ISSN 1122-8792 Electronic ISSN 1724-2169

HISTORY OF ECONOMICS IDEAS · XIX/2011/

HISTORY OF ECONOMIC IDEAS HEI

OFFPRINT

XIX/2011/1

Fabrizio Serra editore Pisa · Roma

HISTORY OF ECONOMIC IDEAS

History of Economic Ideas Online www.historyofeconomicideas.com

Editors: Riccardo Faucci (University of Pisa) Roberto Marchionatti (University of Turin)

Editorial Board:

RICHARD ARENA (University of Nice), DUCCIO CAVALIERI (University of Florence), MARCO DARDI (University of Florence), PETER D. GROENEWEGEN (University of Sydney), HANSJÖRG KLAUSINGER (University of Vienna), ENZO PESCIARELLI (University of Ancona), CHRISTIAN SEIDL (University of Kiel)

Advisory Board:

M. M. AUGELLO (University of Pisa), G. BECATTINI (University of Florence),
A. A. BREWER (University of Bristol), B. J. CALDWELL (Duke University),
A. L. COT (University of Paris 1), N. DE VECCHI (University of Pavia), R. W.
DIMAND (Brock University), S. FIORI (University of Turin), G. C. HARCOURT (University of Cambridge, UK), A. KARAYIANNIS (University of Piraeus), B. INGRAO (University of Rome «La Sapienza»), J. E. KING (La Trobe University), S. PERRI (University of Macerata), C. PERROTTA (University of Lecce), P. L. PORTA (University of Milan · Bicocca), T. RAFFAELLI (University of Pisa), A. SALANTI (University of Bergamo), W. J. SAMUELS (Michigan State University), A. S. SKINNER (University of Glasgow),

J. K. WHITAKER (University of Virginia)

BOOK REVIEW EDITOR: NICOLA GIOCOLI (University of Pisa)

Editorial Assistants: Giandomenica Becchio (University of Turin) Giulia Bianchi (University of Pisa)

Address:

The Editor, *History of Economic Ideas*, Dipartimento di Scienze Economiche, Facoltà di Giurisprudenza, Via Curtatone e Montanara 15, 1 56126 Pisa, tel. +39 050 2212845, fax +39 050 2212853, hei@ec.unipi.it

History of Economic Ideas is an international peer-reviewed journal and it is indexed and abstracted in Current Contents/Arts & Humanities, Art & Humanities Citation Index, Social Science Citation Index and Journal Citation Report/Social Science Edition (ISI · Thomson Reuters).

The eContent is archived with Clockss and Portico.

THE ECONOMICS OF THE EARLY CHRISTIAN RHETORIC: THE CASE OF THE SECOND PETRINE EPISTLE OF THE NEW TESTAMENT*

George Gotsis

and

STAVROS DRAKOPOULOS

University of Athens

Department of the History and Philosophy of Science

The aim of this paper is to elaborate an evaluative framework of religious choice within the early Christian communities as viewed in the narrative world of a New Testament Epistle 2 Peter. Drawing on an economic approach to moral dilemmas identified in this narrative context, the work concentrates on the stances, attitudes and social practices of deviant members who engaged in free-riding within early Christian congregations and were exposed to serious self-control problems. In our attempt to employ economic theories of religion, we are in a position to better assess the efficiency of early Christian responses to the entry of competing groups in the religious market of this era, as well as to identify and explore the sort of criteria that determine the intertemporal choices of distinct religious actors.

INTRODUCTION

T HE economic analysis of biblical and other religious texts is a rather complicated process that needs to take into account a wide range of interdependent factors: cultural, societal, religious and political. Such an approach is necessarily *context-specific*, depending upon the particular socio-cultural context and embedding economic reasoning in a broader framework that encompasses economic relationships and activities. Furthermore, it allows the economist to shape a more comprehensive view of the economic phenomena, but it hardly facilitates abstract theorizing based on generalizations or other observed regularities.

^{*} Address for correspondence: Department of the History and Philosophy of Science, University Campus (Panepistimioupolis), University of Athens, GR 157 71, Ano Ilissia Athens (Greece); ggotsis@phs.uoa.gr, sdrakop@phs.uoa.gr

Acknowledgement: This paper is an integral part of a research project (Pythagoras II-EPEAEK II) co-funded by the Greek Ministry of Education and the European Union. Special thanks are due to an anonymous referee of this journal for useful comments and suggestions.

Adopting a rational choice approach to biblical interpretation may help the social scientist infer a set of generalizing propositions that can shed new light on how religious and faith traditions operate in specific social settings. The endeavour, undoubtedly, can be promising if only viewed as a methodological stance that seeks to complement, but *not* to contradict existing methodologies. In this respect, one could escape some devastating criticism of rational choice approaches either as too narrow and restrictive (Boudon 2003), one-dimensional or instrumentalist (Bankston 2002, 2004), utilitarian or consequentialist (Johnson 2003, Blasi 2009), or partly ignorant of the more idealistic or experienced dimensions of religious faith (Jerolmack and Porpora 2004, Iannaccone 2005 for a reply).

The purpose of this paper is to critically discuss issues of religious choice in the narrative context of a New Testament Epistle, 2 Peter (for a historical background of this approach see Anderson 1988). This text employs a rhetoric on problems of religious identity formation and maintenance, as well as deviance and apostasy in early Christian communities other than those established through Pauline mission. We explore the text's rhetoric involving an emphasis on religious disaffiliation due to the life-style and attitudes of dissidents challenging the prevailing interpretations of faith. We then turn to analyse the two main problems potentially associated with this dissident group, religious free-riding and self-control problems, and we underscore the process of how religious rhetoric affects religious choice within the emerging congregations. For pure analytical purposes, we resort to the methodologies advanced by the contemporary analysis of religious organizations, also with respect to the underlying behavioural dimensions of religious actors operating their choices but enjoying entirely different benefits, here and in the afterlife (the pioneering article of this approach was Azzi and Ehrenber 1975). Methodologically, this approach significantly differs from the attempt to simply embed economic ideas in their respective socio-cultural setting, as implying another view of New Testament Economics (pace Gotsis 2007; also Gotsis and Drakopoulou-Dodd 2002, 2004).

This study has been structured as follows: in the first section, we briefly discuss the occasion of 2 Peter in a social-scientific context, relevant to the purpose of our analysis. In the second section, we employ analytical concepts of the religious market model to properly delineate scope and objectives, as well as to reconstruct religious free-riding in the context of 2 Peter. In the third section, we attempt at illustrating the underlying dynamics of group rivalry in 2 Peter's narrative world resorting to basic assumptions of the religious market model. In this very section, we seek to enrich the single *vs* multiple membership perspective

in the framework of the religious market of the Roman Empire adopted in the previous section: as a result, we focus on certain strictly economic aspects of religion (*e.g.*, a brief analysis of avaricious behaviour of the opponents). The last two sections focus on the costs of and benefits from the adoption of more licentious life-styles that encourage immediate gratification but involve major self-control concerns. We also analyse the effects of this specific religious rhetoric on religious choice as implied in the text's narrative world. In this respect, we consider the efficiency of Petrine judgement discourse to directly influence intertemporal religious choice of believers within the emerging Christian communities. Finally, the main arguments of the paper are summarized in the form of some concluding thoughts.

1. The Case-Study: a brief historiographic overview

1.1. The Petrine communities

2 Peter appears in a testamentary form, perhaps as the last will of the Apostle Peter. This epistle is mostly concerned, not with state persecution or with other types of external threat to the community, but with dissent and enmity *within* the church, which seems to have been consumed with internal division. The author of 2 Peter argues against a certain group who seems to have questioned the likelihood of the final judgment and who has raised serious doubts about the reliability of the Christian faith. The Epistle emerges from an Hellenistic Jewish milieu probably in Asia Minor (Neyrey 1993, 118-120). For other scholars, the epistle originates in Rome from an associate of Peter,¹ provided that an ancient testament as a literary form consistently alluding to mechanisms of pseudepigraphy tends to rule out direct Petrine authorship (Kraftchick 2002, 75-76; Horrell 1998, 136; Knight 1995, 61).

The occasion of 2 Peter is the emergence of a perceived heretical group, and the epistle places its emphasis upon this particular situation. The author grounds the apostolic message in scriptural writings, argu-

¹ Available evidence for dating the epistle seems to corroborate this perspective. *First*, the shared material between 2 Peter and Jude reveals a literary dependency of the first upon the second, a practice rather unlikely for an apostle (NEYREY 1993, WATSON 1988). *Second*, passages as 2 Pet. 3:4 indicate the fading of the hope for an imminent return of Jesus, as the founding generation of the faith died prior to the Lord's *parousia*, an evolution that took place certainly after 80 CE. This date fits well to the *third* piece of evidence: the reference to Paul's letters as «Scripture» in 2 Pet. 3:15-16, is rather suggestive of a period later than Paul's life-time. 2 Peter should be attributed to a circle of Peter's associates rather than to the apostle himself (ACHTE-MEIER *et al*ii 2001, 529; CHESTER and MARTIN 1994, 145). Taken for granted that sufficient time had passed permitting doubts to arise and disseminate about the *parousia*, this is suggestive of one or two decades after the destruction of the Second Temple in AD 70; overall, such approaches have an adequate reason to favour the last two decades of the 1st century CE.

ing in favour of their divine inspiration, and defends the proclamation of the gospel by reminding the eyewitness testimony to Jesus' transfiguration, with all its eschatological connotations (2 Pet. 1:16-18). The Epistle denounces the ideas and practices of a group consisting, not of outsiders, but of persons participating in the communal life (2 Pet. 2:13). The opponents of 2 Peter adopted certain beliefs already familiar among Hellenistic philosophical circles (Webb 2004, 387), reminiscent of the Epicurean position concerning repudiation of the doctrine of a provident Deity and of divine intervention in worldly affairs, a view also shared by the group of Sadducees in Hellenistic Judaism (cf. Green 2001). Against this view, 2 Peter develops an essentially Christian theodicy, indicating that the rejection of God's eschatological rule entails moral corruption, and it is subject to this very judgment it denies (Johnson 1999, 501-502).

In sum, the epistle struggles with deviant behaviour *within* a community of addressees living in a typical hellenistic social world, that of a more stable and rather middle class (Wall 2001, 67). 2 Peter is more accurately a parenetic letter which aims to remind the readers of the truth they already know and to motivate them accordingly, providing positive behavioural models that function as an ethical paradigm for believers (Johnson 1999, 503).

1.2. Ethical controversies and religious dissidence

The Second Petrine Epistle is articulated on the grounds of honour and shame discourse, so prominent in the classical Antiquity (de Silva 2000, 23-93; Moxnes 1996; Pilch and Malina eds 1998, 106-115; Hellerman 2005). The author of 2 Peter presents himself as a person defending divine honour against opponents, by appealing to a set of traditions held as authoritative by the group he belongs while denouncing the opponents' methods and practices. In his effort to shame his opponents, the author of 2 Peter attributes to them a number of doctrinal fallacies pertaining, not only to matters of belief or thought, but also to ethics and morality (2 Pet. 2:12b-22). The adversaries were disparaging the notion of a world-ending catastrophe as inimical to their philosophical view of a by nature everlasting cosmos: their skepticism was based on the increasing passage of time that was falsifying predictions of a temporally near ultimate event (Adams 2005, 114).

Apart from disseminating erroneous eschatological ideas, these leaders envisioned in preaching an opportunity for financial gain, thus demanding a non-negligible remuneration for their religious services (2 Pet. 2:3). Evidence concerning the contested status of 2 Peter's opponents remains minimal. Polemical distortion seems to make recovery of their views an uncertain endeavour, yet they were rather influential and involved in the community as a dissident group, «perhaps sufficiently different to qualify for the accusation of apostasy» (Wilson 2004, 68). The Petrine author appears as one entitled to dishonour those not belonging to his own fictive kin group, portraying them as governed by self-interest, having forfeited the claims of kinship (cf. Esler 1994, 27). Deviants were perceived to have negative qualities, dominated by avarice and cupidity, culminating in disruptive behaviour, the latter mostly resulting in faction between opposing groups (Barclay 1999, 304-306). In doing so, they subordinated the core values of the community to their presumed individualism, by developing different ways of articulating the Jesus' narratives and distorting group orientation and identity. On the contrary, public witness to the testimony of the truth gave prominence to group members (2 Pet. 1:16-18), as an intrinsic criterion of group ranking (Malina 2000, 392). Concomitantly, participation in the benefits bestowed by God the Patron and Benefactor, was elevated to a primary privilege (grace, favour) enjoyed by recipients of this divine benefaction (2 Pet. 1:3-4, 10-11).

We proceed to the analysis of the opponents' religious practices focusing on their two main aspects, free-riding and self-control problems, resorting to the necessary analytical tools provided by the contemporary economic literature.

