

## **Examining Customer Purchase Intentions for Counterfeit Products Based on a Modified Theory of Planned Behavior**

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### **ABSTRACT**

*Counterfeits consumption has recently attracted considerable attention. This study examines factors affecting consumer purchase intention for counterfeit products. Specially, this study takes Vietnam, a developing country where consumer behavior is being affected by rising living standard, as a research object. Based on the Theory of Planned Behavior of Ajzen with the additional factor of perceived financial control, it is hoped that an improved framework can be obtained for predicting customer intention to purchase counterfeits. The hypotheses were tested via Structural Equation Modeling technique. The results indicated that subjective norms exert the greatest impact on customer intention to purchase counterfeits, while additional factor of perceived financial control negatively affects intentions. This investigation can help marketers and policy makers understand the key influences on consumer behavior towards counterfeits and thus to create effective marketing campaigns and anti-piracy strategies.*

**KEYWORDS:** Consumer behavioral intention, Counterfeit products, Perceived financial control, Structural Equation Modeling, Theory of Planned Behavior

### **Introduction**

While globalization has resulted in the lowering of international barriers, it has also created new opportunities for illegal trade. The international trade in counterfeit products is growing at an alarming rate and, according to the International Chamber of Commerce, is worth \$650 billion. Vietnam is ranked fifty-third globally in terms of the size of its counterfeit market, with a total counterfeit market value of US\$ 122 million, including software (US\$ 96 million), books (US\$ 16 million), movies (US\$ 10 million) and cable (unauthorized connections) (US\$ 1.37 million), as well as clothes, cosmetics, watches, etc. (Counterfeit Goods and Piracy Industry, 2006). The US International Trade Commission and The Allen consulting group (2003) define counterfeiting as “the unauthorized duplication of a product protected by one or more intellectual property rights. Regarding the product, there are several related factors, including brand name, scarcity, country of origin, quality and price. Dornoff and Tatham (1972) observed that original product brand image was the main driver of the purchase of fakes (Penz and Stottinger, 2005).

And while fakes are inferior to the originals, they preserve the general form of the original branded product. Another important factor is the price difference between fake and original products, with larger difference being associated with stronger purchasing intention (Huang, Lee, and Ho, 2004; Albers-Miller, 1999). Ang, et al (2001) concluded that consumers consider prices charged for originals to be too high despite their good quality. Price is the main moderator of attitudes towards counterfeit purchasing intention (Penz and Stottinger, 2005). Wee, Tan, and Cheok (1995) demonstrated that where counterfeits serve the same purpose as or have comparable quality to originals; this is a crucial factor in customer decisions to purchase counterfeits, because the consumers get the same functions from the counterfeits but just need to pay cheaper price. The above context provides the background to this study. It is important to understand consumer behavior by understanding and forecasting consumer decisions to purchase counterfeit products during periods of rapid economic and lifestyle change. Consequently, this study develops a modified model, based on the Theory of Planned Behavior (Ajzen, 1991), which conceptually ties various important determinants of consumer purchasing intention together.

Furthermore, with the addition of one more determinant of behavior intention - perceived financial control, it is hoped to provide a more comprehensive model for predicting consumer behavior.

### **Literature review**

#### **Theory of planned behavior**

According to the Theory of Planned Behavior (TpB)(Ajzen ,1991), human action is guided by three considerations: beliefs regarding the likely outcomes of a behavior and evaluations of those outcomes (behavioral beliefs), beliefs about the normative expectations of others and the motivation to comply with these expectations (normative beliefs), and beliefs about the presence of factors that may facilitate or impede performance of a behavior and the perceived power of these factors (control beliefs). In their respective aggregates, behavioral beliefs produce favorable or unfavorable attitudes towards the behavior; normative beliefs cause perceived social pressures or subjective norms; and control beliefs causes' perceived behavioral control. In combination, attitudes towards behaviors, subjective norms, and perceptions of behavioral control lead to the formation of behavioral intention. Consequently, individual intention to perform the behavior in question increase with how favorable the attitude and subjective norm are, as well as the intention of the individual to perform the behavior in question. Finally, given a sufficient degree of control over the behavior, people are expected to fulfill their intentions when the opportunity to do so arises.

