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# CONTRIBUTION TO THE KNOWLEDGE OF CONTINGENT FACTORS ON THE PERFORMANCE OF MUNICIPAL SERVICES

# Donatien Avelé, University Of Moncton Nabil Bikourane, IUT Paris Descartes

#### ABSTRACT

The purpose of this study is to examine the contingency determinants in the performance of municipal public services of Cameroonian cities. This objective requires two related studies: the first consists of contributing to the understanding of municipal practices regarding the measurement of performance while the second consists of identifying the factors likely to influence the performance of municipal public services. The study relies on the hypotheticaldeductive method. Two questionnaires were administered to both local elected officials and to different managers responsible for the public services visited. Globally, the results show the existence of structural factors influencing the performance of Cameroonian municipal public services.

#### **INTRODUCTION**

Public authorities in Cameroon continue to be faced with important challenges, both in terms of allocation of resources and in the satisfaction of the citizens they serve; who continue to insist that public officials deliver a sound quality/price ratio on the services they provide. As in most other African countries, Cameroonians have begun to ask for a greater transparency and opening from decentralized territorial municipalities. Wastefulness of any kind in municipal public services has become unacceptable. The reasons generally invoked are: insufficient control, lack of responsibility by elected officials and staff in charge of the functioning of decentralized territorial municipalities, and especially the absence of an accounting method that includes governance and ethical constraints. According to (Anthony and Young, 1988; Nioche, 1991), this waste is explained by suppressing control a priori without having sufficient regulatory mechanisms in place, and especially by a lack of democratic control over municipal financial accounts that are quite opaque (Berman and Wang, 2001; Meny, 1992). In order to overcome these deficiencies due to mismanagement of public finances, the Account Chamber came into existence and has been operational ever since 2006, outside the highest state audit control already in place. Its principal mission is to ensure that operations linked to expenses are normal and justified. As stated by Meyssonnier (1993), municipalities have a number of informational systems at their disposition: public accounting (financial and mandatory and analytical accounting more or less developed. Our investigations onsite allowed us to note that the use of analytical accounting is still rudimentary in the Cameroonian municipal sector. This is unfortunate since analytical accounting allows us to measure the costs per department, equipment, operation, etc (Evraert and Mevellec, 1991). It also allows us to have an overall view of the resources provided and used by each service individually (Demeestere, 2007). Without entering into a detailed analysis of the difficulties faced by Cameroonian municipalities, a certain

number of questions underlie our problematic. First, we must inquire on the nature of the performance measuring systems used by Cameroonian municipal public services. In other words, do the measurements taken by Cameroonian officials allow them to realize the performances within local entities, such as the new documentation on decentralization, balancing and stabilizing public finances, and the implementation of a sector-based accounting plan? In addition, what are the factors likely to influence the performance of Cameroonian municipal public sectors? As stated, the objective of this article is two-fold:

- To contribute in the understanding of the contingency determinants for performance of municipal public services;
- To identify the factors convincible to influence the performance of municipal public services.

Firstly, we present the performance measuring systems as seen through structural contingency factors, and afterwards we specify the hypotheses to verify. Secondly, we will give details on the methodological research steps undertaken. Finally, the third part concentrates on the discussion and the presentation of the main results obtained.

# PERFORMANCE DETERMINANTS IN MUNICIPAL PUBLIC SERVICES AND RESEARCH HYPOTHESES

## **Dependent Variables**

Dependent variables were chosen by taking into account the organizational specificities of African municipalities. Because of a general reticence by African municipal officials to publicize their financial statements, particularly by Cameroonian officials, we have measured the performance by a set of six criteria.<sup>1</sup> These criteria were personally assessed and evaluated by department managers, as a function of their importance on a five point Likert scale.

## **Independent Variables**

The determinants for municipal performance are grouped into a set of five exogenous variables. After presenting the theory behind each of these explicative variables, we will give out the applicable hypotheses.

## **Degree of Computerization of Activities**

The degree of computerization as a structural contingency factor has been the subject of numerous empirical studies in organizations, notably in SME (small and medium-sized enterprise). Its use as a community performance measurement in the scope of our research no longer needs justification. The study by Chapellier (1994) is one of the few who tried to characterise globally the accounting practices of SME, defined simultaneously in terms of data production and utilization by the director, pertaining to the following three fields of general accounting: management control, financial analysis, and control panels. Other studies, notably those by Lacombe-Saboly (1994) and Lavigne (1999), concentrated on the particular field of general accounting. These latter studies (Chapellier, 1994; Lacombe-Saboly, 1994; and Lavigne, 1999), which adhered principally to the mainstream contingency theory, both objectively (structural) and subjective (behavioural), demonstrated the heterogeneity of the computerized accounting system of SME, and also identified a few of its determinants. According to Chapellier

(1994), the structural contingency factors can be reduced to a few fundamental characteristics that lead to more general complex and uncertain concepts, which are more all-encompassing in the context of SME. In his research, Chapellier (1994) retains the size and age of the company, the degree of management computerization, and the nature of the activity. On the other hand, Germain (2000) shows in his study on SME that there exists a significant link between the degree of computerization of a company's activities and the sophistication of its control panels. His results corroborate the conclusions of other research studies that examined this relationship following the examples of Kalika (1987) and Chapellier (1994). Therefore, it remains to verify if the degree of computerization of municipal activities exerts an influence or not on the organizational performance of municipal public services. Thus, the research proposes to test the hypothesis according to which:

H1: The degree of computerization of activities positively influences the performance of Cameroonian municipal public services.

#### The Effect of Size on Municipal Performance

The research on this subject has been the most often quoted and viewed as a pioneering effort, notably for being a leader in comparative analysis, whose aim is to uncover the common and specific problems of organizations of all types. The main results of the Aston School reinforce the idea according to which the "size of the organization constitutes a major predictive factor of its structure" (Desreumaux, 1992). As for the size/structure ratio, numerous empirical works confirm the Aston School results (Blau & Schoenherr, 1971; Child and Manfield, 1972; etc.). However, a study conducted by Meyssonnier (1993) on the utilization of control panels in 82 French municipalities shows that a large majority of cities do not use control panels to control the functioning of services and to guide municipal activities. By using the khi2 method to evaluate the hypothesis of independence (no correlation) between the use of control panels and the size of municipalities, the author finds a value of 4.59 for a khi2 with 2 degrees of separation and a probability of 9.85%. According to this author, "we cannot affirm, with certainty, that size and the use of control panels are correlated, especially since these control panels can be variable by nature." Considering the preceding statements, the size of an organization as such seems to be a variable likely to influence the performance characteristics of Cameroonian public services. Returning to the current context in our study, inspired by previous works, we have formulated the following hypothesis:

- H2: The size of municipalities positively influences the performance of Cameroonian municipal public services.
- H3: There exist a significant link between the use of control panels and the size of Cameroonian municipalities.

#### **Degree of Decentralization of the Municipal Structure**

Decentralization must be accompanied by a strong re-structuring of activities; in other words, a precise definition of the roles and responsibilities of each person is required in order to maintain control. For Bruns and Waterhouse (1975), "in an organization that is decentralized and structured, activities are clearly defined, areas of responsibility and authority are clearly identified, and control is essentially impersonal." Therefore, decisions may be delegated since organizational control is maintained. "Decentralization also transfers a certain degree of

autonomy left to those responsible for decision-making" (Chenall and Morris, 1986). The explicative variables, pertaining to decentralization and autonomy, were measured by Bruns and Waterhouse (1975) using the scales proposed by the Aston Group. The freedom of choice to act by various responsible officials in an organization was defined at different hierarchical levels for a certain number of decision types. The anticipated relationships between the structural variables and the control systems are as follows:

- Positively influence "structured" decentralization of activities over the complexity of control systems and its perception;
- Negatively influence decentralization and the lack of autonomy on the same variables to explain;

Regarding the aforementioned work, it is clearly evident that organizational structure has been the object of numerous empirical studies in organizations. Consequently, it would be interesting for us to see if the level of decentralization of activities can influence the performance of Cameroonian municipal public services. Thus it will be necessary in the scope of this study to test the following hypothesis:

H4: There exists a positive relation between the degree of decentralization of municipal activities and the performance of Cameroonian municipal public services.

