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## Grain for Delos

*By Joshua D. Sosin, Durham, NC*

A decade ago Gary Reger offered an arresting analysis of Delian *sitônia*-funds, special endowments that were dedicated to the purchase of grain. He argued that these funds suffered “chronic cash shortfall[s]” of roughly 25%. The study contributed to Reger’s more comprehensive argument that free Delos was not a great hub of trade, but rather a “Kykladic backwater”<sup>1</sup>. I do not wish to challenge the broader thesis, but will argue that Reger’s observations on the mechanics of the Delian *sitônia*-funds need modification.

### Early Sitônia

A scrap of the *hieropoioi* accounts from 301 BC tells us that the city borrowed 1,000 drachmas from Apollo in order to purchase grain<sup>2</sup>. Half a century later there was another loan to purchase grain; the *hieropoioi* of Apollo report lending the city 10,050 drachmas<sup>3</sup>:

καὶ εἰς τὴν σι[τω]-  
 124 νίαν ἐδανείσαμεν τοῦ ἱεροῦ ἀργυρίου κατὰ ψήφισμα τῇ πόλει καὶ προδανεισταῖς  
 Ξενοκράτει Ἱερομβότου, Πολυξένωι Ἀρησιμβρότου, Σωσιδήμωι Νίκωνος δραχμάς  
 ΜΓ' ἐπὶ ὑποθήκει τα[ῖς]  
 προσόδοις δημοσίαις

Reger translates and explains<sup>4</sup>:

'And for the purchase of grain we borrowed of the sacred money by decree for the city and for the guarantors [three persons are named] 10,500 dr on the hypothecation of the public incomes.' ... The money was lent to the *hieropoioi* themselves (the first-person-plural subject of the sentence), on behalf of the city (τῇ πόλει) and three guarantors (προδανεισταῖς) ... [T]he repayment of the loan was accomplished through the obligation of public income.

But δανείζω in the active voice means “lend”, not borrow, and takes a dative indirect object (τῇ πόλει καὶ προδανεισταῖς). Ὑπέρ plus the genitive, and not a

- 1 G. Reger, “The Public Purchase of Grain on Independent Delos”, *ClAnt* 12 (1993) 300–334;  
 “shortfall” 328; idem, *Regionalism and Change in the Economy of Independent Delos* (Berkeley  
 1994); “backwater” 188.  
 2 *IG* XI.2 146.A.20–21: --- δραχμ]ὰς ΗΗΗΗ καὶ ἄλλας ἐπ’ ἄξιαν τοῦ σίτου οὗ ἡ πόλις ἐπρίατο Χ  
 (... 400 drachmas, and another 1,000 for the price of the grain that the city purchased).  
 3 *IG* XI.2 287.A.123–125 (250 BC); for M<sup>F</sup> (124) corrected from M<sup>Γ</sup> see V. Chankowski-Sablé/  
 C. Feyel, “Comptes de la fin de l’indépendance délienne”, *BCH* 121 (1997) 103–124, at 123.  
 4 Reger, *ClAnt* 12 (1993) 318.

bear dative, would be needed to express “on behalf of someone”. We should translate as follows:

And for the purchase of grain, in accordance with a decree, we lent 10,050 drachmas from the sacred money to the city and the *prodaneistai*, Xenokratēs son of Hierombotos, Polyxenos son of Arēsimbrotos and Sōsidēmos son of Nikôn, against the public revenues as security.

Repayment was secured, not accomplished, by encumbrance of a matching sum from the public revenues, which were to be tapped only in the unlikely event that the borrower defaulted and the three *prodaneistai* lacked sufficient assets to cover the debt.

Neither of these loans, as Reger rightly saw, implies the existence of an organized institution or a permanent fund, as opposed to the one-time loan of money for the purchase of grain.

### Sitônia in 209 BC

Reger suggested that the Delians created the *sitônia*-fund in 209 BC, observing that the *hieropoioi* for that year recorded two payments to *sitônai*, in the amounts of 13,014 drachmas and 25,138 drachmas 1<sup>1</sup>/<sub>12</sub> obols<sup>5</sup>:

- ... καὶ ἔθεμεν εἰς Ἀρτεμῖσιον ΜΗΗΗΔΗ[Η]· ἔθεσαν τοῦ ... ἰου ---  
 ..... ὅς παρούσης βουλῆς καὶ γραμματέ[ω]ν Εὐκλείδου καὶ Τελεστοκρίτου [- - -  
 παρούσης]  
 8 [βο]υ[λ]ῆς καὶ γραμματέων Εὐκλείδου καὶ [Τ]ελεστοκρίτου εἰς τ[ὸ] ἱερὸν --- παρούσης]  
 [βουλ]ῆς καὶ γραμματέων Εὐκλείδου κα[ὶ] Τελεστοκρίτου εἰς τ[ὸ] ἱερὸν? --- ψηφισα]-  
 [μέ]νου τοῦ δήμου ΔΗ οὗ ἔθεσαν οἱ ταμίαι Καλλίφαντος καὶ Φίλων | ---  
 [... τ]ὸ τεθὲν τοῖς ἀνληταῖ[ς.] ||| ἔδο[με]ν τοῖς σιτώναις Διογένηι, Σω ---  
 12 ἀ[ρ]γύριον? ΜΧΧΧΔΗΗΗ· λοιπὸν ἐν Ἀρτεμι[σίω]ι ΜΜ<sup>Ρ</sup>ΗΔΔΔΓΗ[Η]· καὶ ἡμεῖς ---  
 ... τα ΓΗΗΗ<sup>Ρ</sup>· τὸ πᾶν ἐν Ἀρτεμισίωι Μ]Μ<sup>Ρ</sup>ΧΧΗΗΗ<sup>Ρ</sup> ΔΔΔΓΗΗ\· τοῦτο [παρέδομεν  
 ἱεροποιοῖς Ἐλπίνει καὶ Λυσάν]-  
 [δε]ροι παρούσης βουλῆς [καὶ γραμματ]έων τοῦ τῆς πόλεως [Εὐ]κλ[εί]δου, τοῦ τῶν ἱερο-  
 ποιῶν Τελεστοκρίτου].

The following explanation of events is offered<sup>6</sup>:

In its very first occurrence, in 209 B.C., the fund received a payment of 13,014 dr early in the year, and another in Artemision (4)<sup>7</sup> of 25,138 dr and a few obols. The *sitônai* seem to have repaid to the *hieropoioi* in Artemision (4) a total of at least 27,488 dr 1<sup>1</sup>/<sub>12</sub> ob, though certainty about these transactions is impossible, owing to the lacunae in the text.

Thus two payments are envisioned, but λοιπὸν ἐν Ἀρτεμι[σίω]ι ΜΜ<sup>Ρ</sup>ΗΔΔΔΓΗ[Η]\ in line 12 means, “The balance in the Temple of Artemis (is) 25,138 drachmas 1<sup>1</sup>/<sub>12</sub> obols”. Reger has mistaken the temple of Artemis (Ἀρτεμῖσιον) for

5 *I. Délos* I 362.A.6–14; Reger, *CIAnt* 12 (1993) 319 Table 3, with discussion at 320.

