

Retail Arbitrage



With the worst-case equilibrium [Elsie](#) possibly [as low as 93% of the peg](#), should an unexpected Elsie panic arise, how risky is it for the [VIP Treasury](#) and the [ABC](#) to guarantee merchants 99% of the peg when they take the Elsie in trade?

Unlike treble arbitrage, which increases dramatically with deep discounting of the Elsie, merchants would seem more reluctant to accept the Elsie during a panic. However, the opposite is true if the ABC guarantees 99% of the peg for conversion back to dollars.

There are two fundamental reasons why merchant interest in accepting Elsie increases in a panic. First, their customers can buy Elsies at a price as low as 92% of the peg and spend them with the merchants at peg. The ABC subsidizes 7% of the purchase, and the merchants fund 1% as they do when the Elsie trades at 99% of the peg. Second, the Elsie pays a huge dividend, as discussed in the next module, maxing out at 32% of the rent when the Elsie is at or below 95.25% of the peg. In this environment of sequestered Elsies for treble arbitrage, the return on the scarce Elsie could be annualized at 1000% or more. For that reason alone, the ABC can afford to promise 99%. What merchant would exchange an instrument, currently discounted by 8%, with a return of 1000%, for U.S. dollars?

Retail plays a vital role in the AFFEERCE business plan. Without it, the Earth Dividend could not be easily implemented. It is the catalyst of Elsie Toolkit development and the test of biometric identity. Distribution along the cellular democracy hierarchy is intimately tied to retail purchasing.

Because of the operational cost of ensuring optimal implementation, full in-store retail is delayed by at least one year from the start of operations. By so doing, we dropped the initial investor cost from \$30 million to \$24 million. That should not be interpreted as diminishing retail's importance because retail remains as critical as ever to the plan's ultimate success.

This module explains retail arbitrage and estimates its effect on moving the supply line on the TAD curve to the left.

At a 1% discount, the merchant pays only 1% for Elsie transactions. There are no other costs. During the first few years following implementation, even the equipment will be provided free or subsidized heavily. The merchant will have cost savings over credit cards. The time cost and equipment needed for rewards programs also vanish for grocery stores.

What about the consumer? Purchasing Elsies at a 1% discount gives them a 1% discount on all merchandise where the Elsie is accepted. This could be done automatically at the time of purchase. But there is a problem.

[Biometric identities](#) are only provided at no charge to [property owners](#) who sell their land into the [commons trust](#) and merchants who accept the Elsie. Although the [VIP Treasury](#) will sign a contract with the county's Motor Vehicle Division (DMV), it will cost to buy one.

Alternatively, the VIP Treasury cannot guarantee identity or provide absolute theft and fraud protection if the consumer uses a smartphone to complete the transaction.

Assume that between those with smartphones, those who pay for a biometric identity, and those who get a free biometric identity, 50% of the county's adults can take advantage of the 1% Elsie discount on the spot when purchasing.

Assume an average of 1.8 adults per household and that 1% of the county's properties are purchased into the commons trust at an average price of \$200,000.

Other assumptions for this example are that only county grocery stores and gas stations have opted in and that each adult in the county spends an average of \$30 per day at these stores. In the worst case, they all buy Elsies at the point of purchase, and the merchant goes to market with the Elsies at the end of the day.

Given a uniform distribution of spending throughout the day, how many Elsies are removed from circulation by retail arbitrage in this specialized case?

To make the math easier, assume 40,000 households. 1%, or 400 of their properties, have been sold into the commons trust.

40,000 households x 1.8 adults participating per household x 50% participating x £30 spent per day per adult participating x 50% of the day, on average, withheld from circulation = £1.08 million each day on average withheld from circulation.

Now consider the Elsie created. The land under 400 houses sold into the commons x £200,000 per house sold into the commons = £80 million. In this worst-case scenario, retail arbitrage would create less than 1.5% of Elsie demand. Under these assumptions, it does not appear to be a promising source of Elsie demand.

The [Elsie pays a dividend](#), and the U.S. dollar does not, so treating it like a hot potato is not rational. More rationally, between the period where it is held by the patron and by the merchant, the average Elsie used in retail would be in circulation for a week.

The merchant would convert to U.S. dollars once a week, and the consumer would purchase a fresh supply of Elsies once a week. With the development of a VIP economy, suppliers will also accept the Elsie. This would lead to long periods before redemption.

Furthermore, 55% of all landlords accept credit cards from their tenants. With a 99% guarantee, almost all landlords will take the Elsie from their tenants. Since ground rent to the commons trust and local purchases are in Elsies, much of the payment will require no 0.95% redemption loss and is equivalent to cash.

The Elsie will appeal tremendously to tenants if they believe it can fall to 92% of the peg. Not only can they get an 8% discount on their rent, but if they have the funds, they can purchase future rent payments at an 8% discount. Landlords are also excited by an Elsie that falls to this level. The ABC guarantees 99% of the peg, and Elsie dividends, under such deep discounts, can easily spike to annualized returns over 100%. Furthermore, landlords can raise their rents and collect from both sides if the discount stays in place. With the same reasoning, merchants in these counties can raise their prices and increase their exports simultaneously.

