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Traditional food traders in developing countries and competition from supermarkets: Evidence from Indonesia

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ABSTRACT

Indonesia's urban centers recently underwent an explosion of supermarkets. With cheaper, higher quality commodities and better services, supermarkets have the potential to drive traders in traditional markets out of business. In this paper, we evaluate whether this is indeed the case. We find that traditional traders experienced declines in their business. However, both qualitative and quantitative findings indicate that the main cause of decline is not supermarkets. Instead, traditional markets are plagued with internal problems and face increasingly bitter competition from street vendors. Therefore, the policy recommendations include strengthening traditional traders and seriously tackling the problem of street vendors.

Introduction

The competition between modern and traditional retailers has been taking place in developed countries for many years. In the United States, for example, many studies find that Wal-Mart adversely affects existing retailers (Artz and Stone, 2006) and the local labor market (Basker, 2005), while consumers generally benefit through the lower prices, arrival of new brands, and differentiated products that result from the competition (Hausman and Leibtag, 2007).

Towards the last decade of the previous millennium, the battleground has expanded to developing countries, where deregulation in the retail sector aimed at increasing foreign direct investment has resulted in the proliferation of supermarket chains (Reardon and Hopkins, 2006; Minten, 2008). Reardon et al. (2003) find that as of 2003, supermarket's share of the retail food sector in several emerging economies, such as Thailand, Mexico, and Poland, has reached 50%. In Brazil and Argentina, where the proliferation began earlier, the share was around 60%. Traill (2006) uses various assumptions and predicts that supermarket's share of the retail food market will reach 61% in Argentina, Mexico, and Poland; 67% in Hungary; and 76% in Brazil by 2015.

The onset of supermarkets in developing countries, bringing with it higher quality products at lower prices, would theoretically be beneficial to consumers, especially those who are poor. As an example, D'Haese and Van Huylenbroeck (2005) provide a case study of the effect of supermarkets on poor households in rural South Africa. At the same time, however, the increased competition may force traditional retailers, many of whom are also vulnerable to poverty, out of business. According to Reardon and Hopkins (2006) and Minten (2008), the war between supermarkets and traditional retailers in developing countries takes place on several fronts, such as price, convenience, quality of the products, and safety.

Similar to the findings from the United States, most studies in developing countries find that the effect of supermarkets on traditional retailers is mainly negative, although the effect differs in magnitude on different types of retailers. Reardon and Berdegué (2002) summarize studies that look at the effect of supermarkets on traditional food retailers. They find that small shops and 'mom and pop' stores are hit the hardest, while speciality shops and street fairs tend to hold out much longer. When differentiated by products sold, those selling dairy products or processed food tend to go out of business the earliest, with fresh produce shops and wet markets following afterwards. After several years of competition, the traditional retailers that are usually still in business are those selling niche products. An exception to this is in Brazil, where it appears that traditional traders are able to coexist with modern retailers by depending on traditional food preparation habits and ensuring fresher products (Zinkhan, Fontenelle, and Balazs, 1999; Farina, Nunes, and Monteiro, 2005).

Other than describing the number of traditional retailers that have closed down since the onset of supermarkets or comparing their growth rates, however, there is yet to be any study that conduct an impact evaluation of the effect of supermarkets on

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traditional retailers in developing countries. Furthermore, studies that use micro-level data of traditional retailers are still very rare, even in developed countries. In a case study in Portugal, Farhangmehr, Marques, and Silva (2001) measure traditional retailers' perception of supermarkets and unsurprisingly find a negative perception.

In this article, we investigate the business practices of traditional retailers in Indonesia and measure whether supermarkets adversely affect the traditional retailers. We use the data from a survey of traditional retailers that was precisely designed for this purpose. This article focuses on traditional retailers inside traditional markets, as opposed to local shops, for two reasons.[1] Firstly, the majority of traditional retailers are located in these markets. Secondly, the commodities sold by these retailers are fresh fruit and vegetables, meat, and basic necessities. These commodities also make up a large part of the supermarkets' product line (Krishnamurti and Fauzia, 2004). Hence, these traders are the supermarkets' main competitors. We abstract away from traditional wholesalers in this study. This would not significantly bias our results given that traditional wholesalers are not located in the same area as traditional retailers or most of the supermarkets.

The rest of this article is organized as follows. The next section describes food retail trade in Indonesia. "Survey design and research methodology" lays out the survey design and research methodology. "Business practices of supermarkets" provides an overview of the business practices of supermarkets. "Business practices of traditional traders" discusses the business practices of traditional traders. "Business performance of traditional traders 2003–2006" measures the traditional traders' performance during the period that we study. "The effect of supermarkets on traditional traders" explains the econometric estimation strategy and the results. "Possible bias" examines possible biases in this study. "Conclusion and policy recommendation" concludes and provides policy recommendation.