6 Reger, *CIAnt* 12 (1993) 320.

7 “4” here indicates that Artemisiôn was the fourth month in the Delian calendar.

the month of Artemisiôn (Ἀρτεμισιών)<sup>8</sup>. Λοιπὸν is the subject of an elliptical verb, not the direct object of ἔδο[με]ν of the preceding sentence. The Greek does not say who paid in the 27,488 drachmas  $1\frac{1}{12}$  obols. The account simply states that money was in the temple of Artemis. The syntax in this portion of the text is clear: it is addition.

Line	Transaction	Figure
12	The balance in the Temple of Artemis was	25,138 dr. $1\frac{1}{12}$ ob.
12	And we [paid in	N dr. ]
12–13	[And]	850 dr.
13	The total in the Temple of Artemis is	27,488 dr. $1\frac{1}{12}$ ob.

Table 1. Transactions in *I.Délos* I 362.A.12–13.

Line 12 seems thus to have acknowledged a round deposit of 1,500 drachmas (27,488 dr.  $1\frac{1}{12}$  ob. – 25,138 dr.  $1\frac{1}{12}$  ob. – 850 dr. = 1,500 dr.). Durrbach's restoration of line 12, ΜΜΓ<sup>Ϟ</sup>ΗΔΔΔΓ<sup>Ϟ</sup>Η[Η], suggests that he appreciated the syntax. Though the restoration is not beyond doubt, considerations of space do make it probable. This figure, in 12, and the balance in 13 both end in the unround sum of 8 drachmas  $1\frac{1}{12}$  obols, a similarity that is not likely to be an accident. Like the *hieropoioi*, Durrbach did the math. The sense of lines 11–14 seems to be: “We gave the *sitônai* 13,014 drachmas; after this payment (and others from the previous lines?) the balance in the Temple of Artemis was 25,138 drachmas  $1\frac{1}{12}$  obols, to which we added 1,500 and another 850 drachmas; the final balance in the Temple of Artemis was 27,488 drachmas  $1\frac{1}{12}$  obols, all of which we transferred to the incoming *hieropoioi*.” The 38,152 drachmas  $1\frac{1}{12}$  obols, most of which Reger thought were paid to the *sitônai* in the month of Artemisiôn<sup>9</sup>, were only 13,014<sup>10</sup> and could have been paid in any month – the Greek identifies a place, the Artemision, not a month.

Whether the 13,014 drachmas belonged to or derived from an endowment, the Greek does not specify and we do not know. A *sitônês* was a grain-purchaser; whether he handled endowed money was defined by law. Title alone is not sufficient evidence to posit the existence of an endowment. For example, in

8 The month Artemisiôn does not appear to be attested on Delos in any case but the genitive; e.g.: *IG* XI.2 138.A.fr.a.6; 148.65; 158.A.42; 159.A.33; 203.A.31, 41; 205.B.fr.a.17, fr.b+c.7; 224.A.10; 287.A.6, 19, 55; *I.Délos* I 290.66; 316.86; 338.A.fr.b.29; 354.20; 354.67; II 372.A.80; 396.A.73; 405.29; 442.A, 102, 104, 105, 107, 108, 109, 129, 130, 131, 185; 443.A.fr.b.10, 97; 455.A.fr.c.1; 456.B.14; 459.47; 460.fr.s.15, fr.v.5; 461.A.fr.b.4; 503.20.

9 Reger, *ClAnt* 12 (1993) 320, adduces the text in the context of an argument as to the “significant timing of loans” for *sitônia*.

10 U. Fantasia, “Finanze cittadine, liberalità privata e sitos demosios: considerazioni su alcuni documenti epigrafici”, *Serta historica antiqua* 2 (1989) 47–84, at 49, mentions only the 13,014 drachmas.



two very well known third-century instances Erythrai and Samos commissioned *sitônai* for what appear to have been one-time purchases of grain<sup>11</sup>.

### Sitônia in 192 BC

Evidence for *sitônia* in 192 BC consists of a handful of lines in the *hieropoioi* account for that year<sup>12</sup>. The section of the account as it stands does not construe:

- 68 ... [τ]ὸ πᾶ[ν]· ΜΓ<sup>ρ</sup>ΧΧΓ<sup>ρ</sup>ΗΓ<sup>ρ</sup>ΔΔ. κεφαλὴ τοῦ δημοσίου Γ<sup>ρ</sup>Γ<sup>ρ</sup>ΧΗΗΔΔΔΔΓ<sup>ρ</sup>†††††[C].
- Two erased lines
- 69 //////////<sup>vac</sup> κεφαλὴ τοῦ ἀργ[υρ]ίου τοῦ δ[η]μοσίου ΜΜΓ<sup>ρ</sup>ΧΧΧΓ<sup>ρ</sup>ΗΔΔΔΔ†††††ΤΧ ἀπὸ  
τοῦ σιτωνι[κοῦ]· παρ[έ]δο[μεν] Μενύ[λ]-  
[λωι] καὶ Φωκαεῖ. καὶ τόδε ἄλλο Μ[ενύλλ]ω[ι?] | | [..... τοῦ] σίτου? εἰς τὴν σιτωνίαν  
ΜΜΜΧΧΧΧΓ<sup>ρ</sup>ΗΗΗΓ<sup>ρ</sup>ΔΔΔΔΧΧ. καὶ ἐπὶ τῆς  
[ἡμετ]έρας ἀρχῆς [ἐ]θ[εσαν] ταμ[ίαι] Περιάν[δ]ρος καὶ Εὐξενίδης εἰς τὴν σιτωνίαν  
ΜΜΗΗΗΔΔΔΔΓ<sup>ρ</sup>†††††Τ. κεφαλὴ τοῦ σ[ι]-  
72 [τωνι]κοῦ Γ<sup>ρ</sup>Γ<sup>ρ</sup>ΗΗΔΔΔΔΓ<sup>ρ</sup>†††††ΤΧΧ. ἀπὸ τοῦ[τ]ου ἔδομεν τοῖς σιτώναις Ἡγέαι, Εὐφράνορι,  
Μενύλλωι ΜΜΜΜΓ<sup>ρ</sup>ΧΧ. λοι[πὸν]  
[τοῦ σι]τωνικοῦ Γ<sup>ρ</sup>ΧΧΧΗΗΔΔΔΔΓ<sup>ρ</sup>†††††ΤΧΧ· καὶ τοῦτο παρ[έ]δομεν ἱεροποιοῖς Μενύλλωι καὶ  
Φωκαεῖ<sup>vac</sup>
- Vacat
- 74 [Καὶ τόδε] ἄλλο ἀργύριον εἰσὶν κει τῶι θεῶι· ἐ[ν]ηροσίων· ...
- 68 ... Sum: 17,670 drachmas. Total of the public account 56,248 drachmas 3<sup>1</sup>/<sub>2</sub> obols.
- 69 Total money belonging to the public account: 28,643 drachmas 3<sup>4</sup>/<sub>12</sub> obols from the grain fund: we transferred (*sc. it*) to Menyllos and Phôkaieus. And another sum to Menyllos, ... of the grain for the purchase of grain: 34,890 drachmas <sup>2</sup>/<sub>12</sub> obols, and in our magistracy the treasurers Periandros and Euxenidês deposited for the purchase of grain 20,346 drachmas 4<sup>3</sup>/<sub>12</sub> obols. Total of the grain fund: 55,236 drachmas 4<sup>5</sup>/<sub>12</sub> obols.
- 72 From this we gave the grain-purchasers, Hêgeas, Euphranôr and Menyllos 47,000 drachmas. The balance of the grain fund is 8,236 drachmas 4<sup>5</sup>/<sub>12</sub> obols. And this we gave to the *hieropoioi* Menyllos and Phôkaieus.
- 74 And this other sum of money came in to the god; from rents: ...

