

Apostolis Pavlou completed his doctoral studies in September 2013 under the supervision of Professors Nikolaos Vettas (principal advisor), Chrysovalantou Milliou and Yannis Katsoulacos. Apostolis research interests and area of expertise is applied microeconomics, industrial organization and competition policy. His doctoral thesis entitled "Essays in Industrial Organization Theory: Vertical Contracting and Pricing in Oligopolistic Markets" consists of three chapters and focuses mainly on vertical contracting. In particular, it deals with the analysis of vertical relations and the way contracts are shaped in such an environment. Vertical

relations, that is, relationships among firms at different stages on the production chain are interesting because various vertical agreements have an ambiguous effect both on firms' profits and on society's welfare. The main goal of his research is to draw policy implications that arise from the positive analysis with respect to competition issues (e.g. article 101,102).

The first chapter focuses on the analysis of upstream horizontal mergers. It provides an explanation for why upstream firms merge, highlighting the role of R&D investments and their nature, as well as the role of downstream competition. It shows that an upstream merger generates two distinct efficiency gains when downstream competition is not too strong and R&D investments are sufficiently generic: The merger increases R&D investments and decreases wholesale prices. It also shows that upstream firms merge unless R&D investments are too specific and downstream competition is neither too weak nor too strong. When the merger materializes, the merger generated efficiencies pass on to consumers, and thus, consumers can be better off. It has been published in the Journal of Economics and Management Strategy (2013). The second chapter makes an analysis of horizontal mergers when production is characterized by learning by doing in an one-tier industry. It demonstrates in an n-firms dynamic (two-period) model that a horizontal merger instead of having adverse welfare effects, due to an increase in concentration, may be welfare improving when production is characterized by learning-by-doing. In particular, within this framework it shows that contrary to the conventional wisdom a horizontal merger, which leads to the monopolization of an industry, may improve welfare. That holds when the learning effect is strong and firms care for future profits, that is, they are patient enough. When the merger does not lead to monopolization it always lowers prices (in both periods) when it materializes, but note that the number of active firms cannot be high enough since then market congestion occurs. Finally, the third chapter deals with asymmetric information and vertical contracts with competing downstream firms. This chapter analyses the pricing decision of an upstream firm, vertically linked with downstream competing firms, when it is less informed regarding the marginal cost of them. In this framework the upstream firm (principal) has rather two options, either offering a menu of contracts (designing a direct truthful mechanism) or offering a single contract. The former choice under contract choice observability leads to a "separating" case, full information disclosure, while the latter one (when trade occurs with both types) to a "pooling" case, without information disclosure. Both cases may form an equilibrium depending on the extent of heterogeneity between the two potential types with respect to efficiency. Thus, it is no longer optimal for the upstream firm to price using a menu (when this is a viable option), as it is when the choice of the contract remains secret.



Efthymios Argyropoulos completed his PhD studies in June 2013 under the supervision of Professors Elias Tzavalis (principal advisor), Efthymios Tsionas and Assistant Professor Stelios Arvanitis. His area of expertise is financial and monetary economics and econometrics. His thesis entitled "Essays on forecasting interest rates, economic activity and inflation, based on factor models of the yield curve", aims to provide new insights into the forecasting ability of the term structure of interest rates about future interest rate movements, real consumption growth, economic activity and

inflation. It is compiled by four chapters. The first chapter entitled "Term spread regressions of the rational expectations hypothesis of the term structure allowing for risk premium effects",

