

# Surplus and Default in Xenophon's Business Economics

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**Abstract** Surplus and default are both as old as Man himself. Yet the first work which studies the phenomenon of deficit in a scientific way is Xenophon's *Oeconomicus* (fourth century B.C.). Conversing with Critobulus, Socrates not only develops a technical nomenclature to denote defaults and losses, but also reveals what to do for transforming them into profits.

**Keywords** Socrates, Xenophon, Default, Business Economics

## 1. Introduction: Surplus and Default at the Origin of Business Economics

«Ma cos'è questa crisi?  
(=But what's this crisis?)»

[Rodolfo Tonino "De Angelis", 1933].

It has already been sustained that «accounting would have been impossible without some surplus to take into account». <sup>1</sup> This is the reason why accountancy originated in Mesopotamia as soon as ancient Mesopotamian peoples – because of soil fertility – got some surplus to accumulate.

We have already maintained that accounting is «a mental form a priori of human intellect». <sup>2</sup> As such, it cannot only reckon profits, but also losses. Modern accountants say that balance may be either «positive» or «negative», registering either a surplus or a default.

Therefore, it happens that – in times of crisis – a clever accountant must register losses more often than profits. Most people think business economics to be useless in times of crisis, when surpluses and profits lack. The contrary is true: during economic depressions, the science of accountancy is even more useful, since it prevents temporary losses from becoming permanent defaults. <sup>3</sup>

## 2. Xenophon: The First Nomenclature of Business Economics and Accountancy

«Xenophon [...] too often irritates the reader by incessant repetition of the same pattern of sentence, of the same formula, and even of the same word. [...] It is strange that he constantly uses the same word over and over again in the compass of a few lines. A translator is often compelled to have recourse to synonyms». <sup>4</sup>

We shan't subscribe to such a severe judgement. Repetitions in Xenophon's *Oeconomicus* – and especially in the first part of it (chap. I-VI), the so-called *Critobulus' Dialogue* – denote the effort of creating the nomenclature of business economics and accountancy ex nihilo. Elsewhere, we sought to classify the fundamental entries of Xenophon's «*lessicocontabile* (= accountants' lexicon)» <sup>5</sup> in Greek. Here we are doing the same in English.

**Business economics:** ΕΠΙΣΤΗΜΗ ΤΗΣ ΟΙΚΟΝΟΜΙΑΣ *epistēmētēsoikonomias* (*Oec.* I 1 B, VI 4, etc.; Liddell, Scott 1996 [3], 660, 1204; Montanari 2004 [7], 819, 1448). No doubt, ΟΙΚΟΝΟΜΙΑ *oikonomia* is a most polysemous term. However, when Socrates speaks of ΕΠΙΣΤΗΜΗ ΤΗΣ ΟΙΚΟΝΟΜΙΑΣ *epistēmētēsoikonomias*, he surely hints at the «science of the ΟΙΚΟΣ *oikos*». Yet ΟΙΚΟΝΟΜΙΑ *oikonomia* – in Socrates' opinion – isn't a sort of «domestic science» (as some annotators maintain). On the contrary, Socrates' ΟΙΚΟΝΟΜΙΑ *oikonomia* deals with the nature and function of the ΟΙΚΟΣ *oikos* (the latter being the cell of economic organization). Socrates' innovative change is just considering the ΟΙΚΟΣ *oikos* not merely as a «(family) house», but rather as a prototype of «(family) business» (see enterprise or concern). Only the ΟΙΚΟΣ *oikos* as a business company – we shall note – can be the object of a science which may be compared with medicine: namely, an ΕΠΙΣΤΗΜΗ *epistēmē* including a general theory (that's what we call «business economics») and an applied science (that's what we call «accountancy»). It is to be noted, then, that Socrates' ΟΙΚΟΝΟΜΙΑ *oikonomia* doesn't correspond exactly to modern «economics» as being the science of money. Indeed, today's financial economics is the equivalent of ΧΡΗΜΑΤΙΣΤΙΚΗ *khrēmatistikē* of the ancient Greeks (literally: the «science of ΧΡΗΜΑΤΑ *khrēmata* = capitals»). On the other side, ΟΙΚΟΝΟΜΙΑ *oikonomia* of the ancient Greeks is closely linked to the notion of ΟΙΚΟΣ *oikos* as a «(family) business»; therefore, it appears to be the equivalent of today's «business

<sup>1</sup>Cfr. Paganelli 2012 [11], 1227-1228.

<sup>2</sup>Paganelli 2012 [11], 1227. For further information, we must quote Id. 1992 [9]: perhaps, repeating what we wrote (more than twenty years ago) isn't necessary.

<sup>3</sup> See the late Osvaldo Paganelli's doctoral dissertation (1953/54 [12]).

<sup>4</sup>Marchant 1923 [5], xxvii.

<sup>5</sup>Paganelli 1991 [8]; cfr. Gabrovec Mei 1990 [2].

economics and accountancy». Now, whether ΟΙΚΟΝΟΜΙΑ*oikonomia* includes in itself ΧΡΗΜΑΤΙΣΤΙΚΗ*khrematistikē* (as Socrates maintains at the end of chap. II), or «financial economics» includes in itself «business economics and accountancy», it's a problem much debated by ancient and modern economists.

**Business management:** ΟΙΚΟΝΟΜΙΑ*oikonomia* (*Oec.* I 1 ff.; Liddell, Scott 1996 [3], 1204; Montanari 2004 [7], 1448). Socrates defines ΟΙΚΟΝΟΜΙΑ*oikonomia* not only as the «science of the ΟΙΚΟΣ*oikos*» (see business economics), but also as the «ΤΕΧΝΗ*tekhne* = art and technique of managing an ΟΙΚΟΣ*oikos*»: that's what we call «management». Of course the act of ΟΙΚΟΝΟΜΕΙΝ*oikonomein*, etymologically deriving from ΟΙΚΟΝΕΜΕΙΝ*oikonemein* (see to manage or administer), isn't the very same as «domestic science», namely housekeeping: on the contrary, it's closely linked with the notion of ΟΙΚΟΣ*oikos* as a «(family) business». No doubt ΟΙΚΟΝΟΜΙΑ*oikonomia* – in Socrates' opinion – isn't an idle debate on the basic elements of economic theory, but rather a practice. Socrates doesn't accept the distinction (so widespread today) between «business economists» and «business managers or businessmen». According to his ethical intellectualism, the knowledge of business economics is a necessary and sufficient condition to know how to manage a business; and, conversely, the one who doesn't know how to manage an enterprise, proves beyond all doubts that he doesn't know the «science of (business) enterprise».

