



ΣΠΟΥΔΑΙ / SPOUDAI

Journal of Economics and Business

Volume 62

January - June 2012

Issue 1-2

Σπουδαί

<http://spoudai.unipi.gr>

AN ACADEMY OF ATHENS AWARD
PUBLISHED SINCE 1950

UNIVERSITY OF PIRAEUS



University of Piraeus

www.unipi.gr

SPOUDAI is a peer-reviewed journal, publishing rigorous analytical papers, theoretical and empirical that deal with contemporary economic and business issues. It fosters both theoretical and quantitative contributions to Economics and Business. SPOUDAI not only serves as a link between theorists and practitioners, but also builds a bridge between economists and their colleagues in related fields. Contributions which make use of the methods of mathematics, statistics and operations research will be welcomed, provided the conclusions are factual and properly explained.



Indexed in Journal of Economic Literature (EconLit Database)

Published since 1950

Awarded by the Academy of Athens

PRINT ISSN 1105-8919

ONLINE ISSN 2241-424X

Editor-In-Chief

Prof. Evangelos Sambracos

Secretariat:

Konstantinos Yannelis, Eirini Ramfou

SPOUDAI Journal of Economics and Business

University of Piraeus

80, Karaoli - Dimitriou 18534 Piraeus

Greece

Phone: +302104142296

URL: spoudai.unipi.gr

Email: spoudai@unipi.gr

Publisher: University of Piraeus

Published by: **EPTALOFOS S.A.**



12-16 Arditou Str., 116 36 Athens, Greece

Tel.: (0030) 210.921.7513, 210.921.4820 • Fax: 210.923.7033

www.eptalofos.gr • e-mail: info@eptalofos.gr



ΣΠΟΥΔΑΙ / SPOUDAI

Journal of Economics and Business

Volume 62 (2012)

Issue 1-2

UNIVERSITY OF PIRAEUS

Editor-In-Chief

Evangelos A. Sambracos, Department of Economics, University of Piraeus

Former Editors-In-Chief

Stratos K. Papaioannou (1950-1959)

Claudio V. Bantaloukas (1960-1969)

Stylios A. Sarantides (1970-2010)

Editorial Board

Stylios Sarantides ,	Honorary Editor-In-Chief, University of Piraeus
Ghristos Agiakloglou ,	University of Piraeus
George Alogoskoufis ,	Athens University of Economics and Business
Nickolas Apergis ,	University of Piraeus
Theodore Artikis ,	University of Piraeus
George Avlonitis ,	Athens University of Economics and Business
Theofanis Benos ,	University of Piraeus
George Bitros ,	Athens University of Economics and Business
Nicholaos Blesseos ,	University of Piraeus
George Bohoris ,	University of Piraeus
Sophocles Brissimis ,	University of Piraeus
Sofronis Clerides ,	University of Cyprus
George Demopoulos ,	Athens University of Economics and Business
George Diakogiannis ,	University of Piraeus
Constantine Drakatos ,	Member of the Athens Academy
Emmanuel Drandakis ,	Athens University of Economics and Business
Nicholaos Georgopoulos ,	University of Piraeus
Nicholaos Ghianakopoulos ,	University of Piraeus
Dionyssios Glykopantis ,	City University, London
Joseph Hassid ,	University of Piraeus
Hercules Haralambides ,	Erasmus University, Rotterdam
George Karathanasis ,	Athens University of Economics and Business
Sotiris Karvounis ,	University of Piraeus
Theodore Katsanevas ,	University of Piraeus
Angelos Kotios ,	University of Piraeus
Athanasios Kouremenos ,	University of Piraeus
Markos Koutras ,	University of Piraeus
Spyros Lioukas ,	Athens University of Economics and Business
Anastasios Malliaris ,	Loyola University of Chicago, U.S.A.
Panos Pashiardes ,	University of Cyprus
Yannis Pollalis ,	University of Piraeus
Gregory Prastacos ,	Athens University of Economics and Business
Euthimios Pournarakis ,	Athens University of Economics and Business
Theodore Skountzos ,	University of Piraeus
Nikolaos Travlos ,	Athens Laboratory of Business Administration
Angelos Tsaklanganos ,	University of Thessaloniki
Giannis Vavouras ,	Panteion University of Social and Political Sciences
Demetrios Xouris ,	University of Macedonia, Greece
Nicholaos Yannelis ,	University of Illinois, U.S.A.

ΣΠΟΥΔΑΙ / SPOUDAI

Journal of Economics and Business

YEAR 2012	JANUARY-JUNE	VOL. 62	Issue 1-2
-----------	--------------	---------	-----------

Abstracts and keywords, Volume 62, Issue 1-2

Measuring Market Concentration in the Aegean Ferry System

*Alexander M. Goulielmos
Giannis Sitzimis*

JEL Classifications: K23, L11-13, L22, L43.

Keywords: Concentration, Greek ferry system, The ‘Hirschman-Herfindahl Index’, Deregulation.

