

Technical Specifications of the Tender for
Sustainability Model and Business Plan for
the Infrastructure and Organisation of
OpenAIRE

By AUEB-RC team

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By AUEB-RC Team

Introduction

This document provides the technical specifications of the proposed work of the tender. The following sections will present the objectives, methodologies, work plan and expected results. Further information about the management structure, participants, etc. is also provided.

1. Concept and objectives

The overall objective of the proposed study is to provide OpenAIRE with an accurate estimation of the benefits and costs of the OpenAIRE infrastructure and to build a sustainable business model for the continuation of OpenAIRE beyond the life-time of the project funding. Therefore, in order to achieve this goal a set of specific objectives must be met:

1. Stakeholder definition, and given benefits: It is important to identify and prioritise the stakeholder groups and their needs. This study seeks ways to assign a monetary value to the benefits these stakeholders gain from OpenAIRE.
2. Accounting: how much does the current system setup, operation and maintenance cost? It is important that this study distinguishes between the operation of existing services, upgrades of the system, and the development of new services.
3. Cost benefit analysis: how do the system costs respond to the benefits of the identified stakeholders?
4. Revenue channels: identify the best and most viable model for OpenAIRE to spread the costs among beneficiaries (including service charges where appropriate) for its services. Who contributes, how much and when.

2. Methodology

In this section, the proposed methodology in order to achieve the four different specific objectives discussed in the previous section is presented.

Task 1. Identification of the main stakeholders of a European-wide adoption of the Open Access infrastructure and network as provided by OpenAIRE. Estimate the total economic benefits for those stakeholders.

Task 1.1 Identification of the main stakeholders

In order to identify current and potential stakeholders of the Open Access infrastructure and network provided by OpenAIRE in this task information of the current and potential

stakeholders and how they interact with the OpenAIRE infrastructure either as beneficiaries or/and contributors will be collected and compiled in order to create a stakeholder map. Stakeholder mapping is a collaborative process of research, debate, and discussion that draws from multiple perspectives to determine a key list of stakeholders across the entire stakeholder spectrum. The mapping will be broken down into four phases:

1. Identifying: listing relevant groups, organizations, and people. This first step includes the creation of a database containing the following targeted user typologies:

- a) *Authors* interested in depositing their publications into the infrastructure associating it with the FP7 project information;
- b) *Researchers and general public* interested in accessing the Information Space of all OA FP7 publications through friendly web interfaces and a variety of functionalities;
- c) *Commission and organizational funders* studying and assessing the effectiveness of their policies on research directives as well as publication models;
- d) *Repository community* interested in interoperability and other joint projects or interested in becoming an integral part of the OpenAIRE infrastructure integrating deposition and publication referral processes;
- e) *E-Science applications operated by third-party organizations*, interested in accessing/retrieving content from the Information Space.

It is important to stress that the previous list is not exhaustive and other stakeholders may be included during this phase.

2. Analysing: understanding stakeholder perspectives and interests.

Once the list of stakeholders has been identified, further analysis will be conducted to better understand their relevance and the perspective they offer, to understand their relationship to the issue(s) and each other, and to prioritize based on their relative usefulness for this engagement. The following criteria will be used in order to analyse each identified stakeholder:

- Contribution (value): Does the stakeholder have information, counsel, or expertise on the issue that could be helpful to OpenAIRE?
- Legitimacy: How legitimate is the stakeholder's claim for engagement?
- Willingness to engage: How willing is the stakeholder to engage?
- Influence: How much influence does the stakeholder have? (It is important to identify "who" they influence, e.g., other authors, the repository community etc.)
- Necessity of involvement: Is this someone who could derail or delegitimize the process if they were not included in the engagement?

These five criteria will be used to create and populate a chart with short descriptions of how stakeholders fulfil them. Values will be assigned (low, medium, or high) to these stakeholders. This first data set will allow deciding which stakeholders to engage (see figure 1).

Figure 1 Sample stakeholder description chart

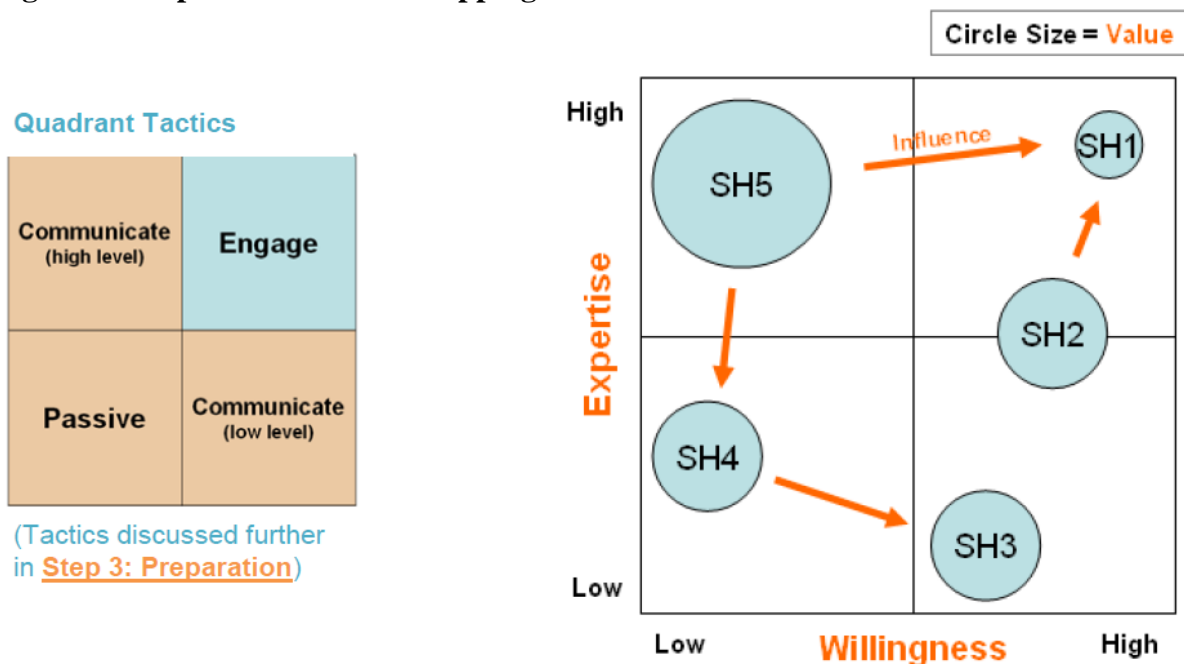
Stakeholder	Expertise		Willingness	Value	
	Contribution	Legitimacy	Willingness to Engage	Influence	Necessity of Involvement
SH1	High: Knowledge in X issue is of value to the OpenAIRE project	High: Directly affected by OpenAIRE's activity	High: Proactive group that is already engaging	Low: Relatively unknown group	Low: Not an outspoken stakeholder
SH2	Medium	Medium	High	Medium	Medium
SH3	Low	Low	Medium	Low	Medium
SH4	Low	Medium	Low	Medium	Medium
SH5	High	Medium	Low	High	High

Source: Adapted from BSR (2012)

3. Mapping: visualizing relationships to objectives and other stakeholders. Mapping stakeholders is a visual exercise and analysis tool that will be used to determine which stakeholders are most useful to engage with. The mapping will allow seeing where stakeholders stand when evaluated by the same key criteria and compared to each other and helps to visualize the complex interplay of issues and relationships created in the criteria chart above.

