

# International Journal of Sales, Retailing and Marketing

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A handwritten signature in black ink, appearing to read "Lazo Roljić".

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## KNOWLEDGE TYPES IN NON-PROFIT COLLABORATIONS: EXAMPLE OF MEXICAN FOOD BANK NETWORK

**Dr. Alina Pukhovskaya,**

University of Vitez;

**Dr. Gianpaolo Vignali,**

University of Manchester;

**Prof. Dr. Bernd Hallier,**

President of the European Retail Academy (ERA)

### Abstract

*Major problem of food waste provoked a community response in a form of creation of food banks. Food banks are non-profit organizations that mainly collect food surplus in commercial sector and transfer it to food aid sector. Therefore, increase in their efficiency could have a substantial positive impact on society, while allowing food banks to serve more needy people. Introduction of knowledge management practices can help achieving the constant improvement that food banks aim. Moreover, existing research shows that knowledge exchange is beneficial not only within, but also across organizations. Knowledge becomes a critical strategic resource in inter-organizational collaborations, which needs to be managed in a structured manner. However, in order to manage it, all relevant knowledge has to be first identified and organized.*

*As a research unit was chosen the Mexican food bank network, which is one of the oldest and most developed food bank networks in the world. Data were collected through prolonged semi-structured interviews both at the network level (national service office) and member level (food banks) and reinforced with data from documentation. The identified knowledge was assigned to ten most relevant knowledge categories that unite fifty-three sub-categories of knowledge. Developed knowledge types are suggested as a basis for knowledge structure not only in food bank networks, but also in non-profit collaborations in general. It could be applied for organization of network knowledge during knowledge audit and further development of digital knowledge platform.*

**Keywords:** *inter-organizational knowledge management; knowledge types; non-profit; food bank network; collaborations.*

### INTRODUCTION

On average 1/3 of the global food is getting wasted on different stages of supply chain while billions of people are malnourished (FAO, 2011, FAO, 2016). The immense problem provoked a community response in a form of creation of food banks. Food banks are non-profit organizations (NPO) that mainly collect food surplus in commercial sector and transfer it to charitable food programs or directly to needy people (Starkey et al., 1998, González-Torre and Coque, 2016). Food banks can be seen as intermediate agents that connect donors and beneficiaries (Gentilini, 2013). Despite the common goal of feeding the vulnerable population, food banks have a variety of models depending on their environment (González-Torre and Coque, 2016). Moreover, for

food banks, similar to other non-profit organizations (Guo and Acar, 2005), it is quite common to form collaborations. They have unusually homogeneous and structured way of networking with other food banks. This is also the case for the investigated Mexican food bank network (Bancos de Alimentos de México, BAMX), as pictured on Figure 1. Most of the food banks are members of national network organizations (Campbell et al., 2013) and the national networks are members of one of the location-based international networks, such as Global Food Banking Network, European Federation of Food Banks, Food Banking Regional Network, or Second Harvest Asia (Gentilini, 2013).

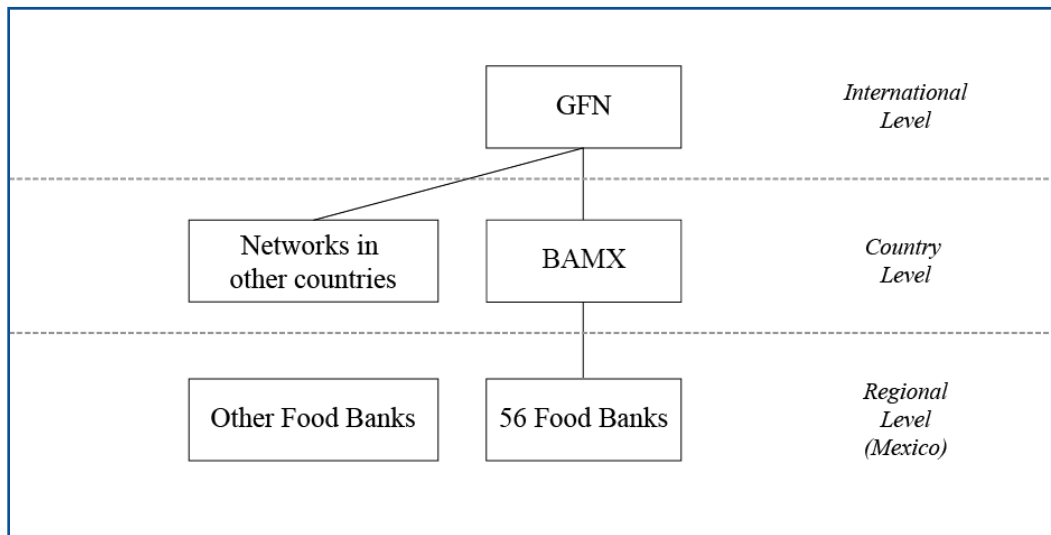


Figure 1: Place of BAMX in the food-banking sector (State: January 2017). Source: Own elaboration.

Nowadays food banks play a leading role in the food aid sector (Bazerghi et al., 2016) and improving their efficiency can have a substantial impact on society and help meeting basic needs of more struggling families. Current research extends prior empirical studies (Lettieri et al., 2004, Reilly, 2005, Bedoya-Dorado, 2015, Cantu and Mondragon, 2016) and suggests knowledge management as a way to address the topic of efficiency. Zaied et al. (2012) write that in today's knowledge economy, most organizations in all three sectors – private, public and social – have knowledge that has a potential to improve their performance.

To the best of our knowledge, existing research in the third sector overlooks the importance of inter-organizational knowledge management in non-profit collaborations. However, research on knowledge management practices in food bank networks can support the professionalization and sustainable growth of the sector.

## LITERATURE REVIEW

Knowledge management field draws a clear line between data, information and knowledge. Data in organization can be compared to a set of facts or to a "content that is directly observable or verifiable" (Dalkir and Liebowitz, 2011; p. 9). Afterwards data are used as a raw material for generation of information. Davenport and Prusak define information similar to Zack (1999) as a message with meaning, which is transmitted as a physical document or in the process of communication. Information is stored in the books, databases and software programs (Drucker, 1993). Knowledge is richer and broader than information, but derives from it: "Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and

information. It originates and is applied in the minds of knowers" (Davenport and Prusak, 1998; p. 5).

In order to take advantage from knowledge as an asset and turn it into sustainable competitive advantage it is important to be able to manage knowledge in a systematic way. Knowledge management (KM) is "the deliberate and systematic coordination of an organization's people, technology, processes, and organizational structure in order to add value through reuse and innovation. This coordination is achieved through creating, sharing, and applying knowledge as well as through feeding the valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning" (Dalkir, 2005; p. 3). In other words, KM means that the right knowledge needs to be available to the right people at the right time (Holsapple and Jones, 2004; p. 156). This permits to "maximize the enterprise's knowledge-related effectiveness and returns from its knowledge assets" (Wiig, 1997; p. 1).

As previously mentioned, food banks form networks and, consequently, it is important to optimize the knowledge flow at the network level. Inter-organizational knowledge management (IKM) is a network-focused knowledge management (Carlsson, 2003), which addresses all stages of KM process between organizations. The purpose of IKM is to manage the knowledge exchange and co-creation of new knowledge (Blecker and Neumann, 2000, Lancini, 2015), which permit the organizations that form part of collaboration to gain a sustainable competitive advantage (Carlsson, 2003).

The aim of this paper is to outline a structure of knowledge base that can be used by entire food bank network, while addressing a challenge typical for any non-profit organization (Lettieri et al., 2004). Professional knowledge base can be built upon a formalized taxonomy of organizational knowledge. Taxonomy is a "hierarchical structure for organising a body of knowledge; it gives a framework for



understanding and classifying that knowledge – how to group it and how the various groups relate to each other” (Servin, 2005; p. 62).

In the opinion of Hume and Hume (2015) a large number of KM architectures and models were proposed in the recent years with an attempt to organize the KM activities available to organizations. These models helped organizations to “understand potential categories or divisions of knowledge and how knowledge can be managed” (Hume and Hume, 2015; p. 26). For instance, Binney (2001) suggests six types of knowledge: transactional, analytical, asset management, process, developmental, and innovation. Though the proposed approach is reasonable, however, according to Hume and Hume (2015) such an understanding of types of knowledge suits rather the mature for-profit organizations. Some other authors regard knowledge as an intellectual capital (Mårtensson, 2000, Roos et al., 1997, Kong, 2010a, Kong, 2015, Kong, 2010b, Kong, 2008, Kong, 2007, Kong and Prior, 2008, Choo and Bontis, 2002) and use corresponding taxonomy for assigning knowledge to one of the three categories (Kong, 2010b): human capital, structural capital and relational capital.

This study agrees with Hume et al. (2012) that immature third sector would rather benefit from a simpler and leaner practice-oriented framework, which could be partially derived from the corporate functional lines.

A popular classification of knowledge types in third sector is proposed by Lettieri et al. (2004), whose research shows that knowledge can be clustered into six main groups: accounting/administration; managerial/organizational; teaching/training; fund raising/public relation management/marketing; operational; and miscellaneous. Lettieri et al. (2004) suggest knowledge-taxonomy for NPO based on the results of case-study research and some proposals in for-profit literature, for example by Zack (1999) and Blackler (1995). The main contribution of Lettieri et al. (2004) is the recognition of miscellaneous knowledge, which is not directly used for carrying out daily activities, but has a hidden potential for performance improvement (Lettieri et al., 2004).

Rathi et al. (2016) address the topic in a different way and speak about the knowledge needs in NPOs. It is a distinct angle in comparison to Lettieri et al. (2004), who identified the available knowledge in four in-depth case studies, not the knowledge needed. Rathi et al. (2016) conduct an extensive survey in total of 2800 NPOs in Canada and Australia and propose a detailed classification of knowledge, which is potentially relevant to every non-profit organization. It is an important contribution and practical framework, since any NPO can use the taxonomy proposed by Rathi et al. (2016) as a guide in the process of identification of own knowledge needs.

Knowledge needs have to be identified and documented as a first step of knowledge audit when NPO starts to develop a KM strategy.

Rathi et al. (2016) propose 5 major categories and 28 sub-categories of knowledge types that are relevant to all non-profit organizations: knowledge about management and organizational practices; resource knowledge; community knowledge; sector-based knowledge; and situated knowledge. This study builds on and further expands the work of Rathi et al. (2016) in non-profit organizations, while applying their extensive framework of knowledge needs to non-profit collaborations.

## METHODOLOGY AND RESEARCH DESIGN

This qualitative study was conducted in Bancos de Alimentos de México (BAMX), which is Mexican food bank network formed by over fifty members located throughout the country. The network is registered as Asociación Mexicana de Bancos de Alimentos A.C., which is a civil association. Due to its legal form, investigated network has a general assembly as a supreme body, board of directors as a representative body and supervisory committee as a supervisory body. Moreover, the network is structured as a confederation. This model is characterised by an umbrella organization that supports, coordinates and provides services to several member organizations. The national service office (NSO), which is the umbrella organization of the network, is located in Mexico City from where they manage, for example, relationships with government and large corporations in food sector.

Geographical proximity to the organization allowed first carrying out a pilot study to test the initial conceptual model and then conducting a number of interviews in person. Data were collected through semi-structured in-depth interviews with the average length of one and a half to two hours.

Interviews in the national service office (NSO) were carried out with managers of every department. Six prolonged face-to-face interviews took place with logistics manager, nutritionist, government projects manager, information technologies manager, director of finances and administration, and manager of the capacity-building department. Two more Skype interviews were conducted with general director and fundraising manager. These interviews took place between November and December 2016.

The network members were chosen based on two characteristics: region and involvement into governance structure. Therefore, after thorough discussion with the NSO team, two active regions were identified. Inside of each region, members were analysed and two cases were chosen based on their level of overall motivation and involvement into governance structure.

Details of the interviews conducted in the member organizations are summarized in the Table 1. These interviews took place between August and October 2017.

Respondents	Role in network governance	Method
Director 1, Region 1	President of the food bank is on the board of the food bank network and represents the Region 1	Interview in person
Director 2, Region 1	Food bank is not represented on the board of the food bank network	Skype interview (video)
Director 1, Region 2	President of the food bank is on the board of the food bank network and represents the Region 2	Skype interview (video/audio)
Director 2, Region 2	Food bank is not represented on the board of the food bank network	Telephone interview (audio)

Table 1: Summary of interviews (network members). Source: Own elaboration.

To protect confidentiality of the participants to each respondent was assigned a code. Codes N01 to N08 correspond to the team of national service office (NSO), which is the umbrella organization of the network. Codes M01 to M04 are assigned to the network members. Other information that was considered confidential was coded as [Name of city], [Name of person], [Name of region] etc. The symbol of three dots in round brackets corresponds to a reduced phrase. The interviewer is given the code AP. Therefore, the remarks and clarifications of the interviewer are put in square brackets as [AP: remark].

Large amount of data gathered through interviews were transcribed verbatim and further analyzed with the help of thematic analysis. Moreover, this study adopted a specific version of thematic analysis – a “template analysis” as suggested by King (2004). The use of a priori codes and hierarchical organization of codes are the main characteristics of this technique (King, 2004).

## RESEARCH FINDINGS

Research data confirm the applicability to the investigated network of all five knowledge categories suggested by Rathi et al. (2016) and listed in the literature review section. However, due to the specifics of the network structure, the first three categories of knowledge (knowledge about management and organizational practices, resources, and community) prove to be relevant at two levels of the network, which are:

1. Level of the network as organization (categories I, II, and III, Table 2) as visualised in the Figure 2. It is knowledge about the network as an entity.

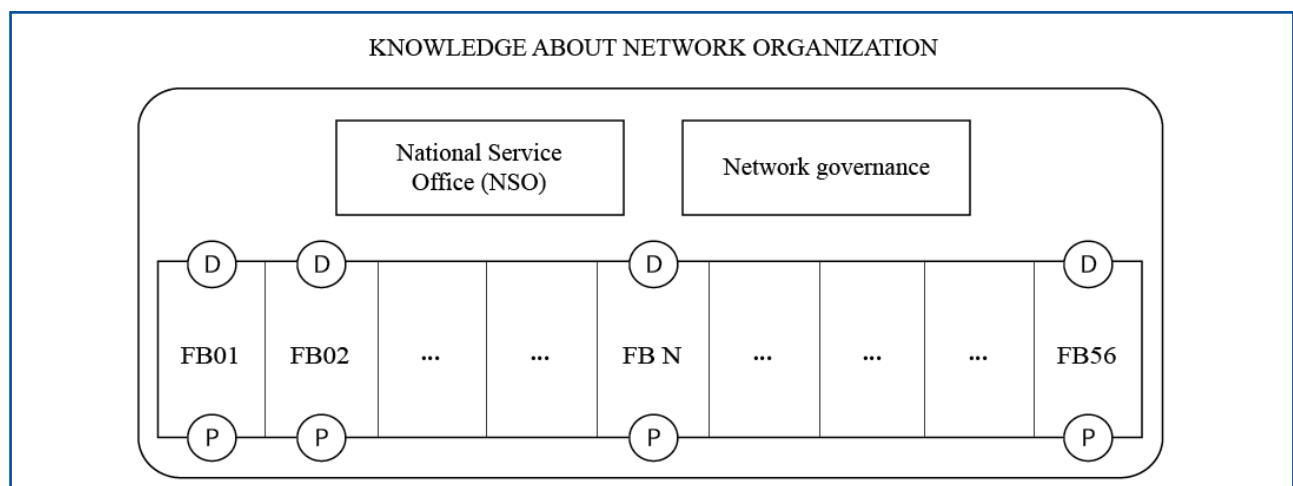


Figure 2: Visualisation of knowledge about network organization. Source: Own elaboration.

2. Level of the network members (categories V, VI, and VII, Table 2) as visualised in the Figure 3. This knowledge is needed both for having a better insight into the state and activities of the network members and for accumulation and sharing of useful practices, resources, and contacts among them.

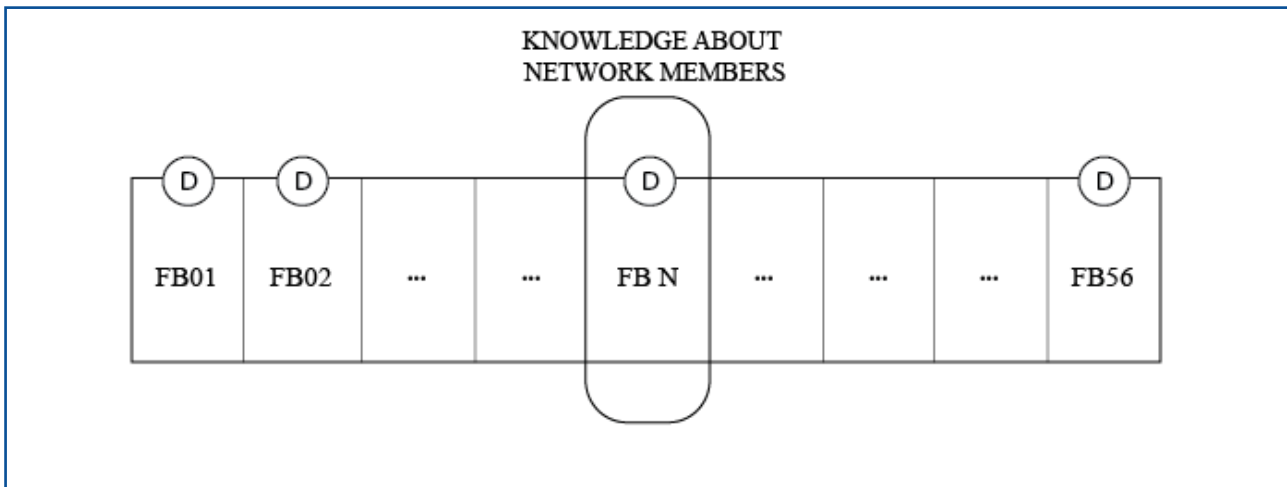


Figure 3: Visualisation of knowledge about network members. Source: Own elaboration.

The other two categories suggested by Rathi et al. (2016) are about the sector (category IX, Table 2) and general environment (category X, Table 2), which are the same for the network organization and for the members.

