Supply, Demand, and Holding 99%

The most important factor differentiating a pyramid scheme from a legitimate economic strategy is that profits result from creating real wealth. AFFEERCE achieves this in at least four ways.

First, the elimination of property taxes encourages development. Second, the 33% premium on structures accelerates this tendency toward development by promising low rents to those who improve or keep up their property. Third, the availability of free land much closer to downtown urban areas opens the door to new enterprise. Fourth, movement into the commons trust is an irreversible operation that creates wealth by making land available to the most efficient user of that land, now or at any time in the future.

The strength of the Elsie originates with the creation of wealth. Backed by this creation of wealth, the Elsie has intrinsic value. It is not only good for the payment of rent but also good for the payment of rent at a 1% discount to the U.S. dollar. Bloated margins, rates, and fees on mortgages and other competing rents allow business plan success despite and because of that 1% discount.

The discount is not fully 1%. Typically, it can be as low as 0.84% and as high as 0.95%. But there are extraordinary circumstances where people desperately seek a 0.01% discount or are indifferent to a 7% discount. These exceptional circumstances might never occur.

The 0.95% discount creates arbitrage opportunities. You buy an Elsie for 99.05 cents and spend it like a dollar. Demand for the Elsie is determined, in part, by those who wish to take advantage of this discount.

Each arbitrage opportunity has a different name, depending on what you plan to use the discount for. If it is to pay rent, it is rental arbitrage. If it is to treble a property, it is treble arbitrage. It is bidder arbitrage if it is to bid for a property at auction. It is retail arbitrage if it is to purchase goods or services from a merchant. All these arbitrage opportunities were discussed in their modules.

This module deals with them as a group and other factors creating demand for the Elsie.

Everybody pays their rent in Elsies, yet rental arbitrage plays only a tiny role in Elsie demand. Were it the only source of Elsie demand, Phase I would take 289 years to complete.

Rent is transactional, with 43% of the Elsies used to pay rent converted back to U.S. dollars almost immediately.   An additional 7% of rent is used for dividends and might or might not be converted to U.S. dollars on the Elsie market shortly after. Exactly 50% of the rent received is destroyed (land fund) or sequestered (EDSF). Land fund Elsies received in rent are typically destroyed because most of the usable land fund is in U.S. Dollars from auction revenue. Only if demand is insatiable will land-fund Elsies received from rents be converted to U.S. dollars.

Ignoring the players and their roles, suppose 100 Elsies were purchased from the market for $99.15 and used to pay rent. Of the rent received, 50 Elsies were sold back at 50 x 99.05 cents = $49.53 to pay rent recipients (ABC, VTLM, and counties). The remainder of the Elsie rent was sequestered or destroyed, leaving somebody with $99.15 - $49.53 = $49.62 net profit.

The $49.62 is called natural demand. This demand would bring Phase I to completion in just 289 years. Other forms of natural demand, combined, reduce the duration of Phase I to 228 years.

The value of natural demand is not that we intend to wait 228 years for Phase I, but that natural demand is ubiquitous. Whenever we are in a jam, natural demand will bail us out. It keeps things steady when we veer off the correct path, nudging us in the right direction and continuously moving the process toward completion.

Supply

Economists explain that price is set where supply meets demand. Elsie supply and people's demand for the Elsie determine what people are willing to pay. The greater the demand, the higher the price. The greater the supply, the lower the price.

The Elsie supply is determined by the amount of land the ABC purchases into the commons trust. If the supply is a billion Elsies, then the supply "curve" is denoted by a vertical line at the quantity of Ł1 billion.

There is another way to represent this quantity on the horizontal axis. Instead of saying that the quantity is Ł1 billion, the quantity can be denoted as a percentage

of Elsies ever minted. If the supply of Elsies is all the Elsies ever coined, the supply would be 100%.

A 100% supply is never the case. The [advance rent fund](#) and [EDSF](#) are unavailable to those who want to purchase Elsies. If the average rent funds hold 2.5% of the total property value, then a minimum of 2.5% of Elsies will be out of circulation (assuming property value never drops).

Elsies out of circulation is much higher than 2.5% from day one. In standard auction mode, a purchase into the commons trust is followed by an auction. Bidder arbitrage is not expected to be common in the early days. Unlike rent, the proceeds of these auctions are typically in U.S. dollars. Only 5% of those proceeds go to the advance rent fund, with 95% distributed as rent with an immediate-delayed disposition. Only 32% of proceeds destined for the EDSF and Elsie dividend are converted to Elsies in the market. The remainder are kept as U.S. dollars.

