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#### Published Research in Scientific Journals with Reviewing

### 1. Culture, Performance and Banking Acquisition Value in an era of increasing risks. Global findings.

20th Annual Conference of the Multinational Finance Society, Izmir, Turkey, 30 June – 3 July 2013, with Vergos K.

Abstract: This study investigates whether cultural factors and performance affect Mergers and Acquisitions (M&As) value creation in Europe. Northern America and Asia after the financial crisis of 2007. It is also examined whether the magnitude and degree of the effect of these factors change, when compared to the pre-crisis period. If these factors become more or less significant after crisis, then timing strategies that take account of these factors should reflect these developments. To examine the hypothesis, abnormal returns are investigated for the largest bank-to-bank mergers for the period 2002 to 2012. We examine whether the Hofstede cultural dimensions are associated with high market returns for Target companies, Acquirers and Joint market value returns, after accounting for size and efficiency control variables. By computing Abnormal Returns, we found that there is some evidence that supports the hypothesis that some cultural factors remain statistically significant. Our results are partly in line with findings from previous researches, regarding Target Banks. Our findings provide support for the hypothesis that cultural factors have been associated with benefits for the joint bank value. Our findings are significant for fund managers and regulators. If mergers are associated with increasing market value when cultural factors exist then managers should focus on investments where these factors are evident. Our findings are also useful to fund managers because they provide an indication about post-announcement gains for involved banks, so fund strategies could take advantage of these findings.

#### 2. Is the application of Simple Trading Rules a powerful tool for Profitability Prediction?: the case of the FTSE-20 of the Athens Exchange

European Journal of Scientific Research, Volume 103 Issue 2 (2013), with Demiri, G., Dokas, I. and Vergos K.

Abstract: The aim of this paper is to test the profitability predicting power of firms, by using Moving Average (MA), the simplest and most popular trading rule. The Index FTSE-20 of the Athens Exchange (ASE) is employed in order to compare the ability of this technique with the performance of a buy-and-hold strategy to earn excessive profits. The rules of the Moving Average are applied with bands of various periods and RSI Oscillator and SI Oscillator. In the empirical analysis daily stock values of the 20 largest capitalised firms of the ASE are elaborated for the period 2004-2012. The results are encouraging, particularly, for the effectiveness of simple moving averages, while for the efficiency of the oscillators the results are rather discouraging. The investment strategies are suited for short investment periods as long the excessive profits "evaporate" as the time passes and the transaction costs increase. The statistical significance of the results is controlled by the t-statistics, accepting the possibility of error due to non-normality of the data, while, the Granger Casualty test is also applied. Finally, linear and EGARCH models are estimated in order to predict the future price changes of the FTSE20 Index. It is concluded that the linear model is satisfactory in terms of interpretation and predictability while the estimated EGARCH model is more complicated and its predictability is lower than that of the linear model.

#### 3. Do banking acquisitions create value in an era of deregulations and increasing risks? Recent findings in the US

Global Journal of International Business Research Vol. 5 No. 5 2013 with Vergos, K.

Abstract: This study investigates whether Mergers and Acquisitions (M&As) continue to be an effective means of capital allocation in periods of increasing risks and decreasing banking regulation. To examine this hypothesis, abnormal returns are investigated for the largest bank-to-bank mergers in the US for the period 2005 to 2011. We find that M&As are associated with high market returns for Target companies, negative returns for Acquirers and positive Joint market value returns. By computing standardised Cumulative Abnormal Returns (SCARs), we find that the gains for Target banks are statistically significant. In particular we find that on a 3-day event window, Target Banks appreciated approximately by 9.7% while bidders lose approximately 0.45% of their value for the same period. Average appreciation of the market value of target companies for an 11-day event window is estimated at 22.94%. Our results are in line with the findings of previous studies based on US data. Nevertheless we found abnormal returns for Target Banks that are significantly higher than in other studies. Abnormal returns before the announcement day are significant, whilst the abnormal returns after

the announcement day are not significant. Our findings provide support for the hypothesis that deregulation has been associated with benefits for the joint bank value, albeit not statistical significant. Our findings are significant for fund managers and regulators. If mergers are associated with increasing market value then they decrease the risk of the institutions involved. Our findings are also useful to fund managers because they provide an indication that there are no post-announcement gains for involved banks, so fund strategies could reduce post-announcement investments in banks that are involved in M&As.

#### 4. The estimation of corporate liquidity management using artificial neural networks

International Journal of Financial Engineering and Risk Management (IJFERM) (forthcoming, September 2013), with Dokas, I. and Mantzaris, D.