Moreover, the research identifies two new categories that are relevant only for the network setting. One is knowledge about characteristics of the network members (category IV, Table 2), such as operative model, infrastructure, organizational structure and maturity. The other new knowledge category is the network-based knowledge (category VIII, Table 2), which is knowledge about the network itself: network dynamics, network experts and their knowledge, and the best practices in the network. All ten knowledge categories and fifty-three knowledge types are displayed in the Table 2.

Knowledge types in non-profit collaborations	
I Knowledge about management and organizational practices of the network	
I.1	Strategic management knowledge
I.2	Knowledge about organizational identity
I.3	Internal governance knowledge
I.4	Knowledge about processes and practices
I.5	Knowledge about products and services
I.6	Knowledge about the organization’s history
II Resource knowledge of the network	
II.1	Knowledge about financial resources and sources of funding of network
II.2	Knowledge about product donations
II.3	Knowledge about network tools and technologies
II.4	Knowledge about network intellectual resources
II.5	Knowledge about network human resources
II.6	Knowledge of other resources of network
III Community knowledge of the network	
III.1	Knowledge about clients and customers
III.2	Knowledge about network volunteers
III.3	Knowledge about network donors
III.4	Knowledge about experts
III.5	Knowledge about other community partners and stakeholders

III.6	Cultural knowledge
IV Knowledge about characteristics of network members	
IV.1	Knowledge about operational model
IV.2	Knowledge about infrastructure
IV.3	Knowledge about organizational structure
IV.4	Knowledge about organizational maturity
V Knowledge about management and organizational practices of network members	
V.1	Internal governance knowledge
V.2	Knowledge about processes and practices
V.3	Knowledge about products and services
V.4	Knowledge about local activities and services
V.5	Knowledge about the organization's history
VI Resource knowledge of network members	
VI.1	Knowledge about financial resources and sources of funding
VI.2	Knowledge about tools and technologies
VI.3	Knowledge about intellectual resources
VI.4	Knowledge about human resources
VII Community knowledge of network members	
VII.1	Knowledge about local clients and customers
VII.2	Knowledge about volunteers
VII.3	Knowledge about local donors
VII.4	Knowledge about other local community partners and stakeholders
VIII Network-based knowledge	
VIII.1	Knowledge about network dynamics
VIII.2	Knowledge about network experts
VIII.3	Network-specific knowledge of network experts
VIII.4	Knowledge of best practices in the network
VIII.5	Knowledge about network activities
IX Sector-based knowledge of network and network members	
IX.1	Domain-specific knowledge
IX.2	Knowledge about professional and industry standards
IX.3	Knowledge of best practices
IX.4	Knowledge about governing bodies
IX.5	Knowledge about collaborators, competitors and other organizations
IX.6	Knowledge of inter-organizational networks and networking
X Situated knowledge of the network	
X.1	Bureaucratic directive knowledge
X.2	Regulatory knowledge
X.3	Political knowledge
X.4	Geographical knowledge
X.5	Economic knowledge
X.6	Recorded knowledge
X.7	Current affairs

Table 2: Fifty-three knowledge types in non-profit collaborations. Source: Own elaboration.

There is a lack of systematisation of knowledge in the investigated non-profit network. Although respondents mentioned every type of knowledge, most of this knowledge is neither centrally stored nor properly shared in the network, which is related to the lack of IKM mechanisms and tools such as knowledge platform.

## I. KNOWLEDGE ABOUT MANAGEMENT AND ORGANIZATIONAL PRACTICES OF THE NETWORK

Based on the framework of Rathi et al. (2016) to this category belongs knowledge about goals, regulations, processes, services, and history. All five sub-categories of knowledge were found relevant at the network level. Moreover, data analysis shows that in case of a network organization also knowledge about organizational identity plays an important role.

### 1.1 Strategic management knowledge

Knowledge about organization's philosophy, mission, objectives and goals that defines the strategic direction of the non-profit network: "Before starting, mission, vision, values and strategic imperatives are refreshed and the VP [AP: Vice President] directly passes this information to each of the regions" (N03).

### 1.2 Knowledge about organizational identity

Knowledge about organizational identity of the network includes the rules for using the brand, corporate image and colours. It is common for networks to be united under one brand in order to strengthen their public image and recognition in the community and sector. Therefore, knowledge about how to use the network branding is an important addition to this knowledge category: "banks started working under the same image, under the same brand and in fact we have a contract where we give banks permission to use this brand (...) and there is a policy on how they should use the colours, what they can move, what they cannot move" (N07).

### 1.3 Internal governance knowledge

This sub-category of knowledge unites internal policies, guidelines and standards for unified decision-making and operations in the network: "[Name of regulation] (...) talks about how it will be operated the distribution, collection, reception" (N07). In case of network, this type of knowledge also describes the governance structure: governing bodies ("network needs to explain us what's up with its committees", M02), their responsibilities ("I did not know who had each position, who did what", M02) and representatives ("I was asking for an updated directory - with whom I should see what", M04).

### 1.4 Knowledge about processes and practices

It is knowledge about everyday operational processes at the level of the network, which are recorded in manuals and embedded into routine: "there is also a manual by area" (N05).

### 1.5 Knowledge about products and services

This is knowledge about products and services provided by non-profit network: "The program itself has the axes of nutrition, depending on the food that has the recipe, it is explained to them, well, it already comes in the manual that was developed" (N08). In the investigated network, more specialised knowledge about products (food) and services (food distribution to beneficiaries) is rather concentrated at the level of the network members, who are the service providers.

### 1.6 Knowledge about the organization's history

It captures knowledge about documented and shared history of the non-profit network: "The document explains a little bit what it [AP: network] is, an abstract, the history, the super important dates, a bit of history, what we do, the philosophy, values, where we are, how we operate, what we want to achieve, how it works, what is our organization chart" (N04).

## II. RESOURCE KNOWLEDGE OF THE NETWORK

Knowledge about all five resources suggested by Rathi et al. (2016) was found relevant in the investigated organization at the network level. Additionally, the respondents brought to attention the crucial role of product donations as a network resource.

### 1.1 Knowledge about financial resources and sources of funding of network

It is knowledge about funding bodies and funding opportunities that identifies network: "this year I also made a systematization of all convocations and government programs and we put them in Excel and we shared them with all the banks" (N04).

### 1.2 Knowledge about product donations

This sub-category of knowledge gathers knowledge about how to find and establish productive relationship with new and existing product donors (procurement): "to present the new donors that arrive and tell them what is the way to work with each of them, because each donor has their specifications for work and reports" (N01).

### 1.3 Knowledge about network tools and technologies

Knowledge about information and communication technologies is essential for efficient networks: "In 2014/2015 they did regional trainings to teach them how to use [Name of the network IT system]" (N05).

#### *II.4 Knowledge about network intellectual resources*

This sub-category of knowledge includes reports, publications, and statistics related to the non-profit network: "this is the full report of 2015 - message, vision, 2015 in figures, nutritional programs, financial statements, and the function of the network" (N07).

#### *II.5 Knowledge about network human resources*

This knowledge is about management of human resources in non-profit network: "we have a law firm that gives courses on how to handle a job termination without a risk for the banks" (N03). The network members emphasized a need for more formal training opportunities for new and existing staff of the network.

#### *II.6 Knowledge of other resources of network*

To this sub-category corresponds knowledge about infrastructural and physical resources of the network: "I have a program for building new banks. Last year we built eleven and this year I'm with five" (N04).

### **III. COMMUNITY KNOWLEDGE OF THE NETWORK**

This knowledge is originated in the community served by the network organization. Rath et al. (2016) suggest that volunteers, experts, consultants, partners, clients, donors and other stakeholders form a part of the community. This study did not identify any new knowledge sub-categories at the network level.

#### *III.1 Knowledge about clients and customers*

This sub-category of knowledge includes demographics and statistics about the clients of the non-profit network. In case of the investigated network, this knowledge mainly captures socio-demographic data, since the network members establish the direct contact to beneficiaries: "they adopted a very long report of beneficiaries; they say that there are 120 questions" (N06).

#### *III.2 Knowledge about network volunteers*

This knowledge addresses the topic of management of the network volunteers, how to recruit and retain them. Investigated network manages in centralised manner the corporate volunteering, which is arranged through collaborations with large organizations: "He asks them [AP: food banks] to propose an agenda, and between them they agree, organize themselves, present it to the donor and the donor makes their adjustments" (N01).

#### *III.3 Knowledge about network donors*

It is knowledge about donors, which is not only their contact information and historical data, but also tacit knowledge gathered through work and interactions. Establishment of productive relationship with

national donors is one of the priority tasks of the investigated network: "I am actually giving attention to all the donors that have already been with us for years and I also have a goal of getting new donors" (N01).

#### *III.4 Knowledge about experts*

This knowledge is about subject-matter experts that may or may not be formally affiliated with the network, but form a part of the community and provide important insights. The investigated network has a number of specialised experts and consultants that can be approached by the network members: "They can contact them and, for example, (...) a tax attorney - any region can ask him for help and he gladly gives it to them. They also can talk with the law firm and with all the pleasure they give them the service, too" (N03).

#### *III.5 Knowledge about other community partners and stakeholders*

This sub-category of knowledge is about strategic partnerships with individuals and other organizations in the same social arena and interested in the mission or cause of the non-profit network: "with the main foundations of this country (...) we have a strong relationship" (N03).

#### *III.6 Cultural knowledge*

Knowledge about culture can have a significant impact on how NPOs operate in different communities. In case of the network, cultural differences should be anticipated in the moment of development and implementation of network activities and tools: "there are as many cultural differences as there are races in the country. For example, I can tell you that there is a difference between people from the north and from the south of the country" (N03).

### **IV. KNOWLEDGE ABOUT CHARACTERISTICS OF NETWORK MEMBERS**

Knowledge about characteristics of network members is a new category of knowledge suggested for non-profit networks. This knowledge strongly depends on the sector where the non-profit network operates. Food banks are logistics-oriented non-profits. Therefore, knowledge about operational model and available infrastructure of the network members plays an important role.

#### *IV.1. Knowledge about operational model*

First knowledge sub-category is about operational specifics of the network members. For example, in the food bank network the members might distribute the food directly to beneficiaries or to the agencies, what has a serious impact on how the organization operates: "We do not focus on the city like other banks (...) 90% of the population that we serve - is

outside of the municipality of [Name of the city]" (M03).

#### *IV.2. Knowledge about infrastructure*

This sub-category of knowledge is about infrastructure of the network members, such as type of owned transport, warehouse capacity, availability of a cold room. This knowledge has a great impact on the network logistics and distribution of food: "I can see that they do not have a cold room, but we can make a logistical plan so that not necessarily fruit and vegetables go through the fridge" (N02).

#### *IV.3. Knowledge about organizational structure*

Sub-category of knowledge about the organizational structure includes number of people employed by the network members, their positions, responsibilities and contact details: "From the map of BAMX I was taking the phone number and calling (...) the bank" (M04).

#### *IV.4. Knowledge about organizational maturity*

Knowledge about maturity of the network members should be taken into consideration in the process of decision-making at the network level. Maturity is defined both through formal diagnostics and certification that conducts network and through a subjective opinion: "The banks that are diagnosed in category A, B or C etc. will receive this training. Because the others are in another stage. This is how it should be - not all are equal, not all are in the same conditions" (M02).

### **V. KNOWLEDGE ABOUT MANAGEMENT AND ORGANIZATIONAL PRACTICES OF NETWORK MEMBERS**

Four out of five sub-categories of knowledge suggested by Rathi et al. (2016) were confirmed for the investigated organization as relevant at the member level, which is the level of a single non-profit organization. Additionally was introduced one new sub-category of knowledge, which is about local activities, services and programs that has each network member apart of the centralised network activities.

#### *V.1 Internal governance knowledge*

This sub-category represents policy-related knowledge, including guidelines for executive decision-making and standards for operating procedures. Similarly, to the network level the sub-category of internal governance knowledge at member level is broader than described in the theoretical framework. First, internal governance knowledge also covers governance structure, such as number of the board members, length of their term on the board, frequency of the board meetings, and current president and director: "Generally we are

informed that there will be elections or that there was a change of the board or president" (N03). Second, this sub-category describes governance practices and documentation: "we update and revise every year the constitutive acts and send out an "ideal" constitutive act so that the banks can implement it" (N03). Third, here belongs knowledge about compliance with internal regulations of the network, including regular network fee payments, correct reception and handling of the network donations: "We want to implement more and more for the banks to be in order with our administration team" (N04).

#### *V.2 Knowledge about processes and practices*

This is knowledge of everyday processes that might be formally documented in manuals or embedded into organizational routines. Operative knowledge of the network members is captured in the manuals: "We have passed our manual of procedures to smaller banks. This information exchange is super valuable and very positive" (M02).

#### *V.3 Knowledge about products and services*

It is knowledge about specifics of the products and services that provides the NPO. Since the network members are the service providers in the investigated network, they accumulate the most of the product (food) and service (food distribution to beneficiaries) knowledge: "[Name of the food bank] has a social worker named [Name of the person] - she is a darling and she has a lot of experience in the communities" (M01).

#### *V.4 Knowledge about local activities and services*

Every network member at the local level has knowledge about services and programs, apart of the centralised network activities. It is important to monitor activities of the member organizations in order to be able to identify similar projects in the network and support knowledge exchange: "They sent us a lot of bread, which is white bread. And we had too much left and (...) white bread is very bulky. So what we did - right now we are sending it to make breadcrumbs" (M03).

#### *V.5 Knowledge about the organization's history*

Knowledge about documented history and history shared through anecdotes in the organization. History of foundation of the member organization has an impact on the network dynamics. In the investigated network, the association itself helped to establish some of the member organizations and others became members: "person who was responsible for leading BAMX at that time met a person from here (...) and that's why a food bank was created here in the city. (...) it was very much related to the network of food banks because we were not a bank that was working before" (M02).

## VI. RESOURCE KNOWLEDGE OF NETWORK MEMBERS

Four out of five sub-categories of knowledge suggested by Rathi et al. (2016) were confirmed as relevant for the investigated organization at the member level. No new knowledge sub-categories were identified in the regarded network.

### *VI.1 Knowledge about financial resources and sources of funding*

It is knowledge of network members about access to funding opportunities at the local level: ““I want to bring a same project to [Name of the city]. What is needed? How did you do it?” We chat and there it goes all the information, the whole project was sent to the bank that asked for it” (M04).

### *VI.2 Knowledge about tools and technologies*

This sub-category of knowledge regards information and communication technologies in the member organizations: “I went to see how she does her warehouse control in the system (...) and to make some improvements to this same mode and replicate it in certain banks” (N06).

### *VI.3 Knowledge about intellectual resources*

Broad category of knowledge that combines reports, publications, and statistics related to the organization. Any research, articles, publications initiated by the network members would be of benefit for the entire network: “We are working with the [Name of university] on the questions of subject matter; let’s say of socialization - social questions, social impacts, etc. And we are discussing to do a project to see how the bank impacts each of the families (M01)”.

### *VI.4 Knowledge about human resources*

It is knowledge about management of human resources in organization. All network members regularly train large number of volunteers and have their own materials and techniques: “we let the banks show up, and say what they do, let them present their video, show them the areas of the bank” (N01).

## VII. COMMUNITY KNOWLEDGE OF NETWORK MEMBERS

Four out of six sub-categories of community knowledge defined in the research of Rathi et al. (2016) were seen as relevant for the investigated network at the member level.

### *VII.1 Knowledge about local clients and customers*

Knowledge about clients includes demographics, statistics, and more tacit knowledge about their perception of the NPO. Network members have direct interactions with beneficiaries, learn their

stories and perceive their needs: “We are now, for instance, making a book (...) of testimonies that we have been gathering from people - how a donation has made a person or a family to change completely from a ruin to wealth” (M01).

### *VII.2 Knowledge about volunteers*

It is knowledge about the ways of recruiting and retaining new volunteers at the local level. Operations of network members strongly depend on volunteers who represent about 80-90% of staff: “I believe the banks bit us in this, because they all have volunteers and by thousands” (N07).

### *VII.3 Knowledge about local donors*

Knowledge about local donors of the network members includes their contact information, historical data, and tacit knowledge built through interactions: “The local donors are the ones that we get directly in the area” (M03).

### *VII.4 Knowledge about other local community partners and stakeholders*

This knowledge is about strategic partnerships of the network members with individuals, businesses and other organizations active in the same social arena: “For example, right now we are doing a study, which was organized by the association to see how mature the banks (...) are. With a foundation called [Name of foundation], which is precisely dedicated to analysis of all the institutions” (M03).

## VIII. NETWORK-BASED KNOWLEDGE

Network-based knowledge is a new category of knowledge that was identified in the investigated non-profit network during analysis of the data. This knowledge is about the network itself, about its dynamics, network experts and their knowledge, and the best practices in the network.

### *VIII.1. Knowledge about network dynamics*

This knowledge is about the role that some of the members play and its effect on the network dynamics. Interview data show the importance of knowing and monitoring the changes in the dynamics in order to maintain the balance of the network: “There were changes of directors, changes of presidents and the association did not take care of this leader - that apparently was the best in the region - to keep on helping him/her to be the one who unites” (N01). Identification of key members and critical cases is equally important. Network leaders create the bone structure of the network, while strengthening the network culture and supporting the sharing of product and knowledge among the members. Meanwhile, the critical members obstruct the development of collaborative relationships in the entire regions.



### *VIII.2. Knowledge about network experts*

This knowledge is about the experts that are affiliated with the network members (employees, members of the management team or board of trustees etc.). Other network members acknowledge these experts and reach out to them for advice. Their broad network-specific knowledge is mainly based on the long-term engagement with the subject inside of the NPO: “[Name of the food bank] has a social worker named [Name of the person] - she is a darling and she has a lot of experience in the communities (...) and she is really nice and also has many years in the bank” (M01). Network members emphasize the importance of support of network experts and creation of mechanisms for sharing their knowledge in the network: “among ourselves generating it and saying: “Well, Fulanito [AP: any person] is very good with the accounting questions”. We go and stick to him and we learn. To another one - regarding institutions, and another - for communities. Because the problems are the same everywhere” (M01).