**Capital(s):** ΧΡΗΜΑ(ΤΑ)*khrema(ta)* (*Oec.* I 7 ff.; Liddell, Scott 1996 [3], 2004-2005; Montanari 2004 [7], 2371). Of course, ΧΡΗΜΑ*khrema* can't mean «industrial capital», which didn't exist before the Industrial Revolution: it must surely mean «financial capital». In this *Dialogue on business management*, the notion of ΧΡΗΜΑ*khrema* is strictly related to one's capability of «managing» it (= ΧΡΗΣΘΑΙ*khresthai*, from the same root). Socrates theorizes that not every ΚΤΗΜΑ*ktēma* («possession») is a ΧΡΗΜΑ*khrema*: only what can be managed is a «capital». Conversely, a ΚΤΗΜΑ*ktēma* – if one doesn't know how to manage it – is possibly a «possession», but surely not a «capital». It follows that «capital» is an absolute value, whereas «possession» is a relative one: evidently, ΧΡΗΣΘΑΙ*khresthai* (see to manage or use) and ΧΡΗΜΑΤΑ*khremata* («capitals») are etymologically linked in Socrates' economic theories. No doubt, linking together the ideas of «capital» and «management» is an innovative change – and it seems to occur in *Critobulus' Dialogue* for the very first time. Business economists<sup>6</sup> are used to assuming that the origins of the sciences of accounting are to be found at the origins of capitalism: in their view, the first appearance of «industrial capital» would have given rise to early accountancy. On the contrary, we could assert that business accounting originates from the first appearance of «financial capital». If so, the first treatise on accountancy would surely be this *Dialogue*.

**Capital owner or possessor:** ΧΡΗΜΑΤΙΣΤΗΣ*khrematistēs* (*Oec.* II 18; Liddell, Scott 1996 [3], 2005; Montanari 2004

[7], 2372). If ΧΡΗΜΑΤΑ*khremata* are «capitals», ΧΡΗΜΑΤΙΣΤΗΣ*khrematistēs* has to be the «capital owner» – not the «capitalist», since modern capitalism didn't exist yet in fourth-century Athens (that is why Critobulus could never become a skilled «capitalist»). Evidently, ancient ΧΡΗΜΑ*khrema* was only «financial capital», not «industrial» one: it follows that the science called ΧΡΗΜΑΤΙΣΤΙΚΗ*khrematistikē* corresponds to modern «financial economics» (see capitals), while ΟΙΚΟΝΟΜΙΑ*oikonomia* is rather similar to our «science of management» (see business economics). Both seem to be closely linked in Socrates' opinion: thus Critobulus – becoming a good ΟΙΚΟΝΟΜΟΣ*oikonomos* (see manager) – shall become a skilful ΧΡΗΜΑΤΙΣΤΗΣ*khrematistēs* at the same time.

**Costs:** ΔΑΠΑΝΑΙ*dapanai*, see to expend = ΔΑΠΑΝΑΩ*dapanao* (*Oec.* III 15; Liddell, Scott 1996 [3], 369; Montanari 2004 [7], 492). In Socrates' opinion, the balance of an ΟΙΚΟΣ*oikos* is based upon economic equilibrium between ΠΡΟΣΟΔΟΙ*prosodoi* (see revenues) and ΔΑΠΑΝΑΙ*dapanai*. In particular, Xenophon thinks that ΠΡΟΣΟΔΟΙ*prosodoi* are within the man's province, whereas ΔΑΠΑΝΑΙ*dapanai* concern the woman as «joint manageress» of the family business. No doubt, such a division of labour between male and female, husband and wife, would be outdated today – yet it wasn't so in fourth-century Athens. But (what's more surprising) Socrates seems to have already understood – twenty-four centuries ago – that economic equilibrium consists of a positive cost-revenue balance. In other words, ΠΡΟΣΟΔΟΙ*prosodoi* must be higher than ΔΑΠΑΝΑΙ*dapanai*, so that the difference «revenues minus costs» may be a positive number (ΠΕΡΙΟΥΣΙΑ*periousia*: see profit). As concerns that, Socrates is certainly ahead of his time. Now, we have no proof that Xenophon knew something like a «balance sheet» (today consisting in a «statement of assets and liabilities» and a «profit and loss account»). Actually, we know very little about Xenophon's own bookkeeping techniques (it appears that he employs the term ΔΑΠΑΝΑΙ*dapanai* to denote also «expenditure», whilst modern accountancy is used to distinguishing between «costs» and «expenses»). However it might be, we must admit that the essential logic of balance was already clear to Socrates' mind.

**(to) Decrease:** ΜΕΙΟΩ*meioō* (*Oec.* III 15; Liddell, Scott 1996 [3], 1093; Montanari 2004 [7], 1318). In business economics, it's the contrary of ΑΥΞΕΩ*auxō* (see to expand). As the former means the «decreasing or diminishing» of an enterprise, the latter means its «increasing». In Socrates' opinion, the «decrement» of a business is the result of mismanagement. That happens when the enterprise – instead of accumulating ΠΕΡΙΟΥΣΙΑ*periousia* (see profit) – accumulates ΖΗΜΙΑ*zēmia* (see loss). In conclusion, such «decrement» proves to be due to lack of ΕΠΙΣΤΗΜΗ*epistēmē* (see science) or ΕΠΙΜΕΛΕΙΑ*epimeleia* («attention»).