Let us begin with lines 70–73, which are coherent independent from 68–69. The account records two deposits for the purchase of grain, the total of the two deposits, the subtraction of 47,000 drachmas from that total and the new balance<sup>13</sup>.

11 *I.Erythrai* I 28.20–29; *IG XII.6* 11.37–49.

12 *I.Dêlos* II 399.A.68–74.

13 Cf. J. A. O. Larsen, *Economic Survey of Ancient Rome* IV (Baltimore 1933–1940) 345, with n. 25 below.

Line	Transaction	Sum
70	Deposit εἰς τὴν σιτωνίαν	34,890 dr. $\frac{2}{12}$ ob.
71	Deposit εἰς τὴν σιτωνίαν	+ 20,346 dr. $\frac{4}{12}$ ob.
72	Subtotal	55,236 dr. $\frac{4}{12}$ ob.
72	Transfer to <i>sitônai</i>	– 47,000 dr.
73	Balance in grain fund	8,236 dr. $\frac{4}{12}$ ob.

Table 2. Transactions in *I.Délos* II 399.A.70–73

The restoration, Μ[ενύλλ]ω[ι], in line 70 cannot be correct – Durrbach had doubts<sup>14</sup>. If the *hieropoioi* had transferred the 34,890 drachmas  $\frac{2}{12}$  obols to Menyllos, they could not subsequently have given the money to the *sitônai* (ἔδομεν, 72). None of the figures in 70–73 is the result of modern deduction; all were recorded on the stone. And they tally. It would be perverse to suggest that the fractional numbers in 70 and 71 balance with those in 72 by coincidence. We keep math or Menyllos, but not both.

In the place of Μ[ενύλλ]ω[ι] I propose ἀ[ργύρι]ο[ν]<sup>15</sup>. In the Delian *hieropoioi* accounts the phrase καὶ τόδε ἄλλο ἀργύριον typically introduces entries, and in this text it is not only the introduction of choice<sup>16</sup>, but the phrase καὶ τόδε ἄλλο is always followed by ἀργύριον, never by another word<sup>17</sup>. Thus, we may restore καὶ τόδε ἄλλο ἀ[ργύρι]ο[ν] with some confidence. This leaves || [..... τοῦ] οἴτου. The formulaic phrase τόδε ἄλλο ἀργύριον is either the subject or direct object of a verb, usually εἰσῆκει<sup>18</sup>, that denotes the movement of money as it enters<sup>19</sup> or leaves<sup>20</sup> the hands of the *hieropoioi*. Of the available options εἰσῆκει fits

14 *I.Délos* II 399.A p. 62: “Μ[ενύλλ]ω[ι]?: conjecture de G. Glotz; on peut aussi supposer ἀ[πὸ τῆς] ὦ[ν]ῆ[ς] (ou plutôt ὦ[ν]ῆ[ς] [σεως], en raison de la lacune); mieux encore ἀ[πὸ τῆς π]ω[λ]ῆ[ς] [σεως], car il s’agit d’une recette, et non d’un achat.” The word πώλησις appears to be unattested on Delos.

15 An *alpha* (ἀ[ργύρι]ο[ν]), not *mu* (Μ[ενύλλ]ω[ι]), seemed plausible to Durrbach, *I.Délos* II 399.A p. 62; and graphic confusion of *omega* and *omicron* is common enough in antiquity and now.

16 E.g. *I.Délos* II 399.A.16, 35–36, 58, 74, 88, 92, 122.

17 Also the case in e.g. *I.Délos* II 442.A (179 BC).

18 *IG* XI.2 161.D left.1–2; 162.A.42; 288.10 (restored); *I.Délos* I 314.A.12; 316.58 (restored), 63; 320.B.77; 353.A.49 (restored); 354.17, 23, 27, 29, 30; 368.23 (restored), 34 (restored), 45; 371.A.4 (restored), 10 (restored), 41; II 372.A.10, 19, 24, 28, 31 (restored), 71; 399.A.74, 88, 92, 94, 122; 441.11 (restored); 442.A.140, 145, 152, 155, 159; 449.B.25; 460.t.21; 461.B.b.58.

19 Τίθημι: *I.Délos* II 399.A.16, 58; 442.A.38, 99; 443.A.b (restored); 445.A.b.19; 461.A.a.77–78 (restored); παραλαμβάνω: *IG* XI.2.147.B.6; 224.A.4 (restored); *I.Délos* I 354.4, 22 (restored); 356bis.A.28 (restored); II 399.A.35–36; 442.A.75; 448.A.21 (restored).

20 Παραδίδωμι: *I.Délos* I 364.A.23; 365.55–56; ἐξαίρω: *I.Délos* II 442.A.63; δανείζω: *IG* XI.2 287.A.125–126; *I.Délos* II 406.B.1 (restored), 55 (restored); 442.A.209 (restored), 215, 217; 449.A.27; ἀναλίσκω: *IG* XI.2 203.A.57–58.

best, so that we might restore line 70: καὶ τότε ἄλλο ἀργύριον εἰσῆκει τοῦ σίτου. Durrbach printed, without explanation, a question-mark after τοῦ σίτου. That the source of revenue should appear in the genitive without preposition is not unusual, but grain generates revenue only if it is disposed, by sale or otherwise. We expect a more direct designation, such as ἐνοικίων, or ἐνηροσίων, “from rents”, or τοῦ ἐστιατικοῦ, “from the *hestiatic* fund”<sup>21</sup>. But in one place the *hieropoioi* record revenues that came τῆς οἰκίας ἧς ἀνέθηκε Στησίλεως, “from the *oikia* that Stêsileôs dedicated”<sup>22</sup>. Real-estate, like grain, generates money only on disposition, but no mention is made of sale or lease of Stêsileôs’ gift. Perhaps we may render τοῦ σίτου as “(the sale of) the grain”, just as we must render τῆς οἰκίας as “(the lease of) the *oikia*”. Or, perhaps τοῦ σίτου should be understood as standing, whether by metonymy or error, for τοῦ σιτωνικοῦ, which is logical enough, on the model of τοῦ ἐστιατικοῦ.