### *VIII.3. Network-specific knowledge of network experts*

It is knowledge of the network experts (discussed above) about their field of expertise. Network-specific knowledge of experts has a great significance for the network and should be codified before it gets lost through rotation of personnel. It is rather an exception that this knowledge is stored and shared: “In the staff of [Name of the city], for example, there is also a lady in the social work who (...) began to document, so she has “books”... she has really done “files” with practical questions for food safety and procedures that are already being institutionalized” (N05).

### *VIII.4. Knowledge of best practices in the network*

Knowledge of the best practices has a high value in the network, since these are positive learning experiences of some network members that could be replicated in the rest of the network. When there is a lack of mechanisms for sharing the best practices then it is done rather informally: “when I went to visit banks, which needed something that I saw in the other bank (...) I try to be also an intermediary so that they can request some recommendations or good practices from another bank” (N02).

### *VIII.5. Knowledge about network activities*

This knowledge is about centralised network activities, such as network programs and projects, meetings, events, and courses. It includes both the historical data, such as participants, place, date, and description of the activity: “[Name of the person] wanted to know if I had a document that summarizes the regional meetings that were held. So, I know from conversations that they were made and I have evidence of one, from one of the regions, but I do not know anything about the rest” (N05).

## **IX. KNOWLEDGE ABOUT SECTOR**

Sector-based knowledge is defined by Rathi et al. (2016) as knowledge about the sector or industry where the NPO operates. It is knowledge external to organization and community, but still relevant to achieving organizational goals. Interview data show that this knowledge category also applies to a non-profit network. All six sub-categories of knowledge suggested by Rathi et al. (2016) and no new sub-categories were identified in the data.

In case of the investigated network, sector-based knowledge is knowledge about the food, social and food-banking sector. The entire network operates on the cross of the same sectors and would benefit from knowing more about them. This knowledge was identified both at the network and local level. Combination of knowledge at different levels would provide better picture of network’s interconnectedness with these sectors.

### *IX.1 Domain-specific knowledge*

This is knowledge of internal and external subject matter experts related to specific profession or field both at the network and local level, including sector knowledge of the personnel in the member organizations: “we have a [Name of organization], which is a network of accountants who provide pro bono consulting on accounting and administrative matters to all banks in the network” (N03).

### *IX.2 Knowledge about professional and industry standards*

It is knowledge about multiple policies, legislations and standards both within the non-profit sector and within industry they belong to. Since there are not many industry standards that concern food banks, this knowledge is mainly regarded at the network level: “The norms of social sector, let’s say, are more related to the administration. For example, what things that you make can cause you lose the deductibility” (N05).

### *IX.3 Knowledge of best practices*

Knowledge of the best practices of the industry is gathered both at the network and at local level: “We have had meetings where we participated with foreign institutions, mainly FAO, World Bank, etc. to see what they are doing on food waste issues” (N03).

### *IX.4 Knowledge about governing bodies*

This knowledge is about the functioning of the public sector and the best ways of interacting with government bodies at different levels on a day-to-day basis including the relationships developed by the network members with the local government: “this company is consulting us and they have taught me a lot about how to deal with the government agents and we have also tried to advise the banks on how to do it at the local level” (N04).

### *IX.5 Knowledge about collaborators, competitors and other organizations*

It is knowledge about other organizations that are active in the same sector or industry and can be potential competitors or collaborators and have an impact on the success of the NPO: “now the World Bank is also functioning as an ally. Now we are doing a [AP: food] loss measurement study” (N04). This knowledge is gathered both at the network and at local level.

### *IX.6 Knowledge of inter-organizational networks and networking*

This sub-category includes knowledge about formalized or informal networks that represent a space where domain-related knowledge freely circulates: “To share information of the global network of the banks. What is happening in the banks around the world (...). She summarizes and shares it with the banks” (M04). This knowledge is collected at the network and local level.

## **X. KNOWLEDGE ABOUT ENVIRONMENT**

Data analysis proves that situated knowledge is relevant both for single non-profit organizations and for non-profit networks since it is concerned with the environment external to the organization. Therefore, this research follows the definition of Rathi et al. (2016) that situated knowledge is contextual knowledge about the environment in which the non-profit is embedded in. All seven sub-categories defined by Rathi et al. (2016) were identified in the data and no new sub-categories of knowledge were found. Situated knowledge is mainly gathered at the national level (due to the involvement of the NSO and network president with the federal government) and could be enriched with some input at municipal level. Having situated knowledge in more structured manner would help the governing bodies of the network to take it in consideration during the strategic planning.

### *X.1 Bureaucratic directive knowledge*

This sub-category refers to knowledge about executive governmental decisions and actions resulting in policy changes that might affect the social sector and NPO: “to create laws to avoid food wasting. This is what our board is working on right now. And they have already put several initiatives in different local congresses” (N07).

### *X.2 Regulatory knowledge*

This knowledge is about regulatory and compliance requirements for NPO in specific domain: “now with this alliance with the [Name of company], they send us alerts of changes or new legislations that have something to do with hunger” (N04).

### *X.3 Political knowledge*

Political knowledge is relevant for long-term strategic planning, while changes in political climate can have implications on funding opportunities for NPOs: “I think that the most affected is the Government Projects area because they deal with the government for infrastructure and things like that” (N05).

### *X.4 Geographical knowledge*

It is knowledge about physical surroundings of the community, such as location, ecology, climate and weather conditions among others: “For example, if we collect the eggplant in the south and send it to the north - well, they do not know what to do with it. This is where you begin to educate so that they know that it is a vegetable and that they can give it different uses” (N03).

### *X.5 Economic knowledge*

This sub-category of knowledge is concerned with national and international economies, which in the long-term may have an impact on the NPO and should be considered during the planning: “What happens around is important and if it results that the minimum wage has just went up - well, “great”, but most of the people who are there are fishermen and day labourers” (N05).

### *X.6 Recorded knowledge*

It is published knowledge external to organization and its community in form of the articles, research findings, archives, and databases: “we recently made a compilation in order to encourage banks to work more with their localities. In order to tell them: “In your city you have this poverty index and you are working with the twenty distant ones [AP: communities]”. It was a little bit to inform and motivate not to fight between banks for beneficiaries when in their own cities they are not even covering 100%” (N04).

### *X.7 Current affairs*

This is knowledge about general trends that affect public perception and trends in the non-profit sector that potentially can have an impact on the network: “For me a tendency right-right now is the eating habits. All, I mean really all the companies (...), government, are trying to find programs that support this” (N08).

## CONCLUSIONS AND LIMITATIONS

Current research represents a part of the larger PhD study that develops a detailed framework for implementation of inter-organizational knowledge management (IKM) in non-profit collaborations. This paper offers knowledge taxonomy consisting of ten predefined knowledge categories that unite fifty-three knowledge types. The categories were developed based on the study conducted in the Mexican food bank network.

Knowledge taxonomy is suggested as a basis for knowledge structure both in food bank networks and in non-profit collaborations in other sectors. It can be applied for development of technological knowledge platform that would permit managing network knowledge more efficiently. A centralised platform can help addressing some of the typical problems of NPOs, such as: instability of knowledge caused by rotation of personnel (Matzkin, 2008, Huck et al., 2011, Kong, 2007, Dalkir, 2009); reinvention of existing solutions, low accessibility of data and information, inefficient communication, accumulation of administrative paper documents and deficiency of record of best practices (Lettieri et al., 2004).

The findings of the thesis should be regarded in light of its limitations. First, study relies on a single unit of analysis and might lack generalizability. Research addresses this issue by disclosing and describing in detail specifics of the investigated organization permitting other researchers to have a complete picture of the case. Second limitation of the research is the low number of interviewed network members, namely four food bank directors. Mexican food bank network is a complex organization consisting of a large number of autonomous NPOs. The network members have varying models, maturity stages, working approaches, geographical, and economic conditions among others. Therefore, in order to obtain a complete picture of IKM in investigated non-profit network it would be beneficial to investigate a larger number of network members, what was not possible as a part of this research. Third, research was conducted in Global South and the findings might not be directly applicable to the NPOs in developed countries. It should be investigated in the future research.

Extension of the framework of Rathi et al. (2016) to the network context represents an important contribution to the definition of the IKM-NPO field, since this classification allows building a better understanding of knowledge needs in non-profit sector at multiple levels.

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## CONSUMER DECISION-MAKING STYLES FOR GREY LUXURY GOODS: A STUDY ON THAILAND

**Marisa Rojanasingsawad,**

School of Business and Technology, the University of Gloucestershire;

**Daniella Ryding,**

Department of Materials, the University of Manchester;

**Liz Barnes,**

Manchester Fashion Institute, the Manchester Metropolitan University

### Abstract

*This study examines consumer decision making styles on grey luxury purchase within the Thai market; an emerging economy which contributes to the total grey market phenomena. It utilises and extends Sproles and Kendall's (1986) Consumer Style Inventory (CSI) to segment 431 Thai respondents into groups based on their luxury shopping orientations. Exploratory Factor Analysis (EFA) is used to ensure the reliability and validity of findings. The results show that there are eleven consumer decision-making styles for grey luxury purchase in Thailand. The main contribution of this study involves the application of the CSI model in the additional context of grey luxury purchase in Thailand. It can serve as a guideline for researchers who want to conduct research in other countries where the grey market takes place and share similarities in consumer culture with Thailand. Furthermore, it also highlights economic and political significance to the research community and practitioners.*

**Keywords:** *Consumers decision-making styles, Consumer Style Inventory (CSI), buying behaviour, grey market, luxury consumption, grey luxury consumption, Thailand.*

### INTRODUCTION

Grey market or parallel import refers to an unauthorized trading channel which sells genuine trademark products. It is considered to be legal as it involves the reselling of legally acquired products which makes it impossible for authorized dealers to take action against the grey sellers. Although grey market is not classified as 'illegal', Jean-Claude Biver (as cited in Koltrowitz, 2017), head of LVMH's luxury watch division, regards it as "industry's cancer" which damages the equity of authorized brands. Grey market has been witnessed globally in many industries e.g. automobile and camera but the largest grey market for luxury goods is evidenced to be situated within Asia (Chitrakorn, 2016). The reasons behind this is because Asian consumers are facing regional price discrimination as the selling price of luxury goods in Asia are around 20-30% higher than European countries. Additionally, many luxury brands try to preserve their exclusivity by only distributing limited items in Europe. Therefore, Asian consumers need the medium source or grey sellers to acquire such limited products for them.

Accordingly, the grey market is constantly growing in Asia as Asian consumers can gain full benefits from the grey market such as lower price and ability to purchase an exclusive item, which is not available for sale in Asia region.

The negative impact of the grey market growth in Asia is too damaging for luxury brands to ignore. LVMH, one of the world's leading luxury houses, comprising of multinational luxury brands such as Louis Vuitton and Christian Dior, have announced its retail restriction policy by limiting the amount of luxury products a consumer can buy to prevent grey market transactions (Robertson, 2016).

In comparison, the Kering Group, which owns top-tier luxury brands such as Balenciaga and Gucci, have tried to combat the grey market with more competitive pricing strategies (Chitrakorn, 2016). However, such strategies adopted by the leading luxury houses have not stopped the growth of the grey market in Asia, mainly as a result of consumers' familiarity with grey market opportunities through increased use of technology including social media,

which is the main marketplace for grey luxury market. While there are a few studies relating to consumer attitudes and behaviour towards the grey market (e.g. Chitrakorn, 2016; Schindler, 2016; Zhao, Zhao, and Deng, 2016), none of them research on Thai consumers. Therefore, this study seeks to expand the area of research by focusing on Thailand, given that it is an emerging Asian consumer market for luxury industry. Additionally, it witnesses constant growth in grey market trading. Thai consumers are exposed to approximately 30% more expensive luxury goods than European countries due to luxury brand pricing policy, import duty, transportation cost and other expenses (Euromonitor, 2019). For this reason, the grey luxury market is growing so well in Thailand as Pantong (2013) reports that Thai government lost around £909 million import duty to grey Mercedes Benz automobile importers alone.

The aim of this paper is to test the generalizability and validity of the original consumer styles inventory (CSI) framework (Sproles and Kendall, 1986) on a specific category product: grey luxury goods, to better understanding Thai consumer shopping characteristics. In addition, it develops three additional extended consumer decision-making style dimensions, from the current literature within this emerging market to underpin the analysis. The CSI framework has been widely used to examine consumer decision-making styles in cross-cultural studies (e.g. Cowart and Goldsmith, 2007; Neelam, and Venkatachalam, 2014; Tai, 2005). Consequently, this study will form an additional country of analysis which will further contribute to a much wider literature in the field of consumer cognitive behavioural. The outcome of this study will not only provide an understanding on Asian emerging market like Thailand but also other similar consumer cultures where the grey luxury market has emerged.

This research aims to accomplish the following objectives:

1. To examine the applicability of the CSI on a specific product category, grey luxury goods.
2. To test the validity of the CSI in terms of general population rather than focusing on student sample.
3. To validate and extend the CSI scale items to measure consumer decision-making styles for grey luxury goods in the Thai market.

## LITERATURE REVIEW

### *An Overview of Asian Luxury Consumption Behaviour*

The distinction between luxury goods and grey luxury goods is through the acquisition process. Luxury goods acquired from the grey market are genuine products, thereby potentially providing the full benefits, i.e. uniqueness, symbolic and quality, of luxury goods sold through legal trading outlets (Gardetti and Torres, 2015).

Consumer culture is an important element in determining behaviour as it accumulates shared value, attitude and belief of people in the same environment, which is the reason why people from different cultures interpret things differently (Hofsted, 1991). Many researchers established that the differences and similarities of consumer culture (e.g. Hofstede, 1991, 2001; Triandis, 1995) and luxury consumption behaviour (Wong and Ahuvia, 1998) could be explained through individualism/collectivism dimension. Individualism is described as a person who is independent of others but greatly value self-expression and uniqueness (Hofsted, 1991). On the contrary, collectivists refer to those who prefer to conform to a social group and can be easily influenced by social norm (Triandis, 1988). Previous studies (e.g. Shukla and Purani, 2012; Wong and Ahuvia, 1998) emphasised that individualist consumers are often found in Western culture while individualist are predominant in Asian culture. Westerners and Asians have completely different luxury consumption behaviour as their value on luxury consumption and ownership of luxury goods are diverse (Phau and Prendergast, 2000). As an individualist, Western consumers put great emphasis on personal factors such as uniqueness and self-concept while Asians consumers maintain their collectivism through interpersonal factors like face and social status (Chadha and Husband, 2006; Shukla and Purani, 2012).

Although the main reason for Asian luxury consumption highly involves with interpersonal effects such as social influence or conspicuous consumption (Chen and Lamberti, 2015), functional (Timperio, Tan, Fratocchi, and Pace, 2016) and individual (Siu, Kwan and Zeng, 2016) dimensions also play their parts in influencing luxury consumption behaviour among Asians. Functional attributes of luxury goods consist of usability, quality and uniqueness. Lertwannawit and Mandhachitara (2012) explain that usability refers to basic utility and aesthetic of product. Quality is often viewed as a core value of luxury (Timperio et al, 2016) while uniqueness is often attached to luxury and greatly influenced consumers to consume luxury products (Young and Combs, 2016). On the other hand, individual dimension, which has greater impact on Western consumers than Asian consumers, mainly concerns with individual's self-concept including self-identity, and hedonism.

Previous studies on Asian luxury consumption (e.g. Chen and Lamberti, 2015; Timperio et al, 2016) established that Asian consumers can be influenced to purchase luxury goods through their self-identity as they link their ideal-self with luxury brand identity. In addition, hedonic or emotional benefits also drive Asian consumers to purchase luxury goods as a way to show their accomplishment or as a personal reward, which encourages them to feel good about themselves (Liang, Ghosh and Oe, 2017).

Among Asian collectivist culture, Thailand is considered one of the most collectivist countries in Asia (Hofsted, 1991). Thai consumers are group-oriented in nature as they often live in an extended-family environment (Chadha and Husband, 2006). Accordingly, Thai society is shaped by social norm as individuals are often influenced by family and peer-group (Buriyameathagul, 2013). Social influence, including traditional and modern communications such as social media, also plays a big role in luxury consumption behaviour in Thailand because Thai consumers buy luxury goods to gain social acceptance and conform to their social group (Posakabuta, 2015). Recent research by Quach and Thaichon (2017) revealed that social media significantly effect Thais' luxury consumption behaviour because Thai consumers can actively share their luxury purchase and instantly gain social acceptance through online platform which is more convenient than the traditional 'worn and seen' method. While Ipsos (2017) asserted that Thai consumers often rely their happiness on other's perception towards themselves, for example, the number of engagements on their social media can be an indication of how good their lifestyles are. Accordingly, they prefer luxury brands that are well known and highly expressive within the society rather than their personal preference (Kim, 1997). Schutte and Ciarlante (1999) assert that social meaning of luxury goods in collectivist culture is conveyed by price, brand name and social acceptance rather than quality. Owning luxury goods is common and compulsory among Thai culture as it can be seen as social class establishment since wealth is highly valued in Thai society (McAleer and

Mao, 2017). Additionally, celebrities also have great impact on luxury consumption in Thailand as they are known to be the centre of Thai culture (Oe, Yamaoka, Liang, and Sunpakit, 2015).

#### *Consumer Decision-Making Styles*

A consumer decision-making style is defined as a cognitive characteristic of consumers when making a decision (Sproles and Kendall, 1986). It is also referred to as consumer shopping orientation (e.g. Goswami, and Khan, 2015; Tanksale, Neelam, and Venkatachalam, 2014). Both terms are used interchangeably to describe the cognitive process when consumer makes a purchase of products (Tanksale, Neelam, and Venkatachalam, 2014). Consumer decision-making style aims to understand consumers' behaviour by categorizing them into typologies based on their psychographic characteristics (Nayeem and Casidy, 2015). This process can be done by the use of psychographic inventory or a battery of statements, which is designed to capture relevant aspects of consumers' personality, buying motives, interests, attitudes, beliefs and values (Schiffman, Kanuk, and Hansen, 2008). Consumer decision-making styles are widely used among marketers as a basis of consumer segmentation because it offers an understanding of consumers' purchasing behaviour by explaining consumers' cognitive process (Knowles, and Castillo, 2011). Moreover, it helps marketers to identify the target market and develop marketing strategies by providing an understanding of individual's inner attribute to portray the needs of consumers within the same profile while illustrating the differences in consumers' decision-making style, (Schiffman, Kanuk, and Hansen, 2008).