Figure 2 presents a sample stakeholder mapping. In the figure there is a quadrant using two axes labelled “Low” to “High.” It also adds “Expertise,” “Willingness,” and “Value” to the criteria chart, as in figure 1. “Expertise” is assigned to the Y-axis and “Willingness” to the X-axis. Discussion and debate where each stakeholder falls should be included. Then, stakeholders are plotted on the grid. Small, medium, and large circle sizes are used to denote their “Value.” To illustrate relationships, arrows are used to depict “Influence.”

Figure 2 Sample Stakeholders Mapping



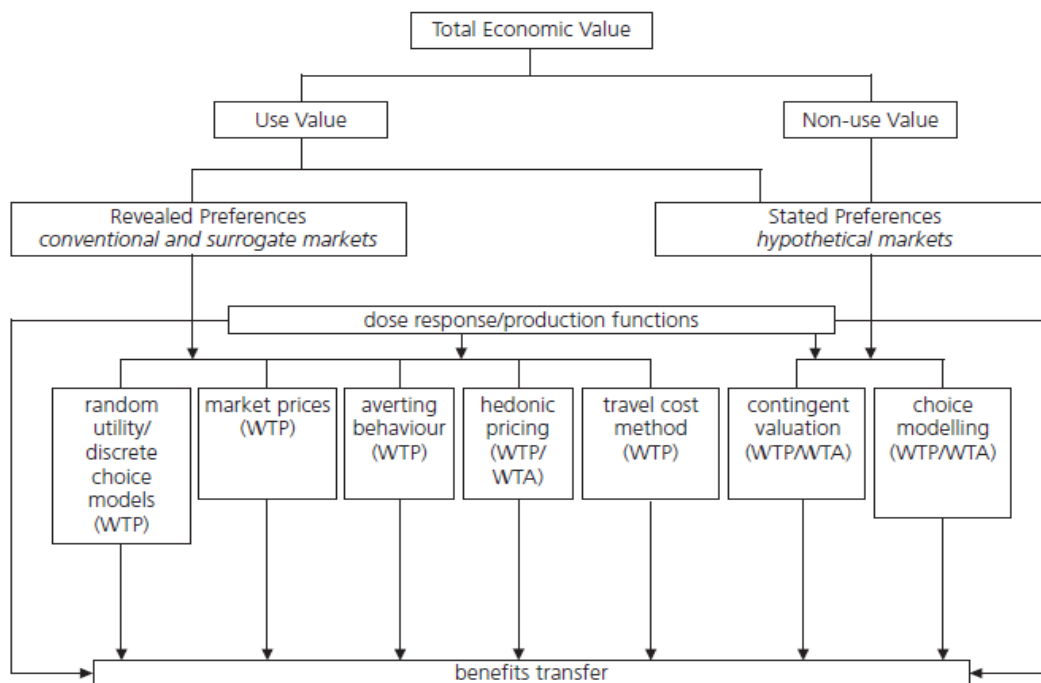
Source: BSR (2012)

4. Prioritizing: ranking stakeholder relevance and identifying issues. It is not practical and usually not necessary to engage with all stakeholder groups with the same level of intensity all of the time. Being strategic and clear about whom OpenAIRE is engaging with and why, can help save both time and money. Combined with the criteria chart and mapping, issue materiality will be used to rank the stakeholders into a prioritized engagement list. The most relevant issues and the most relevant stakeholders will be captured at the end of this stage. The process of stakeholder mapping is as important as the result, and the quality of the process depends heavily on the knowledge of the people participating.

Task 1.2 Estimate the total economic benefits for those stakeholders.

This task will also analyse the identified stakeholders of the OpenAIRE infrastructure including beneficiaries and contributors and estimate their total economic benefits (marketed and non-marketed benefits from an Open Access infrastructure as provided by OpenAIRE and its services). It is important to take into account and include dependencies with third party providers and services relevant to the infrastructure operation. One theoretical approach of capturing and describing the benefits derived from the different services provided by the OpenAIRE platform is the Total Economic Value (TEV) framework. It provides a systematic tool for considering the full range of impacts a service has on human welfare. The way to derive TEV is from preferences of individuals. Preferences can be studied by stated preference methods and revealed preference methods (see figure 3).

Figure 3: Techniques for monetary valuation of non-market services



Source: Eftec, 1999.

The following methods could be used to assign a monetary value to the benefits these stakeholders gain from OpenAIRE. Revealed preference methods rely on data regarding

individuals' preferences for a marketable good and could be divided in market-based and surrogate markets related. Surrogate market related includes travel cost method and hedonic pricing. Stated preference methods use structured questionnaires to elicit individuals' preferences for a given change in a natural resource or environmental attribute. In this category, the contingent valuation method (CVM) and choice experiment (CE) are included. The CVM is based on the development of a hypothetical market or scenario in which the respondents to a survey are given the opportunity to state their Willingness-to-Pay (WTP) or Willingness-to-Accept (WTA). Different elicitation methods are used to derive the WTP/WTA amounts and because these values are contingent on the hypothetical market the method is called CVM. CE is another stated preference method. In a CE framework, the good in question is broken down into its component attributes, which are presented to respondents normally as a set of combinations of the attributes. Respondents are then presented with a sequence of choice sets differentiated by its attributes and levels. The fact that gathering primary site-specific data is costly has made BT a popular alternative for the valuation of ecosystem goods and services. BT is about applying existing economic value estimates from one location where data are collected to another similar site in another location with little or no data. The three main approaches to BT: (i) the transfer of the mean household WTP (ii) the transfer of an adjusted mean household WTP and, (iii) the transfer of the demand function.

Task 2. Identification and estimation of OpenAIRE total cost which includes a cost estimation of OpenAIRE infrastructure components (technical and human), account keeping and financial analysis of and operation/ maintenance of the OpenAIRE system.

The costing of the project includes three levels:

- 1st Level:** Budget of OpenAIRE Data Base construction cost, includes hardware equipment and software.
- 2nd Level:** The Operating Budget of the Base under a subsidized financing.
- 3rd Level:** The Operating Budget of the Base under a self-financing scheme.