#### **Perceived financial control**

While consumer researchers have recognized that financial control obviously impacts purchase decisions, increased attention has recently been devoted to attitude and subjective norms as antecedents of purchase behavior, and ignoring financial capability. The research of Sahni (1994) adapted and operationalized the central construct of the Theory of Planned Behavior (Ajzen, 1991, 2002), with "perceived behavioral control" being replaced by "perceived financial control" for predicting purchases of both inexpensive and expensive products. The results highlighted the importance of considering financial capability in purchase predictions. Notani (1997) conducted another insightful study to improve understanding of the role of perceived affordability in forecasting purchase intentions. Numerous researchers argued that purchase intention is a function not only of attitudes and purchase intentions but also of economic considerations. Furthermore, the economic variable that can influence behavioral intention in this case is perceived affordability (perceived financial control). Therefore, perceived ability to afford a product motivates the purchase of that product, regardless of whether the consumer perceives the product as expensive or inexpensive.

### **Methodology**

This study proposes a procedure to examine consumer purchase intention for counterfeit products based on a modified Theory of Planned Behavior.

#### **Structure Model Specification**

This investigation proposes a structure model of "Customer Intention of Purchasing Counterfeit Products" based on a modification of the Theory of Planned Behavior (TPB) for describing complex customer behaviors. This structure model elucidates the relationships between attitude toward purchasing counterfeits, subjective norms, perceived behavior control, perceived financial control, and intention of purchasing counterfeits. Figure 1 presents the overall structure of this study.

**Insert figure (1) about here**

#### **Proposed Hypotheses Statement**

Based on the structure model and the above overview of previous researches on counterfeit purchasing, four hypotheses are proposed.

- H1: Intention to purchase counterfeit products increases with more positive customer attitude towards purchase*
- H2: Intention to purchase counterfeit products increases with consumer perception of normative pressure from important others to support their own purchases of counterfeits.*
- H3: Intention to purchase counterfeits increases with perceived behavioral control.*
- H4: Intention to purchase counterfeits reduces with perceived behavioral control of purchasers of original products.*

#### **Questionnaire Development**

The questionnaire was partly developed by integrating questions used in previous literature reviews. The illustrations of five perspectives of questionnaire are as followings:

**Attitude toward counterfeits.** In terms of attitude toward counterfeit purchasing, customers assess their behavior according to features of counterfeit, including quality, practical, reliability features.

And customers neglect personal feelings such as shame, guilt or illegal when buying and using the unauthorized products (Augusto, Ituassu and Rossi, 2007; Penz and Stottinger, 2005). The items of attitude toward purchasing counterfeits are measured on a five-point scale with strongly disagree, disagree, neither, agree and strongly agree represented by 1, 2, 3, 4, and 5, respectively.

**Subjective norms.** According to Ajzen and Fishbein (1975), subjective norms are individual's perception of social normative pressures, or are relevant to the beliefs of others regarding whether they should perform the behavior in question. Therefore, if people think their significant others agree with their purchasing of counterfeits, or make such purchases themselves (Albers-Miller, 1999), purchasing intention and likelihood are increased. The respondents evaluate each item of subjective norms using a five-point scale with never, seldom, sometimes, often, and always represented by 1, 2, 3, 4, and 5, respectively.

**Perceived behavioral control.** Perceived behavioral control, according to Ajzen (2002) describes individual perceptions of the ease or difficulty of performing a specific behavior. In the case of purchasing counterfeit products, those factors include information regarding counterfeits, the time required to access counterfeits and individual ability to solve difficulties they may face in product purchases. Therefore this study assumes that perceived behavioral control (information, time, ability to solve problems) positively affects intention to purchase counterfeits (Penz and Stottinger, 2005). Each respondent answers questions on a five-point scale with strongly disagree, disagree, neither, agree and strongly agree represented by 1, 2, 3, 4, and 5, respectively.

**Perceived financial control.** Notani (1997) concluded that perceptions of individual ability to afford products will considerably influence intention. Each respondent also answers questions of perceived financial control on a five-point scale with strongly disagree, disagree, neither, agree and strongly agree represented by 1, 2, 3, 4, and 5, respectively.

**Behavioral Intention.** Intention is a symptom of a person's readiness to perform a given behavior, and it is considered to be the immediate antecedent of behavior. The intention is based on attitude toward the behavior, subjective norms, perceived behavioral control, and perceived financial control, with each predictor weighted for its importance in relation to the behavior. The items of behavior intention are designed on a five-point scale with strongly disagree, disagree, neither, agree and strongly agree represented by 1, 2, 3, 4, and 5, respectively. Table 1 summarizes all of the items used to measure the variables in this study.

#### Insert Table (1) about here

#### **Sampling and data collection**

This research was conducted students in Vietnam universities. Each of the 400 subjects was given a questionnaire to fill out in January 2009. A total of 328 questionnaires were returned. Out of those, 97% was valid (318 out of 328). Valid sample data was analyzed using statistics.

