How To Think About Value

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Let’s talk about...

1. How Costs Determine Value

We look at fundamental economic models to understand value capture and distribution at equilibrium.

2. Economic Value Capture vs. Investment Returns

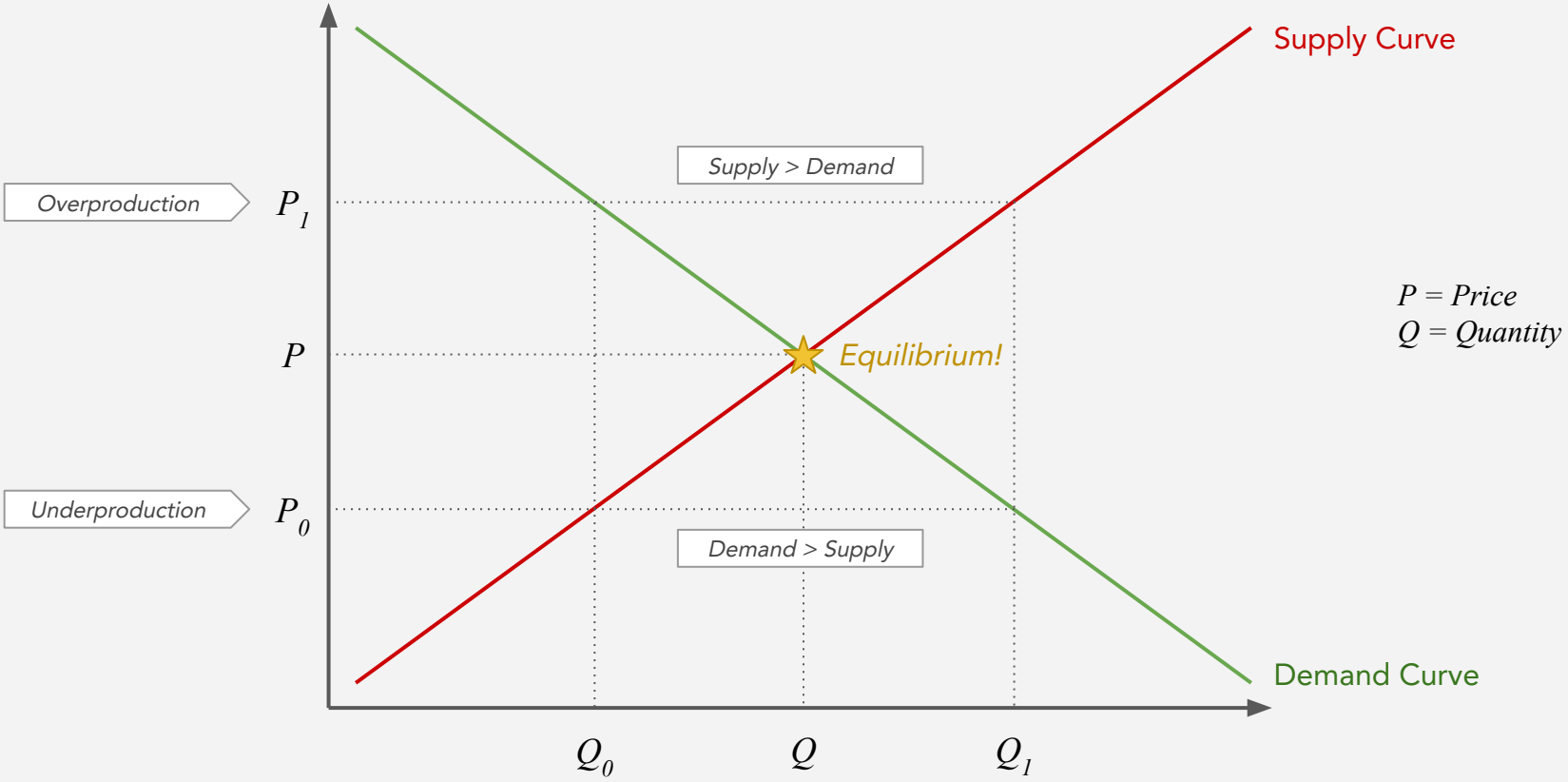
We draw the distinction between value capture and investment returns across crypto “layers”.

3. Value (DeFi) Protocols vs. Applications

We consider value capture philosophies for protocols and applications, with a DeFi lense.