1. Data Base Cost Construction:

- Technical specifications of hardware, cost and method of procurement and operating life. The specifications and the operating life of the assets are important and determining factors for the overall costing.
- Technical specifications of software, cost and method of procurement.
- Time required completing the construction.
- Labour costs assayed in monthly wages.
- Administrative and other costs incurred and distributed during the lifetime.
- Funding sources to determine the opportunity cost or financial cost.

2. Data base Operating Cost Calculation under European Funding

- Duration and rate of subsidy.

- Operating costs of production:
 - Rents.
 - Depreciation.
 - Cost of equipment maintenance.
 - Cost of labour expressed in monthly wages.
 - Insurance costs.
- Administrative and other operating expenses per month (e.g. user support, policy implementation, communication, etc.).
- Cost of potential partnerships with publishers and others involved in the system operation.
- Sources of funding.
- Opportunity costs or financial costs

3. Data base Operating Cost Calculation under a self-financing scheme

- Duration of utilization equipment.
- Cost to upgrade or renew equipment.
- Operating costs of production:
 - Rents.
 - Depreciation.
 - Depreciation of equipment replacement
 - Cost of equipment maintenance.
 - Cost of labour expressed in monthly wages.
 - Insurance costs.
- Administrative and other operating expenses per month.
- Cost of potential partnerships with publishers and others involved in the system operation.
- Sources of funding, potential customers.

Important Note for Operating Cost Calculation: The total cost including depreciation is closely connected with the volume of data (activities) to be covered and the calculations will be done by the method of flexible budgets for different levels of activity in order to determine the breakeven point given the sale price or to facilitate the determination of the selling price from the resulting cost.

Task 3. Cost-benefits analysis

The cost benefit analysis (CBA) of the OpenAIRE project will involve the following states.

1. Feasibility and option analysis

1.1 Option identification

Given the analysis of costs carried out in task 2, task 3 will try to identify, whenever possible, alternative options related to the implementation of the project related to design of the system in terms of technical and human infrastructure, operating conditions, expansions and

development. Option identification will take into account the existing OpenAIRE infrastructure and will identify options, which would provide an optimal combination with the existing conditions.

1.2 Feasibility analysis

At this stage we will identify potential constraints related to the project, such as technical, legal, or constraints related to the distributed nature of the project. In coordination with task 2 we will study and cost personnel and infrastructure requirements and maintenance requirements.

1.3 Option selection

Option and feasibility analysis from sections 1.1 and 1.2 will be combined to identify the option on which detailed CBA will be carried out.

2. Economic analysis

Economic analysis will use results from tasks 1 and 2 regarding the benefits and the cost of the option that has been chosen for implementation, in order to estimate the net social benefits of the OpenAIRE project.

In particular the following tasks will be carried out:

2.1 Determination of detailed cash flows for costs and benefits.

Costs identified and estimated in task 2 will be separated into total investment costs and total operating costs. Investment costs will mainly include equipment, software costs and hardware upgrading, while operating costs will include costs such as labour, energy, maintenance, and development.

Benefits will include the external and non-market benefits estimated in task 1 along with the financial revenues that the project could receive through pricing schemes related to provisions of services.

The cash flows of costs and benefits will be combined to provide the economic future cash flows denominated into euros and expressed in real terms. The cash flow of the project will thus provide the predicted future costs and benefits for a time horizon that will reflect the expected duration of the project.

In the EU guidelines “Guide to Cost Benefit Analysis of Investment Projects” for the period 2007-2013 a time horizon of 15 years is recommended for projects related to ‘other services’. We will use a time horizon of 15 years as a benchmark for projects cash flows and we will provide sensitivity analysis on this parameter.

2.2 Economic and Financial Performance.

The economic cash flow will be used to estimate the net present value (NPV), the internal rate of return (IRR), and the benefit-cost (B/C) ratio of the project.

We will estimate these performance indicators using as benchmark a pricing scenario where financial revenues are such that the project is at a break-even point with an NPV equal to zero before any external benefits are considered. This approach will provide valuable information regarding: (i) the size of the external benefits and their contribution to the social profitability of the project, (ii) whether the project can be justified on external benefits alone because it

has a positive social profitability without any financial revenues, (iii) the cash flow of the required revenues for the project to break-even financially, and (iv) the required flows of financial support if it is decided not to implement a break-even pricing policy. Relevant performance indicators will be estimated for the different sub-scenarios.

The use of a financial break-even-revenue scenario will also provide information for developing the financial plan in task 4.

For the choice of the social discount rate, which is required to obtain the NPV and the B/C, or to be used as cut-off rate in the context of the IRR, we will start by using as benchmarks the European Commission suggestion for the period of 2007-2013 of 5.5% for Cohesion countries and 3.5% for the others.

The use of benchmark discount rates implies the use of the standard exponential discounting approach. At a second stage we will use discount factors that capture the idea that societies' decisions should incorporate intergenerational altruism for long-term projects with strong social impacts. This is the case where the discount factor under hyperbolic discounting declines over time at a slower rate than the discount factor under standard exponential discounting. Thus, under hyperbolic discounting society values benefits and cost occurring in the distant future more relative to exponential discounting. Since the OpenAIRE project is expected to have strong social benefits through knowledge externalities that will accrue to future generations we will also use discount factors incorporating intergenerational altruism to estimate the NPV and the B/C of the project and we will compare these results with the traditional exponential discounting based on the benchmark social discount rates.

3 Risk Analysis

Given the uncertainties of the cash flows associated with future costs and benefits, risk analysis will provide an assessment of risks associated with the project and relevant impacts on the project's social performance.

We plan to perform, given the constraints imposed by possible lack of relevant information, sensitivity analysis and risk analysis using Monte Carlo simulations.

3.1 Sensitivity Analysis

This includes:

- Identification of 'sensitive variables' in the project's cash flows, which are variables, which will have significant impacts on the project's performance, if their future values vary around the mean forecast values, used to construct the cash flows. We expect that these sensitive variables will be associated with the external benefits of the project.
- The performance indicators obtained in stage 2.2 will be calculated with the sensitive variables changing by discrete amounts, say 5% each time, within a predetermined range of variation. This will provide information about the total change (swing) of the performance indicator (e.g. NPV), when the sensitive variable changes from its maximum to its minimum value.
- Tables and graphs (spider and tornado) will provide results of the sensitivity analysis. These results will approximate the sensitivity of the project's social profitability to the assumptions used for predicting costs and benefits, and will indicate the conditions under which the project's profitability is severely affected.