If auction proceeds average 50% of the purchase price, then 50% x 25%, or about 12.5% of the purchase price, is sequestered. Adding advance rent, 15% of all Elsies minted on day one are not part of the supply.

We saw above that 50% of rent payments are sequestered or destroyed, and rent is 2.5% of the purchase price annually. In that case, 1.25% of the purchase price is taken out of circulation annually, and all Elsies created from the purchase are destroyed or out of circulation in 66 years (2.5% + 12.5% + 66*1.25%). However, this assumes no rent increases from either inflation or community growth. If there is 5% growth plus inflation, rent doubles every 15 years. If so, all Elsies created when a property is purchased into the commons trust are removed from circulation in under 40 years. This hyper-deflationary state can be maintained indefinitely if the funds released from the EDSF for monthly Earth Dividends equal the rent.

With a finite Earth's surface, the only release valve for hyperdeflation is the Earth Dividend.

As natural demand assures a hyperdeflationary outcome, the Elsie dividend acts as an accelerant.

Sequestered Elsies are not eligible for the dividend. If, on average, one Elsie remained in circulation for every $250,000 property purchased, that single Elsie

would receive 7% x 2.5% x Ł250,000 = Ł437.50 x .9905 dollars/Elsie = $433.34, an annual return over 42,000%.

Natural demand pushes the dividend up, and only an acceleration of property purchases can keep the dividend down. Property purchases are dependent on Elsie demand. The dividend will increase if the ABC fails to accelerate property purchases, increasing Elsie demand, and increasing property purchases. On the other hand, ABC success at property purchase acceleration lowers the dividend, decreases Elsie demand and property purchases. Is there an equilibrium?

As much as the world's land area is finite and hyperdeflation inevitable, the equilibrium in a rational market would be an insatiable demand for the Elsie. Feeding a virtuous cycle, insatiable demand decreases the time to hyperdeflation, creating a buyer's panic. In a rational marketplace, the duration of Phase 1 would only be a function of politics and logistics.

Unfortunately, markets are rarely rational, and the risk of legal and political obstacles is relatively high compared to other investments.

We can confidently say that (2.5% + 12.5% = 15%) of the minted Elsies for a property are sequestered on the auction day. The maximum supply line is 85%. This supply line falls for a given property over time, reaching 0% between 30 and 66 years, depending on inflation and growth. For the set of all properties in the commons trust, the supply line drops much more slowly from 85% due to purchases at a faster rate. Once the supply of available properties is exhausted, the supply line will fall rapidly due to ever-increasing sequestration and the psychology of panic buying.

Supply is initialized to 82.5% of Elsies minted. Calculating demand for the Elsie is more complex—however, the concepts underlying demand can be understood. First, we must get a feel for the vertical or price axis. This is the price of Elsies in United States dollars. But there is an easier and equivalent way to measure price.

The Elsie is tied to the U.S. dollar at some rate, which does not change in the short run. This rate is called [the peg](). Instead of pricing Elsies at so many U.S. dollars, they are priced at a certain percentage of the peg, like 100%, 90% peg, or 99% of the peg.

Whether there is panic buying or a complete lack of buyer interest, the Elsie market value will likely be 99.05% of the peg with a market maker spread of 0.1%.

Only government interference (Elsie scares), resistance (general refusal to sign the agreement), or intervention can materially move the needle.

Sources of Demand

There are many sources of Elsie demand.

With rental arbitrage, people demand Elsies to pay their rent because it saves them 0.85%-0.95% and is risk-free and hassle-free. The demand is minuscule. Daily demand is 1/30 x 8.33% x 2.5% = .007% of property value in the commons trust. With a billion dollars of property, the daily demand is only $6,942, or about one more property purchased monthly. Unfortunately, if the only demand for the Elsie were to take advantage of rental arbitrage, the duration of Phase I would be over 289 years with 2% inflation and 3% additional property appreciation!