Line 69 is more intractable. Durrbach thought that ἀπὸ τοῦ σιτωνικοῦ went with the preceding section, limiting κεφαλὴ τοῦ ἀργυρίου τοῦ δημοσίου MMF<sup>23</sup> XXXΓ<sup>24</sup> ΗΔΔΔΔ††ΤΧ<sup>23</sup>, so that we must understand παρέδομεν (69) as taking an elliptical direct object<sup>24</sup>. But the preceding section of the account (58–69) does not mention the grain fund, and I find no other Delian text in which the formulaic παρέδομεν lacks a direct object. On the other hand, if we repunctuate as follows, ἀπὸ τοῦ σιτωνικοῦ παρέδομεν Μενύλλῳ καὶ Φωκαεῖ καὶ τότε ἄλλο (From the grain fund we transferred to Menyllos and Phôkaieus also another sum of money), then we produce defective formulaery and an impossible situation. In the Delian accounts the formulaic phrase καὶ τότε ἄλλο ἀργύριον always appears as the first element of its sentence. Such repunctuation would create a unique internal use of the introductory phrase. Moreover, as we have already seen the *hieropoioi* cannot have transferred the money to Menyllos, and then have given the same money to the *sitônai* (72). Thus, whether we maintain or abandon Durrbach’s punctuation we get unintelligible procedure and bad formula.

The words ἀπὸ τοῦ σιτωνικοῦ παρέδομεν Μενύλλῳ καὶ Φωκαεῖ are simply a crux. As to the first part (ἀπὸ τοῦ σιτωνικοῦ) I can offer no compelling explanation. A mason’s error, however, might explain the second (παρέδομεν Μενύλλῳ καὶ Φωκαεῖ). When the mason came to the end of one section (69), after which appeared the formulaic introduction καὶ τότε ἄλλο ἀργύριον (70), his eye could have skipped to the end of the subsequent section (73), after which appeared the same formulaic introduction (74). Perhaps the

21 *I. Délos* II 372.A.19: καὶ τότε ἄλλο ἀργύριον εἰσῆκει τῷ θεῷ· ἐνοικίων; 399.A.74: εἰσῆκει τῷ θεῷ· ἐνηροσίων; 399.A.88: εἰσῆκει τέλων; 399.A.122: εἰσῆκει τοῦ ἐστιατικοῦ.

22 *IG* XI.2 162.A.42.

23 Larsen, *ESAR* IV 345, followed.

24 *I. Délos* I 399.A p. 62, “je pense que les mots ἀπὸ τοῦ σιτωνικοῦ doivent se référer à la somme précédemment énoncée, en sorte que παρέδομεν κ.τ.λ. doit être pris absolument (cf. l. 73), car la phrase n’est pas suivie d’un nombre; la somme est donc transmise en entier”.

closing words of this subsequent section (καὶ τοῦτο παρέδομεν ἱεροποιοῖς Μενύλλωι καὶ Φωκαεῖ) influenced the mason to compose the impossible παρέδομεν Μενύλλωι καὶ Φωκαεῖ at lines 69–70. Something, at any rate, has gone wrong in the account. The erasures between 68 and 69 and the pair of erasures at the start and finish of line 69 suggest as much. Grammar, formula, and context prove it. The full meaning of line 69 and the beginning of 70 may be hopelessly lost<sup>25</sup>.

Difficulties of interpretation notwithstanding, the passage has been adduced to support the claim that the Delian grain fund suffered routine capital loss on a grand scale<sup>26</sup>:

[T]he *hieropoioi* seem to have begun the year with 34,890 dr  $\frac{1}{6}$  ob in their grain account. During their term of office the treasurers deposited an additional 20,346 dr  $\frac{4}{4}$  ob, for a total of 55,236 dr  $\frac{5}{12}$  ob (ll. A70–72). Of this the *hieropoioi* turned over 47,000 dr to the *sitônai* (l. A72). If the money that the *hieropoioi* began the year with was left over from grain sales for 193 B.C. (an assumption by no means assured), then the funds realized by those sales were clearly inadequate by about 26 percent<sup>27</sup> to cover anticipated expenses in 192.

Capital loss in 193/2 BC, however, is not in evidence. The Greek records the deposit of two sums of money εἰς τὴν σιτωνίαν. One derived from a source now obscured by lacuna (70), but perhaps the sale of grain (at an unspecified date). The second was made while the *hieropoioi* were in office (70–71), by the *tamiai*<sup>28</sup>. If the fund had been capitalized at 47,000 drachmas then why, when it returned only 34,890 drachmas  $\frac{2}{12}$  obols, did the *tamiai* not simply deposit the difference, 12,109 drachmas  $\frac{5^{10}}{12}$  obols?

25 Larsen, *ESAR* IV 345, admitting the extreme difficulty of the passage, explained that “the total of the public money derived from the grain fund”, the 28,643 dr.  $\frac{3}{12}$  ob. (line 69), “... is not transferred to the public chest but is passed on by the *hieropoioi* to their successors as a separate item, though it is no longer a real part of the grain fund and is not included in the total of the fund for the year”. He expands: “The last college of *sitonai* had closed its accounts and turned over all the remaining money to the grain fund. Some of this money remained in the grain fund, while some was turned back to the state as money derived from the grain fund. This money remained sequestered and was not transferred to the public treasury; instead the treasurers added another sum to the grain fund.” If I understand this, Larsen envisioned the following scenario. When the *sitônai* for 193 left office they divided their revenues in two lots: 34,890 drachmas  $\frac{2}{12}$  obols (line 70) remained in the grain fund, while the other 28,643 drachmas  $\frac{3}{12}$  obols (69) ceased to be “a real part of the grain fund” and reverted to the state under the designation ἀπὸ τοῦ σιτωνικοῦ (69). The treasurers for 192 then deposited a smaller sum, 20,346 drachmas  $\frac{4}{12}$  obols, in the grain fund. This reconstruction rests on the assumption that ἀπὸ τοῦ σιτωνι[κοῦ] (69) construes with the text that precedes without damage to the sense of the text that follows, and on failure to observe that the *hieropoioi* cannot have both transferred the coins to Menyllos, and then have given the same coins to the *sitônai* (ἔδομεν, 72); also Fantasia, *Serta historica antiqua* 2 (1989) 52–53. But the passage is difficult and, as Larsen notes, not even Durrbach attempted to explain it.

26 Reger, *ClAnt* 12 (1993) 321–322.

27 34,890 drachmas  $\frac{2}{12}$  obols  $\approx 74\% \times 47,000$  drachmas.

