File 20100716.2223: Notes from an email conversation with Steve Steinberger:

I want to develop the economics thesis to the point where I can write a tool to implement a part of it. What I want to implement is an artificial market where various accreditors can post bid/ask offers relating to the residual risk of an ST&E, where the price of an offer is related to the difficulty or effort of performing a particular test or activity. An accreditor who has already performed or witnessed a particular test—e.g., a penetration test or some portion of a FAT—could pre-empt another from having to perform the same test again, thereby saving time and money. The tricky part is to do it without leaking information when the details of the test or test results are classified. My model of accreditor–accreditor (or accreditor^2) interactions is artificial and differs from the real world in minor ways, but it is internally consistent enough for me to prove things.

Ideally, I would like to run experiments on my model, showing numerically that it settles to equilibrium in certain conditions when an impulse is applied [1, 2].

Read the impulse paper tonight.

References

[1] Axel Ockenfels and Reinhard Selten. Impulse balance equilibrium and feedback in first price auctions. *Games and Economic Behavior*, 51(1):155–170, April 2005.

[2] Reinhard Selten and Thorsten Chmura. Stationary concepts for experimental 2x2 games. *American Economic Review*, 98(3):938–966, June 2008.