### The Consumer Style Inventory (CSI)

The CSI model is a method of profiling consumer based on their decision-making styles which consists of eight dimensions as outlined in the Table 1 below (Sproles and Kendall, 1986):

Consumer decision-making styles factors	Interpretation
Factor1: Perfectionistic, High Quality-Conscious	A consumer who search for the very best quality in products. He/she is mainly driven by the quality.
Factor2: Brand Conscious, Price Equals Quality	A consumer who purchases products based on high-price and their well-known brands. He/she believes that price is an indication of quality.
Factor3: Novelty-fashion Conscious	A consumer who seeks new products for his/her own pleasure and excitement.
Factor4: Recreational-Hedonistic Conscious	A consumer who perceives shopping as a relaxation activity. He/she shops for personal pleasure and entertainment.
Factor5: Price Conscious	A consumer who is price-sensitive and value-for-money consciousness. He/she is comparison shopper who seeks the best value for money.
Factor6: Impulsive and Careless	A consumer who shops impulsively. He/she is an instant shopper who rarely plans their shopping.
Factor7: Confused by Over choice	A consumer who has difficulties in choosing products because he/she finds that there are too many products in the market.
Factor8: Habitual and Brand-Loyal	A consumer who repeatedly buys the products from the same brand or stores. He/she is loyal to his/her favourite brands.

Table 1. Sproles and Kendall's (1986) Consumer Decision-making Styles

Although the CSI was initially developed as a framework to measure and segment the American consumers' decision-making style for general product class (Sproles and Kendall, 1986), its usefulness as well as reliability and applicability have been tested and replicated in various studies (e.g. Nayeem, and Casidy, 2015; Tanksale, Neelam, and Venkatachalam, 2014). It can be implemented to measure consumer's decision-making style not only for general product class but specific product category such as food (Herrman and Warland, 1990) and sport apparel (Bae and Miller, 2009). Furthermore, it has been adopted to investigate consumers' shopping orientation beyond traditional shopping approach such as online shopping (Coward, and Goldsmith, 2007) and online shopping through smartphone (Eriksson, Rosenbrojier, and Fagerstrom, 2017). Additionally, it has been validated in various cultural settings such as Australia (Nayeem, and Casidy, 2015), Greece (Tarnanidis et al, 2015), and Macau (Sam, and Chatwin, 2015) and cross-cultural studies such as India versus Germany (Mehta, and Dixit, 2016).

### DEVELOPMENT OF THE CSI FRAMEWORK

For this study, the CSI model is deemed to be useful as it covers many consumer shopping characteristics which can be founded in Asian luxury consumers as discussed in section 2.1 such as Perfectionist, Brand-conscious, Novelty/fashion conscious, Recreation-Hedonistic conscious, and Habitual/brand loyal. Perfectionist, Brand conscious, and Novelty/fashion conscious are considered to be a part of luxury goods since consumers see quality, brand equity, and aesthetic design as a basic requirement of luxury goods (Chen and Lamberti, 2015; Timperio et al, 2016). Recreation-Hedonistic conscious can be found when consumer gains emotional benefits from luxury consumption (Liang, Ghosh and Oe, 2017) while Thai consumers are known to be Habitual/brand loyal as brand loyalty is positively related to their luxury purchasing intention (Lekprayura, 2012). On the other hand, Price consciousness should also be found among grey luxury consumers since price is one of the main factors that drives consumers to purchase luxury goods from the grey market (Berman and Dong, 2016). Accordingly, there is also a possibility that grey consumers will exhibit Impulsive characteristic when they found discounted or limited-edition luxury items in the grey market as Chevalier and Lu (2010) illustrated that consumers can be influenced to purchase luxury impulsively by conspicuousness and a good deal. Lastly, Thai consumers are exposed to massive source of information through social media and social reference group which makes it

confusing and harder for them to make a decision (Euromonitor, 2019).

Based on this overall finding, it conveys the CSI framework is applicable to identify consumer's decision-making styles for grey luxury goods in the Thai market. Accordingly, the following hypothesis is proposed:

H1: The CSI framework can be used to validate and represent a decision-making dimension of Thai consumers for grey luxury goods.

### Additional Decision-making Style Dimension

Although the CSI framework has a great potential in representing consumers' typologies for this research, it was initially developed for general product class which means that some important elements of luxury consumptions are neglected. Accordingly, this research further extends the usefulness of the CSI model by integrating the motivations for luxury consumption in Thailand including Conspicuous conscious, Reliance on Celebrities, and Exclusivity conscious as explained in Table 2.

Consumer decision-making styles factors	Interpretation
Factor9: Conspicuous conscious	A consumer who use of luxury products in public to display individuals' economic power and social status.
Factor10: Reliance on Celebrities	A consumer who is relied on celebrities when make a purchasing decision because he/she believes that the products used by celebrities are better than others are.
Factor11: Exclusivity conscious	A consumer who demonstrate a need for exclusivity. He/she desires rare products because it is unique and different from others.

Table 2. Extended Consumer Decision-making Styles

It could be assumed that Conspicuous consumption has a significant impact on the decision-making process for Thai consumers as many researchers (e.g. Buriyameathagul, 2013; Chen and Lamberti, 2015) regard it as a key factor for luxury consumption among Asians including Thais. Thai consumers mainly consume luxury for social functions to gain acceptance and conform to social group (Posakabuta, 2015). Furthermore, celebrities are found to play a key role towards purchasing decision within Thai culture (Euromonitor, 2019). As previous research (Oe et al 2015) exhibits that Thais' luxury consumption behaviour is greatly influenced by celebrities as they see celebrities as a trendsetter. Due to its exclusive characteristic, luxury products usually involve with exclusivity. It can be said that exclusivity is an expected feature of luxury products because it is not accessible for everyone (Young and Combs, 2016). As an emerging market, luxury ranges in Thailand are very limited and exclusive comparing to the mature market like the UK, USA and Japan. Accordingly, grey market is the place that allows luxury consumers to acquire limited products in Thailand.

Based on these arguments, the following dimensions are formed and the hypotheses are proposed:

H2: Conspicuous conscious characteristic represents a decision-making dimension of Thai consumers for grey luxury goods.

H3: Reliance on Celebrities characteristic represents a decision-making dimension of Thai consumers for grey luxury goods.

H4: Exclusivity conscious characteristic represents a decision-making dimension of Thai consumers for grey luxury goods.

## METHODOLOGY

### Sample

The focus took a general population sample with specified characteristics, which is, Thai consumers who have purchased luxury products from the grey market within the past 12 months. This is to ensure that their responses can truly reflect the decision-making style on grey luxury goods, which is the objective of the study. The questionnaire was constructed in English and was translated into Thai and translated back into English again. This is to reduce bias from the language barrier and achieve a better translation equivalent (Mullen, 1995). The self-administered survey questionnaires were distributed to the respondents by the grey market stores across Thailand. The 478 questionnaires were completed and returned but 47 cases (8.83% of total case) were excluded because the respondents failed to meet the predetermined criteria for the sample. Therefore, 431 responses were carried forward for further analysis. Table 3 outlines the demographic characteristics of the respondents of this research.

	Frequency	Percent
<b>Gender</b>		
Female	334	77.5
Male	97	22.5
Total	431	100
<b>Age</b>		
Under 18 years old	6	1.4
18-25 years old	86	20.0
26-35 years old	209	48.5
36-45 years old	96	22.3
Over 45 years old	34	7.9
Total	431	100.0
<b>Education</b>		
Primary	2	0.5
Secondary	15	3.5
Undergraduate	253	58.7
Postgraduate and above	161	37.3
Total	431	100.0
<b>Occupation</b>		
Accountant	6	1.4
Executive/ Managerial	101	23.4
Government official	6	1.4
Housewife	12	2.8
Junior Supervisor	61	14.2
Professional (doctor, lawyer, etc.)	51	11.9
Self-employed/ Own Company	94	21.8
Student	26	6.0
Supervisor	57	13.2
Trader	3	.7
Unemployed/Retired	14	3.2
Total	431	100.0
<b>Income (1 THB≈£0.02)</b>		
Less than 10,000 Baht	14	3.2
10,001-20,000 Baht	27	6.3
20,001-30,000 Baht	62	14.4
30,001-40,000 Baht	99	23.0
40,001-50,000 Baht	102	23.7
More than 50,001 Baht	127	29.4
Total	431	100.0

Table 3. Demographic characteristics of respondents (N = 431)

## Measures

The questionnaire was developed to collect participants' demographic as well as their cognitive characteristics since consumers' internal attributes (such as psychographic profile) and external attributes (demographic characteristics) are best to be treated together for a comprehensive segmentation (Hoyer and Macinnis, 2008). The demographic characteristic measurements included gender, age, education, occupation, and income. The initial cognitive characteristic measurements consisted of 40 item statements from the CSI model developed by Sproles and Kendall (1986) and 35 item statements from previous luxury consumption studies to cover three extended dimensions for grey luxury consumption, which had been tested and shown a satisfactory degree of reliability, by Bian, and Forsythe (2012), Hung, et al. (2011), Lertwannawit, and Mandhachitara (2012), Sonwalker, Kapse, and Pathalk (2011), and Zhan, and He (2011). Each item statement was rated on the 5-point Likert scale (1=strongly disagree and 5=strongly). The name of the subscale measurement, the number of items, and sample item for each subscale are shown in Table 4.

Subscale	No. of items	Example
Perfectionist, high quality conscious	8	Getting very good quality is very important to me.
Brand conscious	6	The well-known national brands are best for me.
Novelty/fashion conscious	6	I keep my wardrobe up-to-date with the changing fashions.
Recreation-hedonistic conscious	4	Going shopping is one of the enjoyable activities of my life.
Price conscious	3	The lower price products are usually my choice.
Impulsive, careless	5	I should plan my shopping more carefully than I do.
Confused by over-choice	4	There are so many brands to choose from that often I feel confused.
Habitual/brand loyal	4	I have favourite brands I buy repeatedly.
Conspicuous conscious	18	This luxury brand is a symbol of social status.
Reliance on Celebrities	13	I have bought products under the influence of celebrity.
Exclusivity conscious	4	I often try to avoid products or brands that I know are bought by the general population.

Table 4. Subscale measurement: items per scale with sample items.

A total of 75 scale items, which are derived from the CSI model and previously five mentioned studies, were used as the measurement variables in a pilot study. In consistent with previous research on consumer's decision-making styles (e.g. Nayeem, and Casidy, 2015; Sproles and Kendall, 1986), the principle component method for factor extraction and Varimax rotation for factor analysis were used to analyse validity of factor solution. The result revealed that 75 item statements are valid and applicable to be adopted in the Thai context. On the other hand, the Cronbach's Alpha test confirmed the scale reliability within each subscale indicating that the measurement items can be used to measure dimensions of consumers' decision-making styles for grey luxury goods. Although the first pilot study provided satisfactory results, the respondents' feedbacks highlighted some issues that could be improved: 1. the length of questionnaire is too long; 2. some statements are too similar; 3. some statements are difficult to understand. Accordingly, the questionnaire was revised to

address the issues. Firstly, the number of item statements were reduced with a consideration of number of indicative variables to latent variables, and selection of words and sentence construction to ensure that the questionnaire is comprehensive to measure consumers' decision-making styles for grey luxury goods. As shown in Table 4, the number of item statements for each dimension is uneven, ranging from three to eighteen scale items. Newsom (2015) emphasis that the inequality in number of item statements for each dimension can lead to the importance bias in each dimension as it creates unequal weight of indicators. Therefore, the researcher allocated an equal number of four measurement variables to each dimension not only to reduce the level of potential bias but also to make the length of the questionnaire more practical. For dimensions with more than four measurement variables, the researcher minimized statements that are very similar and overlap in meaning to reduce the number of variables without jeopardizing the measurement. The priority was given to earlier

measurement variables while the later variables were cut down because the first few factors are better to explain the latent variable compared to the later variables (Sproles and Kendall, 1986). However, the Price conscious is the only dimension that contains less than four measurement variables, consequently, the supplement measurement item is added from Zhan and He's study (2011) to overcome the potential bias. The final of 44 measurement variables were randomly listed, to minimize the ordering effect, and sent to the same pilot sample group to test the reliability and validity. The results and feedbacks were consistent and better than the first pilot questionnaire.

**DATA ANALYSIS AND FINDINGS**

*Exploratory Factor Analysis*

An Exploratory Factor Analysis (EFA) was performed on 44 measurement items to categorize consumers' decision-making styles for grey luxury goods in the Thai market. The factors were extracted through the Principal Component method with Varimax Rotation. The Eigenvalue of 1 is used as criteria to indicate number of factors while the factor loading

cut-off point is 0.4, which is consistent with previous studies on decision-making styles (Hafstrom, Chae, and Chung, 1992; Sproles and Kendall, 1986). The EFA confirmed eleven-factor solutions: Perfectionist, Brand Conscious, Fashion Conscious, Hedonic, Price Conscious, Impulsive, Confused by Overchoice, Brand Loyal, Conspicuous Conscious, Reliance on Celebrities and Exclusivity Conscious, which explain 64.47% of the variance in the correlation matrix. Each of eleven dimensions exhibited Eigenvalues more than 1 while factor loadings were above 0.4, as shown in Table 4, which confirmed construct validity (Sproles and Kendall, 1986). Accordingly, the following hypotheses were accepted:

H1: The CSI framework can be used to validate and represent a decision-making dimension of Thai consumers for grey luxury goods.

H2: Conspicuous conscious characteristic represents a decision-making dimension of Thai consumers for grey luxury goods.

H3: Reliance on Celebrities characteristic represents a decision-making dimension of Thai consumers for grey luxury goods.

H4: Exclusivity conscious characteristic represents a decision-making dimension of Thai consumers for grey luxury goods.

Decision-making Styles Dimensions and Measurement Variables	Factor Loading
<p><b>Factor1-Perfectionist Dimension</b>                      In general, I usually try to buy the best overall quality.                      Getting very good quality is very important to me.                      I make special effort to choose the very best quality products.                      My standards and expectations for products I buy are very high</p>	<p>0.873                      0.866                      0.841                      0.833</p>
<p><b>Factor2-Brand Conscious Dimension</b>                      The most advertised brands are usually very good choices.                      I prefer buying the best-selling brands.                      The well-known national brands are best for me.                      The higher the price of a product, the better its quality.</p>	<p>0.799                      0.770                      0.758                      0.700</p>
<p><b>Factor3-Fashion Conscious Dimension</b>                      Fashionable, attractive styling is very important to me.                      To get variety, I shop different stores and choose different brands.                      It's fun to buy something new and exciting.                      I keep my wardrobe up-to-date with the changing fashions.</p>	<p>0.772                      0.748                      0.713                      0.691</p>
<p><b>Factor4-Hedonistic</b>                      Shopping the stores wastes my time.                      I enjoy shopping just for the fun of it.                      Going shopping is one of the enjoyable activities of my life.                      I make my shopping trips fast.</p>	<p>0.789                      0.743                      0.718                      0.664</p>

Decision-making Styles Dimensions and Measurement Variables	Factor Loading
<b>Factor5-Price Conscious</b> I look carefully to find the best value for the money. I am very concerned about low prices, but I am equally concerned about overall product utility. The lower price products are usually my choice. I buy as much as possible at sale prices.	0.797 0.772 0.709 0.699
<b>Factor6-Impulsive</b> I carefully watch how much I spend. I am impulsive when purchasing. I should plan my shopping more carefully than I do. Often I make careless purchases I later wish I had not.	0.890 0.873 0.842 0.840
<b>Factor7-Confused by Over choice</b> All the information I get on difference products confuses me. The more I learn about products, the harder it seems to choose the best. Sometimes it's hard to choose which stores to shop. There are so many brands to choose from that often I feel confused.	0.809 0.773 0.729 0.703
<b>Factor8-Brand Loyal</b> Once I find a product or brand I like, I stick with it. I have favourite brands I buy repeatedly. I go to the same stores each time I shop. I change brands I buy regularly.	0.789 0.785 0.699 0.694
<b>Factor9-Conspicuous Conscious</b> This luxury brand is a symbol of social status. I like to be seen wearing this luxury brand. This luxury brand helps me fit into important social situations. If other people can see me using a product, I often purchase the brand they expect me to buy.	0.794 0.789 0.738 0.684
<b>Factor10-Reliance on Celebrities</b> I feel that celebrities initiate an action to buy that product. I have bought products under the influence of celebrity. I pay more attention to the advertisements using celebrity icon. I will buy the product if the celebrity I like start endorsing it.	0.809 0.745 0.733 0.656
<b>Factor11-Exclusivity Conscious</b> Products do not seem to hold much value for me when they are purchased regularly by everyone. I often try to avoid products or brands that I know are bought by the general population. When a product I own becomes popular among the general population, I begin to use it less. I am often on the lookout for new products or brands that will add to my personal uniqueness.	0.834 0.815 0.690 0.629

Table 5. Exploratory Factor Analysis

### Reliability Analysis

The Cronbach's alpha is used to measure the reliability coefficient within each factor, in which, the acceptable factor would result in at least 0.7 (Nunnally, 1987). The analysis showed that all eleven decision-making style exhibit satisfactory level of the internal consistency ranging between 0.746 to 0.896, which indicated that they are reliable to represent Thai consumers' decision-making styles for grey luxury goods. Table 6 summarized the internal reliability of each decision-making style in descending order.

Decision-making Style Dimensions	Cronbach's Alpha	N of Items
Impulsive	0.896	4
Perfectionist	0.884	4
Fashion Conscious	0.801	4
Reliance on Celebrities	0.798	4
Conspicuous Conscious	0.766	4
Exclusivity Conscious	0.766	4
Brand Conscious	0.765	4
Brand Loyal	0.765	4
Hedonistic	0.762	4
Confused by Over choice	0.752	4
Price Conscious	0.746	4

Table 6. Reliability Analysis

### Analysis of Thai Consumers' Decision-Making Styles for Grey Luxury Goods

This study further analysed the confirmed eleven decision-making styles to identify their level of significances on representing Thai consumers' shopping characteristic when they purchase luxury goods from the grey market. Mean value comparisons can portray the significant of characteristics that was expressed by consumers. A greater mean score implies a higher expression of the characteristic while a lower mean score implies a lower expression (1=Strongly Disagree, 5=Strongly Agree). Mean score of each dimension is descently summarized in Table 7.

