All features

Set route to the directory

```
m_file_path = pwd;
m_files = dir(m_file_path);
filename = struct2cell(m_files);
freq = [1,5,10,20,50,100];
fid = fopen('kick_back.txt');
A = textscan(fid,'%s','delimiter',',');
key_ = cellstr(A{1,1});
p = 1;
for i = 1:length(filename(1,:))
    name = filename(1,i);
    if isempty(strfind(char(name),'.mat')) == 1
        continue
    else
    disp(char(name))
    name1 = char(name);
    data = load(name1);
    data = data.data1;
    name1 = name1(1:13);
    for j = 1:length(key_)
        if strcmp(key_(j),name1) == 1
            key = str2num(cell2mat(key_(j+1)));
            break;
        end
    end

    T = length(data.Asset_Price);
    num_of_freq = length(freq);
    PnL = zeros(T,num_of_freq);
    cost = zeros(T,num_of_freq);
    C0 = data.Call_Price(key);
    P0 = data.Put_Price(key);

    for n = 1:num_of_freq
        f = freq(n);
        cost(key,n) = data.Asset_Price(key) * data.Delta(key);
        for m = key+1:T
            if mod((m-key),f) == 0
                cost(m,n) = cost((m-f),n) + (data.Delta(m) - data.Delta(m-f))*...
                    data.Asset_Price(m);
                PnL(m,n) = data.Call_Price(m) + data.Put_Price(m) - ...
                    C0 - P0 + cost((m-f),n) - data.Delta(m-f)*data.Asset_Price(m);
            else
                cost(m,n) = cost((m-1),n);
                PnL(m,n) = PnL((m-1),n);
            end
        end
    end

    PnL_straddle = straddle(data,key,freq);
    PnL_hedge = hedge(data,key,freq);
```

```matlab
    tur_graph = [m_file_path,'\Tur_regime\',name1];

    figure(p)
    plot(PnL((key:end),:));
    legend(num2str(freq'))
    title([name1,'P&L'])
%     savefig(tur_graph);
    p = p + 1;

%     figure(p)
%     plot(data.Asset_Price);
%     title(name1)
%     p = p + 1;
%
%     figure(p)
%     plot(PnL_hedge((key:end),:));
%     legend(num2str(freq'))
%     title([name1,'P&LHedge'])
%     p = p + 1;
%
%     figure(p)
%     plot(PnL_straddle((key:end),:));
%     legend(num2str(freq'))
%     title([name1,'P&LStraddle'])
%     p = p + 1;

%     T = key;
%     figure(p)
%     a= data.Asset_Price(T) + data.Call_Price(T);
%     b= data.Asset_Price(T) - data.Put_Price(T);
%     c= data.Asset_Price(T);
%     plot(data.Asset_Price);
%     hline1 = refline([0,a]);
%     hline1.Color = 'r';
%     hline2 = refline([0,b]);
%     hline2.Color = 'r';
%     hline3 = refline([0,c]);
%     hline3.Color = 'g';
%
%     title([name1,'Call Put threshold'])
%     p = p + 1;
%
    end
    clear data;
    clear data1;
end
```

```
AAPLX20141201.mat
ARCCX20141010.mat
CYXXX20140417.mat
INTCX20141014.mat
KERXX20140326.mat
LAMRX20140423.mat
NUANX20140616.mat
```

SBGIX20140625.mat
TMUSX20140731.mat
VVUSX20140528.mat
VVUSX20140915.mat

AAPLX20141201P&L

ARCCX20141010P&L

CYXXX20140417P&L

INTCX20141014P&L

KERXX20140326P&L

LAMRX20140423P&L

NUANX20140616P&L

SBGIX20140625P&L

TMUSX20140731P&L

VVUSX20140528P&L

	1
	5
	10
	20
	50
	100

VVUSX20140915P&L

	1
	5
	10
	20
	50
	100