#### **LISREL analysis**

Linear structural relationship (LISREL) was used to examine the causal relationships between attitude toward purchasing counterfeits, subjective norms, perceived behavior control, perceived financial control, and intention of purchasing counterfeits. Figure 1 presents the overall structure of this study. Furthermore, LISREL was used repeatedly to identify the most suitable model for the significant influence of the variables included in this study.

#### **Empirical analysis**

##### **Demographic analysis**

Personal characteristics were divided into gender, marital status, age, and education. Regarding gender, "female" occupied 62.5% of the total respondents. There is also a high rate of "single" situation in marital status characteristic (88.1%), subjects falling in the 21-25 year old age group (59.1%). Most of the respondents have a tertiary education, with 81.1% being either university students or graduates, 5.8% being graduate students, and the remainder (13.1%) being either high school graduate or in other categories.

##### **Reliability analysis**

This study adopts the Cronbach alpha coefficient to measure the internal consistency of the questionnaire. The Cronbach alpha coefficients of five subscales in this study are 0.95, 0.89, 0.89, 0.91, and 0.88, exceeding the minimum of 0.70 suggested in the literature (Cronbach and Meehl, 1955; Nunnally, 1970; Fornell and Larcker, 1981). Consequently, the scales achieve the needs of internal consistency.

##### **Model fit indices**

As recommended by Hair et al. (1998), several other fit indices are examined. The Goodness of Fit Index (GFI) and the adjusted Goodness of Fit Index (AGFI) should be greater than 0.90 and 0.80, respectively, and the Root Mean Square Error of Approximation (RMSEA) should be lower than 0.08 (Hu and Benter, 1996; Hoyle and Panter, 1995).

As mentioned above, the values of GFI, AGFI and RMSEA are examined for the judgment of the fitness of the proposed model. In our study, GFI is 0.907 and AGFI is 0.884. RMSEA is also at the acceptable level with 0.053. Table III lists the examination results.

### **Hypothesis testing**

The following is the table of parameter estimation that presents the regression and standardized weights of each latent variable to behavioral intention to purchase counterfeits. The table 2 of estimated parameters is produced.

When examining the influence of attitude on behavioral intention, the results indicate that attitude positively affects behavioral intention with regression weight  $\beta = 0.185$ ,  $p < 0.001$ , supporting H1.

H2 is supported: The more consumers perceive normative pressure from important others to agree with their purchase of counterfeits, the more strongly the intention to purchase those products, the regression weight of this factor is  $\beta = 0.271$ ,  $p < 0.000$ .

The regression weight of perceived behavioral control to behavioral intention is significant given  $p < 0.000$ ,  $\beta = 0.264$ , supporting H3: Intention to purchase counterfeits increases with perceived behavioral control.

**Insert Table (2) about here**

Figure 2 presented and clarified the causal paths among the observed and latent variables, as well as among the dependent and independent variables.

**Insert figure (2) about here**

### **Conclusions**

This study demonstrates the following results: Subjective norms are the strongest influence on customer intention of counterfeit purchasing. Another strong effect was observed with regard to the influence of perceived behavioral control. Most importantly, a contribution of this investigation is identifying the negative influence of perceived financial control (perceived affordability) on counterfeit purchasing intention. When people perceive that their financial ability enables them to purchase authentic products, they tend to do so, and vice-versa. Based on these points, this study proposes various perspectives and practical implications.

Research result also indicated that customers' awareness of intellectual property rights is still low, leading to the need of retailers to orient customers to obey intellectual property rights as well as to realize law violation when using fake products. Besides, subjective norms strongly influence intention to purchase counterfeits. Along with retailers, marketers should launch marketing campaigns to encourage word-of-mouth communication among friends and family members. The possibility of being known that one was not willing to pay the full price for a legitimate product but resorted to buying counterfeits instead may discourage those purchases. Besides, an aggressive advertising campaign discouraging the purchase and use of counterfeits may create a domino effect. People may be influence by the opinions of others that purchasing counterfeits is immoral.

Finally, since it was concluded that the perceived financial control, namely the perceived affordability of authentic products, negatively impacts intention to purchase counterfeits. Discounts or promotions campaigns from Marketers of retailers would help reach potential customers. Once customers believe that the price is reasonable and affordable they may become used to purchasing original products and develop brand loyalty.