> 2. Economic theories of religion: competition and the religious market model

2.1. The broader theoretical context

In a contemporary theoretical context, religion is frequently conceptualized as a cultural factor entering into a process of interaction with political economy (e.g., McCleary and Barro 2006) or democracy (Lehrer 2007). On the one hand, religion is viewed as an *independent* variable: in the light of this argument, the main issue is to determine the mechanisms through which religiosity affects individual personality traits such as work ethic, honesty and thrift, as well as tax morale (Torgler 2006), children's human capital formation (Fan 2008) and the experience of happiness (Mookerjee and Krista 2005, Lelkes 2006, Snoep 2008), thus influencing overall economic performance. Religion may also serve as a proxy for reputation, or as a mechanism for enforcement of exchange agreements, enhancing their members' capacity in performing economic roles (Berndt 2007). On the other hand, religion may be viewed as a dependent variable that could undergo economic explanations, primarily by demonstrating how economic development and political institutions affect religious participation, beliefs and commitment (Barro

and McCleary 2003). Economic factors may be accounted for the existence of wide disparities in national religious participation, the latter being dependent on investment in religious human capital, religious market structure and social interactions (Smith, Sawkins and Seaman 1998). Other contributions to the literature investigate the consequences of religious values and beliefs to differences in per capita income worldwide: findings suggest that religious behaviour, exemplified in moderate attitudes, is conducive to higher income levels in countries that are not located on both ends of the religious spectrum (Jacob and Osang 2007).

Not unexpectedly, attempts that favour economic analysis of religious commitment appear possible even in a context that may significantly differ from our own if the analytical interest focuses on a rationality principle in human motivation, belief and action. One recent example of such an approach is Smith (1999, 2002) who applies rational choice theory to specific texts, *i.e.*, the book of Revelation and contends that the argument of this book functions so as to persuade believers not to engage in pagan idolatry, as the latter does not pay off. He then turns to demonstrate the underlying reasons of this compromise, *i.e.*, the fact that eschatological outcomes are often subject to severe discounting and analyses Revelation's rhetoric as a thought-device preventing believers from heavy discount of the future. Equally importantly, Beck (2007) analyses the respective decisions of early fifth century church to reject doctrinal claims raised by Pelagius, in favour of Augustinian positions. The so-called 'Pelagian Controversy', Beck contends, revealed two self-interested church motives to condemn Pelagian views: such a doctrine would not only undermine church hierarchy, but it would also impose stricter behavioural rules, thus raising the cost of being a Christian. In doing so, Pelagianism could significantly discourage religious participation, particularly among the Roman aristocracy. Beck convincingly argues that church decisions, deeply affected by rational self-interest, appear irreducible to solely theological argumentation.

Moving on to the institutional level, considerable effort has been recently devoted to explore not only the introduction of new religious doctrines, but also the emergence of new religious organizations as innovations that challenge existing hierarchies (Ekelund, Hébert and Tollison 2002, 2004; Richardson and McBride 2009; Ekelund and Hébert 2010). Most recently, Ferrero (2008) addresses the process of transformation of the early Christian sects into a universal religion as a set of rational choices made by the very Christian movement in its attempt to displace competing or alternative conceptions of monotheism. Ferrero argues that, in sharp contrast to its early comprehensive, inclusive and

Economics and early Christian rhetoric from the 2nd Petrine Epistle 23

tolerant theology, Christianity's initial membership policy was somewhat sectarian and exclusive. He also addresses the Church's choice between exclusive membership and open access to all after its triumph, contending that universal inclusion and doctrinal radicalization should be viewed as the outcome of a rational choice. From this point of view, the Christian Church appeared as a benefit-maximizing agent that controlled its doctrinal basis in response to its potential competitors, moving from liberalization to strictness when facing heresies within itself.

2. 2. The fundamental premises: religious markets in the Ancient Mediterranean societies

Religious markets in the early Roman Empire exhibited a high degree of religious diversity, given that many competing cults and sects were striving to attract new, potential adherents and new rites of initiation to the worship of new deities were emerging. Conceivably, these religions encompassed not only a wide range of public and private cults originating in classical Greek and Roman religious practices, but also various native cults, as well as mystery sects of Near East provenance, subsequently disseminated in and effectively spread to the major urban cities of the Roman world. A central feature of this religious system was the deep conviction that this maintenance of a constant relationship between humans and the gods was deemed a spiritual prerequisite of temporal prosperity and welfare at both the individual and social levels. In short, such heterogeneous religions were supposed to better satisfy diversified demands for religious services and styles of worship, given the beneficial role of competition as a determinant factor of religious behaviours (Pena Lopez and Sanchez Santos 2008).

It is widely held that competition produces consumer sovereignty as superior to established religions, as Adam Smith's analysis of religious market structure predicts (see Leathers and Raines 2008, as well as Ekelund, Hébert and Tollison 2005 for a discussion; also, Fase 2005, 96-102). Early Christianity undoubtedly emerged in and was shaped by a sacrificial religious culture (Klauck 2003, 12): the ancient Mediterranean societies witnessed a two-fold development of religious institutions, *domestic* religion (in terms of gods of specific kin groups) and *political* religion (consisting of temple-systems and of deities pertaining to certain people). Most importantly, domestic religion was reminiscent of domestic economy (in which producers and consumers were the same persons), while political religion was ultimately resorting to political economy (primarily involving exchange and transport of goods and services and yielding economic advantages to the local, as well as to the ruling elites). Both religious and economic benefits should be converted into kinship, or into political advantages so as to be socially meaningful and legitimate human pursuits (Malina 2001a, 103-111).

Given the importance of religious participation for kinship groups or political systems, certain Christians did not entirely abandon central pagan practices: their ability however, to effectively sustain such dual identities, or to exhibit dual loyalties, was far from being unproblematic and was vehemently criticized as a scandalous sort of compromise, as implying devastating effects to Christian commitment. Unlike the Greek and Roman religions which tolerated dual loyalties and allowed for multiple allegiances, the Judeo-Christian tradition was unique in demanding complete and unconditional exclusivity. In this respect, polytheistic and Christian beliefs and values appeared to be mutually exclusive, as Christianity placed considerable restrictions on a believer's attempt to seek for alternate gods and deities within a competitive ancient religious market. Paul for instance, in his Corinthian correspondence, 1 Cor. (10:1-22), addresses those liberal stances that allowed believers to maintain their pagan lifestyle virtually unchanged: he also advances a set of arguments oriented to detach believers from polytheistic superstition and idol worship (Hays 1997, 157). Once again, as in the respective Old Testament narratives, God is distinctive in his refusal to share the covenant people with other gods: Idolatry poses a perceived threat to proper Christian identity that is unlikely to be tolerated. Unsurprisingly, pagan religiosity, in its variety of forms, was permeating all aspects of public and private life of individuals in the Roman world (cf. Beard et alii 1998). Unlike paganism, adherence to Christianity denoted a high degree of intolerance of spiritual practices that facilitated participation in pagan worship, either individually of publicly (cf. Garnsey 1984).

Religious tolerance in paganistic worship originated in the high level of diversification exhibited in such religious environments. Since both Greek and Roman deities enjoyed a high degree of specialization, none of them was in a position to impose exclusive devotion on its adherents. In the Judeo-Christian traditions on the contrary, God was perceived as an all-encompassing deity that affected every aspect of life. On the one hand, churches and new congregations were emerging in a *high* tension with surrounding reality: in the contemporary economics of religion, a new religious group implies a high state of tension with society, but its success over time results in *lowering* these levels of tension (Stark 1996, 2004), the outcome depending, among others, on the degree of institutionalization of a religious organization. This is due to the fact that established religious firms compete in response to consumers preferences and needs, and mass religious movements adopt less strict criteria for admission of new members, albeit maintaining boundaries. Con-

Economics and early Christian rhetoric from the 2nd Petrine Epistle 25

versely, new religious firms and new movements exhibit a higher degree of ideological coherence to properly articulate distinct identities.

Ancient Christianity, in this respect, is viewed as seeking an ideal of 'unity of faith' rather than positively appreciating the rich diversity of early Christian beliefs and practices, manifest in specific local settings (cf. Burrus ed. 2005). This is also the case of nascent Christians communities, in which Christian leaders resisted diversity, opposed to deviance, strove for homogeneity and substantial unity of belief, practice and behaviour that resulted in viewing heterodoxy, as well as traditional cults, not merely as mistaken, but primarily as demonic ones (cf. the contributions in Harris ed. 2005). The same principle applies to the communities under examination, in the context of which the focal point remains not an external threat due to such socio-economic antagonisms between competing cults or sects, but the *internal* peril substantiated in a sub-group of dissidents, as already discussed. Tentatively, Petrine like other mainstream early Christian communities were founded on such a single membership perspective.

On the other hand, the same literature on economics of religion advances the view that it is *competition* among religious organizations in a given society that stimulates effort, thus increasing the overall level of religious commitment and entailing the demise of those faiths lacking sufficient market appeal (Stark 2006, 63). To properly motivate their members, as well as to attain higher levels of commitment, the new churches elaborated and developed an overall vision centered on exclusivity, consisting primarily of a «comprehensive theological system, and of a broad network of fellow members to meet both social and emotional needs» (Stonebroker 2005, 279). These ideals were deemed effective in reducing the considerable start-up costs that the nascent Christian communities were confronting. In Ekelund, Hébert and Tollison's (2006) view, reaction against the new faith reduced the gross benefits of adherence in it, but the net benefits of switching to Christianity were progressively increased, due to the fact that martyrdom and sacrifice may have added credence to the new religious product. On the contrary, «the net benefits of loyalty to the Roman gods fell relative to the net benefits of joining the new Christian cult», given the reduction of the net value of secular goods (safety, security, life-span and the like) due to various socio-economic factors of the era (Ekelund, Hébert and Tollison 2006, 60). The central idea is paganism's apparent inability to provide individual security in times of institutional crisis, this being a reason for the increasing demand for monotheism (Ferrero 2008). Arguably early Christianity, albeit a by-product of the Graeco-Roman culture, was competing not just for a proper market share, but almost for everything.

Christian communities (including the petrine ones) and respective networks were rather unique in offering «a distinctive and effective combination of shared ethics and sacred text, a supportive community with outreach to those in need, regular meetings and Mediterranean wide connections» (Clark 2004, 24). In such networks, in particular, new practices emerged and were progressively disseminated in, as well as assimilated by, the respective communities: these practices were reflective of an ethic of interdependence and mutuality, the latter reshaping the substantial norms of social interaction and affecting socio-economic activities through reciprocity, care and concern for the needy and destitute (see Gotsis and Dodd 2004, 27-30). In an entrepreneurial context, these networks, primarily enhancing reciprocity and trust among fellow believers, may serve as an effective basis for facilitating religious entrepreneurs: evidently, the formation of new practices such as described above, may be understood as a kind of investment in spiritual and social capital, that in turn is conducive to sustainable competitive advantage in the religious market, and yields highest overall symbolic returns (cf. Bertrand et alii 2000, Bruderal and Preisendörfer 1998, Davidsson and Hönig 2003, Hoang and Antoncic 2003). Arguably, the creation of these networks may be accounted for the success in establishing, maintaining and perpetuating new religious organizations; such a success, however, would be hardly conceived in the absence of a specific symbolic language these communities came to adopt. We shall now turn to examine the underlying rationale of this language.

2.3. Compensators and symbolic rewards in 2 Peter

In the contemporary economics of religion, religion creates social benefits in that it «becomes an additional technology that rational humans might use to combat scarcity» (Stonebraker 2005, 265). Religious systems and traditions appeal to potential clients by providing compensators in the form of religious goods: compensators are defined as postulations of reward according to explanations not always susceptible to unambiguous evaluation (Stark and Bainbridge 1987). In Bainbridge's (2003) terminology, compensators are viewed as «sacred algorithms» that emerge and evolve in a world eventually devoid of such a supernatural realm. Religious belief, however, is inseparable of rewards, of genuine and authentic explanations of the ultimate meaning of life. Rational individuals, in this respect, seek to attain such symbolic rewards, possibly elevated to the state of religious certainties: these rewards frequently incur costs, that is, sacrifices that any rational agent should normally avoid. In their religious behaviour, believers are intrinsically motivated insofar as they attempt to exchange compensators for rewards,

Economics and early Christian rhetoric from the 2nd Petrine Epistle 27

given that compensators are treated by humans as if they were rewards: people often aspire for rewards presupposing «the existence of an active supernatural» that creates «credible compensators» based on such «supernatural assumptions» (Stark and Bainbridge 1985, 5-8).

Such compensators are context-specific, as dependent upon the particular contents of a given faith-tradition. In the context of 2 Peter, these compensators are identified in the form of eschatological promises offered to potential believers so as to enable them ultimately escape from the corruption of this world, thus becoming participants in God's immortality and glory. The author of the epistle posits:

Thus he has given us, through these things, his precious and very great promises, so that through them you may escape from the corruption, that is in the world because of lust, and may become participants of the divine nature.

