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The topics addressed in this issue of Economic Research are the following: (i) *A First Assessment of the Economic Impact of the “Fit for 55” Energy and Climate Policy Package in Cyprus*; (ii) *Forecasting economic activity using preselected predictors: the case of Cyprus*; (iii) *The effect of educational systems on differences in the performance of children of different backgrounds and on the improvement of their learning outcomes, with reference to Cyprus*.

“A First Assessment of the Economic Impact of the “Fit for 55” Energy and Climate Policy Package in Cyprus”

Theodoros Zachariadis, Elias Giannakis and Constantinos Taliotis

The climate emergency is one of the most important challenges of modern society. A transition to low carbon economies can mitigate some of the adverse impacts of climate change but requires investments at an unprecedented pace and scale. The European Green Deal aims to achieve a carbon-neutral European economy by 2050, while the ‘Fit for 55’ package attempts to set EU member states, already in 2030, on a path that aligns with this long-term goal. This paper provides an overview of the impact of this package on Cyprus. Our analysis concludes that the balance between costs and benefits of ‘Fit for 55’ in the medium term depends on the revenue to be secured by the Republic of Cyprus through the auctioning of allowances in the shipping sector. Some elements of the package may adversely affect the cost of living, with subsequent impacts on employment, public finances, and the need for social support. However, it can clearly be beneficial in the longer term as it will decrease dependence on energy imports, drastically reduce the cost of imported fossil fuels that burdens the trade balance, increase economic productivity, and improve quality of life, as a result of low greenhouse gas and air pollutant emissions.

“Forecasting economic activity using preselected predictors: the case of Cyprus”

Christiana Anaxagorou and Nicoletta Pashourtidou

This paper applies hard and soft thresholding techniques to a large dataset of domestic and foreign series in order to preselect informative predictors for forecasting economic activity in Cyprus. The variables of interest in the forecasting exercise are GDP and its production-side components, expressed in growth rates. The subsets of selected predictors are allowed to differ across the variables of interest and over the forecast horizon, thus accommodating idiosyncratic features of economic sectors. The sets of selected predictors contain a higher proportion of domestic as opposed to foreign predictors for the one-quarter horizon, while the opposite occurs for longer horizons. Furthermore, in the case of GDP all thresholding techniques result in selecting high proportions of business and consumer survey indicators for all horizons. The forecasting

performance depends on the forecast horizon and, most importantly, on whether the subsets of chosen predictors remain constant or change over time. The thresholding technique employed is not found to substantially affect the forecasting performance. Selecting predictors prior to forecasting GDP growth, leads to lower forecast errors vis-à-vis a simple univariate benchmark, as well as compared to exploiting the full dataset of predictors for forecasting. The gains from preselecting predictors are higher during a crisis period than in normal times, especially for short horizons, while preselection in normal times benefits forecast accuracy for longer horizons. Predictor preselection is found to improve the forecasting performance in the case of some production-side components, particularly the gross value added in the sectors of trade and construction, and net taxes.

“The effect of educational systems on differences in the performance of children of different backgrounds and on the improvement of their learning outcomes, with reference to Cyprus”

Leonidas Kyriakides, Maria Eliophotou and Evi Charalambous

Socioeconomic inequalities in education are an important issue for both researchers and policymakers, since student achievement was found to be associated with students' socioeconomic status (SES). Consequently, educational effectiveness research attempts to investigate not only factors associated with student learning outcomes (i.e., the quality dimension of effectiveness), but also whether effective schools can reduce the initial differences observed in student achievement which can be attributed to student background characteristics that are unlikely to change (i.e., the equity dimension of effectiveness). This report aims to explore the relationship between these two dimensions of effectiveness at the school and country level. To achieve this aim, secondary analyses of data from PISA 2015 and 2018 are conducted. Specifically, we first investigate whether variables associated with economic prosperity (such as SES, GDP and GNI) can explain differences in student learning outcomes. Then, we explore whether educational systems which appear effective in relation to quality are also effective in relation to the equity dimension of effectiveness. Subsequently, we examine whether an improvement in the effectiveness status of countries in relation to one dimension can lead to the improvement of the other dimension. Through within-country analyses, the relation between the two dimensions of educational effectiveness at the school level in Cyprus is examined. The results show that GDP has a significant effect on student achievement in each subject (Mathematics, Science, and Reading), therefore educational systems should control for this effect when establishing policies for promoting equity in education. The findings of this study also reveal a strong relationship between quality and equity at both the country and the school level. The across country analyses showed that the achievement gap (in Mathematics, Science, and Reading) based on SES tends to be smaller in countries and schools which achieve better learning outcomes. It is also shown that the great majority of countries that can be considered as among the most effective in terms of the quality dimension are also

among the most effective in terms of the equity dimension. As regards the relationship between the two dimensions of effectiveness at the school level in Cyprus, the great majority of the schools that can be considered as among the most effective in terms of the quality dimension were also found to be among the most effective in terms of the equity dimension. The implications of the findings for promoting quality and equity are drawn.