Consumers' Decision-Making Styles Dimension	N	Mean	Standard Deviation
Price Conscious	431	3.8817	0.55972
Perfectionist	431	3.5621	1.05105
Exclusivity Conscious	431	3.4629	0.82021
Conspicuous Conscious	431	3.4594	0.83914
Reliance on Celebrities	431	3.3823	0.97448
Fashion Conscious	431	3.2529	0.89434
Brand Loyal	431	3.2355	0.76245
Brand Conscious	431	3.2117	0.80694
Hedonistic	431	3.1729	0.84787
Confused by Over choice	431	2.9049	0.73962
Impulsive	431	2.8852	0.88487

Table 7. Statistical Analysis of Consumers' Decision-Making Styles Dimensions

## DISCUSSION AND CONCLUSION

The study aims to investigate the acceptability of the CSI for grey luxury goods, given its substantial growth within an emerging Thai market. The findings established that Sproles and Kendall's (1986) eight decision-making styles dimensions: Perfectionist, Brand Conscious, Novelty-fashion Conscious, Recreational-Hedonistic Conscious, Price Conscious, Impulsive and Careless, Confused by Over choice, Habitual and Brand Loyal were found in consumers when they are making purchasing decision for luxury goods in the Thai grey market. The results were consistent with previous studies on Asian consumers' decision-making styles that these shopping characteristics can be found in Asian consumers (e.g. Haron, and Chinedu, 2018; Hafstrom et al, 1992).

Price conscious dimension is the strongest shopping characteristic with the highest mean score of 3.8817, which indicates that Thai consumers rely heavily on price when they purchase luxury goods from the grey market. This outcome is in line with previous study by Berman and Dong (2016) which exhibited that a cheaper price is one of the main reasons that drives consumers to purchase from the grey market. Additionally, Price conscious was confirmed in other Asian consumer studies (e.g. Mokhlis, 2009; Tzeng and Wong, 2016) which suggest that many Asian consumers are price-sensitive in general. Moreover, quality of luxury products is also highly concerned by Thai consumers with mean score of 3.5621 while other research (e.g. Hafstrom et al, 1992; Haron, and Chinedu, 2018) illustrated that Asian consumers usually take quality of product into their considerations not only for expensive products but also general product. Brand conscious dimension is exhibited by Thai consumers when they purchase luxury goods from the grey market. This outcome is quite sensible as brand conscious dimension is highly related to the brand's equity, which is one of the main strengths of luxury brands. Previous researchers (e.g. Prakash, Singh, and Yadav, 2018; Tzeng and Wong, 2016) also support that most Asian consumers are Brand conscious in nature as they tend to perceive that the well-known brands are more promising than the less-known brands.

Thai consumers also perceive shopping for luxury goods from the grey market as a pleasurable activity as they pose Recreational-hedonistic conscious dimensions. Apart from price, the grey luxury market in Thailand provides other benefits to its buyers such as convenience since most of the transactions are taken places through the internet. Yang and Wu (2007) argued that online shopping is not considered a pleasant activity because consumers had already thought through their purchase before making decision. However, it is important to acknowledge that Recreational-hedonistic conscious dimension was not the only dimension excluded from Yang and

Wu (2007)'s study on Taiwanese consumers' decision-making styles. Price conscious was also absence from Taiwanese consumers, which is totally contradicted with the findings of this study that Price conscious is the most exhibited shopping characteristic. On the contrary, this study illustrated that online shopping is a meditating factor that allows consumers to be more Price conscious as they can make a price comparison before they make a purchase. Additionally, Recreational-hedonistic conscious dimensions were also confirmed in recent research on Indian (Prakash, Singh, and Yadav, 2018), and Malaysian (Haron, and Chinedu, 2018) consumers' decision-making styles along with Price conscious dimension.

Novelty-Fashion Conscious dimension is unsurprisingly found in this luxury consumption research as luxury brands highly influence the fashion trends (Lertwannawit and Mandhachitara, 2012) not only in the view of Thai consumers but also Chinese (Siu et al, 2001; Tzeng and Wong, 2016), Malaysian (Haron, and Chinedu, 2018), and Taiwanese (Yang and Wu, 2007), consumers. However, Hafstrom et al (1992) suggested that there might be a connection between Fashion conscious and Brand conscious dimensions as many of Fashion-conscious measurement items are loaded in Brand conscious dimension. In Hafstrom et al's (1992) study, Fashion conscious characteristic could not be found in Korean consumers as they developed new consumer decision-making style which is called 'Time-Energy Conserving' dimension by integrating Brand conscious and Habitual Brand-Loyal dimensions together. On the other hand, brand loyalty is another characteristic expressed by Thai consumers when they purchase luxury goods from the grey market. Previous researchers (Haron, and Chinedu, 2018) supported that brand loyalty (Habitual and Brand-loyal) can be enhanced through strong brand equity (Brand conscious). Additionally, Asian consumers are known to be more loyal to the brand than consumers in the individualist Western culture as Habitual and Brand-Loyal dimension is confirmed in many Asian consumers research such as Korean (Hafstrom et al, 1992), Chinese (Siu et al, 2001; Tzeng and Wong, 2016), Taiwanese (Yang and Wu, 2007).

On the contrary, the outcome illustrated that Thai consumers are less likely to be confused by the information they received when they purchase luxury goods from the grey market. This can be because Thai consumers search for information cautiously to make a logical purchase as Tsai, Yang, and Liu (2013) explained that various choices of products and sources of information could be beneficial rather than confusion. Impulsive and careless dimension also received the similar response with the least mean score of 2.8852, which indicating that Impulsive and careless is the least expressed decision-making characteristic among



Thai consumers when they purchase luxury goods from the grey market. Although impulse purchase of luxury goods mainly involves with price (Chevalier and Lu, 2010), buying luxury from the grey market requires information search before the purchasing decision is made. For example, the buyer might need to assess the reputation of the grey sellers and authenticity of the products to make sure that the transaction will go smoothly. Accordingly, it is rare for the consumers to impulsively buy luxury goods from the grey market. In addition, it is uncommon for online shopping transaction to be an impulse purchase because consumers might need to search and process the information, and possibly price comparison, before making a final decision (Haron, and Chinedu, 2018).

In addition, the three extended dimensions: Exclusivity conscious, Conspicuous conscious, and Reliance on Celebrities were also confirmed in this study. The results indicated that Exclusivity conscious, Conspicuous conscious, and Reliance on Celebrities are very significant in identifying Thai consumers shopping characteristics as they are consecutively ranked as the third, fourth and fifth most relevant decision-making style for grey luxury goods. The research outcome illustrated that Thai consumers' need for uniqueness has driven them to purchase from the grey market, as luxury range offerings in Thailand are limited unlike the luxury stores in the developed market such as the UK or USA. Additionally, it has also highlighted the importance of social influence among Thais as they widely express a significant level of conspicuous conscious, which suggested that Thai consumers highly concern with social benefits such as conformity with social group and social status when they purchase luxury fashion goods from the grey market. Furthermore, it reconfirmed that celebrities had an impact on their process of making purchasing decision. However, previous researchers (Chadha and Husband, 2006) suggested that there is a connection between the influence of celebrities and influence of mass media because celebrities are a part of mass media, which has a great impact on Thai consumers.

In sum, this study aimed to examine the applicability of the CSI model on grey luxury goods in Thailand. It extended the validity and usefulness of the CSI model to Thai consumers and exhibited that Sproule and Kendall (1986)'s eight original decision-making styles can be used to categorize Thai consumers based on their grey luxury shopping behaviour. Additionally, it highlighted the similarities of consumers' decision-making styles with other Asian consumer studies, which emphasize that Asian consumers share some level of value and belief in their cultures. Furthermore, the three additional consumer decision-making styles were proven to be valid to be used on grey luxury goods, which is a growing

industry in Thailand. These findings can be valuable for the Thai government to improve Thai economic as it highlights the key factors, Price, that influence consumers to purchase luxury fashion goods from the grey market, which has an impact on the import revenue of Thailand. The Thai government should act against the grey luxury market by reducing import tax for the luxury product segment to reduce gap in selling price between the grey market and the authorized seller and prevent lost on import revenue to the grey sellers. Furthermore, the Thai government should encourage the grey consumers and grey sellers to be more socially responsible as that the grey market is an unethical business as it creates harmful effects to others in the society such as the authorized dealers.

#### LIMITATIONS AND FUTURE RESEARCH RECOMMENDATIONS

This study had some limitations that could be deemed as guidelines for future research. First, the generalizability of the findings would be limited to grey luxury consumers as the samples of this study were Thais who purchased luxury fashion goods from the grey market within the past 12 months as they can portray an understanding about the grey market or grey luxury shopping. However, the validation of measurement items is more important in replication research (Nayeem and Casidy, 2015) like this study. Accordingly, it is recommended for the future research to replicate this study using samples from other cultures with high growth in the grey luxury market such as China. Although the findings from this study are not generalizable, the measurement instruments were developed from a review of literatures on Asian luxury consumption and the CSI model, which is widely replicated in cross-cultural contexts. The measurement model should be applicable to different consumer cultures, especially Asians.

Furthermore, this research only focused on a specific product category, the grey luxury goods, so it might not be applicable to other product category. However, the measurement scales of this study are relevant to luxury goods to some extent as benefits and motivations for luxury consumption from the grey market are quite similar to luxury consumption from the authorized dealers. Accordingly, future research may replicate this study on luxury goods or other luxury segments

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## SUSTAINABILITY BONDS AND GREEN BONDS WITHIN THE RETAIL SECTOR

**Peter Jones**

School of Business and Technology at the University of Gloucestershire;

**Daphne Comfort**

School of Business and Technology at the University of Gloucestershire;

### **Abstract**

*Green investment in the retail sector of the economy has received limited attention in the academic literature but some large retailers are taking a growing interest in Sustainability Bonds and Green Bonds. This short exploratory paper outlines some of the characteristics of green investments, as illustrated by Sustainability Bonds and Green Bonds, provides four cameo case studies of the Sustainability Bonds and Green Bonds issued by a small number of large retailers and offers some reflections on such bond issues within the retail sector of the economy. The authors conclude that such green investments face a number of challenges, including concerns about greenwashing and independent assurance and about the tensions between sustainability and continuing growth.*

**Keywords:** *Corporate Environmental Sustainability; Retailing; Green Investment; Sustainability Bonds; Green Bonds; Greenwashing; Assurance*

### **INTRODUCTION**

In their review of corporate environmental sustainability (CES) in the retail sector of the economy, Naidoo and Gasparatos (2018) identified several ways to engage stakeholders in CES activities, including the introduction of green marketing strategies, eco-labelling, employee development activities, and green investments. At the same time, Naidoo and Gasparatos (2018) claimed 'there is a lack of literature on stakeholder engagement initiatives for CES strategies in the retail sector, especially regarding customer-focuses sustainability strategies.' While some work has been published on green marketing strategies (e.g. Ko, E. et. al. 2012), eco-labelling (e.g. Chkanikova and Lehner 2013) and employee development activities (Elg and Hulman 2016), green investments in retailing have received no attention in the literature. Nevertheless, in June 2019, Steiner (2019) claimed 'retail and telecoms' were 'the new industries driving a record boom in green bonds.' With these thoughts in mind, this short exploratory paper outlines some of the characteristics of green investments, as illustrated by Sustainability Bonds and Green Bonds, provides four cameo case studies of the Sustainability Bonds and Green Bonds issued by a small number of large retailers and offers some reflections on such bond issues with the retail sector of the economy.

### **GREEN INVESTMENTS: GREEN BONDS, SOCIAL BONDS AND SUSTAINABILITY BONDS**

While there is no universally agreed definition of green investment, the term is generally taken to refer to allocating capital towards projects whose purpose is to benefit the environment. The commitment to green investments is rooted in the belief that 'the transition to a sustainable and green economy requires scaling up financing of investments through projects that provide environmental and social benefits' (Sustainalytics 2019a). Green Bonds and Sustainable Bonds, along with Social Bonds, are increasingly seen to have an important role to play in attracting capital to such projects. In simple terms, Green Bonds facilitate the raising of capital for new and existing projects with environmental benefits, while Social Bonds raise funds for new and existing projects with social outcomes and Sustainability Bonds are used to finance projects with a mix of both environmental and social benefits.

More specifically, 'the cornerstone of a Green Bond is the utilisation of the proceeds of the bond for Green Projects', while 'all designated Green Projects should provide clear environmental benefits, which will be assessed and, where feasible, quantified by the issuer' (International Capital Markets Association 2018). For the United Nations Development

Programme (2019), 'Green Bonds can mobilize resources from domestic and international capital markets for climate change adaptation, renewables and other environment-friendly projects.' NASDAQ (2019) suggests that 'international standards define sustainable bonds as loans used to finance projects that bring clear environmental and social-economic benefits' and that 'Sustainable Bonds are designed to help investors looking to finance a better tomorrow.'

The origins of Green Bonds are traced back to 2007 when the European Investment Bank issued a 600 million Euros Climate Awareness Bond and since then this market has grown rapidly with estimates of its size in 2018 ranging from US \$175,000 million (Environmental Finance 2019), to US \$ 250,000 million (International Finance Corporation 2019). Sustainability Bonds have emerged more recently and have attracted more limited attention and here the market was estimated at US \$ 18,000 million in 2018 (Environmental Finance 2019). In 2018 corporations and financial institutions each issued c.30% of all Green Bonds, with the remainder being issued by agencies, municipalities, sovereign states and supranational organisations but the issue of Sustainability Bonds was dominated by municipalities (36%) and financial institutions (35%) with corporate issues accounting for just below 6% (Environmental Finance 2019). Geographically, the issuance of Green Bonds and Sustainable Bonds varies from year to year, but the market is currently concentrated in the, Western Europe and China.

A number of studies have focussed on the role of Green Bonds in generating environmental benefits. Shishlov, Morel and Cochran (2016), for example, explored the current and potential contribution of Green Bonds to a low carbon transition. The authors found that while the Green Bond market unlocked a number of benefits, notably helping investors to implement their long term climate strategies and helping bond issuers communicate their sustainability strategies, they argued that the Green Bond market's 'tangible contribution to the low-carbon transition has so far been limited' (Shishlov, Morel and Cochran 2016). At the same time Shishlov, Morel and Cochran (2016) also argued that 'the green bond market does not appear to directly stimulate a net increase in green investment.' More generally, Shishlov, Morel and Cochran (2016) emphasised the 'need to strengthen the green bond market by aligning it with long-term sustainable development priorities and unlocking its full potential to deliver environmental benefits.'

Flammer (2018) reported that corporate Green Bonds had become more prevalent over time, 'particularly in industries where the natural environment is financially material.' Further, Flammer (2018) claimed that Green Bonds yielded a range of benefits

including increases in ownership by long term and green investors, improvements in long-term value and operating performance, and increases in green innovations. Overall, Flammer (2018) argued that 'green bonds are effective - companies invest the proceeds in projects that improve the company's environmental footprint and contribute to long-term value creation and help attract an investor clientele that is sensitive to the environment.' More specifically Tang and Zhang (2018) reported that stock liquidity improves on the issuance of Green Bonds and that a firm's issuance of Green Bonds is beneficial to existing shareholders.

More critically, Berensmann et al. (2016) ask how realistic are the assessments of Green Bonds in contributing to the financing of sustainable development. In looking to answer this question, Berensmann et al. (2016), suggested that Green Bonds face a number of challenges, including 'deficiencies of the governance framework for the green market', the significant costs associated with labelling a bond green' and 'the weakly developed pipeline for green projects in which the proceeds from the bonds could be invested.' At the same time, Weber and Saravade (2019) warned 'as more issuers and investors enter the green bond market each year, greater accountability and transparency is needed' and recommended that 'international and domestic regulators engage in supervising the environmental performance of green financial products.'

## CAMEO CASE STUDIES

Although many of the world's major retailers have publicly reported on their commitment to sustainable development (e.g. Jones, Hillier and Comfort 2011) the issuance of Green Bonds and Sustainability Bonds is still at an embryonic stage within the retail sector of the economy. However, a small number of large retailers, including Ahold Delhaize, NorgesGruppen, the Co-op and Sainsbury's, are taking a growing interest in Sustainability Bonds and Green Bonds. Ahold Delhaize is one of the world's largest food retail groups, and it trades from 6,500 stores in eight European countries as well as in the US and Indonesia. The Co-op is a UK consumer cooperative and its food retailing business operates out of over 2,600 stores throughout the UK. Sainsbury's trades from over 600 supermarkets and some 800 convenience stores throughout the UK and owns the Argos and Habitat retail brands. NorgesGruppen is the largest player in Norwegian grocery retail market and trades from some 1, 800 grocery stores and over 900 convenience good stores. Cameo case studies of the Sustainability and Green Bonds issued by these four retailers provides an insight into how retailers are developing their green investment portfolios.

Ahold Delhaize issued its first Sustainability Bond in June 2019, amounting to 600 million Euros, with a term of six years. The proceeds from this bond are to be used to finance the company's new or existing environmentally friendly projects and community initiatives and the company emphasise 'our Sustainability Bond will only support projects that go beyond business as usual' (Ahold Delhaize 2019). More specifically, Ahold Delhaize have identified three categories of projects deemed eligible for Sustainability Bond support, namely; the procurement of sustainably sourced products; climate impacts, including carbon emissions and food waste; and the promotion of healthier eating. At the same time, Ahold Delhaize anticipated that its Sustainability Bond will also support the United Nations (UN) Sustainable Development Goals (SDGs), and has mapped the alignment of several of the SDGs to the three categories of projects outlined above.

In addressing the procurement of sustainably produced products, for example, Ahold Delhaize, listed the procurement of third party certified tea, coffee, cocoa and seafood as well as expenditure related to the installation of rooftop farms on stores that grow vegetables on site and provide educational programmes for schools, to SDGs 2 (Zero Hunger), 3 (Good Health and Well-being), 8 (Decent Work and Economic Growth), 13 (Climate Action), 14 (Life Below Water), and 15 (Life on Land). The company's focus on promoting healthier eating includes initiatives to improve the nutritional quality of its food products by reducing salt, sugar and fat levels and increasing fibre content and here the alignment is to SDG's 2 and 3.