### **References**

- Ajzen, I.:1991, 'The Theory of Planned Behavior', *Organizational Behavior and Human Decision Processes*, **50**(2), 179-211.
- Ajzen, I.:2002, 'Perceived Behavioral Control, Self- Efficacy, Locus of Control, and the Theory of Planned Behavior', *Journal of Applied Social Psychology*, **32**, 665-683.
- Ajzen, I., and M.Fishbein:1975, *Belief, attitude, intention, and behavior: An introduction to theory and research*,( Addison-Wesley).
- Albers-Miller, N.D.:1999, 'Consumer Misbehavior: Why People Buy Illicit Goods', *Journal of Consumer Marketing*, **16**(3), 273-287
- Ang, S. H., P. S.Cheng, E. Lim, and S. K.Tambyah:2001, 'Spot the Difference: Consumer Responses Towards Counterfeits', *Journal of Consumer Marketing*, **18**(3), 219-235.
- Asia Computer Weekly*:1999, Anti-software Piracy Movement Gets a Boost with New BSA Members. April 19.
- Augusto, C., C.T. Ituassu, and C.Alberto:2007, 'Consumer attitudes toward counterfeits: a review and extension', *Journal of Consumer Marketing*, **24**(1), 36-47.

- Churchill, G. A. Jr.:1995, *Marketing Research: Methodological Foundations*, 6th ed., NY: The Dryden Press.
- Cooper, D. R. and C. W. Emory:1995, *Business Research Method*, Chicago: Richard D. Irwin, 149-173.
- Counterfeit Goods and Piracy Industry: 2006, ([www.havocscope.com/Counterfeit/cgproductrank.htm](http://www.havocscope.com/Counterfeit/cgproductrank.htm))
- Cronbach, L.J. and P.E. Meehl:1955, 'Construct Validity in Psychological Tests', *Psychological Bulletin*, **52**, 282-302.
- Devinney, T., G. Eckhardt and R. Belk:2005, 'Why Don't Consumers Behave Ethically? The Social Construction of Consumption', *Proceedings of the 2005 Berkely Corporate Social Responsibility Conference*.
- Dornoff, R.J. and R.L. Tatham:1972, 'Congruence Between Personal Image and Store Image', *Journal of the Market Research Society*, **14**, 45-52.
- Eisend, M. and P. Schuchert-Güler:2006, 'Explaining Counterfeit Purchases: A Review and Preview', *Academy of Marketing Science Review*, **6**(12), 1-25.
- Fornell, C. and D.F. Larcker:1981, 'Evaluating Structural Equation Models with Unobservable Variables and Measurement Error', *Journal of Marketing Research*, **18**(1), 39-50
- Hair, J. F., R. E. Anderson, R. L. Tatham and W. C. Black:1998, *Multivariate Data Analysis* (5<sup>th</sup> edition), Prentice Hall, Upper Saddle River, NJ
- Hofstede, G.:1980, *Cultural Consequences: International Differences in Work-Related Values*, Sage Publications, Beverly Hills, CA.
- Hoyle, R. H. and A. T. Panter:1995, 'Writing about Structural Equation Models', in R. H. Hoyle (ed.), *Structural Equation Modeling, Concepts, Issues, and Applications* (pp. 158-176). Sage Publications, Thousand Oaks, CA.
- Hu, L., and P. M. Bentler, 1999, 'Cutoff Criterion for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives', *Structural Equation Modeling*, **6**, 1-55.
- Huang, J.H., B.C.Y. Lee and S.H. Ho:2004, 'Consumer Attitude Toward Gray Market Goods', *International Marketing Review*, **21**(6), 598-614
- Kwong, K.K., H.M. Yau, S.Y. Lee, Y.M. Sin and C.B. Tse:2003, 'The Effects of Attitudinal and Demographic Factor on Intention to Buy Pirated CDs: The Case of Chinese Consumers', *Journal of Business Ethics*, **47**, 223-235.
- Notani, A. S.:1997, 'Perceptions of Affordability: Their Role in Predicting Purchase Intent and Purchase', *Journal of Economic Psychology*, **18**(5), 525-546.
- Nunnally, J.C.:1970, *Introduction to psychological measurement*. New York: McGraw-Hill.
- Penz, E and B. Stottinger:2005, 'Forget the Real Thing – Take the Copy! An Explanatory Model for the Volitional Purchase of Counterfeit Products', *Advances in Consumer Research*, **32**, 568-575.
- Sahni, A.:1994, 'Incorporating Perceptions of Financial Control in Purchase Prediction: An Empirical Examination of the Theory of Planned Behavior', *Advances in Consumer Research*, **21**, 442-448.
- The Allen consulting group report:2003, Retrieved from: [www.allenconsult.com.au](http://www.allenconsult.com.au)
- Vann, E.F.:2006, 'The Limits of Authenticity in Vietnamese Consumer Markets', *American Anthropologist*, **108**(2), pp. 286-296.
- Wee, C.H., S.J. Tan and K.H. Cheo:1995, 'Non-price Determinants of Intention to Purchase Counterfeit Goods', *International Marketing Review*, **12**(6), 19-46.
- Yau, H.M.:1994, *Consumer Behavior in China: Customer Satisfaction and Cultural Values*. London: Routledge.
- Zaichowsky, J.:1985, 'Measuring the Involvement Construct', *Journal of Consumer Research*, **12**, 341-352.
- Zaichowsky, J.:1986, 'Conceptualizing Involvement', *Journal of Advertising*, **15**(2), 4-14.

