

CREDIT CYCLES AND THE COUNTER-CYCLICAL CAPITAL BUFFER IN AN AGENT-BASED KEYNESIAN MODEL

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The authors have developed in this paper an agent-based Keynesian macro model that features a detailed representation of a banking system, alongside households and firms, and in which fiscal, monetary and macro-prudential policy regulators also operate. The banking system generates longer credit cycles in the time series compared with the business cycle, and it also fosters growth through lending, but it deepens recessions that occur by decreasing credit supply. This procyclicality of the banking system is decreased by the macro-prudential authority using counter-cyclical capital buffer requirements. According to the authors' results, this policy instrument is effective in enhancing financial stability, while in recessions, the decrease in GDP is less with counter-cyclical capital buffer requirements than without any macroprudential rule. However, there is a trade-off between financial stability and economic growth.

FAST-GROWING BUSINESSES IN HUNGARY: THE INNOVATIVE, MYSTERIOUS AND VIRTUAL GAZELLES

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Interest in gazelles - high-growth businesses - has been increasing. Despite many papers and investigations on this tiny segment of the business population, knowledge of it remains limited. While identifying gazelles, the research presented focuses on their demographic (size, age) and inside (innovation, export orientation, human capital, leadership skills, venture capital) business attributes, based on a regionally representative sample of 404 gazelles. Fast growth is measured with four indicators based on revenue and employment. It emerges that less than half the gazelles engaged in innovation in the 2010–12 period; the share of exporting gazelles was under 20 per cent, and many of these lacked human capital. Cluster analysis shows that gazelles are highly heterogeneous. Of the seven clusters, there are four (54 per cent of the businesses) where fast growth is aligned with inside features like innovation, export orientation, human capital, excellent leadership skills, or venture capital. Moreover, these inside factors only appear in one cluster. The fast growth in two clusters may be explained, at least in part, by positive agglomeration effects in the Central Region. The cause of growth remains a mystery in the fastest-growing cluster.

Thirteen per cent of the sample consists of very small businesses that decreased their payrolls in the 2010-12 period and the revenue increase derived from only one year's extreme growth. The largest cluster (18 per cent of the sample) covers relatively long-established, medium or large businesses operating outside the Central Region. They probably possess local knowledge, network capital, or local market-monopoly force that could not be identified from the questionnaire. The results question the ascription of only positive attributes to gazelles. It was possible to grow fast without innovation, export, human capital, or proper leadership experience. These findings may help to explain the lack of competitive medium and large-sized businesses in Hungary.

#### IS THE STATE ON THE BALL? THE EFFECT OF THE STATE'S ROLE ON THE DEMAND SIDE OF VENTURE CAPITAL

Patrícia Becsky-Nagy and Balázs Fazekas

The authors conducted a comprehensive analysis of the JEREMIE venture-capital program by examining all enterprises that received funding in its framework. The article reaches several conclusions: the drawbacks of government-backed venture capital emphasized in the literature in relation to selecting viable enterprises and value added by the managerial assistance of investors are apparent in the Hungarian market. Furthermore, certain problems arise from the infancy of the industry. At the same time, the increased investment activity could generate new knowledge and competence for this developing industry, which could lay the foundation for developing the ecosystem for young and innovative firms in the long term.

#### A BIT OF GROWTH THEORY – SOMEWHAT DIFFERENTLY. THE PARTIAL GROWTH EFFECT OF LABOUR, CAPITAL AND TECHNICAL DEVELOPMENT

Tibor Erdős

Starting from an examination of the Cobb-Douglas and Solow production functions, this discussion paper clearly denies that capital and labour's partial share in the economic growth can be established as the two most significant production factors, or that this partial share can be deduced by means of the marginal product theory. The latter is all the less appropriate to it, because either of the two factors' unilateral increment raises the performance of other factor. So the extra income realized through the unilateral rise in either factor is always larger than the marginal product. Using the vintage model, the author analyses the aggregate growth effect of several production factors. He pays keen attention to the role of technical development, the significance of economic efficiency, and the growth effect of human capital. While he sees technical development as of significant importance, he demonstrates that temporarily, in certain cases and owing to other factors, productivity may grow at a pace far higher than technical development. He pays particular attention to economic efficiency, and stresses that low production level in many countries has been caused by low efficiency rather than slow technical development. The paper is a condensed discussion of the theoretical problems of economic growth and paves the way for debate.