**Enterprise or concern:** ΟΙΚΟΣ*oikos* (*Oec.* I 2 ff.; Liddell, Scott 1996 [3], 1204-1205; Montanari 2004 [7], 1448). No doubt, the most important entry in Xenophon's economic

<sup>6</sup> We must quote the notable exception of Teodoro D'Ippolito 1960 [1], chap. II.

nomenclature is this. Its original meaning was «house or family», including the «family estate and/or wealth». Yet, by way of catachresis (ΚΑΤΑΧΡΗΣΙΣ *katachrēsis*: Latin = *abusio*),<sup>7</sup> Socrates employs this term to signify the «family business or enterprise». Notice that – as time went by – the word ΟΙΚΟΣοικος lost its affective implications, so as to mean only the «business company or concern or firm», as the basic cell of economic organization. As concerns that, some annotators haven't understood such catachresis, and have supposed that ΟΙΚΟΣοικος merely means «family estate and/or wealth». But this supposition proves to be incorrect, for three reasons. Firstly, Socrates deems the ΟΙΚΟΣοικος to be, not a set of wealth, but a «growing» organism (see expansion), whose value is much greater than the sum of its parts. Secondly, Xenophon maintains that there are most valuable ΟΙΚΟΙοικοι with little wealth (like Socrates' family business) and less valuable ΟΙΚΟΙοικοι with much more wealth (like old Crito's and young Critobulus' family business: see chap. II) – which is the best proof that an ΟΙΚΟΣοικος doesn't identify itself with its wealth. Thirdly, the essence of Xenophon's ΟΙΚΟΣοικος isn't represented by its business wealth, but rather by its business management. Thus the predominance of managerial matters over financial matters is Socrates' innovative change – and this anticipates the theories of modern business economists, in Europe<sup>8</sup> and especially in the USA. However, the limit of Xenophon's economic thought is that the author wouldn't or couldn't invent a series of neologisms in order to denote the realities (German = *Realien*) of business economics and accountancy: he limited himself to employing the compounds of ΟΙΚΟΣοικος, by way of catachresis (so did the historical Socrates, who was accustomed to discussing the realities of philosophy using terms of everyday speech). But such catachresis has caused many misunderstandings among today's translators and annotators<sup>9</sup> of Xenophon's ΟΙΚΟΝΟΜΙΚΟΣ *Oikonomikos*.

**(to) Expand:** ΑΥΞ(ΑΝ)Ωαυ(αν)ῶ (*Oec.* I 4 B, etc.; Liddell, Scott 1996 [3], 277; Montanari 2004 [7], 378-379). It denotes the operation of «increasing and incrementing» a business. Such operation is the ultimate aim of business management. If, at the end of the accounting period, the ΟΙΚΟΣοικος (see enterprise or concern) has accumulated ΠΕΡΙΟΥΣΙΑ *periousia* (see profit), it has «grown» (= ΟΙΚΟΣ ΗΥΞΗΜΕΝΟΣ *oikosēuxēmenos*). This is a symptom that the ΟΙΚΟΝΟΜΟΣ *oikonomos* (see manager) has operated well – namely, with ΕΠΙΜΕΛΕΙΑ *epimeleia* («attention») and ΕΠΙΣΤΗΜΗ *epistēmē* (see science). The exact contrary of ΑΥΞΩαυῶ is ΜΕΙΩΩμειῶ (see to decrease).

**Expansion:** ΑΥΞΗΣΙΣ *auxēsis* (*Oec.* V 1; Liddell, Scott 1996 [3], 277; Montanari 2004 [7], 378). It means the «business growth», being the good manager's objective. Some annotators interpret ΑΥΞΗΣΙΣ *auxēsis* as though it meant only an «increase or increment in wealth». But actually, the business company doesn't identify itself with

the business wealth. In fact – according to Socrates – the ΟΙΚΟΣοικος (see enterprise or concern) is a living organism, having in itself the potentiality of growth; on the contrary, ΠΛΟΥΤΟΣ *ploutos* («wealth») hasn't such potentiality. Moreover, Socrates points out that even ΑΡΓΥΡΙΟΝ *nargyriōn* (see money) is no ΧΡΗΜΑ *chrēma* (see capitals) if one doesn't know how to «manage» it (ΧΡΗΣΘΑΙ *chrēsthai*: I 14). This is a proof that to Socrates' mind, managerial matters are much more important than financial matters, as for what concerns business life.

**(to) Expend:** ΑΝΑΛΙΣΚΩ *analisiskō* or ΑΝΑΛΟΩ *analoō* and ΔΑΠΑΝΑΩ *dapanāō* (*Oec.* III 5, 15; Liddell, Scott 1996 [3], 111, 369; Montanari 2004 [7], 184, 492). Both synonyms have a slightly negative meaning. «To spend money» is never a virtue, on the contrary, according to Xenophon's moralism, it may be a vice, if money is expended for unnecessary and/or immoral purposes. As a matter of fact, the author implies that a «good manager» (= ΟΙΚΟΝΟΜΟΣ ΑΓΑΘΟΣ *oikonomos agathos*: I 2) ought not to spend money for his own sake, but for his business's sake only. As to ΔΑΠΑΝΑ *dapanan*, it's a typical prerogative of the woman in the family business: yet she must be a good «treasurer», reducing ΔΑΠΑΝΑ *dapanai* (see costs) in order to increase ΠΕΡΙΟΥΣΙΑ *periousia* (see profit) – which operation is called today «spending review», while Xenophon names it ΤΑΜΙΕΥΜΑ *tamieuma* («treasury»).

**Gain:** ΚΕΡΔΟΣ *kerdos* (*Oec.* III 8; Liddell, Scott 1996 [3], 942-943; Montanari 2004 [7], 1138-1139). Socrates counters ΚΕΡΔΟΣ *kerdos* with ΠΕΡΙΟΥΣΙΑ *periousia* (see profit). The latter is the «net income» obtained by balancing costs and revenues in a skilful way. On the contrary, the former is the «gain or lucre» obtained by buying at a low price and reselling at a high price. Therefore, ΠΕΡΙΟΥΣΙΑ *periousia* as such is the result of sound management and the characteristic feature of a good manager. On the contrary, ΚΕΡΔΟΣ *kerdos* is the result of retail trade and the characteristic feature of a ΚΑΠΗΛΟΣ *kapēlos* (= «[small] retailer»). This is the reason why Socrates deems ΠΕΡΙΟΥΣΙΑ *periousia* to be licit and lawful, whilst other Greek authors consider ΚΕΡΔΟΣ *kerdos* as an illicit, unlawful «lucre».