3.2 Monte Carlo Simulations

Monte Carlo simulation involves the assignment of specific probability distributions (e.g. uniform, triangular, and normal) to sensitive variables identified at the sensitivity analysis stage. Using random number generators, values for these variables will be selected from the assumed distributions, and the performance indicators obtained in stage 2.2 will be estimated for large number of repetitions (e.g. 2000-3000 times). The results of the Monte Carlo simulations are summarized in the frequency distribution, the cumulative distribution and the corresponding measures (e.g. mean, standard deviation, median) of the performance indicator. These measures, under a normality assumption, can be used to estimate confidence interval and test hypotheses for the project's performance. For example what is the probability that the project will have a positive NPV if only external benefits are considered? Sensitivity analysis and Monte Carlo simulations will provide a clear picture of the risks involved in the OpenAIRE project.

Task 4. Identify a sustainable and socio-economically acceptable business plan for OpenAIRE

The Business Plan will analyze in detail:

A. Causes, need and purposes of creating the new product / service, sources of income, the necessary allocation of resources and the desired / expected result.

- In particular, emphasis will be given on the following topics:
- Direct and quick dissemination of the results from various research efforts.
- Greater accessibility to those research results for relevant users (private and government entities, individuals and associations).
- Increased use of the generated information, which in turn will increase research processes and the use of the managed product.
- Improve the capacity of researchers to disclosure of their research.
- Overall benefit from the relevant interactions of the above mentioned issues.

B. Potential applications of the OpenAIRE Access Database based from relevant users developers - potential partners - prospective shareholders:

- Universities individually or in collaboration.
- Private research institutions.
- Public research institutions.
- Private firms.
- Public firms.

C. Recording of revenues and expenses on a cash-basis accounting and on an accrual-basis accounting from the Business Plan though five different scenarios, depending on the volume and type of services briefly summarized, but not limited, to following:

- Revenues:
 - Revenues from the public sector.
 - Revenues from the private sector.

- Revenues from researchers.
- Revenues from grants.
- Expenses:
 - Wages.
 - Secretarial support.
 - Operating and maintenance of hardware & software.
- Fees:
 - Counsel advisors.
 - Scientific advisors.
- Various operating costs:
 - Depreciation and amortization.
 - Rents.
 - Administrative and selling.
- Cash budgets:
 - Cash inflows.
 - Cash outflows.
 - Borrowing needs.

3. Work plan and expected results

In this section a detailed programme of the work to be undertaken is presented. The project is expected to last one year. The following activities are envisaged:

2013

- June: Kick-off in a major European city
- June: Methodology for cost analysis
- July/August: Stakeholder report
- August/September: Cost analysis report
- October: Business plan - cost benefit analysis
- November: Business plan interim report
- December: presentation of interim report/results at OpenAIRE workshop in Vilnius

2014

- March/April: Business plan for OpenAIRE - final report
- May: Presentation at the OpenAIRE conference in Athens, Greece

Expected results

Deadlines are indicative and depend on start of the contract.

Deliverable	Type	Due date
a. Methodology for cost analysis of OpenAIRE	Brief	June 2013

b. Stakeholder report - deliverable for task 1 and 2	Report	July/August 2013
c. Cost analysis report - deliverable for task 2	Report	August/September 2013
d. Business plan for OpenAIRE: cost benefit analysis - deliverable for task 3 and 4	Report	October 2013
e. Business plan for OpenAIRE: first version of plan	Interim report	November 2013
f. Business plan for OpenAIRE: final plan	Report	March/April 2014

4. Participants in the tender

The academics participant in the tender have:

- At least 5 years of experience in academia and/or consultancy.
- Extensive experience in economic analysis (cost benefit analysis, profit margin analysis etc.).
- Excellent knowledge of digital infrastructures for scholarly communication.
- Excellent written and communications skills in English.

All the researchers involved are affiliated to the Athens University of Economics and Business – Research Centre. A summary of relevant experience to undertake this project and evidence of engagement with the stakeholder community is presented in section 8: Short CVs.

5. Risk assessment

See section 2 Methodology.

5. Resources to be committed (including person effort and travel) and financial breakdown of the costs and all related financial information.

See appendix 2

7. Management structure

The Athens University of Economics and Business - Research Centre was established in 1983. It aims at providing the institutional framework which facilitates and supports the research carried out by Faculty members, in the general fields of economics, management and computing. Research at the Centre is carried out mainly by members of the academic staff of the University. Visiting scholars and short-term appointees may also engage in research activities. All research is undertaken with a view towards eventual publication in scholarly journals, discussion papers and monographs.

Administration and Finance

The Research Centre is a non-profit organisation governed by an executive board formed exclusively by Faculty members of the University. One of the Vice-Rectors is appointed by the Senate as its Chairman, while each Department appoints two members to the Board.

The research activities of the Centre are funded in two main ways: First, through various research grants from the European Commission, Greek Government Agencies and other public and private organizations. Second, through the overhead fee that the Centre collects from the various graduate and executive training activities.

The Centre accepts funds on the understanding that the sponsors or donors will not interfere in the development or the outcome of the research they finance.

Seminars, Research Workshops and Conferences

Regular training and executive seminars are organised by the Centre, addressed to managers in the public and private sectors of the Greek economy. Many of the Centre's seminars are subsidised by the European Social Fund (ESF).

Regular research workshops attended by faculty, doctoral students, and invited specialists from universities, government agencies, international organisations and private industry, are held at the Centre. During these workshops, progress reports of research projects under way, as well as completed research work, are presented and discussed.

In addition, the Centre assists the University in providing organisational support for national and international conferences. Many national and international conferences have been organised in the last decade. Example of such events organised by the Centre include the Annual Conference of the International Institute of Public Finance, the Annual Conference of the European Marketing Academy, the International Conference of the Decision Sciences Institute, the International Conference of the European Finance Association, the World Congress of the International Economic Association, the Annual Competition and Regulation Summer School and Conference (CRESSE), and many others.

Facilities

The Research Centre is located at 46, Kefallinia's Street and includes administration offices, meeting rooms, lecture rooms and computer labs. It is fully networked and has a high - speed connection with the University.