Abstract: In this paper computational intelligence techniques are applied based on Artificial Neural Networks (ANNs) in order to investigate the liquidity performance of Greek listed firms. The effectiveness in managing their liquid assets is estimated with Multi-Layer Perceptrons (MLPs) and Probabilistic Neural Networks (PNNs) based on a set of financial ratios. Various MPL architectures are examined after modifying the number of nodes in the hidden layer, the transfer functions and the learning algorithms. The PNNs use spread values from 0.1 to 50, and 3 or 2 neurons in output layer, according to the coding of corporate liquidity management outcome. A PNN of 10-55-2 architecture is implemented to estimate the effectiveness of liquid assets management of Greek listed firms. We conclude that PNNs outperform MLPs, proved to be an appropriate computational intelligence technique for liquidity management estimation since the proposed PNN evaluate firm's liquidity classification with 98.46% accuracy over the testing cases.

#### 5. Macroeconomic factors and company value in the context of the Ohlson residual income valuation model: Empirical Findings from Greece

International Journal of Sustainable Economies Management, 2(2), 1-11, April-June 2013, with Vergos, K. and Kalogirou, V.

Abstract: Over the past decades the Ohlson Residual Income Model for equity valuation has drawn much attention concerning its advantages when compared to traditional models (DDM, FCFM). This paper attempts to empirically investigate the validity of the Ohlson Residual Income model using data from the Greek economy over the period 1969-2001. By using multiple regression analysis and by incorporating macroeconomic factors as explanatory variables, we investigate the link of accounting and macroeconomic factors in the market valuation of major Greek companies listed in the Athens Stock exchange. We find that the performance of the Ohlson Residual Income Model is quite satisfactory and the use of factors such as commodity prices, discount rates, and market level in some cases add to the explanatory power of the examined model. Our findings are important for both economists and fund managers, because they show that a relation between accounting and macroeconomic data is valid in the Greek market and economy, alongside more developed markets.

### 6. The economic crisis and the IT industry in the USA: An empirical study

9<sup>th</sup> International AFE Conference in Samos Island (Advances Financial Economics), June 2012, with Vergos, K., Pan, Q. and Ozturk, P.

Abstract: This paper examines the effect of ICT investments on the economy and vice versa in the context of an economic crisis. The empirical analysis examines US data during the period 1969-2011. Initially we estimate the effect of GDP growth on the ICT industry associated with by examining the relation of economy growth to ICT sales, ICT profitability and changes in employment rate, and then we estimate the effect of ICT investments on the economy. Our study shows that ICT investments are affected by GDP growth but not by the recession period. We also find that ICT investments lead to significant GDP growth and employment growth. However, when accounting for other, non ICT private investments, the role of ICT investments for GDP growth and employment is not found significant. Our study provides evidence that ICT investment policy is a significant tool to foster GDP growth and employment in the US, but only in the context of an overall private investment policy initiative. The empirical results are interesting since they provide support for the joint use of ICT and other types of investments for the reduction of unemployment and the increase of economic growth in US and possibly for other countries, so tax incentives for ICT investments should require investments in supplementary to ICT areas. Our findings can be used by policy makers and by macro analysts who estimate the effect of tax incentives for national and regional economies.

#### 7. A panel analysis of large and mid cap stocks in the Athens Stock Exchange for the period 2005-2008

9<sup>th</sup> International AFE Conference in Samos Island (Advances Financial Economics), June 2012, with Gioldasis, G. and Vergos, K.

Abstract: The influence of firm characteristics to stock prices is a common subject of discussion among scientists and an always triggering question to be studied. In contrast to the major amount of literature that questions the relation between firm characteristics and stock value in foreign countries, only few studies are accomplished to describe this relation in Greece. This study attempts to 'depict' the relation between the percentage change in stock value and firm characteristics such as dividend yield, leverage, total assets turnover ratio, liquidity, return on assets, capital intensity and finally price to earnings ratio. Stocks of the FTSE 20 and FTSE 40 Athens Stock Exchange Index where examined. The period from 2005 to 2008 was considered. Consequently, an interesting change to the relation between firm characteristics and stock price was captured.

### 8. Is the issuing of executive stock options a 'positive signal' for the market value of a firm? The Greek evidence

3rd Early Career Academics' Research Development Program in Istanbul, 15-17 May 2012, with Vergos, K.

Abstract: Executive Stock Options are believed to provide an incentive for superior management performance, a key for increasing shareholder value. In this paper it is examined whether stock options are associated with positive or negative shareholder returns in the short run in the Greek market by examining evidence from 35 major companies listed on the Athens Stock Exchange during the 2006-2007 period. The empirical results reject the hypothesis that stock options provide positive market returns in the long run. We also find that the effect of stock options is increasingly negative for the company market value in the short run up to twelve months. Our findings indicates that the issue of executive stock options should be of a closer focus by regulators, shareholders and probably tax authorities, because they combine significant tax benefits to managers whilst leading to high negative effect to shareholder value.

# 9. Can real options enhance company survival and company survival prediction? The case of Altman's z-score and Ohlson's o-score models taking into account real options

"Multinational Finance Journal" (under review), with Vergos, K. and Dokas, I.