examines the empirical failures of the term spread to forecast future interest rate movements and suggests term spread regression based tests allowing for time-varying term premia to answer these failures. To capture these premia an affine arbitrage-free dynamic term structure model is implemented. Under a minor revision this paper has been re-sent for a publication to the journal "Studies in Nonlinear Dynamics and Econometrics". The second chapter entitled "Real term structure forecasts of consumption growth", proposes an affine arbitrage-free dynamic term structure model of real interest rates to predict changes in real consumption growth. The model is estimated jointly by real interest rates and consumption data and it is found to be consistent with the consumption smoothing hypothesis. The third chapter entitled "Forecasting economic activity from yield curve factors", provides some new interesting results about the predicting ability of the yield curve and term spread. It presents clear cut evidence that the slope and curvature factors of the yield curve contain superior information about future economic activity than the term spread itself. This is shown for five world leading economies. To extract the slope and curvature factors of the yield curve, in this chapter we fit the dynamic Nelson-Siegel model. Finally, the fourth chapter entitled "Forecasting inflation from the term structure and the inflation risk premia effects", fits an affine arbitrage-free dynamic term structure model into nominal term structure, inflation and real consumption data with the aim of examining how important are the inflation risk premia in the short run. The model provides estimates of the real term structure, inflation expectations and inflation risk premia. Since October 2013 Dr. Argyropoulos is a Post-Doctoral research fellow at Athens University of Economics and Business (AUEB) and a fellow of the State Scholarships Foundation (IKY). His current research is based on joint econometric models of macroeconomic and term structure dynamics.



Yiannis Karavias completed his doctoral studies in July 2012 under the supervision of Professors E. Tzavalis (principal advisor), E. Kyriazidou and Assistant Professor S. Arvanitis. His area of expertise is theoretical econometrics and panel data models. His thesis entitled "Unit Root Tests and Structural Breaks in Panel Data Models" has three chapters. The first chapter "Testing for unit roots in short panels allowing for a structural break" considers unit root tests in fixed T panel models allowing for a structural break. The break may be known or unknown. The model may have individual effects and incidental trends and the errors may follow

AR(1) or AR(2) processes. Monte Carlo experiments show that the power of the tests is greater than that of their time series counterparts. It is forthcoming in the journal of Computational Statistics and Data Analysis (2013). The second chapter is "On the local power of fixed T panel unit root tests with serially correlated errors." This paper derives analytical asymptotic power local power functions which are employed to study the effects of general forms of short term correlation on fixed T panel unit root tests. It is shown that the tests based on the IV estimators are more powerful in all cases examined. Even more, for the model with individual trends a new IV based test is shown to have non-trivial local power at the natural root-N rate. The third chapter of the thesis "Generalized fixed-T panel unit root tests allowing for structural breaks" proposes new fixed T panel unit root tests that allow for structural breaks but also general forms of short term serial correlation. When the date of the break is unknown the asymptotic distributions of the tests are shown to be nonstandard and are analytically derived. Consistency of the tests for large N is also established. Local power functions are provided and the effects of the break and serial correlation are studied. In the case of trend it is shown that there are cases where the tests have local power on a root-N neighbourhood of the null hypothesis. Monte Carlo evidence suggest that the tests have size which is very close to its nominal level and satisfactory power in small-T panels. This is true even for cases where the degree of serial correlation is large and negative, where single time series unit root tests are found to be oversized.

Since October 2012 Dr. Karavias is a post-doctoral research fellow at the University of Nottingham and a fellow of the Granger Centre for time series econometrics. His current research is focused on unbiased estimation and inference on panel data models under cross section

dependence. Further information and research papers can be found at: <u>https://sites.google.com/site/yianniskaravias/</u>



Marios Papaspyrou completed his doctoral studies in Athens University of Economics and Business (AUEB) in the Department of Economics under the supervision of Professors Mike Tsionas (principal advisor), Elias Tzavalis and Yiannis Karagiannis. His areas of expertise are microeconometrics, stochastic frontier models, Bayesian inference and stochastic volatility. His thesis entitled "Statistical Inference in Production Function Models" deals with the fundamental problem of consistently estimating production functions using only input and output data. In the first part of the thesis we estimate a multiple

- output stochastic frontier dealing explicitly with the problem that all outputs are jointly endogenous.

