
From: Vincenzo Iozzo <[REDACTED]>
Sent: Tuesday, September 18, 2018 7:14 PM
To: jeevacation@gmail.com
Subject: Insurance idea

Hi Jeffrey,

I've been looking more into the cyberinsurance stuff and it seems to me that there's an opportunity on the tail end of the risk.

I spoke to a bunch of brokers and reinsurers and every player in the market is very concerned about catastrophic scenarios (Eg: the whole Amazon cloud is brought down by an attack) but because there isn't enough data and nobody really trusts the models it's very hard for say SwissRE to hedge that risk.

So the idea here is to offer cyber-cat bonds on specific catastrophic scenarios that have a hedging strategy available in the capital markets (Eg: you can buy deeply out of the money puts).

So the basic math ends up being:

Say you offer \$100m of coverage with a 8% coupon for an Amazon cloud outage that causes at least \$5bn in aggregated losses, the principal has to be fully collateralized but you can still buy treasuries with it. So if nothing happens, you make 8% spread on treasuries.

If the catastrophe does happen then you need to have a pool of capital you can use to short the company. Let's set aside options for a second and let's say that you just short Amazon, if you assume that the event is catastrophic enough such that the share price goes down 10% you have to deploy about \$330m (assuming the retail 3:1 level) to fully cover your loss in principal on the cat bond side.

It's a bit more complicated than this because you want to use some tech to decide when to actually buy the options and how to do some amount of portfolio construction but the gist of it is the above.

I spoke with Aon and they think that it is possible a cat bond of that kind would sell, the big issue here is that the capital required is pretty high. What do you think? Or more precisely, do you think it would be possible to raise capital for something like this?

Thanks,
Vincenzo

Sent from my iPhone

```
<?xml version="0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="0">
<dict>
  <key>conversation-id</key>
  <integer>327765</integer>
  <key>date-last-viewed</key>
  <integer>0</integer>
  <key>date-received</key>
  <integer>1537298031</integer>
```

```
<key>flags</key>
<integer>8590195713</integer>
<key>remote-id</key>
<string>854481</string>
</dict>
</plist>
```