



The coincidence of private branding and foreign sourcing: Is there a causality direction?

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ABSTRACT

Private branding, a retail trend whereby products made by unaffiliated manufacturers are sold under the private brands owned by retailers, has coincided with another trend known as foreign sourcing, whereby retailers outsource products from foreign manufacturers. Prior studies have tended to treat private branding and foreign sourcing as two separate trends without paying much attention to their coincidence. In this paper, we take a transaction cost approach to explore why the two retail trends coincide and whether there is a causality direction between them. Focusing on the manufacturer-retailer relationship, we point out that a special case of asset specificity (i.e., *brand specificity*) can drive up the costs of intra-channel transactions in foreign sourcing, in that private branding serves to neutralize the transaction cost disadvantage of foreign manufacturers and preserve their production cost advantage. Empirical data drawn from a multi-product/single-retailer sample confirm this transaction cost view and reveal a clear causality direction between the two retail trends. Both scholars and managers can derive useful insights from the conceptual framework and empirical evidence presented in this paper.

1. Introduction

Private brand products are made by unaffiliated manufacturers but sold under the private brands owned by retailers (Fitzell, 1982, 1992; Kumar & Steenkamp, 2007). Since its rise in the 1970s, private branding has become widespread in the retail industry. In the United States, for instance, over 60% of shoppers fill about half of their grocery carts with private brand items (Store brands decisions, 2012). National retail chains such as Target and Whole Foods have introduced private brands in many product categories (Intelligence Node, 2017). The rise of private branding has attracted the attention of marketing researchers, who tend to treat it as a store-level tactic for retailers to reach certain market segments (Ailawadi, Pauwels, & Steenkamp, 2008; Kamakura & Russell, 1989; Steenkamp & Dekimpe, 1997).

Simultaneously, the last four decades have seen the hollowing out of U.S. manufacturing sectors, in that retail chains have increasingly moved from domestic to foreign suppliers to fill their store shelves (Doh, 2005; Li, Murray, & Scott, 2000; Raa & Wolff, 2001). The practice of foreign sourcing can be handily explained through trade theories at the country level—that is, retailers are expected to source more from foreign suppliers because the United States is losing comparative advantages to foreign countries (Melvin, 1985; Ruffin, 1990). The

problem is that the decision to use foreign sourcing is not made at the country level. Instead, it is a cost-cutting decision made at the product level. This product-level decision varies substantially across retail chains, in that some choose to source a product internationally; others elect to do so domestically. Yet, the choice between domestic and foreign sourcing has not been analyzed at the firm level in the trade literature.

Remarkably, private branding and foreign sourcing have coincided in an uncanny manner at the product level, in that many products sourced from abroad are sold under private brands and many private brand products are sourced from foreign suppliers (Far Eastern Economic Review, 1994). However, previous studies have largely overlooked the uncanny way in which these two retail trends coincide with each other, since the level of analysis differs between marketing and trade literatures. To marketing researchers, private branding constitutes a *firm-level* tactic used by retailers to build store loyalty among shoppers, regardless of the sourcing origin of a product (Ailawadi et al., 2008; Corstjens & Lal, 2000). To most trade economists, foreign sourcing is a *country-level* trend driven by production cost consideration, regardless of the branding status of a product (Melvin, 1985). The inherent gap in the level of analysis between the two literatures has led prior studies to ignore the coincidence of private branding and foreign

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sourcing.

Still, the coincidence of these two retail trends has an intuitive explanation, i.e., unknown foreign suppliers use private branding to borrow reputation from retail chains to attract shoppers in the United States (Chu & Chu, 1994; Terpstra & Yu, 1990). This argument is not entirely convincing because most private brands are unrelated to store names and unknown to shoppers. Moreover, private brand suppliers include many popular foreign firms that do not need to borrow reputation from U.S. retailers (e.g., Sony). Even if foreign suppliers are totally unknown in the United States, the stocking of their products by a reputable store alone is often enough to attract shoppers; branding them with a private label is not really necessary. Most importantly, there is no empirical evidence to support the above reputation borrowing theory for the coincidence of private branding and foreign sourcing.

The coincidence of private branding and foreign sourcing suggests that retailers can best govern their relationships with *foreign* manufacturers who are *anonymous* to shoppers. It follows that the coincidence of the two retail trends can be examined through the governance approach in transaction cost economics. In this paper, we argue that foreign sourcing is a double-edged sword with production cost advantages and transaction cost disadvantages. The transaction cost penalty in foreign sourcing arises from a special type of asset specificity called *brand specificity*. Private branding, which shifts the right to brand a product from manufacturers to retailers, is an intuitive solution to the problem of brand specificity and can nullify the transaction cost penalty in foreign sourcing. In other words, private branding allows retailers to enjoy the production cost savings in foreign sourcing without bearing the transaction cost penalty, which can explain the coincidence of these two retail trends.

Our approach deviates from traditional transaction cost analysis in the channel literature. Prior studies have long confirmed that channel integration serves as a mechanism to save on the high costs of contracting the manufacturer-retailer transaction, either in the same country (John & Weitz, 1988), or across borders (Anderson & Schmittlein, 1984; Klein, Frazier, & Roth, 1990). This contract-versus-integration paradigm is based on the general case of *asset specificity* without identifying the specific asset, which can be classified into six categories, including brand reputation (Williamson, 1991). If the costs of negotiating and enforcing distribution contracts are too high, full integration of manufacturing and distribution becomes the sole solution to the issue of asset specificity. In this study, we propose that private branding is an automatic solution to the special type of asset specificity called brand specificity. More precisely, private branding can be seen as *partial integration* made by retailers into product branding, which eliminates the need for *full integration* of manufacturing and retailing within a single firm, as prescribed by the contract-versus-integration dichotomy in traditional transaction cost analysis (Williamson, 1975; 1985). Simply put, prior studies prescribe the use of full integration to avoid the general case of asset specificity, but this study proposes the use of partial integration (private branding) to evade a special type of asset specificity (brand specificity).

In the following sections, we first propose a transaction cost framework to explain the coincidence of private branding and foreign sourcing. Next, we present the methods that we used to test this transaction cost explanation on a sample of products stocked by a national chain that operated more than 2000 stores in the United States. We report our empirical results, which not only confirm the coincidence of these two retail trends but also reveal a clear causality direction (i.e., private branding leads to foreign sourcing, but the opposite does not hold). We discuss the implications of our findings before concluding the paper.

