Source | Model Presentation

purejump1d

1 Description

We consider the following market model:

$$dS_t = rS_t dt + \sigma S_{t^-}(\beta_{N_{t^-}} dN_t - \nu dt),$$

where $(N_t)_{t\in \mathrm{R}_+}$ is a Poisson process with constant intensity λ, $(\beta_k)_{k\in \mathrm{N}}$ is a sequence of random variables independent of $(N_t)_{t\in \mathrm{R}_+}$, and r represents the interest rate.

2 Code Implementation

```
#ifndef _PUREJUMP1D_H
#define _PUREJUMP1D_H

#include "optype.h"
#include "var.h"

#define TYPEMOD PUREJUMP1D

/*1D Pure Jump World*/
typedef struct TYPEMOD{
  VAR T;
  VAR S0;
  VAR Mu;
  VAR Sigma;
  /*VAR Divid;*/
  VAR R;
  VAR Beta;
  VAR Nu;
```

```
} TYPEMOD;

#endif
```