(2 Peter 1:4, NRSV)

Accordingly, sound knowledge of God takes precedence over any trait of a virtuous behaviour (faith, self-control, endurance, godliness, mutual affection): conversely, those devoid of such virtues are excluded from the very rewards, «entry into the eternal Kingdom of our Lord and Saviour Jesus Christ» (2 Peter 1:11, NRSV). Among these virtues, goodness (*arete*), brotherly kindness and love are central to the edification of the community of the faithful (Charles 1998).

These core promises of petrine teaching were exposed at the risk of being refuted by a particular interpretation of faith elaborated by a group that came to cast doubt on the *parousia*, Christ's second advent. In this respect, this dissident – group seems to challenge the ultimate meaning of Petrine teaching, *i.e.*, the *compensators* it seeks to provide. The Petrine polemic aims at eliminating such views, thus preventing them from being disseminated in and propagated through the Christian flock. Moreover, opponents adopted attitudes that, in contemporary parlance, were reminiscent of a typical free-riding problem in religious organizations, as we are going to explain in the following sub-section.

2.4. Religious participation and free-riding: A context for 2 Peter?

Contemporary religious organizations are frequently affected by internal problems, like free-riding and other inefficiencies. (Iannaccone 1998). These problems emerge as a by-product of the combination of three factors. *First*, believers share common goals and aspirations, thus the respective utilities derived from religious participation are interdependent. *Second*, participation generates considerable spill-over effects insofar as the benefit of a typical church-member highly depends on the quantity of others' contributions, both in labour and money. *Third*, religious goods such as worship and education opportunities, spiritual counseling and social activities seem to be non-excludable: as in the case of public goods, they appear available to every member at no additional cost (Stonebraker 2005, 273). As a result, some members choose to benefit from religious goods while they contribute *disproportionately* to their production. Typical free-riders do not appear to care for the common good, but they entirely depend on the contributions of less-selfish members (cf. Iannaccone 1992, 1994).

Free-riding generates considerable problems within congregations, insofar as the proliferation of such attitudes disintegrates religious bonds of mutuality and cohesion. Free-riding is not only expensive in that it incurs additional costs to more committed believers, but it also negatively affects the less devoted members, given that it may be conducive to *reduced* levels of morality and commitment. These problems, Iannaccone (1992) contends, may be effectively mitigated by seemingly gratuitous costs, the sacrifice and stigma of sectarian religious groups. Sects, cults and communes impose considerable restrictions on their members, extending from prohibitions on normal economic activities to rules limiting social contact with outsiders. Sacrifice and stigma, as well as social isolation, make free-riders quit from membership in such sects, whilst they allow for increasing levels of religious involvement among the most committed members. Other religious groups are effectively limiting free-riding in offering a menu of club goods of varying excludability, as well as through a sophisticated administrative structure, so as to drastically foster commitment (McBride 2007). Such strategies pertain to high-tension religious or secular groups (cf. Berman 2003, 2000): on the contrary, in large mainstream denominations believers are induced to higher levels of commitment if they obtain rewards that considerably outweigh the costs and inconveniences implied in the exclusivity claims of religious groups.

Brewer, Jozefowicz and Stonebraker (2006, 390) advance the hypothesis that people benefiting from a church affiliation without contributing to its mission are attracted by the more popular denominations, which may offer potential free-riders social acceptance, as well as other benefits of belonging to a predominant church. Minority groups on the contrary, may adopt such a distinctive 'subculture' that stigmatizes genuine members and isolates them from the rest of society. Accordingly, free-riders and less devoted members will be prone to switch to more fashionable denominations: minority groups are ultimately left with a 'faithful remnant', *i.e.*, their most committed members. Stricter groups appeal primarily to those devoid of the most attractive secular options *i.e.*, education, status, income and other substitute goods that lower the demand for religious activities (cf. Gill and Lundegaarde 2004). The same bundle of secular goods, however, may be important in determining a specific aspect of religious behaviour in larger congregations, especially in the cases where current participation in religious activities appears to be *positively* associated with past religious experience (*e.g.*, the relationship between education and church attendance in Brown and Taylor 2007).

These observations are not devoid of importance for the context under consideration. Peter's opponents were not only perceived as benefiting from their fellow-believers' contributions, even in monetary terms (2 Pet. 2:3), but they also appeared as practicing dissipation, leading an immoral life and living in luxury (cf. 2 Pet. 2:13). Most importantly, these persons participated in the love-feasts, but they markedly differed from their fellow-believers in that they were «reveling in their dissipation» counting it «a pleasure to revel in the daytime» (2 Pet. 2:13). Admittedly, in giving precedence to pleasure, the opponents appeared as ultimately practicing procrastination insofar as they consistently exhibited a negligent behaviour, not performing their true religious duties here and now (cf. König and Kleinmann 2004; also, O'Donoghue and Rabin 1999 for a discussion in the economic literature). Conceivably, false-teachers pursued their own agendas, engaging in deceitful pleasure, attempting to satisfy their insatiable desires. Their inappropriate mode of feasting signified that they appeared to neglect their responsibilities towards the community (Davids 2006, 239), perhaps not involved in productive engagements. On the contrary, they seemed to enjoy taking part in the communal meal, given that table-covenant was one of the most significant religious goods shaping individual and communal identities as a sign of shared faith (Shannon Jung 2006, Smith 2003). In so doing, particularly in intentionally attempting to mislead others and defraud them of their true faith, Peter's opponents seemed to distort the very nature of shared meals as a part of the early Christian experience. Reese (2007, 156) comments on such issues:

The practice of sharing meals together was the perfect place for such deceit to have maximum effect, for often the people we most value, respect, and want to emulate are the people we share meals with. When meals are shared in the context of the community, it should be one of the intimate places where truth and encouragement are shared with all the members of the community... if this is the case, then the distortion of the false teachers makes the meal a place of danger rather than of love and encouragement.

Under such conditions, one may plausibly argue that in 2 Peter's narrative world, opponents were not far from being considered as persons prone to free-riding, benefiting from religious services without substantially contributing to them. In conformity to the contemporary analysis of religious free-riding briefly discussed, the opponents' attitudes were not only costly and expensive, but also *detrimental* to the

community's morality and cohesion. The disruptive effects opponents exerted on the networks of believers were reflected in that these persons were perceived as «blots and blemishes» (2 Pet. 2:13), experts in greed, appealing to those not trained enough in faith (2 Pet. 2:14). This is due to the fact that proper behaviour was ethically shaped to enhance the common good of the community according to altruistic, other-centered pursuits (Smith 2003, 283-284).

2.5. Conclusions

Elimination of deviant attitudes and stances remains a primary concern of early Christian discourse. As the economic literature on the religious free-riding predicts, in smaller congregations free-riders tend to disappear by significantly elevating the cost of commitment, of sincere adherence in, and devotion to the community (Jannaccone 1992). In doing so, the Petrine author strongly exhorts his audience to lead holy and godly lives, oriented to the Lord's day and speeding its coming (2 Pet. 3:11-12). The Petrine author significantly devaluates the structures and practices of this world reminding his addressees of the impending end of this age. As the value of any bundle of secular goods is rapidly diminishing in view of this ultimate event, anyone engaging in secular pursuits resembles to a uninformed investor placing his funds on a firm constantly running the risk of bankruptcy (cf. Davids 2006, 288). In these narratives, adjusting one's life-style to the value systems of dominant culture is bereft of any rationale; the life of the future age, however costly and dysfunctional, purports to outweigh the «sacrifice and stigma» imposed on a true believer.

3. The 'religious market' of the Petrine communities: the supply-side approach

The hermeneutics of religious texts can be enriched by employing analytical tools from the contemporary economic analysis of religious competition, as suggested in the previous section. A commonplace assumption in the rational choice theory of religion is the well-elaborated distinction between monopolistic and pluralistic religious markets. In opposing free-market efficiency to monopolistic inefficiencies, a substantial body of literature is devoted to addressing issues such as religious products, marketing policies, incentive structures, consumers' preferences and so forth (for a review see Iannaccone 1998). In this line of argument, religious pluralism is supposed to be conducive to beneficial outcomes, enhancing religious vitality, or positively affecting religious participation. However, pluralism and religious diversity do not always imply deliberate choice, competition (cf. Bruce 2000a, Beaman 2003), or increased participation (Voas et al. 2002). In Bruce's (1992) view, pluralism in religious markets may exert detrimental effects in eroding the credibility of religious claims, in generating doubts concerning the plausibility of a given religious belief, or in threatening the predominance of an established truth. In sharp contrast to religious orthodoxies, religious diversity may negatively affect the demand for religiosity in that it results in increasing levels of *uncertainty*, thus lowering the expected utility of religious commitment (cf. Hull and Bold 1998). These remarks can apply to the specific context under examination, as we shall demonstrate in the final section of this paper.

The literature also suggests that religious pluralism may allow product differentiation and specialization: a monopolistic faith on the contrary, will satisfy only one market segment, unavoidably alienating another. A church's theology cannot encompass the entire spectrum of religious preferences, distributed along a space from liberal to conservative ones (Barros and Garoupa 2002). In Mao and Zech's (2002) view, churches attempt to maximize membership, as well as minimize the distance between their organizational structures and that preferred by their respective adherents, subject to their doctrinal constraints. Religious monopolies face no competitive pressures from other worldviews, this implying a lack of fervour and zeal, especially in the case of government regulation that sanctions artificial restrictions on religious diversity, thus raising inefficiencies in the operation of religious markets (Finke 1997). On the contrary, in free-markets individual entrepreneurship may shape new religious groups, as in the process of formation of new alliances between denominations (Miller 2002), or in the delegation of responsibilities and tasks within the same church (Schmidtchen and Mayer 1997). As Smith and Sawkins (2003, 1587) argue, «fundamental economic explanation of international variations in religious attendance lies in the degree of competition in a religious economy», given that in the absence of competition the clergy of dominant firms has little incentive in engaging in product innovation and effective marketing, the outcome being lower levels of religious participation.

Arguably, a monopolistic structure of the religious market is undeniably inefficient, and it is inimical to religious vitality, primarily in the case of a *state-sponsored* church or faith. Taken for granted that Christianity in the making faced start-up costs as discussed earlier, the ongoing formation of an established 'orthodoxy' was rather unlikely not to result in long-run inefficiencies. For our analytical purposes, we suppose that an orthodox interpretation of the new faith begins to dominate the life of the emerging communities.

Consider the early Christian communities in our case-study as constituents of a supposedly 'monopoly church' imposing differential

prices on its members: since these members were primarily gentiles, they ought to abandon previous attitudes, even participation in pagan manifestations of social life, once converted to Christianity. Whereas in the religious market of the Roman world many different cults were competing for preeminence, in the context of petrine congregations the need for doctrinal cohesion was ultimately substantiated in a 'dominant firm' that sought to maintain traditional doctrine. Church management, albeit loose and geographically dispersed, was based upon persons of pastoral oversight, also prominent in the respective communities (cf. 1 Pet. 5:1-4). In this respect, the established 'Petrine churches' possibly practiced a sort of price discrimination, in the sense that they were depending upon individual contributions proportionate to one's status and prosperity, thus imposing differential prices to their members. Even in a context of honest stewardship certain resources, being a price for the provision of this spiritual good, were extracted from believers. Most importantly, the opportunity cost experienced by prosperous pagan converts, combined with price discrimination, seemed to push certain consumers to the limits of their demand for Petrine religious product. This specific group enjoyed a significantly low consumer surplus from the consumption of this spiritual good, due to both an increase of the social cost of membership and to the adoption of more ascetic value-systems. Empirical research is partly supportive of this assumption, namely that the expected 'price' for participation in religious activities (e.g., the tithe) is negatively correlated to some religiosity aspects, such as the frequency of prayer (Brown 2009).

This kind of appropriation of consumer surplus made market entry by rival, or heretical doctrines, feasible because some members with no consumer surplus were rather inclined to adhere to these potential rivals. The latter entered the market of nascent Christianity as a rival firm claiming that it was charging people with a significantly cheaper price, as the assumed ethical permissiveness tended to considerably reduce the opportunity cost of being a Christian – Christian identity underwent some sort of accommodation, or adjustment, to worldly affairs. Such a diversification, however, may also prove costly: religious consumers who wished to exploit the opportunities afforded by several different congregations, were constantly exposed to the risk of isolation, or even ex-communication from the body of the faithful. Such an outcome appeared far from being unlikely, taken for granted that most churches adopted strategies that imposed severe symbolic sanctions on potential defectors. On the contrary, they seemed to develop value systems that rewarded allegiances in the context of network building, as demonstrated earlier. Accordingly, religious switching, albeit possible, considerably reduces the benefits derived through adherence to a given faith.