2. Literature and hypotheses

To build our transaction cost framework for examining the

Combinations of Sourcing Origin and Branding Status

		<i>Sourcing Origin</i>	
		<i>Domestic</i>	<i>Foreign</i>
<i>Branding Status</i>	<i>National</i>	(I) Domestic/ National	(III) Foreign/ National
	<i>Private</i>	(II) Domestic/ Private	(IV) Foreign/ Private

Fig. 1. Combinations of Sourcing Origin and Branding Status.

coexistence of private branding and foreign sourcing, we classify all products into four categories. In this 2 × 2 matrix (see Fig. 1), one classification is whether a product is sourced from domestic or foreign suppliers (domestic or foreign sourcing); the other is whether a product carries the national brands of manufacturers or the private brands of retailers (national or private branding). As such, four branding-sourcing combinations exist to structure the manufacturer-retailer transaction, depending on the branding status and sourcing origin of a product.

The starting point is domestic sourcing under national branding (Domestic/National, Cell I in Fig. 1). As an example of this structure, Sears used to source bicycles from the U.S. maker Schwinn and sell the products to shoppers under the Schwinn brand. In the second scenario, retailers continue to engage in domestic sourcing, but use private branding to hide the identities of U.S. suppliers (Domestic/Private, Cell II of Fig. 1). Under this arrangement, Sears sold bicycles made by Schwinn to shoppers under its private brand, Free Spirit. As a third option, retailers can adopt foreign sourcing but do so under national branding (Foreign/National, Cell III of Fig. 1). For instance, Sears sourced bicycles from the Taiwanese maker Giant and sold the products to shoppers under the Giant brand. In the final arrangement, retailers can shift to foreign sourcing and use private branding to block the identity of foreign suppliers (Foreign/Private, Cell IV of Fig. 1). As an example of this arrangement, Sears sourced bicycles from Giant but sold them to shoppers under its private brand, Free Spirit.

2.1. Domestic versus foreign sourcing

The flow of manufactured goods across borders increased substantially after World War II for three reasons. First, products could move freely across nations due to bilateral trade packs and supranational trade organizations (e.g., the General Agreement on Tariffs and Trade (GATT)). Second, advancements in transportation technology reduced the cost of shipping goods over long distances (Melvin, 1985). Third, the explosion of information and communication technologies made it easier and cheaper for firms to build and operate a global sourcing network.

Along with the increase in cross-border trade, rising labor costs pushed U.S. manufacturers to move production overseas and import the foreign-made products for sale at home. These U.S. manufacturers quickly discovered that managing their own plants abroad had serious drawbacks because of the liability of foreignness (Zaheer, 1995). In comparison to their local counterparts, for instance, U.S. manufacturers had to incur higher costs to operate their own plants and faced difficulties in deploying capable managers to run their plants overseas. Ownership of physical plants further limited their flexibility to migrate from one nation to another.

To avoid these problems of foreign production, U.S. manufacturers chose to close their plants and farm out production to subcontractors

(Chen, 2005). They imported the products from subcontractors for sale at home under their own brands, a contractual arrangement that is called “original equipment manufacture” (OEM; see Heide & Stump, 1995; Kotabe, Mol, & Ketkar, 2008). The use of OEM by U.S. manufacturers to send production overseas turned retailers into unwilling participants in foreign sourcing. Accordingly, national chains started to set up sourcing offices to handle certain logistic issues at the plants of OEM subcontractors (Liu & McGoldrick, 1996). Eventually, these retail chains bypassed U.S. manufacturers to outsource products directly from foreign subcontractors.

The existence of a global sourcing system allowed retailers to choose domestic or foreign sourcing based on the comparative advantages enjoyed by the United States vis-à-vis foreign countries (e.g., factor prices, shipping costs, and trade barriers). Thanks to this global sourcing network, national chains were able to import foreign-made products for sale in the United States on an unprecedented scale (Jones, Kierzkowski, & Lurong, 2005; Raa & Wolff, 2001). All else being constant, retailers are more likely to choose foreign over domestic sourcing in those sectors where import conditions are more favorable (i.e., where foreign manufacturers are more competitive than their U.S. counterparts). Hence, we hypothesize that:

H1: Retail chains are more inclined to choose foreign over domestic sourcing for those product items where import conditions are more favorable to them.

2.2. National versus private branding

Typically, products are sold nationally to shoppers under the brands of manufacturers, a practice referred to as “national branding.” The introduction of private brands by retail chains to replace the national brands of manufacturers has a number of explanations. For instance, scholars have long proposed that manufacturers can use private branding to practice price discrimination or dispose of excess output (Cook & Schutte, 1967; Keller, Dekimpe, & Geyskens, 2016). In addition, private branding can be used to reach those market segments where shoppers prefer cheaper but less advertised products (Hoch & Banerji, 1993; Stern, 1966). Yet, these goals can be handily accomplished through a secondary brand introduced by manufacturers, which means that retailers need not extend a private brand to products sourced from unaffiliated suppliers.

These traditional accounts for private branding do not consider the governance implication of this retail practice. Basically, the branding system serves to reduce quality uncertainty (Landes & Posner, 1987; Nelson, 1970) and create symbolic value (Kleine, Kleine, & Kernan, 1993) for a product in the consumer market. Through a wide variety of marketing tools, manufacturers can invest in the reputation and image of a brand to attract shoppers. Thus, the branding right can be seen as the right for branders to claim the premium price that shoppers are willing to pay for a product over the same product presented to them *unbranded* (Simon & Sullivan, 1993). Private branding shifts the right to brand a product—and thereby the right to claim the premium price of the product—from manufacturers to retailers. As such, the choice of national or private branding has governance implications for channel cooperation, in that the incentive of retailers to enhance the marketability of a product also depends on the branding status of the product.

The rise of national chains in recent decades has allowed retailers to take over many of the marketing functions previously performed by manufacturers. For example, national chains have become major advertisers for the products that they stock, and price promotions can be found in their stores on a regular basis (Bemmar & Mouchoux, 1991). National retail chains even use the scanner data that they have collected from shoppers to design and develop their products. In such instances, retailers can recoup their investment in product marketing directly from shoppers through a higher margin and/or a greater sales volume.

Yet, when retailers invest in marketing a product to shoppers, most of the reputation gains accrue to the manufacturer who brands the product. The newly gained reputation will allow the manufacturer to raise its wholesale price and/or sell the product to competing stores that do not invest in marketing and can thus afford a lower margin. The original retailer will fail to recover its marketing investment, which is specific to the manufacturer who brands the product. We call this problem *brand specificity*, a special type of asset specificity that can substantially drive up the costs of contracting intra-channel transactions.

Integration of manufacturing and retailing within the same firm is the traditional solution to the high costs of contracting intra-channel transactions caused by asset (brand) specificity (John & Weitz, 1988; Klein et al., 1990). In the retail context, nonetheless, this contract-versus-integration dichotomy has two limitations. First, integration is often infeasible due to the presence of scope economies in retailing (Basker, Klimek, & Van, 2012). It is impossible for a retailer to integrate into manufacturing all products that receive its marketing investment. Second, full integration of manufacturing and retailing serves to solve the general case of asset specificity without considering the nature of the specific asset—in our case, the product brand (Minkler & Park, 1994). These two limitations imply that full integration is either impossible or unnecessary for addressing the special case of asset specificity called brand specificity.