# **RESEARCH METHODOLOGY**

The research is based on the *hypothetical-deductive* method. Thus, in order to test the above hypothesis, a study by questionnaire was conducted with the participation of the local elected officials and department managers of municipal public services of the French speaking sub-Saharan Africa cities of Cameroon.

## **Preparing and Pre-Testing the Questionnaire**

In order to answer the problematic elements in this research and thus validate the hypothesis proposed, we decided to retain the questionnaire as the principal means to collect the data. Resorting to this technique seemed to us to be appropriate and could not be overlooked; in fact, the exploratory nature of our work did not allow us to obtain all the fullest and complete information needed without due recourse to a questionnaire. Hence, at the beginning of the first trimester in 2006, the first questionnaire was administered around twenty senior managers responsible for different departments in the city of Douala. Elements that seemed to present problems in understanding were re-written. Once the errors detected in the pre-test were corrected, preparing the modified questionnaire was now conceivable. The new corrected questionnaire was tested around twenty elected officials and senior department managers in the city of Yaoundé. This second pre-test did not detect any major abnormality in the questionnaires and consequently confirmed the validity of the latter. The final phase of administering the questionnaire could now begin.

## **Data Collection**

In order to collect the necessary data, questionnaires were sent to elected officials and senior department managers of Cameroonian municipalities. Details on the response rate relative to the number of questionnaires sent, returned, exploitable, and non-exploitable, are presented in Table 1.

Table 1								
GLOBAL RESPONSE RATE OF THE QUANTITATIVE SURVEY								
	Total	Percentage						
Questionnaires sent	250	100 %						
Questionnaires returned	150	60 %						
Questionnaires non-exploitables	40	16 %						
Questionnaires exploitables	110	44 %						

#### Verification of the Validity and Reliability of Measurement Methods

Recognizing the necessity to adapt the rule to the specific context of each research, Perrien et al. (1984), Evrard et al. (2003), and Usunier et al. (1993) estimated that for exploratory research, an alpha coefficient between 0.5 and 0.6 is acceptable. Thus, in the scope of this research, all elements that were not able to reach this threshold were simply discarded in order to obtain measurements that are more reliable. With this in mind, the internal coherence method was retained to measure the reliability of the measuring instruments used in the scope of this quantitative analysis. The Cronbach alpha coefficient was therefore estimated to verify the homogeneity of elements that are part of the measurement of variables relative to the evaluation of the performance of Cameroonian municipal public services. The different Cronbach alpha coefficients obtained as per our analysis are presented in Table 2.

Table 2	
<b>CRONBACH ALPHA COEFFICIENTS</b>	
Variables	Cronbach Alpha
	Coefficients
<i>Q371_IMO</i> : importance of objective 1= satisfaction of users	
$Q372\_IMO$ : importance of objective $2 = ensure garbage collection$	
<i>Q373_IMO</i> : importance of objective 3= ensure civil acts	0 753
<i>Q374_IMO</i> : importance of objective 4= satisfaction of personnel	0.755
<i>Q375_IMO</i> : importance of objective 5 = Supplying potable water	
Q38_RO : realization of objectives	
Q47_NAF : number of agents trained	0.797
Q19_NFO : Level of training	0.758
Q09_DDMA: degree of computerization of activities	0.872
$39\_COM$ : Control of objectives by minatd <sup>3</sup>	0.614
Q28_UCPM: use of control panels by municipalities (mayors)	
Q29_SMU : Size of municipality (number of employees)	0.721
Q52_EDVO: Existence of voluntary departures; Q53_DVO:	0.371
Voluntary departures	0.271

All the Cronbach alpha coefficients have values greater than 0.6 and very clearly meet the criteria for reliability generally accepted. Only the coefficient related to the variables

Q52\_EDVO, Q53\_DVO and Q57\_CP has a very low value of 0.371. The same applies to the coefficients of correlation obtained between these variables and the performance of municipal public services. However, a correlation analysis between these variables and the other variables likely to influence the performance of municipal public services were realized. All the variables of the model were measured according to the 5 or 7-point Likert scale. As Kinnear and Gray (2005) clearly point out, if the data is considered as ordinal measurements, such as for a series of rows or nominal data, the non-parametric test is the only option or possibility. Therefore, in the scope of this research, considering our small sample size and the objectives that have been assigned, we have opted for non-parametric tests. Finally, we used the software Statistical Package for the Social Sciences (SPSS) version 13.00 to analyse the data in our study.

## DETAILED RESULTS AND TESTING OF HYPOTHESES

#### The Perception by Department Managers of Global Decentralization

The question asked to measure this autonomy was direct and straightforward. We questioned the managers of the various municipal public services if they felt they belonged to a decentralized municipality. Our aim was to measure their perception of autonomy. This "perception" is an essential gauge of autonomy since it comes from the persons responsible for the implementation of management tools necessary to control the performance of public services in Cameroonian municipalities. As with the mayors, those department managers questioned had to answer on a 5-point scale varying from "not at all in agreement" to "completely in agreement". The results of the onsite survey can be seen in the graph below:



Average: 12; Maximum: 27; typical-spread: 05; Minimum: 05; Median: 07

The results of the quantitative survey show that 25% of department managers "do not agree at all" that they are part of a completely decentralized municipality. Similarly, 6 department managers or 10% only slightly agree versus 27 managers or 45% who agree "more or less". Conversely, only 7 department managers or 11.7% agree that they are in a fully decentralized environment while 5 managers or 8.3% completely agree with this statement.

## The Perception of the Number of Agents Trained by the 110 Municipal Officials (Mayors and Department Managers) in Our Sample

The observations of our onsite survey allowed us to note that there exists a genuine problem regarding the training of municipal agents in Cameroon. We were able to observe that the recruitment of agents was made on a purely political basis. However, we could not confirm these observations without the opinions of the municipal officials surveyed. Thus, we measured the perception of the agents trained on a 5-point scale from « Nil » to « High ». The 110 participants had to identify their views on this scale to indicate their opinion regarding the number of agents trained for the last two years preceding this survey.

Table 3 TOTAL SPREAD OF OPINIONS BY THE 50 MAYORS AND 60 SENIOR DEPARTMENT MANAGERS								
Minimum	Maximum	Average	Typical-Spread	Coefficient of variation				
0	58	22	23.15	1.052				

The results of the survey show that 52.7% of participants believe that the number of agents trained over the last two year preceding the survey is relatively null. 18.2 % believe that the number is very low versus 25.5% who think it is low. Only 3.6% of the 110 participants state that the number of agents trained has been high. With a maximum of 58 and an average score of 22, we note that the number of agents trained in the 50 municipalities that constitutes our sample is relatively low or at least since our onsite survey. The typical-spread is 23.15 and the coefficient of variation of 1.052 shows that there exists a strong dispersion of opinions regarding the number of agents trained in the 50 Cameroonian municipalities that comprised our survey. The graph below clearly shows the opinions shared by the 110 municipal officials.



Figure 2 **OPINION OF THE NUMBER OF AGENTS TRAINED** 

# Respecting Delivery or Completion Times as Scheduled For Public Services to Users as Perceived by 110 Municipal Officials

The performance of municipal public services can be judged by achieving the promised objectives. In other words, the satisfaction of end users and therefore the population at large is thus defined as the perception and the judgment of the customers themselves, which in turn is the population itself. In order to do this, the municipality must be able to satisfy their expectations and needs. Here we measure the length of time or delay in delivery of goods and services on a 5-point scale from "completely disagree" to "completely agree". Those surveyed (50 mayors and 60 department managers) in our sample had to state their viewpoint or opinion on whether or not the goods and services were delivered to end users in the time frame promised. The graph below summarizes the opinions provided.