Ahold Delhaize have established a Sustainability Bond Committee to oversee the implementation of the allocation and selection process. This committee has also established an internal tracking system to monitor and account for the allocation of proceeds of the Sustainability Bond and in cases where a project no longer meets the eligibility criteria, then the funds will be reallocated to other green or social projects. The company have committed to publishing annual updates to investors on its website and this reporting process will include a number of Key Performance Indicators (KPIs). These KPI's include the percentage of sales from sustainably sourced own-brand certified tea, coffee, cocoa and seafood; the reduced/avoided annual greenhouse gas emissions and annual energy savings associated with energy efficiency projects; and reductions in plastic use associated with the company's New Plastic Economy Global Commitment.

NorgesGruppen issued a Green Bond, amounting to US \$ 46 million in February 2019, which is set to mature in February 2024. The proceeds from the Green Bond are to be used exclusively to finance

and refinance projects and assets in Norway with the aim of supporting sustainable development and the transition to a low carbon economy. More specifically, the proceeds will fund projects, which look to reduce greenhouse gas emissions, including investments in low carbon, clean technology, and environmentally sound solutions. Projects which look to contribute to adaptation to climate change by improving resilience to expected changes in the microclimate, the local environment and ecosystems will also be eligible for support.

The NorgesGruppen Green Bond Framework (2019) argued 'sustainability is good business', that 'our sustainability work is an integrated part of our business' and that 'our ambition is to be sustainable and to become a climate-neutral business.' The framework specifies three categories of project that will be eligible for funding, namely; clean transportation; green buildings; and renewable energy. At the same time NorgesGruppen emphasise that the proceeds from Green Bonds will not be allocated or linked to energy generation from fossil fuels, nuclear energy generation, weapons and defence research and development, potentially environmentally damaging natural resource extraction and gambling or tobacco. More generally, the Green Bond Framework targets three of the SDG's namely SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities and Communities) and SDG 13.

In addressing the selection process for Green Bond funding NorgesGruppen emphasised that projects must comply with the company's sustainability and purchasing policies as well as with local laws and regulations. Responsibility for final approval of eligible projects rests with the company's Business Council, which is made up of members of the company's senior management and includes sustainability expertise. NorgesGruppen has committed to annual reporting on its Green Bonds and reports are to include details of both use of proceeds and impacts, and the company will look to provide estimates for future performance levels for the projects awaiting implementation. More specifically NorgesGruppen emphasise energy production/ energy savings and greenhouse gas reductions as the most relevant metrics for most projects.

The Co-op established its Sustainability Bond Framework in November 2018 and issued its first Sustainability Bond, in May 2019. This five year bond, raised £300 million, and the proceeds are to be allocated exclusively to the Co-op's work in supporting and promoting Fairtrade. The focus is to be on bringing Fairtrade products to customers, marketing and promoting Fairtrade products and the wider Fairtrade movement, and supporting Fairtrade producers and their communities. The bond is also

designed to meet the UN SDG's and to contribute to the Co-op's major environmental and sustainability targets.

The Co-op's Sustainability Bond Framework, which looks to reflect the ways in which the Co-op looks to deliver environmental, and social benefits for members, communities and wider society, includes four core components which cover the use of proceeds; the process for project evaluation and selection; the management of proceeds; and reporting. In addressing the use of proceeds, the general focus is on 'socio-economic advancement and empowerment', 'environmentally sustainable management of natural resources and land use' and 'renewable energy and energy efficiency' (Co-op 2018). All projects for potential funding via the Sustainability Bond are evaluated and selected by a core project team, which, in turn, makes recommendations to the Co-op's Ethics and Sustainability Management Forum. In addition to meeting the Co-op's strategic sustainability objectives, all projects must also comply with official national and international environmental and social standards and local laws and regulations.

The reporting process is to be conducted in line with the Co-op's general annual reporting cycle. Reports will cover both the allocation of proceeds to chosen projects, and wherever feasible, the impact of these projects. Here allocation reporting will include the total amount of investments and expenditures of selected projects; the amount or percentage of new and existing projects; and the balance of unallocated proceeds. Where feasible the Co-op plans to report on the environmental and social impacts of projects via the existing sustainability reporting process. The Sustainability Bond Framework specifies a list of potential indicators and suggests that qualitative narratives and case study reports may supplement these indicators. Any material changes, such as modifications to the Sustainability Bond Framework, will also be included in the reporting process.

In July 2014, Sainsbury's announced that it had agreed a £200 million 'Green Loan' and in so doing, the company noted that while Green Bonds had become increasingly issued by institutions to support environmental and sustainable initiatives, it was the first time that commercial loan had been structured to achieve the same ends. The structure of this loan is consistent with Green Bond Principles. The proceeds of the loan can be used to support four types of project namely: renewable energy; energy efficiency; water use management; and carbon reduction. Energy efficiency projects, for example, can include building energy efficiency, transportation energy efficiency and power management. Eligible projects for power management might include the design, purchase or installation of equipment and services,

which enhance the efficiency of operation of the electrical power network. In a similar vein, eligible water use management projects might include the development, purchase or installation of new, or repairing existing, water and sanitation systems.

Sainsbury's have both an internal and an external reporting process on the Green Loan. Internally, the company's project team produce reports on a four-weekly basis, which outline both the expenditure commitments and the absolute reductions in carbon dioxide emissions associated with funded projects, on a store by store basis. All these reports are signed off by a senior finance executive. Externally, the company's project team produce an annual public report, which outlines both the expenditure commitments to funded projects and the absolute carbon dioxide reductions associated with funded projects, on an aggregate company basis. Sainsbury's claimed that this public report would be reviewed and endorsed by an external assurance provider.

In 2018-2019 Sainsbury's (2019) reported that 'the vast majority of the investment has been focussed on aerofoil technology' and that 'the full year effect of this work saves over 17.5 million kWh, which is equivalent to the annual electricity use of 9 mid-sized supermarkets.' More generally, the annual Green Loan report included details of several key activities including the installation of aerofoil technology in 721 stores; the installation of energy efficiency and LRD lighting in three new supermarkets and eight new convenience stores; the installation of combined heat and power plants in three new supermarkets; and refrigeration system gas replacement of carbon dioxide systems in 24 stores. The company also reported that during the 5-year period 2014/2015 to 2018/2019, its Green Loan funding of £189 million had produced a reduction in carbon dioxide emissions of 187,000 tonnes and electricity savings of 279 million kWh.



## CONCLUDING REFLECTIONS

While each of the four retailers' bonds outlined above has its own characteristics and goals, three general issues merit reflection and discussion. Firstly, there is the issue of greenwashing, where funds raised under a Green or Sustainability Bond or Loan are not applied consistently, or when an organisation represents its activities or policies as producing positive environmental outcomes when this is not the case. Demers (2018), for example, argued 'as the green bond market hits its stride, investors need to be aware of how greenwashing can plague the field. Although touted as environmentally friendly, many green bonds are not as green as they appear' and Robinson (2019) claimed the 'worst examples of greenwashing are in green bonds.' In a more measured vein, Weber and Saravade (2019), argued 'as more investors and issuers enter the green bond market each year, greater accountability and transparency is needed to mitigate fears of greenwashing.' More specifically, 'greenwashing in the green bond market means bond proceeds get allocated to assets that have little or no environmental value, which shakes market confidence' (Weber and Saravade).

Weber and Saravade (2019) also suggested that the lack of a clear definition the term 'green' is a challenge in that it has 'raised investor concerns around the risk of greenwashing.' Here, the Climate Bond Initiative (2019) argued 'the challenge is to develop definitions that are scientifically robust but also practical i.e. usable by issuers and give confidence to investors.' In looking to make policy recommendations for the Green Bond market, Weber and Saravade (2019) noted that 'so far financial regulators are not actively involved in supervising environmental aspects of green financial products.' Further Weber and Saravade (2019) recommended that 'if financial products such as green bonds offer additional green returns, there should be mechanisms that prevent greenwashing' and that 'regulators engage in supervising the environmental performance of green products.'

Secondly, there are two related, but wider, issues relating to the assurance and verification of Sustainability Bonds and Green Bonds. On the one hand, DNV GL (2019), a consultancy that provides an independent assessment of the accuracy and integrity of Green Bond information and data, for example, suggested 'as the green bond market continues to develop, the complexity of types of green bonds will cause challenges for specialist and mainstream asset managers in determining the sustainability credentials of individual issuances.' Three of the four retailers included in this paper, namely Ahold Delhaize, NorgesGruppen, and the Co-op commissioned a 'second party opinion' of their bonds from an independent consultancy.

Sustainalytics provided this opinion for Ahold Delhaize and the providers for NorgesGruppen and the Co-op were Cicero and Vigeo Eiris, respectively. The second party opinion for Ahold Delhaize's Sustainability Bond Framework for example, was provided by Sustainalytics and covered four issues, namely: use of proceeds; project evaluation and selection; management of process; and reporting. In providing this second opinion, Sustainalytics held discussions with members of the company's management team and reviewed relevant public and company documentation. In conclusion Sustainalytics (2019b) reported that it was 'of the opinion that Ahold Delhaize is well positioned to issue a sustainability bond and that the Ahold Delhaize Bond Framework is credible, impactful and aligned with the Green Bond Principles, Social Bond Principles and Sustainability Bond Principles.' That said, in its 'Disclaimer' Sustainalytics (2019b) emphasised that its second opinion 'is based on information made available by the client, the information is provided "as is" and, therefore Sustainalytics does not warrant that the information presented in this Opinion is complete, accurate or up to date, nor assumes any responsibility for errors or omissions.' This must raise questions of the credibility of assurance process.

On the other hand, the assurance and verification of the information and data provided on the progress of funded projects in the reports on Sustainability and Green Bonds is an issue. In some ways, this is part of the wider issue of the independent external assurance of corporate sustainability and social responsibility reports. In reviewing how the UK's leading food retailers assure their annual sustainability and corporate social responsibility reports Jones, Hillier and Comfort (2014), for example, concluded that the food retailers' approach to external assurance 'can best be described as idiosyncratic and partial' and that this 'reduces the credibility of the food retailers' corporate social responsibility/sustainability reports.' More specifically, while some of the Sustainability Bond and Green Bond frameworks cite their commitment to external review, the focus is on the allocation of bond proceeds, not on the verification of project impacts. In its Green Loan Framework Sainsbury's (2014) claimed that its external impact report would be 'reviewed and endorsed by an external 3rd party assurance provider' but the company's publicly available report for 2018-2019 did not include an external assurance statement.

Thirdly, and arguably more contentiously, there is the issue of the fundamental tensions between sustainability and economic growth. While the underlying rationale for Green Bonds and Sustainability Bonds is to generate environmental and social benefits, retailers are committed to growth, which is ultimately dependent on the continuing depletion of the earth's natural resources

and, as such, is fundamentally incompatible with the concept of sustainability. Within the UK, the British Retail Consortium (2018), for example, claimed that the retail industry was mobilising to achieve 'sustainable economic growth', but the British Retail Consortium did not define what the term 'sustainable economic growth' meant. In a similar vein, Marks and Spencer (2019), the iconic UK retailer, emphasised its 'clear vision', namely 'driving growth and increased efficiency.'

However, Higgins (2013) suggested that 'our continued emphasis on economic growth as we know it today is diametrically opposed to the sustainability of the planet.' More politically, Liveryman (2018)

expressed concerns that 'growth goals cannot be met without sacrificing many environmental ones or that sustainability cannot be achieved under the current economic model of capitalism.' The issuance of Green Bonds and Sustainability Bonds by retailers is still in its infancy and it is too early to predict if this approach to engaging consumers in corporate environmental sustainability will become increasingly popular. More fundamentally, whether continuing enthusiasm for such green investment can help retailers to contribute to the delivery of the potentially elusive goal, that is genuinely sustainable growth, remains to be seen.

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## FISCAL AND TAX ADJUSTMENTS IN THE SERVICE OF ECONOMIC PROSPERITY OF BOSNIA AND HERZEGOVINA

**Prof. Amir Karalić, PhD**

University of Vitez, Faculty of Business Economics  
Bosnia and Herzegovina

**Prof. Jusuf Kumalić, PhD**

University of Vitez, Faculty of Business Economics  
Bosnia and Herzegovina

### **Abstract:**

*Paper points to fiscal policy measures that need to determine the level of tax burden that will stimulate investments primarily in the real economy. In this regard, the balance between indirect and direct taxes should be seen in the sensitivity to the regressive effects of the value added tax and include a broad base of taxation on income and income tax. Recognizing the contribution rates as a basis for filling the budget of social funds should always take into account their amounts from the aspect of the burden of income.*

*Bosnia and Herzegovina has a stable system of indirect taxes, which allows for a continuous filling of entity budgets, but more emphasis should be placed on redesigning direct taxes both from the aspect of coverage and from the aspect of the rate for different payment categories.*

*The income of both tax springs is well aligned with the growth trend of indirect and direct taxes. Question is, whether indirect taxes can provide budget stability if we introduce more VAT rates. The introduction of the differential rate should be aligned with the reduction of the tax on labor in terms of the adequacy of tax revenues.*

**Keywords:** *fiscal system, fiscal balance, tax structure.*

**JEL codes:** *H210, H240, H250.*

### **INTRODUCTION**

Taxes include the major part of the budget revenues of a country, which are constantly under scrutiny. Economic experts for fiscal issues, the academic community, political leaders, businesses as well and citizens are interested in establishing and implementing of the adequate tax policy. Therefore, they ask questions like what it will be the level of tax rates and how many of them will be there, what is exempted from calculations and paying of taxes, what the tax base should contain, etc. From the above questions, we can undoubtedly conclude that the tax policy affects all areas of human life. The social system will depend on the budget expenditures that are intended for the same purpose or will be directly connected to the transactions that would be exempted from paying taxes. Some economic sectors for which the state is considered to have competitive advantages at the international market may be exempted from the calculation as well and paying of

taxes or any export. Of course, it is important to take into account the form of any tax concerning, in order not to happen the case that economic activity is fully exempted from paying taxes. It is how Wagner had defined tax principles, and one of them are economic and political principles which it has just explained about the importance in determining of tax source that is tax form. This paper strives to determine the appropriate form of tax on consumption primarily by the calculation rate, which would provide the profusion of tax revenues on one hand, and less burdened on consumers on the other.

Every move (proposal) of tax policy should first be considered in terms of its impact on the distribution of national income. It is extremely important to consider effect to the poor population layer, especially in times of economic recession, given that this group tends to be most vulnerable. For the poorest in society, tax reduction is unlikely to be of great help because this group of people does not pay significant amounts of income or property taxes. They are actually in the

state aid system that is best achieved through social benefits. However, tax reductions for those with modest income can improve family life standards at the perimeter of poverty, through the immediate abolition of tax burdens on their minimum income. In this context, the reduction in personal income tax and social security contributions for low-income families becomes even more attractive. This will stimulate demand, alleviate poverty and increase participation in work activities. None of the other tax cuts would be particularly beneficial for the poor, such as, taxes on the profits of shareholders, consumers with high incomes. Reducing the high rate of income tax or property tax is likely to help more concrete and more efficient, while the reduction in sales tax affects the entire population and provides greater absolute benefit to those who cannot afford to spend more income on generic benefits.

Although it seems that, this issue is clearly set but it opens up a sequence of other issues that the authorities have to take into account when defining not only the level of tax rates or its number but also the scope of taxation and its possibility of exemption. Of course, it is important to emphasize the interdependence with other tax forms from which depend the

## REVIEW OF LITERATURE AND DEVELOPMENT HYPOTHESIS

This paper is based on standard theories of taxation and in connection with the Ramsey (1927) and Mirrlees-a (1971). Of course, the papers of other scholars who dealt with issues of tax policies will be contemplated and will assist us in order to point out the importance of this phenomenon. In order to simplify the matter we should proceed from the assumption that all persons within the society are with approximately equal preferences in relation to consumption and leisure time. The assumption of homogeneity of the economy is taken for easier understanding that the vast majority of people (citizens) have similar needs in the field of collective consumption. Which brings us to the notion of function of social welfare that is directly linked to the general services relating to all individuals. Whether that relationship is linear or not, it remains to examine it.

In order to simplify the issue to which the government or the authority are faced, it is often assumed that everyone in society have the same preferences for example, of consumption and leisure time. Sometimes that assumption of homogeneity is taken one-step further by assuming that the economy is populated entirely by identical individuals. The goal of governmental representatives and the policymakers are to choose the tax system that maximizes the welfare of the representative consumer, knowing that consumers will respond to any incentives that

the tax system provides. However, as we shall see, making political conclusions from the model with the representative consumer it may in some cases lead to certain problems.

After defining the objective function, the next step is to determine the constraints in which the government confronts in setting the tax system. Frank Ramsey (1927) made a major contribution and he had proposed a single line of considerations: It is assumed that the government must raise a given amount of tax revenues through taxes, but only in goods. Ramsey had shown that such taxes should be imposed in inverse proportion to the elasticity of consumer demand (by their representatives) for goods, so that goods that result in inelastic demand will be more taxed.

Here it is actually focused is on two items:

- Only final goods should be taxed uniformly,
- In stochastic terms, changes in the economy and in terms of establishing the optimal tax policy represent an increase of sophistication.

Since Ramsey's concept of perfect competitive economy was not received by various externalities in meantime, it is rebuilt and upgraded for various situations. Thus, in their paper (Tea Hoon Oum & Michael W. Tretheway, 1988) they improved Ramsey's model for the costs of externalities, and made it available in a several situations.

Another paper treats the optimization of taxes on consumption through mathematical formulation (Wang, 2011) and treats the indirect taxation more efficient than direct. Of course, conditions are on the market of imperfect competition.

However, from the standpoint of literature that talks about of optimal taxation, which objective is to establish the best tax system, it is obvious problematic to exclude the assumptions of some already pre-conceived tax systems. Why do not allow to political makers to take into account all possible schemes of tax systems, including nonlinear and interdependent taxes on goods, revenues from various sources, and even non-economic personal characteristics of individuals?