Brand specificity arises in the first place because the products that receive marketing efforts from retailers carry the national brands of manufacturers. An automatic solution to this issue is to reassign the branding right from manufacturers to retailers through private branding (Chen, 2009; 2010). Under private branding, manufacturers are anonymous to shoppers and lack the brand power to raise the wholesale price of a product that has become more popular owing to retail marketing. Private brand manufacturers cannot even distribute the product through competing stores because they do not own the product brand. As a result, retailers are free to invest in the marketing of any private brand products without facing the issue of brand specificity, since they can claim all reputation gains in their private brands directly from shoppers.

With the right to brand a product—along with the right to claim its reputation gains—being shifted from manufacturers to retailers, private branding saves on intra-channel transaction costs caused by brand specificity, which in turn eliminates the need for integration of manufacturing and retailing within the same firm, as prescribed by the contract-versus-integration dichotomy in traditional transaction cost analysis. It follows that retailers are more motivated to choose private over national branding for those product items where brand specificity is costlier to address (i.e., retailers invest more in product marketing). Therefore, we hypothesize that:

H2: Retail chains are more inclined to choose private over national branding for those product items that receive more marketing investment from them.

2.3. Private branding in foreign sourcing

National retail chains, particularly general merchandisers, import intensively from overseas and sell many foreign-made products under their private brands. The coexistence of these two retail practices seems to suggest that private branding is more likely to occur in foreign sourcing than in domestic sourcing. If this is the case, what is the mechanism through which private branding coincides with foreign sourcing?

As argued earlier, national retail chains choose foreign over domestic sourcing because of the production cost advantages of foreign manufacturers (vis-à-vis their U.S. counterparts). Yet, foreign firms are typically ill-equipped to serve consumers in the United States because they lack the necessary brand recognition, marketing expertise, and

customer knowledge to penetrate the U.S. market (Chen & Hennart, 2002). Therefore, retailers must raise their efforts in marketing foreign-made products to U.S. shoppers, and their marketing efforts are specific to the foreign manufacturers who control the product brands, which suggests that brand specificity is a bigger issue in foreign than in domestic sourcing. Even if retailers make the same level of effort in marketing a product to shoppers regardless of its sourcing origin, it still costs more to address brand specificity across borders (Klein et al., 1990). Hence, foreign sourcing always faces a transaction cost penalty (relative to domestic sourcing), which will offset the production cost advantages enjoyed by foreign manufacturers.

Private branding can neutralize this transaction cost disparity between domestic and foreign sourcing in two ways. First, private branding exempts U.S. retailers from making extra efforts in marketing foreign-sourced products because manufacturers (domestic or foreign) are anonymous anyway and their brand power becomes irrelevant to consumers. Second, even if retailers have to invest more to market a foreign-made product, the sourcing origin of the product does not affect the costs of contracting intra-channel transactions because brand specificity is no longer an issue under private branding. Accordingly, private branding allows retailers to preserve the production cost savings without incurring extra transaction costs to address the issue of brand specificity in foreign sourcing.

As predicted in H1, retailers are more inclined to choose foreign over domestic sourcing in those product categories where import conditions are more favorable to them. According to H2, retailers are more motivated to choose private over national branding for those product items that receive more marketing investment from them. Since retailers must make more efforts to market a foreign-made product to shoppers, and it is costlier to coordinate such marketing efforts across borders, the choice of foreign over domestic sourcing will lead them to also choose private over national branding. Therefore, we hypothesize that:

H3: The choice of foreign over domestic sourcing will lead retail chains to also choose private over national branding.

2.4. Foreign sourcing under private branding

As noted earlier, brand specificity is more of an issue in foreign than in domestic sourcing for two reasons: (1) retailers must invest more in marketing foreign-sourced products to consumers; and (2) retail marketing is costlier to coordinate across borders. Before retailers adopt private branding to deal with brand specificity, they might stay away from certain foreign suppliers who enjoy production cost advantages but face transaction cost disadvantages. Retailers will keep sourcing nationally branded products from domestic suppliers unless foreign sourcing can save enough on production costs to cover the high transaction costs of resolving the problem of brand specificity across borders.

As an automatic solution to brand specificity, private branding can alleviate this transaction cost disparity between domestic and foreign sourcing. Under national branding, foreign sourcing faces a transaction cost penalty that might be large enough to offset the production cost edges of foreign manufacturers. Under private branding, retailers can harvest the production cost savings in foreign sourcing without worrying about the extra transaction costs of solving the problem of brand specificity across borders. The freedom of retailers to adopt foreign sourcing under private branding suggests that the two retail trends can coincide through an alternative route, in that the choice of private over national branding will lead retailers to also choose foreign over domestic sourcing. Hence, we hypothesize that:

H4: The choice of private over national branding will prompt retail chains to also choose foreign over domestic sourcing.

3. Methods

Our conceptual model contains two decision variables that are binomial in nature: the choice of domestic versus foreign sourcing, and the choice of national versus private branding. Therefore, our hypotheses can be best tested on a sample that is fairly represented by the four (2×2) types of sourcing-branding combinations, and through a statistical model that analyzes these two binomial decisions simultaneously. Below, we present our sample and model, followed by the description of our independent variables collected from various sources.

3.1. The sample

We established a sample of products stocked by a general merchandiser that operated over 2000 stores in the United States. We chose this particular sample for several reasons. First, a general merchandiser uses private branding more frequently than other store types, balancing the sample between national and private brand products. Second, unlike other specialty stores (e.g., apparel stores), a general merchandiser stocks a wide variety of products, which contributes to sample diversity. Third, foreign sourcing is feasible for most products sold at a general merchandiser, which is not always true for other store types (e.g., drug stores). Finally, a single-retailer sample controls for all store-level factors that might also affect the coincidence of private branding and foreign sourcing.

To strike a balance between domestic- and foreign-sourced products, we needed a sample compiled about halfway along the hollowing out of U.S. manufacturers. A sample compiled too early would be over-represented by domestic-sourced products (or under-represented by foreign-sourced products), and the opposite would hold if the sample was compiled too late. Therefore, we chose a sample compiled between 1996 and 1999, nearly halfway along the mass exodus of U.S. manufacturers due to improved import conditions to U.S. retailers at home.

We compiled the sample through the following processes. First, all products stocked by the general merchandiser were coded according to their branding status and sourcing origin. To keep the variation in product features consistent across our observations, we assigned all items a five-digit Standard Industrial Classification (SIC) code and grouped them by this code. Because many new brands came and went, all qualified brands had to be on the market for at least three years, unless a national brand could be found in at least one competing chain, or a private brand was attached to at least two observations. We eliminated those products made by foreign suppliers in the United States or by U.S. manufacturers in foreign nations because such products could not be clearly classified as either domestic- or foreign-sourced products. The above procedures resulted in a sample of 670 observations.

