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# Indonesian Consumers' Choice of Food Retail Formats: Are Traditional Food Retailers Being "Crowded Out"?

Hery Toiba[1], Wahida[1], Wendy J. Umberger[1], Nick Minot[2] and Randy Stringer[1]

[1] *PhD Student, PhD Student, Associate Professor and Professor,* respectively; *Global Food Studies, The University of Adelaide*

[2]*Senior Research Fellow; International Food Policy Research Institute, Washington, DC USA*

## Introduction & Objectives

The growth of modern food retail structures, including hypermarkets, supermarkets and mini-markets, has been taking place in Indonesia for more than two decades. Initially, modern food retailers focused mainly on servicing the needs of upper-class consumers and expatriates in major cities and were mainly domestically-owned and managed. Modern food outlets have expanded their market to middle- and lower-income households in suburban and rural areas (ACNielsen 2007; Suryadarma et al. 2010).

The penetration and diversification strategies of modern food retailers in Indonesia have resulted in concerns that supermarket penetration may negatively impact the Indonesian food supply chain. For example, if traditional food retailers are crowded out of the market, smallholder farmers may lose market access (Gorton et al., 2011; Suryadarma et al., 2010). Additionally, consumers' access to fresh affordable produce could decrease if traditional retailers are forced out of the market. Consequently, diet quality may be adversely affected if fresh fruit and vegetable consumption decreases or consumption of highly processed food increases (Hawkes, 2008).

Previous studies investigating the impact of supermarket penetration on food chains have limitations due to small non-representative samples. This study explores data on consumers' shopping behaviour with respect to multiple formats, including hypermarkets, supermarkets, minimarkets, semi-permanent stands, wet markets, and peddlers. Indonesian consumers' preferences, attitudes and frequency of use and expenditure shares at each modern and traditional food retail outlet are examined.

Objectives :

1. To determine consumers' frequency of shopping for food at modern (hypermarkets, supermarkets and mini-markets) and traditional (semi-permanent stands, wet markets, small shops and peddlers) retail outlet formats;
2. To explore consumers' perceptions of retail formats with respect to price, quality, safety and trust of product information;
3. To determine factors which explain consumers' food shopping frequency at retail outlet formats.

## Methods

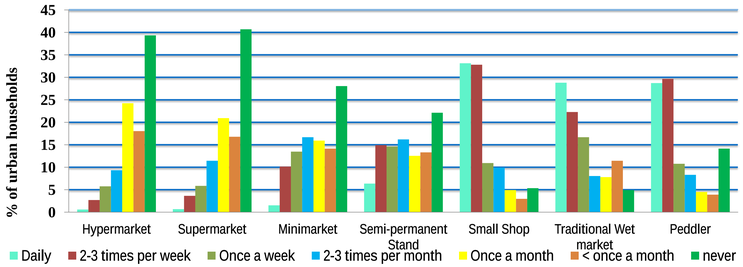
Data is analysed from household surveys conducted from November, 2010 to January, 2011. The sample consists of 1180 urban households from three cities: Surabaya, Bogor, and Surakarta. Surveys were completed via face-to-face interviews with the person responsible for purchasing food for the household. Cities and households were selected using systemic random sampling methods considering population, income, and distance to nearest hypermarket or supermarket.

The survey assessed respondents' frequency of shopping for food at seven retail formats, distance and travel time to each outlet, perceptions of quality, safety, price, and trust of information provided by retailers, food expenditures and socio-demographics.

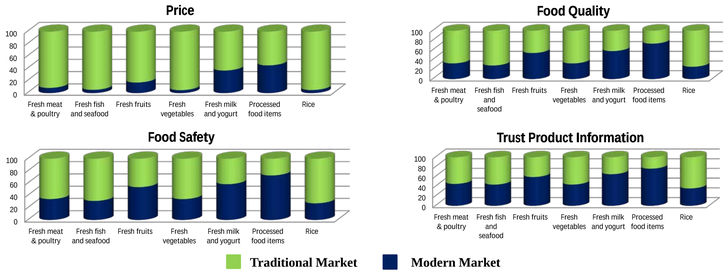
Ordered probit models were estimated to determine if socio-demographics, attitudes regarding nutrition, food quality and food safety, and consumers' perceptions of the retail format type help to explain higher shopping frequency. The dependent variables in the ordered probit models were the frequency of shopping at each retail outlet format.