Abstract: This paper analyses whether Altman Z-score models and Ohlson's O-score model can predict correctly company failures under the existence of real options. The empirical analysis examines all listed in the Athens Exchange companies during the period 1995-2010 and discontinuations of operation for these companies during the same period. It is investigated whether Z-score and O-score models can predict bankruptcies for a period of four to eight years earlier. Our study shows that Altman model performs well in predicting failures if adjusted for the existence of real options. Our study provides evidence that companies that have some types of valuable real options can skip bankruptcy irrespectively of their reported z-scores, while Altman z-score model can predict quite successfully bankruptcies of companies that do not have these real options. We conclude that the Altman's z-score model has high bankruptcy predicting ability if we adjust for the existence of real options. We provide evidence that the adjustment of the z-score model increases its ability to predict company failures up to eight years before the bankruptcy takes place. In particular, our findings show that the existence of valuable options to expand, options to abandon for salvage value or options to switch use are associated with smaller possibility of default in the long run. The empirical results are interesting since they provide support for the joint use of the Altman's z-score model and the value of real options in capital markets in the long run. Our findings can be used by company management for financing decisions, by regulatory authorities and by portfolio managers in stock selection.

### 10. "The PIIGS stock markets before and after the 2008 financial crisis: A dynamic cointegration and causality analysis".

International Journal of Banking, Accounting and Finance (IJBAAF) (accepted August 2012), with Chouliaras, A., Kenourgions, D. and Kalantonis, P.

The scope of this paper is to investigate whether cointegration and causality relationships exist among the Europrean Stock Markets of the PIIGS countries: Portugal, Italy, Ireland, Greece and Spain, over the period 2005 - 2011. Our analysis is divided in two periods: 1 February 2005 - 30 June 2008 and 1 July 2008 - 30 June 2011. By testing whether such relationships exist among these stock markets, the Efficient Market Hypothesis is also being tested for each period, i.e. before and after the European financial crisis of 2008. Evidence of cointegration among these stock markets implies that the advantages of diversification over PIIGS are not significant. In addition, it proves that the specification of an optimal portfolio at the international level is not a

stress-free case; even in the case of countries with common currency. Particularly for the period 2008-2011, our findings for the PIIGS' financial markets are extremely important, since the European financial crisis becomes a systemic crisis which is expected to stress the entire Eurozone. In order to realize the above we implement a different tests such as Johansen cointegration, Gregory and Hansen residuals cointegration with regime shifts, fully modified ordinary leased squares while we apply a multivirate GARCH framework in order to model the volatility.

## 11. "Can work-sharing decrease unemployment while maintaining economic growth? A case study for six world leading economies".

Middle Eastern Finance and Economics (MEFE), issue 17 (2012), with Vergos, K. and Kosteletou, N.

Abstract: In this paper we investigate the effects of decreasing weekly working time, known as "work-sharing", on growth and unemployment in the world largest countries. We find that the decrease of standard time of work is associated with a reduction in unemployment in the long run. For every 10% decrease of working time, unemployment decreased by 3.37%. We also find that time-sharing is not associated with decreasing economy growth. Our results provide an indication that countries that promote work-sharing policies are associated with decreasing unemployment while being also competitive in the long run. These findings are interesting for policy makers. If the decrease of standard working time leads to a decrease of long-run unemployment, then worksharing should be a key to policymaking to promote social prosperity whilst keeping competition at high level. Given the small, if any, cost of work-sharing to government budget and the lack of governments to achieve a consistently costly expansionary investment policy, the contribution of work-sharing to achieve high employment, while keeping economy growth and government budget at sustainable level may be the main policy tool of economic prosperity in times of crises, given the lack of investment resources during recession. Our findings question the policy rationale behind working time increasing policies promoted by the European Commission and the EU including steps towards amending Working Time Directive 2003/88.

### 12. "Dynamic cointegrations among European national stock markets: The case of PIIGS".

The Southeuropean Review of Business Finance and Accounting (under publication), with Papathanasiou, S., Kalantonis, P. and Chouliaras, A.

The purpose of this paper is to test whether cointegration and causality relationships exists among the Europrean Stock Markets come to be known as the PIIGS, an acronym for Portugal, Italy, Ireland, Greece and Spain. By testing whether such kind of relationships exist among these stock markets, the Efficient Market Hypothesis is also being tested. Possible evidence of cointegration among these stock markets will show that the advantages one might have by internationally diversifying over these countries, are not significant. Furthermore, it will show that the selection of an optimal portfolio in an international level is not an easy case. Especially at this moment, investigating the financial markets of the PIIGS is extremely important, since Europe faces the most severe financial crisis of its history.

### 13. "Asset markets linkages and contagion during the global financial crisis".

HFAA Conference Piraeus 16-17 December 2011, "Multinational Finance Journal" (under final review), with Kenourgios, D.