3.2. The model

Our conceptual model contains two decision variables that are binomial in nature, where foreign sourcing is more likely to be chosen in those industrial sectors where import conditions are more favorable to the general merchandiser (H1), and private branding is more likely to be selected for those products that receive more marketing efforts from this general merchandiser (H2). The two hypotheses can be tested through two binomial logistic models, as specified below:

$$P_{FS}(Y_i = 1) = \Lambda(X_{Ti}\beta_T) \quad (1)$$

$$P_{PB}(Y_j = 1) = \Lambda(X_{Mj}\beta_M) \quad (2)$$

where the dependent variable Y_i in Eq. (1) will equal one if the i^{th} product is foreign-sourced, and zero if domestically sourced; and the dependent variable Y_j in Eq. (2) will equal one if the j^{th} product bears a private brand, and zero if it bears a national brand. Hence, X_{Ti} represents a vector of import factors that predicts the choice of domestic

or foreign sourcing; β_T captures a vector of their estimated parameters. Likewise, X_{Mj} is a vector of marketing variables behind the choice of national or private branding; β_M is a vector of their estimated parameters. In both equations, $\Lambda(\cdot)$ denotes the logistic cumulative distribution function, where $P_{FS}(Y_i = 1)$ and $P_{PB}(Y_j = 1)$ capture the probability of foreign sourcing and the probability of private branding, respectively (Maddala, 1983).

The decisions of foreign sourcing and private branding, nevertheless, are not independent of each other. The decision of foreign sourcing will raise the likelihood of private branding (H3), and the decision of private branding will increase the probability of foreign sourcing (H4). Thus, Eqs. (1) and (2) should be re-specified as follows:

$$P_{FS}(Y_i = 1) = \Lambda(X_{Ti}\beta_T + BS_i\beta_{BS}) \quad (3)$$

$$P_{PB}(Y_j = 1) = \Lambda(X_{Mj}\beta_M + SO_j\beta_{SO}) \quad (4)$$

where all signs denote the same meanings as in Eqs. (1) and (2), except that BS_i represents the branding status of the i^{th} observation; SO_j captures the sourcing origin of the j^{th} observation; and β_{BS} and β_{SO} are their estimate parameters. The two new variables serve to test H3 and H4.

To fully capture the interaction between the two decisions, Eqs. (3) and (4) must be run simultaneously. Due to the issue of bidirectional association, a simultaneous equation model can be run only after we replace the binomial logistic models in Eqs. (3) and (4) with two binomial probit models (see Asparouhov, 2016). The simultaneous equation model is given in Eqs. (5) and (6) below, where $\Phi(\cdot)$ represents the standard normal distribution function. We call Eq. (5) the *Sourcing* model, and Eq. (6) the *Branding* model.

$$P_{FS}(Y_i = 1) = \Phi(X_{Ti}\beta_T + BS_i\beta_{BS}) \quad (5)$$

$$P_{PB}(Y_j = 1) = \Phi(X_{Mj}\beta_M + SO_j\beta_{SO}) \quad (6)$$

3.3. Independent variables

The choice of domestic versus foreign sourcing depends upon a vector of import variables that captures the import conditions to the general merchandiser, and the decision of national versus private branding depends upon a vector of marketing variables that captures the brand-specific investment made by the general merchandiser in product marketing.

3.3.1. Import variables

We collected three variables from the U.S. Department of Commerce (1992, 1995a, 1995b, 1999) to capture the competitiveness of U.S. manufacturers vis-à-vis their foreign counterparts in three aspects (labor, energy, and capital). We expected the propensity of foreign sourcing to be higher in those industrial sectors featuring high *labor intensity* but low *energy* and *capital intensity*. This prediction is based on the fact that the United States, relative to most trade partners (e.g., China), is poorly endowed with labor, but richly endowed with energy and capital. These three intensity variables are measured through the cost-to-value ratio on a per-dollar basis at the four-digit SIC level. According to H1, we expected *labor intensity* to carry a positive sign, but *energy intensity* and *capital intensity* to carry a negative one.

We used two variables to capture the presence of trade barriers that also affect the choice of domestic versus foreign sourcing. One variable is *transportation efficiency*, which is measured through the value-to-weight ratio compiled by the U.S. Department of Transportation at the four-digit SIC level (Commodity Transportation Survey, 1982). This variable captures the presence of natural trade barriers and its coefficient was expected to bear a positive sign, since transportation efficiency mitigates the shipping cost penalty borne by foreign suppliers. Also, the government is more inclined to erect trade barriers to block the inflow of foreign-sourced products if domestic manufacturers face fierce competition from overseas (Maggi & Rodriguez-Clare, 2000).

Thus, artificial *trade barriers* (i.e., quotas and tariffs) are more likely to be observed in those industrial sectors that feature intense foreign sourcing. We used a zero-one dummy variable to denote the imposition of artificial trade barriers in each industrial sector, using data collected from the U.S. International Trade Commission (1989). We expected the coefficient of this dummy variable to also carry a positive sign.

3.3.2. Marketing variables

We used two variables to capture brand-specific investments made by this general merchandiser in product marketing. The first is *media advertising*, collected from *Ad \$ Summary*, published by the *Leading National Advertisers, Inc.* Since this retailer typically put a basket of products in a single campaign, the variable was recorded under 51 product items. The second variable is *store promotion*, based on the space devoted by this retailer to promoting a product in Sunday advertising inserts over a six-month period. We expected *media advertising* and *store promotion* to bear a positive coefficient, which would suggest that these two variables should enhance the propensity of private branding (H2).

Branding serves the functions to reduce a product's quality uncertainty and/or increase its symbolic value for consumers. In general, private brands are less known to consumers than the national brands that they replace (Kumar & Steenkamp, 2007). To reflect this fact, we created two variables to measure the reputation/image barriers faced by private brands. First, we counted the total number of pages used by *Consumer Reports* to evaluate a product over a 10-year period. We used this variable to proxy for *product quality uncertainty*, knowing that the magazine would use more space to evaluate a product whose quality was harder for shoppers to inspect. In such cases, shoppers tend to rely more on brand reputation as a quality signal, which discourages this retailer from using an unknown private brand to replace a reputable national brand. Second, we recruited two consumer judges to rank all observations in our sample, using a seven-point scale that serves to evaluate the symbolic value of their brands. We then created an index to measure *product symbolic value*, which should discourage this retailer from using a dull private brand to replace a glamorous national brand. Therefore, we expected the two marketing variables to bear a negative coefficient.