**House:** ΟΙΚΙΑ *oikia* or ΟΙΚΗΣΙΣ *oikēsis* (*Oec.* I 5, IV 6; Liddell, Scott 1996 [3], 1203; Montanari 2004 [7], 1447). These two synonyms mustn't be confused with ΟΙΚΟΣοικος (see enterprise or concern). As a matter of fact, ΟΙΚΙΑ *oikia* and ΟΙΚΗΣΙΣ *oikēsis* mean the «house» (Latin = *domus*) and also the «household». Thus comparing the notions of ΟΙΚΟΣοικος and ΟΙΚΙΑ *oikia*, Socrates is obliged to underline a considerable difference between the two. Actually, ΟΙΚΙΑ *oikia* is nothing but the «family house». As to ΟΙΚΟΣοικος, it's something including the «family house» – yet something whose limits are far beyond the bounds of the «family house». Some annotators identify the ΟΙΚΟΣοικος with the «family estate», which may extend even to different city-states. However, elsewhere Socrates points out that the ΟΙΚΟΣοικος has also in itself the capacity of «growing» (see to expand). That is why we have considered it as denoting not merely a sort of «estate», but the earliest form

7 Cfr. Paganelli 1991 [8], 142-154; Id. 2006 [10], 232-233.

8 Cfr. Paganelli 2012 [11], 1227 n. 5.

9 See Marchant 1923 [5], xxvii.

of «business enterprise», being the smallest cell of economic organization. So in the history of Greek language, the word ΟΙΚΟΣ*oikos* – formerly concerning a «family» – tends to signify a «family business», and finally a «business company» tout court, like in Modern Greek.

**(to) Know:** ΕΠΙΣΤΑΜΑΙ*epistamai* (*Oec.* I 8-17; Liddell, Scott 1996 [3], 658-659; Montanari 2004 [7], 818-819). This is one of the keywords in the *Dialogue*. Firstly, it means the «knowledge of an ΕΠΙΣΤΗΜΗ*epistēmē*» (see science), and secondly the «skill in a ΤΕΧΝΗ*tekhnē*» (see technics or technique). The high frequency of this verb gives an intellectualistic tone to Xenophon's *Oeconomicus* – and indeed, Socrates' ethical intellectualism is witnessed also by Plato and other philosophers. Conversing with Critobulus, Socrates maintains that «knowing the science of business management» is a necessary and sufficient condition for managing a business well. That is why the good ΟΙΚΟΝΟΜΟΣ*oikonomos* (see manager), in this *Dialogue*, is so often called ΕΠΙΣΤΑΜΕΝΟΣ*epistamenos* or ΕΠΙΣΤΗΜΩΝ*epistēmōn* (see scientist).

**Loss:** ΖΗΜΙΑ*zēmia* (*Oec.* I 7 B, 9, II 18, etc.; Liddell, Scott 1996 [3], 755; Montanari 2004 [7], 918). It's the exact contrary of ΠΕΡΙΟΥΣΙΑ*periousia* (see profit). As the latter is the positive result of business management, the former is the negative difference obtained subtracting ΔΑΠΑΝΑ*dapanai* (see costs) from ΠΡΟΣΟΔΟΙ*prosodoi* (see revenues). Therefore, as ΠΕΡΙΟΥΣΙΑ*periousia* is the characteristics of a good ΟΙΚΟΝΟΜΟΣ*oikonomos* (see manager), ΖΗΜΙΑ*zēmia* is the typical feature of a bad ΟΙΚΟΝΟΜΟΣ*oikonomos* – that is to say, a real vice to Socrates' mind, in so far as it derives from an excess of «costs» and a lack of «revenues».

**(to make a) Loss:** ΖΗΜΙΟΩ*zēmioō* (*Oec.* I 8-9, etc.; Liddell, Scott 1996 [3], 755-756; Montanari 2004 [7], 918). Etymologically, it derives from ΖΗΜΙΑ*zēmia* (see loss), being the typical symptom of mismanagement and maladministration. Socrates maintains that, when ΚΤΗΜΑΤΑ*ktēmata* («possessions») are managed «so as to make a loss» (= ΩΣΤΕΖΗΜΙΟΥΣΘΑΙ*hōstēzēmiousthai*: I 8), they don't even deserve the very name of ΧΡΗΜΑΤΑ*khēmata* (see capitals).

**(to) Manage or administer:** (ΔΙ)ΟΙΚΕΩ(*di*)*oikeō* and ΟΙΚΟΝΟΜΕΩ*oiknomeō* (*Oec.* I 2 B, 4 A, II 13, etc.; Liddell, Scott 1996 [3], 432, 1202-1204; Montanari 2004 [7], 569, 1446-1448). As for ΟΙΚΕΙΝ*oikein*, it originally meant «to inhabit or live in». Yet Xenophon uses this verb by way of catachresis (see enterprise or concern), so that the idiom ΟΙΚΟΝΟΙΚΕΙΝ*oikonoikein* means «to manage a (family) business». Such «management» implies also «business administration, organization, and control». As for ΔΙΟΙΚΕΙΝ*dioikein*, this compound is almost a synonym of ΟΙΚΕΙΝ*oikein*. As for ΟΙΚΟΝΟΜΕΙΝ*oiknomein*, etymologically it derives from ΟΙΚΟΝΝΕΜΕΙΝ*oikonnemein* (= «to dispense food to the ΟΙΚΟΣ*oikos*»), implying that «to manage, administer, and control a (family) business» is a vital function (see business management and manager).

**(to) Manage or use:** ΧΡΑΟΜΑΙ*khraomai* or ΧΡΩΜΑΙ*khromai* (*Oec.* I 7-16, etc.; Liddell, Scott 1996 [3],

2001-2002; Montanari 2004 [7], 2367-2368). The verb means «to use» (Latin = *utor*): Xenophon employs it by way of catachresis (see enterprise or concern), to denote the act of «managing» goods. ΧΡΑΟΜΑΙ*khraomai* occurs in this *Dialogue* very frequently, and this is a proof that the main notion in Socrates' economic theory is «management». No doubt such a practice (see business management) is much more important than «business wealth and/or estate» to the author's mind: cfr. chap. II, where the «sound management» of a small «estate» (that is to say, Socrates' ΟΙΚΟΣ*oikos*) is compared with the «mismanagement» of a large «estate» (that is to say, Critobulus' one). Actually, theorizing the supremacy of «business management» on «business wealth and/or estate» means taking sides, in the economic dynamics, not with «wealth» (ΠΛΟΥΤΟΣ*ploutos*), but with «management or handling of capitals» (= ΧΡΗΜΑΤΑ ΧΡΗΣΘΑΙ*khēmata khresthai*). Such «management» is a particular form of «labour», employing further «labour» and improving social welfare.

