

The Impact of Information and Communication Technology on Bilateral Trade in Goods

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Abstract : This paper investigates the impact of Information and Communication Technology (ICT) on bilateral trade in goods. Empirical analysis is performed on the United States and 34 partnering countries from 2000 to 2013. Our econometric model fits the data well, explaining 52% of the variation in trade flows for goods trade, 53.2% of the variation in trade flows for goods export and 48% of the variation in trade flows for goods import. For every 10% increase in fixed broadband Internet subscribers per 100 people increases, goods trade by 7.9% and for every 5% increase in fixed broadband Internet subscribers per 100 people, goods export increases by 11%. For every 1% increase in fixed telephone line penetration per 100 people, goods trade increases by 26.3%, goods export increases by 24.4% and goods import increases by 24.8%. For every 1% increase in mobile-cellular telephone subscriptions, goods trade decreases by 29.6% and goods export decreases by 27.1%, whilst for every 0.01% increase in mobile-cellular telephone subscriptions, goods import decreases by 34.3%. For every 1% increase in the percentage of population who used the Internet from any location in the last 12 months Internet, goods trade increases by 32.5%, goods export increases by 38.9%, goods import increases by 33%. All our trade determinants as well as our ICT variables have significances on goods exports for the US. We can also draw from our study that the US relies more rather heavily on ICT for its goods export compared to goods import.

Keywords : bilateral trade, fixed broadband, fixed telephone, goods trade, information and communicative technologies, Internet, mobile-cellular phone

Conference Title : ICISO 2017 : International Conference on Information Society and Organizations

Conference Location : Stockholm, Sweden

Conference Dates : July 13-14, 2017