

**Title:** "*Herd-driven Business Cycles*", Edouard Schaal (joint with Mathieu Taschereau-Dumouchel)

**Abstract:**

We embed a theory of rational herding into a business cycle framework. In the model, technological innovations arrive randomly over time. New innovations are not immediately productive, and there is uncertainty about how productive the technology will be. Investors receive private signals about the future productivity and decide whether to invest in the technology or not. Macroeconomic variables and prices partially aggregate private information but do not reveal the true fundamentals as the agents ignore the degree of correlation in their information sets. Herd-driven boom-bust cycles may arise in this environment when the technology is unproductive but investors' initial signals are optimistic and highly correlated. When the technology appears, investors mistakenly attribute observed high investment rates to high fundamentals, leading to a pattern of increasing optimism and investment until the economy reaches a peak, followed by a quick collapse, as agents ultimately learn their mistake. As such, the theory can shed light on bubble-like episodes in which excessive optimism about uncertain technology fueled overinvestment, and were followed by sudden recessions. We calibrate the model to the U.S. economy and show that the theory can explain various features of the data that relate to the cyclicity and the predictability of business cycles. Finally, we show that leaning-against-the-wind policies can be welfare improving as they increase the amount of private information that becomes public.