

**Platforms, Markets and Government: Understanding 21<sup>st</sup> Century Institutions**  
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I recall, from my days as a graduate student, one of Herbert Simon's papers that discussed how if an alien from Mars were to observe Earth's economy, it would look very little like a "market" economy, and more like an "organizational" economy, with most individual economic agents embedded within firms, and most market transactions occurring between these firms rather than between individuals. Since the early days of the Internet, we have been anticipating a fundamental restructuring of this 20<sup>th</sup> century economy, and of the 20<sup>th</sup> century organizational form, taking us from Simon's organizational economy to something closer to Gérard Debreu's model of a pure market economy.

However, it is worth noting that the impacts of technological progress (and especially of progress in digital technologies) on the scope and intensity of organization-based activities are two-fold. On the one hand, they create the possibility of more market transactions by lowering different kinds of transaction costs. On the other hand, they also lower the costs of managing large organizations, creating the possibility of growth in the scale and scope of firms. It is unclear ex-ante which effect will dominate.

Granted, we have witnessed a growing popularity in different matrix or networked organizational forms, which aim to create agile and reconfigurable teams that come together, work on projects, and then disband, all operating within the shell of a traditional hierarchy.

But what is equally interesting, and potentially truly disruptive, is the emergence, over the last decade, of digitally enabled institutions that facilitate a greater variety of direct economic exchange between individual economic agents, dramatically increasing many aspects of complexity of the business environment. In a decade, we may look back on 20<sup>th</sup> century organizations fondly, reminiscing about the simplicity of the economy of the last century.

These institutions represent new market-firm hybrids that centralize certain layers of a transaction (like branding, trust and payments), while decentralizing others (like pricing, supply infrastructure and service provision). Examples of such "platforms" include Airbnb with over half a million suppliers but under 1000 employees, Uber, a 5-year old firm recently valued at \$17B, Etsy, which has over a million sellers and enables an open production system, and BlaBlaCar, which only this week closed an VC round of \$100M and is building a global transportation network with almost no infrastructure investment. They also include equity crowdfunding platforms like Angellist and KissKissBankBank that allow individuals to make investments that

were available almost exclusively to institutions in the past, and which could dis-intermediate a number of financial services organizations, especially in markets like India and China.

Today, more than 20% of the U.S. workforce is freelance, not employed by a traditional organization. This number is growing rapidly, fuelled in part by the creation of such platforms and the economic opportunity they create. These platforms can be an important gateway for innovation, shifting significant fractions of innovative activity outside the organization.

What we seem to be witnessing as a consequence is a dramatic increase in “microentrepreneurship.” Some of this small-scale innovation and entrepreneurship will be a gateway to the creation of traditional large organizations, but a large fraction of economic activity could, in equilibrium, simply remain in these new firm-market hybrids. As this occurs -- much like employment changes in the past fueled the growth of companies like Regus --we will continue to see significant expansions in co-working spaces, something quite evident over the last year in New York and Paris alike.

The emergence of these new ‘open supply systems’ has raised a familiar debate about whether the optimal ownership structure of such a platform is a shareholder corporation or a worker cooperative. This is a particularly challenging discussion for markets that have emerged out of a shared desire from suppliers to be more socially responsible or to create greater sustainability in their models of business. Perhaps in this regard, there are lessons that can be learned from credit unions and the cooperatively owned banks of today. Another important consideration is to focus on the system-wide redistribution of value induced by the platforms, and not focus exclusively on ownership of the platforms themselves.

Another perspective suggests that such platforms are the *new economic institutions*. In the past, strength in property rights, contract law and banking, were economic institutions instrumental in spurring economic growth in certain countries by facilitating more market-based exchange between firms and greater economic activity for consumers. In the future, online trust infrastructures created from reputation systems and digitizing real-world social capital, as well as the repositories of individual reputation profiles constructed from the data trails these transactions generate could have similar growth-inducing effects. Interestingly, these digital institutions cross geographic boundaries, facilitating peer-to-peer exchange that bypasses national barriers, and posing interesting future legal and trade issues, and perhaps forcing a renewed need for global business laws.

What is perhaps most interesting about such platforms is that they are not just market-firm hybrids or new digital institutions; they also are starting to look like a convex combination of a firm and a government. What I mean is that these platforms aim to take on some of the

regulatory and governance roles that we previously the provenance of a city, state or central government. These new 21<sup>st</sup> century institutions seem to be one example of a broader trend, wherein platforms, either privately held or otherwise, are replacing many of the roles traditionally played by government institutions. This goes beyond the familiar trend of the privatization of public companies. Copyright law aside, iTunes and Amazon, both platforms for digital goods, have become the de facto arbiters of intellectual property rights between content creators and consumers. Facebook and LinkedIn are increasingly becoming important centralized providers of identity, once the exclusive purview of the government. Cryptocurrencies like Bitcoin, while still in their infancy and on the fringes of a disruptive path, raise the question of whether a decentralized platform can subsume the government's role of backing a currency. Data trails once constructed by law enforcement are now held by platforms like Google. Ushahidi, city regulatory challenges from Airbnb and Uber – the list goes on. Forward-looking government organizations need to rethink their current roles while also exploring ways in which they can branch into new ones.

What this may lead to is a situation where, initially, citizens will ask for or accept this transfer of responsibility from governments to platforms, perhaps even celebrating its democratizing effects. However, my guess is that, over time, as the power of these platforms grows, citizens may turn again to their governments, the collectives that are supposed to represent them, to try and reclaim the rights they have handed over to the platforms. The debates we have seen over privacy and the ownership of web browsing and search information may be a first example of this, but it certainly isn't the last.

To summarize: over the coming decade, we will see a substantial restructuring of our organizational economy, taking us further away from Simon and closer to Debreu. New institutions will mediate significant fractions of economic activity between individuals, threaten incumbents with disintermediation, spawn vast new levels of micro-entrepreneurship, and put pressure on existing regulatory structures; while hybrid, matrix and networked organizations may also continue to emerge. We will face new worker protection issues, see the emergence of new collectives, formulate new approaches to global trade and legal issues, deal with new ownership structures and new issues of sustainability and social responsibility, and have to call into question how we fund capital contributions to society.

We've got a great lineup of panelists for the rest of the session – thank you for inviting me to start.