Can 'Free' Shopping Experiences Ameliorate the Productivity Slowdown?

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Brick and mortar businesses frequently provide elaborate shopping experiences for 'free'. For example, a hardware store might run classes on gardening or a mall might offer a playground. This paper uses an experimental GDP methodology to value those 'free' shopping experiences. In 2015, I calculate that 'free' shopping experiences added $346 billion to nominal GDP, more than triple the $103 billion contribution from 'free' digital content like Google and Twitter (Nakamura, Samuels and Soloveichik 2017). This $346 billion number might appear high, but it is consistent with previous research demonstrating that consumer shopping is an important component to household production and has the potential to substitute for out-of-pocket spending (Aguiar, Hurst and Karabarbounis 2013; Nevo and Wong 2015). In recent years, the growth of online retailers like Amazon has led to a decline in time spent shopping at brick and mortar retailers. Many analysts worry that this reduction in shopping time may decrease the quantity of 'free' shopping experiences available and thereby harm communities (Sanburn 2017; Peterson 2017). In fact, I calculate that 'free' consumer shopping experiences grew from 1.52 percent of nominal GDP in 1995 to 1.92 percent of nominal GDP in 2015. In other words, computers and the Internet has led to an increase in the intensity of 'free' shopping experiences at the brick at mortar stores which remain. Furthermore, 'free' shopping experiences grew slower than overall GDP before 1995. As a result, our experimental methodology ameliorates the post-1995 slowdown in growth in two separate ways: a) by decreasing historical growth and b) by increasing recent growth. For real GDP growth, the slowdown shrinks from 1.09 percentage points per year to 1.05 percentage points per year. For TFP growth, the slowdown shrinks from 0.76 percentage points per year to 0.73 percentage points per year.