This paper investigates the contagion effects of the global financial crisis (2007-2009) across multiple asset markets and regions. We use daily return data of six asset classes for the period 2000-2009: stocks, bonds, commodities, shipping, foreign exchange and real estate. Conventional cointegration and vector error correction analyses show a long-run relationship and strong interactions among asset classes, with the exception of regional emerging market indices, commodities and shipping indices. However, due to shortcomings of those approaches, we provide a more robust analysis of financial contagion by estimating and comparing asymmetric conditional correlations among asset markets during pre- and post-crisis periods. Results provide evidence for a correlated-information channel as a contagion mechanism among U.S. stocks, real estate and commodities. However, our findings support the decoupling of BRIC, shipping and foreign exchange value of the U.S. dollar indices to the financial crisis, and a flight to quality from risky U.S. assets (stocks and real estate) to German bonds. This evidence has important implications for portfolio diversification strategies and the future work of policymakers around the world.

### 14. "Measuring the Impact of Financial Crisis on International Markets: an application of Financial Stress Index".

Review of European Studies, Vol.3, No.1 June 2011, with Mylonakis, J. and Koromilas, C.

Abstract: The scope of paper is to examine whether the recent financial crisis has had any impact on international capital markets and more

precisely on the 4 primary international stock markets of England, France, Japan, the United States and Greece. The research is based on the use of the Financial Stress Index (FSI) from July 2005 until December 2008 and August 2009. Research results showed that the recent financial crisis has had a negative impact on all examined markets, with the Tokyo stock exchange being the one mostly affected. It was, also, found increased variability of performances following the start of the financial crisis, a fact that is indicative of the presence of conditional heteroscedasticity. As far as the Greek market is concerned, the recent financial crisis has not affected in general the credit expansion towards enterprises and households; however, it has affected the credit expansion to enterprises and households on a caseto-case basis.

## 15. "Could Lehman Brothers' Collapse Be Anticipated? An Examination Using CAMELS Rating System".

International Business Research, Vol. 4, No 2 Apr. 2011, Published by Canadian Center of Science and Education, with Mylonakis, J. and Diktapanidis, P.

Abstract: The collapse of Lehman Brothers, the largest investment bank that has ever declared bankrupt has had a major impact among economies and in most stock markets across the globe. For this reason, the case of Lehman Brothers is being examined by analysing its financial particulars of the last five years (2003-2007) using the CAMELS ratios. Research results showed that its credits were found as bad and doubtful while its management appeared to be unwilling and unable to reverse its declining course. Also, the management was not complying with the rules set by the supervisory authorities while the risk management methods followed is regarded as insufficient proportionally to its size. Finally, the bank appeared to be vulnerable against risks or unstable conditions while the supervisory authorities and the US Federal Reserve should have foreseen that Lehman Brothers presented several signs of decline and react accordingly.

#### 16. "Economies of Scale and Concentration in the Greek and the Norwegian Aquaculture Industry. An empirical Study".

Int.J.Buss.Mgt.Eco.Res., Vol 1(1),2010,70-78, with Vergos, K., Krystallidis, P. and Papandroni, O.

Abstract: The purpose of this study is to investigate whether there are economies of scale in the Greek and Norwegian fish farming industry, and to examine the structure of the sector. To investigate economies of scale, use the Cobb-Douglas production function, while we examine the structure of the fish-farming by computing the HHI indicator over different years. We find that the market concentration level is high in Greece in both relative, to Norway, and in absolute terms. From the other part, Norway, the leader of the fish farming of Atlantic salmon and Rainbow trout globally, suffers from economies of scale in the examined period. Given the fact that both Greek and Norwegian production is targeting large markets in Europe (UK, France, Italy) both the findings in Greece and Norway may be worrying signals, that large M&A activity may lead to decreasing competition and increasing returns to scale in the industry, as previously happened in the food retail industry. Given the important contribution of fish farming to poverty alleviation, food security and social well-being, European regulators should investigate whether it is optimal to exercise policies that enhance technology transfer and limit further market concentration.

#### 17. "Volatility of a stock index as thermodynamic fluctuation".

7<sup>th</sup> International AFE Conference in Samos Island (Advances Financial Economics), July 2010, with Zarikas, V. and Rendoumis, V.

Abstract: This paper describes a new empirical model that has been developed in order to encompass the phenomena of up and down trends and the related volatility of stock indices. The approach follows ideas established in the context of statistical thermodynamics. The model is based on the thermodynamic behaviour of a system in contact with reservoirs and it is capable to describe the macroscopic properties of stock markets. A novel inherent to the model phenomenological explanation is proposed for the description of the volatility of a stock index. The model encompasses a mechanism for the fluctuations of the stock market indices.

#### 18. "Could Business Cycles and Economic Crises smooth out at a Reasonable cost? Empirical Findings from the US Economy".

