The Sixth IMF Statistical Forum

SESSION VI: WELFARE EFFECTS FROM E-COMMERCE AND FINTECH

November 20, 2018

CHAIR: Gian Maria Milesi-Ferretti (IMF Research Department)

PRESENTERS: Lizhi Liu (Georgetown University);

                  Zhao Li Meng (JD Finance Institute);

                  Peter J. Klenow (Stanford University).

SESSION TOPIC

Online marketplaces and retailing have increased consumers' access to varieties and saved consumers time. Fintech has helped to make payment and credit services more widely available and lowered their costs. What are the welfare effects, and how can we measure them?

SUMMARY OF PRESENTATIONS

1.   ***E-Commerce Integration and Economic Development: Evidence from China*** *(Lizhi Liu, Victor Couture, Benjamin Faber, and Yizhen Gu)*

The authors use an empirical approach to study the welfare impact of e-commerce integration as a catalyst for development in Chinese rural areas. They find that the welfare gains from e-commerce trading are sizable but are not homogenous across geographic areas or age groups. That is, the benefits accrue only to a minority of rural households who tend to be younger and richer. Importantly, in contrast to some earlier case studies, the authors find little evidence of significant income gains to the average rural producer or worker. Welfare gains are driven by the consumption side through a reduction in household cost of living and not through production. The gains arose from accessing a wider variety of merchants online and from the removal of logistical barriers.

2.   ***Opportunities and Risks to Economic Welfare from Fintech*** *(Zhao Li Meng)*

In this presentation, the author discusses how Fintech can add to economic welfare and how big data are used in China to show the development of the digital economy over time. As examples, the author discusses Fintech applications in loan, insurance, and farming industries. Using more than 1 billion users' real-time data, the author studies the heterogeneity in the size of digital economy across Chinese provinces. The results show that IT penetration has a multiple center effect, resulting in a highly skewed digitalized world. The author also points out unexplored links between Fintechs and social welfare. For instance, the working environment is moving from

traditional to more unconventional jobs such as data scientists and crowdfunding has impacted the way entrepreneurs access capital to fund start-ups.

3. ***Assessing the Gains from E-Commerce*** *(Peter J. Klenow, Liran Einav, Benjamin Klopack, Jonathan D. Levin, Larry Levin, and Wayne Best)*

The authors discuss the macroeconomic concept of consumer surplus and how it is affected by e-commerce. They quantify the US consumer surplus from e-commerce using transaction-level data on credit and debit card from Visa Inc. between 2007 and 2017. Using a simple binary choice model of consumer behavior, the paper quantifies the convenience gained from e-commerce. The authors estimate that e-commerce spending, reached 8 percent of consumption in 2017, yielding consumers the equivalent of a 1 percent permanent boost to consumption, or over $1K per household. The main gains arose from (i) saving from travel costs of buying from local merchants and more importantly (ii) accessing merchants online who do not have local brick and mortar stores. The authors also find heterogeneity in gains: as a percent of consumption, cardholders with income above $50k gained more than twice as much as those below $50k, and perhaps surprisingly, consumers in densely populated counties gained more.

QUESTIONS AND ANSWERS

Questions and comments during the session focus on (i) the risks of Fintechs - such as data privacy, and the impact of this on consumer welfare, (ii) whether there are any consumer protection regulations in place and to what extent consumer financial literacy is promoted (iii) the source of welfare gains from e-commerce, (iv) the geographical and demographical heterogeneity of the welfare gains (e.g. rural vs urban; younger generation vs older generation), (v) the impact of e-commerce on migration, and (vi) the proposed areas of focus for statistical agencies.

On the risks of Fintechs to the consumers, some speakers highlight that there is ongoing research and debate on how to improve the consumer protection regulations in the industry. Specific mention was made of the EU's GDPR data regulations. On the source of consumer welfare, the speakers provide a breakdown of the welfare gains which emanate mainly from lower prices, convenience, and time savings. The speakers note that according to the Adobe digital price index, the inflation rate is lower online versus offline. Others mention that production is not the main source of welfare gains from e-commerce, but rather consumption. However, further study on the policies to support the supply- side gain is promising. On demographic heterogeneity, the older population and those in rural areas are highlighted to be the less benefited group. Some speakers note that the older population might benefit more from e-commerce once they pay the initial fixed costs of learning because they have the time and money to enjoy them. On the issue of migration, the speaker noted that from the sample, there is little evidence of rural-urban migration resulting from the introduction of e-commerce. As a suggestion to statistical agencies, some speakers suggest collecting and analyzing household survey data for both online and offline transactions.