Another source of demand is treble arbitrage. For details, see the module. Generally, 1/12 of all properties will be under treble at any time. The rent takes about a year to fall from the trebled amount to the treble-danger level. When that happens, the property is trebled again. The cost to treble a property is about 86% of the purchase price for a 40% land share property. If the average treble is in escrow for one month and treble arbitrage with Elsies is employed, then continuous treble arbitrage demand for the Elsie would be 7.16% of property value in the commons trust. However, not everyone has the liquidity or the psychology to treat rent optimally. Nor would all trebles take advantage of the arbitrage. In most analyses, we use 50% of maximum demand or about 3.58% of property value. This is a one-time demand per property. However, it does grow with inflation, property appreciation, and new purchases. With a billion dollars of property, one-time demand is 3.58% or Ł35.8 million in demand. Annual demand is 3.58% x 3.58% or Ł1.28 million. This demand purchases five properties a year. Growth and inflation increase treble arbitrage demand. Assuming 5% G + I, 3.58% x 5% or Ł1.79 million, or seven properties per year.

In summary, treble arbitrage results in an ongoing 3.58% x 8.58% of total property value in demand annually, which purchases the same amount of property as daily rental arbitrage. Rental arbitrage and treble arbitrage, as the only sources of demand, bring the duration of Phase I down to 228 years.

As seen in the module, the effect of an Elsie Discount on Treble Arbitrage, treble arbitrage demand (and rental arbitrage demand) increases violently as the Elsie

falls below 99% of the peg. The deepest discount possible in the first year is about 80% before treble arbitrage demand exceeds supply.

The 80% of the peg floor assumes everyone but the treble arbitragers is selling. But that would be irrational, as the dividend on the last Elsie left standing would be 1/365 x 7% x 2.5% of total property value. If there were $1 billion in total property value, the daily dividend would be Ɛ4794 x .9905 = $4,748. But this is much too small. At an 80% discount to peg, the EDSF receives nothing, and the dividend is 32% of the ground rent instead of 7% of the ground rent. The dividend on that single Elsie would be $21,707 daily. If a $0.9915 investment generated $21,707 daily, it would not be sold at a loss - for $0.80! Anybody would gladly pay $10,000 or more for that Elsie. So, the Elsie would not be selling at 80% of the peg; it would be trading at 9,999,900% of the peg or more! But if it were, nobody would be using treble arbitrage. There is an equilibrium maximum discount at 93% of the peg.

In the simulation, a dividend over 6% creates demand that lowers the dividend below 6%. However, a simulation without a random number generator cannot generate a source of demand that could prove explosive: the dividend spike. The $21,707 above is an example. It could never happen two days in a row. If it happened once, demand would obliterate the spike. Spikes occur because the movement toward equilibrium is neither smooth nor linear. Treble, rental, and bidder arbitrage demand increase when the Elsie falls below 99% of the peg. So, too, does market maker demand. Nobody knows how many bidders will use Elsies or how many properties will be trebled. Or how much market makers will take advantage of the opportunity to increase their inventory. A dividend spike can lead to panic buying before the ABC can step in with ram and jam.

The depletion of market maker inventories and the 99.16% inventory are warnings of a dividend spike. A dividend spike is imminent if retail holders start selling their holdings at 99.99% of the peg. Ironically, if the price rises above 100% of the peg, people buy for the dividend, not arbitrage, and the spike will not be as high.

Dividend spike demand is like lottery ticket demand, although the ticket never becomes worthless, and the spike can happen anytime. We promise massive dividend spikes and extreme appreciation of the Elsie in 40 or so years.

Although [retail arbitrage](#) will not be a primary source of Elsie demand in the first few years, it will be significant by year five. The consumer buys discounted Elsies at

the point of purchase, saving 1% on the list price. The merchant accepts the Elsies at a 1% cost, far better than most credit card contracts.

Because of the Elsie dividend, consumers and merchants grow increasingly comfortable holding Elsies for periods exceeding a few seconds around the transaction time. A deep discount increases consumer demand but fails to dampen merchant demand because of the huge dividend increase.

Idealist demand should not be trivialized in the first few years. Demand for the Elsie accelerates the path to land-based capitalism. For those fed up with the myriad negative aspects of debt-based capitalism, purchasing Elsies is an investment in their sanity.

In Phase II, the supply of Elsies will dry up. Because the Elsie is needed to bid on an Earth Dividend, lack of supply will create hyperdeflation of the Elsie and hyperinflation of fiat currencies. Those without a cache of Elsies in their investment portfolio will suffer serious financial harm. Those who hoard Elsies to pay their rent in Phase II will never see a rent increase, while those who purchase Elsies when rent is due will suffer through hyperinflation of rent. The Elsie is needed to survive financially until federation.