28 This may have been standard operating procedure: *I.Délos* II 442.A.106–121, 122–138.

The same account that is used to tell a story of massive financial shortfall could be adduced in support of the opposite. Perhaps an investment of 47,000 drachmas returned 55,236 drachmas  $4\frac{5}{12}$  obols, yielding a profit of roughly 18%<sup>29</sup>. If, moreover, the situation were so dire – as a net loss of over a quarter might be viewed – why were only 47,000 drachmas disbursed to the *sitônai*? Why not try to recoup the losses? The Greek does not suggest that the fund was a losing proposition. If we do not begin with minimalist assumptions about the Delian grain-market it is equally plausible that an investment of 47,000 drachmas returned roughly 18% for 193/2 BC, so that the god, and ultimately the state, earned a handsome profit. On current evidence any conclusion as to loss or gain will remain a modern invention<sup>30</sup>.

### Sitônia in 180/79 BC

*I.Délos* II 442.A.90–140 (179 BC) furnishes rich data on the operations of a grain fund in 180/79 BC. I present that data in a series of tables below. Lines 90–97 record money received by the current *hieropoioi*, in the magistracy of Dêmarês, from the previous *hieropoioi*, and transferred into the public *kibôtos*; the account includes the qualification and date of deposit, and the bank through which the sealed jar containing the funds came.

Line	Qualification of Dep.	Date	Deposited	Bank of	Sum Received
90–91	εἰς τὴν σιτωνίαν	Posid.	Phôk.	Ph&S	10,000 dr.
91–92	εἰς τὴν σιτωνίαν κατὰ τὴν διάταξιν	Posid.	Phôk.	H&M	1,500 dr.
92–93	εἰς τὴν σιτωνίαν	Posid.	Phôk.	N&H	3,060 dr.
93–94	εἰς τὴν σιτωνίαν	Posid.	Phôk.	N&H	4,000 dr. <sup>31</sup>
<i>sub-total</i>					18,560 dr.

29 8,236 dr.  $4\frac{5}{12}$  ob.  $\approx 18\% \times 47,000$  dr.

30 It is worth noting that in one case, not mentioned by Reger, but noticed by Fantasia, *Serta historica antiqua* 2 (1989) 49 n. 5, the *hieropoioi* refer, in a list of public monies received ἐν τῇ ἄλλῃ κιβωτῷ (*I.Délos* II 399.A.35–36.), to the deposit of “surplus from the *sitônia*” (52–54): ἄλλον στάμνον ἐν ᾧ ἐνήσαν ΗΔΔΔΔΓΓΗΗΗΗ, ἐπιγραφὴν ἔχοντα ἐπ’ ἀρχοντος | [Σω]στράτου ἱεροποιοὶ Εὐξενίδης καὶ Ἀντίγονος ἔθεσαν κατὰ τὸ ψήφισμα τοῦ δήμου τὸ περιγεγόμενον ἀπὸ τῆς | [σιτ]ωνίας καὶ ὃ παρελάβοσαν παρὰ Σωκρίτου καὶ Πολυξένου (Another jar in which were 148 drachmas 3 obols, bearing the inscription, “In the magistracy of Sôstratos the *hieropoioi* Euxenidês and Antigonos deposited, according to the decree of the people, the surplus from the *sitônia* and that which they received from Sôkritos and Polyxenos”). We do not know whether the surplus was generated by sale of grain, i.e. that it was surplus revenue, or whether it was deposited for the purpose of *sitônia*, but not spent. The phrase, τὸ περιγεγόμενον ἀπὸ τῆς | [σιτ]ωνίας, may suggest the latter, i.e. that the money was left over from the purchase of grain, not its sale. The account is from 192 BC, but refers to a deposit made in 195.

31 We can only guess whether *I.Délos* II 441.3–4 (180 BC) is in some way related to this deposit, also routed through the bank of Nymphodôros and Hêrakleidês.

94–95	ἐκ τῶν ἀδιατάκτων	Posid.	Phôk.	N&H	432 dr. 1 <sup>4</sup> / <sub>12</sub> ob.
95–96	τῶν ἀκατατάκτων	Posid.	Phôk.	Ph&S	3,370 dr. <sup>6</sup> / <sub>12</sub> ob.
96–97	ἐκ τῶν ἀκατατάκτων	Posid.	Phôk.	H&M	83 dr. 2 ob.
<i>sub-total</i>					3,885 dr. 3 <sup>10</sup> / <sub>12</sub> ob.

Table 3a. Transfer of deposits εἰς τὴν σιτωνίαν, *I.Délos* II 442.A.90–97. For the last three entries see the corresponding entries in Table 3c. Phôk. = in the magistracy of Phôkaieus; Ph&S = the bank of Philôn and Silênos; H&M = Hellên and Mantineus; N&H = Nymphodôros and Hêrakteidês.

Lines 106–122 record money deposited by the *tamiai* to the public *kibôtos* in the year of the current *hieropoioi*, in the magistracy of Dêmarês.

Line	Qualification of Dep.	Date deposited by <i>tamiai</i>		Bank of	Sum
106–107	εἰς τὴν σιτωνίαν κατὰ τὴν διάταξιν	Artem.	Dêm.	H&M	6,560 dr.
107–108	εἰς τὴν σιτωνίαν	Artem.	Dêm.	N&H	6,000 dr.
108–109	εἰς τὴν σιτωνίαν	Artem.	Dêm.	Ph&S.	6,000 dr.
<i>sub-total</i>					18,560 dr.
109–110	εἰς τὴν σιτωνίαν	Metag.	Dêm.	Ph&S	5,000 dr.
110–111	εἰς τὴν σιτωνίαν	Metag.	Dêm.	H&M	5,000 dr.
111–112	κατὰ τὴν διάταξιν εἰς τὴν σιτωνίαν	Metag.	Dêm.	N&H	4,674 dr. 2 <sup>8</sup> / <sub>12</sub> ob.
<i>sub-total</i>					14,674 dr. 2 <sup>8</sup> / <sub>12</sub> ob.
115–116	εἰς τὴν σιτωνίαν	Posid.	Dêm.	N&H	5,060 dr.
116–117	εἰς τὴν σιτωνίαν	Posid.	Dêm.	Ph&S	7,000 dr.
118–119	εἰς τὴν σιτωνίαν κατὰ τὴν διάταξιν	Posid.	Dêm.	H&M	6,500 dr.
<i>sub-total</i>					18,560 dr.
119–120	ἐκ τῶν ἀκατατάκτων	Posid.	Dêm.	H&M	2,500 dr.
120–121	ἐκ τῶν ἀκατατάκτων	Posid.	Dêm.	N&H	1,374 dr. 3 <sup>1</sup> / <sub>12</sub> ob.
<i>sub-total</i>					3,874 dr. 3 <sup>1</sup> / <sub>12</sub> ob.

Table 3b. Deposits εἰς τὴν σιτωνίαν, *I.Délos* II 442.A.106–122. Dêm. = in the magistracy of Dêmarês.

Lines 122–140 record money withdrawn by the *hieropoioi* for transfer to the *si-tônai*, in the magistracy of Dêmarês, including the date of withdrawal.



