevii (Broekaert 2013, nr. 862-863)
Fig. 21 : M. Ovius Avillianus (Broekaert 2013, nr. 891)

Fig. 22 : T. Testius Titullus (Broekaert 2013, nr. 954)
Fig. 23: Urittii (Broekaert 2013, nr. 965-968)

![Diagram of Urittii]

Fig. 24: Vibii (Broekaert 2013, nr. 1016-1023)

![Diagram of Vibii]

BIBLIOGRAPHY


NOTES

5. CIL 10.5585 = Broekaert 2013, nr. 73. This is not the place to compile an exhaustive list of local elites explicitly stating their profession, so a few examples can suffice: AE 1940, 64; AE 1995, 311; CIL 3.2086; 3.14370; 12.1896; 13.1911; 13.1918; 13.2448; 14.303; 14.409; 14.4142.
9. CIL 14.303 = Broekaert 2013, nr. 280. For this business strategy, which in contemporary economics is called ‘vertical integration’, see Silver 2009 and Broekaert 2012 with several case studies. For a short introduction to the role of vertical integration in contemporary economics, see González-Díaz and Vázquez 2008.
18. CIL 12.4393 and 15.3863-3873.

20. For an introduction into oil amphora epigraphy, tituli and stamps, see Berni Millet 2008.


22. Broekaert forthcoming, with analysis of several case studies.

23. Petronius, Sat. 76.

24. I only include a number corresponding to the individual merchants’ entry in the prosopographical analysis by Broekaert 2013. A discussion of all relevant data and references can be found there. Wide-spread gentilicia such as Aurelius, Claudius and Iulius cannot be used to detect close family relationships and have been excluded.

25. There is considerable debate on the identity of the persons whose names are mentioned in the genitive case. For a short introduction into amphora epigraphy and its difficulties, see Liou and Tchernia 1994 (whose interpretation I follow here); Aguilera Martín and Berni Millet 2000; Remesal Rodríguez 2004 and Aguilera Martín 2007. Theoretically, ownership of the oil does not necessarily imply that the person was also the producer, for he might have purchased the goods on someone else’s estate. However, as many tituli which cite the name of an estate also include in the genitive case the name of the owner – and hence producer – a name alone without the full name of the estate may have been a shorter indication of the producer annex estate owner. For tituli with both the estate and its owner, see CIL 15.3934 (baganiense Tertulli); 15.3940 (clodiane(n)se Optati[---]); 15.3721 (salsense Clarini); 15.3825 (novale(n)se Coceiae); 15.3826 (portense Tutili Pontiani); 15.3977 (barcufiense Lucini); 15.4175 (billeiense Terentiani); 15.4221 (turrense Gallionis); 15.4273 (ciscariensem Paulae); 15.4350 (arcle(n)se Soranae).

26. The appendix is not intended to offer an exhaustive comparative analysis of all stamps and tituli, but only presents the most accessible and compelling evidence. For additional case studies, see Broekaert 2010, p. 1341-1357.

27. Broekaert 2013, nr. 516 and 520.

28. See Broekaert 2008 and id. 2011 with further references.

29. The Urittii are not the only Gallic business family who decided to personally organize amphora production on the Iberian peninsula, for similar strategies are well-documented in the wine business. See Christol and Plana-Mallart 1997; id. 1998 and Christol and Fédière 1999 for the Usuleni; Pena and Barreda 1997 for the Volteilii and Pena 2000 for some minor families.


ABSTRACTS

One of the main subjects of debate in the analysis of the Roman economy is the question whether the Roman aristocracy made investments in trade and industry and if so, to what extent this
money supply was able to support economic performance. I will argue that the focus on elite money is flawed, because the available evidence does not allow a serial analysis of the origin of commercial investments. Nevertheless, the amphora epigraphy of the Spanish oil industry offers a promising avenue to counterbalance these limitations. First, it allows us to trace personal investments by elites in the oil trade and their strategies to increase efficiency and profitability, viz. the creation of family firms and vertical integration of production and distribution stages. Second, the evidence shows that the same two strategies were also implemented by entrepreneurs who, to our knowledge, did not belong to the aristocracy. Yet, as they were able to finance these investments, we can conclude that these entrepreneurs, whether being part of the elite or not, commanded financial reserves similar to or even superior to elite fortunes. In conclusion, the focus on elite investments in Roman trade can never be an argument to question the scale of exchange.


INDEX

Mots-clés: aristocratie romaine, élite marchande, huile de Bétique, commerce, production des amphores, entreprise familiale, intégration verticale

Keywords: roman aristocracy, merchant elite, baetican oil, trade, amphorae production, family business, vertical integration

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