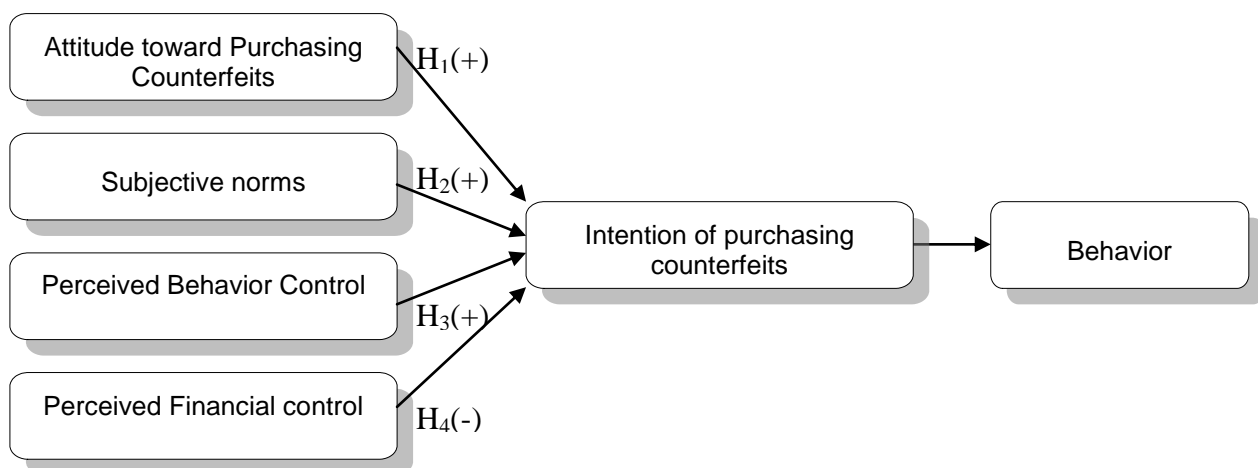


Figure 1. The structure model of "customer intention of purchasing counterfeit products"

TABLE 1: The questionnaire items of customer purchase intentions for counterfeit products

Items	
<b>Attitude toward counterfeit products</b>	
A1	Generally speaking, counterfeits have satisfying quality.
A2	Generally speaking, counterfeits are practical.
A3	Generally speaking, counterfeits are reliable.
A4	For me to buy/use counterfeits is virtue of thrift.
A5	For me to buy/use counterfeits is convenient.
A6	For me to buy/use counterfeits is wise.
A7	For me to buy/use counterfeits is proud.
A8	For me to buy/use counterfeits is guiltless.
<b>Subjective Norms</b>	
SN1	How much do your <i>parents</i> think you should purchase counterfeit product?
SN2	How much do your <i>partners</i> think you should purchase counterfeit product?
SN3	How much do your <i>friends</i> think you should purchase counterfeit product?
SN4	How much do your <i>relatives</i> think you should purchase counterfeit product?
<b>Perceived Behavioral Control</b>	
PBC1	I have enough time to find and purchase counterfeits.
PBC2	I have enough information to find and access counterfeits.
PBC3	I am able to control and solve difficulties when finding/purchasing counterfeits
<b>Perceived financial control</b>	
PFC1	I could likely afford to pay such a price for purchasing original product.
PFC2	For me to spend a lot of money for purchasing original product is easy.
PFC3	My personal income permits me to easily spend money for original product.
<b>Behavioral Intention</b>	
BI1	I will make effort to buy counterfeits next 6 month.
BI2	I will plan to purchase any counterfeits next 6 months.
BI3	I will expect to purchase any counterfeits next 6 months.