Line	Qualification of Dep.	Date deposited by <i>tamiai</i>		Bank of	Date withdrawn	Sum
123	εἰς τὴν σιτωνίαν	Posid.	Phôk.	N&H	Lên.	3,060 dr.
123–124	εἰς τὴν σιτωνίαν	Posid.	Phôk.	N&H	Lên.	4,000 dr.
124–125	εἰς τὴν σιτωνίαν	Posid.	Phôk.	Ph&S	Lên.	10,000 dr.
125–126	εἰς τὴν σιτωνίαν κατὰ τὴν διάταξιν	Posid.	Phôk.	H&M	Lên.	1,500 dr.
126–127					<i>sub-total</i>	18,560 dr.
129–130	εἰς τὴν σιτωνίαν κατὰ τὴν διάταξιν	Artem.	Dêm.	H&M	Tharg.	6,560 dr.
130–131	εἰς τὴν σιτωνίαν	Artem.	Dêm.	N&H	Tharg.	6,000 dr.
131–132	εἰς τὴν σιτωνίαν	Artem.	Dêm.	Ph&S	Tharg.	6,000 dr.
132					<i>sub-total</i>	18,560 dr.
132–133	εἰς τὴν σιτωνίαν	Metag.	Dêm.	N&H	Bouph.	4,674 dr. $2^{8}/_{12}$ ob.
133–134	εἰς τὴν σιτωνίαν κατὰ τὴν διάταξιν	Metag.	Dêm.	H&M	Bouph.	5,000 dr.
134–135	εἰς τὴν σιτωνίαν	Metag.	Dêm.	Ph&S	Bouph.	5,000 dr.
					<i>sub-total</i>	14,674 dr. $2^{8}/_{12}$ ob.
135–136	τῶν ἀκατατάκτων	Posid.	Phôk.	Ph&S	Bouph.	3,370 dr. $6/_{12}$ ob.
136–137	ἐκ τῶν ἀδιατάκτων	Posid.	Phôk.	N&H	Bouph.	432 dr. $1^{4}/_{12}$ ob.
137–138	ἐκ τῶν ἀκατατάκτων	Posid.	Phôk.	H&M	Bouph.	83 dr. 2 ob.
138–139					<i>sub-total</i>	18,560 dr. $6/_{12}$ ob.

Table 3c. Money withdrawn for transfer to the *sitônai*, *I.Délos* II 442.A.122–140. For the last three entries see the corresponding entries in Table 3a.

Chronological tabulation of deposits and withdrawals allows us to build a narrative of procedure.

442.A	Magistrate	Month	Activity		Amount	
90–97	Phôkaieus	12	Posid.	Depos.	18,560 dr.	+ 3,885 dr. $3^{10}/_{12}$ ob.
123–127	Dêmarês	01	Lên.	Withdr.	18,560 dr.	
106–109	"	04	Artem.	Depos.	18,560 dr.	
129–132	"	05	Tharg.	Withdr.	18,560 dr.	
109–112	"	08	Metag.	Depos.	14,674 dr. $2^{8}/_{12}$ ob.	
132–139	"	09	Bouph.	Withdr.	14,674 dr. $2^{8}/_{12}$ ob.	+ 3,885 dr. $3^{10}/_{12}$ ob.
115–121	"	12	Posid.	Depos.	18,560 dr.	+ 3,874 dr. $3^{11}/_{12}$ ob.

Table 3d. Deposits and withdrawals for *sitônia* in 180/79, as derived from *I.Délos* II 442.A.90–140.

In the month of Posideôn, under Phôkaieus, the *tamiai* deposited in the temple 18,560 drachmas for *sitônia* and 3,885 drachmas  $3^{10}/_{12}$  obols that were not part of the normal budgetary allocation, or *diataxis*; at the end of that month the outgoing *hieropoioi* transferred both blocks of deposits *via* the incoming *hieropoioi* to the public *kibôtos* (90–94, 94–97). In Lênaiôn, the first month of the next year, under Dêmarês, the *hieropoioi* withdrew the same 18,650 drachmas, in the same lots, in the same sealed jars in which the banks had put them, and gave the cash to the *sitônai* (123–127).

Next – and here we must conjecture, because the account tracks money only as it enters and exits temple-oversight<sup>32</sup> – the *sitônai* used the money to purchase grain. Then they sold the grain, presumably at Delos, such that they could deliver 18,650 drachmas to the *tamiai* by the month of Artemisiôn.

The *tamiai* deposited the 18,650 drachmas in the public *kibôtos* in Artemisiôn (106–109). In the next month, Thargêliôn, the *hieropoioi* withdrew the same 18,560 drachmas (as before), and gave them to the *sitônai* (129–132). Again – and again, we must conjecture – the *sitônai* purchased grain and sold it such that the money could be re-paid to the *tamiai* by Metageitniôn. But in Metageitniôn the *tamiai* deposited only 14,674 drachmas  $2^8/_{12}$  obols (109–112). In the next month, Bouphoniôn, the *hieropoioi* withdrew the same 14,674 drachmas  $2^8/_{12}$  obols, as well as the 3,885 drachmas  $3^{10}/_{12}$  obols, in the same sealed jars in which they had been deposited nine months before (94–97), for a total of 18,560 drachmas  $6/_{12}$  obols (138–139); they then gave both lots of coin to the *sitônai* (132–135, 135–139). For the third and final time of the year – conjecture again – the *sitônai* sold the grain such that they could repay the money to the *tamiai* by Posideôn.

In Posideôn the *tamiai* deposited 18,560 drachmas for *sitônia* plus an additional 3,874 drachmas  $3^1/_{12}$  obols that were not part of the normal budgetary allocation (115–119, 119–121). At this point the year ended, the officials stepped down, and the process started over. If we had a similarly complete account for 178 we could follow the mechanism through additional cycles.

Fantasia argued that the fund was capitalized not at 55,680 drachmas, as several have assumed<sup>33</sup>, but at 18,560, and that the same money turned over three times per year<sup>34</sup>. He observed that in the section of the account covering deposits for *sitônia* the three deposits κατὰ τὴν διάταξιν (6,560 [107], 5,000 [111], 6,500 [119]) amount to 18,060, which is only 500 drachmas below the amount disbursed to the *sitônai* three times throughout 179 BC. According to

32 See e.g. T. Linders, “The Delian Temple Accounts: Some Observations”, *OpAth* 19 (1992) 69–73.

33 I.e. 18,560 drachmas  $\times$  3: Larsen, *ESAR* IV 347; L. Migeotte, “Le pain quotidien dans les cités hellénistiques: A propos des fonds permanents pour l’approvisionnement en grain”, *Cahiers Glotz* 2 (1991) 19–41, 31–32; Reger, *ClAnt* 12 (1993) 319 Table 3.

34 Fantasia, *Serta historica antiqua* 2 (1989) 51–52.



Fantasia this cannot be coincidence. The force of the argument is unclear. Nevertheless, Fantasia is, I suggest, right for a simpler reason. It is evident from *I.Délos* II 442.A.122–135 that coin was disbursed to *sitônai* in the same sealed jars in which it had been deposited the month before<sup>35</sup>. At no time can the fund be shown to have had more than 18,560 drachmas  $\frac{6}{12}$  obols<sup>36</sup>. The Delians thus moved the same 18,560 drachmas three times per year<sup>37</sup>. The *sitônia*-fund was a rolling fund capitalized at 18,560 drachmas with thrice-annual turnover.