EuroMed Journal of Business, Emerald Management eJournals, Vol. 5 Issue 1, 2010, with Vergos, K. and Mylonakis, J.

Abstract: The purpose of this paper is to investigate the effect of macroeconomic factors in income growth, as defined by IS-LM, and the relation between these factors and economic cycles. The sample under examination is the annual US data during the 1928-2007 periods, using the official data as released in the US Bureau of Economic Analysis, while for crisis the used data have been provided by the National Bureau of Economic Research, Graduate Center of the City University of New York. The examined Business Cycles, using the methodology developed by the National Bureau of Economic Research, Graduate

Center of the City University of New York. The research findings imply that government consumption expenditure growth is the most important factor that affects positively GDP growth. A change by 10% of Government consumption leads to 1.65% GDP growth. Also, the duration of crises is affected by lowering interest rates while being also affected by government and personal consumption. The findings are interesting for policy makers. The empirical findings of this study indicate that the role of private investments for Gross Domestic Product (GDP) growth may be over-rated among policy makers, given the low contribution of this factor to GDP growth. On the contrary, policies aiming at increasing the role of the state may lead to higher GDP growth and smaller economic crises. In line with other studies, it was found that interest rate policy limits the duration of economic cycles, though not affecting long-term growth. The paper contributes to the economics literature by adding a further insight into the possible mix of policy that could be followed by regulatory authorities and governments for both the boost of economy and the resolvement of economic crises.

#### 19. "Estimating the demand for ADSL and ISDN services in Greece".

Journal of Telecommunications Policy, Vol.33, Issue 10-11 Nov.–Dec. 2009, with Yannelis, D. and kalantzis, F.

Abstract: The aim of this paper is to investigate the demand for broadband services in Greece and to estimate the price elasticity of the demand for ADSL and ISDN services as well as the cross-price elasticity between the two services. The empirical analysis uses the 384 kbps connections since for the period examined, over 85% of the total ADSL customers in Greece are connected at this bandwidth. The empirical analysis is based on an ad-hoc specification of the demand equation, with no reference to the utility maximization problem of the representative consumer. The results of the analysis show that both demands are inelastic. In addition, cross-price elasticity for ADSL is negative, indicating that ISDN is a complement to ADSL, whereas the demand for ISDN is almost neutral to ADSL.

#### 20. "Tracing Long Run Interactions of Telecommunications Companies Stock Prices: A Cointegration Analysis".

International Research Journal of Finance and Economics (IRJFE), Issue 32 (2009), pp. 230-243, with Migiakis, P.

Abstract: In this study we investigate the long run interactions among major international telecommunications companies' equities in order to trace significant indications of synchronizations in their price

determination procedure. Using Johansen's cointegration Analysis we find strong evidence of existence of common factors in the telecommunications companies stock prices' international deterministic process, eliminating the idiosyncratic stochastic trends, thus leaving only one common stochastic trend out of the cointegration space, driving all of the system's variables' stochastic processes. Specifically serving our aim to trace evidence of integration among the major international telecommunications' companies stock prices, namely the prices of AT&T, NTT, BT, Deutsche Telecom and France Telecom, we use Cointegration Analysis for non-stationary time series in order to analyze the common stochastic trends and the exogeneity characteristics of the corresponding stock prices for the time period 1999:1 to 2005:12.

# 21. "Macroeconomic factors that affected Business cycles before the 50s, after the 80s and during the intermediate period: Empirical findings on the US economy".

International Research Journal of Finance and Economics (IRJFE), Issue 40 (2009), with Vergos, K. and Kosteletou, N.

Abstract: The aim of this paper is twofold. On the one hand, it is investigated which is the effect of macroeconomic factors in income growth, as defined by IS-LM, and on the other hand it is examined which is the relation between these factors and economic cycles. The aim of this paper goes further and examines whether the magnitude of the effect of these factors to GDP growth remains intact over time. The examination periods includes the years 1930-1949, 1950-1979 and 1980-2008. According to the results of the analysis, the government consumption expenditure growth is the most important factor that affects positively GDP growth. A change by 10% of Government consumption leads to 1.65% GDP growth. It is also examined which is the effect of Personal consumption expenditures to gross domestic product growth by breaking down personal consumption components, namely consumption for Durable goods, consumption for Nondurable goods and consumption for Services. A change in demand for Nondurable goods is found to be the major factor that affects GDP growth. This study also shows that the duration of crises is adversely affected by lowering interest rates while being equally affected by government consumption and private investments even after adjusting for different time periods. However, the effect of these factors is somewhat smaller after 1950, maybe due to increasing globalisation. The findings are interesting for policy makers. The empirical findings of this study indicate that the role of private investments for GDP growth may be over-rated among policy makers, given the low contribution of this factor to GDP growth. On the contrary, policies that aim in increasing role of the state may lead

to higher GDP growth and smaller economic crises. In line with other studies it is also found that interest rate policy affects the duration of economic cycles. However it is found that there is no effect on longterm growth.

