

Sand in the Wheels: A Dynamic Global-Game Approach*

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Abstract

We study the impact of frictions on the prevalence of systemic crises. Agents privately learn about a fixed payoff parameter, and repeatedly adjust their investments while facing transaction costs in a dynamic global game. The model has a rich structure of externalities: payoffs may depend on the volume of aggregate investment, on the concentration of investment, or on its volatility. We examine how small frictions, including those similar to the Tobin tax, affect the equilibrium. We identify conditions under which frictions discourage harmful behavior without compromising investment volume. The analysis is driven by a robust invariance result: the volume of aggregate investment (measured in a pivotal contingency) is invariant to a large family of frictions.

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Abstrakt

Tento článek studuje dopad finančních fricí na výskyt systemických krizí. Článek navazuje na literaturu takzvaných globálních her, kterou obohacuje o některé dynamické prvky: ekonomičtí agenti se postupně a soukromě učí o parametrech hry. Model vykazuje bohatou strukturu externalit. Zisky hráčů mohou záviset na celkovém objemu investic, na jeho koncentraci, nebo volatilitě. Zkoumáme jak malé frikce – kupříkladu Tobinova daň – ovlivňují rovnovážné chování hráčů. Popisujeme podmínky, za kterých frikce odrazují od škodlivých investičních projevů, aniž by poklesl objem investic.