Retail arbitrage with a 99% guarantee makes deep discounting so profitable that it cannot occur. Demand for profits erases the conditions to earn profits.

The effect of retail arbitrage on deep discounting is not limited to rational behavior. People often behave irrationally about money. How much does retail arbitrage limit the availability of supply? How much does it shift the supply line to the left on the TAD curve?

A quick calculation, using grocery stores and gas stations that accept the Elsie, point-of-purchase buys, daily redemptions, and 1% of county property in the commons trust, showed a 1.5% shift left in the supply line.

Expected parameters are very different. It is still likely that households will spend £30 per day at retail. However, with apartment rent, that increases to £50 per day. Because people are often paid biweekly, a new assumption has 14 days' worth or £700 per person in the VIP economy for 90% of these 14 days. This is the retail demand for Elsie. We will also increase the participation rate from 50% to 75%.

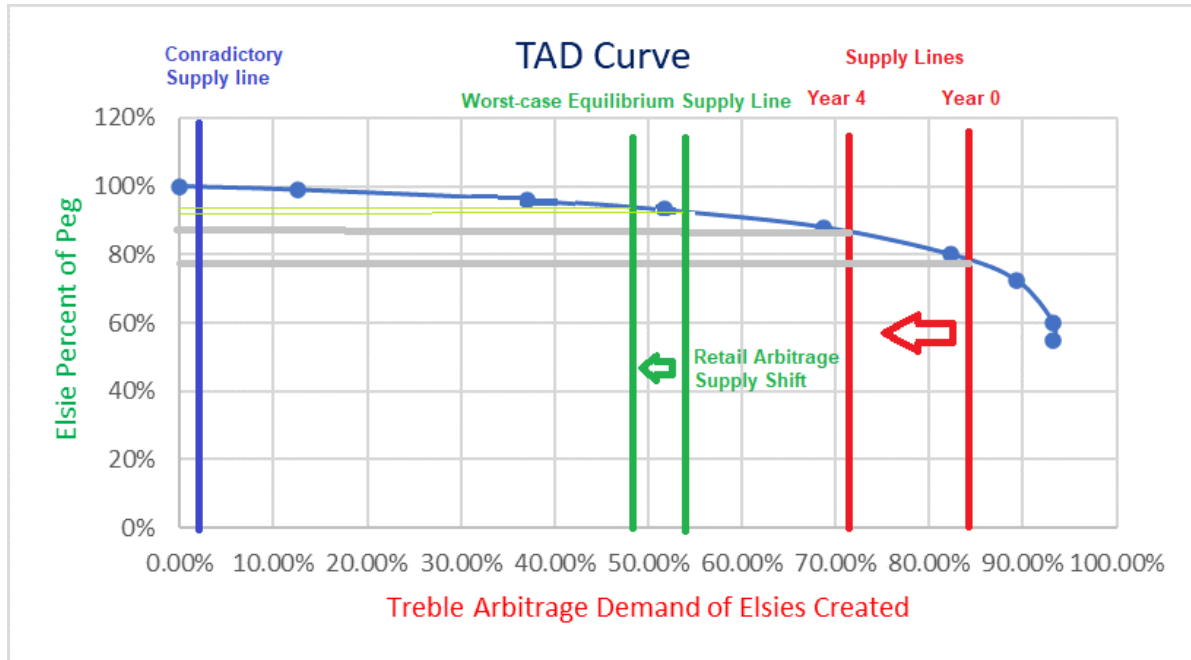
The supply of Elsie from the same county will increase over time as more county property is purchased into the commons trust. We guess that counties where the Elsie is accepted in retail throughout Phase I have, on average, 20% of their property in the commons trust. During the early years of Phase I, before growth renders supply lines on the TAD curve immaterial, the same counties might have 10%, on average, of their property in the commons trust. This would seem to be a conservative upper bound.

In the new calculations, 40,000 households. 10%, or 4000 of their properties, have been sold into the commons trust.

40,000 households x 1.8 adults participating per household x 75% participating x £700 spent per period per adult participating x 90% of the period, on average, withheld from circulation = £34.02 million each period on average withheld from circulation.

Now consider the Elsie created. With 4000 properties sold into the commons trust x £200,000 per property = £800 million.

The supply line on the TAD curve is shifted left by $34.02/800 = 4.25\%$.



As shown by the two thin green lines, the deep discount of the worst-case equilibrium decreases from 92% of the peg to 94%.

A well-developed retail sector has bidder arbitrage implications as well. So far, bidder arbitrage has been ignored in determining the TAD supply line because it is assumed most bidders will use U.S. dollars. That changes if there is a thriving VIP retail economy. People feel better holding Elsies for the long term to use in bids and trebles. Bidder arbitrage shifts the supply line much further left, based on average Elsie bids per property, but also increases the volatility, as some will dump their losing bids.

Counties prefer dollar bids, as they receive their U.S. dollars immediately. The dollar recipients of Elsie bids must offer their Elsies at 99.16% of the peg. They will only be paid when market maker inventories are depleted. However, market maker inventories will hold only the minimum number of Elsies that can be turned over in a day. On a popular auction day where the number of Elsie bidders exceeds the average, market maker inventories will be depleted, and bidders will purchase their Elsies from the 99.16% inventory.