The methods are demonstrated in a large banking dataset. In the second part we offer a solution to the long standing problem of consistently estimating the Cobb Douglas production function under autoregressive firm specific productivity. A Bayesian MCMC algorithm is developed tailored for estimating this specific model. Novel techniques are presented using extensive Monte Carlo simulations along with an empirical application of UK manufacturing data. The third part proposes a novel estimation technique incorporating stochastic volatility. His current work is on developing a hybrid MCMC algorithm using the lately proposed Fixed Effects Vector Decomposition estimator and on estimating technical and allocative efficiency with unobserved input prices.

Marios Papaspyrou has worked as an external researcher at the Center of Planning and Economic Research (KEPE) in the period 2006 – 2007. From 2009 is an Economist at the Bank of Greece at the Department of Statistics in the section of the Balance of Payments. He has attended seminars and workshops at the ECB and EUROSTAT on seasonal adjustment, with which he is also strongly involved. He currently pursues a second undergraduate degree on Mathematics in the University of Athens. He is an IKY and Karelias Foundation scholar.



Ilias Boultzis was awarded his phd degree in July 2010. His thesis, entitled "Essays on the Economic Behaviour of Lobbies", was written under the supervision of Prof. A.Philippopoulos (principal advisor), Prof. K.Gatsios and Prof. C.Kotsogiannis.

The thesis considers menu auctions and their application to lobbying and has three chapters. The key result in the first chapter, is that rent extraction by public officials, depends on the available policy instruments. In particular,

more discretion implies more rents. The second chapter shows that lobbying can increase allocative efficiency, when fiscal instruments are missing. This is so, because contributions to politicians, can substitute for the missing instruments. Finally, the third chapter proves that truthful equilibria in menu auctions are often efficient, even in the presence of externalities. A paper based on the first chapter of the thesis, was published in 2007 in the Journal of Economic Asymmetries. Extracts from the thesis have been presented in the CRETE 2007-2010 and the APF 2006 conferences.

Currently, Ilias Boultzis is working on introducing, non monotonous agent's objectives to the standard common agency model. His general research interests include, menu auction theory, political economy and especially lobbying, and coalition formation games applied to supranational unions. He holds a Master's degree in Economics from London School of Economics and in Applied Mathematics from National Technical University of Greece. His master's thesis in mathematics discussed compact metric spaces and fixed point theorems. During his studies, he was awarded scholarships from Achilopoulos Foundation, the Bank of Cyprus and the State Scholarship Foundation. He has worked in the past for the National Bank of Greece. Currently he lives in Chios Greece, where he works as a high school teacher.



Yiannis Dendramis completed his PhD in December of year 2011 under the supervision of Professor Elias Tzavalis. He was a visiting scholar at the School of Economics and Finance, Queen Mary University of London, where he collaborated with Professor George Kapetanios (QMUL). Yiannis research interests are focused in the areas of Mathematical Finance, theoretical and applied Econometrics, and Statistics, as well as in applied financial economics. His PhD thesis consists of three main essays in the area of Financial Econometrics, covering Option Pricing, Volatility Modeling and

Value at Risk Management. In the first essay of his PhD thesis, he derives analytical formulas of European Call Options assuming that the underlying stock price is subject to regime switching. The suggested formulas enables us to price regime switching sources of risks.

In his second PhD thesis essay, he suggests a new stochastic volatility model which allows for persistent, long-term shifts in the volatility function of stock market returns. The model can endogenously adjust the stochastic long-run mean of the volatility function based on large return shocks, reflecting large pieces of stock market news. The model can be employed to investigate economic (or market) sources of volatility shifts of stochastic timing and magnitude, without relying on any exogenous information. The estimation method of the model relies on a large scale Bayesian MCMC algorithm. Finally, his third PhD essay proposes a new time series model of measuring Value at Risk (VaR) combining regime switching EGARCH effects. The performance of the suggested model is investigated and tested against frequently used parametric VaR models in practice, such as the MRS-GARCH and GARCH models. This is done under different distribution assumptions (e.g, skewed-t, student-t) of the disturbance terms.