Nevertheless, if the political makers are allowed to freely engage in the selection of the tax system, then issue of optimal taxation becomes too easy to solve: the optimal tax is simply the overall tax or flat-rate tax. After all, the economy is depicted as a representative consumer, who will pay the entire tax bill to the state in one form or another. Exactly what creator of tax policy want realizes the flat-rate taxation? In the world, there are good reasons why it is rarely used the total sum of taxation as a flat-rate tax. Most importantly, this tax falls equally on the rich and poor people, putting greater relative burden on the poor ones. When Margaret Thatcher, at the time when she was Prime Minister of Great

Britain, successfully pushed the flat-rate tax at the local level at the beginning of 1989, the tax was extremely unpopular. Shortly thereafter, the same was abolished.

Therefore, the governmental representatives have to come to grips with the fact of heterogeneity in the capacity of taxpayers to pay their taxes. If the government is able to observe differences among taxpayers in their key capacities, it is related to flat-rate taxation, but now these taxes are part of the total contingent capacities. These taxes will not depend on any choice of the individual, so it would not distort the eventual incentives, and the government at the same time may achieve equality without cost efficiency.

### OPTIMIZING OF TAX SYSTEM

Although it is not directly related to taxation of consumption, we will look back at the paper of James Mirrlees (1971) who launched the next step in the model of the optimal taxation suggesting a way to formalize the government's issue that deals explicitly in undetected heterogeneity among taxpayers. In the most basic version of the model, individuals differ in their innate ability to generate revenues. Governmental representatives may observe income, which depends on the capacity and of its effort, but they also may observe neither the capacities nor the effort. If the government tends to do the taxation of those expressed capacities (through acquirement of revenues), individuals will be discouraged to put a lot of effort in order to achieve these revenues. Recognizing of unnoticed heterogeneity, by reducing marginal costs of utilities, and the effect of incentives, Mirrlees's approach formalizes the classical relationship between equity and efficiency to which the government is realistically faced, and it has become the dominant approach for tax theorists. In Mirrlees framework<sup>1</sup>, the optimal taxation issue becomes a game of incomplete information between taxpayers and the government (tax creators). The government would like to do taxation of those taxpayers with high capacities in economy and provides transfers to those with low earning capacities in economy. However it is necessary for government to be sure that tax system does not encourage those ones with high capacities in economy to simulate them as if they are taxpayers with lower earning capacities. Indeed, modern Mirrlees analysis often relies on "the principles of revelation". According to the result of this classical theory, any optimal allocation of resources may be achieved through policy under which individuals voluntarily reveal their types of capacities in response to tax incentives.<sup>1</sup>

<sup>1</sup> Research of the optimal taxation in the spirit of Mirrlees (1971) generally avoids situations in which the principle of revelation is not implemented, if the government cannot perform the future policy plan.

In other words, the government must ensure that the tax system provides sufficient incentive for taxpayers with high capacities in economy in order to maintain production at a high level appropriate to their capacities, although the government keeps an attitude that these groups should be burdened with higher taxes.

Strength of Mirrlees's framework is standpoint that the government takes into account all the possibilities of tax systems. Weakness of Mirrlees's approach is its high level of complexity. Monitoring of limited tax incentives requires that individuals do not produce additional amounts if they may not achieve the benefits of the optimal tax system.

#### *Consideration of taxation on income or consumption through macroeconomic outlook*

Creators of the fiscal policy usually considered different objectives for the realization of tax policy. Generally there are five possible objectives: simplicity of collecting taxes, stability, integrity, adequate amount of revenues and economic efficiency.

Differences between indirect and direct taxes are not economically important, but from a political point of view, they are a significant tool for redistributing income. For example, countries with pronounced direct taxes in the total tax income prefer this concept in order to correct differences in the distribution of income that the market places on them.

Macroeconomic effects actually represent economic efficiency. However, on the other hand the fiscal policy objectives also play an important role in motivating of interests in tax reforms. Fiscal policies often have to make a compromise between these objectives.

For example, if you increase the tax consumption in our case the VAT it will imply higher expenditures for end consumers at a much higher rate of growth in prices. This is due to the fact that consumers pay higher prices in the final consumption of wage increase that contain the largest part of the production cost. In his paper (Garner, 2005) it is pointed out that within the neutral tax reforms VAT will raise more the consumer prices in relation to the wages of employees who are in fact an integral part of the product price that is services.

Prior considering the particularities of the tax on consumption, it is important to emphasise the basic difference between tax on consumption and income tax.

A simple ratio between consumption and income can be summarized as:

Consumption = income from work + capital gains - savings, or

Income = Consumption + Tax on consumption + savings

Taxable income includes income from work plus the current capital gains. Current capital gain is the average rate of return on equity multiplied by the existing capital at the beginning of the period. The key difference between the income tax and tax on consumption, therefore, lies in the treatment of savings. Tax on consumption excludes current savings from the tax base. As a result, consumption and income tax provide various initiatives for savings or investing. Within the tax on consumption, households probably save more nowadays, because the tax on consumption does not include the savings. Therefore, the present value of the tax on consumption is the value of current and future tax payments discounted at present time, depending on whether the households use now or in the future. Contrary to it, the income taxes puts up greater tax burden on savers, because households pay its taxes on taxable income without any deduction for new savings. Capital gain derived from the new savings would also be taxed as a part of the current capital gain in the future period. In the system of base income, households are confronted with a higher overall tax burden on capital gains and have less incentive for new savings.

In his paper (Auerbach, A.J. 2008) emphasize the equivalence test between consumption taxes and payroll taxes. In this test, it starts from the assumption that there is a different time to introduce these two taxes leads to different choices between work and leisure, which in fact violates the thesis of equivalence. Namely, as we know, the tax on wages is charged on receipt of income on the labor market, while consumption taxes are postponed until this income is spent. Because of this fact, individuals will work more today and spend later on to postpone the consumption tax, which represents the corresponding cost.

### *Effective tax rate on consumption*

Before we get into discussion on the calculation of the effective tax rate on consumption, it is necessary to mention that for total tax burden it was established the effective tax rate which actually represents the average value. It is consisted of the effective tax rate on labour and capital. Effective tax rates on labour and capital when are related to the taxation of personal incomes constitute a single effective tax rate of the household. In fact, the more accurate term is the average effective tax rate as it involves different goods and services which are taxable as such, and are included in the system of the National accounts. With the exception of tax deductions, credits, and other benefits, the average rate should provide more accurate insight into burden taking into account the main macroeconomic variables. Taking into consideration the calculation based on the papers (Carey, D. & Tchilinguirian, H., 2000) and (Mendoza, Razin, Carpenter, 1994) we come to the framework

for determining the tax rate on consumption.

(Effective tax ratio on consumption marked as AETR) ( $\tau_c$ ) is calculated in equation (1). and represents the sum of general taxes on consumption of goods and services (TGC) and excises (A) divided by the sum of private consumption (CP) and governmental spending decreased for wages in public administrative sector (CG-CGW) as net of given indirect taxes. Value-added tax, which is by far the largest and most important indirect tax in most countries, is included in category 51102.<sup>2</sup> The denominator is significantly wider than the real tax base such as governmental consumption, and many goods and services (e.g, basic food in some countries, financial services, medical services) in final private consumption, which is not generally subject to indirect taxes. This broad of the tax base is retained on the basis that the indirect taxes (especially VAT) are mainly paid on inputs for the production of such goods and services. Therefore, in contrast to the assumptions that is made to calculate the other AETR, it implicitly assumes that the tax burden on inputs for such goods and services have passed through multiple output prices. The wages of governmental servants are excluded from the tax base, because there is no indirect taxes on the purchase of labour. Indirect taxes are deducted in the denominator in order to reflect the tradition of expressing the rates of indirect taxes as a percentage of the price without taxes. For example, 20 per cent of VAT is added 20 per cent to the price before taxation, but also represents and 16.7 per cent of the total price including VAT. This rate represents the so called recalculated rate of VAT. This adjustment ensures dateoriated  $\tau_c$  for this tax is 20 per cent, rather than 16.7 per cent.

In case of B&H where the amount of a single VAT rate is 17%, calculated rate is 14.53%.

(1)

$$\tau_c = (5110 + 5121)/(CP + CG - CGW - 5110 - 5121)^3$$

Formula although simplified actually includes all necessary and valid factors that determine the creation of tax policy. The height rate is therefore determined based on the comprehensiveness of the subject of taxation, the quantum of exemption and the amount of total tax revenues necessary for the functioning of the state.

Mendoza in his paper excludes wages of the public administrative sector as a cost (CGW) from the tax base of the consumption by the fact that they are not subject to indirect taxes. However, many of the

<sup>2</sup> The tax revenue data are identified using the OECD system (OECD Revenue Statistics), 5110 General taxes on goods and services (5111 VAT) and Taxes on specific goods and services (5121 excise taxes).

<sup>3</sup> CareyD., Tchilinguirian, H: Average Effective Tax Rates on Capital, Labour and Consumption, Organisation for Economic Co-operation and Development, Paris, 2000.

services which are provided by the government sector, such as education and health care, are not subject to indirect taxes regardless of when practiced by the private sector. It means the same ones are exempted from paying the VAT. Consequently, the failure to include the wages of state administration in the tax base would result in the absence of the AETR in consumption, especially in countries with overvalued consumption in which these services are labour-intensive. In order to improve the comparability of the data it has been used the equation (2). The second change is to express the tax base in gross terms (ie, including indirect taxes). This enhances comparability with other AETRs. This is particularly important for work as relevant tax burden that affects on decisions on labour supply including taxes on labour and consumption.

$$(2) \quad \tau_c = (5110 + 5121)/(CP + CG)$$

Factor to be borne in mind when interpreting the estimates of the AETR on consumption based on the previous equation is that these terms include indirect taxes on investments in properties in the numerator. In case of the VAT, this is due to on industry which is exempted from VAT, and which receives the inputs for production of the investment goods. Neither purchasers of these goods nor suppliers who are exempted from tax cannot claim back VAT paid on inputs of VAT exempted industry. This issue is mainly related to finance industry, which is largely exempted from VAT because of the difficulties in measuring the added-value.

For general indirect taxes, the issue is more direct, in fact, how the taxes are applicable to investment spending in general. The allocation of such taxes on consumption and investment in the proportion of their part in GDP is probably satisfactory solution, because the rates are generally lower in investment of goods. Therefore, the equation (2) overemphasize the AETR on consumption including indirect taxes of investments in the numerator. However, the degree of overemphasis is probably exceptional, especially in countries that have the tendency to have VAT or any other general indirect tax, but not both.

From the above mentioned we can conclude that taxes on consumption since they are exempted from the calculation of savings represent better measure of the payment of obligations to the state from taxes on income. This statement actually comes down to the fact that remind us that welfare at any stage of human life actually depends on its capacity of consumption. As we can see savings as part of the total income of an individual is sacrifice of present pleasures in order to increase satisfactions in the future.

That future satisfaction will again turn into consumption.<sup>4</sup>

While the optimal taxation of labour remains somewhat indefinite, there are certain research results that indicate to the optimal taxation of goods and services. For example, Diamond and Mirrlees (1971) pointed out that the optimal taxes are zero rate on all raw materials (intermediate goods). Atkinson and Stiglitz (1976) pointed out that the optimal taxes are equal for all final consumption of goods. Of course there are exceptions from these settled results.

One well-known exception is for goods that create externalities and therefore justify the correction, Pigovian taxes or subsidies. For higher standards of goods, differentiated taxes on goods can be optimal if goods vary in its complementarities for leisure, if these taxes affect the wages paid to employees of different skills, or if the preferences for goods are correlated with individual capacities, as it was specified in Kaplow (2000b), Naito (1999), and Saez (2002b). But earlier results are still leading ones due to powerful institutions behind them.

Settings of Diamond and Mirrlees's (1971) were resulted in a connection to raw materials and that is, regardless to the optimal distribution of final goods, the government would ensure that the production of these goods is done as efficiently as possible. By examining the paper of Diamond and Mirrlees it is concluded that there is the same set of relative prices that could be achieved under given governmental policy which can achieve that objective by the tax authority in the competitive economy through different set of taxes on final goods. The implication is that the optimal taxes can set up the economy on its production limit.

What is related to the tax on consumption is that the revenue from VAT respond quickly to changes of the tax bases. This derives from the fact which is a result of legal provisions that taxpayer must pay the tax on a monthly basis. Hence, the total national tax base is reduced by the amount of investments and net export. So that the proportion of consumption is reduced at the time of economic growth and is increased in time of the economic capacities. This occurs due to changes of consumption that are less during the cyclical movement of GDP change.

Meaning that allocative disturbances caused by turnover tax that is VAT depends on whether the tax system is characterized by comprehensive tax base, single tax rate, the absence of differences in terms of production, economic sectors and certain goods or services and so on.<sup>5</sup>

<sup>4</sup> See the elaboration in Hyman, N.D., (2010), *Public Finance, A Contemporary Application of Theory to Policy* p. 645

<sup>5</sup> See more in Brümmerhorf, D., (1996), *Public finance, Mate, d.o.o. Zagreb*



## TAX POLICY IN BOSNIA AND HERZEGOVINA

Fiscal policy and strategy in B&H is based on the commitments that B&H authorities have taken over through the stand-by arrangement and are reflected in the policy of managing public spending and further reducing internal and external debt. According to the IMF's recommendations, the management of prudent fiscal policy requires the limitation and reduction of the budget deficit for the next period. The need to maintain a cautious fiscal policy aimed at limiting public spending stems, among other things, from the negative effects of the economic crisis on the revenue side. These goals will be achieved by taking certain reforms and measures in the categories of revenue and especially spending. The importance and role of fiscal policy is the easiest and only possible to determine if fiscal policy is viewed in the context of economic policy. This is because economic policy determines the fiscal policy goals, which means criteria for assessing its effectiveness, as well as the interdependence of goals and instruments.

In the context of the formulation of fiscal policy for the next period, a number of questions are asked:

1. The level of fiscal demand,
2. Size and scope of public spending,
3. Public spending priorities and methods of rationalization of public expenditures,
4. The balance of public revenues and public expenditures, the way of balancing possible imbalances, namely the issue of monetary and fiscal policy relations.

Observed, predominantly in the economic plane, the fiscal mechanism has the task of achieving a balanced relationship between the three basic goals:

1. Efficient allocation,
2. Redistribution of income to stable reproduction process,
3. The ultimate result in general social and economic progress.

Under allocative neutrality we mean such a fiscal system and fiscal policy that arbitrarily does not change the relative cost of inputs and outputs formed in a competitive market. In the tax system, inter alia, is the avoidance of differentiated sectoral and local taxation, narrowing the range of tax exemptions and relief, and on the expense side of the policy of selective transfers. In order to achieve the same goal, fiscal policy should provide guidelines for simplifying the tax system and reducing tax administration, and also affects the expansion of tax bases and the reduction of marginal tax rates. Regarding the redistributive fiscal function, the attitude towards the need to protect the threshold of social endurance is increasingly crystallized, not narrowing the range of

household income. This is achieved by appropriately defining the non-taxable minimum, combined with tax relief and transfers to support family members. In accordance with "Keynesian counterrevolution", the focus of economic policy is shifted from the global approach and the short-term regulation of the volume and structure of demand, to the structural aspects and effects on the supply side. The Keynesian concept of anti-cyclical policy is abandoned, but it remains to be said that the fiscal system (public sector) should not be a source of imbalance. Fiscal policy should not be selective at sectoral and sectoral level, and should refrain from tax exemptions and facilitating tax evasion and deepening social inequalities, but also a positive attitude toward those critically motivated incentives to encourage motivation for work, savings, capital imports. Structural economic adjustment, employment, etc. The interaction between fiscal and monetary policy is evident through the public debt institution. Namely, fiscal policy determines the size of public sector revenue and expenditure balances, and monetary policy is the way of financing it (or covering it). Therefore, these two policies are interdependent and must be coordinated so that each of them is effective. With regard to their relative performance, it is generally considered that monetary policy is more effective in combating inflation and maintaining the optimum level of the exchange rate, and fiscal policy in combating depression and maintaining the internal economic balance. Therefore, it is most often considered that the most optimal combination of moderately restrictive fiscal and moderately expansive monetary policy, as this is the combination that ensures optimum growth in stable economic conditions. It is not an axiom, and every specific policy, especially ours, calls for optimal combinations of these two policies. What is important is to point out that the Fiscal Council needs to get greater authority through the creation of fiscal policy by shifting from the role of coordinator to the role of fiscal policy makers. The imposition of budget limits as well as the monitoring and control of the tax burden should be a matter for the interest of the Fiscal Council, thus gaining an active role in creating not only the tax but also the economic space in the whole of B&H. The tax system in the Federation of B&H is basically decentralized, whereby some tax forms on the partition are locally belonging to the cantons and municipalities while the other Federation of B&H. Income tax and income tax are paid according to the taxpayer's seat in favor of the budget revenues of the cantonal budget. Except for the above, the profit tax of banks and other financial organizations, insurance companies and reinsurance of property and persons, legal entities in the field of electricity, legal entities in the field of post and telecommunications, legal entities in the field of games of chance and other companies are paid in full to the account of the public revenues of the Federation budget. municipalities and cantons

in certain proportions. TI ratios are different in different cantons. For example, in Tuzla and Zenica Dobož Canton, 100% of this revenue is allocated to municipal budgets on this basis. In Sarajevo Canton this ratio is 60% in Canton and 40% in the municipality.<sup>6</sup>

In Canton Middle Bosnia and Canton HN revenues are allocated according to cantonal regulations on the affiliation of public revenues and other regulations. The distribution of indirect tax revenues from the Special Account for Distribution of Income from the Single Account between the users in the Federation shall be based on the coefficients set out in the Law on the Affiliation of Public Revenues in the Federation of Bosnia and Herzegovina "Official Gazette of the Federation of Bosnia and Herzegovina", no. 22/06, 43/08, 22/09, 35/14 and 94/15) for: a) to finance the function of the Federation 36,20% b) to finance the functions of the canton 51,23% c) to finance the functions of local self-government units 8.42% d) for financing the Road Directorate in the Federation 3.90% e) to finance the function of the City of Sarajevo 0,25%. To illustrate the above provisions of the Act and Bylaws, we will show the structure and trends of the tax revenues of B&H and the Federation of B&H for the period 2009-2016. year.

