



Economics Chapter of the System Dynamics Society

To: Policy Council of the System Dynamics Society

From: Economics Chapter

Re.: Chapter report

Period covered: July 2005 – January 2006

Date: January 31, 2006

Membership

There are currently 71 members, based on the subscriptions to the mailing list of the chapter. This is a net increase of 7 members since the time of the last report in June 2005.

Website and mailing list

The chapter website, <http://www.wpi.edu/~econsd>, has been continuously maintained and updated. The chapter's mailing is list-econsd@wpi.edu. Instructions about how to subscribe to the list are available on the chapter website.

Chapter name

Members who participated in chapter meetings during the summer system dynamics conference in Boston voted in favor of changing the name to Economics Chapter of the System Dynamics Society. Accordingly, the Society has been informed of the change. The website has also been updated to reflect the new name of the chapter.

Current officers

During the summer conference in Boston, chapter members supported a proposal to change the organizational structure of the chapter. Rather than having President and Secretary, the chapter now has President, President-Elect, and Past-President. Current officers are:

President: Burkhard Schade

President-Elect: Oleg Pavlov

Past-President: Michael Radzicki

Conferences

Our chapter will be represented with two sessions during the annual meeting of the Association for Institutional Thought (AFIT), which this year will be held in April in Phoenix, Arizona. This is an economics conference and our chapter's presence is being

enthusiastically supported by conference organizers. These sessions are being coordinated by Michael Radzicki and Oleg Pavlov.

Scholarship and teaching

Chapter members continued working on a variety of economic topics. Below are some examples.

Brian Dangerfield successfully completed the Sarawak project. The project was sponsored by the Government of the State of Sarawak in East Malaysia to create a System Dynamics model to facilitate the management of a transition of the local economy from a resource-based economy to a knowledge-based one by 2020. During his trip to Sarawak in November 2005, Professor Dangerfield presented the final report to the State Secretary and senior state officials. The model was well received and is currently being used by the Sarawak State Planning Unit.

Michael Reilly continued his work on a model that captures the interaction of trade, exchange rates, interest rates and international capital flows. The model is based on the following paper: Roubini, Nouriel & Setser, Brad. 2004. *The US as a Net Debtor: The Sustainability of the US External Imbalances*, New York. New York University Stern School of Business.

Daniel Arthur of University of Surrey, England continued research into the diffusion of new technologies and the development of service markets using a comparison of econometrics and system dynamics. He talked about the project during the summer conference in Boston: Arthur, D. (2005), "Upscaling diffusion models to represent General Purpose Technologies for industry modeling," Proceedings of the International System Dynamics Conference, Boston, USA.

Lars Weber of BTU-Cottbus in Germany incorporated SD into his courses "Introduction into General Economics" and "Business Cycles and Economic Growth" (upper-level course). He uses the system view to give students an idea about how things are connected in the economy. He draws CLDs for common economic problems. In the upper-level course he uses SD to visualize and understand the links between the variables in common economic theories. Next year, he plans to introduce a seminar, in which students can investigate different policies by running simulations.

Transport economics is the research area of Burkhard Schade. He recently published the following paper: Schade, B., Schade, W. (2005), "Evaluating Economic Feasibility and Technical Progress of Environmentally Sustainable Transport Scenarios by a Backcasting Approach with ESCOT" *Transport Reviews*, Special issue: Transport Energy Use and Sustainability, Vol. 25, no. 6, pp. 647-668.

Michael Radzicki of WPI presented a paper titled "The Circular and Cumulative Structure of Administered Pricing" (with Mark Nichols and Oleg Pavlov) during the annual meeting of the Association for Evolutionary Economics (AFEE). The meeting was held in January, 2006 in Boston. The paper was based on Radzicki's Post Keynesian-

Institutionalist System Dynamics "core" model of the economy. More information about the model can be found on http://www.michaeljosephradzicki.com/pki-sd_model.htm .

This report was prepared by Oleg V. Pavlov. I would like to thank chapter members for contributing to this report.