#### Figure 3 RESPECTING TIMEFRAME IN DELIVERY OF GOODS AND SERVICES AS SEEN BY MUNICIPAL OFFICIALS



Average: 22; Maximum: 2 Median: 21 Minimum: 19; Typical-spread: 3.46; Coefficient of deviation: 0.18

The results of the quantitative survey already show that there is no significant link between the delivery of goods and services and the performance of Cameroonian municipal public services. Examining the above graph, the results show us that 46.3% of persons surveyed indicate on a scale from "completely disagree" to "generally disagree" that they do not share the opinion that goods and services rendered to users in the community are done so in a timely fashion. Yet, 34.6% of the 110 officials (mayors and managers) generally agree or are split 50/50 that deliveries occur on time. Finally, 19.1% completely agree that deliveries are indeed on time. With a maximum of 27 and an average of 22, the number of persons surveyed that do not share the opinion that deliveries of goods and services to users are not always respected is slightly lower than those who share the opinion in our scale from "generally agree" to "completely agree". The typical-spread and the coefficient of deviation of the scores obtained show that there exists a weak dispersion of opinions between the principal participants and confirm as well that the results between the performance of municipal public services and the explicative variable (delays in deliveries) are not significant.

#### Degree of Absenteeism as Seen by 50 Mayors and 60 Department Managers in Our Sample

We note that the phenomenon of absenteeism is a notion that is little understood, despite the proliferation of research studies attempting to comprehend, predict, or control it. Besides, after a review of the literature of more than one-hundred studies relating to absenteeism, Chadwick-Jones (1973) concludes that the efforts of the researchers was not concerted. In fact, he deplores the lack of both a uniform definition of absenteeism and a standardized approach. He notes, just as Gaudet (1963) once said, that the large diversity of measurement indices used in

the context of our research study, we wanted to understand if the degree of absenteeism could influence the performance of municipal public services in Cameroonian municipalities. We therefore measured the degree of absenteeism on a 5-point scale varying from "very low" to "very high". The 110 officials in the sample were asked to provide, according to their respective field of competency, their appreciation of absenteeism and its effects on performance.

Figure 4 APPRECIATION OF THE DEGREE OF ABSENTEEISM BY THE 110 MUNICIPAL OFFICIALS (MAYORS AND DEPARTMENT MANAGERS)



Average: 22; Maximum: 50; Median: 16; Minimum: 09; Typical-spread: 16.23

A detailed analysis of the results of the above survey shows that the degree of absenteeism is very significant. Of the officials questioned (mayors and department managers), 72.7% believe the rate of absenteeism has seen a marked increase from "average" to "very high" in the local Cameroonian municipalities. Besides, the average score of 22 can also explain the high rate of absenteeism in Cameroonian municipalities along with a typical-spread of 16.7 can shed light on the diverse opinions regarding the appreciation of the degree of absenteeism. A maximum of 50 also justifies the number of persons who believe that the degree of absenteeism is sufficiently high and that it evidently has an influence on the performance of Cameroonian municipal public services. The median indicates that 50% of persons in the survey obtained an average score less than 16, while the other half obtained a score of greater than 16. We have taken our comprehension of this phenomenon of absenteeism beyond the relationship between the personal and the organizational characteristics involved. Numerous authors insist on the necessity of taking into account lifestyle influences outside the work environment. Smulder (1983) for example mentions that for certain employees, absenteeism was a means to experience positive benefits outside work instead of "attending personal matters" or "participating in family activities".



Figure 5

The results of the quantitative investigation indicate that 74% of those questioned considered that objective 1, ensuring the satisfaction of the population, is very important with a middle score of 1.44, a median score of 1 and a gap-type of 0.88; The maximum score is identical for the five objectives, 5, as is the identical minimum of 1. Regarding the importance of objective 2 = to ensure garbage collection, only 4% of those questioned considered it to be very important, 8% considered it to be important, 6% fairly important, 20% less important and 62% of those questioned judged it as not at all important. The middle score is of 4.2 with a median score of 5, a gap-type of 1.14 and a maximum of 5. The gap-type of 1.14 shows a strong scattering of opinions of people questioned on the degree of importance of the municipal objectives of the town halls. The management of the civil status service presents a middle score of 2.62 with a median of 3; this assumes that half of the scores of people questioned are lower than 3 whereas the other half are superior or equal to the same score. The gap-type of 0.8 shows that a weak scattering of scores exist between those who judge that ensuring birth and marriage certificates are "very important, or "fairly important" along with "less important" or "not at all important". Of those questioned, 36% of people consider that this objective is important whereas 52% find it "fairly important". With a middle score of 4.10 and a gap-type of 0.76, the people questioned who consider that objective 5 (ensuring drinking water) is very important seems overall very weak. Because 64% among them find this objective of little importance with others stating even "not at all important", the reason that one can give to explain this oddity is the fact that providing drinking water is a very expensive activity for the Cameroonian town halls and their respective populations. Thus, they are obliged to share the management of this activity with the national entity SNEC (national society of the waters of Cameroon). The scattering of the scores for this objective remained nonetheless weak. When it comes to achieving these objectives, we asked the people to rate their view according to the Likert 5 point scale from "rare" to "very frequent" as to whether they were reached.

# The perception of the Degree of Conflicts by the 50 Mayors and the 60 Department Managers in our Sample

Results of our own investigations show that there exists a significant correlation between the variables of "conflicts between the mayor and the district treasurer" and the performance of Cameroonian municipal public services. The participants were asked to assign on a 5-point scale varying from "very rare" to "very frequent" their appreciation of the degree of conflict between the mayors and district treasurers.

Figure 6 DEGREE OF CONFLICT BETWEEN MAYORS AND MUNICIPAL TREASURERS



Average: 22; Maximum: 34; Median: 26; Minimum: 11; typical-spread: 10.07

In Cameroon, the municipal treasurer is the "last defender of municipal rights". As such, he is personally responsible to prevent any lapse in regulations, to ensure the protection of estates and preferred rights, mortgages, or any other type of valuable securities. As well, he must pay the regular authorized expenses; however, he may reject a request in case of irregularities, lack of credits, exceeding available funds, errors in data input, or absence of sufficient justification. It is at this level that numerous conflicts can arise between the elected official and the municipal treasurer. Consequently, 55.4% of persons questioned judged that the degree of conflicts within Cameroonian municipalities to be "frequent" or "very frequent". Conversely, 20.9 % rate it to be "very rare" or "rare". With an average score of 22 and a maximum of 34, this can also explain the large number of persons who judged the degree of conflicts to be relatively significant within the circle of mayors. The typical-spread of 10.7 does not explain the scattering that can occur regarding the appreciation of the degree of conflicts between those questioned who believe that the conflicts are frequent or very frequent and those who, on the contrary, consider them rare or very rare.

#### MAIN RESULTS OF TESTING OF HYPOTHESES AND DISCUSSION

In this section, we present and discuss the principal results we obtained while staying focused on the assigned objectives of our research. In order to test the principal hypothesis proposed, we used the Spearman coefficient of correlation. All the results are based on the data obtained in our quantitative survey.

# The influence of structural and behavioural factors on performance in Cameroonian municipal public services

The empirical confirmation of the principal hypothesis proposed shows positive correlations between structural contingency factors and performance in municipal public services (MPS). The Table below summarizes the tests conducted to validate the hypothesis relative to structural and behavioural contingency factors.

