Substitution Analysis

One question typically asked when evaluating a competitive market is whether a new entrant is a viable economic substitute for an existing product. Substitute goods are those goods that can satisfy the same necessity, they can be used for the same end. Some examples of substitute goods are:

- Coca-cola and Pepsi
- Car, motorbike, bike and public transport
- Butter and margarine
- Tea and coffee
- Bananas and Apples

Generally, this "substitutability" is expressed a relationship between price and demand for the substitute good. This is distinguished from "complimentary" products such as hot dogs and mustard. In this case, more sales of hot dogs leads to an increase in sales in mustard while and increase in the price of hot dogs leads to a decrease in sales of both hot dogs and mustard.

Basically, if the price of Coke goes up, more people will switch to Pepsi. Applied to the gTLD market, accessing whether the new gTLDs represent economic substitutes for legacy gTLDs, one would ask as the price of legacy gTLDs increases does demand for the new gTLDs increase. Analysis of this sort in the gTLD marketplace involves three challenges.

First, as noted earlier, the existence of price caps on legacy gTLDs masks what might be the true market price for legacy gTLDs and any tipping price that would directly increase demand for alternatives. It is possible that these price caps actually suppress competition by keeping prices below market value and discouraging substitution and other competitive effects. As Debra Aron and David Burnstein note:

The regulatory constraints on the market would, in some circumstances, impede the normal functioning of competitive forces, resulting in a market that appears to fail competitive criteria, which in turn leads regulators to perpetuate the regulatory constraints.[1]

Ideally, an evaluation of the pricing in the secondary market is desirable to determine if there are any direct price impacts but even those will not likely be directly substitutions.

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[1] Debra Aron and David Burnstein, "Regulatory Policy and the Reverse Cellophane Fallacy", *Journal of Competition Law & Economics*, Volume 6, Issue 4, December 2010, Pages 973–994, available at https://doi.org/10.1093/joclec/nhp033

Second, the typical price point of a gTLD is such that "substitution" is not economically mandatory and, in certain cases, counter indicated. For example, if a registrant has done business at VertigoSoftware.com for a number of years but eventually buys Vertigo.com, perhaps even at a premium, they are unlikely to immediately drop VertigoSoftware.com because of its presence in bookmarks, emails, blog posts, 3rd party reports, etc. When the price to maintain VertigoSoftware.com is relatively low, the registrant will be inclined to simply keep both registrations, at least for a time. The "substitution" takes place on letterhead, websites, business cards and marketing materials, not in the direct marketplace. Studying the *use* of a gTLD would be complex but perhaps necessary to fully understand what substitution has taken place.

The third challenge with a substitution analysis is that that not every second level domain of a new gTLD is a substitute for the corresponding domain in a legacy gTLD. With the exception of a few new strings such as XYZ, the new gTLDs are meant to be more semantic and specific than the legacy generic TLDs. So while bridal.photography is a viable substitute for bridalphotography.com, plumbing.photography is not a substitute for plumbing.com. Instead, it's important to take the new gTLDs as a whole and treat them as a single alternative for the legacy gTLDs (and ccTLDs) as a whole. It's here that we see a competitive trend whilke observing that half of new registrations (or a third if you include ccTLDs) are new gTLDs. While the demand for second level domains has remained somewhat constant at roughly 5% growth per year, these new registration figures suggest that substitution is taking place in the overall market.

Jonathan Parker and Adrian Majumdar argue,

In some cases, the dynamics of future competition are much better captured by the share of new business won than shares based on total revenues from installed base customers. For example, where a firm has a large installed base of customers locked-in to long term contracts, it may be of greater interest to access its success in relations to business opportunities.[2]

A final point is that substitution is suggested by the constant rate of growth in the second level domain market. The fact that growth has remained constant at 5% before and after the introduction of new gTLDs almost by definition implies that the sales of new gTLDs are cannibalizing the existing market for legacy TLDs rather than creating a new complimentary market. The sales of new gTLDs are sales that otherwise would have been realized by legacy TLDs. Therefore, these new strings are represent competition, not compliment to those legacy strings.

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[2] Jonathan Parker and Adrian Majumdar, *UK Merger Control*, 2016 (excerpts available at https://books.google.com/books?isbn=1509904913), p. 432.

While ongoing study is certainly needed, the trends suggest the initial formation of a competitive marketplace for second level domains that will only grow with time and reveal more explicit substitution behavior as time passes.