**Manager:** Ο ΟΙΚΟΝΟΜΟΣ, Ο ΟΙΚΟΝΟΜΙΚΟΣ *hooikonom(ik)os* (*Oec.* I 2-3, etc.; Liddell, Scott 1996 [3], 1204; Montanari 2004 [7], 1448). Another keyword in *Critobulus' Dialogue* is ΟΙΚΟΝΟΜΟΣ*oikonomos*, originally meaning the «dispenser (= ΝΕΜΩΝ*nemōn*) of food in the ΟΙΚΟΣ*oikos*»: that is to say, either the «master (householder)» or the «steward (housekeeper)». By way of catachresis (see enterprise or concern), Xenophon employs this term to denote the «manager of the (family) enterprise»,<sup>10</sup> being also «administrator and controller» of the ΟΙΚΟΣ*oikos*. No doubt the real hero of this *Dialogue* is the ΟΙΚΟΝΟΜΟΣ*oikonomos* as an ΕΜΠΕΙΡΟΣ*empeiros* («expert») and an ΕΠΙΣΤΗΜΩΝ*epistēmōn* (see scientist). According to his own custom (witnessed by Plato too), Socrates refuses the title of ΟΙΚΟΝΟΜΟΣ*oikonomos*: in fact, although he has understood the principles and laws of the ΕΠΙΣΤΗΜΗ ΤΗΣ ΟΙΚΟΝΟΜΙΑΣ *epistēmētēs oikonomias* (see business economics), he cannot have the practice deriving from managing a large «business» with big ΧΡΗΜΑΤΑ*khēmata* (see capitals). Yet Xenophon's change is maintaining that a «manager» may have full powers over an ΟΙΚΟΣ*oikos* (see enterprise or concern), even though he isn't the «owner» and possesses no «capitals» of his own. It follows that – when a business appears to be mismanaged by an incompetent «owner or possessor» – Xenophon counsels to delegate it to a «receiver» (ΚΑΤΑΛΑΒΩΝ*katalabōn*: I 4) – namely, a competent ΟΙΚΟΝΟΜΟΣ*oikonomos*, who will manage it better. Another synonym of ΟΙΚΟΝΟΜΟΣ*oikonomos* is Ο ΟΙΚΟΝΟΜΙΚΟΣ (ΕΠΙΣΤΑΜΕΝΟΣ) *ho oikonomikos (epistamenos)*: literally, «the specialist in business management».

**Money:** ΑΡΓΥΡΙΟΝ *argyriōn* (*Oec.* I 12-14, etc.; Liddell, Scott 1996 [3], 236; Montanari 2004 [7], 331). The Greek term mostly denoted «silver money» (French = *argent*). Ancient Greeks used to identify ΑΡΓΥΡΙΟΝ *argyriōn* with ΧΡΗΜΑ*khēmata* (see capitals).<sup>11</sup> Yet Socrates' innovative

<sup>10</sup> Apart from ΟΙΚΟΝΟΜΟΣ, now pronounced *oikonomos*, today's Greeks also use an English loanword (ΜΑΝΑΤΖΕΡ*manager*).

<sup>11</sup> Also today's Greeks often do the same (cfr. the song ΤΟΧΡΗΜΑ *Tokhrīma*).

change in this *Dialogue* is the following: even ΑΡΓΥΡΙΟΝ *argyrionis* νόΧΗΜΑ *akhrēma*, if one doesn't know how to ΧΡΗΣΘΑΙ *akhrēsthai* (see to manage or use) it. Obviously, the philosopher connects «money»'s value with the owner's managerial skill: if the owner or possessor cannot manage his «money», ΑΡΓΥΡΙΟΝ *argyrion* is valueless to him. It follows that the value of ΑΡΓΥΡΙΟΝ *argyrion* isn't absolute, but relative, in so far as it depends on one's capability of managing it.

**Profit:** ΠΕΡΙΟΥΣΙΑ *periousia* (*Oec.* I 4 B, II 10, etc.; Liddell, Scott 1996 [3], 1381; Montanari 2004 [7], 1648). This is perhaps the most revolutionary idea expressed in this *Dialogue*. Deriving from the root of ΠΕΡΙΕΙΜΙ *perieimi* (= «to be over and above [in the margin]; to remain»), ΠΕΡΙΟΥΣΙΑ *periousia* is the «surplus or positive balance». In arithmetical terms, it's the «remainder or difference» left after the subtraction of ΔΑΠΑΝΑΙ *dapanai* (see costs) from ΠΡΟΣΟΔΟΙ *prosodoi* (see revenues). In geometrical terms, it's the «margin».<sup>12</sup> Therefore, Xenophon's ΠΕΡΙΟΥΣΙΑ *periousia* is just what today's business economists and accountants call «profit» (UK) or «net income for the period» (USA). It may be rightly defined the «balance» of economic equilibrium – the principle that the total amount of «revenues» must be equal to the sum of «costs» plus ΠΕΡΙΟΥΣΙΑ *periousia* was already clear to Socrates, twenty-four centuries ago. On the contrary, if ΠΕΡΙΟΥΣΙΑ *periousia* is a negative number (see loss), the business account is «unbalanced». It follows that the notion of ΠΕΡΙΟΥΣΙΑ *periousia* implies the existence of a sort of «balance sheet»: Socrates couldn't have spoken of «profits» and «losses», hadn't he known something like a «profit and loss account». Undoubtedly, the Athenian philosopher exalts ΠΕΡΙΟΥΣΙΑ *periousia*, defining it the objective of a good ΟΙΚΟΝΟΜΟΣ *oikonomos* (see manager), the ultimate aim of ΟΙΚΟΝΟΜΙΑ *oikonomia* (see business management), the «royal road» to ΠΛΟΥΤΟΣ *ploutos* («wealth»), the only lawful «method to make wealth» (ΠΛΟΥΤΗΡΟΝΕΡΓΟΝ *ploutēr onergon*). In his opinion, ΠΕΡΙΟΥΣΙΑ *periousia* is also the best basis for business appraisal. In fact, chap. II (on ΟΙΚΟΣ *oikos*'s valuation) leads to the conclusion that Socrates' ΟΙΚΟΣ *oikos* (see enterprise or concern) has an upward trend, since it makes ΠΕΡΙΟΥΣΙΑ *periousia*, whereas Critobulus' ΟΙΚΟΣ *oikos* has a downward trend, since it makes ΖΗΜΙΑ *zēmia* («loss»), being the negative of ΠΕΡΙΟΥΣΙΑ *periousia*. And furthermore, while ΚΕΡΔΟΣ *kerdos* (see gain) may be unlawful to Socrates' mind, ΠΕΡΙΟΥΣΙΑ *periousia* is not only lawful, but even a moral duty for the manager. In this *Dialogue*, the good ΟΙΚΟΝΟΜΟΣ *oikonomos* is described as a sort of ascetic, renouncing all unnecessary expenses for the sake of ΠΕΡΙΟΥΣΙΑ *periousia*.

