```
> life = 8/12
> r = 0.04
> foreign  = 0.08
> k = 0.50
> p0 = 0.012
> s0 = 0.52
> b = r - foreign
> GBSVolatility(p0, "p", s0, k , life, r, b)
[1] 0.0932244
>
>
> life = 12/12
> p0 = 82.5
> s0 = 1510
> k = 1480
> r = 0.04
> q = 0.025
> b = r - q
> GBSVolatility(p0, "p", s0, k, life,r, b)
[1] 0.1837636
```

```
> s0 = 41
> k  = 40
> life = 12/12
> r = 0.06
> q = 0.5/41
> b = r-q
> vola = 0.35
> c = GBSOption("c",s0, k, life, r, b, vola)@price
> c
[1] 6.961006
> p = GBSOption("p",s0, k, life, r, b, vola)@price
> p
[1] 4.128551

> lhs = c + k*exp(-r*life) + 0.5*exp(-r*6/12)
> rhs = p+s0
> lhs
[1] 45.11681
> rhs
[1] 45.12855
> c_mat = GBSOption("c",s0, k, 1000, r, 0.06, vola)@price
> c_mat
[1] 41

> p_mat = GBSOption("p",s0, k, 1000, r, 0.06, vola)@price
> p_mat
[1] 1.905683e-25
> p_mat_time = GBSOption("p",s0, k, 0, r, 0.06, vola)@price
> p_mat_time
[1] 0

> p = GBSOption("p",s0, k, 200/12, r, b, vola)@price
> p
[1] 4.873651
> p = GBSOption("p",s0, k, 150/12, r, b, vola)@price
> p
[1] 5.706372
> p = GBSOption("p",s0, k, 125/12, r, b, vola)@price
> p
[1] 6.084083
> p = GBSOption("p",s0, k, 100/12, r, b, vola)@price
> p
[1] 6.382208
> 100/12
[1] 8.333333
```