Table 4CORRELATIONS BETWEEN VARIABLES USED TO TEST OURHYPOTHESIS									
				SMU	UCPM	DDMA	NC		
		Coefficient of correlation		0.305	0.206	0295(*)	0.389(**)		
	RO	Sig. (bilateral)		0.144	0.152	0.039	0.005		
Rho by		N		50	50	50	50		
Spearman		Coefficient of correlation		1.000	0.132	0.277	0.87		
	SMU	Sig. (bilateral)		,	0.575	0.051	0.567		
		N		50	50	50	50		

H1 (The degree of computerization of activities positively influences the performance of *Cameroonian municipal public services.*) is validated. The correlation is positive in the sense that two variables (RO and NC) indicate municipalities that possess an important number of computers (NC) are more likely to realize their objectives. Even if little research has been conducted on this topic, especially between computerization and performance of various services, research by Kalika (1987) and Chapellier (1994) were done in this same light, but showing a significant link between the degree of computerization of activities and the development of accounting informational systems. Hypothesis 2 (The size of municipalities influences positively the performance of Cameroonian municipal public services) is invalidated. The Spearman coefficient of correlation of rank does not indicate any significant link between the size of municipalities (SMU and the realization of objectives (RO). This result is in accordance with the work of Burlaud and Malo (1988) that concludes that the size of a municipality, as a complexity criterion, can influence organizational performance. Hypothesis 3 (There exist a significant relationship between the use of control panels (UCPM) and the size of Cameroonian municipalities.) is invalidated. The Spearman coefficient of correlation does not reveal any significant link between the size of the municipality (SMU) and the use of control panels (UCPM). Our results corroborate those of Meyssonnier (1990) who, based on a study of 82 French municipalities, concluded that municipal size and use of control panels were not correlated, especially when the nature of these control panels can be variable. Hypothesis 4 (There exist a positive link between the degree of decentralization of municipal activities (DDMA) and the performance of Cameroonian municipal public services) is validated. The intersection of the variables for the decentralization of the municipality and the realization of the objectives creates a significant link. This indicates that the more the municipality is decentralized, the more the services themselves are decentralized, and the more easily the objectives too are attained.

#### CONCLUSION

The results of this study, based on a sample composed of 50 Cameroonian municipalities, clearly indicate the existence of a certain number of structural and behavioural contingency factors that measure the performance of municipal public services. These results show the influence that can affect the views and decision-making of elected officials and senior department managers in the performance of municipal public services. However, it seems that, overall, the ensemble of contingency factors related to the mayor and the department managers do not influence the performance of Cameroonian municipal public services. Regarding the intersection of the variables between the realization of objectives (RO) and the size of the municipality (SMU) and the use of control panels in the municipality (UCPM), we observe no significant link. By taking note of numerous studies pertaining to the structural and behavioural contingencies in companies, we have attempted to transpose this work in a municipal context. Our contribution is in the structural or concrete application of these theoretical works to a new field of activity, hardly examined, namely, the Cameroonian local municipalities. The first limitation on this research study is conceptual. In order for this work to be complete, it would have been necessary to examine, exhaustively, all the factors susceptible to influence the performance of Cameroonian municipal public services. Regarding the methodology, a larger sample would have certainly provided us with more information and would have allowed us to more easily generalize the results obtained and, in addition, develop more in-depth statistical tests. Overall, it would be interesting in the future to analyse more thoroughly the existing relational principals between the variables in order to expand the problematic of the contingent evaluation of the performance of municipal public services and emphasize the necessity of multiplying the context of the study.

#### **END NOTES**

1 These criteria are the following: Q371\_IMO (importance of objective 1 = satisfaction of users); Q372\_IMO (importance of objective 2 = ensure garbage collection); Q373\_IMO (importance of objective 3 = ensure continuation of civil acts); Q374\_IMO (importance of objective 4 = satisfaction of personnel); Q375\_IMO (importance of objective 5 = supplying potable water); Q38\_RO: realizing objectives.

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# COMPETITIVE CURRENCY DEVALUATIONS, QUANTITATIVE EASING AND VOLATILITY OF EXCHANGE RATES

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#### ABSTRACT

The pervasive quantitative easing, interest reductions and expansionary economic stimuli put into effect by advanced nations blunted the Great Recession (2007-9) and reverted the global economy decline. Foreign capital inflow to emerging markets was one of the major drivers for strong performance of equity and currency markets of emerging economies during the latter part of the Great Recession. It is observed that with advanced economies providing powerful monetary stimulus to revive their sluggish economies and emerging market economies (EMEs) facing a plethora of capital inflows amid strong recoveries, policy tensions arose between these two groups of economies. The reversal of capital inflow augmented by capital flights seems to have disrupted the equity and the currency markets of these emerging nations.

This study argued that the tenuous parity relationships of exchange rates determinations that are entertained during normal economic conditions should be further tested in this unfolding economic environment. The enhanced volatility of exchange rates triggered by differing economic performance and relatively different economic tools used by different nations should make the determination of equilibrium exchange rates much more difficult. The study confirmed that the changes in exchange rates were more volatile during the Great Recession in comparison to the pre- or post- recession periods for industrialized nations. It is also found that the exchange rates were more volatile for emerging nations.

The study examined the effectiveness of coordinated efforts of the central banks' interventions in the foreign exchange markets. The panel database of nine (U.S. as reference country) advanced industrial nations and nine emerging nations was used to test the significance of three two-way interaction terms; that is, multiplicative terms of the dichotomous variable (1 for the in-recession period and 0 for the pre- and the post-recession periods) and three monetary policy variables (money supplies, foreign exchange reserves and interest rates) The study found that the three two-way interaction terms to be highly significant. This implies that the coordinated efforts of the central banks' interventions in the foreign exchange markets using these tools were highly effective during the recession period in comparison to the pre- and the post-recession periods. However, the evidence of the coordinated interventions during the recession period was not apparent when the model was tested using the panel data of the emerging nations.

#### **INTRODUCTION**

The Great Recession (2007-9) had severely hampered the economic performance of all nations of the world, particularly those of the industrialized nations. The onset of the Great Recession had brought unparalleled coordination among the central banks. Using the G-20

platform, most industrialized and emerging nations have engaged in prolong liquidity expansion and competitive interest rate reductions to stop and reverse the economic carnage of the Great Recession that was triggered by the sub-prime mortgage crisis. A host of fiscal and monetary actions including economic stimulus of more than a trillion dollar at the early stage of the recession as well as decreasing interest rates to the level unheard of in recent memory, increasing liquidity, and decreasing reserve requirement, have been deployed. Nations and regions like Argentina, Australia, Brazil, Canada, China, the eurozone, Iceland, India, Indonesia, Korea, New Zealand, Russia, Taiwan, Switzerland, U.K., the U.S. and others have marshaled and used their resources to soften the blow of the economic crisis. Similarly, many nations have deployed fiscal policies to avert collapse in the banking system and to stimulate the faltering economic activities. On the other hand, it should be recognized that the industrialized and emerging economies had experienced different levels of economic shocks and as such, the degree of economic cooperation and coordination have been tested as was apparent in the G-20 meeting of February of 2014. Interestingly, it seems the level of support and agreement in the G-20 meeting of February 2015 on the role of quantitative easing (QE) to boost the global economy has been elevated.

At a time of diverse economic performance between the emerging, developing and industrialized nations, some important research questions need to be addressed as new economic challenge has begun to emerge. Has the QE by industrialized nations and regions, such as the U.S., Japan, Switzerland, and the eurozone, depreciated their currencies and brought the demise of the underpinning of the freely fluctuating exchange rate system? Has the reverse of stimulus expansion or quantitative easing and prelude of interest rate hikes by the U.S. Federal Reserve System (Fed) triggered exchange control and some other forms of indirect interventions by emerging economies? Indeed, interest rate hikes and imposition of exchange control have been imposed by several developed and emerging countries like Argentina, Brazil, India, Indonesia, Korea, South Africa and Turkey. How are the immensely increased balance sheets of central banks of countries, such as the U.S., Japan, Switzerland, and the eurozone that have used QE as a tool for economic expansion as well as to fight currency appreciation and/or to induce currency weakness, going to be maintained? Will the Fed expected interest rate increase give pause to many central banks that were using QE to nudge growth in their economy and lower the exchange rates of their currencies?

The increase in money supply and the relatively low return on investments in industrialized nations have made emerging countries attractive investment destinations for hedge fund managers, arbitrageurs and other investors. Interestingly, the sheer mention of tapering of quantitative easing catapulted the arbitrageurs and hedge fund managers to engineer a reverse of capital investments from emerging countries. These emerging countries are now perceived, with expected less liquidity or less money supply floating, to have lower economic growth potential and thus carry high risk to expected relative returns on invested capital. These kind of unreliable capital inflows and outflows, and speculative capital, hamper the long term economic development of nations, and in the short run usher in high volatility in the level of performance of exchange rates and equity markets. Such was the situation observed in several of the emerging markets from May to September of 2013 as shown in Graphs 1 and 2 below.