Since October 2010 Dr. Dendramis is a research fellow at the Center of Planning and Economic Research (KEPE) and research associate at the school of Economics and Finance, Queen Mary University of London. At KEPE he is a member of the macroeconomic forecasting unit.



Thanassis Kazanas completed his Doctoral studies in May 2011 under the supervision of Professors E. Tzavalis (principal advisor), A. Philippopoulos and Asst. Professor V. Vassilatos. His areas of expertise are macroeconometrics, monetary and fiscal policy. His thesis entitled "Essays on Monetary Policy Rules Allowing for Structural Breaks" has four chapters. Using an endogenous backward-looking threshold model and data on three large economies, the US, the UK and Japan, the first chapter investigates if monetary policy changes depend on business cycle conditions, i.e. recessions

and expansions of the economy. The results indicate that, while during expansions these countries follow the Taylor rule, during recessions they tend to abandon it. Version of this work is published in the Manchester School Journal. The second chapter examines empirically in a forward-looking environment whether the above major central banks have monetary policy reaction functions that change depending on the actual state of the economy. The model allows for endogenous variables and an exogenous or endogenous threshold variable and the results give evidence of nonlinearity in the policy reaction functions which is associated with large output gap or high level of unemployment rate. The third chapter, using a forwardlooking threshold monetary policy rule, finds that the euro-area monetary policy authorities react more strongly to positive inflation and/or output deviations from their target levels rather than to the negative often occurring during recession periods. The study also indicates that the no reaction of the euro-area monetary authorities to negative output deviations reduces the efficiency of their policy rule to dampen the effects of negative demand shocks on the economy. Version of this work is published in the Working Paper series of the Bank of Greece. The fourth chapter suggests an open economy forward looking threshold monetary policy rule model for Japan. This model assumes that, in addition to inflation rate and real output deviations, the short term nominal interest rate of the central bank of Japan responds to nominal (or real) exchange rate deviations from their target levels. The results show that this happens only when the economy lies in the recession regime.

Since May 2011 Dr. Kazanas is a research fellow at the Centre of Planning and Economic Research (KEPE). His current research is focused on the study of structural breaks in fiscal policy rules and the building of a DSGE model for Greece. He is also a laboratory associate in Technological Educational Institute of Athens since October 2002.



Frago Kourandi completed her Doctoral studies in June 2010 under the supervision of Professors N. Vettas (principal advisor), K. Gatsios and Y. Katsoulacos. Her areas of expertise are industrial organization, microeconomics and game theory. Her thesis entitled "Essays on Strategic Vertical Relations" has three chapters. The first chapter studies a dynamic vertical contracting framework with learning-by-doing production technologies and analyzes the possibility of upstream foreclosure. Exclusivity may arise in equilibrium and be welfare enhancing. Versions of this work have been presented at conferences such as EARIE 2011, the 26th

Meetings of the European Economic Association and the CEPR 2011 Applied IO School. The second chapter examines a linear-city model with successive duopolies where all pricing and location decisions, upstream and downstream, are endogenous. The upstream firms commit to locations closer to the centre of the line to strengthen the strategic position of their own retailers. Versions of this work have been presented at CEPR 2010 Applied IO School and EARIE 2010. The third chapter studies different vertical trading structures (non discriminatory vs. discriminatory tariffs) in a linear-city model, where firms are located within the unit interval.

Additional work of Dr. Kourandi examines the strategic timing of licensing and technology transfer in a vertical chain with an endogenous market structure. She has also co-authored a paper "On the Economics of Non Horizontal Mergers," published in *The Reform of EU Competition Law – new challenges*, Wolters Kluwer, 2010.

Since January 2010 Dr. Kourandi is a post-doctoral fellow in Paris, at the University Telecom ParisTech, participating in the Chair on "Innovation and Regulation of digital services" under the guidance of Prof. Tommaso Valletti. Her current research is focused on the study of 'net neutrality' in a framework with competing Internet Service Providers. Further information and