TABLE 2: The analysis of influence path among variables in this study

Relations	Std Regression weight	S.E.	p-value
A → BI	.185	.069	0.001
SN → BI	.271	.019	0.000
PBC → BI	.264	.060	0.000
PFC → BI	-.158	.054	0.006
The measured index:	The goodness of fit		
Chi-square =	365.03 ( $p < 0.000$ )		
$df$ =	185		
GFI =	0.907		
AGFI =	0.884		
RMSEA =	0.053		

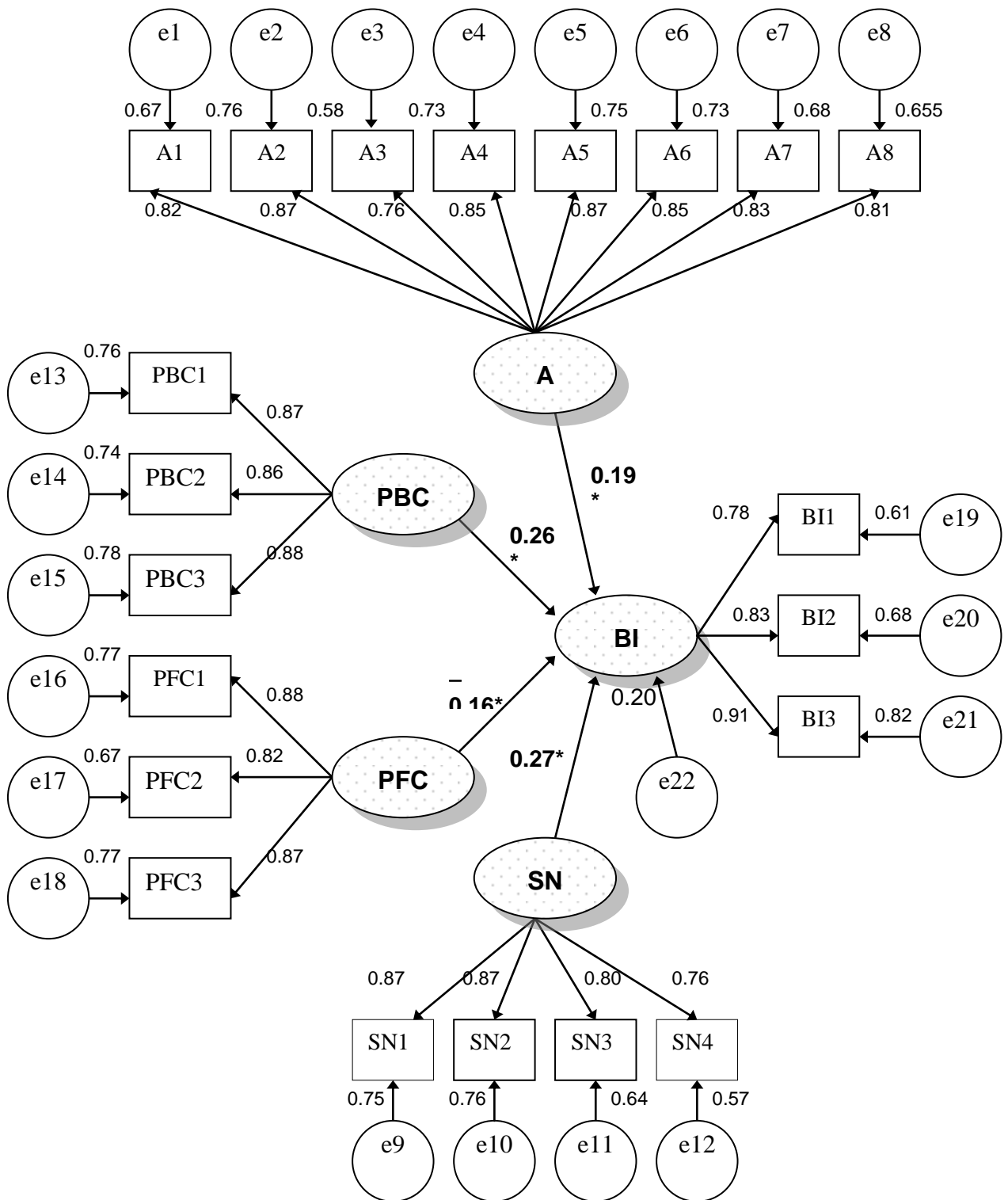


Figure 2. Model with standardized estimated parameters