**(to make a) Profit:** ΠΕΡΙΠΟΙΕΩ *peripoieō* (*Oec.* II 10, etc.; Liddell, Scott 1996 [3], 1384; Montanari 2004 [7], 1651).

It's a synonym and a derivative of ΠΕΡΙΟΥΣΙΑΝ ΠΟΙΕΩ *periousian poieō* (see profit). Such operation is an indication of the ΟΙΚΟΝΟΜΟΣ *oikonomos*'s own managerial skill: a good manager can achieve it by decreasing expenditure (see costs: that's what we call «spending review») and increasing income (see revenues). Xenophon (II 10) points out how easy «making high profit from high revenues» (= ΑΠΟ ΠΟΛΛΩΝ ΠΟΛΛΗΝ ΠΕΡΙΟΥΣΙΑΝ ΠΟΙΗΣΑΙ *apollōn pollēn periousian poiēsai*) can be and how difficult «making a profit from low revenues» (= ΑΠ' ΟΛΙΓΩΝ ΠΕΡΙΠΟΙΕΙΝ *ap' oligōn peripoiein*) can be.

**(to) Programme:** ΜΗΧΑΝΑΟΜΑΙ *mēkhanaomai* or ΜΗΧΑΝΑΩΜΕ *mēkhanaōmē* and ΠΡΟΝΟΕΩ *pronoeō* (*Oec.* I 21 A, II 7, V 18, etc.; Liddell, Scott 1996 [3], 1131, 1490-1491; Montanari 2004 [7], 1362, 1787). ΜΗΧΑΝΑΣΘΑΙ *mēkhanasthai* – originally a military technicality – denotes the act of «programming» the future «company strategy», «planning» the accumulation of «capitals» (ΧΡΗΜΑΤΑ *akhrēmata*) and «revenues» (ΠΡΟΣΟΔΟΙ *prosodoi*). «Company strategy» is compared with military strategy by Xenophon, who was an expert in both. As a disciple of Socrates' intellectualism, he thinks that «programming» requires ΕΠΙΣΤΗΜΗ *epistēmē* (see science). Therefore, only a manager who is rich in ΕΠΙΣΤΗΜΗ *epistēmē* and ΕΠΙΜΕΛΕΙΑ *epimeleia* («attention») can «plan» the future «company strategy». As to that, a good ΟΙΚΟΝΟΜΟΣ *oikonomos* (see manager) can be rightly defined the «strategist» of business activity. As for ΠΡΟΝΟΕΙΝ *pronoein*, it denotes the act of «forecasting» the future trends of a business. No doubt a manager cannot foresee «unforeseen events» – yet, he needs to have the gift of ΠΡΟΝΟΙΑ *pronoia* (= «foresight or forethought»): in other words, his ΝΟΥΣ *nous* (= «intellectual power») must try to «foretell» even the future results of business activity. Once again, ΟΙΚΟΝΟΜΙΑ *oikonomia* (see business management) is deemed to be an operation of the «intellect», according to Socrates' philosophy.

**(lack of) Programme:** ΑΜΗΧΑΝΙΑ *amēkhania* (*Oec.* I 21 B; Liddell, Scott 1996 [3], 82; Montanari 2004 [7], 152). Like ΜΗΧΑΝΑΟΜΑΙ *mēkhanaomai* (see to programme), also this term is a military technicality. Referred to a business company, it means a situation of «financial straits» due to «lack of (company) strategy». So it's the exact contrary of ΜΗΧΑΝΑΣΘΑΙ ΠΡΟΣΟΔΟΥΣ *mēkhanasthai prosodous* (= «programming revenues») or ΜΗΧΑΝΑΣΘΑΙ ΧΡΗΜΑΤΑ *mēkhanasthai akhrēmata* (= «planning the accumulation of capitals»). Socrates connects the idea of «economic crisis» directly with the idea of mismanagement.

**Revenues:** ΠΡΟΣΟΔΟΙ *prosodoi* (*Oec.* I 21 A, II 11, etc.; Liddell, Scott 1996 [3], 1520; Montanari 2004 [7], 1827). The term denotes «proceeds or revenues» as opposed to ΔΑΠΑΝΑΙ *dapanai* (see costs), but also «income» as opposed to «expenditure» («to expend» = ΔΑΠΑΝΑΩ *dapanāō*). If ΠΡΟΣΟΔΟΙ *prosodoi* are higher than ΔΑΠΑΝΑΙ *dapanai*, the difference «revenues minus costs» is called ΠΕΡΙΟΥΣΙΑ *periousia* (see profit). If ΔΑΠΑΝΑΙ *dapanai* are higher than ΠΡΟΣΟΔΟΙ *prosodoi*, the difference «costs minus revenues» is called ΖΗΜΙΑ *zēmia* (see loss). We may conclude

by the famous singer ΔΑΝΑΗΣ ΤΡΑΤΗΓΟΠΟΥΛΟΥ *Danaï Stratīghopoulou*: 1919).