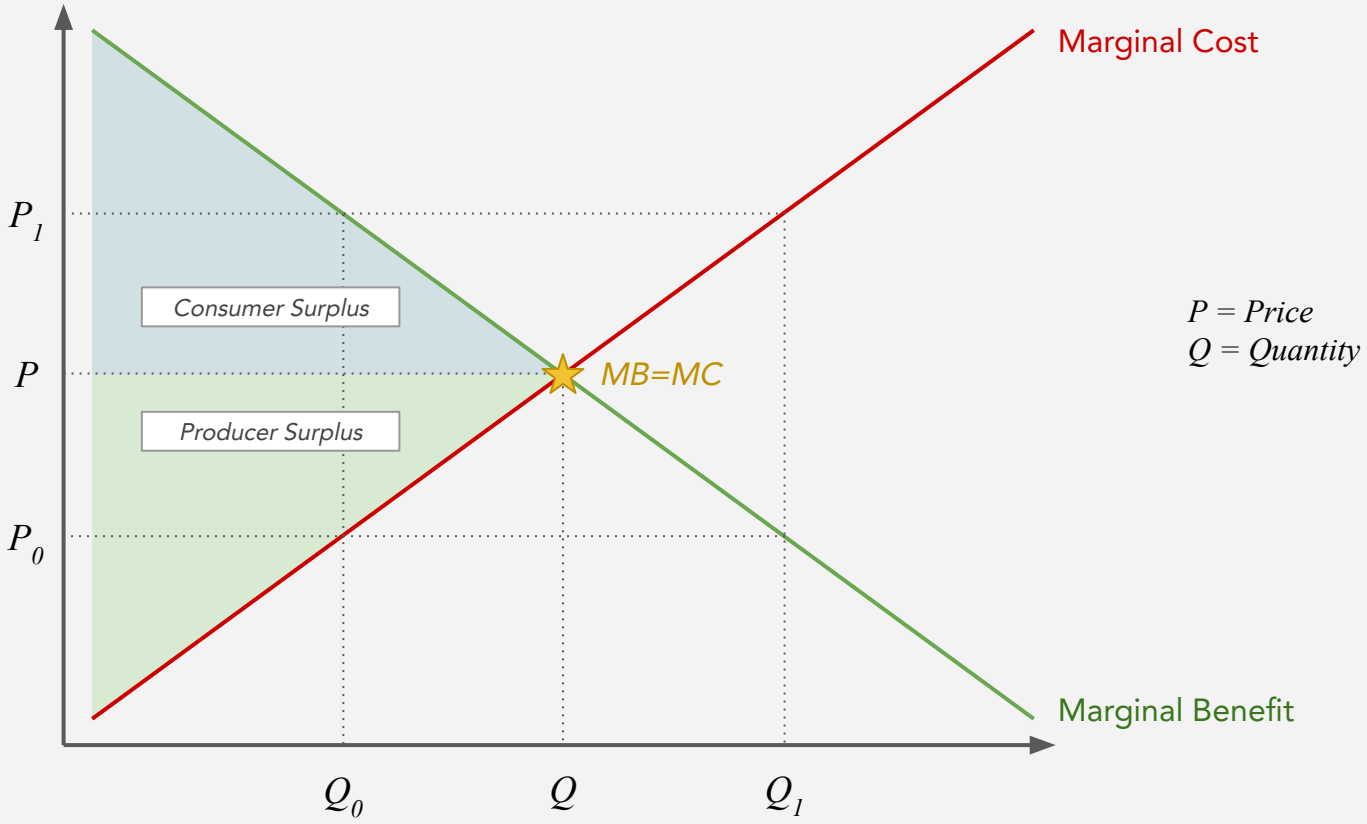
Market Equilibrium (Macro)

Markets look to maximize benefit. Maximum benefit happens when supply matches demand.



