

Dog Eat Dog: Measuring Returns to Scale Using a Digital Platform Merger

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Abstract:

Large digital platforms are economically important and are increasingly the subject of regulatory scrutiny. These platforms may improve welfare if network effects are sufficiently large but they may also harm users if they exercise market power. We study the merger of the two largest platforms for pet-sitting services and use it to measure network effects. Despite being of similar size and competing in the same geographies, the two platforms did not converge in outcomes prior to the merger. Transaction prices and the ratio of buyers to sellers differed between the platforms. This divergence is consistent with a limited degree of multi-homing -- only 3% of buyers and 8% of sellers transacted on both platforms. We use variation in pre-merger market shares across cities to measure the effects of the merger. We find evidence of increasing returns to scale -- doubling the number of market participants more than doubles the number of transactions but does not substantially increase average match quality. Part of the increase in transactions is due to higher user retention.