**Inter exchange arbitrage**

* Coin is listed for $100 on exchange A
* Coin is listed for $150 on exchange B
* Buy Coin on exchange a for $100, send it to exchange B and sell it for $150
* You now made $50

**Problems:**

* Transfer times
* Fees
* Whether the coin is transferrable
* Orderbook depth / liquidity (how much volume you can trade)
* Keeping your money in currencies (because they can be volatile) -> tether is solution

**Triangular arbitrage (intra / inter exchange)**

* Intra exchange
  + Coin A/B trades for 10
  + Coin B/C trades for 5
  + Coin A/C trades for .4
  + You have 1 A and you buy 10 B. With 10 B you buy 50 C. With 50 C you buy back 50 \* .4 = 20 A
  + You now made 10A
  + B / C = 5
  + (A / C) / (A / B) ( = B / C) = .4 / 10 = .04. So you can get B / C at a much better rate if you buy via A and then sell it back on the original B / C for a profit. (In this case you would buy B for much less C (0.04) and then sell that B again for much more C (5)
  + You’re just buying a coin pair at a better rate than the real rate by buying it via a third coin.
* Inter exchange
  + Do the same but find different pairs on different exchanges

**Problems**

* Fees
* Small percentages
* Small timeframes (speed)
* Orderbook depth / liquidity (how much volume you can trade)
* Keeping your money in currencies (because they can be volatile) -> tether is solution

**Parity arbitrage**

* Coin B/A trades for 1.25
* Coin B/$ trades for 1
* Coin A/$ trades for 1
* Eventually B/A will go down from 1.25 to 1, because of the arbitrage opportunity. If you buy 1 B with 1$, the buy 1.25 A with 1 B, and then convert A into 1.25$ then that’s an arbitrage opportunity which other people will exploit. So, B/A is underpriced and will go down to parity (=1).
* If B/A > 1 A is underpriced and you buy it. If B/A < 1 A is overpriced (and B is underpriced) and you sell it. **Then you wait until it hits parity or sell at parity.**

**Example:**

* Coin A/B = (A/$) / (B/$) = 4 (parity, above = buy quote, below = sell quote (or reverse))
* Coin A/$ = 2
* Coin B/$ = 0.5
* 4 B (4\* $0.5 = $2) buys 1 A which is $2

**Solves:**

* Speed (don’t have to be first to spot arbitrage)
* Fees (less fees because you wait for parity to drop so you only exchange once)

**Problems:**

* Fees
* Small percentages
* Small timeframes (speed)
* Orderbook depth / liquidity (how much volume you can trade)
* Keeping your money in currencies (because they can be volatile) -> tether is solution