This general merchandiser stocked many products that were traditionally sold to industrial buyers through other distributors (e.g., power tools, air compressors, water pumps, etc.). The rise of "do-it-yourselfers" created new demand for such products in the household market. In serving industrial buyers, the manufacturers of such items did not invest in reputation building or image making, which implies that private brands could more easily survive in the household market. As such, we used another variable to capture the barrier that this retailer must overcome in selling these types of products to shoppers under private brands, namely, the portion of output shipped to industrial buyers by all manufacturers at the four-digit SIC level (see the U.S. Department of Commerce Census of Manufactures). We named this variable *shipment to industrial buyers* and expected it to carry a positive coefficient (i.e., to increase the probability of private branding).

Statistics of all variables and the correlation matrix are shown in Table 1. Since we have two models in our analysis, all variables are grouped in two tables. Table 1a covers the variables related to the choice of domestic or foreign sourcing (the *Sourcing* model), and Table 1b contains the variables related to the choice of national or private branding (the *Branding* model).

4. Results

Each of the 670 observations in our sample can be assigned to one of the four cells in the 2×2 matrix in Fig. 1. The sample has 316 and 155 domestically sourced products under national branding (Domestic-National) and private branding (Domestic-Private), plus 68 and 131 foreign-sourced items under national branding (Foreign-National) and

Table 1
Statistics and Correlation Matrix.

Variable	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>a. Import Variables</i>									
(1) Sourcing Origin	0.30	0.46	1						
(2) Labor Intensity	0.03	0.01	0.13	1					
(3) Energy Intensity	0.03	0.02	-0.13	0.02	1				
(4) Capital Intensity	61.64	12.26	-0.07	-0.03	-0.08	1			
(5) Transportation Efficiency	4.79	4.67	0.19	-0.01	-0.21	0.25	1		
(6) Trade Barriers	0.43	0.50	0.21	0.70	-0.03	-0.38	0.08	1	
(7) Branding Status	0.43	0.50	0.30	0.22	-0.05	-0.09	-0.01	0.20	1
<i>b. Marketing Variables</i>									
(1) Branding Status	0.43	0.50	1						
(2) Media Advertising	63.08	84.20	0.27	1					
(3) Store Promotion	25.08	45.72	0.26	-0.05	1				
(4) Product Quality Uncertainty	8.07	15.07	-0.20	-0.28	0.27	1			
(5) Product Symbolic Value	5.51	3.77	0.01	0.53	-0.03	-0.05	1		
(6) Shipment to Industrial Buyers	34.30	32.57	-0.07	-0.38	-0.05	-0.82	-0.54	1	
(7) Sourcing Origin	0.30	0.46	0.30	0.15	-0.03	0.08	0.15	-0.15	1

private branding (Foreign-Private). The probability of private branding is 33% in domestic sourcing, but increases to 66% in foreign sourcing. Furthermore, the probability of foreign sourcing is 18% under national branding, but it increases to 46% under private branding. Those percentages are consistent with H3 and H4 (i.e., foreign-sourced products are more inclined to be privately branded, while private brand items are more likely to be foreign sourced). A chi-square test ($\chi^2 = 61.82$) confirms that the sample is not randomly distributed across the four cells.

We ran the simultaneous equation model using Mplus (Version 7.4). The overall fit for the baseline model is excellent ($\chi^2 = 406.48$; p-value = 0.0000). All predictors in the *Sourcing* model, except for *branding status*, carry the correct sign (**Simultaneous** in Table 2). Both variables that capture the presence of trade barriers have a positive effect on the likelihood of foreign sourcing, where the impact of *transportation efficiency* is significant at the 0.001 level (two-tailed), and the effect of *trade barriers* is also significant at the 0.000 level. Although all three production factor variables bear the predicted coefficients, their significance level differs: *labor intensity* at the 0.66 level, *energy intensity* at the 0.07 level, and *capital intensity* at the 0.13 level. The overall results support H1: this general merchandiser was more likely to choose foreign over domestic sourcing in those industrial sectors where import conditions were more favorable.

All variables in the *Branding* model have the predicted effects on the probability of private branding (the **Simultaneous** model in Table 3).

Table 2
Results of Regression Analysis—Sourcing Model (Sourcing Origin: 1 = Foreign Sourcing; 0 = Domestic Sourcing).

Variable	Simultaneous	Separate 1	Separate 2
Labor Intensity	2.930 (0.45)	0.564 (0.11)	-6.52 (-1.18)
Energy Intensity	-8.078 (-1.82)*	-12.655 (2.82)***	-11.10 (-2.47)**
Capital Intensity	-0.008 (-1.52)	-0.007 (-1.34)	-0.008 (-1.39)
Transportation Efficiency	0.042 (3.28)***	0.048 (3.94)***	0.053 (4.12)***
Trade Barriers	0.525 (2.92)***	0.048 (3.12)***	0.459 (2.88)***
Branding Status	-0.039 (-0.60)	na	0.796 (7.12)***
Intercept	0.66 (1.51)	-0.273 (-0.71)	-0.480 (-1.22)
Model Chi-Square	406.48***	60.36***	113.67***
Correct Prediction (Random Prediction)	70.45% (58.24%)	69.85% (58.24%)	75.22% (58.24%)

Parentheses: t-statistics; * p < 0.1; ** p < 0.05; *** p < 0.01 (two-tailed).

Table 3
Results of Regression Analysis—Branding Model (Branding Status: 1 = Private Branding; 0 = National Branding).

Variable	Simultaneous	Separate 1	Separate 2
Media Advertising	0.005 (5.23)***	0.005 (6.17)***	0.004 (5.735)***
Store Promotion	0.017 (9.11)***	0.014 (7.57)***	0.016 (8.145)***
Product Quality Uncertainty	-0.037 (-5.87)***	-0.032 (-5.53)***	-0.039 (-6.39)***
Product Symbolic Value	-0.118 (-4.79)***	-0.071 (-3.90)***	-0.089 (-4.56)***
Shipment to Industrial Buyers	0.002 (0.542)	-0.002 (-1.07)	-0.001 (-0.60)
Sourcing Origin	0.733 (4.97)***	na	1.13 (8.825)***
Intercept	-0.341 (-0.86)	-0.153 (-0.95)	-0.40 (-2.36)**
Model Chi-Square	406.48***	169.64***	253.19***
Correct Prediction (Random Prediction)	70.16% (51.07%)	70.90% (51.07%)	74.03% (51.07%)

Parentheses: t-statistics; * p < 0.1; ** p < 0.05; *** p < 0.01 (two-tailed).

Four of the five marketing variables (i.e., *media advertising*, *store promotion*, *product quality uncertainty*, and *product symbolic value*) carry a coefficient that is significant at the 0.000 level, and *shipment to industrial buyers* is the only one that lacks a significant impact. The findings provide clear evidence for H2: the retailer was more likely to choose private over national branding for those items that received more efforts of retail marketing and featured lower barriers to private branding.

