

# A Market-Based Solution for Fire Sales and Other Pecuniary Externalities\*

Weerachart T. Kilenthong<sup>†</sup> and Robert M. Townsend<sup>‡</sup>

## Abstract

In economies with a continuum of agents of different types, pecuniary externalities are removed with market exchanges. Agents choose from among various possible prices they want to prevail in the future and buy or sell rights in these market exchanges for future trade. Each agent can choose the exchange it wants without regard to what any other agent is doing. But crucially, the right to trade in each and every exchange is priced. The fee structure has a per unit price and quantity decomposition: a price, as determined by the exchange chosen, times the quantity of rights acquired.

**Keywords:** price externalities; Walrasian equilibrium; markets for rights to trade; market-based solution; collateral; exogenous incomplete markets; fire sales.

## 1 Introduction

Both developed and emerging economies have experienced episodes of rapid credit expansion followed, in some cases, by a financial crisis, with a collapse in asset prices, credit, and

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<sup>†</sup>University of the Thai Chamber of Commerce.

<sup>‡</sup>Massachusetts Institute of Technology.