In general, we expect a toned down but similar situations, capital flights and currencies volatility to occur around the Fed action of December 2015. Furthermore, if the central banks of these industrialized nations are going to reduce the assets, besides through natural maturities, (e.g., treasury bonds, mortgage bonds) from their balance sheets, would this trigger other economic disruptions in emerging economies with entailing contagions?



Graph 1: Impact of Fed Tapering Policy on TRK Lira and Equity Index

Graph 2: Impact of Fed Tapering Policy on Indian Rupee and Equity Index



Undoubtedly, the deal to establish the New Development Bank (NDB) and Contingency Reserve Arrangement (CRA) with an initial capital of \$50 billion and \$100 billion respectively by BRICS countries, Brazil, Russia, India, China and South Africa, on July 15, 2014 was to mitigate economic disruption as had occurred in the second part of 2013. At the same time, it was also to avoid high reliance on development and emergency funds availability from industrialized countries and western financial institutions. The objective of NDB is to make funds available to emerging and developing nations for long-term economic development focused on infrastructure development. The CRA objective is to make funds available for financial emergencies such as had happened in equity and currency markets of emerging countries when the Fed announced that it would start tapering the quantitative easing in late May of 2013. Even as the tapering by the Fed progresses, there will still be an increase in the assets of its balance sheet, albeit at a decreasing rate. On the other hand, at the August 2014 Jackson Hole central banks meeting, the European Central Bank (ECB) and the Bank of Japan definitely indicated that they would pursue more QE to fight deflation and economic malfeasance in their economies. Raising the QE by ECB recently from 60 billion euro a month to 72 billion euro a month and extending the quantitative easing program from September 2016 to March 2017 as well as reducing the deposit rate to -0.03 from -0.02 are good examples that central banks will be increasing their balance sheets for the foreseeable future. Such has been the case with the People Bank of China along with the unexpected currency (yuan) devaluation of August 2015. Nevertheless, the increased assets in the balance sheets of the central banks have raised the money supply in the world. Wouldn't this increased liquidity be a harbinger of high inflation, besides raising the inflation to the central banks targeted 2%, as the velocity of money start to increase? Paradoxically, would the world economy with high money supply and accelerating velocity inject more relevance to the International Fisher Effect and Purchasing Power Parity theories through increasing inflation?

#### **BACKGROUND AND RELATED LITERATURE**

The U.S. Federal Reserve switched its monetary policy stance towards an easing mode beginning September 2007 in order to deal with the sub-prime crisis that started in August of 2007. The U.S. Fed cut its policy rate from 5.25 percent in August to 2.0 percent by April 2008 and reached the zero bound by December 2008. It has remained at that level for more than six years. The monetary response of the Bank of England (BOE) and the Bank of Canada (BOC) broadly tracked the U.S. Federal Reserve. The European Central Bank (ECB) went into easing in October 2008 following the collapse of Lehman Brothers. The ECB reached its lowest interest rate of 0.25 percent in November 2013 and plans to purchase \$1.3 trillion of sovereign and private debts until the later part of 2016. The conventional interest rate reduction and the unconventional quantitative easing of the various central banks were in response to their respective domestic situations, but were heavily influenced by developments in the U.S. In the immediate aftermath of the Lehman collapse, there was a coordinated reduction of 25-50 basis points in the policy interest rates by the central banks of six advanced economies in order to ease global monetary conditions (Kapur & Mohan, 2014). Such a coordinated effort by central banks in the U.S. and other major advanced economies to pursue highly accommodative monetary policy, including through unconventional policy actions, quantitative easing drove interest rates to nearly zero for almost five years.

The advanced industrial nations have pursued aggressive unconventional monetary policies (UMP) since 2008 to provide support to their economies. These policies have taken interest rates, both short-term and long-term, in these economies to record low levels and have encouraged large capital outflows, but with recurrent volatility to the emerging market economies (EMEs). The uptrend in capital flows received by the EMEs since 2008 has been interspersed with sudden retrenchment as occurred in 2010-11 on the back of the eurozone sovereign debt crisis and in mid-2013 on the back of tapering concerns over the Fed monetary policy's stand. These sudden swings in capital flows, have complicated macroeconomic management in the EMEs while the policy makers in advanced economies argue that the UMP are net positive not only for them but for the EMEs as well. The empirical evidence casts doubt on these claims (Kapur & Mohan, 2014). The volatility experienced by financial markets in

EMEs in mid-2013 and early 2014 has already provided indications of what may happen as the unwinding of QE proceeds as it must. Furthermore, how much QE in the U.S. spurred capital flows into EMEs and the factors that might have contributed to such an outflow and whether there was significant change between the period before and after the crisis have been the subject of several research papers including the one by Byrne and Fiess (2011) that found low interest rates in the U.S. as a major determinant of capital outflow from the U.S. to EMEs. Ghosh, Kim, Qureshi and Zalduendo (2012) find that in addition to lower interest rates, greater global risk appetite and EMEs' attractiveness as investment destinations have contributed to the capital inflows into EMEs. More recently, Ahmed and Zlate (2013) have also found that interest differentials and global risk appetite have been the main determinants of net private capital inflows into EMEs.

Given the near zero short-term interest rates and also the historically low level of longterm interest rates in the advanced industrial nations, the sharp increase in their balance sheet sizes led to an aggressive search for yield and led to large amounts of capital flows to EMCs putting undue pressure on EME's currencies leading to widening of current account deficits. These actions helped the advanced industrial nations revive their sluggish economies. As a result, when the U.S. Federal Reserve hinted at a possible tapering of its QE, large capital outflows from major EMEs took place leading to large local currencies depreciation making imports more expensive and ignited fears in the EMEs. Several EME countries argued that the advanced industrial nations' policies, including the unconventional monetary policy in the U.S. through large scale asset purchases, were primarily responsible for the excessive flows of capital to their economies creating adverse spillover effects.

Increasing the money supply tends to depreciate a country's exchange rates relative to other currencies, through its effects on interest rate. Relatively lower interest rates lead to a capital outflow from a country, thereby reducing foreign demand for a country's money, leading to weaker currency. In a normal economic condition, the process of QE directly benefits exporting industries in the country deploying QE, as well as debtors both domestic and international, since the currency and interest have fallen, meaning there is less money to be repaid. However, it directly harms creditors as they earn less money from lower interest rates. The reverse is true for importers and creditors of the country that deployed QE.

Given the difference between the perception of the EMEs and the advanced economies on the spillover, it is apparent that the EME policy makers would be better served by policies that minimize the spillovers for them. If international monetary coordination is to take place, the major advanced industrial nations have to first recognize that their monetary policy actions, especially of the unconventional variety, do have significant spillovers on EMEs and hence have to be internalized. Their current stance, however, is that either there are no significant crossborder spillovers, or they are indeterminate, or that they are in fact overall positive for EMEs. If this view does not change. EME policy makers would have to manage these spillovers on their own. This would involve a combination of various policies to promote financial stability in their economies: judicious capital account management to reduce the domestic impact of volatile capital flows would have to be a significant element in such policies while maintaining exchange rate flexibility, and buildup of adequate precautionary foreign exchange reserves. Such macromanagement would only be effective in the presence of prudent monetary and fiscal policies, and the continued development of domestic financial markets along with active financial regulation. The establishment of the New Development Bank and Contingency Reserve Agreement is a move to mitigate such spillover problems.

Moreover, new developments in the EMEs are opening up, such as the creation of local currency bond markets to foreign portfolio investors from the advanced industrial nations. Turner (2014) argues that such development has major implications for the transmission of advanced industrial nations' monetary policy for both monetary policy and financial stability in the EMEs. The unconventional monetary policy induced low long-term interest rates have led to corresponding low long-term interest rates in EMEs, and the withdrawal of unconventional monetary policy will then have reverse corresponding effects on EME interest rates. It has, therefore, become more difficult for EMEs to practice independent monetary policy without significant capital account management.