Loveland (2003) investigates this phenomenon with respect to the us religious experience: his findings suggest that almost a third of Americans came to change religious affiliation at some point of their lives in a way that religious preferences themselves is highly unlikely to remain unaltered over time. This is far from being unusual in contemporary reality, in sharp contrast to an early Christian context, in which maintaining allegiances to established religious authorities was one of the utmost importance for many Christian groups. On the contrary, lower levels of participation in religious services (i.e., reduced attendance levels), were perceived as potentially conducive to defection. Religious apostasy could be stimulated by dissident groups that challenged the prevailing interpretations of faith in a specific setting, as discussed earlier. Switching between religious cults seems to be a complicated outcome: conversion, in modern societies, is far from being a life-time experience, and one can distinguish different factors influencing religious involvement, disaffiliation or rejection of a former membership (Gooren 2007; cf also, Sherkat and Wilson 1995). In an early Christian context however, religion was an integral part of these communal bonds that constituted a group's identity: in this respect, religious commitment may be determined in terms of loyalty to the respective group, being less a matter of choice than of devotion (cf. Bruce 2000b). To effectively address issues of religious commitment, 2 Peter employs a specific rhetorical strategy consonant to the epistle's narrative world. Accordingly, the appropriate rhetorical response to the entry of rival perceptions of faith within petrine Christianity was articulated at three distinct, albeit interrelated levels:

First, the avaricious behaviour of the opponents was denoting the fact that these teachers, albeit pretending that they offered a cheaper spiritual good, they ultimately aimed at extracting a considerable amount of resources from their congregations. Their true aims consisted in the attempt to merchandise the gospel through greedy motives, so vehemently denounced in early Christian moral literature (2 Pet. 2:3; cf. Mk. 7:22, Lk. 12:15, Rom. 1:29, Eph. 5:3, Col. 3:5. Also, 1 Tim. 6:5, 2 Clem. 20:4), as well as in the subsequent patristic teaching (cf. Basil, Ep. 210.3, PG, 32, 897A; Gregory Nazianzenus, Or., 21.31, PG, 35, 1117C; John Chrysostom, Hom., 6.1 in 1 Thess., PG, 62, 130). This typical avaricious behaviour was denoting those who sought capital accumulation through fraud or extortion, an entirely dishonourable line of conduct in limited good economies (Malina 2001b, 98-99). By charging considerable wages for their services the opponents, in their turn, sought to appropriate the consumer surplus of those buying their religious product through inventing strategies of economic exploitation (Blomberg 1999, 230-231). On the contrary, the ideal of faithful stewardship of material resources

penetrates many early Christian narratives based on, but properly distinct from the prevailing cultural mores and norms of effective stewardship of property and wealth in an ancient Mediterranean context (Shellenberg 2008; cf. Blomberg 1999, 121-123).

In a contemporary context, church ministers may remain highly productive even when they face relatively low financial rewards: empirical evidence however, suggests that, despite an emphasis on calling and vocation rather than career in Christian ministry, improved compensation structure may affect ministers' incentives and intrinsic motivation, thus inducing higher effort levels and increased performance (Smith, Sawkins and Mochrie 2007). In an economic world of reciprocities,¹ however, these economic practices comprised a form of *negative reciprocity* describing the attempt in an exchange to get as much for oneself, but giving as little as possible in return. Such stances perennially involving attempts to impoverish others by cheating or deceiving, were universally recognized as morally shameful, insofar as they were typical of a treatment of enemies, not kins or neighbours (cf. Gotsis and Dodd 2004, 15-16).

Second, the rhetoric of virtue and divine benefaction to potential clients of God's grace retains the economic significance of adopting or developing marketing and advertising policies that would render early Christian spiritual good attractive to potential consumers – alternatively, this implies a more inelastic demand for this product. This rhetoric of *generalised reciprocity* pertaining to kinship and including assistance and hospitality was typical of an altruistic and asymmetrical concern for the wants and needs of another, culminating in God's beneficial care for the believers and in an open-ended debt of gratitude in return for the favours provided by divine Patron to his clients (Malina 1996, 146, 153-154).

Third, the rhetoric of divine judgment underlying the Petrine strategy to eliminate heretical teaching, should bear the economic explanation as an attempt to increase the marginal cost of defection by employing cost-effective rhetorical strategies: the latter, placing an emphasis on divine retribution and on the impending judgment, operated

¹ The reciprocity of benefactions proved to be an effective social network through which social bonds between the inhabitants of the Graeco-Roman world were constructed. In his treatise *De beneficiis* devoted to interpersonal benefit-exchange, Seneca determines the respective responsibilities of people involved in reciprocal relations. In this context, mere possession or accumulation of wealth was of no worth if not transformed through status or power by being distributed. Since the bestowal of a gift had to be reciprocated, the act of proving the recipient's gratitude turned to be a duty not less imperative than the return of a gift, or service. In the case that a return was of lower value, the original recipient became a *client* owing a debt, or obligation, to the giver. Accordingly, social exchange was embedded in a framework of patron-client interactions, so prominent in the Roman world. For further discussion on reciprocity, see VIVENZA 1997. An overview of the contemporary connotations of the term, is provided in FEHR and GÄCHTER 2000.

as a kind of redistributive tax imposed on the product offered by the opponents who were facing a more elastic demand for their religious services, insofar as their converts were afforded more alternatives than the Petrine believers. Those distinct groups of believers had different demand elasticities originated in the devotion to traditional piety, the latter being practically an impediment to an access to other religious substitutes on which licentious believers could equally place their demand. Accordingly, by significantly raising the rivals' costs, benefits enjoyed from adherence to the heretical doctrines would seemingly decrease, due to an effective raising of the cost of membership in these sects: such an outcome would be feasible, provided that the rhetoric of divine punishment was intended to ultimately encompass any potential adherent to rival doctrines, thus affecting the level of participation in the deviant groups.

Having these in mind, we are going to move from the organizational to the individual level, focusing on how religious actors make their own respective choices of spiritual goods.

4. Desire and self-control in the narrative-world of 2 Peter

4.1. Theoretical considerations

We have so far discussed the relative attempts of the nascent Christian communities to secure a share in the religious market of the Roman Empire, as well as the respective barriers on the entry of new interpretations of Christian faith in the emerging and evolving communities. The question, however, still persists: how are we going to explain the particular content of this religious belief? Religious belief may effectively be viewed as a form of social capital that encompasses traditions, past experiences and social identities and is reflected on a variety of socioeconomic activities, the latter not being unimportant in shaping future beliefs (cf. Putnam 2000). Experimental evidence suggests that more religious trustees are found to be trustworthier in a trust game (Tan and Vogel 2008). Admittedly, rational religious belief involves the capacity of human beings to conceive of the supernatural realm in terms of rationality and scarcity (Stark and Finke 2000, Iannaccone 1999). Existing rational choice approaches to religion seek to explain the complicated processes of the formation of religious communities able to sustain long-term relationships and to foster high levels of commitment, as demonstrated earlier. Such cohesive communities appear difficult to maintain in the absence of moral claims about exclusivity and sacrifice: these costly constraints on individual choice prevent believers from investing in different portfolios of sacred commodities (Iannaccone 1995).

This seems to be the case in the early Christian faith-tradition, in which the demand for *diversified* religion was minimized, given the *uncertainty* it incurred and its relativising effects on the universalizing claims of each branch of faith. Unlike pagan religious markets in which rational clients had legitimate access to different competing suppliers, Christian believers were devoid of this opportunity. In these high-tension groups doctrinal and communal cohesion was given a high priority in a way that any challenge to these certainties was equally detrimental to group's orientation. Increasing *uncertainty* was then an act of depreciating accumulated religious capital and violating relationships and shared norms. In this respect, it would be of primary importance to explain the mechanisms affecting religious belief under uncertainty, by enriching our analysis with certain cognitive and behavioural elements underlying the formation of the religious preferences under examination.

Uncertainty in particular, turns out to be an important factor affecting the respective decisions of humans, whether believers or not. In an entirely ergodic world, *i.e.*, in one whose fundamental underlying nature would be constant and in principle predictable, it would be sufficient for humans to make thorough insights about this nature, as well as to elaborate the appropriate structures of thought to conceive of the right course of future actions (cf. Dequech 2006, 115). In a static world, North (2005, 22) argues, «uncertainty is a function of the stock of knowledge ... if this static world is repeated over time, then it may be plausible that states of uncertainty would go to zero». Uncertainty however, arises as the world is subject to various changes due to the action of human beings transforming their environment, creating new conditions and facing new problems (see also Drakopoulos 1994). In a world of non-ergodicity, and taken for granted that people are far from being qualified with perfect perception, «institutions adopted for a particular time, even if optimal... at that time may be far from optimal as the human environment changes over time» (North 2005, 22). Supernatural beliefs and organized religions may generate major tensions, or produce fundamental conflicts, primarily when individual action is based on those ultimate supernatural explanations. As North (2005, 42) observes:

Ideological conformity to this day is a major force in reducing the costs of maintaining order, but it comes with the additional societal costs of preventing institutional change, punishing deviants, and serving as the source of endless human conflict with the clash of competing religions.

4.2. Intertemporal choice in 2 Peter: self-control and ensuing dilemmas

In the early Christian context, maintenance of existing religious institutions (*i.e.*, those pertaining a specific tradition) might be viewed as sub-optimal because of eventually inherent rigidities preventing them from entirely adjusting to their cultural environment, or as being a source of intolerance towards deviants. If this was the case, believers faced two main choices: either to compromise with heretical views, or to remain faithful in traditions and divine scriptures. For practical purposes, we are distinguishing between two time-periods, the present and the eschatological future. In the present, choice in favour of faithfulness induces a significant opportunity cost for believers, namely higher levels of utility achieved only if their consumption patterns were no more affected by religious constraints, as in the case of licentious life-styles, invoked by opponents. These life-styles were described, as we have seen, not only in terms of sensual depravity, but also in those of an assumed liberation from moral restrictions and of a concomitant promiscuity. Conversely, choice in favour of compromise induced significant opportunity costs for those converted to heretical doctrines, these persons perceived as inappropriate clients of God the Patron's benefaction.

In the *eschatological future*, choices are more dramatically depicted, depending on the *degree* and the *intensity* to which future outcomes shape present choices.¹ In this remote future, believers are assumed to receive the divine rewards, while defectors incur the cost of punishment, primarily pertaining to the opponents as scoffers (2 Pet. 2:3). Defection is eternally perilous, since the *certainty* of divine judgment permeates the entire epistle (2 Pet. 2:3b-10a, 3:5-7). On the contrary, the opponents did not share this conviction. In doing so, particularly in denying the *parousia*, the second advent of Christ, dissidents were supposed to underestimate any distant rewards in the afterlife: in economic parlance, they strived for discounting future or eternal outcomes perceived as remote and *uncertain* eventualities that exerted no significant influence on present choices. In abandoning eternal payoffs, the opponents were discrediting intertemporal preferences by inducing believers to assign less weight on long-run consequences of their present choices.

Like other societal agents, some believers may be depicted as individuals with limited will power which prevents them from properly assessing the importance of their long-term goals and aspirations. Due to weaknesses of human nature, human beings often seem to succumb to

¹ In modern economic theory, the time-preference component of a time-preference theory of the interest rate, serves as a basis for posing similar questions. In the Austrian marginalist analytical framework, individuals having to wait longer require additional compensation for their reduced ability to consume in the present, since human beings value the present more than the future, *ceteris paribus*. Having a present good is advantageous in that one is certain about his ability to consume now, while any future good is intrinsically associated with *uncertainty*, because of possible events intervening to prevent a future consumption: in a sense, present goods satisfy human wants *more effectively* than future goods.

the temptation of immediate gratification, even when the latter proves to be detrimental to their long-term planning. Smokers who would like to quit in favour of their better long-term health but repeatedly fail to abstain from the immediate pleasure of smoking, offer a representative example of human failure to effectively perceive the long-term consequences of a present choice. As in the case of other forms of «hyperbolic discounting» (Banks, Blundell and Tanner 1998; Laibson 1996, 1997; O' Donoghue and Rabin 1999) in which short-term and long-term preferences enter into conflict with each other, this type of behaviour systematically violates the principle of intertemporal utility maximization. Indeed, such self-control problems have been identified in a wide range of consumer decisions (Angeletos *et alii* 2001) that reveal 'time-inconsistent preferences' of individuals (Frederick et alii 2002). To reduce costs incurred when succumbing to immediate gratification seems almost unavoidable, individuals often have to resort to the coercive power of social institutions by establishing appropriate norms of self-commitment. Alternatively, social policies which enforce human planning for the future through proper incentives, are frequently evoked (cf. Saez-Marti and Weibull 2005).