You can find more about the Research Centre, following the link: <http://www.rc.aueb.gr/>

8. Short CVs

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PHOEBE KOUNDOURI (LEADING RESEARCHER)	14
ANASTASIOS XEPAPADEAS	15
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JOHN SORROS	17
MARIANNA MOUSOULIDES	18
NIKOLAOS KOUROGENIS	19
OSIEL GONZÁLEZ DÁVILA	20
OYA Y. RIEGER	21
PETER A. XEPAPADEAS	22

PHOEBE KOUNDOURI

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Web page: <http://www.aueb.gr/users/koundouri/resees/index.html>

EDUCATION

- Ph.D. in Economics, University of Cambridge, Department of Economics, Faculty of Economics and Politics, 2000
- M.Sc. in Economics, (Ph.D. Course Work), University of Cambridge, Department of Economics, Faculty of Economics and Politics, 1996
- MPhil Economics (Distinction), University of Cambridge, Department of Economics, Faculty of Economics and Politics, 1995
- B.A. in Economics, (1st Class Honors) – Ronald L. Meeks Prize, University of Leicester, Department of Economics, Faculty of Social Sciences, 1994

RESEARCH PROJECTS

For a full list of funded research projects, see
<http://www.aueb.gr/users/koundouri/resees/projects.html>

PUBLICATIONS (SELECTED)

- Koundouri, P., Kougea, E., Stithou, M., Ala-Aho, P., Eskelinen, R., Karjalainen, T., Klove, B., Pulido-Velazquez, M., Reinikainen, K. and Rossi, P., 2012. The Value of Scientific Information on Climate Change: A Choice Experiment on Rokua esker, Finland. *Journal of Environmental Economics and Policy*, (1) 2012: 85-102.
<http://dx.doi.org/10.1080/21606544.2011.647450>
- Remoundou, K., Kountouris, Y. and Koundouri, P., 2012. Is the value of an environmental public good sensitive to the providing institution? *Resource and Energy Economics*. 34(3, September): 381-395. *Resource and Energy Economics*. 34: 381-395.
<http://dx.doi.org/10.1016/j.reseneeco.2012.03.002>
- Groom, B. & Koundouri, P. (2011) The Economics of Water Resource Allocation: Valuation Methods and Policy Implications. *Water Resources Allocation*. 2011: 89-109.
http://ec.europa.eu/environment/integration/research/newsalert/index_en.htm
- Koundouri, P., 2010. *Water Resources Allocation: Policy and Socioeconomic Issues in Cyprus*. Springer Publishing, Environment and Policy Series. ISBN: 978-90-481-9824-5 (164 pages) <http://dx.doi.org/10.1007/978-90-481-9825-2>
- Birol, E., Koundouri, P., and Kountouris, Y. Assessing the economic viability of alternative water resources in water scarce regions: The roles of economic valuation, cost-benefit analysis and discounting, 2009. *Ecological Economics* (doi: 10.1016/j.ecolecon.2009.10.008).
- Koundouri, P., and Kountouris, Y. and Remoundou, K., 2009. Valuing a Wind Farm Construction: A contingent valuation and Long-run Cost Benefit Analysis. *Energy Policy*. doi:10.1016/j.enpol.2009.01.036.
- Hepburn, C., and P. Koundouri, 2007. Cost-Benefit Analysis in Forest Management: The Effect of Declining Discount Rates. *Journal of Forest Economics*, doi: 10.1016/j.jfe.2007.02.008.

For a full list of publications and citations, see
<http://www.aueb.gr/users/koundouri/resees/research.html>

ADDITIONAL PROFESSIONAL EXPERIENCE

- Visiting Senior Research Fellow, London School of Economics and Political Science, Grantham Research Institute on Climate Change and the Environment. UK.
<http://www2.lse.ac.uk/GranthamInstitute/>
- Elected Board Member of the European Association of Environmental and Resource Economists (EAERE). <http://www.eaere.org/>
- Associate Editor, *Environmental and Resource Economics*. Springer. The Official Journal of the European Association of Environmental and Resource Economists.
<http://www.springer.com/economics/environmental/journal/10640>

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EDUCATION

- Ph.D. in Economics, University of Manchester, 1981
- M.A. in Economics, University of Manchester, 1977
- B.A. in Economics, University of Athens, 1976

RESEARCH PROGRAMS (SELECTED)

- MERMAID: Innovative Multi-purpose Offshore Platforms: Planning, Design and Operation, Task: Risk Analysis, EU-FP7, in progress.
- “Economic Evaluation of the Greek GENE BANK, Project Coordinator, LATSIS FOUNDATION, 2012.
- “Green National Accounts for the Greek Economy,” *Ministry of Environment, Energy and Climate Change*, Project Coordinator, 2010-2011.
- “The Impact of Climate Change in Greece,” *Bank of Greece*, 2009-2011 (Economic Evaluation of Impacts).
- “Green Measures in Greece,” *WWF Hellas*, Project Coordinator, 2009-2010 (Cost – Benefit analysis of Renewable Energy).

For a full list of funded research programs, see

<http://www.aueb.gr/users/xepapadeas/xepapadeas/D%5ECVENG.pdf>

PUBLICATIONS (RECENT)

- “Spatial Climate-Economic Models in the Design of Optimal Climate Policies across Locations”, (with W. Brock and G. Engstrom), (2013), *European Economic Review*, forthcoming.
- “Environmental Policy, First Nature Advantage and the Emergence of Economic Clusters” (with E. Kyriakopoulou), (2012), *Regional Science and Urban Economics*, doi:10.1016/j.regsciurbeco.2012.05006
- “The Role of Information Provision as a Policy Instrument to Supplement Environmental Taxes” (with E. Sartzetakis and E. Petrakis), (2012) *Environmental and Resource Economics*, 52: 347-368.
- “Pollution Control with Uncertain Stock Dynamics: When and How To Be Precautious” (with S. Athanassoglou), (2012), *Journal of Environmental Economics and Management*, 62: 304-320.
- “Uncertainty Aversion Robust Control and Asset Holdings” (with G. Vardas) (2012), *Quantitative Finance*. 1-15 iFirst
- “On the Optimal Taxation of Common-Pool Resources” (with G. Kossioris, M. Plexoyakis, and A. de Zeeuw), (2011), *Journal of Economic Dynamics and Control*, 35: 1868-1879
- “The Economics of Non-Point-Source Pollution” (2011), *Annual Reviews: Annual Review of Resource Economics*, 3, 355–373.

For a full list of publications and citations, see

<http://scholar.google.gr/citations?user=7WSbyAgAAAAJ&hl=en>

ADDITIONAL PROFESSIONAL EXPERIENCE

- Editor-in-Chief, *Environment and Development Economics*, Cambridge University Press, 2005 to date
 - Editorial Committee of the *Annual Review of Resource Economics*, 2011 to date
 - Chair of Board of Directors, Beijer Institute of Ecological Economics, Royal Swedish of Academy of Sciences, 2007-2011
 - President/Past President, European Association of Environmental and Resource Economists, 2004-2007
 - Coordinating Leading Author, Millennium Ecosystem Assessment, United Nations Environment Program, 2002-2005
-

GEORGIOS A. PAPANASTASOPOULOS

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Web page:

http://www.ode.unipi.gr/index.php?option=com_content&view=article&id=25%3Apapanast&catid=9&Itemid=14&lang=en