In Africa, they created what is called African Domestic Bond Fund (ADBF) (Ncube, 2014). The creation of the ADBF is expected to help mitigate the effects of QE tapering on African economies. The fund will contribute to the development of sound domestic debt markets on the continent by investing in African local currency denominated sovereign bonds. This is expected to reduce African countries reliance on foreign currency denominated debt, and thus help build resilience against the transmission of capital flow shocks. The bank seeks to further deepen domestic financial markets through borrowing and lending in local currencies. This will help reduce imbalances and exposure to foreign exchange risks.

The EMEs and a number of observers have stressed the adverse impact of spillovers from the monetary policies of the reserve currency countries. Given the key channels for spillovers are through cross-border capital flows and exchange rate movement, the EMEs would benefit from management of capital flows, and management of exchange rate volatility. EMEs with greater restrictions on capital flows fared better, and those with higher economy-wide capital inflows restriction in pre-crisis years experienced smaller growth decline (Ostry et al., 2010, 2011).

According to Koester (2014), chief executive and co-founder of FiRE apps, a provider of currency exposure management tools various emerging market currencies have depreciated enough to evoke calls of 'currency crisis' and 'currency war.' Most of this has fallen on the BRIC countries. The Brazilian real weakened to a five year low during the peak of QE taper anticipation in late August, 2013. In India a tepid economic growth combined with current account deficits and capital outflows required heavy central bank intervention to shore up the rupee. The South African rand fell 7.5 percent in January 2014, its weakest level since 2008. The currency continued to fall even after the central bank raised its benchmark interest rate to 5.5 percent from 5.0 percent-the first rate increase in almost six years. The Russian ruble fell 7 percent, hitting a five year low. A confluence of factors is causing the emerging market panic. The first is the pull-back of stimulus in the U.S. Since September 2012, the Federal Reserve has pumped massive amounts of liquidity (\$85 billion at its highest) every month into the global market through OE. In December 2013, outgoing Fed Chairman Ben Bernanke announced the beginning of tapering- a \$10 billion reduction in monthly bond buying. On January 2014, the Fed announce that it would reduce its bond buying by an additional \$10 billion to \$65 billion a month.

BRIC countries have criticized the QE carried out by the central bank of developed nations. They argue that such actions amount to protectionism and competitive devaluation. As net exporters whose currencies are partially pegged to the dollar, they protest that QE causes inflation to rise in their countries and penalizes their industries.

#### DATA, MODELS AND EXPECTATIONS

It is the premise of this study that the tenuous parity relationships of exchange rates determination that are entertained during normal economic conditions will be further tested in this unfolding economic environment. Thus, the enhanced volatility of exchange rates that are triggered by differing economic performance and relatively different economic tools used by different nations will make the determination of equilibrium exchange rates among currencies much more difficult. With these questions in mind, our study examines the volatility of exchange rates as measured by the coefficient of variation, the unbiased relationships of forward rate (local currency per U.S. \$) and spot exchange rate (local currency per U.S. \$), and comparative stock market performance in connection to direct and indirect market interventions by the central banks among emerging countries as well as the U.S. The countries included in this study are nine advanced industrial nations (Australia, Canada, the eurozone, Japan, New Zealand, Sweden, Switzerland, U.K. and the U.S.) and nine emerging nations (Brazil, China, India, Indonesia, South Korea, South Africa, Turkey, Russia, and Mexico).

Using Thompson-Reuters' Data Stream, monthly data of several key macro variables are collected for these nations and the eurozone during the pre-Great Recession period (July 2001-November 2007), the in-Great Recession (December 2007 – June 2009), and the post-Great Recession period (July 2009 – July 2014). Our study examined the impact of quantitative easing on volatility of exchange rates as measured by coefficient of variation in before, during and after the Great Recession periods. We are also interested in finding evidence of central banks' effective intervention in the foreign exchange market that forced the exchange rate to deviate from the rate forecasted by the forward rate (since the summer of 2007). We define F t-1 to be the percentage change of forward rate at time t-1 for delivery at time t. S t is the percentage change of the exchange spot rate at time t, and e is an error term. If the unbiased spot-forward **contemporaneous** relationship holds, it is expected that the intercept B0 = 0 and B1 (the coefficient associated with F t) = 1. In contrast, if the unbiased spot-forward **lagged** relationship holds, it is expected that B0 = 0 and B1 (the coefficient associated with Ft-1) = 1.

In addition to these fundamental factors, we introduce:

Model I

$$\mathbf{S}_{t} = \beta_{0} + \beta_{1} * \mathbf{F}_{t-1} + \beta_{2} * \mathbf{X}_{1 t-1} + \dots + \beta_{8} * \mathbf{X}_{7 t-1} + \mathbf{AR} (1) + \varepsilon_{t}$$
(1)

Seven key macro variables along with AR (1) were added in the equation over and above what is included in the lagged forward rate expectation model. The inclusion of a first-order autoregressive process is a widely accepted practice based on Durbin and others' pioneer work (Durbin & Watson, 1971; Godfrey, 1978). The seven variables added are: 1) relative percentage changes in money supply that may account for direct intervention and/or a probable shift in a nation's monetary policy; 2) relative percentage changes in foreign exchange reserves (measured in SDR) that may indicate direct intervention; 3) relative change in nominal interest rates that also may indicate indirect intervention; 4) relative percentage changes in the Consumer Price Index; 5) relative percentage changes in Industrial Share Price; 6) relative change in the trade balance ratio (exports divided by imports) that may partially account for the level of strength/weakness of a currency, and/or likely decrease (increase) in a nation's GDP and foreign currency reserve; and 7) relative percentage change in stock market index. The relative

percentage change is computed by subtracting the percentage change of a foreign nation's macro variable from that of the U.S. Three macro variables from the above, that is, 1) money supply, 2) foreign exchange reserves and 3) nominal interest rates, are presumed in this study as part of central banks' monetary tools that may shed light as to central banks' foreign currency intervention activities.

The reason why these macro variables are included in Model I is that if the unbiased spotforward lagged relationship holds and all macro fundamental information is captured into the forward rate at time t-1, it is thus expected that B0 = 0, B1 = 1 and  $B2 \dots B8 = 0$ . In contrast, if the forward rate at time t-1 is a valid but not perfect predictor of the spot rate at time t, which is also influenced by the macro variables, it is anticipated that at least one of the beta coefficients associated with the macro variables should be statistically significant and between 0 and 1, or between -1 and 0, depending on how the exchange rate is quoted (e.g., direct or indirect quote). In this study, spot rates and forward rates are direct quotes (e.g., Japanese yen per U.S. \$).

Model II

$$\begin{split} S_{t} &= \beta_{0} + \beta_{1} * F_{t-1} + \beta_{2} * X_{1 t-1} + ... + \beta_{8} * X_{7 t-1} + \beta_{9} * D + \beta_{10} * X_{1 t-1} * D + \beta_{11} * X_{2 t-1} \\ * D + \beta_{12} * X_{3 t-1} * D + AR (1) + \varepsilon_{t} \end{split}$$
(2)

The model tests the effectiveness of coordinated efforts of the central banks' interventions in the foreign exchange markets. The model adds one dichotomous variable which assigns 0 to the pre-recession period, 1 to the in-recession, and 0 to the post-recession period. We used the panel database to test the significance of the three two-way interaction terms; that is, multiplicative terms of the dichotomous variable and the three macro variables (money supplies, foreign exchange reserves and interest rates). If the central banks have effectively coordinated their efforts to intervene in the foreign exchange markets to combat the recession, we should observe statistically significant interaction terms.