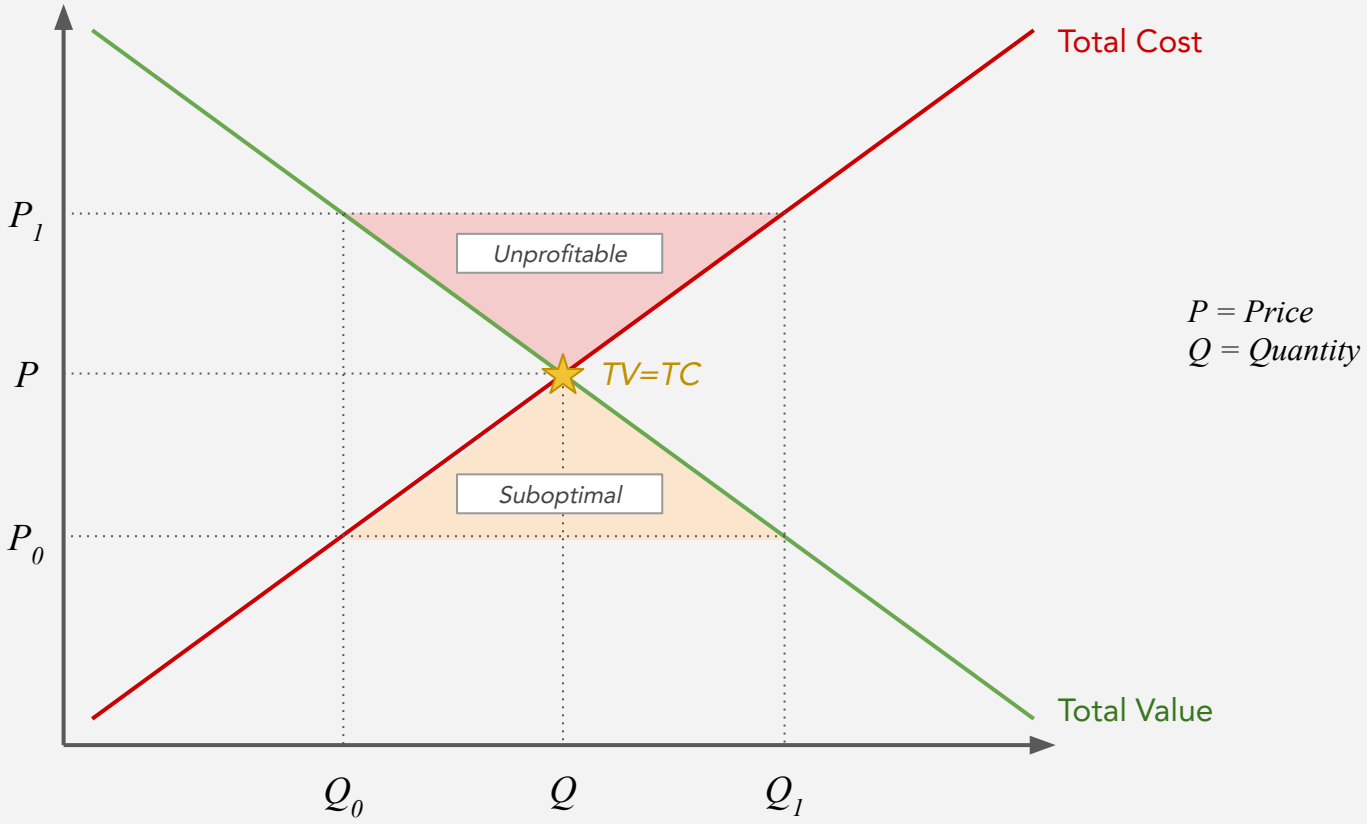
Marginal Equilibrium (Micro)

At equilibrium, marginal benefit equals marginal cost.



Total Value = Total Cost (back to macro)

Total value is the sum of marginal benefits, and total cost is the sum of marginal costs. Thus total value = total cost.



How Costs Determine Value

Consider *all* economic costs (important!)