In H3 and H4, we proposed two alternative routes for foreign sourcing and private branding to coexist. In the *Branding* model, *sourcing origin* carries a positive coefficient and its impact on the probability of private branding is significant at the 0.000 level. This finding confirms H3: the choice of foreign over domestic sourcing would lead the retail chain to also choose private over national branding. In the *Sourcing* model, however, *branding status* has no significant effect on foreign sourcing, and the coefficient bears a sign that contradicts the prediction in H4. In other words, the decision of private branding did not lead to the choice of foreign sourcing.

The combined findings related to H3 and H4 not only confirm the coincidence of private branding and foreign sourcing, but also indicate a clear causality direction between the two retail trends. While the decision of foreign sourcing can explain private branding, the choice of private branding cannot explain foreign sourcing. Such a causality direction suggests that, to exploit the production cost advantages in foreign sourcing, the retailer adopted private branding to nullify its

transaction cost disadvantages due to the problem of brand specificity. Nevertheless, this retailer did not use private branding to save on the high transaction costs of addressing brand specificity across borders and preserve the production cost savings in foreign sourcing.

To justify the use of the simultaneous regression model to test our hypotheses, we reran the *Sourcing* and *Branding* equations separately. As shown in Table 2, we reran the *Sourcing* model twice, once with *branding status* and once without (Separate 1 and Separate 2 in Table 2). The addition of *branding status* clearly improves model fit (the chi-square statistic rose from 60.36 to 113.67). The same situation holds in the *Branding* model (Separate 1 and Separate 2 in Table 3), where the addition of *sourcing origin* also boosts model fit (the chi-square statistic increased from 169.64 to 253.19). Although the chi-square statistics in both separate modes are considered high, they are much lower than the chi-square statistic in the simultaneous model (406.48).

The most significant finding in these separate models is that *branding status* has a positive impact on the likelihood of foreign sourcing that is significant at the 0.000 level (t-statistic stands at 7.12). This result is consistent with H4 (i.e., the decision of private branding will lead the retail chain to also take on foreign sourcing). In the simultaneous regression model, however, *branding status* does not have a significant impact on the propensity of foreign sourcing, and its coefficient is negative instead of positive. Clearly, the causality direction of these two retail trends cannot be revealed if they are analyzed separately (instead of simultaneously).

5. Discussion

Private branding and foreign sourcing are two prominent retail practices that have coexisted for nearly four decades but have not been examined simultaneously. In this study, we have taken a transaction cost approach to explain the coincidence of these two trends and provided empirical evidence to clarify the causality direction between them. More specifically, private branding is a potential solution to brand specificity, a special type of asset specificity that inflicts a transaction cost penalty on foreign sourcing. The decision made by retailers to source a product from abroad will lead them to attach a private brand to the product, although the decision of private branding will not push them to undertake foreign sourcing. Our conceptual model and empirical evidence have contributed to four seemingly unrelated literatures—transaction cost analysis, international economics, channel management, and product branding.

5.1. Theoretical contributions

It has long been recognized that the presence of specific assets in a market transaction will drive up the costs of contracting the transaction. Integration allows the parties to save on the costs of addressing the issue of asset specificity. Yet, asset specificity can manifest itself in many formats (Williamson, 1985; 1991), and full integration of the parties to a costly transaction is not always possible or necessary. This study contributes to transaction cost analysis in three ways. First, we identify a special case of asset specificity called brand specificity, wherein the specific asset that plagues an intra-channel transaction is the product brand. Second, we propose the use of private branding as a solution to the problem of brand specificity. Third, we show that private branding represents *partial integration* made by retailers into product branding to evade the issue of brand specificity, and *full integration* of manufacturing and retailing serves to avoid the general case of asset specificity.

This research also incorporates a transaction cost component into international economics. Trade theories rely primarily on production cost variations across nations to justify the choice of foreign over domestic sourcing (Ruffin, 1990). Yet, international trade often occurs between two private companies that rely on contractual restraints to

regulate their transactions. When retailers choose foreign over domestic sourcing to exploit the production cost gap between two countries, they must incur extra costs to transact with foreign suppliers, especially when retailers also make extra efforts to market foreign-sourced products to shoppers. This study is the first that examines the trade-off between low production costs and high transaction costs in foreign sourcing, where private branding can save on the costs of addressing the issue of brand specificity across borders and preserve the production cost advantages enjoyed by foreign manufacturers.

This paper also contributes to the channel literature by taking an efficiency-based approach to explicate the coincidence of private branding and foreign sourcing. Without analyzing private branding and foreign sourcing simultaneously, previous studies have tended to see the two retail practices as attempts made by retailers to enhance their power vis-à-vis manufacturers (Ailawadi & Keller, 2004; Meza & Sudhir, 2010). Instead, our study has seen private branding as a cost-saving practice that benefits all channel members. We argue that foreign sourcing is not desirable unless it can save enough on production costs to offset the extra costs of addressing the issue of brand specificity, to which private branding is an automatic solution. The coincidence of private branding and foreign sourcing indicates that foreign manufacturers are gaining market power in the United States, wherein private branding undermines the reputation edge and transaction cost advantage that insulate U.S. manufacturers from foreign competition.

Finally, this study identifies an institutional role for branding to play in facilitating channel cooperation—a critical contribution to the branding literature. Traditionally, the branding system serves to mitigate quality uncertainty and create symbolic utility for a product. In this paper, we contend that the right to brand a product can be shifted from manufacturers to retailers to realign the incentives of the parties in boosting the marketability of the product. Private branding allows them to save on the costs of addressing brand specificity in intra-channel transactions. On top of its traditional role in promoting business-to-consumer transactions, branding has an institutional role to play in facilitating business-to-business transactions. This institutional view on branding can be generalized to all business settings, where two firms that cooperate to deliver a product to consumers can find an optimal allocation of branding right between them.

5.2. Practical implications

All members of a distribution channel, within a nation or across two nations, can derive practical guidelines from this study. First, the coincidence of private branding and foreign sourcing means that the intermediary role of retailers between manufacturers and shoppers has evolved. Through private branding, retailers act as a representative of manufacturers to sell a product to consumers. Through foreign sourcing, they serve as a representative of shoppers to identify suppliers abroad. In this paper, we illustrate that retailers can handle the dilemma of low production costs and high transaction costs in foreign sourcing through private branding. From the coincidence of these two retail trends, retailers can derive useful guidelines to harmonize the decisions of private branding and foreign sourcing. Retailers should not take on foreign sourcing under national branding if the savings on production costs are not large enough to offset the extra transaction costs of resolving the issue of brand specificity across borders. Through private branding, retailers can preserve the production cost edge in foreign sourcing by neutralizing the transaction cost penalty inflicted by brand specificity on foreign manufacturers.