During the Great Recession period, the larger percentage change in U.S. quantitative easing (e.g. increasing money supply and/or non-sterilized intervention by increasing mortgage and Treasury bonds holding as well as foreign currency reserves) is likely to pull the U.S economy out the Great Recession. It is, thus, likely over time to strengthen the U.S. dollar against other currencies, which should result in a significant, positive beta associated with money supply (or foreign currency reserve) change in the model. Initially, increase in money supply should depreciate the U.S. dollar but the determined and forceful quantitative easing of the Fed supported by fiscal policy will create expected relative strength in the U.S. economy thereby leading to U.S. dollar appreciation. If the beta of the in-recession period is larger than that of the pre-recession or the post-recession, we should observe a significant positive interaction term.

In contrast, the larger reduction in the U.S. interest rates is likely to weaken the U.S. dollar against other currencies in the low inflation environment, producing a significant, positive beta associated with interest rate change. If this beta of the in-recession period is larger than that of the pre-recession or the post-recession, we should observe a significant positive interaction term.

In other words, these statistically significant interaction terms indicate the major impact of the monetary interventions through changes in money supplies, foreign exchange reserves, and interest rates during the recession period in comparison to the pre- or the post-recession period.

#### **DESCRIPTIVE RESULTS**

Tables 1 and 2 indicate descriptive statistics of exchange rates of advanced and emerging nations. Mean and standard deviation (STD) of each currency per U.S. \$ are shown for the prerecession, in-recession and post-recession period respectively. The coefficient of variation (CV), a standardized measure of the dispersion, makes it possible to compare the extent of the dispersion across different currencies. Mean and STD of percentage changes are also presented. Larger STDs of percentage changes are observed for all counties during the recession period, in comparison to the pre- and the post-recession periods. This is best illustrated in Graph 3 where the Canadian dollar fluctuated in both directions during the Great Recession, though very large percentage changes were clearly seen.

Table 1										
DESCRIPTIVE STATISTICS OF EXCHANGE RATES										
Advanced Industrial Nations										
	· · · ·	<sup>1</sup> Iu Vanc	cu mu	ustitui	114101	5				
Pre-Recession (January 2000 - Nov 2007)	Panel	AUS \$/ US\$	CN \$/ US\$	Euro/US\$	JP Y/ US\$	NZ\$/US\$	SW Krona/US\$	SWISS Fr/US\$	UK £/ US\$	
MEAN		1.534	1.346	0.913	115.376	1.792	8.300	1.406	0.598	
STD		0.263	0.181	0.147	6.960	0.385	1.259	0.201	0.069	
CV = STD / Mean		0.171	0.134	0.161	0.060	0.215	0.152	0.143	0.116	
MEAN % Change	-0.26%	-0.28%	-0.42%	-0.35%	0.12%	-0.35%	-0.27%	-0.33%	-0.86%	
STD % Change	2.96%	3.53%	1.98%	2.81%	2.80%	3.80%	3.03%	2.76%	6.79%	
In-Recession (December 2007 - June 2009)										
MEAN		1.268	1.111	0.705	100.904	1.540	7.116	1.101	0.582	
STD		0.184	0.102	0.053	6.797	0.244	0.990	0.059	0.079	
CV = STD / Mean		0.145	0.092	0.076	0.067	0.158	0.139	0.054	0.136	
MEAN % Change	0.64%	0.82%	0.88%	0.42%	-0.66%	1.11%	1.31%	-0.04%	1.32%	
STD % Change	4.95%	6.15%	3.42%	4.96%	4.70%	5.34%	4.81%	4.62%	4.75%	
STD % In- vs. Pre-Recession	1.672	1.741	1.722	1.766	1.679	1.404	1.586	1.672	0.699	
Post-Recession (July 2009 - October 2014)										
MEAN		1.040	1.030	0.744	89.372	1.276	6.789	0.951	0.627	
STD		0.075	0.042	0.034	9.288	0.094	0.362	0.069	0.021	
CV = STD / Mean		0.072	0.040	0.045	0.104	0.073	0.053	0.073	0.033	
MEAN % Change	-0.13%	-0.12%	0.00%	0.17%	0.21%	-0.31%	-0.11%	-0.17%	0.04%	
STD % Change	2.76%	2.78%	1.84%	2.75%	2.75%	3.19%	3.06%	3.05%	2.08%	
STD % In- vs. Post-Recession	1.794	2.215	1.860	1.800	1.710	1.673	1.569	1.514	2.286	

During the recession period, STD of percentage changes in advanced nations' currencies was 4.95%, 1.67 times and 1.79 times as large as STD of the pre-recession and the post-recession respectively as indicated by the panel data. Similarly, STD of percentage changes in emerging currencies was 5.16% during the recession period, 1.37 times and 2.0 times more than the STDs during the pre-recession and the post-recession periods. Interestingly, the mean exchange rates of most of the emerging nations over the three periods had declined with the exception of Brazilian real and Chinese yuan. The quantitative easing by the Fed might have reduced the value of exchange rates of seven out of nine emerging nations contrary to what had been voiced by certain central banks. The impact of quantitative easing might have been felt intensely by the Turkish lira and the Mexican peso. On the other hand, the Brazilian real and the Chinese yuan appreciated strongly against the U.S. dollar over these three periods lending some credence to the notion that the U.S. may be exporting its economic problems.

#### ECONOMETRIC ANALYSIS RESULTS

A number of Augmented Dickey-Fuller (ADF) unit root tests were conducted to ensure the stationarity of the data used in the econometric models discussed earlier. All but four country-specific percentage differential data were stationary at the first difference. Four indicators, including CPI percent differential between U.S. and Turkey, money supply percent differential between U.S. and Russia, foreign currency reserves percent differential between U.S. and Russia, and money supply percent differential between U.S. and India, became stationary at the second difference.

Twenty-four econometric analyses were conducted for the eight advanced industrial nations in the pre-, in- and post-recession periods while 27 models were run for the



	Table 2									
DESCRIPTIVE STATISTICS OF EXCHANGE RATES Emerging Nations										
Pre-Recession (January 2000 - Nov 2007) CHN INDO										
		<b>BR Real</b>	Yuan	IN Rupee	Rupiah	KO Won	MX Peso	<b>RU Ruble</b>	SA Rand	TK Lira
	Panel	/ US\$	/ US\$	/ US\$	/ US\$	/ US\$	/ US\$	/ US\$	/ US\$	/ US\$
MEAN		2.464	8.154	45.465	9187.058	1116.682	10.392	28.698	7.565	1.304
STD		0.504	0.222	2.175	741.718	127.030	0.785	1.753	1.474	0.305
CV = STD / Mean		0.205	0.027	0.048	0.081	0.114	0.076	0.061	0.195	0.234
MEAN % Change	0.16%	0.07%	-0.11%	-0.10%	0.38%	-0.20%	0.19%	-0.09%	0.22%	1.07%
STD % Change	3.78%	4.72%	0.31%	1.22%	4.11%	2.02%	1.99%	1.21%	5.17%	7.07%
In-Recession (December 2007 -	June 2009)									
MEAN		1.951	6.937	45.262	10087.000	1170.905	11.966	27.432	8.578	1.407
STD		0.277	0.164	4.143	990.917	182.888	1.514	4.106	1.113	0.196
CV = STD / Mean		0.142	0.024	0.092	0.098	0.156	0.127	0.150	0.130	0.139
MEAN % Change	1.06%	0.85%	-0.43%	1.11%	0.64%	1.85%	1.22%	1.42%	1.27%	1.63%
STD % Change	5.16%	5.54%	0.68%	3.04%	5.80%	5.25%	4.91%	4.84%	7.15%	5.86%
STD % In- vs. Pre-Recession	1.367	1.173	2.169	2.492	1.414	2.597	2.473	3.991	1.384	0.829
Post-Recession (July 2009 - Oct	ober 2014)									
MEAN		1.943	6.418	52.189	9796.273	1115.991	12.816	31.473	8.480	1.769
STD		0.248	0.264	6.298	1086.032	52.431	0.497	2.456	1.338	0.237
CV = STD / Mean		0.127	0.041	0.121	0.111	0.047	0.039	0.078	0.158	0.134
MEAN % Change	0.18%	0.37%	-0.17%	0.41%	0.29%	-0.25%	0.03%	0.45%	0.54%	0.61%
STD % Change	2.53%	3.27%	0.47%	2.29%	2.04%	2.17%	2.35%	2.86%	3.10%	2.87%
STD % In- vs. Post-Recession	2.038	1.693	1.447	1.328	2.849	2.420	2.093	1.695	2.309	2.040

nine emerging nations, for a total of 51 statistical analyses, in the three sub-periods to test Model I:

# $S_{t} = \beta_{0} + \beta_{1} * F_{t-1} + \beta_{2} * X_{1 t-1} + ... + \beta_{8} * X_{7 t-1} + AR(1) + \epsilon_{t}$

This study states that if the forward rate at time t-1 is a valid but not perfect predictor of the spot rate at time t, which is also influenced by the macro variables, it is anticipated that at least one of the beta coefficients associated with the macro variables should be statistically significant. The study is particularly interested in three macros, specifically 1) money supply, 2) foreign exchange reserves and 3) nominal interest rates, which are presumed in this study as part of central banks' monetary tools that may shade light as to central banks' foreign currency intervention activities.

