not only at the terminal time, but also at some predefined interim times – thus bringing the market to higher efficiency than in the case of Markovian price process.

The remainder of the paper is organized as follows. Section 2 presents the model and the assumptions. Existence of Markovian equilibrium, and uniqueness of the inconspicuous Markovian equilibrium price process, are proved in Section 3. Existence of equilibrium for more general pricing functionals is demonstrated in the Section 4. Section 5 concludes.

2 The Model Setup

Consider a stock issued by a company with fundamental value given by the process Z_t, defined on $\left(\Omega, \mathcal{F}, (\mathcal{F}_t)_{t\geq 0}, \mathbb{P}\right)$, and satisfying

$$Z_t = v + \int_0^t \sigma_z(s) dB_s^1$$

where B_t^1 is a standard Brownian motion on $\mathcal{F}_t$, v is $N(0,\sigma)$ independent of $\mathcal{F}_t^{B^1}$ for any t, and $\sigma_z(s)$ a is deterministic function.

Then, if the firm value is observable, the fair stock price should be a function of Z_t and t. However, the assumption of the company value being discernable by the whole market in continuous time is counterfactual, and it will be more realistic to assume that this information is revealed to the market only at given time intervals (such as dividend payments times or when balance sheets are publicized).

In this model I therefore assume, without loss of generality, that the time of the next information release is $t = 1$, and the market terminates after that.[1] Hence, in this setting the stock can be viewed as a European option on the firm value with maturity $T = 1$ and payoff $f(Z_1)$. In addition to this risky asset, there is a riskless asset that yields an interest rate normalized to zero for simplicity of exposition. In what follows it is assumed that all random variables are defined on the same stochastic basis $\left(\Omega, \mathcal{F}, (\mathcal{F}_t)_{t\geq 0}, \mathbb{P}\right)$.

The microstructure of the market, and the interaction of market participants, is modeled as a

[1] This is without loss of generality, since the extension to multiple information release times is straightforward.