Is the impact of Ikea entry on firm turnover varying with distance?

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Extended abstract:

Our study investigates the effects of the most notorious Swedish big-box retailer, Ikea, on the turnover of retail firms in Sweden, while accounting for distance from the Ikea store as well as for unobserved heterogeneity and reverse causality.

Previous studies record both positive (Davidson and Rummel 2000; Artz and Stone 2012) and negative (Stone 1997; Ailawadi et al. 2010) overall effects of big-box entry on retail sales.

The inconclusiveness of the previous findings may be explained by the wide variety of methods utilized and by the fact that none of these controlled for both unobserved time- and group/regional-level heterogeneity and for sample selection bias. Thereby there is a risk of omitted variable bias in the results due to the former and distortion of the effects due to the latter.

With profits of about EUR 3.3 billion, total revenues of about EUR 27.9 billion (Ikea 2014), and 345 stores operating in 42 countries (Ikea 2013), Ikea is today one of the world's largest Swedish big-box retailers. In spite of its notoriety, the effects of Ikea-entry have been little looked at and as far as we know only one study by Daunfeldt et al (2014) examines the effects of this retailer. Daunfeldt et al. finds that Ikea-entry increased entry municipality durable-goods revenues by about 20% and employment by about 17%. In addition, a negative effect on retail revenues, of about 2%, was found in neighboring municipalities. However, this study did not examine the overall effects on retail nor the effects at firm level and as there appears to be a spatial dimension to the effects of a big-box entrant (see also: Stone 1997; Zhu et al 2011) studying the impact at firm level becomes interesting. To our knowledge no studies have analyzed big-box impacts at firm level on the Nordic market while taking distance into account.

Using data from Statistics Sweden and HUI Research in an intervention-control approach, the purpose of this study is to determine how Ikea affects the firms located in its vicinity and how this effect varies with distance. To control for the possibility that Ikea entered municipalities with more favorable conditions we included, as control group, firms located in control municipalities which were obtained by a propensity-score matching. This method enables us to compare firms located in Ikea entry municipalities both to themselves in the period before entry and to other firms located in non-entry municipalities that are very similar to the entry municipalities in terms of retail trade, employment,

and a purchasing-power index relating retail revenues to population size. Next, we used a linear-regression model with Newey-West standard errors for coefficients (to correct for heteroscedasticity and autocorrelation problems) to determine how retail revenues are affected for firms located in municipalities with a new Ikea store. We separate these firms according to four distance buffers around each Ikea to account for the possibility that impacts vary with distance between the location of each firm and the closest Ikea store. In sum we have included in our analysis retail firms from a total of 15 municipalities, including control- and entry municipalities, generating a dataset of 12,099 firms covering the period between 1997 and 2012, thus yielding 53,792 observations.

We find that retail firms experience a 25-35% increase in net turnover after the establishment of an Ikea store only if they are located in the close proximity of the respective Ikea store (within 1 km). If a firm is located 1-5 km away, the impact remains positive, but lower, accounting for a 15-20% increase in net turnover. If located further than 5 km away, this effect becomes insignificant, while after 10 km it becomes negative, accounting for a decrease of 25-41% in net turnover.

As big-boxes are typically vertically integrated we applied the same model also on data for wholesale firms. Now it was more difficult to discern a trend as wholesale firms located 1-5 and 5-10 km away are in some models positively impacted by Ikea-entry while in other models the effect is insignificant. The impact on nearby wholesale firms (within 1 km) is 78-94% increase in net turnover, three times the effect found for retail firms. In the meantime, wholesale firms located more than 10 km from the Ikea experience a decrease in net turnover of 70-85%, nearly thrice the impact noted for retail firms in the corresponding buffer.

Our findings support the theories of agglomeration economies (McCann 2001), where the benefits of locating nearby a large retailer supersede the potential costs in terms of increased factor prices. The positive effects also appear to attenuate with distance, which is in line with the results of previous studies (Daunfeldt et al. 2014).

Keywords: Big-box retailing, retail revenues, distance decay, propensity-score matching, panel data.

JEL-codes: D22, L11, L25, L26, P25.

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