Gul and Pesendorfer (2001) posit that individuals often find themselves in having 'temptation preferences' in that they may experience disutility from not choosing the option that offers the higher immediate satisfaction. In their view, a person might feel better off if this particular option was not available, and consequently, he may be willing to find ways to eliminate that option through developing a preference for commitment. The authors introduce a formal model in which agents attain self-control if they resist temptation and choose an option with higher ex-ante utility. In their words, «the representation of self-control preferences allow us to quantify the cost of self-control as a utility penalty that applies whenever the ultimate choice is not the most tempting one» (Gul and Pesendorfer 2001, 1420). In the same line of argument, Brocas, Carrillo and Dewatripont (2004) analyse some of the main commitment devices employed to increase welfare in the case of agents with time inconsistent preferences: they also discuss the process of formation of the respective choices of individuals maximizing their intertemporal utility from a current perspective constrained by the available commitment devices. Interestingly, empirical findings support the hypothesis that religiousness enhances self-control, fosters self-regulatory behaviors, facilitates self-monitoring and influences goal-orientation through self-regulatory strength, thus securing a higher level of well-being (McCullough and Willoughby 2009).

In our specific narrative context, we can identify two potential groups: those engaging in licentious activities (exemplified in excesses of either food or drink, and/or sexual immorality) heavily discount long-term outcomes of their behaviour, in contrast to those who. insisting on the reliability of the apostolic tradition, attribute much more emphasis to the future consequences of their present choices. Not unexpectedly, early Christian authors praise self-control (enkrateia), a virtue sharply contrasted to desire (*epithymia*), the latter implying both feasting and sexual indulgence in a variety of contexts (cf. Davids 2006, 180-181). The teachers Peter emphatically opposes appear as persons that «are in no way self-controlled but rather given to desire» (Davids 2006, 180), this desire being negatively viewed in a context of zero-sum socio-economic relationships. These negative perceptions of excesses in consumption pertain to an ethically-structured intellectual milieu in which self-control is elevated to a primarily virtue (2 Pet. 1:6; cf. Gal. 5:23) and 1 Cor. 7:9, 9:25). Among the Hellenistic-Jewish literature, Sirach for instance (18:30-33) strongly admonishes against self-indulgence and licentiousness as conducive to poverty (cf. Prov. 5:10, 21:17). In this respect, base desires and other unruly passions, as well as luxury (Sir. 18:32) and feasting with borrowed money (Sir. 18:33) are unique in their deleterious consequences, as they incur unanticipated future costs.

In the Petrine discourse, intertemporal choices unavoidably involving tradeoffs among costs and benefits for each of the two respective groups affect not only their present, but also their future prosperity and well-being. The first group (opponents' followers) anticipates immediate (material) rewards and delayed (spiritual) costs, while the second (true believers) experiences present (material) costs but future (spiritual) rewards. Since delay is ordinarily associated with uncertainty, both groups are uncertain if these rewards and costs will ultimately materialize. This type of subjective (or epistemic) uncertainty associated with delay, takes account of a situation in which one is incapable of forming any belief or opinion due to lack of sufficient knowledge. In an unstable and highly variable environment, the unpredictability of events generates feelings of uncertainty within individuals, and it is our apprehension of this complex environment that engenders our limited ability of inferring probability judgments of the eventual occurrence of an event.

Since apprehension of an event is delineated by knowledge deficiencies, the knowledge we have of our circumstances seems to be highly *subjective*, being dependent on personality traits, intentions, motivations and desires, past experiences, emotions, spatio-temporal location and so on. In the context of delayed costs and rewards with respect to the two aforementioned groups, each group differs in its response to the challenge of uncertainty. Religious adherence seems to shape the structure of each group's intertemporal choice: while the first group

(the 'apostates' from the orthodox faith) is supposed to have a preference for immediate gratification, the second (the true believers) is expected to derive additional utility from anticipating the eschatological rewards. This type of utility from anticipation should be enough to outweigh present losses, due to self-control in social behaviour, and to the believers' commitment to traditional forms of piety. Indeed, this «utility from anticipation creates a downward bias on estimated discount rates, and this download bias is larger for goods that create more anticipatory utility» (Frederick, Loewenstein and O' Donoghue 2002, *37*1).

The picture changes dramatically when one adopts the viewpoint of those adhering to the opponents' fallacy. In contemporary parlance, these persons were perceived as prone to certain *visceral influences*, particularly to a strong craving for food, drink and sexual lust (2 Pet. 2:14). Berridge (2003, 36) for instance, analyses the cognitive dimensions of the process of formation of such irrational pursuits and contends that a hyper-incentive wanting may be accounted for provoking an irrational decision: arguably, such choices based on wanting arise and operate «outside the bounds of declarative conscious awareness». Analogically, opponents' irrational pursuits in 2 Peter were deeply affecting the emotions, desires and motivation of their followers.

These followers were thought to live in corruption, before entering the community of the faithful. This new allegiance was threatened insofar as false-teaching, far from leading to self-control, was experienced as one that appealed to the «licentious desires of the flesh» (2 Pet. 2:18): the new communities witnessed a situation in which freedom from bondages of moral rules and dietary regulations was perceived as resulting in depravity (2:19), or inordinate sexual practices (2:10) through the pursuit of pleasure (2:13). This is a typical case of people experiencing a sufficiently strong craving and practically responding to these intense visceral factors (lust, greed, hunger) by entirely succumbing to their influence. Such choices seem attractive enough to give rise to an impulsive behaviour that creates a cleavage between the 'decision-utility' of this type of action and the 'experienced utility' that reflects people's welfare. Arguably an incontinent individual, one that is impulsive and deficient of the virtue of self-control, is supposed to possess different and competing cognitive selves, each justifying conflicting courses of action: one way from escaping such weaknesses of will is to conform to the requirements evident in «shared, mutually reinforcing social practices», insofar as participation in the practices of a community of individuals «enables them to achieve a unity of their multiple selves» (Davis 2003, 74). This may appear equivalent to the commitment to the binding values and practices of the believing community in the Petrine context. Under the prevalence of visceral influences, people tend to underestimate their intertemporal welfare, thus a preference for commitment appears as an appropriate means to avoid these situations.

In other words, adhering to the opponents' doctrines was accounted for a sort of myopic behaviour that resulted in a conflict between present and future selves. Consuming the opponents' spiritual commodity not only considerably reduced the future welfare of their followers, but also made the latter enter into interpersonal interactions of subordination to the former. The interaction between the opponents and their followers was an *asymmetrical* relation in which the former (like all farsighted selves) attempted to control the behaviour of myopic selves, particularly in the absence of self-control precepts which require the cooperation of temporally situated selves.

4.3. Conclusions

In sum, the opponents' pursuit of pleasure ultimately entailed a voluntary delay in the intended course of the actions pertaining to the acquisition of virtue and holiness. Economically speaking, those who seek for pleasure practically discount the future cost of their procrastination by choosing not to perform a moral duty, but to do more enjoyable things. This form of positive discounting of the future implies such an inefficient procrastination, to the detriment of the long-run individual welfare. The rhetoric on the imminence of divine judgment, explicitly formulated in the Petrine context, may be considered as inducing believers to adopt a different pattern of time-management that renders a preference for improving sequences more feasible. In this respect, the established rhetoric seeks to positively affect the believers' model of evaluating sequences of actions in a way through which a preference for improvement originates in the decision to conform to a given deadline, the imminence of the parousia, as we shall demonstrate in the following section.

5. The impact of Petrine judgement narratives on the pursuit of pleasure

5.1. The necessity of persuasion. Religious belief and consumption decisions

Our analysis can be further specified in the light of the two-period distinction between *present* and *eschatological future*. In the context of the letter of Jude, on which 2 Peter constantly draws, a set of narrative episodes are employed in view of a rhetorical impact on the direction, self-understanding and identity of a particular Christian community (cf. Webb 2008). Analogically, in the exhortations to his audience, the author of 2 Peter tends to construe his argument at three distinct levels: *decreasing the opportunity cost of faithfulness* to traditional doctrines and to apostolic teaching, *raising the present value of future rewards* enjoyed by true believers, and also *raising the eschatological cost of defection* by placing an emphasis on the eternal outcomes entailed by adherence to heretical views. This *three-fold persuasive strategy* underlies 2 Peter's attempt to affect human decision-making under uncertainty. From a rational choice perspective, believers make a choice in favour of defection if the expected gains from such a decision would significantly exceed the expected costs, or alternatively, if the present gain from this choice were high enough to outweigh the anticipated present and eschatological cost. Underlying this approach is the standard theoretical premise that each rational agent should act in a way so as to maximize his/her expected utility.

In this respect, the choice of a life-style, licentious or not, is viewed as a function of individual needs or desires: it is precisely at the level of preferences that the persuasive strategy adopted ultimately operates. Economically speaking, the early Christian author was deeply concerned with altering those individual preferences that favoured or encouraged consumption of the opponents' products. Such considerations are not unparalleled in the economic literature: contrary to the prevailing assumption that individual preferences are given, as merely exogenous to economic decisions, individual choices are not infrequently conceived of as something more than mere attempts by rational economic agents to maximise their expected utilities. Religious precepts for instance are in a position to affect individual preferences or to reshape choices, as dictated by the proper norms or the behavioural patterns of the social network in which the believer participates (see also Bruni 2007). Deeper religious beliefs, identities and actions are reflecting competing perceptions of God, that can in turn predict religious *diversity*, measured by the salience of a particular religious faith, as well as by religious devotion and attitudes about the compatibility of secular and religious engagements (Froese and Bader 2007). In a contemporary context, religious participation is likely to have an important effect on the level of income, as well as on the net earnings potential of the adherents «by altering their preferences towards afterlife consumption and by requiring time and monetary commitments that discourage the acquisition of material wealth» (Lipford and Tollison 2003, 258). Conversely, high incomes deter religious participation by inducing a process of substitution between market earnings and religious activities. On the one hand, economic welfare is partly determined by religious membership insofar as the latter may directly inhibit the pursuit of material wealth. On the other hand, religious membership is partly determined

Economics and early Christian rhetoric from the 2nd Petrine Epistle 43

by economic factors, given the opportunity cost associated with high earnings potential (Lipford and Tollison 2003, 257).

Tentatively, identities are supposed to influence economic decisions. primarily in the case of intrinsically motivated behaviour (Akerlof and Kranton 2000). Religious identities do matter in influencing consumption decisions, as believers come to internalize and appropriate the value-systems of a wider belief-network, acting in a way consonant to the maintenance of their proper identities (cf. Nixon 2007). In this respect, beliefs are not separate from preferences: Cosgel and Minkler (2004, 349) posit that «the analysis of choice as expression of religious identity and commitment suggests the presence of a sophisticated relationship between them» to the degree to which consumption decisions communicate information about identities and commitments. Religious consumption in particular, may be viewed as an activity integrating multiple spheres of life: issues of identity formation and maintenance, participation in a specific tradition, as well as engaging in market activities, are intrinsically associated with religious consumption choices that in turn, may transform spiritual experience. Religious influences in consumption patterns appear to reflect how one exercises such beliefs (Park and Baker 2007).

If choices are affected by the *salience* of a religious belief, or by the *intensity* of religious commitment, then consumption choices *do* reflect the *degree* of commitment. In our context, genuine believers' decision to abstain from consuming the opponents' product indicates the *quality* of their commitment to the apostolic teaching and practice. Those adhering to dissidents' beliefs are certainly exhibiting *lower* levels of commitment, this possibly reflecting an alternative understanding of faith. Hardin (1997) in his economic theory of knowledge argues that beliefs may be reinforced through a reduction of cognitive dissonance as information and knowledge is required to properly motivate someone to act in compliance to accepted rules, so as not to be excluded from a group's life. The Petrine author is intended to offer this type of information.

5.2. The economics of Petrine judgement discourse

Petrine three-fold persuasive strategy may be articulated as follows: *First,* in his attempt to significantly diminish the opportunity cost of faithfulness to the inheritance of the apostolic generation, the petrine author systematically repudiates worldly desires and concomitant pursuit of pleasure. In sharp contrast to a cultural milieu favouring attitudes based on wealth and reputation, petrine emphasis on righteous living and godliness (*eusebeia*) reflects a deeper awareness that the ne-

cessities of life are secured for new, genuine converts (cf. Davids 2006, 168). Foregone gains from participation in worldly activities are constantly reduced, since for the Petrine author alternative life-styles are deprived of intrinsic moral worth. This is justified on Petrine anticipation of the certainty of the *parousia*, having two ethical connotations – a loosing of all restraint or a call to holiness and purity – hence the accusation on the opponents of succumbing to the former, accompanying the exhortations to believers to pursue the latter. Moreover, consuming the opponents' religious product is morally shameful: as discussed earlier, dissidents were perceived as instinctual beings, entirely devoid of reason and morality, «blots and blemishes» engaging in activities that reveal their insatiable desires so as to «entice unsteady souls» (2 Pet. 2:14). In this respect, no real benefits were expected to be enjoyed by those converted to teachings entwined with a licentious, but morally perilous, mode of living.

