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This issue hosts the following topics: (1) *Factors affecting the productivity of European Economies* by Elena Ketteni, Theofanis Mamuneas and Panos Pashardes, (2) *Sectoral linkages and economic crisis: An input-output analysis of the Cypriot economy* by Elias Giannakis and Theofanis Mamuneas, (3) *The expectations of prospective students regarding the economic returns to higher education: evidence from Cyprus* by M. Eliophotou and S. Andreou, (4) *Scoring rules for simple forecasting models: The case of Cyprus GDP and its sectors* by Elena Andreou and Andros Kourtellos, (5) *Wage Dynamics Network: SME credit constraints in Cyprus during the period 2010-2013 and effects on employment, wages and prices* by Charalambos Charalambous and Marios Polemidiotis, (6) *Growth after crisis in Europe: An interdependence of macroeconomic and structural policies* by Roumeen Islam.

Short summaries of the articles are provided below:

(1) *Factors affecting the productivity of European Economies* by Elena Ketteni, Theofanis Mamuneas and Panos Pashardes

Summary: The 2008 financial crisis in Europe highlighted the importance of productivity growth as a vehicle to economic growth and stability. This paper estimates and compares productivity growth in European countries. It also investigates factors that directly or indirectly affect productivity growth with a view to reaching policy conclusions. The data used in the analysis are drawn from Eurostat, European Commission, OECD, and World Bank sources, and cover the period 1995-2014.

We find that productivity growth exhibits substantial variation over time. Cross-country differences in productivity growth are also observed, indicating changes in the countries' competitiveness. To explain the observed productivity differences, we apply simple regression analysis to link productivity growth with factors found in the literature to be among the main drivers of productivity growth: Research and Development (R&D) and Patents; Foreign Direct Investment (FDI); Information and Telecommunications Technology (ICT); and human capital, as measured by gross enrolment ratios in primary, secondary and tertiary education. The results obtained suggest that R&D expenditures and the number of patents have a positive and statistically significant effect on productivity growth. Thus, both process and product innovations contribute to the growth of an economy. The effect of ICT

capital on productivity growth is also positive and significant, as is the effect of human capital - as measured by people entering tertiary education.

These findings conform to those prevalent in the literature, suggesting that to increase their productivity and, thereby, enhance competitiveness and economic growth, the EU countries should initiate reforms to promote R&D and encourage investment in ICT and human capital. Such reforms should be designed around measures creating new business opportunities, while tackling anti-competitive product and labour market regulations.

(2) *Sectoral linkages and economic crisis: An input-output analysis of the Cypriot economy* by Elias Giannakis and Theofanis Mamuneas

Summary: The objective of this paper is to analyse the inter-industry linkages and interdependencies in Cyprus economy during the recent economic crisis. The input-output multiplier analysis indicates that the food manufacturing industry and the transportation sector are the sectors with the highest backward linkages in the Cypriot economy overtime. The food manufacturing industry and the agricultural sector achieved to increase their positive economy-wide effects in the economy during the recession. Supporting the partnership of these sectors can enhance the whole agri-food chain and invigorate economic growth in both good and bad times. The banking-financing sector, although it suffered the brunt of the economic recession impacts, also managed to increase its multiplier effect, thus confirming its important role on the stability of the Cypriot economy. The size of the economy-wide multiplier effect of economic sectors is a key criterion in judging industries' potential on promoting economic growth.

(3) *The expectations of prospective students regarding the economic returns to higher education: evidence from Cyprus* by M. Eliophotou and S. Andreou.

Summary: The paper investigates the expectations of prospective university students in Cyprus in relation to the returns to higher education. Specifically, we estimate the expected rates of return to a higher degree and compare the estimates of respondents based on the intended field of study and country of study. Moreover, we estimate expected rates of return for students of different socioeconomic backgrounds. The data used for the estimation were collected from 2051 students in their final year of secondary education in Cyprus in January and February of 2013. The findings point to rational expectations on the part of prospective

students. Of the four most popular country destinations, the highest rate of return was expected by respondents intending to study in the United Kingdom. As regards field of study, Medicine and related fields were associated with the highest rate of return. Children of higher parental educational and occupational levels expected higher rates of return. In regression analysis, several variables were significantly linked to the expected rate of return. These included the respondent's socioeconomic status, the field of study, the country of study (students intending to study in Cyprus expected lower rates), student ability, and urban/semi-urban residence. The paper discusses the implications of the findings for educational planning and policy making in higher education.