## 22. "A thermodynamic description of the time evolution of a stock market index".

European Journal of Economics, Finance and Administrative Sciences (EJEFAS), ISSN1450-2887 Issue.16, with Zarikas, V. and Rendoumis, V.

Abstract: The scope of this paper is to present a phenomenological analysis for the time evolution of a Stock Index. The model which is introduced represents a new methodology for the description of the up and down trends of a stock index and also an example is presented referring to the Athens Stock Index (ASI). The day-by-day closing prizes of the ASI exhibit exponential laws. This behavior supports an alternative formalism based on the thermodynamic concepts of Physics in order to study the macroscopic properties of stock markets. Hence, the Newton's law of cooling is introduced as a pattern for up and down trends of the ASI. The results encourage us to construct a more complete thermodynamic model in order to understand the time evolution and the behavior of the ASI.

### 23. "Can Altman Z-score model predict business failures in Greece?"

Research Journal of International Studies (RJIS), Vol.12, October 2009, with Gerantonis, N. and Vergos, K.

Abstract: This paper analyses whether Altman Z-score models, can predict correctly company failures. The empirical analysis examines all listed in the Athens Exchange companies, during the period 2002-2008 and discontinuations of operation for these companies during the same period. It is investigated whether Z-score models can predict bankruptcies for a period up to three years earlier. Our study shows that Altman model performs well in predicting failures. This is in line with other findings. The empirical results are interesting since they can be used by company management for financing decisions, by regulatory authorities and by portfolio managers in stock selection.

#### 24. "A Research Study on the Strong Relationship between World Oil Prices Fluctuations and Consumer Price Indexes".

Rajiv Academy for Technology & Management (RATM), bi-annual peer-reviewed research journal Knowledge Hub, Vol.1, No.1. 2009,

Special Issue on International Business, with Mylonakis, J. and Alexopoulos, P.

Abstract: The effect of the international petroleum prices in a country's macroeconomic values, including the domestic Consumer Price Index (CPI), has intensely troubled economists, namely after the mid 70s. The scope of this paper is to approach the relationship between oil prices and inflation rates using empirical data for Germany, Greece and the United Kingdom. Monthly inflation data have been used (percentage of Consumer Price Index changes) covering the time period from January 1998 until January 2006. The research method used is that of Least Squares (LS) and the statistics are based on a series of calculations. like correlation coefficients, the standard error value, the t statistics and the R2 regression determination coefficient, as well as, the Durbin -Watson statistics and the Schwarz and Akaike criteria. Results showed that there is a strong positive correlation between domestic inflation rates and world oil prices for the cases of Germany and the United Kingdom and a slightly negative one for the case of Greece which is mainly due to comparatively much lower oil consumption taxes.

#### 25. "Globalisation and Broadband: The case of the Greek telecommunications market".

International Journal of Trade in Services (IJTS), Vol 1, Jan.-June 2009, with Vergos, K. and Kosteletou, N.

Abstract: The aim of this paper is twofold. On the one hand, we investigate whether the liberalization of telecommunications within the globalization process has benefited all participating countries and on the other hand, we examine within a country, which types of consumer have benefited more. The main question is whether the era of liberalization offers lower prices and better services and whose interests are served the most compared with the previous situation of publicly-owned monopolies. During state ownership, big telephony users like enterprises subsidized households as part of social policy. However, the transition towards competition does not allow the implementation of such social policy. The aim of this paper goes further and argues that in reality the subsidization has been reversed and households pay for advanced services that they do not really need, leading to a decrease in the average cost for users. In this way the big users, who really gain from the advanced services face a lower usage cost. According to our conclusions, either on a state level or at an individual level, liberalization has led the weaker to pay the cost. According to our arguments, the period of public utilities benefited more the weaker consumers, i.e. the households, whereas the era of liberalization has transferred the benefits to the big users, i.e. the business users.

## 26. "Liberalization of the fixed voice telephony and the possible effects on the Greek telecommunications sector in the long run".

International Journal of Trade in Services (IJTS), Vol. 1, Jan.-June 2009, with Vergos, K. and Kotsiri, K.

Abstract: Since the late 1990s, the telecommunications sector in most European countries has shown a significant structural transformation from national monopolies to competition. The European Commission (EC) decided that the liberalization process should be based on a smooth transition towards competition. Most of the European Union (E.U.) Member States fully liberalised their telecoms markets at the beginning of 1998, whereas some of them required a further extension. In 2001, Greece became the last member state which fully liberalised telecommunications. The aim of this paper is to examine the present structure of the Greek fixed voice telephony market and to investigate the optimum number of providers, in order for the sector to operate efficiently. A two-stage analysis is used where the first stage consists of specific financial models which we implement for each fixed voice telephony provider, in order to decide for their viability. Hereafter, we use different financial ratios, in order to verify that our findings from the first stage analysis are strengthened by the results of the second stage analysis. According to the results of our two-stage analysis, we also make suggestions for possible acquisitions between operators in order to become efficient and we comment on the future perspectives of the Greek telecommunications market.