EDUCATION	<ul style="list-style-type: none">• PhD University of Piraeus, Department of Banking and Financial Management, 2007• M.Sc. University of Piraeus, Department of Banking and Financial Management, 2003• Ptyxion, University of Piraeus, Department of Banking and Financial Management, 2000
PREVIOUS POSITIONS	<ul style="list-style-type: none">• Visiting Lecturer in Accounting at Various Universities (Hellenic Open University, National and Kapodistrian University of Athens, National Technical University of Athens, University of Peloponnese University of Piraeus), 2004-2012.• Assistant External Auditor, Ernst & Young Hellas S.A. Department of Assurance and Business Advisory Services, 2003-2004.
OTHER PROFESSIONAL ACTIVITIES	<ul style="list-style-type: none">• Visiting Lecturer in Accounting at Various Universities (Athens University of Economics and Business, Technological Institute of Crete, Technological Institute of Piraeus)
PUBLICATIONS (SELECTED)	<ul style="list-style-type: none">• Papanastasopoulos, G., Thomakos, D. and Wang, T. (Forthcoming). Corporate Financing Activities, Fundamentals to Price Ratios and the Cross Section of Stock Returns. <i>Journal of Economic Studies (ABS: 2)</i>.• Hardouvelis, G., Papanastasopoulos, G., Thomakos, D. and Wang, T. (Forthcoming). External Financing, Growth and Stock Returns. <i>European Financial Management (ABS: 3, Impact Factor: 1.029)</i>.• Papanastasopoulos, G., Thomakos, D. and Wang, T. (2011). Accruals and the Performance of Stock Returns Following External Financing Activities. <i>The British Accounting Review (ABS: 3)</i>, vol. 43, pp. 214-229.• Papanastasopoulos, G., Thomakos, D. and Wang, T. (2011). Information in Balance Sheets about Future Stock Returns: Evidence from Net Operating Assets. <i>International Review of Financial Analysis (ABS: 3)</i>, vol. 20, pp. 269-282.• Papanastasopoulos, G., Thomakos, D. and Wang, T. (2010). The Implications of Retained and Distributed Earnings for Future Profitability and Stock Returns. <i>Review of Accounting and Finance (ABS: 1)</i>, vol. 9, pp. 395 – 423.• Papanastasopoulos, G. (2007). Using Option Theory and Fundamentals to Assess the Default Risk for Listed Firms. <i>International Journal of Accounting, Auditing and Performance Evaluation (ABS: 1)</i>, vol. 4, pp. 305-331.• Benos, A. and Papanastasopoulos, G. (2007). Extending the Merton Model: A Hybrid Approach to Assessing Credit Quality. <i>Mathematical and Computer Modeling (Impact Factor: 1.346)</i>, vol. 46, pp. 47-68.
TAUGHT COURSES	<ul style="list-style-type: none">• Undergraduate level: Financial Accounting, Cost Accounting, Financial Statement Analysis, Accounting for Companies, Group Accounting, Accounting Plans, Investments, Money and Capital Markets• Postgraduate level: Advanced Financial Accounting and Analysis, Managerial Accounting, Financial Statement Analysis, Special Topics in Accounting, International Financial and Reporting Standards, Accounting for Decisions, Accounting Theory and Research, Accounting Principles, Corporate Finance

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EDUCATION

- University of Piraeus, PhD in Business Administration
- Athens University of Economics, Bachelor in Business Administration

MOSR RECENT BUSINESS EXPERIENCE

- 2001 – 2004 Deputy General Manager in AGB Financial Leasing S.A.
- 1999 – 2001 Financial and Administrative Manager in OTE Financial Leasing S.A.
- 1996 – 1999 Investment Consultant
- 1994 - 1999 Financial and Administrative Manager in SYNEL SA a Fertilizer Merchant and Manufactory Company

TEACHING EXPERIENCE

- University of Piraeus, Cost and Financial Accounting, since 1993
- Aegean University, Shipping Accounting, 1999 – 2000
- Economic University of Athens, Cost Accounting, 2000 - 2002
- University of Patra, Financial and Tax Accounting, 2002 – 2003
- Hellenic Open University, Accounting, since 2007
- Several in-house seminars for Business Executives in Budgeting, Accounting and Financial Management since 1994

BOOKS

- Managerial Accounting, with C. Kazantzis, business Plus SA, Piraeus, 2012
- Cost Accounting Principles, with C. Kazantzis, Business Plus SA, Piraeus, 2009
- Problems and Solutions in Financial Accounting, with C. Kazantzis, Business Plus SA, Piraeus, 2005
- Problems and Solutions in Cost Accounting, with C. Kazantzis, Business Plus SA, Piraeus, 2006

ARTICLES AND CONFERENCES

- Author and Co-Author of 17 articles (13 published in international journals).
- Participated in various International Economic Conferences worldwide

PROFESSIONAL ORGANIZATIONS

- Member of Academic of Economics and Finance, USA
 - Member of the Greek Economic Chamber
 - Member of the Hellenic Financial and Accounting Association
-

MARIANNA MOUSOULIDES

Research Associate, Athens University of Economics and Business

The Cyprus Popular Bank Ltd (Laiki Bank)

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EDUCATION

- Professional Competence Certificate of Investment Services Firms (CIF) for Portfolio management – Ministry of Finance Examining Board of Cyprus, 2009
- MBA (Master of Business Administration) (Distinction) – University of Leicester, School of Management, Faculty of Social Sciences, U.K., 2008
- Associate of the Chartered Institute Of Bankers (ACIB) – An Institute of Financial Services Qualification, U.K., 2000
- Bachelor of Science in Financial Services (First Class Honours) – University of Manchester Business School (UMIST), 2000
- Bachelor of Arts (BA) in Economics (Upper Second Class Honours, II(i)) – University of Leicester, Department of Economics, Faculty of Social Sciences, 1993

PROFESSIONAL EXPERIENCE

- Branch Manager, Business development at branch level, The Cyprus Popular Bank Ltd (Laiki Bank) (Metochiou Branch, Nicosia, Agios Eleftherios Branch, Latsia), 2010-Present.
- Sales Officer, Retail Relationship officer and small business officer at the Main Branch Nicosia, The Cyprus Popular Bank Ltd (Laiki Bank), 2009-2010
- Officer Economic Research and Planning, Overview of the statistics issued by the Statistical Service of Cyprus and the Central Bank of Cyprus with the purpose of depicting and projecting the main macroeconomic figures and the National Accounts of Cyprus, 2004-2008
- Officer Investor Lending Unit, Settlement of problematic investor accounts as a result of the rapid fall of the Cyprus Stock Exchange in Cyprus, 2002-2004
- Accountant and Auditor Assistant, Delloite and Touche Audit and Accounting Firm, 1993-1995

For a detailed description, see:

<http://www.aueb.gr/users/koundouri/resees/uploads/Marianna%20Mousoulides.pdf>

RESEARCH PROJECTS

- MERMAID Economical, technical and environmental feasibility of multi-use Platforms, EU-FP7, in progress.
- AQUALIBRIUM: European Water Management between Regulation and Competition, funded by DG research European Commission
- AQUASTRESS: Solving Water Stress Problems by Integrating New Management, Economic and Institutional Instruments.
- SESAME: Southern European Seas: Assessing and Modelling the Changes in Ecosystems: European Commission, Directorate General Research e-LUP, Simulating Land Use Processes FP7.
- THESEUS: Innovative Coastal Technologies for Safer European Coasts in a Changing Climate.