Four deposits made by the *tamiai* in 180/79 are qualified by the phrase, κατὰ τὴν διάταξιν<sup>38</sup>, which should indicate money that was allocated in the annual budget<sup>39</sup>. Reger clarifies<sup>40</sup>:

The careful distinction between these deposits [*i.e. those labeled κατὰ τὴν διάταξιν*] and the rest is not likely to be accidental; it is meant to distinguish, I believe, between funds realized from previous sale of grain and plowed back into the *sitônia* (funds simply εἰς τὴν σιτωνίαν) and funds added to the *sitônia* by the ekklesia to bring the grain fund up to full size.

But deposits designated κατὰ τὴν διάταξιν were made throughout the year. Surely when the Delians assembled to set the annual budget (*diataxis*) they could not have predicted the amounts by which the fund would be deficient as a result of three separate sales across an entire year. Perhaps the annual budget reserved a large block of cash from which deficits could be rectified. But the provision of make-up money, even from earmarked funds, suggests randomness, and deposits designated κατὰ τὴν διάταξιν give the appearance of order: all, for reasons unexplained and unknown, were routed through the bank of Hellên and Mantineus<sup>41</sup>. No other bank appears to have handled such deposits. The dictionary-meaning of κατὰ τὴν διάταξιν is clear enough, but precisely what procedure the phrase indicated seems beyond knowing for now.

So too the deposits labeled τῶν ἀκατατάκτων / ἐκ τῶν ἀδιατάκτων / ἐκ τῶν ἀκατατάκτων<sup>42</sup>. Reger suggests that these “undesigned funds” were called on to replenish the fund when revenue from the sale of grain fell short<sup>43</sup>. On this in-

35 Cf. *I.Délos* II 442.A.90–94 and 123–126; 106–109 and 129–132; 109–112 and 132–135.

36 18,560 dr. and 3,885 dr.  $3^{10}/_{12}$  ob. were deposited in Posideôn under Phôkaieus (90–97), and 18,560 dr. and 3,874 dr.  $3^{11}/_{12}$  ob. in Posideôn under Dêmarês, but in both cases the latter deposits were ἐκ τῶν ἀδιατάκτων (*vel sim.*), not strictly part of the fund’s capital.

37 Larsen, *ESAR* IV 347, appears not to have noticed that the three banks handled the money in the same sealed jars, and so concluded “that the fund consisted of 55,680 drachmas and that not the purchasing but the sale of grain was distributed somewhat evenly throughout the year”.

38 *I.Délos* II 442.A.91–92 + 125–126, 106–107 + 129–130, 110–111 + 133–134, 118–119.

39 On ἀνα- / διάταξις see Robert, *Nouv. Sardes* I 17; *Hell.* IX 14–18. Migeotte, *Cahiers Glotz* 2 (1991) 31; idem, “Le pain quotidien dans les cités hellénistiques: une ‘affaire d’Etat’?”, in: *Mélanges Ernest Pascal* [= *Cahiers des études anciennes* 24] (Montreal 1990) 291–300, 297.

40 Reger, *ClAnt* 12 (1993) 322.

41 *I.Délos* II 442.A.91–92, 106–107 (also 129–130), 110–111 (also 133–134), 118–119, 125–126.

42 The three designations appear to be variants of identical meaning; or, if there is a shade of difference, it is beyond our grasp.

43 Reger, *ClAnt* 12 (1993) 322.

interpretation the rubrics indicated two classes of extraordinary deposit to the *sitônia* fund to rectify shortfall, one reserved in advance by budgetary provision and the other consisting of funds that had not been earmarked. Now, the 3,885 drachmas  $3^{10}/_{12}$  obols in “undesigned funds” that were given to the *sitônai* in Bouphoniôn under Dêmarês (135–138) raised Metageitniôn’s slim deposit of 14,674 drachmas  $2^{8}/_{12}$  obols to 18,650–drachmas – plus half an obol, to be precise. Thus, Reger suggests that the sale of grain fell short by 3,885 drachmas  $3^{4}/_{12}$  obols, and so the *ekklêsia* contributed that much (plus a half-obol, for some reason<sup>44</sup>) to the fund to bring it up to full strength. But if the *ekklêsia* did provide the 3,885 drachmas  $3^{10}/_{12}$  obols for this purpose, it can only have been by incredible coincidence, since the *tamiai* deposited the 3,885 drachmas  $3^{10}/_{12}$  obols in a sealed jar in Posideôn under Phôkaieus, nine months before the shortfall is alleged to have occurred (see Table 3d above). Once again the dictionary-meaning of a phrase seems straightforward, while the procedure that the phrase flagged remains obscure.

Reger calculated total alleged shortfalls for 179 BC by adding the money deposited *κατὰ τὴν διάταξιν* in 179 (13,060 drachmas<sup>45</sup>) to the “undesigned funds” (3,885 drachmas  $3^{10}/_{12}$  obols<sup>46</sup>). Thus, he concluded that “across the whole year [sc. 179 BC] the grain fund was underfunded by 16,945 dr, or about 30 percent of the total required”<sup>47</sup>. But it is not evident that either designation indicates rectification of shortfall of the sort envisioned by Reger<sup>48</sup>. Thus, the sum of deposits under the two rubrics furnishes weak measurement of the fund’s profitability. We do not know even whether logic permits us to add the two catego-

44 Migeotte, *Cahiers Glotz* 2 (1991) 30 n. 35: “sans doute par erreur”.

45 But if deposits *κατὰ τὴν διάταξιν* were designed “to bring the grain fund up to full size”, as Reger, *ClAnt* 12 (1993) 322, suggests, then to gauge sales in 179 BC we must exclude the deposit recorded at 91–92 (also 125–126), and include the one recorded at 118–119, so that the alleged shortfall, in this category alone, would have been 18,060 drachmas.

