

### **Micro-simulation analysis in examination of the effects of personal income-tax changes**

*Dóra Benedek and Áron Kiss*

Micro-simulation is used to evaluate planned proposals in economic policy in most developed countries. This study presents the micro-simulation model devised by the Office of the Fiscal Council, Hungary, which allows changes in personal income-tax rules to be simulated and their effects analysed. A general presentation is followed by four examples to illustrate the uses of the model. First, the authors calculate the fiscal cost of the family allowance for the year 2008, obtaining a more accurate estimate than the one found in official publications. As a second example, they calculate the fiscal effect of one element in the autumn tax package of 2010, which is impossible to assess through aggregate data. Thirdly, they focus on the full tax package, showing how micro-simulation can be used to analyse the distributive effects of policy changes. Finally, they estimate the behavioural changes that the new tax rules may induce.

### **The role of creative destruction in the development of corporate productivity in Hungary**

*Gábor Békés, László Halpern and Balázs Muraközy*

The article examines the relation between productivity growth in the competitive sphere and corporate growth trends, based on company data for 1992–2006. Theories that emphasize corporate heterogeneity suggest that the growth in an industry's productivity may derive not only from efficiency increases in individual firms, but from changes in their relative weights and from the process of creative destruction. Using methods current in international literature, the authors show that increases in productivity in Hungary's industries are mainly due to improvements in firms functioning continually, but that creative destruction also played a significant part during the period.

### **Who gains by postponed schooling? Age at starting school and achievement as pupils in Hungary**

*Szilvia Hámori and János Köllő*

The study examines the connection between the age of starting school and test results for fourth and eighth graders, based on the 2006 wave of the national competence survey and focusing mainly on the children of unschooled and of graduate mothers. The results estimated by the method of instrumental variables suggest that children whose schooling did not start until they were seven do better in the competence surveys than those who started at six. This advantage from starting school later is greatest among the children whose mothers completed only elementary school than among the children of graduate mothers, but it diminished as the school career progressed.

**Wines as an alternative investment***Péter Erdős and Mihály Ormos*

Investing in fine wines has become a real alternative investment opportunity in recent decades. Data providers like Bloomberg publish various wine indexes on their platforms. Liv-ex (the London International Vintners Exchange) estimates that the wine market was worth \$3 billion in 2009. The study analyses fine wines as financial assets using the Liv-ex 50 and Liv-ex 500 fine-wine indexes. Variance ratio tests based on ARMA spectral estimation are applied to investigate the characteristics of wine prices. The results show that prices neither follow a pure random walk nor a pure stationary process. Thus weak-form efficiency can be rejected if it is associated with pure random walk of wine prices. So the non-efficient pricing may create arbitrage opportunities, although the CAPM and the Fama–French three-factor model show that this is not the case. Numerous studies argue that art masterpieces, defined as the most expensive pieces of art, will outperform or under-perform the broader market. In the case of masterpiece wines, there is no significant performance over the broader wine market. Investment-grade wines play a significant role in portfolio diversification and prove to be safe havens in times of recession, in view of the low correlation found with the stock market and the long-run independence from it.

**Coded shortness of breath. Crisis in the vehicle industry***Sára Pásztor*

Sales of new cars halved on the Hungarian market in 2009 and fell 34 per cent short of 2009 levels in the first eight months of 2010. This is among the worst performances even among EU countries where the market is likewise weakening as national programmes for removing aged cars from the road cease. By the beginning of September, the trade forecast for 2010 sales was down to 50,000, compared with peaks of 208,000 (in 2003 and 2004) and 176,000 in 2007. The Hungarian public have become overly indebted since the turn of the millennium, partly because of seemingly favourable loan terms for car purchases. Many livelihoods have become uncertain (at firms and workplaces) with the crisis. The signs in the macroeconomic data that the recession is ending have been insufficient to produce a change of trend or resumed demand growth on the car market. At individual level, growth in vehicle sales to individuals (and to a smaller extent to companies and businesses) assumes there will be a perceptible recovery and a steady increase in employment. Despite the dive in demand, the country's oversized network of dealerships has managed to survive and laying off of staff that could be noticed outside the trade began only in 2010. Apart from the fall in the number of unit sales, the structure of the network is due for alteration, but that depends strongly on the positions of the manufacturers after the crisis.