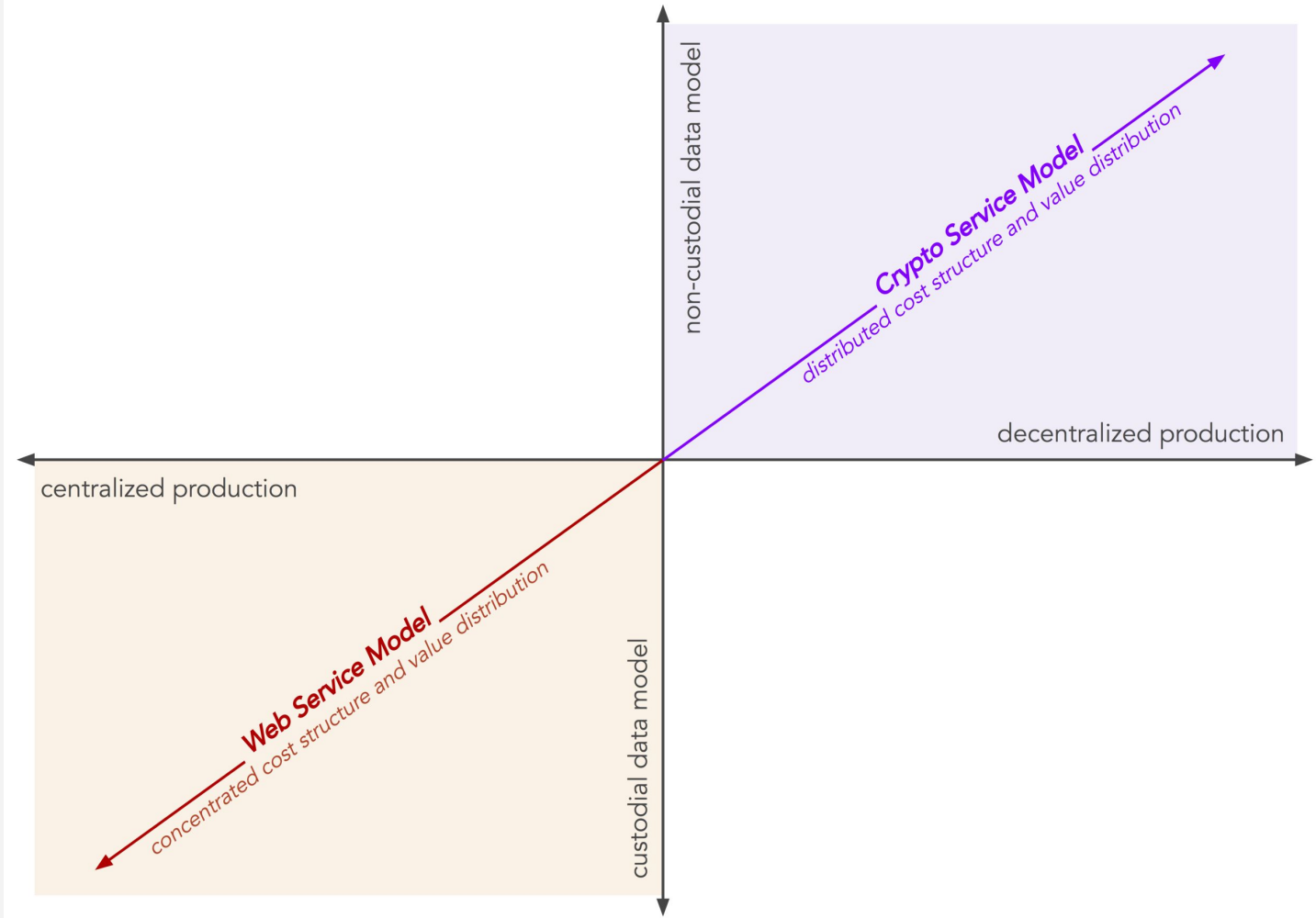
MB=MC can be confusing because businesses have margins and profits. But in economic analysis we consider all economic costs, not just accounting. e.g. opportunity costs, cost of capital, etc.

Value goes to where the costs are

Whenever value drifts away from costs, the market exits equilibrium. Prices are determined at the margin.When costs go up, prices (and thus value as measured by price) also goes up (e.g. BTC).

Observing costs is a useful way to understand (macro) value

If TV = TC at equilibrium, we can deduce that value will accrue to where the costs of production are. Observing costs is easier than predicting future value.