The paper calculates the concentration in 6 major routes of the ‘Greek ferry system’ (2001-2010), important not only for international tourism, including Cruises, but also for the cohesion of the Greek space with EU. Worth noting is the consolidation of companies that took place, where from 25 companies operated (prior of 1994) to 5 groups (by 2012). This was due to: (1) the abolition of ‘cabotage’ (i.e. the right to restrict coastal services to national-flagged ships) by EU. The relevant legislation passed in 1992 with a

long transition period (1992-2004), and (2) the listing of ferry companies in Athens Stock Exchange. Frequent buy-outs increased the monopoly power of companies involved. The Greek ferry system was a par excellence state-regulated one since 1976, with State issuing licenses and determining fares, but failing to control quality. A measure of monopoly power was calculated, based on the work of Lerner, Herfindahl and Hirschman, known as the ‘Hirschman-Herfindahl Index’. After a brief examination of what is meant by ‘market’, we provided the values of HHI for the 6 routes: (1) Piraeus-Crete, (2) Piraeus-Chios-Mytilene, (3) Crete (Iraklion)-Piraeus, (4) Piraeus-Crete (Rethymno), (5) Piraeus-Dodecanese and (6) Piraeus-Cyclades. These show a distinct pattern of *oligopoly/monopoly*, with the traffic concentrated in a small group of companies. We argue that the number of ships of different companies in *one*

route determines the market. Neither partial (2002) or full (2006) deregulation had any effect in increasing competition, as expected, with the temporal exception in one or two cases. Moreover, Greek authorities had not prepared properly for deregulation and as a result failed either to prevent monopolies or to create the effective anti-trust regulation like in USA.

Final Supplier Selection System in Military Critical Items

*Christodoulos Nikou
Socrates J. Moschuris*

JEL Classifications: H56, H57, L39.

Keywords: Military Critical Items, AHP, TOPSIS-Fuzzy TOPSIS, Multivariate Statistical Analysis, Business Intelligence, Voronoi Diagrams.

The financial plans of the Greek Ministry of Defense (MoD) for the year 2013 include a big amount of money in support of the national defense system. Nevertheless, comparing MoD's annual budgets of the last two years, we can see that in 2013 less money than in 2012 were allocated to the MoD by the Government. This budgetary reduction could lead to the need for improvement in all phases of MoD's function so that with limited resources, an even better result can be achieved. Supplier selection procedures could not be an exception, especially when it comes to critical supplies and services. Selecting Suppliers in

military Critical Safety Items has multi-level features and many factors get involved. This paper develops a conceptual evaluation model based on Public Procurement Law in Defence (3978/2011), Analytic Hierarchy Process and Fuzzy Technique Order Performance by Similarity Ideal Solution. Multivariate Statistical Analysis (i.e. Principal Component Analysis, Factor Analysis and Cluster Analysis) and Quality tools are added to the model, while Business Intelligence/Competitive Intelligence is proposed as an additional tool to deal with the strong competitive environment of our days in a worldwide level. The use of Voronoi diagrams is also suggested as a technique that could affect criteria which are linked with the location of a potential supplier. We believe that the proposed model could end up in improving supplier selection procedures as it integrates contemporary approaches seen in the relevant academic literature with some of the particularities of the Armed Forces.

European Monetary Union and Foreign Direct Investment Inflows

*Pantelis Pantelidis
Dimitrios Kyrkilis
Efthymios Nikolopoulos*

JEL Classifications: F10, F30, O50.
Keywords: FDI, EMU, euro.

The aim of this paper is to construct and test a model explaining the in-

ward Foreign Direct Investment (FDI) position of various members of European Monetary Union (EMU), on the basis of their location advantages during 1980-2010 period. The model focuses on the impact of EMU on FDI inflows and indicates that the monetary union has differentiated impact on FDI inflows across individual member countries. Euro zone membership is statistically significant but a negative determinant in the cases of Greece, Portugal, France, Belgium and Spain. Furthermore, for both Germany and Ireland the Euro area membership is a negative but statistically insignificant FDI inflow factor, while in the cases of Netherlands and Finland it is positive but also statistically insignificant. The results imply that countries with low competitiveness have not gained from the entrance in European Monetary Union, in terms of Foreign Direct Investment inflows.

Educational Stock and Economic Growth. The Case of Greece Over the Period 1981-2009

Panagiotis Pegkas

JEL Classifications: O40, O41, O47, I21, I25.

Keywords: Economic growth, Education, Human capital, Greece, Cointegration, Lucas model.

This paper examines the impact of education on economic growth in

Greece over the period 1981- 2009 by applying the model with two sectors introduced by Lucas (1988). The findings of the empirical analysis reveal that there is no long-run relation between educational stock and output. In the short run educational stock has had a statistically insignificant negative effect on economic growth. The econometric model explained 64% up to 72% of the variation of the economic growth rate through the variation of the independent variables. By checking the assumption of scale returns of the model, the results showed that the human capital stock grows but at a decreasing rate, so the endogenous character of the economic growth is not verified.

Women's Time Use with ICT and Physical Travel in Greek Urban and Rural Areas

*Amalia Polydoropoulou
Athena Tsirimpa*

JEL Classifications: R, O, Z13.

Keywords: Women, ICT, Activities, Time use.

Information and Communications Technologies (ICT) can contribute to the modification and development of new patterns of behaviour by individuals in their everyday lives. The implementation of e-activities such as teleworking, tele-education or tele-shopping cut down the need for physical mobility thus enabling individuals to

manage and tailor their time to their optimum advantage. On the other hand, e-activities can be complementary to physical activities or can even bring up derived demand for travel for new activities. This paper seeks to obtain more insight into how women in Greece allocate their time during a typical weekday/week to various types of activities while, it explores the role of ICT during the activities being conducted. A computerized telephone (CATI) survey took place in 2009 and involved the collection of 500 questionnaires. The analysis of the data collected shows that women living in less favourable regions, prefer to use traditional means of transport for their usual activities, mainly due to

their limited familiarity with the use of computers and to the smoother traffic conditions. Moreover, women with children tend to use e-means for longer periods, when executing specific activities during a typical weekday/week. The future scenarios show that under certain conditions (i.e. ICT accessibility, traffic conditions, governmental incentives) the activity may bring more utility if carried out via ICT than by physical travel. For some women, “virtual mobility” offers attractive advantages in the context of much of their administrative personal business (administrative chores, financial transactions, comparison shopping, etc.), some of their retail trips and perhaps their daily commute.