Many will be skeptical and wait until Phase II is just a few years away before they jump into the Elsie. This is a mistake.

In The Effect of an Elsie Discount on Treble Arbitrage. Perhaps the most exciting feature of the TAD curve is that it maintains its shape in the face of U.S. dollar inflation and, more significantly, when wealth is created through new construction, remodeling, or renovation.

However, both serve to increase the scale of the horizontal axis. This axis is the percent of Elsies demanded for treble arbitrage. A ten-fold increase from U.S. dollar inflation or the replacement cost of structures on commons trust land would move an 84.5% supply line to the location of 8.45% on the original horizontal axis. Such a change could not be handled without appreciation of the Elsie peg. However, appreciation of the peg is not allowed in Phase I. Every 14 years, the treble arbitrage demand for a given property doubles due to growth and inflation alone. Furthermore, it only takes one deep discount episode before all treblers use the Elsie, and most property owners will opt not to pay rent until trebled. Bidder arbitrage will also become increasingly popular as time goes on. In the unlikely

event of non-accelerating purchases, treble arbitrage demand grows to 10% in 14 years, 17% in 24 years, and 31% in 38 years.

What about supply? After 40 years, 100% of the Elsies from the first purchase will be sequestered, and 15% of Elsies from the most recent purchase will be sequestered. Assuming no significant acceleration of purchases, the average property will have 58% of its Elsies sequestered or destroyed. The advance rent fund holds almost 12% of property value due to growth and non-accelerating purchases.

The Elsie supply in circulation is 30%, and the treble arbitrage demand alone is 31%. Something has got to give. Dividends spike to infinity, every county signs the agreement, the ABC sells all its Elsies at 99.99% of the peg, and arbitrage ends as rents are paid in U.S. dollars. A buyer's panic means that the average person who could have bought an Elsie for $0.9915 the day before must pay $5 for an Elsie.

While the ABC's failure to accelerate purchases is not likely, it is possible, particularly due to political and logistical issues. Any imbalance in supply and demand from multiple causes could quickly turn a dull market into a buyer's panic that lasts until the end of Phase I.

All it takes is a consortium of nations to see the writing on the wall and put in a bid for Ł15 trillion Elsies, and Phase I could end before that single bid has been completely satisfied.

Dollar-cost averaging is the safest way to buy Elsies. $100 monthly for 20 years is $24,000 Ł. This is sufficient to prosper in hyperdeflation. It is approximately equal to the present value of an Earth Dividend near the end of Phase II. However, if 1/8 of the world's population invested this way, it would lead to $24 trillion in direct land purchase and another $12 trillion from natural demand. It is equivalent to 144 million $250,000 properties, which might be more property than is available for sale worldwide. Again, if a few billionaires figure this out, Phase I could come to a sudden and early end.

Deep Discounting

For the Elsie to fall below 99%, many sellers must be willing to take a loss. There is no rational reason to sell the Elsie. It pays a dividend, can be used in retail, will ultimately hyperdeflate, and can be used to pay rent, purchase a property, or

capture land. It does this at a discount. It is partially to fully backed by land if the commons trust ceases to exist.

However, panics and irrational behavior are common in markets, particularly with an untested instrument. It might come in the form of an attack. A hostile buyer purchases Ł10 billion and then dumps them once all purchased real estate has closed.

If the dump represents a significant percentage of total Elsies, 99% will fail to hold. In the worst case (the dump is 100% of retail Elsies held), the Elsie will fall to 93% of the peg before treble and rental arbitrage exhaust the dumped supply. This does not consider bidder, investor, market maker, or speculator arbitrage. Given the demand not covered in the simulation, the drop could be much less.

Although it could be months before equilibrium is restored, the Elsie does not stay below 99% of the peg the entire time. Instead, arbitrage demand pushes it above 99% shortly after that. The ABC gets some ram and jam in, but speculators sell cheaply purchased Elsies for a profit and push it back down. However, treble, bidder, market maker, and investor arbitragers are more long-term and use the deep discount as an opportunity to increase their holdings rather than make a quick profit.

Simulations show that the chaotic market is a win all around. It is far better for Phase I success for an investor to purchase Elsies and dump them than never to have bought them. The higher volatility around a dump increases overall property purchases from increased arbitrage. The counties win for two reasons. The ABC market maker pays rent receipts in dollars at 99%, regardless of the market price. Second, the high volatility around a dump will tend to empty the 99.16% inventory.