Food retail trade in Indonesia

Supermarkets have been around since the 1970s in Indonesia, although they were only concentrated in large urban centers. Foreign supermarkets began entering the market in late 1990s as foreign direct investment in the retail sector was opened in 1998. While local supermarket chains had been of medium size, the foreign supermarket chains, such as France's Carrefour and Malaysia's Giant, opened hypermarkets.[2]

From 1998 to 2003, hypermarkets grew by 27% a year, from eight to 49 stores in the country. While it is difficult to ascertain the total number of supermarkets and hypermarkets in the country, the top seven retailers operated around 284 supermarkets and hypermarkets in 2004 (PricewaterhouseCoopers, 2006).

The increased competition has resulted in supermarkets reaching smaller cities and waging price wars in their effort to win consumers. Hence, while CPIS (1994) finds that Indonesian supermarkets catered only to the upper class in the 1980s and early 1990s, their mushrooming in smaller cities and predatory pricing practices means that consumers from the lower classes now have an easy access to supermarkets. World Bank (2007) states that the modern market made up only 11% of the total market share for food in Indonesia in 1999. By 2004, the share had almost tripled. In terms of sales, the study finds that supermarket sales grow by an average of 15% while traditional retail sales decline by 2% per year. This pattern is similar to other developing countries, as stated by Reardon et al. (2003).

In contrast to supermarkets, city governments own most traditional markets and manage them under the Office of Market Management (OMM). This office either entirely manages the markets on its own or in cooperation with private companies. The latter involves giving the private companies a permit to build and/or operate a traditional market under a build, operate, and transfer scheme, with the private companies making a set payment to the office each year. There is no information on the number of traditional markets in Indonesia.

Survey design and research methodology

The majority of supermarkets in Indonesia are located in urban areas. Moreover, the mushrooming of supermarkets happened around 2003, 5 years after the food retail sector was opened to foreign direct investment. Given those conditions, our goal is to compare the performance of traditional traders before and after the explosion of supermarkets. This section describes the design of the survey and the research methodology.

We conduct the survey in urban areas with the highest supermarket density: Greater Jakarta and Bandung. Greater Jakarta is comprised of Jakarta, Bogor, Tangerang, Depok, and Bekasi. The traditional markets that form the treatment group are chosen purposively, based on the following conditions: there is a supermarket within a 5-km radius from the traditional market; the supermarket must have been opened between 2003 and 2006, or if there are several supermarkets, they all must have opened within that period; the traditional markets should be located in the same district as the traditional markets in the control group; and the traditional market must not have been renovated after 2003. However, the final condition turned out to be quite irrelevant since the majority of traditional markets in Greater Jakarta and Bandung have not been renovated since 2003.

As for the control group, we choose traditional markets according to the following conditions: the traditional market should be located in the same district as those in the treatment group; there is no supermarket within a 5-km radius from the traditional market; there was going to be a supermarket opening near the traditional market in 2007; and the traditional market must not have been renovated after 2003.[3] Traditional markets that had a supermarket opened near them in 2007 were specifically chosen because a traditional market serving areas where supermarkets are not interested in may not be comparable to those in the treatment group.

There are 98 traditional markets in Greater Jakarta and 20 traditional markets in Bandung. Meanwhile, there are approximately 188 supermarkets in Greater Jakarta and 80 in Bandung. Only supermarkets built between 2003 and 2006 are kept in the sampling frame. The locations of the traditional markets are then overlaid with the locations of the supermarkets.

Using our sampling frame, we find two traditional markets in Depok, and three in Bandung. Traders in these markets form our treatment group. Two additional traditional markets, one each in Depok and Bandung serve as the control group. Given our sampling frame, these markets are representative of the traditional markets in these urban centers in Indonesia.

[1] A traditional market is open-air or covered areas that house rows of small retailers (Reardon and Berdegué (2002)).

[2] In this paper, the definition of supermarket is the following. It occupies between 300 to 8000 sq m, has at least three cash registers, and sells food and household goods. Hypermarkets, meanwhile, are more than 8000 sq m, have one cash register for every 1000 sq m of shopping area, employ around 350–400 employees, and sells electronics, clothing, and sports goods in addition to food and household goods.

[3] In the Jakarta Regional Government Regulation No. 2/2002 on Private Market, it is regulated that a large supermarket cannot be established at a distance less than 2.5 km from a traditional market. We double this zoning regulation in order to make sure that the effect of our control supermarkets on traditional markets is as small as possible.