(4) *Scoring rules for simple forecasting models: The case of Cyprus GDP and its sectors* by Elena Andreou and Andros Kourtellos

Summary: This paper is motivated by the fact that traditional forecasting criteria are often challenged during periods of events such as economic crises, great recessions, institutional changes, wars, great natural disasters and other extreme events which influence the structure of the economy in major ways. Hence we consider alternative forecasting (or scoring) criteria which consider the probabilistic forecast approach and/or are weighted by the extreme observations. The probabilistic forecast approach of formulating forecasts in the form of probability distributions over the future state of an economic indicator takes into account forecast uncertainty and it is particularly useful in evaluating the forecasting performance beyond its mean forecasts. Similarly, the alternative approach is to consider restricted forecasting criteria which weight the sample of historical extreme observations. Using these scoring criteria, we evaluate the predictive ability of the benchmark time series models, such as the Random Walk (RW) and Autoregressive (AR) models, for forecasting the key economic activity variable, the total real GDP and its components for the period 1995-2016. Our results suggest that the restricted prediction criteria favor models with longer memory compared to the corresponding unrestricted criteria. This evidence applies to the total GDP growth rate for the sample 1995-2016 and the subsample before the recent major economic crisis of 2013. This evidence also holds for all components of GDP and is also robust to different quantiles of extremes. Our empirical results suggest that in periods of economic turmoil or crises, the restricted forecasting criteria can be used to provide more accurate forecasts. These findings are useful for economic policy makers, especially in recent periods of global and local economic crises.

(5) *Wage Dynamics Network: SME credit constraints in Cyprus during the period 2010-2013 and effects on employment, wages and prices* by Charalambos Charalambous and Marios Polemidiotis by Charalambos Charalambous and Marios Polemidiotis.

Summary: In the context of its participation in the ESCB Wage Dynamics Network (WDN), the Central Bank of Cyprus (CBC) conducted a survey regarding the wage- and price-setting policies of domestic firms covering the period 2010-2013. This paper focuses on the behaviour of small- and medium-sized enterprises (SMEs) employing between 3-19 workers driven by changes in financing conditions. This is particularly important given the unprecedented shock to the banking system following the March 2013 events. The survey results suggest that, in the run up to the crisis, SMEs focused primarily on the use of price reduction strategies in an attempt to increase or maintain their volume of sales as a response to a shift in demand from SMEs to larger firms. SMEs also resorted to cost reduction strategies, including wage cuts. Since 2012, SMEs increased the average wage cut to broadly match the reduction in prices. Overall, the survey suggests that SMEs' ability to maintain adequate liquidity for operational purposes via significant price and cost reductions, allowed a share of SMEs to overcome the obstacles related to the tighter financing conditions following the crisis.

(6) *Growth after crisis in Europe: An interdependence of macroeconomic and structural policies* by Roumeen Islam.

Summary: Greece, Ireland, Portugal and Spain entered a period of severe economic and financial stress in the aftermath of the 2008-9 crisis. This paper compares the recovery experience of these countries in light of recent policy debates and research on the growth impact of macroeconomic and structural reforms. It highlights, (a) the primacy of total debt, private or public, in affecting the onset of, depth of, and recovery from economic crisis; (b) that the quality of the policies adopted to stabilize economies in the short run affects growth recovery in the long run; (c) that the relationship between financial system development and growth is complex; (d) that macroeconomic policies (fiscal and monetary) are most effective in supporting growth when they take into account structural conditions and country context; and (e) that policies must be adapted to global/regional conditions. A partial, rather than holistic, approach to policymaking may neglect to influence the binding constraints to growth and, thus, slow down recovery.