Although deep discounts in 7.0 are beneficial, they are unlikely. For a deep discount to occur, a significant portion of Elsie holders must decide to sell at a loss within a short time. If it does happen once, it will never happen again.

Ram and Jam

Between rent arbitrage, treble arbitrage, retail arbitrage, bidder arbitrage, and the dividend, the Elsie is unlikely to fall below 99% of the peg under normal conditions. So, why is this module important?

Because investors might find that difficult to believe. The ABC will go broke if the Elsie remains 99% or lower for an extended period. At 99.05%, however, the ABC will be the most prosperous enterprise ever. Understanding why the Elsie can never remain at 99% or below for an extended period is essential.

The ABC's operation is to [ram and jam](#). It buys properties with U.S. dollars, creates Elsies, sells the Elsies at the market for U.S. dollars, buys properties with U.S. dollars, creates Elsies, etc.

The market is flooded with Elsies long before new construction and new retail come aboard. 99% will hold because it is irrational to buy Elsies only to sell them at a loss the next day. Dividend spikes at the beginning are huge, and that is one motivation of the initial buyers.

If nobody wants to buy the Elsies, the ABC destroys them. The ABC never offers them below 99.01%, and no rational person would take a loss to make such an offer. Arbitragers would quickly snatch up the offer if it were made.

In an abstract sense, here are the steps for ram and jam.

Step 1:

From its U.S. dollar land fund, supplied initially by [the investor](#) and later by auction proceeds and Elsie offers on the [Elsie Exchange](#), the ABC purchases land into the [commons trust](#). Elsies are minted and placed on the market with an offer price of 99.05% of the peg. If they sell, it is all good. The money is added to the land fund, and we return to **Step 1**.

If they do not sell, 1/5 or 20% of the Elsies are destroyed. The remaining 80% are placed on the market with an offer price of 99.04%. If they sell, the money is added to the U.S. dollar land fund, and we go back to **Step 1**.

If they do not sell, a second-fifth of the original Elsies is destroyed. The remaining 60% of the original Elsies are marketed with an offer price of 99.03%. If they sell, money is added to the U.S. dollar land fund, and we go back to **Step 1**.

If they do not sell, a third-fifth of the original Elsies are destroyed. The remaining 40% are marketed with an offer price of 99.02%. If they sell, money is added to the land fund, and we return to **Step 1**.

A fourth-fifth of the original Elsies are destroyed if they do not sell. The remaining 20% are marketed with an offer price of 99.01%. If they sell, the money is added to

the land fund. If not, the remainder of the Elsies are destroyed. In either case, we go back to **Step 1**.

The formula for ram and jam assumes an infinite number of iterations and exhaustion of all funds. The formula for infinite iterations is straightforward:

$$Elsie\ Multiplier = \frac{1}{Percent\ destroyed + Elsie\ discount}\ .$$

A practical version of infinite iterations occurs when no Elsies are destroyed, and the discount is replenished from the land fund after each iteration. If the land fund is exhausted, it is financially beneficial to borrow additional land funds as long as demand exists. The 1% loan will be quickly repaid a month later from the 50% x 25% land fund auction proceeds.

The only real constraint is demand. When there is no demand, ram and jam ends. One property's worth of Elsies is destroyed in the process. 99% holds because nobody is offering Elsies for less.

It All Comes Down to Trust

Are we performing our task with utmost transparency? Do people believe we will achieve our goal? Can poverty be eradicated along with taxation? Can enterprise, land at the margin, content, and ideas be truly free? Is the ABC being run using well-established business principles?

Given trust, marketing might be the last step toward insatiable demand, as in the following poster (designed with the pre-Elsie VIP$).

A Few Words about the Future Beyond the First Few Years

This module focused on generating insatiable demand for the Elsie. However, insatiable demand without eligible properties can also lead to serious problems.

With the VIP economy in equilibrium, any net reduction in supply creates deflationary pressures should the ABC not purchase land into the commons trust quickly enough to satisfy Elsie demand.

The ratio of new construction to original construction and U.S. dollar inflation exacerbates the problem.

When the demand shocks begin, and they will, the problem of inadequate Elsie demand discussed in this module will seem antiquated. Keeping the Elsie down becomes the mandate of Phase II.