## **Natural Demand**

Assume the market maker starts with 100 <u>Elsies</u> and 0 dollars. The market maker will show a profit after completing all transactions in each period. The market maker wishes to return to an inventory of 100 Elsies to continue to earn the same return in subsequent periods.

| Redeption | <b>MM Dollars</b> | MM Elsies | Event   | Rent Paid      | EDSF   |
|-----------|-------------------|-----------|---|----------------|--------|
|           | 0                 | 100       | Starting Point                                | 0              | 0      |
|           | \$99.15           | 0         | 100 Elsie rent payment                        | 100            | 0      |
| \$29.72   | \$69.44           | 30        | 30 Elsies redeemed for county at .9905        | 70             |        |
| \$13.87   | \$55.57           | 44        | 14 Elsies redeemed for ABC,VTLM at .9905      | 56             |        |
|           | \$55.57           | 47.5      | 3.5 Elsies as dividend for market maker       | 52.5           |        |
| \$26.00   | \$29.57           | 73.75     | Worst case-26.25 Elsies redeemd for land fund | 26.25          |        |
|           | \$29.57           | 73.75     | 26.25 Elsies sequestered in EDSF              | 0              | 26.25  |
| \$26.00   | \$3.57            | 100       | ABC ram and jam to restore MM inventory       | Natural Demand |        |
|           | \$3.57            | 100       | MM Profit from dividend + turnover            | MM             | orofit |

Consider a \$100 rent payment. With a touch of a button, that rent can be paid in 100 Elsies, purchased by the rent payer for \$99.15 from the market maker. That \$0.85 might not seem like much, but when there is no risk, and the only cost is the time it takes to press a button, everyone will pay their rent in Elsies.

What is the destiny of those 100 Elsies and \$99.15?

30 Elsies will go to the <u>county</u> as  $30 \times \$0.9905 = \$29.71$ . That leaves 70 Elsies in the commons trust and \$69.44 + 30 Elsies with the market maker. 14 Elsies will go to the ABC and VTLM as  $14 \times \$0.9905 = \$13.87$ . That leaves 56 Elsies in the <u>Commons Trust</u> and \$69.44 - \$13.87 = \$55.57 + 44 Elsies with the market maker.

3.5 Elsies will be payable as a <u>dividend</u> to the market maker as the only eligible holder of Elsies. That leaves 26.25 Elsies in the Commons Trust. The market maker holds \$55.57 + 47.5 Elsies.

Although Elsies in the <u>land fund</u> will be frequently destroyed when not needed, they are all converted to land fund dollars in the worst case. This is the land fund that is used to aid in the purchase of more property into the commons trust.

26.25 Elsies remain with the Commons Trust, and these are sequestered in the EDSF.

The market maker holds \$29.57 plus 73.75 Elsies. The market maker still needs to restore the Elsie inventory back to 100 Elsies. The market maker wants to buy 26.25 Elsies at \$0.9905. Where do these Elsies come from? 26.25 Elsies were sequestered in the EDSF and they are not for sale. New Elsies are only minted when the ABC uses its land fund to purchase more property into the Commons Trust. The market maker buys 26.25 of these new Elsies for \$26.00.

This leaves the market maker with \$3.57 and a restored inventory of 100 Elsies. That \$3.57 is profit for the market maker. Assume there are no retail holders of Elsies. The market maker is the only recipient of the dividend. Every time the market maker turns over 100 Elsies of inventory for renters, they earn \$3.57. Even with tens of thousands of retail holders, the profit in this simulation can go no lower than \$0.07 per turnover of 100 Elsies. Elsies can be turned over once a day. Inventory must be restored with each turnover and can only be replenished from the minting of new Elsies as land is purchased into the commons trust.

Restoring that stock is called "natural demand" because the market maker must replenish the inventory to make a profit. Natural demand for Elsies ensures the purchase of more properties into the Commons Trust, even if nobody else knows the Elsie exists (the button could say, "Do you want a .85% discount?"). Using just this demand and an expected Commons Trust land appreciation of 3% over inflation, Phase I will be completed in 249 years. Nobody ever needs to purchase an Elsie for their account. A CD offering 5.95% must be issued occasionally to purchase Elsies when the Elsie dividend rises above 6%. Still, the CD will be redeemed in U.S. dollars, and the investor need never know their money was used to purchase Elsies.

Although we have no intention of waiting 249 years for <a href="Phase I">Phase I</a> to end, natural demand demonstrates that purchasing land into the commons trust is a natural process. Without a catalyst, the process will complete at a languid pace. Since the Commons Trust is a legal entity in perpetuity (or until dissolved by the court of jurisdiction, <a href="ultimately the World Court">ultimately the World Court</a>), the <a href="ABC">ABC</a> can come and go. Other competing organizations could form to purchase land into the Commons Trust and then disappear themselves. The rent on land in the Commons Trust is distributed according to its charter. The land fund can only purchase more property or be destroyed. Whichever trustee receives the land fund must follow the charter. Barring natural or human-caused disasters, the process will go to completion.

The purpose of the ABC is to provide the catalysts for its profit, which significantly reduces the duration of Phase I.

Another source of natural demand, far less pure than rental demand but one that is economically justified, is <u>treble arbitrage</u>. A <u>property owner's</u> optimal strategy in minimizing the rent payment is to allow the rent to fall until the property is <u>trebled</u> and then to match the <u>trebler</u>. Sufficient liquidity is needed to employ this strategy, so those who live paycheck to paycheck will tend to pay rent monthly, likely falling behind, as rent is voluntary and ultimately trebled without the ability to match.

Those who employ the optimal strategy will be trebled once a year, as the rent falls below the <u>treble danger line</u>. Those who make it a profession of trebling these properties will tend to use Elsies, as these can be obtained at a discount of .85% to .95%, depending on whether the Elsies are received from the market maker or the ABC during ram and jam. There is little risk to the trebler because discounted Elsies can be reused until there is a successful treble. There is no cost to treble.

If 75% of property owners allow their rent to fall until trebled, and 75% of treblers use Elsies, then 50% of all properties will create a demand for Elsies equal to  $50\% \times (1/12 \times 133\%)$  structure value +  $1.25\% \times 3 \times 100$  total property value). The 1/12 indicates that treble escrow of a successful treble lasts one month out of the year. 133% represents the <u>structure value</u> and <u>premium</u> that must be <u>sequestered</u>. 1.25% is the treble danger line at half the average rent of 2.49%. The x 3 is the trebled rent that must be sequestered.

Generally, the treble demand parameter is set to 50% when simulating natural demand. The purist might wish to set the parameter at 0%, in which case Phase I would last 288 years from the natural demand of rents alone.

In the "worst case," commons property appreciation is set to an unrealistically low 4% (identical to the average of properties with a property tax). With the treble demand parameter set to 50%, natural demand ends Phase I in 293 years.

As mentioned earlier, the final form of natural demand is a dividend that rises above the CD rate given by the most generous banks. When this return on the Elsie rises above 6%, the ABC can sell CDs for 5.95% and invest the proceeds in Elsies. There is no risk because no retail Elsies exist to be dumped on the market. The only sale occurs when it comes time to redeem the CDs.

Given any initial condition or the application of any catalyst, natural demand allows us to predict the duration of Phase I accurately.

Natural demand demonstrates that <u>AFFEERCE</u> could not be classified as a pyramid scheme. This is the most critical achievement of version 6.1.