The next *two* rhetorical devices are of crucial importance, since it must be demonstrated how the choice of licentiousness based on a preference for immediate gratification can be outweighed by the future, albeit *uncertain* consequences of present decisions. There undeniably exists a *trade-off* between present and future pay-offs, and the Petrine author needs to prove why the present and secure benefits of a licentious living are entirely exceeded by the distant and uncertain eschatological costs. Believers experience future rewards or punishments in *different* degrees, depending upon one's conformity to traditional views on eschatology and prophecy: those who perceive of the future as remote, practically *discount* the weight attributed to eternal outcomes. On the contrary, those conceiving of the future as realized in the present time, seem to underscore future pay-offs, thus revealing their preference for a future consumption of eternal goods, or gifts.

A constant concern of early Christian mainstream literature is to define rhetorical devices able to raise the present value of future rewards and punishments: in so doing, the Petrine author has to effectively demonstrate *how* these future outcomes progressively affect, or shape, present choices. For this purpose, the elaboration of his ethics focusing on the potential benefits of God's honourable clients, is of the utmost importance: in sharp contrast to the supposedly anti-social inclinations of dissident groups, believers are urged to exhibit the distinct qualities of a proper pro-social behaviour beneficial to others (cf. Frey and Meier 2004).

The delay of the *parousia* offers opportunities for salvation, whereas for those making a decision in favour of licentiousness, the probability of incurring *any* divine penalty seems almost negligible. To address these issues, the petrine author needs to stress the imaginative capital

of his readers, *i.e.*, their ability to make assessments of the future consequences of present choices, so as to better appreciate their future welfare. This strategy is consonant to the fact that, due to the indeterminacy that engenders eschatological outcomes, religious agents frequently rely on conjectures about the ultimate consequences of their actions. Such conjectures are a by-product of imagination, they are flexible and can be shaped accordingly, not being necessarily bound by previous experience, as they are open to novelty and surprise in human affairs. Unsurprisingly, the Petrine rhetoric seeks to influence individual decision-making by offering a narrative that embodies previously unimagined informative material. In this respect, it has to considerably reduce the rate to which future events are discounted now, so as to increase the weight allocated to eternal outcomes.

A contemporary reading of this religious rhetoric might take into account certain empirical evidence that appears to offer support to the view that the rate of time-discounting differs, depending on the category of intertemporal decision. To the degree that gains are discounted more than losses (the so-called 'Sign-Effect' in economic literature), economic agents should not prefer to delay a loss: the early Christian emphasis on *future* losses is operational to the extent that it is hardly discounted at the present (see Tversky and Kahneman 1991).

Admittedly, the so-called 'magnitude effect' may be of equal interest: since large outcomes are discounted at a lower rate than smaller ones, the Petrine emphasis on *heavy losses* incurred by the 'apostates' (the loss of heaven plus eternal damnation) should exert a considerable effect on the present choices of religious affiliates. In fact, these harmful future outcomes are intended to generate stronger emotional responses, and this is highly plausible, given that the potential of these anticipatory emotions is further reinforced by anxiety and uncertainty associated with waiting. This anxiety may prevent religious actors from proceeding to risky decisions, that is from entirely discounting the above potential losses, possibly in the form of an aversion to risky choices.

The rhetoric of divine judgment effectively performs this function, namely to raise the anticipated cost of engaging in licentious activities. Present pay-offs from licentious lives are subject to progressive depreciation: sinful satisfaction is perpetually endangered. The respective levels of utility derived from consuming the opponents' product are significantly reduced, as believers perpetrating shameful deeds are constantly exposed to the eventuality of their present pleasures being transformed to future afflictions. Interestingly, we could infer that divine judgment discourses play the same role in the Petrine context, just as legal restrictions operate in a liberal contemporary setting. In their empirical research, Gruber and Hungerman (2008) explore the effect of a policy-driven change in the opportunity cost of religious participation. Findings suggest that repealing state laws that prohibit retail activity on Sunday has significantly raised the opportunity cost of religious participation, this negatively affecting religious attendance, church donations and other forms of religious spending. Most importantly, the effects of repealing these laws on drinking and drug use appear statistically significant only among the initially religious individuals who were affected by such laws. In the absence of a general decline in religiosity prior to the law change, we can plausibly assume that secular opportunities do compete with religious ones when allocating temporal/monetary resources. Analogically in the Petrine context, repudiating judgment discourses offers further rationale to licentious activities, mostly among the less committed members.

The question, however still persists: why the opponents' followers who seemed to considerably discount future payoffs, proceeded to such an irreversible consumption with an uncertain net payoff, because of short-term benefits and long-run costs but entirely ignored the possibility of delaying the decision to consume? Drawing some analogies with the case of an increase in present-oriented, unplanned and impulse buying due to credit purchase and its concomitant facilities, we could argue that the opponents' practices helped modify the believers' habits so as to proceed to emotional consumption with current (uncertain) benefits and delayed costs. In a sense, the loosening of self-control principles made believers currently 'indebted' in order to buy the opponents' spiritual commodity (licentiousness, permissiveness, freedom from moral restraints), and this even under the anticipation that they would probably not enjoy it as they wished. The opponents' followers decision to consume was precisely justified as a *hasty* one, as they estimated that the information value of waiting (and consequently, delaying the consumption) would be negative. Undoubtedly, the petrine teaching operated through various commitment devices that precluded this type of consumption.

The incentives underlying such hasty actions might be clarified in the light of this perspective: as the theory of haste of Brocas and Carrillo (2005, 16) predicts, the individual willingness to undertake activities with negative net present value is derivative of an attempt to avoid detrimental incoming information. For an individual with time-varying preferences, Brocas *et alii* (2004) argue, new information has both benefits and costs, not only in that it can improve the quality of current choices, but also as affecting a possible decision to *forego* this type of information, in particular when the anticipated costs of future choices *outweigh* the anticipated benefits of current decisions. In our case-study, the petrine strategy furnishes new information to those prone to de-

fection, the result depending on how the latter will evaluate these new pieces of information. The Petrine judgement narratives seem to correspond to this very sort of information.

5.3. Conclusions

To summarise, we attempted to reconstruct 2 Peter's narrative world on dissidents' attitudes in terms of agents facing self-control problems that induced them to adopt inefficient consumption decisions. We analysed these attitudes as impulsive behavioural stances to which some rational explanations could be attributed: following Brocas and Carrillo's (2003) permeating insights to impulsive behaviour, we considered these agents as undertaking an irreversible consumption decision yielding short-run benefits, but also severe long-run costs. We then introduced the concept of hyperbolic discounting of future pay-offs, and we emphasized the imperfect knowledge these agents possessed about the long-term consequences of their present choices. As in Brocas and Carrillo's (2003, 99-103) theoretical suggestions, these dissident groups appeared to experience a major intrapersonal conflict originating in the fact that this consumption was seemingly profitable from the current, but highly detrimental from a future perspective. Taken for granted that under hyperbolic discounting the current benefits are attributed more weight than the future (delayed) costs, the religious agent will impulsively consume now, so as to avoid a psychological state in which his present and future preferences will enter into mutual conflict. This is due to happen when the *salience* of current pay-offs and the long delay between the costs and benefits of the consumption goods will motivate him to engage in impulsive behaviour.

In this case, delaying consumption would be *costly* as future pay-offs are more easily discounted: if however, the agent opts for postponing his consumption-decision in the light of new flows of information, then he will probably be in a position to properly evaluate the bundle of consumption goods as worthless or desirable, irrespective of the time perspective. Brocas and Carrillo (2003, 101) contend that in a hasty decision «consumption takes place not because of its intrinsic value but only as a *commitment devise* against future choices» (italics our own). In so doing, religious agents are exposed to the risk of wishing they had chosen differently, indulging in self-recrimination involved in believing they made an error of judgment. As the regret theory of choice under uncertainty predicts, the intensity of regret experienced by those licentious believers also depends on the extent to which such individuals blame themselves for the original decision (cf. Sugden 1985, Loomes and Sugden 1982). Arguably free-riding appears to be intertwined with

self-control problems conducive to cognitive dissonance, the latter being reduced only through a decision embodying contrition and remorse (cf. Cameron 2002). Religious rhetoric aspires to facilitate religious choice, insofar as it purportedly offers flows of information mitigating such consumption inefficiencies through the emphasis on the primary commitments of a believing community.

6. Concluding comments

Effective strategies that link theoretical constructs to new contexts center on properly delineating the boundaries, as well as expanding the perspective of widely held assumptions and prior analytical findings. A rational choice approach to religious institutions and organizations may also be applied to the early Christian communities involving religious antagonisms between competing groups. In the attempt to economically interpret the rhetorical controversies underlying 2 Peter's narrative world, we discussed the two primary problems reflected in the social behaviour of a dissident religious group within these early Christian communities. We argued that the religious dissidents' free-riding with respect to the production of spiritual goods, as well as their grave self-control problems, were perceived as a considerable threat to the community's cohesion and orientation. The early Petrine churches were thus effective in selectively identifying symbolic rewards and spiritual benefits as most valued goods, entirely excluded from less committed members. We demonstrated that the rhetorical strategies employed by 2 Peter's discourses can be viewed as an attempt to eliminate the opponents' share in an emerging religious market of that era. We also showed that the heavy discount of the future these religious dissidents were supposed to proclaim, could be outweighed by rhetorical devices praising eschatological judgment and rewarding fidelity to traditions and personal vocation to holiness. In this respect, we attempted to analyse the ensuing dilemmas concerning religious choice at both institutional and individual levels, in the awareness that economic analysis might not be unimportant to a contemporary reading of sacred texts that evidence a shared cultural heritage, possibly still operative in our contemporary, globalized societies.

References

- ACHTEMEIER P. J., GREEN J. B. and THOMPSON M. M. 2001, Introducing the New Testament, Its Literature and Theology, Grand Rapids (MI), Eerdmans.
- ADAMS E. 2005, «Where is the Promise of his Coming? The Complaint of the Scoffers in 2Peter 3:4», *New Testament Studies*, 51, 1, 106-122.
- AKERLOF G. and KRANTON P. 2000, «Economics and Identity», *Quarterly Journal of Economics*, 115, 3, 715-753.

Economics and early Christian rhetoric from the 2nd Petrine Epistle 49

- ANDERSON G. 1988, «Mr Smith and the preachers: the economics of religion in the Wealth of Nations», *Journal of Political Economy*, 96, 5, 1066-1088.
- ANGELETOS G., LAIBSON D., REPETTO A., TOBAEMAN J. and WEINBERG S. 2001, «The hyperbolic consumption model: calibration, simulation and empirical evaluation», *Journal of Economic Perspectives*, 15, 3, 47-68.
- AZZI C. and EHRENBERG R. 1975, «Household allocation of time and Church attendance», *Journal of Political Economy*, 83, 1, 27-56.
- BAINBRIDGE W. S. 2003, «Sacred Algorithms: exchange theory of religious claims», *Religion and the Social Order*, 10, 21-37.
- BANKS J., BLUNDELL R. and TANNER S. 1998, «Is there a retirement-savings puzzle?», *American Economic Review*, 88, 4, 769-788.
- BANKSTON C. L. 2002, «Rationality, choice and the religious economy: the problem of belief», *Review of Religious Research*, 43, 4, 311-325.
- 2004, «Rationality, choice and the religious economy: individual and collective rationality in supply and demand», *Review of Religious Research*, 45, 2, 155-171.
- BARCLAY J. M. G. 1999, «Deviance and Apostasy. Some Applications of Deviance Theory to First Century Judaism and Christianity», in D. G. Horell (ed.), Social-Scientific Approaches to New Testament Interpretation, Edinburgh, T & T Clark, 289-307.
- BARRO R. J. and MCCLEARY R. M. 2003, «Religion and economic growth across countries», *American Sociological Review*, 68, 5, 760-781.
- BARROS P. P. and GAROUPA N. 2002, «An Economic Theory of Church Strictness», *Economic Journal*, 112, 3, 559-576.
- BEAMAN L. G. 2003, «The myth of pluralism, diversity and vigour: the constitutional privilege of Protestantism in the United States and Canada», *Journal for the Scientific Study of Religion*, 42, 3, 311-325.
- BEARD M., NORTH J. and PRICE S. 1998, *Religions of Rome, A History*, Cambridge, Cambridge University Press.
- BECK J. H. 2007, «The pelagian Controversy: An Economic Analysis. Economics and Religion», *American Journal of Economics and Sociology*, 66, 4, 681-696.
- BERMAN E. 2000, «Sect, subsidy and sacrifice. An economist's view of Ultra-Orthodox Jews», *Quarterly Journal of Economics*, 115, 3, 905-953.
- 2003, «Hamas, Taliban and the Jewish Underground. An economist's view of radical religious militias», NBER Working Paper 10.004.
- BERNDT C. 2007, The Economics of Religion: An Overview of the Literature and two Extensions, Ph.D. dissertation, George Mason University.
- BERRIDGE K. C. 2003, «Irrational Pursuits: Hyper-Incentives from a Visceral Brain», in I. Brocas and J. D. Carrillo (eds), *The psychology of Economic Decisions*, vol. 1, *Rationality and Well-Being*, Oxford, Oxford University Press, 17-40.
- BERTRAND M., LÜTTMER E. F. P. and MULLAINATHAM S. 2000, «Network Effects and Welfare Cultures», *Quarterly Journal of Economics*, 115, 3, 1019-1055.
- BLASI A. J. 2009, «A market theory of religion», Social Compass, 56, 2, 263-272.
- BLOMBERG C. L. 1999, Neither Poverty, Nor Riches. A biblical Theology of Material Possessions, Downers Grove (IL), InterVarsity Press.
- BOUDON R. 2003, «Beyond Rational Choice Theory», Annual Review of Sociology, 29, 1, 1-21.
- BREWER S. M., JOZEFOWICZ J. J. and STONEBRAKER R. L. 2006, «Religious Free-Riders: The Impact of Market Share», *Journal for the Scientific Study of Religion*, 45, 3, 389-396.
- BROCAS I., CARRILLO J. D. and DEWATRIPONT M. 2004, «Commitment Devices under Self Control Problems: An Overview», in I. Brocas and J. D Carrillo (eds), *The*

Psychology of Economic Decisions, vol. 2, Reasons and Choices, Oxford, Oxford University Press, 49-65.