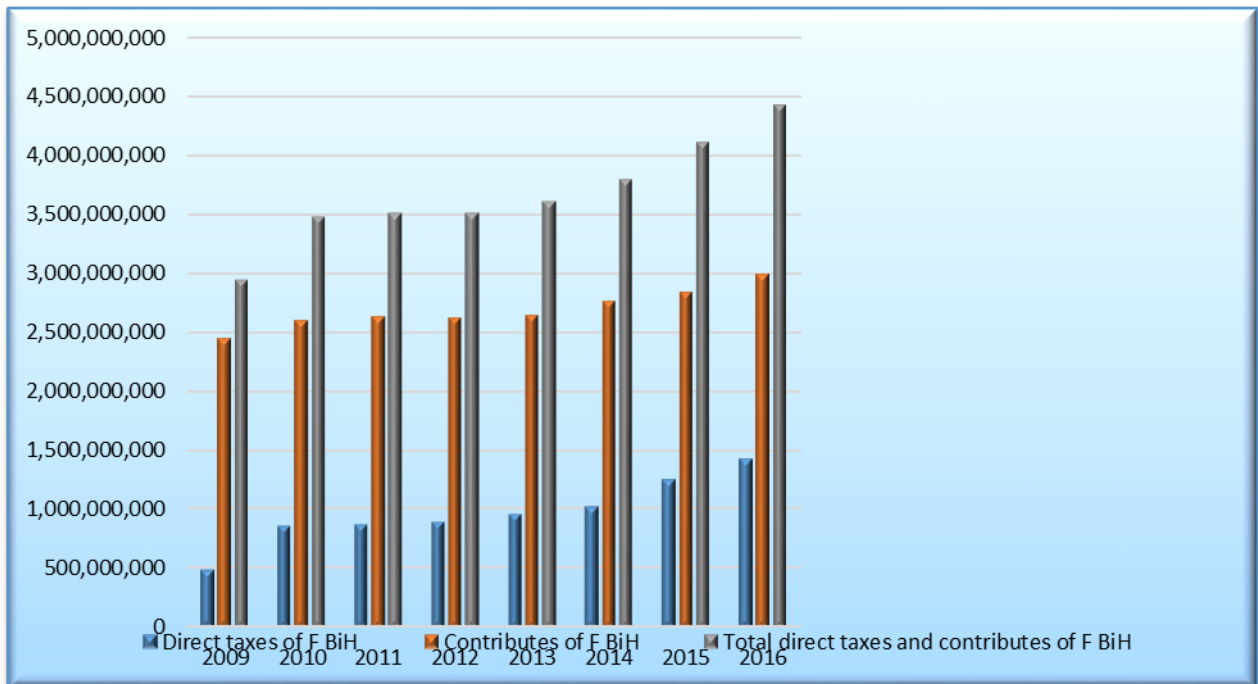


Figure 1. Movement of revenues from direct taxes and contributions in the Federation of B&H  
Calculation by authors. Data from Tax administration of Federation of B&H

The same distribution of indirect taxes between the Entities and the Brcko District of B&H is regulated by the Law on the System of Indirect Extortion in B&H ("Official Gazette of B&H", No: 44/03, 52/04, 34/07, 49/09 and 31/13) which emphasis is placed on end-use as the basic criterion of revenue allocation.

<sup>6</sup> See more at: Taxation Trends in the European Union, Data for the EU Member States, Iceland and Norway 2017 Edition, European Commission.

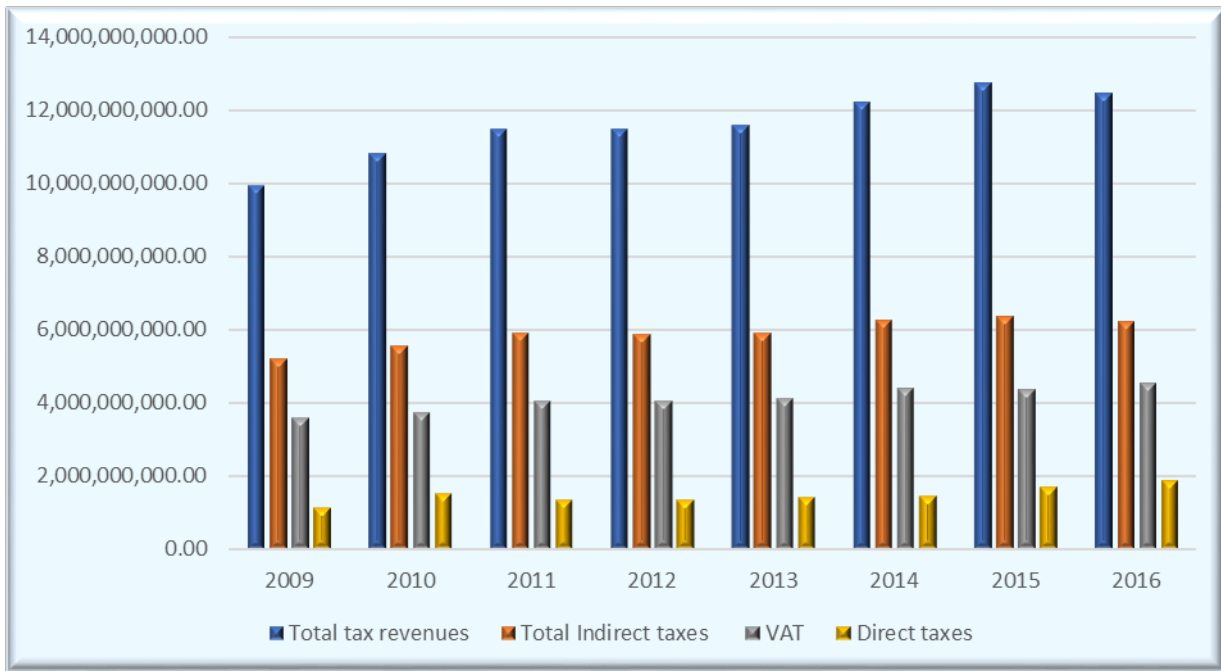


Figure 2. Tax revenues of B&H

Calculation by authors. Data from Indirect Tax Authority of B&H, Tax administration of Federation of B&H, Tax administration of RS.

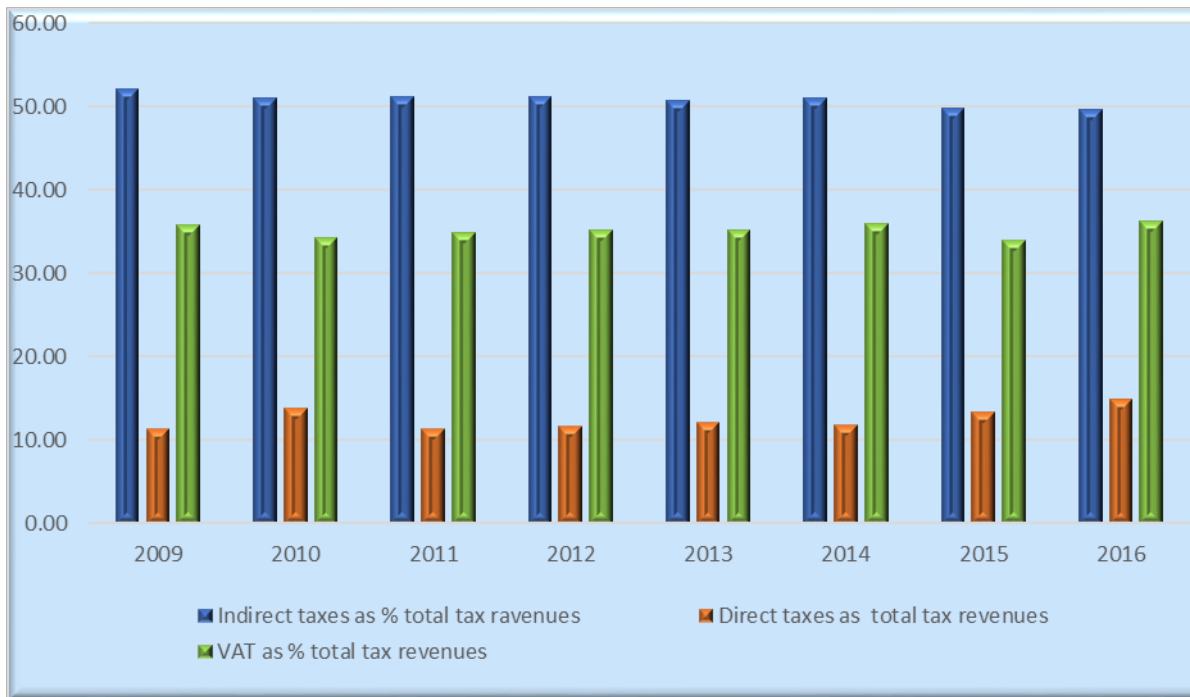


Figure 3. Share of indirect and direct taxes in total B&H tax revenues

Calculation by authors. Data from Indirect Tax Authority of B&H, Tax administration of Federation of B&H, Tax administration of RS.

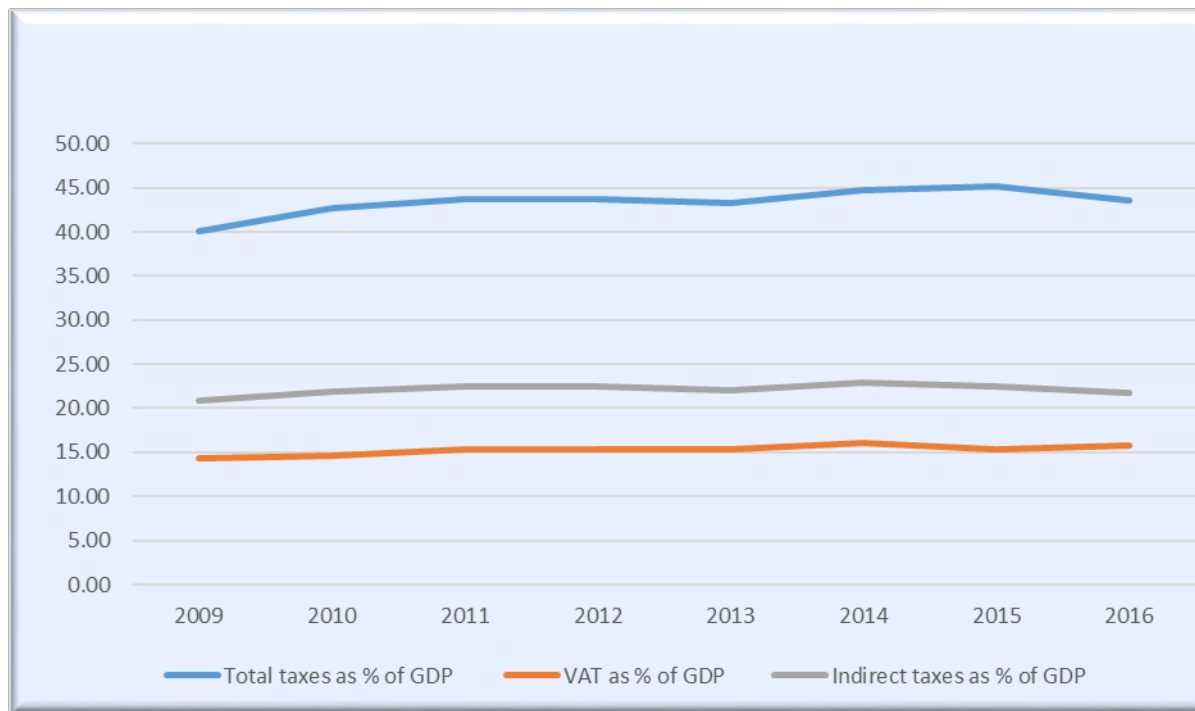


Figure 4. Share of total taxes, VAT and indirect and direct taxes (% of GDP)  
Calculation by authors. Data from Indirect Tax Authority of B&H, Central Ban of B&H.

Starting from the thesis confirmed by the research and mentioned in the previous section for tax harmonization in B&H, it is necessary to introduce additional VAT rates while simultaneously reducing the tax burden on income. New VAT rates should allow for the same level of collection of tax revenues from indirect taxes. On the other hand, increase the tax coverage for most sources of income, but reduce the tax burden on income. This will increase the share of income for individuals spending that may predicate the aggregate demand generator and the basis for increased economic growth.

#### *Recommendations for the most optimal tax system*

As far as the FB&H is concerned, overall contribution rates compared to EU countries are above the average; however, income tax rates are lower. As far as the FB&H is concerned, the overall contribution rate in comparison with EU countries is above average; however, income tax rates are lower. The basic characteristic of the B&H tax system is excessive labor taxation, which is negatively reflected in the development, employment, inflow of foreign investments, preferring the black labor market and so on. The World Bank study on public sector reform in Bosnia and Herzegovina shows that a high tax wedge contributes to unreasonableness of workers, leading to unfair competition between companies that comply with regulations and those who are in the informal economy. The study documents that the tax wedge for workers in Bosnia and Herzegovina, who receive 1/3 of average EU wages among the largest in Europe.

In the Federation of Bosnia and Herzegovina, the tax wedge for a single worker who works for average gross salary and has not received regression is 45%. For this worker, who receives 782 KM (without

regression), the employer has to pay 646 KM for tax and contribution. In case the worker receives a regression, then the tax wedge decreases and is 43.9%. In Republic of Srpska, the tax wedge on average wage for workers without personal deductions is 39.7%.

From the economic theory, we know that different types of tax forms have different effects on economic growth. Thus, for example, securing the necessary public revenues from property taxes and indirect taxes has a more favorable impact on economic growth than income and capital taxes. This fact needs to be taken into account when reforming the tax system. The recommendations of the World Bank for Bosnia and Herzegovina on the need to reduce the rate of compulsory contributions with the reduction of benefits and other current expenditures are fully justified in the context of high tax burdens. To conclude that reducing the tax burden to stimulate economic growth denies establishing a social consensus on the need to change the role of the public sector in society.

Countries with a fixed foreign exchange rate, a currency arrangement, dollarization or the acceptance of a common currency by entering into

the monetary union, are effectively abandoning the possibility that nominal devaluation reduces foreign trade deficits. Countries with the currency and the variable rate, which increase the current account deficit, can reduce the nominal exchange rate by making imports more expensive and exporting cheaper and thus stimulate domestic production over a short period. In the long run, the foreign trade deficit depends on the real exchange rate, which also depends on the different rates of inflation between trading partners, or ultimately, of the productivity trend. B&H does not have the option to change its current foreign exchange policy to its own export position as it has a currency arrangement. It can be concluded that fiscal devaluation (higher taxation of consumption and lowering labor taxation) has led to an increase in the prices of imported and domestic products while simultaneously reducing production costs for domestic products only, practically acting as a substitute for the absence of nominal devaluation of the course. When it comes to domestic production costs, labor-intensive products can be expected to be relatively cheap compared to capital intensive. Most analysts from the EU fiscal devaluation point out as a possible solution to neutralize the negative effects of the currency arrangement. In addition, the results of the analysis conducted in the countries show that the reduction in the rate of compulsory contributions from 2.6 percentage points, while increasing the general rate of VAT by 2.7 percentage points, generated an additional net income in the range of 0.9% up to 4% of gross social product (Ruud and Keen, 2012). The authors argue that the positive effects of fiscal devaluation disappear after 10 years. Countries that have increased consumption taxes and at the same time reduced their contribution rates (reduced labor force) and are important partners of B&H economy (Germany, Croatia, Serbia and others), leading domestic companies into subordinate positions on domestic and foreign markets. Therefore, new VAT rates should be introduced in order to preserve the required amount of fiscal resources. In order to reduce the cost of business of business entities and increase income for individual consumption, it is necessary to reduce direct taxes. This achieves budget balance on one hand and reduces the tax burden on the other.

## CONCLUDING CONSIDERATIONS

Market instruments, including and taxes may be one of the most effective and the most efficient political tools that affect the change of both consumers and customers. They can be used directly or to complement other regulators on the market which is present in many countries of the world.

Stable fiscal policy is the basis for economic growth of the country, which implies low tax rates that allow fiscal leverage on one side and generating accumulation of capital on the other. In economies that monetary policy cannot act on the market, such as the case of B&H, public finance management is of crucial importance for the development of the economy and raising the livelihood of citizens to a higher level.

The paper emphasizes that the priority of fiscal policy is the implementation of tax reform in Bosnia and Herzegovina, i.e. that it is necessary to build a tax system that is in line with market trends.

Thus, tax reform should be revenue neutral, which means that the increase in VAT revenue received by entities and BD (Brcko District) equally reduces their income from income and contribution taxes. Namely, global mobility of capital and labor mobility imposes an inevitable question of the optimal structure of the tax burden. From the point of view of competitiveness and productivity, under the conditions of a market economy, taxation of consumption is preferable to labor and capital taxation. Taking into account the findings of existing studies on B&H, the views of the IMF, domestic and foreign research, and the practice of countries in the EU and the environment, we believe that it would be possible and effectively reduce the tax burden on labor and increase the burden on consumption.

From the above, it is concluded that the main goal of fiscal policy is to stimulate economic growth, employment, exports, and exacerbate excessive consumption and imports. Fiscal policy in the long term should contribute to the macroeconomic stability of the B&H economy.

Taking into account all the political and institutional complexities that lie ahead of the implementation of this fiscal policy (Tax Reform) in B&H, it is necessary to involve all levels of government in the implementation of the measures concerned. Tax reform in the Federation of B&H will require considerably more restrictive measures as certain macroeconomic indicators have a negative trend (higher public consumption, high public debt, higher tax wedge, more unfavorable employment structure, etc.). If the fiscal policy measures are in line with the country's structural or industrial (economic) policy, certain efficiency will be achieved. Clearly structured state policy structures (including entities and the Brcko District - BD) can best affect the construction of the economy structure and its competitiveness. When formulating appropriate fiscal policy measures

in B&H, the EU's position on fiscal instruments, above all on competitiveness, should certainly be taken into account. Apart from the fact that fiscal incentives should be general and horizontal, they need to be formulated in such a way as to comply with the EU legal framework and the tax harmonization guidelines in the segment of state aid. Finally, B&H has low tax rates in relation to the countries of the region and moderate indebtedness, which opens the

door to the development perspectives. Reducing the contribution rate would be a desirable basis for relieving economic entities, in particular reducing the amount of different types of taxes. In addition to fiscal policy and public debt management policy, it should be an important instrument in maintaining the budget balance and creating conditions for economic growth using debt instruments in real economic activity.

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