Buying and selling action has been a fixture of tournament poker for as long as I have been a part of it. Some are interested in reducing their variance, while for others it has been a means for players to play in bigger tournaments they otherwise wouldn't be able to. With large tournaments being offered every weekend, it's natural that the market for buying and selling pieces is as active as ever. However, despite its ubiquity and necessity in the poker economy, I would argue that it has become detrimental to investors, other players, and poker in general, and I would go as far as to say that the purchase of marked up pieces could be viewed as poker welfare in many instances.

First of all, as an economist I will be using a couple phenomenon observed in markets to explain some of the problems that are present in the marketplace. The first that presents itself is that of the "winner's curse". To put it simply, the winner's curse is a phenomenon that tends to occur in auctions (or auction-like markets) with incomplete information or uncertainty regarding the value of the thing being sold. For example, think European basketball players before they began playing in the NBA regularly. In these auctions, the winners almost always overpay for the product (or player, in this instance) being sold. Combining that with the psychological effects of lottery-type payouts ("low probability bias" [wins are more likely than we think] and the "availability heuristic" [I've known plenty of winners]), this leads to the majority of investors overpaying for shares.

The next problem facing shares sold at markup is the interesting but rarely discussed phenomenon of what I like to call "dual prices" or what others might call "profit without winning". Let's give an individual a hypothetical package in the marketplace. Let's assume this person puts together a WSOP package of 15 events totaling \$20,000. Let's also assume that he wishes to sell 50% at 1.2, a relatively common, albeit rather arbitrary markup. In this hypothetical, investors will be paying \$12,000 for 50% (1.2 markup) and our player will be paying \$8,000 for 50%, for a *markdown* of .8. "Wait," you might say, "Of course the player should get a discount when he's providing a presumably +EV investment for the investor(s)." Absolutely. However, we are only concerned with the incentives in this exercise. Perhaps our player falls on hard times prior to the series and decides he needs to sell a little more to make things work, so instead of 50%, he sells 70%. Now, investors are paying \$16,800 for 70% (still 1.2) and our player is paying \$3,200 for 30% for a *markdown* of roughly .53. We generally presuppose that players selling in the marketplace are winning players, but this hypothetical demonstrates that the player only needs to have an ROI greater than -20% in the first example and greater than -47% in the second. I think this phenomenon reveals why many have thought that a lot of players make more from their markup than their profit. It is a lot easier to have an ROI greater than -47% than an ROI above 20%, the latter of which being required to make the investment +EV for investors while the former is required to make it +EV for the player.

The third issue is one that many people understand and can identify but have a hard time explaining, and that is referred to as the "principal-agent" problem. You can see this exhibited anytime two people in a transaction have misaligned incentives. One classic example is the situation encountered between a realtor and homeowner when selling a home. Clearly the homeowner is looking to get the highest price possible for the house, and it's virtually costless to have it sit on the market for a long period of time, but this is not true for the realtor. The realtor's opportunity cost of selling a home is selling other homes, so it's in the realtor's best

interest to sell as fast as possible since the commission is only 3%, whereas the owner will be getting the other 97%. This interaction serves as a model of how many packages operate in the marketplace. Consider our hypothetical from before: a 15-event package spread over, say, 3 weeks. Our hero decides to run good his first event and take a huge stack into the last level, but loses a big flip with 15 minutes left in the day to go back to less than starting. It is at this point that the player realizes that if he busts this tournament before the day ends, then he can register tomorrow's event because it's in his package. The opportunity cost of possibly grinding his short stack into day 2 is the tournament that he would have to skip and given the discounted price for all the events that he gets to play, it's almost *irrational* for hero to play his short stack conservatively.

Having laid out my case for why I think the marketplace is broken, let me now respond to some of the anticipated criticisms. First, many have argued that this is a free market and people have free will, so if there are suckers who are willing to invest in the marketplace as it currently stands, so be it – "whatever price the market will bear is fair" and caveat emptor. Well, I think this is the same logic that perpetuates check cashing businesses, mutual funds, and extended warranties. However, just because the market is functional doesn't mean there isn't room to educate, especially with the negative impacts that piece-buying has on the poker economy as a whole. Moreover, we have checks on the free market all the time: limits on interest rates, lemon laws, and stock market regulations, and as a general rule, we should try to protect consumers in the event of asymmetric information, i.e. one party knows more than the other. If piece-buying isn't an example of this (when the buyers aren't sharps), I don't know what is. Lastly, as stealthmunk recently reminded me, this isn't a completely free market since people aren't able to sell players they think are priced incorrectly (be it over- or undervalued). Mike McDonald, aka Timex, came up with a solution to this with his famous "Bank of Timex". Unfortunately, this was deemed bookmaking, which is illegal, so he had to close up shop. This would be an easy fix, but alas, it's not an option.

I've got more to say, especially in the area of potential fixes, but I'll save that for later.