- BROCAS I. and CARRILLO J. D. 2003, «Information and Self-Control», in I. Brocas and J. D. Carillo (eds), *The Psychology of Economic Decisions*, vol. 1, *Rationality and Well-Being*, Oxford, Oxford University Press, 89-104.
- 2005, «A Theory of haste», Journal of Economic Behaviour and Organization, 56, 1, 1-23. BROWN S. and TAYLOR K. 2007, «Religion and education: Evidence from the National Child Development Study», Journal of Economic Behavior and Organization, 63, 3, 439-460.
- BROWN T. T. 2009, «Rational praying: The economics of prayer», Journal of Socio-Economics, 38, 1, 37-44.
- BRUCE S. 1992, «Pluralism and Religious Vitality», in Idem (ed.), *Religion and Modernization*, Oxford, Clarendon Press, 170-194.
- 2000a, «The Supply-side Model of Religion. The Nordic and Baltic States», *Journal for the Scientific Study of Religion*, 39, 1, 32-46.
- 2000b, Choice and Religion. A Critique of Rational Choice Theory, Oxford, Oxford University Press.
- BRUDERL J. and PREISENDÖRFER P. 1998, «Network Support and the Success of Newly Founded Business», *Small Business Economics*, 10, 3, 213-225.
- BRUNI L. 2007, «The "Technology of Happiness" and the Tradition of Economic Science», in L. Bruni and P. L. Porta (eds), *Handbook on the Economics of Happiness*, Cheltenham (UK), Edward Elgar, 24-52.
- Burrus V. (ed.) 2005, Late ancient Christianity, Minneapolis (MN), Fortress.
- CAMERON S. 2002, The Economics of Sin: Rational Choice or no Choice at all?, Cheltenham (UK), Edward Elgar.
- CHARLES J. D. 1998, «The Language and Logic of Virtue in 2 Peter 1:5-7», Bulletin for Biblical Research, 8, 1, 55-73.
- CHESTER A. and MARTIN R. P. 1994, *The Theology of the Letters of James, Peter and Jude.* Cambridge, Cambridge University Press.
- CLARK G. 2004, Christianity and Roman Society, Cambridge, Cambridge University Press.
- COSGEL M. M. and MINKLER L. 2004, «Religious Identity and Consumption», *Review of Social Economy*, LXII, 3, 339-350.
- DAVIDS P. H. 2006, The Letters of 2 Peter and Jude, Grand Rapids (MI), Eerdmans (The Pillar New Testament Commentary).
- DAVIS J. B. 2003, *The Theory of the individual in Economics. Identity and value*, London and New York, Routledge.
- DAVIDSSON P. and HOANG B. 2003, «The Role of Social and Human Capital among Nascent Entrepreneurs», *Journal of Business Venturing*, 18, 3, 301-331.
- DE SILVA D. A. 2000, Honor, Patronage, Kinship and Purity. Unlocking New Testament Culture, Downers Grove (IL), InterVarsity Press.
- DEQUECH D. 2006, «The new institutional economics and the theory of behaviour under uncertainty», Journal of Economic Behaviour and Organization, 59, 1, 109-131.
- DRAKOPOULOS S. 1994, «Some Implications of the New Physics for Economic Methodology», South African Journal of Economics, 62, 4, 198-209.
- EKELUND R. B., HÉBERT R. F. and TOLLISON R. D. 2002, «An Economic Analysis of the Protestant Reformation», *Journal of Political Economy*, 110, 3, 646-671.
- 2004, «Economics of the Counter-Reformation: Incumbent-Firm Reaction to Market Entry», *Economic Inquiry*, 42, 4, 690-705.
- 2005, «Adam Smith on Religion and Market Structure», *History of Political Economy*, 37, 4, 647-660.
- 2006, The Marketplace of Christianity, Cambridge (мА), The MIT Press.

- EKELUND R. B. and HÉBERT R. F. 2010, «Interest groups, public choice and the economics of religion», *Public Choice*, 142, 3, 429-436.
- ESLER P. F. 1994, The First Christians in their Social Worlds. Social-Scientific approaches to New Testament interpretation, London, Routledge.
- FAN C. S. 2008, «Religious Participation and Children's Education: A Social Capital Approach», Journal of Economic Behavior and Organization, 65, 2, 303-317.
- FASE M. M. G. 2005, «Notes and Communications. On Economics and Religion», *De Economist*, 153, 1, 85-106.
- FEHR E. and GÄCHTER S. 2000, «Fairness and retaliation: the economics of reciprocity», Journal of Economic Perspectives, 14, 3, 159-181.
- FERRERO M. 2008, «The Triumph of Christianity in the Roman Empire: An Economic Interpretation», European Journal of Political Economy, 24, 1, 73-87.
- FINKE R. 1997, «The Consequences of religious competition: supply-side explanations for religious change», in L. A. Young (ed.), *Rational Choice Theory and Religion*, London, Routledge, 45-64.
- FREDERICK S., LOEWENSTEIN G. and O'DONOGHUE T. 2002, «Time discounting and time preference: a critical review», *Journal of Economic Literature*, 40, 2, 351-401.
- FREY B. S. and MEIER S. 2004, «Pro-social behaviour, in a natural setting», *Journal of Economic Behaviour and Organization*, 54, 1, 65-88.
- FROESE P. and BADER C. D. 2007, «God in America: Why Theology is not Simply the Concern of Philosophers», Journal for the Scientific Study of Religion, 46, 4, 465-481.
- GARNSEY P. 1984, «Religious Toleration in Classical Antiquity», in W. J. Shields (ed.), *Persecution and Toleration*, Oxford, Blackwell, 1-28.
- GILL A. and LUNDEGAARDE E. 2004, «State welfare spending and religiosity: a crossnational analysis», *Rationality and Society*, 16, 4, 399-436.
- GOOREN H. 2007, «Reassessing Conventional Approaches to Conversion: Toward a New Synthesis», *Journal for the Scientific Study of Religion*, 46, 3, 337-353.
- GOTSIS G. N. and DRAKOPOULOU-DODD S. 2002, «Economic Ideas in the Pauline Epistles of the New Testament», *History of Economics Review*, 35, 1, 13-34.
- 2004, «Economic ideas in the Epistle of James», History of Economic Ideas, XII, 1, 7-35.
- GOTSIS G. N. 2007, «Socio-economic ideas in the petrine epistles of the New Testament», *Storia del Pensiero Economico*, 2, 67-105.
- GREEN G. L. 2001, «As for Prophecies, they will come to an End: 2Peter, Paul and Plutarch on 'the Obsolescence of Oracles'», *Journal for the Study of the New Testament*, 23, 82, 107-122.
- GRUBER J. and HUNGERMAN D. M. 2008, «The Church versus the Mall: What happens when Religion Faces increased Secular Competition?», *The Quarterly Journal of Economics*, 123, 2, 831-862.
- GUL F. and PESENDORFER W. 2001, «Temptation and Self-Control», *Econometrica*, 69, 6, 1403-1435.
- HARDIN R. 1997, «The economics of religious belief», Journal of Institutional and Theoretical Economics, 153, 1, 259-278.
- Harris W. V. (ed.) 2005, The spread of Christianity in the first four centuries. Essays in explanation, Leiden and Boston, Brill (Columbia Studies in the Classical Tradition, 27).
- HAYS R. 1997, First Corinthians, Louisville (KY), Westminster John Knox Press.
- HELLERMAN J. H. 2005, *Reconstructing Honor in Roman Philippi*, Cambridge, Cambridge University Press.
- HOANG H. and ANTONCIC B. 2003, «Network-Based Research in Entrepreneurship: A Critical Review», *Journal of Business Venturing*, 18, 2, 165-187.
- HORRELL D. G. 1998, *The Epistles of Peter and Jude*, London, Epworth Press (*Epworth Commentaries*).

- HULL B. B. and BOLD E. 1998, «Product Variety in Religious Markets», *Review of Social Economy*, 56, 1, 1-19.
- IANNACCONE L. R. 1992, «Sacrifice and Stigma: reducing free-riding in cults, communes and other collectives», *Journal of Political Economy*, 100, 2, 271-292.
- 1994, «Why strict Churches are strong», American Journal of Sociology, 99, 5, 1180-1211.
- 1995, «Risk, rationality and religious portfolios», Economic Inquiry, 38, 2, 285-295.
- 1998, «Introduction to the Economics of Religion», *Journal of Economic Literature*, 36, 4, 1465-1496.
- 1999, «Religious extremism. Origins and consequences», *Contemporary Jewry*, 20, 1, 8-29.
- 2005, «Economics of Religion. Debating the Costs and Benefits of a New Field», *Faith and Economics*, 46, Fall 2005, 1-9.
- JACOB J. and OSANG TH. 2007, «Values, Beliefs and Development», Working Paper 0705, Southern Methodist University, Department of Economics.
- JEROLMACK C. and PORPORA D. 2004, «Religion, rationality and experience: a response to the new rational choice theory of religion», *Sociological Theory*, 22, 1, 140-160.

JOHNSON D. P. 2003, «From religious markets to religious communities: contrasting implications for applied research», *Review of Religious Research*, 44, 4, 325-340.

- JOHNSON L. T. 1999, The Writings of the New Testament. An Interpretation, rev. edn., Minneapolis (MN), Fortress.
- KLAUCK H. J. 2003, The Religious Context of Early Christianity. A Guide to Graeco-Roman Religions, Minneapolis (MN), Fortress.
- KNIGHT J. 1995, 2Peter and Jude, Sheffield, Sheffield Academic Press.
- KÖNIG C. J. and KLEINMANN M. 2004, «Business before pleasure: no strategy for procrastinators?», *Personality and Individual Differences*, 37, 5, 1045-1057.
- KRAFTCHICK S. J. 2002, Jude, 2Peter, Nashville (TN), Abingdon Press (Abingdon New Testament Commentaries).
- LAIBSON D. L. 1996, Hyperbolic Discount Functions. Undersaving and Savings Policy, Cambridge (MA), Harvard University Press.
- 1997, «Golden eggs and hyperbolic discounting», *Quarterly Journal of Economics*, 112, 2, 443-477.
- LEATHERS CH. G. and RAINES J. P. 2008, «Adam Smith on Religion and Market Structure: The Search for Consistency», *History of Political Economy*, 40, 2, 345-363. LEHRER E. 2007, *Religion, Economics and Democracy*, London, Routledge.
- LELKES O. 2006, «Tasting freedom. Happiness, religion and economic transition», Journal of Economic Bahaviour and Organization, 59, 2, 173-194.
- LIPFORD J. W. and TOLLISON R. D. 2003, «Religious participation and income», Journal of Economic Behavior and Organization, 51, 2, 249-260.
- LOOMES G. and SUGDEN R. 1982, «Regret theory: An alternative theory of choice under uncertainty», *Economic Journal*, 92, 805-824; repr. in J. D. Hey (ed.), *The Economics of Uncertainty*, vol. 1, *Risk*, Cheltenham (UK), Edward Elgar, 199730-199749.
- LOVELAND M. T. 2003, «Religious switching: preference development, maintenance and change», *Journal for the Scientific Study of Religion*, 42, 1, 147-157.
- MCBRIDE M. 2007, «Club Mormon: Free-riders, monitoring, and exclusion in the Lds Church», *Rationality and Society*, 19, 4, 395-424.
- MCCLEARY R. M. and BARRO R. J. 2006, «Religion and Economy», Journal of Economic Perspectives, 20, 2, 49-72.
- MCCULLOUGH M. E. and WILLOUGHBY B. L. B 2009, «Religion, Self-Regulation, and Self-Control: Associations, Explanations and Implications», *Psychological Bulletin*, 136, 1, 69-93.

