



Clustering, competition, and spillover effects in Cambodia

FINDINGS

There is significant evidence of productivity spillovers associated with the clustering of informal firms in Cambodia

Formal and manufacturing firms, however, do not experience the advantages of agglomeration economies due to pressure from direct competitors

Benefits derived from improvements in productivity as a result of the clustering of economic activity of firms in Cambodia most often do not outweigh the negative effects of competition created by nearby firms

What types of businesses benefit or suffer due to geographic clustering? Data available from Cambodia on competition and spillovers—at both village- and commune-level—is useful to answer a number of questions about the effects of clustering and the possible benefits or drawbacks of encouraging the concentration of industries in specific zones in developing countries.

Is firm productivity enhanced by clusters?

In Cambodia, firm clustering at both village- and commune-levels is usually indicative of higher measured firm productivity. However, data also reveal that a large number of competing firms operating within the same sector at either village- or commune-level can have a negative impact on the productivity of firms. In other words, increased competition created by the clustering of similar economic activities in one zone often results in a decrease in productivity as competitive pressures begin to take a toll on individual firms, eventually resulting in lower revenue levels for a given input level.

Does the impact of clustering differ depending on industry and firm size in Cambodia?

While businesses are generally more productive in more densely populated clusters, the manufacturing and service sectors do not benefit from clustering in the same way—service sector firms perform better in agglomerations of economic activity where they are located closer



A woman irons fabric at a garments factory at the Sihanoukville Special Economic Zone. © Chhor Sokunthea / World Bank

to target customers; manufacturing firms experience more pronounced effects of competition and thus must often diversify their customer bases by targeting larger areas. The subsequent diversification of manufacturing customer bases may be hindered due to high transport costs or a lack of relevant market information.

The majority of Cambodian firms are quite small, with most employing less than 10 people. Despite this, there does not appear to be a substantial difference between the effects of competition experienced by small firms compared to those confronting larger industrial firms.

Does the impact of clustering differ between formal and informal firms?

In addition to formally registered firms, Cambodia's economy also counts a large number of informal firms. Consistent with recent empirical findings, formal Cambodian firms are normally more productive than

unregistered firms that do not benefit from productivity gains that often accompany formalization. However, the number of firms from the same sector operating in one cluster is more likely to have a negative effect on formally registered firms than those operating informally. This is a direct result of the negative effect of competition within the cluster on the performance of formal enterprises. Taxes, fees, and other fixed costs associated with the often difficult and cumbersome registration of an enterprise can also inhibit gains in productivity and reduce profits as firms struggle to cut costs when faced with increased competition.

Lessons from Cambodia

There is significant evidence of productivity spillovers associated with the clustering of informal and service sector firms in Cambodia. However, competition in clusters can exert significant negative effects on formal and manufacturing firms and prevent them from reaping the benefits of agglomeration economies often touted in developed countries.

The inflexible nature of formal firms restricts them from adapting and competing effectively with competitive pressures. Manufacturing firms, on the other hand, are challenged with finding broader customer bases when there is greater competition within their specific clusters; challenges from competitors and registration expenses prohibit them from enhancing productivity. Future clustering policies must therefore focus on the removal of the cost base of the formal and manufacturing firms that form the basis of a healthy industrial sector.



Clay makers in Kompon Chhang Province, Cambodia. © ILO/Khem Sovannara



IMPLICATIONS

Policy efforts should focus on removing constraints that prevent formal firms from reaping the benefits of clustering

Reducing the imposed costs of competition within clusters will allow manufacturing firms to become more productive