## Results

**Food Shopping Frequency: Modern vs. Traditional Retail Formats**




**Consumers' Perceptions of Which Retail Format is "Best" for Food Products**




## Conclusions & Take Home Messages

- Traditional food retailers are still used most frequently by the majority of Indonesian consumers.
- Consumers perceive traditional retailers to be the 'best' type of outlet to buy fresh meat, fish, fruit and vegetables.
- Modern retailers are gaining market share in the fresh fruit market and are perceived as the "best" type of outlet to buy food that is safe and provides trustworthy product information.
- A particular socio-economic niche tends to use modern food retailers - consumers with higher household incomes, education, refrigerator and credit cards are more likely to shop frequently at modern retail outlets.
- Growing interest from all consumers in outlets providing better nutritional information, safe to eat products and convenience will result in modern retailers capturing a new customer base. Consequently, modern food retailers will capture traditional food retailers' market share if the traditional outlets cannot adapt and cater to consumers' needs.
- Traditional retailers will need to be innovative to maintain market share because they are an important markets for smallholders. Thus, the government may have a role to play in helping develop innovative retailing strategies.

**Ordered Probit Results: Frequency of Shopping for Food at Retail Type**

| Variable | Hypermkt | Supermkt | Minimkt | Semi-permanent | Small Shop | Wet mkt | Peddler |
|---|---|---|---|---|---|---|---|
| | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. |
| Gender | 0.202** | 0.187* | -0.063 | -0.204** | -0.195** | -0.108 | -0.004 |
| Age | 0.000 | 0.000 | -0.005* | -0.006** | -0.006** | -0.004 | 0.004 |
| Education | 0.057*** | 0.028*** | 0.042*** | 0.003 | -0.038*** | -0.02** | 0.016* |
| Demployee | 0.185** | 0.053 | 0.065 | 0.008 | -0.105 | -0.062 | 0.099 |
| Household_size | 0.046* | 0.013 | 0.023 | -0.005 | 0.067*** | 0.079*** | 0.011 |
| Dchild17 | 0.008 | 0.291*** | 0.223*** | -0.004 | 0.225** | -0.076 | 0.066 |
| Domestic_employee | 0.202* | 0.126 | -0.226 | -0.041 | -0.221** | -0.065 | -0.106 |
| Household_income | 0.115** | 0.191*** | 0.126 | 0.027 | -0.081** | 0.034 | 0.017 |
| Car | 0.04 | 0.055 | -0.126 | -0.301*** | -0.422*** | -0.179** | -0.015 |
| Refrigerator | 0.557** | 0.329*** | 0.232*** | -0.022 | -0.223** | 0.074 | 0.115 |
| Credit_cards | 0.223* | 0.101 | -0.027 | -0.133 | -0.275*** | -0.132 | 0.148 |
| Time_hypersuper | -0.017*** | -0.016*** | 0.012*** | -0.003 | 0.008* | -0.012*** | 0.01** |
| Time_minimarket | 0.005 | 0.005 | -0.027*** | -0.003 | -0.004 | 0.002 | 0.002 |
| Surabaya | 0.49*** | -0.298*** | 0.413*** | -0.107 | -0.06 | 0.211*** | 0.392*** |
| Bogor | 0.344*** | 0.327*** | 0.305*** | -0.142 | 0.634*** | -0.338*** | 0.477*** |
| Nutritionlabel_use | 0.122*** | 0.131*** | 0.145*** | 0.158*** | 0.025 | -0.019 | 0.082* |
| Safety_concerned | 0.106* | 0.013 | 0.043 | 0.095 | 0.063 | -0.1 | -0.018 |
| Riskaverse_factor | 0.079** | -0.004 | 0.008 | 0.033 | -0.063* | -0.037 | 0.023 |
| Service_factor | 0.009 | 0.045 | 0.039 | -0.026 | 0.039 | -0.039 | -0.011 |
| Convenience_factor | 0.169*** | 0.107*** | -0.014 | 0.018 | -0.001 | -0.012 | -0.002 |
| Pricesensitive_factor | -0.072** | -0.088** | -0.024 | -0.013 | 0.06* | 0.083** | 0.031 |
| N | 1180 | 1180 | 1180 | 1180 | 1180 | 1180 | 1180 |
| Wald chi2(23) | 596.63 | 366.59 | 234.13 | 75.12 | 417.96 | 137.97 | 69.95 |
| Prob > chi2 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Pseudo R2 | 0.1583 | 0.102 | 0.0607 | 0.0156 | 0.1129 | 0.0313 | 0.0199 |

****,**, and * indicated the level of significance at 1%,5%, and 10%, respectively.*

## References & Acknowledgements

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**Acknowledgements:** The study was funded by the Australian Centre for International Agricultural Research (ACIAR). We would like to thank staff at the Indonesian Centre for Agricultural Socio-Economic and Policy Studies (ICASEPS) for their assistance in survey development and data collection.

**Contact author:** Dr. Wendy J. Umberger (wendy.umberger@adelaide.edu.au)