Web vs. Crypto Service Models

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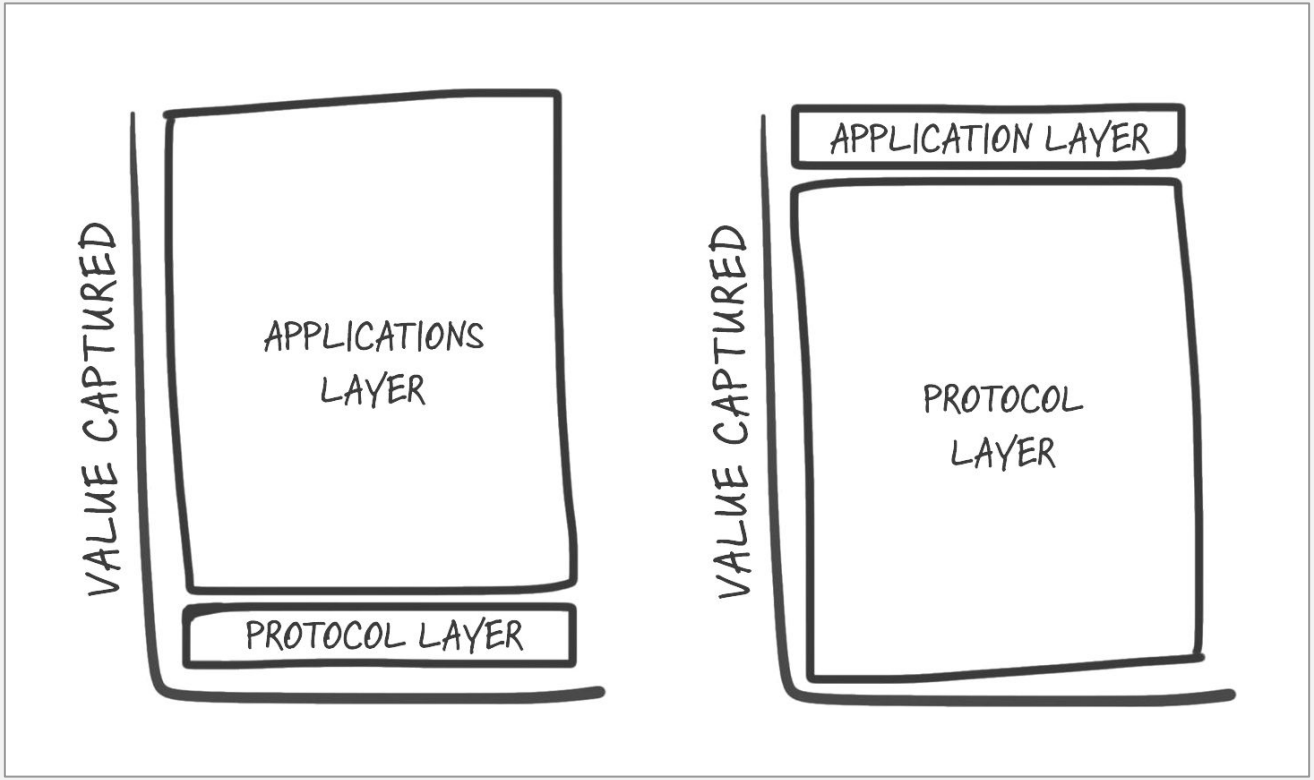
VALUE CAPTURED
APPLICATIONS LAYER
PROTOCOL LAYER
VALUE CAPTURED
APPLICATION LAYER
PROTOCOL LAYER

Value Capture vs. Investment Returns

High-level Value Capture is a TAM input

How much value is “captured” at a step in the value chain is more of a TAM input, not about returns.

Returns are a function of cost basis, concentration (ownership) and growth rate

Applications are more capital efficient than protocols (lower cost, higher concentration). At this stage in the market (pre-adoption) protocols offer the most growth.

Value Capture != Investment Returns

There can be vast amounts of value “captured” at the protocol layer, with a high cost basis and nominal growth (i.e. no outsized returns), as there can be outsized returns in smaller outcomes on top.

Value Capture in (DeFi) Protocols vs. Applications

Protocols build defensibility through via self-sovereignty and liquidity as network effects

Software and functionality is indefensible, liquidity (financial, supply and demand) and self-sovereignty feed each other and are hard to fork.

Applications build defensibility through layered functionality, aggregation, and loyalty

Proprietary functionality is difficult in a cryptoservices architecture but applications can win through value-added functionality, customer aggregation and user loyalty (UX, support, governance).

Application business models remain unclear

But likely going to be a lot of the same (fees, subscriptions), but more of it and at a lower cost. New variable is treasury holdings in underlying protocols as a driver of long-term value.

Closing Notes

Consider distribution of costs when designing cryptoeconomic models

Properly distributing value along the lines of costs is key to long-term cryptoeconomic equilibrium (e.g. don't disadvantage labor over capital, etc.)

Protocols increase total value by flattening out the cost curve(s)

Open protocols collapse cost structures, flatten cost curves and lower price levels. But they more than make up for it in increased output (P*Q). Like previous cycles, they increase value while reducing prices.

To find business models at the application layer, look for new cost centers

Applications are low-cost and high-efficiency, but operate in a different competitive environment. Looking for costs at the application layer can provide hints for potential business models.