PUBLICATIONS (SELECTED)

- Koundouri, P., Dávila, O.G., Stithou, M., Babalos, V., Xepapadeas, A., Anastasiou, I., Antypas, A., Kouronenis, N., Mousoulides, A., Mousoulidou, M., ..., Stuitver, M. (2013). "Methodology for Integrated Socio-Economic Assessment of Offshore Platforms: Towards Facilitation of the Implementation of the Marine Strategy Framework Directive" (Under review at *Environmental Impact Assessment Review*). Available at: http://wpa.deos.aueb.gr/wpa_show_paper.php?handle=1304
- Koundouri, P., Babalos, V., Stithou, M., Mousoulidou, M., Mousoulides, A., Anastasiou, I., Vasiliou, K. (2012) "A Micro-Econometric Approach to Deriving Use and Non-Use Values of in-situ Groundwater: The Vosvozis Case Study, Greece. In *The Handbook on Economics of Biodiversity and Ecosystems Services*", edited by P. A. Nunes, P. Kumar and T. Dedeurwaerdere, Edward Elgar Publishing Ltd, Cheltenham, UK. Forthcoming.

NIKOLAOS KOUROGENIS

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Assistant Professor, Econometrics / Quantitative Finance
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EDUCATION	<ul style="list-style-type: none">• Ph.D., Applied Mathematics, National Technical University of Athens, 1999• B.Sc., Mathematics, University of Athens, 1995
PUBLICATIONS (RECENT)	<ul style="list-style-type: none">• Antypas, A., Koundouri, P., Kourogenis, N. (2012). Aggregational gaussianity and Barely Infinite Variance in Financial Returns, <i>Journal of Empirical Finance</i>, forthcoming.• Kourogenis, Nikolaos; Pittis, Nikitas (2011). “Systematic Errors in Analysts' Forecasts and Tactical Asset Allocation” (in Greek), in G.A. Hardouvelis and C.V. Gortsos (eds.): The International Crisis, the Crisis in the Eurozone and the Greek Financial System. Hellenic Bank Association, Athens, Greece.• Koundouri, P., Kourogenis, N. (2011). On the Distribution of Crop Yields: Does the Central Limit Theorem Apply?, <i>American Journal of Agricultural Economics</i> 93, 1341-1357.• Kourogenis, Nikolaos; Pittis, Nikitas. (2011). Mixing Conditions, Central Limit Theorems and Invariance Principles: A Survey of the Literature with Some New Results on Heteroscedastic Sequences, <i>Econometric Reviews</i> 30, 88-108.• Kourogenis, Nikolaos; Pittis, Nikitas. (2010). Unbounded heteroscedasticity in firstorder autoregressive models and the Eicker–White asymptotic variance estimator, <i>Economics Letters</i> 106, 84-86.• Kourogenis, Nikolaos; Pittis, Nikitas. (2008). Testing for a Unit Root Under Errors with Just Barely Infinite Variance, <i>Journal of Time Series Analysis</i>, 29, 1066-1087.• Kourogenis, Nikolaos; Pittis, Nikitas. (2008). Cointegration, variance shifts and the limiting distribution of the OLS estimator. <i>Economics Letters</i>, 99, 103-106. <p>For a full list of publications and citations, see http://web.xrh.unipi.gr/index.php?option=com_content&view=article&id=31&Itemid=305&lang=en</p>
RESEARCH PROGRAMS (SELECTED)	<ul style="list-style-type: none">• “Integrated Management for the ASOPOS River Basin (Greece): Economic Efficiency, Social Equity and Environmental Sustainability.” Funded by The National Bank of Greece. (Partners: Andreas Papandreou Foundation, Athens University of Economics and Business, The Goulandris National History Museum, Greek Biotope/Wetland Centre, University of Cambridge, University of Venice, and many other European, US and Australian Universities, http://www.aueb.gr/users/resees/aswposproj.html (2009-2012). POSITION IN PROJECT: Researcher.• “MERMAID: Innovative Multi-purpose Offshore Platforms planning Designing and operation (FP7-OCEAN-20011).” European Commission, DG Research and Innovation, 7th Framework Programme: Directorate H - Transport (including Aeronautics). (2012-2016). POSITION IN PROJECT: Researcher.
RECENT CONFERENCE PRESENTATIONS	<ul style="list-style-type: none">• “Inference on Stable VAR around Nonlinear Trends under Nonstationary Volatility”, invited presentation at the Econometric Seminar of the Department of Quantitative Economics, University of Amsterdam, March 2012.• “Persistent stochastic betas and the statistical properties of stock returns”, 5th International conference on Computational and Financial Econometrics, London, UK, 19-22 December 2011.• “Volatility Trends and Optimal Portfolios: the Case of Agricultural Commodities”, XIIIth Congress of the European Association of Agricultural Economists, Zurich, Switzerland, ETH Zurich, August 30 to Sept. 2, 2011.

OSIEL GONZÁLEZ DÁVILA

Research Associate, Athens University of Economics and Business

Senior Teaching Fellow, SOAS-University of London

E-mail: osiel.davila@soas.ac.uk

Web page: <https://sites.google.com/site/osielgd/home>

EDUCATION

- PhD in Economics, SOAS-University of London, 2013
- MSc in Economics, University of Essex, 2009
- MRes in Environment and Development, University of Lancaster, 2008
- Specialization in Monetary and Financial Economics, Autonomous National University of Mexico, 2006
- BA in Economics, Autonomous Metropolitan University, Mexico, 2005

COLLABORTION IN RESEARCH PROJECTS

- MERMAID: Innovative Multi-purpose Offshore Platforms: Planning, Design and Operation, EU-FP7, in progress. Task: Integrated Socioeconomic Analysis.
- THESEUS: Innovative Coastal Technologies for Safer European Coasts in a Changing Climate. EU-FP7, in progress. Task: Cost Benefit Analysis.
- Integrated Water Resources Management in Asopos River Basin: Tasks: a) Benefits transfer estimation for the assessment of industrial pollution of water. b) Econometric analysis of agricultural production focusing on the shadow price of groundwater.