<sup>12</sup> In fact, ΠΕΡΙΘΩΡΙΟΝ *perithōrion* or ΠΕΡΙΟΥΣΙΑ *periousia* is the very «margin» which remains after superimposing the geometrical shape of «costs» upon the shape of «revenues».

that Socrates knows of the existence of something like a «profit and loss account». Furthermore, Xenophon maintains that in a family business, «costs» are mainly represented by the woman's activities, whereas «revenues» are mainly represented by the man's «income» (not casually, in III 15 the husband's «proceeds» are denoted by the verb ΕΡΧΕΣΘΑΙ *erkhesthai*, etymologically meaning «to come [in]»). Therefore, a family balance is also based on economic balance between ΠΡΟΣΟΔΟΙ *prosodoi* and ΔΑΠΑΝΑΙ *dapanai*.

**Salary:** ΜΙΣΘΟΣ *misthos* (*Oec.* I 4 B, 6, etc.; Liddell, Scott 1996 [3], 1137; Montanari 2004 [7], 1368-1369). This is one of the most interesting innovations in Socrates' theory on «business economics» (see business management). He maintains that the ΟΙΚΟΝΟΜΟΣ *oikonomos* on behalf of third parties (see manager) has the right to get an adequate «salary or fee». Hence derives a sort of contrast between the class of «managers» who aren't business «owners or possessors», and the class of «owners or possessors» who aren't business «managers»: the former being expert professionals, the latter inexperienced amateurs. Undoubtedly, the borderline between the two is represented by ΜΙΣΘΟΣ *misthos*. «Salary or fee» is indeed the distinctive feature of the one who «manages big sums of ΧΡΗΜΑΤΑ *akhrēmata*» (see capitals), even though ΧΡΗΜΑΤΑ *akhrēmata* were not of his own. On the contrary, ΜΙΣΘΟΣ *misthos* isn't a prerogative of the one who – although possessing «capitals» – doesn't know how to ΧΡΗΣΘΑΙ *akhrēsthai* them (see to manage or use).

**(to get a) Salary:** ΜΙΣΘΟΦΟΡΕΩ *misthophoreō* (*Oec.* I 4 A; Liddell, Scott 1996 [3], 1137; Montanari 2004 [7], 1369). «Obtaining a fee» is a most sacred right of the professional in ΟΙΚΟΝΟΜΙΑ *oikonomia* (see business management). Therefore, we could say that the act of ΜΙΣΘΟΦΟΡΕΙΝ *misthophorein* gives birth to the profession of ΟΙΚΟΝΟΜΟΣ *oikonomos* (see manager). Yet, this implies that the management of an ΟΙΚΟΣ *oikos* (see enterprise or concern) may be withdrawn from an «incompetent» and ignorant owner, and delegated to a «competent» manager, who gets a salary because of that. Socrates' change is just this sort of opposition (not to say «conflict») between the class of ΟΙΚΟΝΟΜΟΙ *oikonomoi* and the class of ΚΕΚΤΗΜΕΝΟΙ *kektēmenoi* (= «owners or possessors»).

**Science:** ΕΠΙΣΤΗΜΗ *epistēmē* (*Oec.* I 1 B; Liddell, Scott 1996 [3], 660; Montanari 2004 [7], 819). This notion was a great favourite of Socrates', as Plato too testifies. In this *Dialogue*, Socrates states that also ΟΙΚΟΝΟΜΙΑ *oikonomia* (see business economics) is an ΕΠΙΣΤΗΜΗ *epistēmē*, since it's the «science of business management». This means that – up to Xenophon – the management of ΟΙΚΟΙ *oikoi* had been conducted in an amateurish way. From Xenophon onwards, business administration (see business management) becomes the subject of a «science», the prerogative of professionals.

**Scientist:** ΕΠΙΣΤΗΜΩΝ *epistēmōn* or ΕΠΙΣΤΑΜΕΝΟΣ *epistamenos* (*Oec.* I 3 B, 10, II 16, etc.; Liddell, Scott 1996 [3], 658-660; Montanari 2004 [7], 818-820). The term denotes the one who possesses ΕΠΙΣΤΗΜΗ *epistēmē* (see science): namely, the «scientist» as opposed to the ΕΜΠΕΙΡΟΣ *empeiros* («expert»), whose prerogative is to have

skill and «experience» (ΕΜΠΕΙΡΙΑ *empeiria*), and also as opposed to the ΤΕΧΝΙΤΗΣ *tekhnitēs* («technician»), whose prerogative is to have ΤΕΧΝΗ *tekhnē* (= «art»: see technics or technique). According to Socrates, the ΟΙΚΟΝΟΜΟΣ *oikonomos* (see manager) must not only be a professional, but also a real «scientist», versed in economic studies. In other words, today's contrast between theorists and practisers in «business management» – namely, between business economists and managers – isn't validated by this *Dialogue*: it did not exist (and should not exist) according to Socrates.

**Standard of life:** ΔΙΑΙΤΑ *diaita* (*Oec.* II 8 A; Liddell, Scott 1996 [3], 396; Montanari 2004 [7], 525). It's the result of individual «expenditure», rather than of individual «income». Socrates indeed underlines that men with high «incomes» often have ΔΙΑΙΤΑ *diaitai* beyond their means, since their «expenses» are even higher than their «proceeds» (ΠΡΟΣΟΔΟΙ *prosodoi*: see revenues). No wonder the philosopher advises Critobulus to reduce his «standard of life», it being too high, and to decrease «expenditure» (that's what we call «spending review»), limiting ΔΑΠΑΝΑΙ *dapanai* (see costs) to the mere «necessaries» (ΤΑ ΕΠΙΤΗΔΕΙΑ *epitēdeia* or ΤΑ ΑΝΑΓΚΑΙΑ *anankaia*).

**Technics or technique:** ΤΕΧΝΗ *tekhnē* (*Oec.* VI 6-7; Liddell, Scott 1996 [3], 1785; Montanari 2004 [7], 2111-2112). The term denotes «manual arts» and «handicraft technics» as well. One of the main ideas expressed by Socrates in this *Dialogue* is that ΗΕΠΙΣΤΗΜΗ ΤΗΣ ΟΙΚΟΝΟΜΙΑΣ *hē epistēmē tēs oikonomias* (see business economics) is a ΤΕΧΝΗ *tekhnē*, in so far as it is the «art and technique of business administration». As well as other «techniques» (such as ΧΑΛΚΕΥΤΙΚΗ *chalkēutikē* = «metallurgy», ΤΕΚΤΟΝΙΚΗ *tektōnikē* = «tectonics», and so on), it requires skill, ΕΠΙΜΕΛΕΙΑ *epimeleia* («attention»), ΕΜΠΕΙΡΙΑ *empeiria* («experience»), and also special ΟΡΓΑΝΑ *organa* («instruments»), namely ΧΡΗΜΑΤΑ (see capitals). From Xenophon onwards, ΟΙΚΟΝΟΜΙΑ *oikonomia* (see business management) becomes a «technology» – the specialty of professionals (ΟΙΚΟΝΟΜΟΙ *oikonomoi*) being not only «artisans», but also «artists».