## 27. "A Comparative Pricing Study of Five EU Member States In Fixed Voice Telephony".

International Review Journal of Management Research and Technology, Vol. 3 No. 1, pp. 189-206, with Mylonakis, J. and Vergos, K.

Abstract: The scope of this paper is to examine pricing policies in the fixed telephony market within five specific E.U. member-states, after the full liberalization of the telecoms sector. The study focuses on the local, long-distance and international call tariff schemes of the five European states during the period 1998-2006. The research results show that a few years after the liberalization of the market, prices have fallen, but not significantly. It is expected though, that technological progress in the future will stimulate a significant fall in prices, when the national regulatory authorities (NRAs) will set more clear guidelines and regulations.

## 28. "Investigation of the effectiveness of eighteen former public-owned telecom organizations using Data Envelopment Analysis (DEA)".

International Bulletin of Business Administration (IBBA). (accepted), with Papadimitriou, A.

Abstract: The aim of this paper investigates whether the administrations of the former telecom state monopolies succeeded in making productive the factors used, by taking advantage of the transformations that showed up as well as by adjusting to the new market conditions. The output shown is the Total Revenues of the eighteen organizations of the sample and the inputs consist of the productive factors, which are use in the analysis. These factors are staff, investments, marketing expenses, traffic of fixed telephony and traffic of mobile telephony. In order to estimate the efficiency of the administration of the former state monopolies, based on its inputs and outputs, the Data Envelopment Analysis (DEA) is used. According to the findings of this paper, marketing strategies of telecommunication organizations are characterized by the decline of the traditional marketing expenses and the increased efficiency of investments. On the other hand less employees and better exploitation of fixed and mobile telephony is required. The application driven development of the DEA methodology has led to different approaches in the international literature which has different uses and interpretations. This paper concentrates on the weight effects of specific variables on the efficiency of former state monopolies. The results of the study can be useful for efficiency in **Decision Making Units.** 

### 29. "The effects of acquisitions on the market value of the banking sector: An empirical analysis from Greece".

European Journal of Scientific Research (EJSR), Vol.24, Issue 3, 2008, with Vergos, K.

Abstract: The aim of this paper is to investigate how the acquisitions are perceived in the market value of the relevant sector. For this purpose, the following analysis examines the development of sector market value after bank acquisition announcement by Greek banks. The analysis examines the period from 1998 till 2007, when the sector was liberalised and numerous acquisitions took place. The abnormal returns are examined for different event periods (from twenty days before the event/announcement till 160 trading days after the event/announcement). The contribution of this study is important and its results are interesting in the sense that a negative effect of acquisitions will imply bad news for the sector, while the opposite will mean good news for the sector.

### 30. "The short-term market effect of issuing executive stock options: The Greek evidence".

Review of Financial and Accounting Studies (REFAS), with Vergos, K.

Abstract: Stock options, an almost unknown investment tool for the Greek companies for decades, that is believed to provide an incentive for superior management performance, became popular during the last years. In this paper it is examined whether stock options are associated with shareholder returns in the short run in the Greek market. The paper examines evidence from 44 cases from 35 companies where stock options where issued during the 2006-2007 period. The empirical results reject the hypothesis that stock options provide positive market returns in the long run. It is also found that the effect of stock options is negative for the company market value in the short and the medium run. Interestingly, the longer the time period, the more negative the effect. The higher the percentage of stock options issued and released, the bigger the abnormal returns. Discount on stock options is the main explanatory factor for abnormal returns when combined with the percentage of stock options issued. Moreover, the abnormal returns increase over time for the companies that issued stock options. The findings are statistically significant. This study indicates that the additional issue of stock options should be of a closer focus by regulators, shareholders and probably tax authorities, because they combine significant tax benefits to managers whilst leading to high negative effect to company value.

# 31. "The liberalization process of telecommunications and the role of the National Regulatory Authorities in pricing policies: A case study from Greece".

Problems & Perspectives in Management, Vol.7, Issue 2, 2009, with Mylonakis, J. and Vergos, K.

Abstract: The European Uninion (EU) decided to fully liberalise the telecom markets of all member states by January 1998 with some exceptions where extra time was given. The scope of this paper is to show primarily the liberalization process that took place in the telecommunication markets in the EU, emphasising on the pricing policies for regulation and then to investigate the role of National Regulatory Authorities (NRAs) along with two case studies from the Greek telecoms market. The research has evidenced that the basis of the liberalisation process is the cost orientation principle. For this

reason an appropriate costing system for regulatory reasons must be developed by the incumbent operator which will incorporate specific essential principles before its approval by the NRA. For fixed voice telephony cost orientation, two different methodologies are examined and explained in detail: the Fully Distributed Cost (FDC) and the Long-Run Average Incremental Cost (LIRAIC). NRAs have to play an increasingly important role for the sector and pricing policies.