According to this study, U.S. manufacturers are likely to continue declining unless they can find a way to reverse the coincidence of foreign sourcing with private branding. On the one hand, foreign sourcing forces U.S. manufacturers to compete with their foreign counterparts that possess significant production cost advantages. On the other hand, private branding undermines their reputation edge and transaction cost advantage over foreign competitors. The coexistence of

these two trends lets retail chains exploit the production cost savings in foreign sourcing without bearing extra transaction costs to solve the problem of brand specificity across borders. One way for U.S. manufacturers to address the coincidence of foreign sourcing and private branding is to invest more on brand marketing to slow the rise of private brands and move their plants abroad to exploit the low production costs enjoyed by foreign manufacturers, although the cost and risk of foreign direct investment can be substantial.

Notably, the rise of national retail chains is a blessing to foreign manufacturers, who are ill-equipped to serve the U.S. market. Many of these manufacturers are located in remote villages in foreign countries and lack the capacity to serve U.S. shoppers. Thanks to the proliferation of chain stores, foreign-sourced products are widely available in most communities in the United States. Yet, foreign manufacturers are vulnerable in dealing with retail chains that capture much of the savings on production costs in foreign sourcing and transaction costs in private branding. It is in the interest of foreign manufacturers to appeal directly to shoppers under their own brands so that they can reduce their reliance on national retail chains. For this to happen, they must build their capacity to penetrate the U.S. market, including their brand recognition, marketing expertise, and consumer knowledge.

5.3. Future research

This study uses a multiple-product/single-retailer sample to investigate the coexistence of private branding and foreign sourcing in general merchandising. Inevitably, our results could be context-specific and hence could not be extended to other retail settings (or even non-retail settings). This limitation helps to point out several promising directions for future research.

In confirming the coincidence of private branding and foreign sourcing, this paper reveals a causality direction, i.e., foreign sourcing leads to private branding, but the opposite does not hold. This causality direction disappeared when the sourcing and branding models were run separately, which further justifies the use of the simultaneous equation model to run our empirical tests. This causality relationship suggests that this general merchandiser did not choose private branding to nullify the transaction cost penalty in foreign sourcing. Instead, foreign sourcing looks more like a second-order driver behind private branding that was initiated to achieve other marketing goals. The causality direction detected in the simultaneous equation model in this paper is conceptually intriguing and deserves more research attention in the future.

Our sample contains products stocked by a general merchandiser that sourced intensively from overseas and introduced many private brands. Foreign sourcing, however, does not always coexist with private branding in all store types. For instance, although apparel stores also source intensively from overseas, their private brands lack the glamorousness to create symbolic value for consumers. Likewise, appliance stores do not brand foreign-sourced products because their private brands lack the reputation to signal quality to shoppers. One unanswered question is how other store types synchronize private branding and foreign sourcing. If the two retail trends also coexist in other store settings, what is the mechanism behind their coincidence?

In addition, future studies could extend our framework to advance transaction cost analysis in two ways. The first is to investigate the governance role of branding in facilitating inter-firm cooperation. In this study, we have demonstrated that the right to brand a product can be shifted from manufacturers to retailers to save on intra-channel transaction costs if retailers also invest in brand-specific marketing for the product. The point here is that inter-firm collaboration occurs in non-retail settings as well, where two firms work together to deliver a product to consumers and can compete for the right to brand the product. Future research can extend our conceptualization to non-retail settings, in that the right to brand the joint output of two specialist firms can also be reassigned to save on the transaction costs of

governing inter-firm collaboration.

The second opportunity for future research is to generalize the partial integration solution to other types of asset specificity. Essentially, private branding is equivalent to partial integration made by retailers into product branding, which serves to address the issue of brand specificity. It is also likely that partial integration can serve as a solution to other types of asset specificity. For example, if an inter-firm transaction features specific investments in personnel, the parties must incur extra transaction costs to address the issue of *personnel specificity*. According to this study, the transfer of the focal personnel from one party to the other can also eliminate this type of asset specificity, making full integration of the parties within a single firm unnecessary. Future studies can identify corresponding formats of partial integration to handle other types of asset specificity under the traditional market-versus-integration paradigm.

6. Conclusion

For over four decades, private branding and foreign sourcing have coincided in the retail sector, where private brand products are more likely to be sourced from overseas, and foreign-sourced products are more likely to carry private brands. Although private branding and foreign sourcing have each attracted certain research attention, they have not been analyzed simultaneously in the literatures. In this study, we propose that private branding is an intuitive solution to a special type of asset specificity called brand specificity, which is more of an issue in foreign than in domestic sourcing. The coincidence of foreign sourcing and private branding allows retailers to enjoy both production cost savings in foreign sourcing and transaction cost savings under private branding. Empirical data based on a multiple-product/single-retailer sample confirm the coincidence of the two retail trends. We also find a causality direction, in that the decision of foreign sourcing leads to the choice of private branding, but the opposite does not hold. The conceptual arguments and empirical results presented in this study contribute to four literatures on transaction cost analysis, international economics, channel management, and product branding. All channel members can derive useful guidelines from this study to synchronize the branding status and sourcing origin of a product. Future researchers can even extend our framework to other retail or non-retail settings beyond general merchandising.

References

- Ailawadi, K. L., Pauwels, K., & Steenkamp, J. E. M. (2008). Private-label use and store loyalty. *Journal of Marketing*, *72*, 19–30.
- Ailawadi, K. L., & Keller, K. L. (2004). Understanding retail branding: Conceptual insights and research priorities. *Journal of Retailing*, *80*, 331–342.
- Anderson, E., & Schmittlein, D. C. (1984). Integration of the sales force: An empirical examination. *The RAND Journal of Economics*, *15*, 385–395.
- Asparouhov, T. (2016). Bidirection association. <https://www.statmodel.com/download/Rec.pdf> Accessed 26 September 2017.
- Basker, E., Klimek, S., & Van, P. H. (2012). Supersize it: The growth of retail chains and the rise of the 'big-box' store. *Journal of Economics & Management Strategy*, *21*, 541–582.
- Bemmaor, A. C., & Mouchoux, D. (1991). Measuring the short-term effect of in-store promotion and retail advertising on brand sales: A factorial experiment. *Journal of Marketing Research*, *28*, 202–214.
- Chen, S. F. (2005). Extending internalization theory: A new perspective on international technology transfer and its generalization. *Journal of International Business Studies*, *36*, 231–245.
- Chen, S. F. (2009). A transaction cost rationale for private branding and its implications for the choice of domestic vs offshore outsourcing. *Journal of International Business Studies*, *40*, 156–175.
- Chen, S. F. (2010). Transaction cost implication of private branding and empirical evidence. *Strategic Management Journal*, *31*, 371–389.
- Chen, S. F., & Hennart, J. F. (2002). Japanese investors' choice of joint ventures versus wholly-owned subsidiaries in the US: The role of market barriers and firm capability. *Journal of International Business Studies*, *33*, 1–18.
- Chu, W., & Chu, W. (1994). Signaling quality by selling through a reputable retailer: An example of renting the reputation of another agent. *Marketing Science*, *13*, 177–189.
- Cook, V., & Schutte, T. F. (1967). *Brand policy determination*. Boston: Allyn and Bacon Inc.
- Corstjens, M., & Lal, R. (2000). Building store loyalty through store brands. *Journal of*

