



## Editors

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# **Mathematics and Computers in Business, Manufacturing and Tourism**

- **Proceedings of the 14<sup>th</sup> International Conference on Mathematics and Computers in Business and Economics (MCBE '13)**
- **Proceedings of the 2<sup>nd</sup> International Conference on Applied Manufacturing, Commerce, Tourism and Services (MCTS '13)**

**Baltimore, MD, USA, September 17-19, 2013**

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## Plenary Lecture 1

### IFRS for SMEs and Its Possible Adoption in CEE Countries



#### Professor Jiří Strouhal

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**Abstract:** SMEs have fewer resources to use on influencing financial standards and the system is arguably less responsive to their needs. The tightening of professional accounting standards and the proliferation of extensive and complex accounting pronouncements governing financial reporting have added complexities to the preparation of financial statements and have further exacerbated their financial reporting problem. The need to establish appropriate accounting standards for SMEs is one which invariably draws common agreement but generally, there is no consensus achieved on the recommended solutions. The biggest obstacle is existence of 27 different systems of accounting within the European Union, which have to be harmonized. The question about whether or not accounting standards should apply equally to large and small companies has been the subject of much debate and concern by accountancy bodies in many countries (Maingot and Zeghal, 2006) and has become known as the “Big GAAP/Little GAAP” debate (Collis et al., 2001).

Arguments for differential reporting seem to be stronger the important argument now appears to be, not whether this is an appropriate approach but rather how accounting standards for large entities and SMEs should differ. It must be decided what criteria will be used for distinguishing different classes of reporting entities and these should reflect cost/benefit considerations (Eierle, 2005).

One of the main arguments for extending IFRS implementation to SMEs’ accounts is that global financial reporting standard (if applied consistently) will enhance international comparability and understandability, as well as, the transparency and accountability of SMEs financial statements. Greater information relevance, which is also beneficial for management and market efficiency are other suggested benefits for SMEs by the extension of IFRS (Marten et al., 2002).

Apart from the accounting differences between IFRS for SMEs and full IFRS (and local GAAPs), there are many other issues that an entity must take into account before adopting IFRS for SMEs. The considerations often relate to qualitative factors, and require management’s judgments to be exercised before the conclusion can be reached that IFRS for SMEs is the preferred route for the reporting entity.

**Brief Biography of the Speaker:** Jiří Strouhal graduated from the University of Economics Prague in 2003 and finished his doctoral studies in 2005. In 2006 he became an accounting expert (Czech accounting profession certification scheme based on British ACCA curricula). In the period 2007 – 2009 he was member of the Committee for Education and Certification of Accountants Czech Republic and Executive Board member of the Chamber of Certified Accountants (Union of Accountants CR). From 2011 he is President of Chamber of Certified Accountants Czech Republic and member of Accreditation Committee of this professional organization.

He is reputed academician and practitioner; he published more than 400 research outputs, from which could be stated 25 monographers in the area of accounting and corporate finance, more than 40 research papers published in reputed databases (ISI, SCOPUS – important piece of them in WSEAS/NAUN research journals). His ISI H-index is 1, SCOPUS H-index is 7 and Google Scholar H-index is 10. His major is corporate financial reporting, partially focused on international accounting harmonization and financial securities reporting.

He was a plenary speaker of DEEE 2010 conference in Tenerife, E-ACTIVITIES 2011 conference in Jakarta, and conferences in Harvard (ICBA 2012) and Cambridge (EDUCATION 2012). Also did organized special sessions focused on measurement issues in finance and accounting at WSEAS conferences in Timisoara (EMT 2010), Iasi (AEBD 2011), Angers (EMT 2011), Harvard (ICBA 2012), Porto (AEBD 2012), Prague (ECC 2012), Harvard (MMF 2013) and Chania (ICFA 2013). He was a chair of Zlin conferences which were held in September 2012 at Tomas Bata University in Zlin, Czech Republic.

## Plenary Lecture 2

### Modified Neoclassical Growth Models with Time Delay



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**Abstract:** Kalecki was the first to analyze rigorously the relationship between production lags and cycles. In a delay differential equation model, Kalecki showed that production delays can cause cycles in the economy. Since Kalecki's contribution, very few authors have used delay differential equations for modeling the time structure of capital. Recently, some authors have considered the Solow-Swan model and the Ramsey growth models with a delay parameter into the equation for the accumulation of capital. The production occurs with a delay while new capital is installed (time-to-build) since the capital stock decided today will not be utilized in the production process until several periods from today due to the building and installation time needed. The study of these neoclassical growth models with a time to build lag involves differential equations of delayed or advanced type. The objective of this presentation is to overview the main results obtained in this direction.

**Brief Biography of the Speaker:** Massimiliano Ferrara is Professor of Mathematical Economics at "Mediterranea" University of Reggio Calabria where he was also Dean of the degree in Economics. Actually he is the Director of Culture, Education, Research and University Department at Regione Calabria. He was the Founder and Director of MEDAlics and Vice Rector at "Dante Alighieri" University of Reggio Calabria. He was also Visiting Professor at prestigious University and Academy around the world: Harvard University, Cambridge (USA), Morgan State University in Baltimore (USA), Western Michigan University (USA), New Jersey Institute of Technology in Newark (NJ) (USA). Member of Indian Academy of mathematics and Mathematical Association of America. He was invited speaker at several international conferences publishing 128 research papers on prestigious journals at high impact factors and 8 books. He is co-author of the research work on "Knowledge flows and technological trajectories in the Mediterranean Area" published in 2009 on African Journal of Science, Technology, Innovation and Development, and for the scientific book by title: "Economics and International Cooperation in the Mediterranean Area". He is editor of prestigious international journals: Advances in Management and Applied Economics (AMAE), African Journal of Science, Technology, Innovation and Development Applied Sciences (APPS), International Journal of Functional Analysis, Operator Theory and Applications (IJFAOTA), Far East Journal of Mathematical Sciences (FJMS), Journal of Indian Academy of Mathematics (Jiam), Journal of the Calcutta Mathematical Society and Universal Journal of Mathematics and Mathematical Sciences. His main research interests are: Mediterranean policies, dynamical systems, patterns of growth and sustainable development, mathematical economics, game theory, optimization theory, applied Economics.

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