World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

Financial Intermediation: A Transaction Two-Sided Market Model Approach

Authors: Carlo Gozzelino

Abstract : Since the early 2000s, the phenomenon of the two-sided markets has been of growing interest in academic literature as such kind of markets differs by having cross-side network effects and same-side network effects characterizing the transactions, which make the analysis different when compared to traditional seller-buyer concept. Due to such externalities, pricing strategies can be based on subsidizing the participation of one side (i.e. considered key for the platform to attract the other side) while recovering the loss on the other side. In recent years, several players of the Italian financial intermediation industry moved from an integrated landscape (i.e. selling their own products) to an open one (i.e. intermediating third party products). According to academic literature such behavior can be interpreted as a merchant move towards a platform, operating in a two-sided market environment. While several application of two-sided market framework are available in academic literature, purpose of this paper is to use a two-sided market concept to suggest a new framework applied to financial intermediation. To this extent, a model is developed to show how competitors behave when vertically integrated and how the peculiarities of a two-sided market act as an incentive to disintegrate. Additionally, we show that when all players act as a platform, the dynamics of a two-sided markets can allow at least a Nash equilibrium to exist, in which platform of different sizes enjoy positive profit. Finally, empirical evidences from Italian market are given to sustain - and to challenge - this interpretation.

Keywords: financial intermediation, network externalities, two-sided markets, vertical differentiation **Conference Title:** ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020