- Marketing Research*, 37, 281–291.
- Doh, Jonathan P. (2005). Offshore outsourcing: Implications for international business and strategic management theory and practice. *Journal of Management Studies*, 42, 695–704.
- Far Eastern Economic Review (1994). Slaves to fashion. *Far Eastern Economic Review*, 157, 64–65.
- Fitzell, P. B. (1982). *Private labels, store brands and generic products*. Connecticut: AVI Publishing Company Inc.
- Fitzell, P. B. (1992). *Private label marketing in the 1990s: The evolution of price labels into global brands*. New York: Global Book Production.
- Heide, J. B., & Stump, R. L. (1995). Performance implications of buyer-supplier relationships in industrial markets: A transaction cost explanation. *Journal of Business Research*, 32, 57–66.
- Hoch, S. J., & Banerji, S. (1993). When do private labels succeed? *Sloan Management Review*, 34, 57–67.
- Intelligence node (2017). Private label products: Are they national brand killers? <http://www.intelligence.com/blog/private-label-brand-national-killers/> Accessed 7 May 2018.
- John, G., & Weitz, B. A. (1988). Forward integration into distribution: An empirical test of transaction cost analysis. *Journal of Law, Economics, and Organization*, 4, 337–355.
- Jones, R., Kierzkowski, H., & Lurong, C. (2005). What does evidence tell us about fragmentation and outsourcing? *International Review of Economics and Finance*, 14, 305–316.
- Kamakura, W. A., & Russell, G. J. (1989). A probabilistic choice model for market segmentation and elasticity structure. *Journal of Marketing Research*, 26, 379–390.
- Keller, K. O., Dekimpe, M. G., & Geyskens, I. (2016). Let your banner wave? Antecedents and performance implications of retailers' private-label branding strategies. *Journal of Marketing*, 80, 1–19.
- Klein, S., Frazier, G. L., & Roth, V. J. (1990). A transaction cost analysis model of channel integration in international markets. *Journal of Marketing Research*, 27, 196–208.
- Kleine, R. E., Kleine, S. S., & Kernan, J. B. (1993). Mundane consumption and the self: A social-identity perspective. *Journal of Consumer Psychology*, 2, 209–236.
- Kotabe, M., Mol, M. J., & Ketkar, S. (2008). An evolutionary stage model of outsourcing and competence destruction: A triad comparison of the consumer electronics industry. *Management International Review*, 48, 65–94.
- Kumar, N., & Steenkamp, J. E. M. (2007). *Private label strategy: How to meet the store brand challenge* (1st ed.). Cambridge, MA: Harvard Business School Press.
- Landes, W. M., & Posner, R. A. (1987). Trademark law: An economic perspective. *Journal of Law and Economics*, 30, 265–309.
- Leading national advertisers, Inc. (1994). *Ad \$ summary*. New York: Leading National Advertisers Inc.
- Li, Z. G., Murray, L. W., & Scott, D. (2000). Global sourcing, multiple country-of-origin facets, and consumer reactions. *Journal of Business Research*, 47, 121–133.
- Liu, H., & McGoldrick, P. J. (1996). International retail sourcing: Trend, nature, and process. *Journal of International Marketing*, 4, 9–33.
- Maddala, G. S. (1983). *Limited-Dependent and qualitative variables in econometrics*. Cambridge, MA: Cambridge University Press.
- Maggi, G., & Rodriguez-Clare, A. (2000). Import penetration and the politics of trade protection. *Journal of International Economics*, 51, 287–304.
- Melvin, J. R. (1985). Domestic taste differences, transportation costs, and international trade. *Journal of International Economics*, 18, 65–82.
- Meza, S., & Sudhir, K. (2010). Do private labels increase retailer bargaining power? *Quantitative Marketing and Economics*, 8, 333–363.
- Minkler, A. P., & Park, T. A. (1994). Asset specificity and vertical integration in franchising. *Review of Industrial Organization*, 9, 409–423.
- Nelson, P. (1970). Information and consumer behavior. *Journal of Political Economy*, 78, 311–329.
- Raa, T. T., & Wolff, E. N. (2001). Outsourcing of services and the productivity recovery in U.S. manufacturing in the 1980s and 1990s. *Journal of Productivity Analysis*, 16, 149–165.
- Ruffin, R. J. (1990). The Ricardian factor endowment theory of international trade. *International Economic Journal*, 4, 1–19.
- Simon, C. J., & Sullivan, M. W. (1993). The measurement and determinants of brand equity: A financial approach. *Marketing Science*, 12, 28–52.
- Steenkamp, J. E. M., & Dekimpe, M. G. (1997). The increasing power of store brands: Building loyalty and market share. *Long Range Planning*, 30, 917–930.
- Stern, L. W. (1966). The new world of private brands. *California Management Review*, 8, 43–50.
- Store brands decisions (2012). Accenture: Store brands continue to thrive. Accessed 4 June 2016 <http://www.storebrandsdecisions.com/news/2012/07/17/accenture-stores-brands-continue-to-thrive>.
- Terpstra, V., & Yu, C. J. (1990). Piggybacking: A quick road to internationalization. *International Marketing Review*, 7, 52–63.
- U.S. Department of Commerce (1992). *1987 census of manufactures: Distribution of shipment by customer*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Commerce (1995a). *1993 annual survey of manufactures: Statistics for industry groups and industries*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Commerce (1995b). *1993 annual survey of manufactures: Value of product shipments*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Commerce (1999). *Statistical abstract of the United States* (119th ed.). Washington, DC: U.S. Government Printing Office.
- U.S. International Trade Commission (1989). *The economic effects of significant U.S. import restraints, phase I: Manufacturing*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Transportation (1982). *Commodity transportation survey*. Washington, DC: U.S. Government Printing Office.
- Williamson, O. E. (1975). *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Williamson, O. E. (1985). *The economic institutions of capitalism*. New York: The Free Press.
- Williamson, O. E. (1991). Comparative economic organizations: An analysis of discrete structural alternatives. *Administrative Science Quarterly*, 36, 269–296.
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