PUBLICATIONS (SELECTED)

- Dávila, O.G. (2013). Groundwater Contamination and Contingent Valuation of Safe Drinking Water in Guadalupe, Zacatecas, Mexico. SOAS Department of Economics Working Paper Series, No. 180, The School of Oriental and African Studies. Available at: <http://www.soas.ac.uk/economics/research/workingpapers/file82386.pdf>
- Koundouri, P., Dávila, O.G., Anastasiou, Y., Antypas, A., Mavrogiorgis, T., Mousoulides, A., Mousoulidou, M. and Vasiliou, K. (2013). An Econometric Analysis of Agricultural Production Focusing in the Shadow Price of Groundwater: Policies towards Socio-Economic Sustainability. In Koundouri, P. and N. Papandreou (eds.) (2013). *Water Resources Management Sustaining Socio-Economic Welfare: The Implementation of the European Water Framework Directive in Asopos River Basin in Greece*. Springer Publishing, Global Issues in Water Policy, Series (Forthcoming). Available at: http://wpa.deos.aueb.gr/wpa_show_paper.php?handle=1313
- Koundouri, P., Papandreou, N., Stithou, M. and Dávila, O.G. (2013). A Value Transfer Approach for the Economic Estimation of Industrial Pollution: Policy Recommendations. In Koundouri, P. and N. Papandreou (eds.) (2013). *Water Resources Management Sustaining Socio-Economic Welfare: The Implementation of the European Water Framework Directive in Asopos River Basin in Greece*. Springer Publishing, Global Issues in Water Policy, Series (Forthcoming). Available at: http://wpa.deos.aueb.gr/wpa_show_paper.php?handle=1315
- Dávila, O.G. (2010). "Food Security and Poverty in Mexico: The Impact of Higher Global Food Prices." *Food Security*, Volume 2, Issue 4, pp. 383 - 393. doi: 10.1007/s12571-010-0077-0

ADDITIONAL EXPERIENCE

- Experience conducting Contingent Valuation of public goods and Field Experiments (survey design and implementation), using the Logical Framework Approach (LFA) method and conducting Participatory Rural Appraisal.
 - Confident user of STATA, SPSS, E-Views and FRONTIER for statistical and econometric analysis. Advanced knowledge of MATLAB for non-parametric econometric analysis. Confident user of all Microsoft Office applications. Database design and research.
-

OYA Y. RIEGER

Research Associate, Athens University of Economics and Business
Associate University Librarian,
Digital Scholarship & Preservation Services
arXiv Program Director
Cornell University Library, Ithaca, NY 14853
E-mail: rieger@cornell.edu

Web page: <http://vivo.cornell.edu/display/individual23129>

Rieger oversees the Library's digitization, online repository, digital preservation, electronic publishing, and e-scholarship initiatives with a focus on needs assessment, requirements analysis, sustainability, business planning, and information policy development. Included in her program are Cornell's repositories and publishing systems such as arXiv and Euclid. She has provided leadership in various digitization and online publishing initiatives that explore and promote new models of scholarly communication.

EDUCATION

- Ph.D. in Human Computer Interaction, Cornell University, Department of Communication, 2009
- M.S. in Library Science, Columbia University, Concentration: Information Systems, 1991
- M.P.A. in Public Administration, University of Oklahoma, 1985
- B.S. in Economy and Administrative Sciences, Middle East Technical University, Turkey, 1983

RECENT PUBLICATIONS

- Oya Y. Rieger. Sustainability: Scholarly Repository as an Enterprise. *Bulletin of the American Society for Information Science and Technology*. October/November 2012
- Oya Y. Rieger Subject and Institutional Archives: Comparing the Examples of arXiv and Cornell's Institutional Repository. *Insights*. 25:103-106. 2012
- Oya Y. Rieger Assessing the Value of Open Access Information Systems: Making a Case for Community-Based Sustainability Models. *Journal of Library Administration*. 51:485-506. 2011
- Oya Y. Rieger Enduring Access to Special Collections: Challenges and Opportunities for Large-Scale Digitization Initiatives. *Journal of Rare Books, Manuscripts, and Cultural Heritage*. 11:11-22. 2010

RECENT PRESENTATIONS

- Business Model Development for Scientific Repositories, Research Data Access and Preservation Summit 2012
- Research Data Overview, Nordbib Konference 2012: Structural Frameworks for Open, Digital Research (Copenhagen, Denmark), 2012
- Social Informatics: An Analytical Framework for Understanding the Digital Practices of Humanities Scholars, Speaker, 4th International Conference on Qualitative and Quantitative Methods in Libraries 2012
- Preservation Status of e-Resources: A Potential Crisis in Electronic Journal Preservation, Coalition for Networked Information (CNI) Fall Membership Meeting 2011
- Role of Infrastructure for Sustainability, Berlin 9 Open Access Conference 2011

CURRENT MEMBERSHIPS

- National Digital Stewardship Alliance (NDSA), Infrastructure Working Group Member 2011 -
 - Center for Research Libraries (CRL), Trusted Digital Repositories Certification Advisory Panel Member 2009 -
 - Association of Research Libraries (ARL), Digital Repository Task Force Member 2007 - 2010
-

PETER A. XEPAPADEAS

Research Associate, Athens University of Economics and Business

Address: Eretheiou 16 Alimos, Athens 17455

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EDUCATION

- B.Sc. in Informatics (Specialization: Databases and Knowledge Management), Department of Informatics, Athens University of Economics and Business, 2012
- 3rd High School, Rethymno, Crete, 2006

EXPERIENCE

- Preliminary risk analysis in a Cost-Benefit Study under the MERMAID program (EU, FP7) using sensitivity analysis methods and Monte Carlo simulations (SensIt and RiskSim software), January – March 2013
- Design, construction and maintenance of the website for the research program Excellence, “Spatiotemporal Dynamics in Economics”, at www.aueb.gr/excellencediees/spatemdec December 2012 – present
- Processing of GDP per capita, education and health data from the World Bank database for 179 countries for the period 1960-2011, using MS Excel, to construct dispersion diagrams, for the research program Thalis “Optimal Management of Dynamical Systems of the Economy and the Environment”, October – December 2012
- Design and construction of a database for the manuscripts submitted to the scientific journal Environment and Development Economics (Cambridge University Press journal with the Editorial Office at AUEB) and use of SQL to create queries and provide statistical information, June – July 2012

**ADDITIONAL
QUALIFICATIONS**

- Excellent knowledge of the English language – IELTS, grade 8.5 out of 9.0, October 2012
 - Professional Web Site Design (12 hour seminar), January 2013
 - HTML Dreamweaver Javascript CSS (12 hour seminar), February 2013
 - Knowledge of programming languages: Java, SQL, HTML and Telos
 - Knowledge of application software: Matlab, Mathematica, Excel (Solver, RiskSim, SensIt), Dreamweaver
-