

My background is as an investor at a major technology hedge fund that invests in large cap equities like Facebook. Part of what we focus on is business quality, which I define as “the capacity to earn economic returns in a free market despite competition.” We care about this because, in theory, economic returns should be extremely rare in a competitive market. Part of “business quality” is the property of having sustainable competitive advantages (often called a “moat”) that allows for economic profits greater than 0. A simple framework for assessing competitive advantage is testing for the presence of business characteristics that are (i) valuable, (ii) rare, (iii) inimitable and (iv) non-substitutable. In absence of these characteristics, a business should not earn economic returns in a competitive market because excess returns should be eroded by the aggression of competitors or new entrants to the market.

If we want to map our understanding of classical industries onto crypto-assets, we might say that a crypto-project earns economic profits if it grows transaction volumes at a rate faster than the cost of capital plus the rate of coin inflation less degradation in monetary velocity. If such an event occurs, then competitors should enter to compete away these excess profits. In crypto-land, this often means that a new entrant will fork the source code of an existing project and enter as competition. If 10 factories produce a widget, this widget quickly becomes called a “commodity” and the making of that widget should not earn economic profits. Similarly here, if 10 crypto-projects all replicate a similar codebase and functionality, then the functionality becomes a commodity and the growth in transaction volume should rapidly decline, reducing sustainable returns to coinholders. Stated differently, there is no economically relevant distinction between 1 project with a monetary base of 10 and 10 projects with a monetary base of 1; in either case, value has been diluted even if we want to believe that all the projects have a “fixed supply.”

Unfortunately, many of the characteristics of crypto-projects that are valuable are nevertheless not sustainable sources of competitive advantage (which I define as 5-10 years) even though they do create an advantage initially (e.g., the first 3-4 years). For example:

(A) Talent: Currently, talent is a temporary competitive advantage because it is a constrained resource in the ecosystem. As of right now, this is the factor that prevents immediate competition for successful projects. That said, in the long run, talent is never rare, inimitable or non-substitutable for the simple reason that talent tends to diffuse over time in any new technology ecosystem (e.g., knowledge tends to spread to more people over time). For this reason, talent is not a sustainable source of competitive advantage that can make a project endure for the test of time. It is of course useful in assessing young projects that are pre-ICO or in their first 5 years of existence.

(B) Source Code / Technical Ingenuity: Though I agree that a strong code base is a reason why a particular project is valuable in the short run, it is not a source of sustainable competitive advantage, for the simple reason that it is highly imitable (e.g., you can just fork the code). Even if it is true that a genius wrote a particular piece of source code, in theory a lesser genius can fork the code and replicate the identical codebase. When this occurs this is no different than if the original project had massively diluted coins outstanding.

In contrast, there are at least a few things that I think are, in fact, long term sustainable competitive advantages:

(A) Network Effects: Some projects facilitate the creation of 1 or 2 sided networks. An example is Numer.ai which has a network of data scientists that sit on a 1 sided network. Because it is difficult to coordinate people to participate on this platform, this is a sustainable source of competitive advantage. This also I think does occur in open source / decentralized models that have many contributors. For example, Wikipedia has a two sided network of users and writers; if someone attempted to compete with Wikipedia it would be difficult to replicate both sides of this network. With this line of reasoning a crypto-project that created a wikipedia-coin (similar to Steem or Colony but maybe a Wikipedia version) should exhibit similar sustainable competitive advantages if it were able to achieve mass adoption.

(B) Ecosystem: Ethereum has significant competitive advantages over other smart contracting platforms for the simple reason that it has a rich ecosystem that is supportive of new development. It's easy to learn solidity because there's tons of resources. There's a ton of existing projects and people in the community. All of these things make it harder for another entity to compete with Ethereum eventually.

© Scale: For actual blockchains like Bitcoin and Ethereum scale is often advantage because it creates for more security. It is difficult for a new blockchain to compete with these projects over time without a meaningful source of differentiation (e.g., like Monero in the case of Bitcoin) for the simple reason that scale has the effect of producing a more stable and secure blockchain. That said, unless I'm missing something I am not sure why projects built on top of an existing blockchain should necessarily have automatic benefits from scale – i think this mostly applies to core projects like Bitcoin and Ethereum.

With this in mind, can anyone think of other things that true sustainable competitive advantages for crypto-projects, especially those that are being built on top of the ethereum platform? What are the sorts of characteristics that can create enduring competitive advantages despite competition for a period of 5-10 years?