#### 32. "The deregulation process of electricity and gas markets in the European Union and the influence of energy prices on inflation".

European Journal of Scientific Research (EJSR), Vol 19, No4 Febr. 2008, pg. 844-859, with Mylonakis, J. and Francis, T.

Abstract: Energy markets are developing worldwide with rapid rhythm and they are playing an important role in the economy of each country. In recent years an effort has been made for the suppression of the government owned monopolies and the promotion of competition in the energy sector. The scope of this paper is the present the energy markets of 6 European Union countries and specifically in Finland, Italy, Holland, Germany, Sweden and Greece, placing special research interest in the course of energy deregulation and more concretely the deregulation of electricity and natural gas markets, as well as, the investigation of the effect that energy prices have on the inflation for the period 2002-2006. Results showed that in the economically developed countries of Europe the efforts for the deregulation of energy have had successful results, despite the problems which continue to exist. On the contrary, in Greece the attempt for the reformation and deregulation of the energy market remains in a fundamental stage and there has not been an essential progress.

### 33. "The Impact of Publicity and Press Announcements on Share Prices: An Empirical Study".

The Icfaian Journal of Management Research, vol. VII No 3, March 2008, pp. 35-55, with Vergos, K and Mylonakis, J.

Abstract: The aim of this paper is to investigate the effect of political, economic, investment and analysts' report announcements on the share price of the Hellenic Telecommunication Organisation (HTO). For this purpose we include announcements relating to HTO's management status (e.g. government decisions about privatisation), investments in subsidiaries, competitive strategy, capital structure decisions, profit announcements, analysts' reports and investors' plans and decisions. Different event periods are examined in the analysis. In particular, abnormal returns are examined for different event periods (from the day of the event or five days before the event/announcement till 120 trading days after the event/announcement). According to the results of this analysis, stock prices do not react instantaneously to publicly announced information. Indeed, stock prices continue to appreciate or depreciate until at least ten days after the event.

### 34. "Empirical investigation of the business effects of announcements to share prices".

The Journal of Money, Investment and Banking, issue 2, March/April 2008, pp. 37-47, with Vergos, K. and Mylonakis, J.

Abstract: The aim of this paper is to examine the effect of actions by the management of COSMOTE, the leading Greek mobile operator, actions by HTO, its parent company, economic, investment and analysts' report announcements on the share price of Cosmote S.A. and competition issues. For this purpose, the sample includes announcements that relate to managerial decisions (actions to increase market share in the mobile telephony market), investments in subsidiaries abroad and co-operations with retail networks, competition moves, capital structure decisions, profit announcements analysts reports and investors' plans and decisions. Different event periods are examined. The abnormal returns are examined for different event periods (from five days before the event/announcement until 90 trading days after the event/announcement). From the analysis it is shown that stock prices do not react instantaneously to publicly announced information. Indeed, stock prices continue to appreciate or depreciate till at least till ten days after the event.

## 35. "The development of broadband networks and the promotion of broadband services: Is there any interest for enterprises and final users?".

Business Journal for Entrepreneurs, vol. 2007, issue no. 4, with J. Mylonakis, M. Evripiotis

Abstract: Broadband networks will provide users with access to a large variety of high-tech services and applications. The installation of broadband networks and infrastructures in a country may bring important changes in both the public and the private sector. The Information and Communication Technologies economic impact ranges from production and all commercial operations and processes to the organizational structure of enterprises and other social activities, such as in education and training, employment, entertainment, as well as the relationship between the state and its citizens. The base on which the competitiveness of a country will be founded in today's high-tech environment, in reality, consists of advanced, high-quality and rationally priced network infrastructures. Services and applications that are expected to fill the new generation networks are being designed and, to a certain extent, have started to appear at early stages.

#### 36. "Technology Information and Communication Practices in Intra-Organization Training: Proposals for Full Scale Use of Computer-based Learning and Business Decision Support Systems".

Leadership & Organizational Management Journal, Vol.2007, Issue 4, with Mylonakis, J. and Evripiotis, M.

Abstract: The incorporation of Information and Communication Technologies in enterprise training procedures improves the quality of training and reduces time. The traditional model of creating and offering a training program through the Internet is not enough to describe today's situation and its future perspective. The systems and tools for the support of inter-company learning are relatively new in the field of Information Technology and provide researchers with a new way to incorporate innovative ideas and technologies of the business world. Intranets are the fastest growing section of the Internet market, as more and more enterprises understand the importance of the use of technology, in order to carry out internal communications. The management of relational databases containing plenty of information has become a useful factor for achieving enterprise objectives, as well as, inter-company training. Neural nets and decision trees are some of the most used tools and techniques in data mining.