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The Economics Behind the Evolution of the FinTech Industry

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ABSTRACT

The Financial Technology Industry has enjoyed a deluge of investments and technological advancements in the last few years. The popular access to the internet, big data, cloud services and high-power computers have transcended the FinTech sector into an unprecedented phase of development. The number of FinTech start-ups and their growth are among the top counts of recent business developments. More importantly, the current FinTech instruments have replaced almost all conventional modes of transaction in the financial industry and many non-financial industries. The landscape of the FinTech industry is beginning to take up its first stage of evolution. In this paper, we first present decisive economic elements which are crucial to the dynamics of development in the FinTech industry. These include (i) Economies of Scale, (ii) Economies of Scope, (iii) Transaction Costs, (iv) Information Economics with "Instantaneous" Access to Unlimited Sources, and (v) Virtual Money as Medium of Exchange versus Legal Tender.

We then consider how these economic elements are going to shape the future landscape of the future FinTech industry. All these economic phenomena show the traits for the industry to approach a very high degree of industrial concentration. Though in the current dawning stage of development, there appears to be a considerably large number of medium to small start-ups, as the industry grows further the degree of concentration would increase. Many FinTech technologies have very high start-up costs but very low marginal costs for adding additional customers, effectively necessitating FinTech firms to act as natural monopolies. While a single global natural monopoly would unlikely be a possible market outcome, but one can anticipate the appearance of a small number of cross-national mega corporations. Since the development of technology capital is a crucial part of the FinTech industry, there are deemed to be efficiency loss for not capturing the positive externalities of knowledge-based capital. A fair-share economic solution via the dynamic Shapley Value imputation is presented to resolve the problem.