

## #8

1 If you want to get rich without making anything or doing anything  
that anyone needs or wants, you need to be fast.

The technical term for this is arbitrage. Imagine that you live  
in an apartment block and it's snowing so hard out that no one wants  
5 to dash out to the convenience store. Your neighbor to the right,  
Mrs Hungry, wants a banana and she's willing to pay \$0.50 for it.  
Your neighbor to the left, Mr Full, has a whole cupboard full  
of bananas, but he's having a hard time paying his phone bill  
this month, so he'll sell as many bananas as you want to buy  
10 for \$0.30 apiece.

You might think that the neighborly thing to do here would be  
to call up Mrs Hungry and tell her about Mr Full, letting them  
consummate the deal. If you think that, forget getting rich without  
doing useful work.

15 If you're an arbitrageur, then you think of your neighbors'  
regrettable ignorance as an opportunity. You snap up all of Mr Full's  
bananas, then scurry over to Mrs Hungry's place with your hand  
out. For every banana she buys, you pocket \$0.20. This is called  
arbitrage.

20 Arbitrage is a high-risk way to earn a living. What happens if Mrs Hungry changes her mind? You're stuck holding the bananas, that's what.

Or what happens if some other arbitrageur beats you to Mrs Hungry's door, filling her apartment with all the bananas she could ever need?

25 Once again, you're stuck with a bunch of bananas and nowhere to put them (though a few choice orifices do suggest themselves here).

In the real world, arbitrageurs don't drag around bananas -- they buy and sell using networked computers, surveying all the outstanding orders ("bids") and asks, and when they find someone willing to pay  
30 more for something than someone else is paying for it, they snap up that underpriced item, mark it up, and sell it.

And this happens very, very quickly. If you're going to beat the other arbitrageurs with the goods, if you're going to get there before the buyer changes her mind, you've got to move faster than  
35 the speed of thought. Literally. Arbitrage isn't a matter of a human being vigilantly watching the screens for price-differences.

No, arbitrage is all done by automated systems. These little traderbots rove the world's networked marketplaces, looking for arbitrage opportunities, buying something and selling it in less  
40 than a microsecond. A good arbitrage house conducts a billion or more trades every day, squeezing a few cents out of each one. A billion

times a few cents is a lot of money -- if you've got a fast computer cluster, a good software engineer, and a blazing network connection, you can turn out ten or twenty million dollars a day.

45 Not bad, considering that all you're doing is exploiting the fact that there's a person over here who wants to buy something and a person over there who wants to sell it. Not bad, considering that if you and all your arbitraging buddies were to vanish tomorrow, the economy and the world wouldn't even notice. No one needs or wants  
50 your "service" but it's still a sweet way to get rich.

The best thing about arbitrage is that you don't need to know a single, solitary thing about the stuff you're buying and selling in order to get rich off of it. Whether it's bananas or a vorpal blade, all you need to know about the things you're buying is  
55 that someone over here wants to buy them for more than someone over there wants to sell them for. Good thing, too -- if you're closing the deal in less than a microsecond, there's no time to sit down and google up a bunch of factoids about the merchandise.

And the merchandise is pretty weird. Start with the fact that a lot  
60 of this stuff doesn't even exist -- vorpal blades, grabthar's hammers, the gold of a thousand imaginary lands.

Now consider that people trade more than gold: the game Gods sell all kinds of funny money. How about this one:

Offered: Svartalfaheim Warriors bonds, worth 100,000 gold, payable  
65 six months from now. This isn't even real fake gold -- it's  
the promise of real fake gold at some time in the future. Stick  
that into the market for a couple months, baby, and watch it go.  
Here's a trader who'll pay five percent more than it was worth  
yesterday -- he's betting that the game will get more popular some  
70 time between now and six months from now, and so the value of goods  
in the game will go up at the same time.

Or maybe he's betting that the game Gods will just raise the price  
on everything and make it harder to clobber enough monsters to raise  
the gold to get it, driving away all but the hardest-core players,  
75 who'll pay anything to get their hands on the dough.

Or maybe he's an idiot.

Or maybe he thinks you're an idiot and you'll give him ten percent  
tomorrow, figuring that he knows something you don't.

And if you think that's weird, here's an even better one!

80 Coca-Cola sells you a six-month Svartalfaheim Warriors 100,000 gold  
bond, but you're worried that it's going to fall in value between  
now and D-Day, when the bond matures. So you find another trader  
and you ask him for some insurance: you offer him \$1.50 to insure  
your bond. If the bond goes up in value, he gets to keep the \$1.50  
85 and you get to keep the profits from the bond. If the bond goes down

in value, he has to pay you the difference. If that's more than \$1.50, he's losing money.

This is basically an insurance policy. If you go to a life-insurance company and ask them for a policy on your life, they'll make a bet  
90 on how likely it is that you're going to croak, and charge you enough that, on average, they make a profit (providing they're guessing accurately at your chances of dying). So if the trader you're talking to thinks that Svartalfaheim Warriors is going to tank, he might charge you \$10, or \$100.

95 So far, so good, right?

Now, here's where it gets even weirder. Follow along.

Imagine that there's a third party to this transaction, some guy sitting on the sidelines, holding onto a pot of money, trying to figure out what to do with it. He watches you go to the trader and  
100 buy an insurance policy for \$1.50 -- if Svartalfaheim Warriors gets better, you're out \$1.50, if it gets worse, the trader has to make up the difference.

After you've sealed your deal, this third party, being something of a ghoul, goes up to the same trader and says, "Hey, how about  
105 this? I want to place the same bet you've just placed with that guy. I'll give you \$1.50 and if his bond goes up, you keep it. If his bond

goes down, you pay me and him the difference." Essentially, this guy is betting that your bond is junk, and so maybe he finds a taker.

Now he's got this bet, which is worth nothing if your bond goes up,  
110 and worth some unknown amount if your bond craters. And you know what he does with it?

He sells it.

He packages it up and finds some sucker who wants to buy his \$1.50 bet on your bond for more than the \$1.50 he'll have to cough up if your  
115 bond goes up. And the sucker buys it and then he sells it. And then another sucker buys it and he sells it. And before you know it, the 100,000 gold-piece bond you bought for \$15 has \$1,000 worth of bets hanging off of it.

And this is the kind of thing an arbitrageur is buying and selling.

120 He's not carrying bananas from Mr Full to Mrs Hungry -- he's buying and selling bets on insurance policies on promises of imaginary gold.

And this is what he calls an honest day's work.

Nice work if you can get it.