## MORE THAN MERE DEADWEIGHT:

# A DEDUCTIVE TYPOLOGY OF THE VARIETY OF WAYS THAT REGULATORS RESPOND TO DISRUPTIVE TECHNOLOGICAL INNOVATION

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### PROPOSAL: (WORDS: 500)

It has become cliché to note how fast technologies change and lament how slowly society responds. A popular version of this narrative brandishes the word "disrupt" while storming the halls of stodgy industries and regulatory agencies. Despite this contemporary disruption narrative, substantial technological change is not a recent invention. Libertarian rhetoric has convinced disruptive entrepreneurs that regulation is a dirty word synonymous with state inadequacy. Although never perfect and sometimes inadequate, regulators have invariably adapted to technological change. This paper explains how regulators have before and can again become allies of innovators only if entrepreneurs look past their own myopic rhetoric.

Failure is loud, success quiet. Regulatory failures like the Deepwater Horizon oil spill and 2008 Global Financial Crisis are loudly publicized. Quieter are responses other than failure like American recombinant DNA regulation following the 1975 Asilomar Conference. This mismatch reinforces a folk economic perception of regulators as merely deadweight destined to fail. Worse yet, loudly prognosticating regulators' inevitable failure often fosters failure when alternative rhetoric could encourage success.

Regulatory scholars in political science and governance who study actually existing regulation know the folk economic model as "capture" within "command and control" regulation. They have repeatedly demonstrated the deceptive inadequacy of catch-all models of regulation. Nevertheless, scholars who *do not* study regulation still use this folk economic capture baseline

to judge all work on regulation which hinders scholarly understanding of relationships between regulation and innovation. With scholarly limitations, lay entrepreneurs' limitations should be no surprise.

To overcome the limited folk economic model of disruptive technological innovation (DTI), this paper develops a deductive typology of regulatory responses by generalizing underlying concepts into variables. The folk economic model arose from Christensen's (1997) simplification of Stigler's "The Theory of Economic Regulation" (1971) into a blanket proclamation that innovation only happens when entrepreneurs evade regulators. This paper reconceptualizes that fixed interpretation into variables in light of Streeck's demonstration in "Beneficial Constraints" (1997) that some constraints lead to economic benefits.

This paper expands Stigler's orthodoxy with Streeck's heterodoxy to generate five constitutive variables (relationship, access, impetus, outcomes, and effect). These variables deductively define a typology of seven distinct regulatory responses to DTI spanning from Stiglerian impediment thru Steeckian beneficial constraints and discovers the further possibility of driver of adoption. These models demonstrate that regulation can serve innovators' material interests and need not always be merely deadweight.

Yet perceptions create preferences long before outcomes breed interests. Innovators distrust regulation not because they've *had* bad experiences but because they *think* they will. The folk economic model absurdly encourages entrepreneurs to upset regulators, elicit a harsh response, and then use that harshness as proof that regulators are an impediment to innovation. While history agrees that regulators *can* be challenging to disruptive innovation, entrepreneurs create these challenges by selectively extrapolating history into a folk economic perception that regulators *must* be a challenge. This paper's typology demonstrates how regulators were once and can again become allies of innovators if only entrepreneurs can look past the myopia of their own rhetoric.

#### **WORKS CITED**

- Christensen, Clayton M. 1997. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail.* Boston: Harvard Business School Press.
- Stigler, George J. 1971. "The Theory of Economic Regulation." *The Bell Journal of Economics and Management Science* 3-21.
- Streeck, Wolfgang. 1997. "Beneficial Constraints: On the Economic Limits of Rational Voluntarism." In *Contemporary Capitalism: The Embeddedness of Institutions*, edited by J. Rogers Hollingsworth and Robert Boyer, 197-218. Cambridge: Cambridge University Press.