- MALINA B. J. 1996, The Social World of Jesus and the Gospels, London, Routledge.
- 2000, «Social Levels, Morals and Daily Life», in P. F. Esler (ed.), *The Early Christian World*, vol. 1, London, Routledge, 369-400.
- 2001a, The Social Gospel of Jesus. The Kingdom of God in Mediterranean Perspective, Minneapolis (MN), Fortress.
- 2001b, *The New Testament World. Insights from Cultural Anthropology*, third rev. edn., Louisville (ку), Westminster John Knox Press.
- MAO W. and ZECH C. 2002, «Choices of organizational structures in religious organizations: a game theoretic approach», *Journal of Economic Behaviour and Organization*, 47, 1, 55-70.
- MILLER K. D. 2002, «Competitive Strategies of Religious Organizations», *Strategic Management Journal*, 23, 5, 435-456.
- MOOKERJEE R. and KRISTA B. 2005, «Gender, Religion and Hapiness», *The Journal of Socio-Economics*, 34, 5, 674-685.
- MOXNES H. 1996, «Honour and Shame», in R. Rohrbaugh (ed.), *The Social Sciences and New Testament Interpretation*, Peabody (MA), Hendrickson, 19-40.
- NEYREY J. H. 1993, 2Peter, Jude. A New Translation With Introduction and Commentary (The Anchor Bible, vol. 37c), New York, Doubleday.
- NIXON M. G. 2007, «Satisfaction to whom? Freedom for What? Theology and the Economic Theory of the Consumer», *Journal of Business Ethics*, 70, 1, 39-60.
- NORTH D. 2005, Understanding the Process of Economic Change, Princeton (NJ), Princeton University Press.
- O'DONOGHUE T. and RABIN M. 1999, «Doing it now or later», American Economic Review, 89, 1, 103-124.
- PARK J. Z. and BAKER J. 2007, «What would Jesus buy: American Consumption of Religious and Spiritual Material Goods», *Journal for the Scientific Study of Religion*, 46, 4, 501-517.
- PENA LOPEZ J. A. and SANCHEZ SANTOS J. M. 2008, «Effects of Competition on Religious Markets: Some Empirical Evidence», *Applied Economics Letters*, 15, 5, 371-374.
- Pilch J. J. and Malina B. J. (eds) 1998, *Handbook of Biblical Social Values*, Peabody (MA), Hendrickson.
- PUTNAM R. D. 2000, Bowling alone. The collapse and revival of American Community, New York, Simon & Schuster.
- REESE R. A. 2007, 2Peter and Jude, Grand Rapids (MI), Eerdmans (The two Horizons New Testament Commentary).
- RICHARDSON G. and MCBRIDE M. 2009, «Religion, Iongevity and Cooperation: The case of the craft guild», *Journal of Economic Behaviour and Organization*, 71, 2, 172-186.
- SAEZ-MARTI M. and WEIBULL J. W. 2005, «Discounting and altruism to future decision-makers», *Journal of Economic Theory*, 122, 2, 254-266.
- SCHELLENBERG R. S. 2008, «Which Master? Whose Steward? Metalepsis and Lordship in the Parable of the Prudent Steward (Lk. 16: 1-13)», *Journal for the Study of the New Testament*, 30, 3, 263-288.
- SCHMIDTCHEN D. and MAYER A. 1997, «Established clergy, friars and the pope: some institutional economics of the medieval church», *Journal of Institutional and Theoretical Economics*, 153, 1, 122-149.
- SHANNON-JUNG L. 2006, Sharing Food. Christian Practices for Enjoyment, Minneapolis (MN), Fortress.
- SHERKAT D. E. and WILSON J. 1995, «References, constraints and choices in religious markets: An examination of religious switching and apostasy», *Social Forces*, 73, 3, 993-1026.

- SMITH D. E. 2003, From Symposium to Eucharist. The Banquet in the Early Christian World, Minneapolis (MN), Fortress.
- SMITH I. 1999, "The Economics of the Apocalypse: an economic model of the biblical book of Revelation", Journal of Institutional and Theoretical Economics, 155, 3, 443-457.
- 2002, «A Rational Choice Model of the Book of Revelation», *Journal for the Study of the New Testament*, 24, 3, 97-116.
- SMITH I. and SAWKINS J. W. 2003, «The economics of regional variation in religious attendance», *Applied Economics*, 35, 14, 1577-1588.
- SMITH I., SAWKINS J. W. and SEAMAN P. T. 1998, "The Economics of religious participation: A cross-country study", *Kyklos*, 51, 1, 25-43.
- SMITH I., SAWKINS J. W. and MOCHRIE R. I. 2007, «Money, Sex and Religion: The Case of the Church of Scotland», *Scottish Journal of Political Economy*, 54, 2, 195-219.
- SNOEP L. 2008, «Religiousness and Happiness in Three Nations: A Research Note», *Journal of Happiness Studies*, 9, 2, 207-211.
- STARK R. 1996. The Rise of Christianity. A Sociologist Reconsiders History, Princeton (NJ), Princeton University Press.
- 2004, *Exploring the Religious Life*, Baltimore (мD), The Johns Hopkins University Press.
- 2006. «Economics as Religion», in R. A. Segal (ed.), *The Blackwell Companion to the Study of Religion*, Oxford, Blackwell, 47-67.
- STARK R. and BAINBRIDGE W. S. 1985, *The Future of Religion. Secularization, Revival and Cult Formation*, Berkeley (CA), University of California Press.
- 1987, A Theory of Religion, New Brunswick (NJ), Rutgers University Press.
- STARK R. and FINKE R. 2000, *Acts of faith. Explaining the human side of religion*, Berkeley (CA), University of California Press.
- STONEBRAKER R. J. 2005, «Economics of Religion», in S. W. Bowmaker (ed.), *Economics Uncut. A Complete Guide to Life, Death and Misadventure*, Cheltenham (UK), Edward Elgar, 264-288.
- SUGDEN R. 1985. «Regret, recrimination and rationality», *Theory and Decision*, 19, 1, 77-99.
- TAN J. H. W. and VOGEL C. 2008, «Religion and Trust: An Experimental Study», *Journal of Economic Psychology*, 29, 6, 832-848.
- TORGLER B. 2006, «The importance of faith. Tax morale and religiosity», *Journal of Economic Behaviour and Organization*, 61, 1, 81-109.
- TVERSKY A. and KAHNEMAN D. 1991, «Loss Aversion in Riskless Choice: A Reference-Dependent Model», *The Quarterly Journal of Economics*, 106, 4, 1039-1061.
- VIVENZA G. 1997, «The Classical Roots of Benevolence in Economic Thought», in B. B. Price (ed.), *Ancient Economic Thought*, vol. 1, London, Routledge, 191-210.
- VOAS D., OLSON D. A. and CROCKETT A. 2002, "Religious pluralism and participation. Why Previous Research is Wrong", American Sociological Review, 67, 2, 212-230.
- WALL R. W. 2001, «The Canonical Function of 2Peter», *Biblical Interpretation*, 9, 1, 64-81.
- WATSON D. E. 1988, Invention, Arrangement and Style. Rhetorical Criticism of Jude and 2 Peter, Atlanta, Scholars (*SBLDS*, 104).
- WEBB R. L. 2004, «The Petrine Epistles. Recent Developments and Trends», in S. McKnight and G. R. Osborne (eds), *The Face of New Testament Studies. A Survey of Recent Research*, Grand Rapids (MI), Baker Academic, 373-390.
- 2008, «The Use of 'Story' in the Letter of Jude: Rhetorical Strategies of Jude's Narrative Episodes», *Journal of the Study for the New Testament*, 31, 1, 53-87.
- WILSON S. G. 2004, *Leaving the Fold. Apostates and Defectors in Antiquity*, Minneapolis (MN), Fortress.

CONTENTS

FERNANDO ESTRADA, Benoit Mandelbrot (1924-2010): a Greek	-
among Romans	9
PAPERS	
GEORGE GOTSIS and STAVROS DRAKOPOULOS, The economics of the early Christian rhetoric: the case of the Second Petrine Epistle of the New Testament	4.7
ALIGHIERO ERBA, Economic structure and national accounting:	17
G. Ortes' contribution to economic science ROBERT B. EKELUND JR. and MARK THORNTON, Galileo, Smith	55
and the paradox of value: the 'connection' of art and science ALDO MONTESANO, Ricardo on machinery. What matters: technical	85
progress or substitution of machines for circulating capital?	103
MAGNUS HENREKSON, Perspectives on the success and early history of the Industrial Institute for Economic and Social Research (111) ALESSANDRO LANTERI, Douglas, Gesell, and the Economic Ethics	125
of Ezra Pound	147
REVIEW ARTICLE	
IVAN MOSCATI, The visible hand historically X-rayed	169
BOOK REVIEWS	
Скаід F. Freedman, <i>Chicago Fundamentalism: Ideology and Me-</i> <i>thodology in Economics</i> (Emmett) L. Randall Wray and Mathew Forstater (eds), <i>Keynes and Ma-</i>	179
<i>croeconomics after 70 Years: Critical Assessments of</i> The General Theory (Kates)	181
DONALD E. FREY, America's Economic Moralists (Barrows)	183
TED MCCORMICK, William Petty and the Ambitions of Political Arithmetic (Perelman)	186
Geoffrey C. Harcourt and Prue Kerr, Joan Robinson (Mar-	160
cuzzo)	188
GEORGE A. AKERLOF and ROBERT J. SHILLER, Animal Spirits: How Human Psychology Drives the Economy, and Why It Mat- ters for Global Capitalism (Di Giovinazzo)	100
Riccardo Bellofiore and Roberto Fineschi (eds), Re-reading	190
Marx. New Perspectives After the Critical Edition (Gattei) Roger E. Backhouse and Tamotsu Nishizawa (eds), No Wealth	193
But Life (Neill)	195
ANTHONY BREWER, The Making of the Classical Theory of Economic Growth (Groenewegen)	196
SPENCER J. PACK, Aristotle, Adam Smith and Karl Marx: On Some Fundamental Issues in 21st Century Political Economy (Brewer)	198

History of Economic Ideas is published three times a year by FABRIZIO SERRA EDITORE[®], Pisa · Roma, P. O. Box no. 1, Succ. no. 8, 156123 Pisa, tel. +39 050 542332, fax +39 050 574888, fse@libraweb.net, www.libraweb.net Pisa Offices: Via Santa Bibbiana 28, 156127 Pisa, fse@libraweb.net Rome Offices: Via Carlo Emanuele I 48, 100185 Roma, fse.roma@libraweb.net

> Print and/or Online official subscription rates are available at Publisher's website www.libraweb.net. Reduced rate for ESHET members: € 95,00; Reduced rate for STOREP members: € 95,00.

Subscriptions should be paid as follows: by cheque/international money order payable to Fabrizio Serra editore®; by postal giro account no. 17154550; by credit card (American Express, Eurocard, Mastercard, Visa).

© Copyright 2011 by *Fabrizio Serra editore*[®], Pisa · Roma.

Printed in Italy

ISSN 1122-8792 ELECTRONIC ISSN 1724-2169

Direttore responsabile: Lucia Corsi Autorizzazione del Tribunale di Pisa n. 10 del 2/5/1994

FERNANDO ESTRADA, Benoit Mandelbrot (1924-2010): a Greek among Romans · Papers: George GOTSIS and STAVROS DRAKOPOULOS, The economics of the early Christian rhetoric: the case of the Second Petrine Epistle of the New Testament · ALIGHIERO ERBA, Economic structure and national accounting: G. Ortes' contribution to economic science · Robert B. Ekelund Jr. and Mark THORNTON, Galileo, Smith and the paradox of value: the 'connection' of art and science · ALDO MONTESANO, Ricardo on machinery. What matters: technical progress or substitution of machines for circulating capital? · MAGNUS HENREKSON, Perspectives on the success and early history of the Industrial Institute for Economic and Social Research (IUI) · ALESSANDRO LANTERI, Douglas, Gesell, and the Economic Ethics of Ezra Pound · **Review Article:** IVAN MOSCATI, The visible hand *historically X-rayed* · **Book Reviews**.