Our study contributes to the understanding of the resulting changes in input shares that come from the behavior of IT prices. Roughly following Moore’s law, the price of IT capital has been consistently falling over time. The continuous improvements in the price/performance ratio of IT and the empirical evidence of a significant IT impact on productivity continue to motivate increased investment in IT. What we do not know is whether this increased investment in IT exceeds the decline in value of prior vintages of IT capital such that, as an input, IT capital commands a growing or shrinking input share over time. In contrast to the work using the Allen Elasticity of Substitution (AES), our results suggest that in response to decreases in the price of IT capital, the IT capital input share is stable or even slightly shrinking, and this is definitely an area for future work. Indeed, our results about IT capital input shares being stable or shrinking because of the price declines in IT over time invites a different response to Robert Solow’s (1987, p. 36) famous comment “You can see the computer age everywhere but in the productivity statistics”: computers are everywhere because of price declines, but these same price declines keep the real input share of IT capital roughly the same.

Unlike most other factors of production, IT implementations have multiple effects on the production process. Brynjolfsson and Hitt (2000) argue that IT is a general-purpose technology that facilitates complementary technological or organizational innovations that eventually cause dramatic productivity improvements. Farrell (2003) argues that IT increases output because it enhances the efficiency of labor and asset utilization. Supporting these arguments about IT capital being an input that has broader effects, IT has been shown to contribute to organizational capital (Brynjolfsson and Hitt 2003), to indirect effects enhancing the efficiency of non-IT capital and labor (Mittal and Nault 2009), to interorganizational spillovers both up and down the supply chain (Cheng and Nault 2007, 2012), and to knowledge spillovers (Tambe and Hitt 2014). To better understand these different effects, Morishima Elasticity of Substitution (MES) can be compared between different inputs. This opens up the potential of comparing different subclasses of IT capital or even IT capital and IT operating expenses, together with non-IT capital and labor. This allows access to a deeper understanding about how IT combines with other inputs to create value.