46 Not 3,885 drachmas  $3^{1}/_{3}$  obols, *ibid.*

47 Reger, *ClAnt* 12 (1993) 322.

48 Reger does not mention that some *sitônia*-funds safeguarded against shortfall: *SEG* XLIII 205.29–33 (Koroneia, III BC): ἡ δὲ [κά τι]ς ἔνδια γινούεται, ποτιδότης ὁ ταμίας ὁ προάρχων | [τὰν] δευτέραν πετράμεινον τῆς πολεμάρχους τὸ ποτιδε[όμενον ἀργούριον ἄως τὰς ἐ]πτα-κατίας κῆ ἀποδόγ[θω (If there is a deficit the treasurer in office for the second four-month period shall pay the polemarchs in addition the money that falls short of the seven hundred [the amount of the principal] and he shall re-pay ...), with L. Migeotte, “Un Fonds d’achat de grain à Coronée”, *Boeotia Antiqua* 3 (1993) 11–23, esp. 19; J. Bingen, *AC* 50 (1981) 43–44 and J. Tréheux, *BCH* 110 (1986) 419–421, lines 12–17: τοὺς δὲ σιτο[θέτας, εἴαν τις] γένηται ἔγδεια, ἀπαγ[γ]έλ[λιν τὸ πλ]ῆθος, τοὺς δὲ ἀργυρολόγους | [ἐκιδιδόναι τοῖς] σιτοθέταις ὅ τι ἂν αὐτοῖς | [δεήσει παραχρῆ]μα ἐξ ἀπάσης τῆς π[ροσόδου] ἥτις ἂν συν[αχθῇ] (The *sitothetai*, if there is a deficit, shall declare the amount and the accountants shall pay the *sitothetai* immediately whatever their deficit is, from the total revenue, whatever has been collected), with L. Robert, *Gnomon* 35 (1963) 54–57; J. and L. Robert, *Bull.épigr.* (1963) 361; L. Robert, *StudClass* 16 (1974) 87–88; Gauthier, *Bull.épigr.* (1988) 398; J. Tréheux, “Retour à Imbros et Samothrace”, *Hellénika Symmikta* I (Nancy 1991) 143–149, esp. 147–149.

ries together with any meaning, much less whether the result of such an operation suggests negative profitability.

But maybe there is a pattern in the data. The accounts report only two occasions on which regular deposits were accompanied by “undesignated funds”, 3,885 drachmas  $3^{10}/_{12}$  obols in Posideôn under Phôkaieus (90–97) and 3,784 drachmas  $3^{1}/_{12}$  obols in Posideôn under Dêmarês (115–121). Perhaps in satisfaction of some operational rule, which is unknown to us, additional funds of roughly the same amount were deposited in the last month of the year. Anyway, it seems safe to consider it unlikely that someone predicted nine months in advance that grain-sales would result in a shortfall of 3,885 drachmas  $3^{4}/_{12}$  obols. While we cannot reconstruct all the operational details from the accounts, there is nothing to indicate fiscal disaster. The accounts do not suggest that the *sitônia*-fund experienced any shortfall in 179 BC, much less one of ca. 30 percent.

Reger concluded that annual losses of 25–30% were structurally integral to the Delian *sitônia*-funds: “The most reasonable explanation of the loss is resale of grain at a discount of about 25 to 30 percent below market price.”<sup>49</sup> If the grain was sold at a discount we may assume that it was offered below current retail price, but *sitônai* with more than three talents in hand would have bought off the boat, at wholesale prices. The state could have sold below the prevailing retail price, yet above the price at which it had purchased the grain, and still turned a profit, or at least broken even<sup>50</sup>. There is no evidence of loss and no

49 Reger, *CIAnt* 12 (1993) 323. Reger (319) argues that this money-losing institution was popular, suggesting that since two loans (of 17 attested loans, spanning the years 301–178) of roughly 50,000 drachmas were designated εἰς τὴν σιτωνίαν (*I.Délos* II 399.A.72 = 47,000; 442.A.127, 132, 139 = 55,680), all loans over 4,000 drachmas – six loans by this metric – were for the same purpose. But as we have seen, 442.A does not attest a loan of 55,680 drachmas, and the 4,000-drachma benchmark is not decisive: in 301 Delos borrowed 1,000 drachmas for the purchase of grain (*IG* XI.2 146.A.20–21). There are other problems. The loan reported at *IG* XI.2 148.75–76 is presumed to be for *sitônia* because it is “three times greater than the 4,000 maximum for loans for other purposes” (320). But if the number 4,000 has no external significance, how can multiples of it indicate anything? *IG* XI.2 158.B.1–45 is taken (*ibid.*) to indicate a loan for *sitônia* because it is “large” and was contracted in winter. But in 179 BC (442.A.122–140) *sitônai* purchased grain three times throughout the calendar year. The loans attested at *I.Délos* I 354.10–13 are assumed (*ibid.*) to be for *sitônia* because their sums approximate 50,000 drachmas. This in itself proves little (a car loan can approximate a home-improvement loan); in fact 354.13 reads “M”, 10,000. *I.Délos* I 362.A.11–14 records, as we have seen, disbursement to the *sitônai* of 13,014 drachmas, not 38,152. Finally, *I.Délos* II 443.A.b.30 records a deposit of 5,000 drachmas, not “50,000+”, εἰς τὴν σιτωνίαν; line 36, not mentioned by Reger, records another deposit of 6,000 drachmas, for the same. We might imagine loans totaling roughly 50,000 drachmas in the huge lacunas. Perhaps six loans for *sitônia* over more than a century constitute popularity but the data are less than conclusive.

50 A rolling *sitônia*-fund from third-century Koroneia was used to purchase grain for sale at cut-rates, and its founder envisioned the possibility of profits: *SEG* XLIII 205.24–29: ἐπὶ δὲ καὶ διαπωλείσων|θι πάντα τὸν σῖτον, ἐλλογιπτάνθω μετὰ τῶν κατο|πτῶν τὸ συναγμένον ἀπὸ τῆς τιμᾶς· κῆ εἰ| μὲν καὶ τι πλεον γινούειτῃ τῶν ἑπτακατιῶν ἀργου|[ρ]ίω, καταβαλλόνθω τῷ ταμίῃ παρχρεῖμα κῆ ἔστω οὐ|το τῆς πόλιος κῆ οὐπαρχέτω ἐν τῶν φυκονομίαν (Once they have sold all

way, on current data, to correlate alleged loss with whatever discounts the state may have offered.

### *Conclusion*

If the Delian *sitônia*-funds were resorted to often, in spite of the fact that their very structure ensured massive capital loss, then they would fit broadly with Reger's conception of the economy of free Delos. If the island was not a great center for trade in grain, then the commodity would have been neither very plentiful nor very cheap. The frequent necessity of propping up supply would have conditioned Apollo's functionaries and the citizens of Delos to accept the loss of more than half a talent of silver year after year. Reger suggests that by the third century Delos could afford large annual "outlays to make up the chronic cash shortfall" because that was when "the local economic scene picked up"<sup>51</sup>. In prosperous times states are willing to subsidize food, but the accounts suggest that routine capital loss is a modern invention, not an ancient reality. Whether Reger's complex and learned assessment of the Delian economy holds or not is a question beyond the scope of this brief note, but if it does stand, it will not be on the legs of the *sitônia* fund. "Le dossier délien est réouvert, il n'est pas épuisé."<sup>52</sup>

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the grain they shall render an account with the overseers of the revenue gathered from the sale. If there is more than seven hundred drachmas of silver [*the amount of the principal*] they shall turn it over immediately to the treasurer and this money shall belong to the city and shall be reserved for administration); see Migeotte, *Boeotia Antiqua* 3 (1993) 19 and n. 48 above.

51 Reger, *ClAnt* 12 (1993) 328.

52 R. Étienne/V. Sablé, *Topoi* 5 (1995) 555–560, at 560.