**Use:** ΧΡΗΣΙΣ *khresis* (*Oec.* III 9 B, etc.; Liddell, Scott 1996 [3], 2006; Montanari 2004 [7], 2372-2373). This is another important entry in Xenophon's business nomenclature. It means not only the «use», but also the «way of managing things inside a business». Socrates' idea of «management» had almost been forgotten in the Middle Age. It was revived during the Italian Renaissance, thanks to Lucas Pacioli and Leon Battista Alberti (author of *De Iciarchia*, a treatise on the «government» of the ΟΙΚΟΣ *oikos*).<sup>13</sup> Hence modern business economics and accountancy were derived from it. The Athenian Socrates, therefore, can rightly claim to be the inventor of this concept, which has been widely developed by today's Business Schools (especially in the USA).

### 3. Conclusion: «Thou Shalt Rule over It»

<sup>13</sup> Alberti pronounced ΟΙΚΟΣ *ikos*, like modern Greeks do today.

«There come seven years of great plenty throughout all the land of Egypt; and there shall arise after them seven years of famine; and all the plenty shall be forgotten in the land of Egypt; and the famine shall consume the land».

[*Genesis*, XLI 29-30 (King James Version, 1611)].

Crises, deficits and defaults—in so far as they are recurring in human history – are ineluctable. But since the time Socrates discovered the science of business economics and accountancy, such science has not only aimed at registering, but also at controlling them. Ancient business economists and accountants were already able to diagnose deficits; yet their diagnosis was only the first step towards therapy. Just like in the field of medicine, ancient peoples from the Sumerians up to the Greeks studied the phenomena of economic crises in order to cure them scientifically. They deemed default to be a sort of economic pathology, but believed they should «rule over it».<sup>14</sup> So did Socrates, according to which a default is always an effect of maladministration and mismanagement.

#### 4. Appendix: A Greek Index

This Greek reverse index has been compiled in order to favour those readers who don't know ancient Greek (in fact, it follows the English order of words instead of the Greek alphabetical one).<sup>15</sup> We are sure it may facilitate their consultation of the English nomenclature listed above (§ 2).

*Amēkhanía* ΑΜΗΧΑΝΙΑ = (lack of) Programme

*Analiskein* ΑΝΑΛΙΣΚΕΙΝ = (to) Expend

*Argyria* ΑΡΓΥΡΙΟΝ = Money

*Aux(an)ein* ΑΥΞ(ΑΝ)ΕΙΝ = (to) Expand

*Auxēsis* ΑΥΞΗΣΙΣ = Expansion

*Dapanai* ΔΑΠΑΝΑΙ = Costs

*Dapanan* ΔΑΠΑΝΑΝ = (to) Expend

*Diaita* ΔΙΑΙΤΑ = Standard of life

*(Di)oikein* (ΔΙ)ΟΙΚΕΙΝ = (to) Manage or administer

*Epistamenos* ΕΠΙΣΤΑΜΕΝΟΣ = Scientist

*Epistasthai* ΕΠΙΣΤΑΣΘΑΙ = (to) Know

*Epistēmē* ΕΠΙΣΤΗΜΗ = Science

*Epistēmē [tēsōikonomias]* ΕΠΙΣΤΗΜΗ [ΤΗΣ ΟΙΚΟΝΟΜΙΑΣ] = Business economics

*Epistēmōn* ΕΠΙΣΤΗΜΩΝ = Scientist

*Kerdos* ΚΕΡΔΟΣ = Gain

*Khrēma(ta)* ΧΡΗΜΑ(ΤΑ) = Capital(s)

*Khrēmatistēs* ΧΡΗΜΑΤΙΣΤΗΣ = Capital owner or possessor

*Khrēsis* ΧΡΗΣΙΣ = Use

*Khrēsthai* ΧΡΗΣΘΑΙ = (to) Manage or use

*Meioun* ΜΕΙΟΥΝ = (to) Decrease

*Mēkhanasthai* ΜΗΧΑΝΑΣΘΑΙ = (to) Programme

*Misthophorein* ΜΙΣΘΟΦΟΡΕΙΝ = (to get a) Salary

*Misthos* ΜΙΣΘΟΣ = Salary

*Oikein* ΟΙΚΕΙΝ = (to) Manage or administer

*Oikēsis* ΟΙΚΗΣΙΣ = House

*Oikia* ΟΙΚΙΑ = House

*Oikonomein* ΟΙΚΟΝΟΜΕΙΝ = (to) Manage or administer

*Oikonomia* ΟΙΚΟΝΟΜΙΑ = Business management

*Oikonomikos* ΟΙΚΟΝΟΜΙΚΟΣ = Manager

*Oikonomos* ΟΙΚΟΝΟΜΟΣ = Manager

*Oikos* ΟΙΚΟΣ = Enterprise or concern

*Periōsia* ΠΕΡΙΟΥΣΙΑ = Profit

*Peripoiein* ΠΕΡΙΠΟΙΕΙΝ = (to make a) Profit

*Pronoein* ΠΡΟΝΟΕΙΝ = (to) Programme

*Prosodoi* ΠΡΟΣΟΔΟΙ = Revenues

*Tekhnē* ΤΕΧΝΗ = Technics or technique

*Zēmia* ΖΗΜΙΑ = Loss

*Zēmioun* ΖΗΜΙΟΥΝ = (to make a) Loss

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<sup>14</sup>Cfr. *Genesis*, IV 7 (King James Version, 1611): «Thou shalt rule over it».  
<sup>15</sup> Examples: *khi*X—though being one of the last letters in the Greek alphabet—is listed immediately after *kappa*Κ; Greek verbs are listed under the infinitive, etc.