Table 3 summarizes of the 51 statistical analyses on the coefficient associated with money supply, foreign currency reserves and interest rates, which are presumed in this study to be significant variables, will show the coordinated actions of central banks. The summary tables indicate the presence of significant impacts (p<.10) of the monetary policy tools on exchange rates during the recession period, particularly among the advanced industrial nations. The reduction of interest rates seems to have been particularly effective in weakening the U.S. dollar as expected. The model was further tested by the panel data of the advanced industrial and the emerging nations for the three sub-recession periods separately. The results are presented in Tables 4 and 5.

Table 3								
SUMMARY OF COEFFICIENTS OF THREE MONETARY POLICY TOOLS								
	Advanced 1	Industrial Nations						
Period	Monetary Policy Tools	Direction of Coefficients	# of Nations Showing Significant Policy Impact					
Pre-Recession	Money Supply	Positive	1 out of 8					
Pre-Recession	Foreign Currency Reserve	Negative	1 out of 8					
Pre-Recession	Interest Rate	Positive	1 out of 8					
In-Recession	M oney Supply	Mixed	5 out of 8					
In-Recession	Foreign Currency Reserve	Positive	1 out of 8					
In-Recession	Interest Rate	Positive	5 out of 8					
Post-Recession	Money Supply	Positive	3 out of 8					
Post-Recession	Foreign Currency Reserve	Negative	1 out of 8					
Post-Recession	Interest Rate	Mixed	2 out of 8					
	Emer	ging Nations						
Pre-Recession	Money Supply	Negative	1 out of 9					
Pre-Recession	Foreign Currency Reserve	Mixed	2 out of 9					
Pre-Recession	Interest Rate	Negative	1 out of 9					
In-Recession	M oney Supply	Mixed	4 out of 9					
In-Recession	Foreign Currency Reserve	Mixed	3 out of 9					
In-Recession	Interest Rate	Mixed	4 out of 9					
Post-Recession	Money Supply	Positive	1 out of 9					
Post-Recession	Foreign Currency Reserve	Mixed	3 out of 9					
Post-Recession	Interest Rate	Mixed	3 out of 9					

Table 4 shows similar patterns during the pre- and the post-recession periods. The percentage change in forward rates, changes in several macro differentials, and AR(1) were powerful in predicting one-month-ahead spot rate changes although the directions of the coefficients are somewhat difficult to explain. Interestingly, a different pattern emerged during the Great Recession period: the coefficients associated with the two monetary policy tools such as percentage differential changes in foreign currency reserves and interest rates, became highly significant in predicting the change in the U.S. dollar denominated spot rates. This gives credence to the effectiveness of economic policy coordination among the advanced industrial nations during that challenging period. Such pattern, however, did not appear in Table 5 where the model was tested against the panel data of the emerging nations. It is shown there that the industrial share price relative change differentials between the U.S. and the emerging nations were indeed a powerful leading predictor of changes in spot exchange rates among these emerging nations.

Table 4										
MODEL I TEST RESULTS										
Advanced Industrial Nations										
	Pre-Reces	sion	In-Recession	on	Post-Rece	ssion				
Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.				
INTERCEPT	-0.005	0.000	0.009	0.027	-0.003	0.133				
FWD_CHG(-1)	-0.590	0.006	0.295	0.118	-0.266	0.001				
CPI_D(-1)	0.126	0.058	-0.264	0.162	0.092	0.441				
MSPPLY_D(-1)	0.047	0.562	0.249	0.359	0.093	0.292				
SHARE_D(-1)	0.134	0.004	0.196	0.174	0.074	0.223				
RESRV_D(-1)	0.003	0.852	0.144	0.001	-0.045	0.001				
TBILL_D(-1)	-0.165	0.776	2.501	0.010	-0.314	0.790				
TRADE_D(-1)	0.004	0.823	-0.078	0.196	-0.012	0.443				
INDEX_D(-1)	-0.075	0.047	-0.005	0.968	0.073	0.159				
AR(1)	0.525	0.017	-0.074	0.694	0.243	0.004				

Table 5         MODEL I TEST RESULTS         Emerging Nations										
	Pre-Reces	sion	In-Recession	on	Post-Rece	ssion				
Variable	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.				
INTERCEPT	0.000	0.979	0.005	0.168	0.002	0.200				
FWD_CHG(-1)	-0.012	0.628	0.145	0.222	-0.147	0.068				
CPI_D(-1)	-0.164	0.261	-0.648	0.205	-0.152	0.393				
MSPPLY_D(-1)	-0.132	0.001	-0.094	0.560	0.074	0.190				
SHARE_D(-1)	0.082	0.000	0.191	0.000	0.114	0.000				
RESRV_D(-1)	0.011	0.527	-0.048	0.348	-0.028	0.069				
TBILL_D(-1)	-0.026	0.000	-0.547	0.368	0.244	0.329				
TRADE_D(-1)	-0.019	0.135	0.011	0.718	0.021	0.042				
INDEX_D(-1)	-0.011	0.189	-0.016	0.491	0.001	0.946				
AR(1)	0.101	0.014	0.057	0.653	0.248	0.004				

Lastly, the study tested Model II:

$$\begin{split} S_{t} &= \beta_{0} + \beta_{1} * F_{t-1} + \beta_{2} * X_{1 t-1} + ... + \beta_{8} * X_{7 t-1} + \beta_{9} * D + \beta_{10} * X_{1 t-1} * D + \beta_{11} * X_{2 t-1} \\ &* D + \beta_{12} * X_{3 t-1} * D + AR (1) + \varepsilon_{t} \end{split}$$

This model tests the effectiveness of coordinated efforts of the central banks' interventions in the foreign exchange markets. Again, the panel database was used to test the significance of the 3 two-way interaction terms, specifically, multiplicative terms of the dichotomous variable (1 for the in-recession period and 0 for other periods) and the three monetary policy variables (money supplies, foreign exchange reserves and interest rates). If the central banks of the advanced industrial nations have effectively coordinated their efforts to intervene in the foreign exchange markets to combat the recession, we should observe statistically significant interaction terms. The results of Model II tests are presented in Tables 6 and 7.

Table 6										
MODEL II TEST RESULTS										
Advanced Industrial Nations										
Variable	Coefficient	Std. Error	t-Statistic	Prob.						
INTERCEPT	-0.003	0.001	-2.832	0.005						
FWD_CHG(-1)	-0.199	0.060	-3.303	0.001						
CPI_D(-1)	0.066	0.052	1.266	0.206						
MSPPLY_D(-1)	0.048	0.062	0.778	0.437						
SHARE_D(-1)	0.147	0.035	4.212	0.000						
RESRV_D(-1)	-0.017	0.010	-1.671	0.095						
TBILL_D(-1)	-0.073	0.547	-0.134	0.893						
TRADE_D(-1)	-0.007	0.011	-0.624	0.533						
INDEX_D(-1)	-0.057	0.027	-2.122	0.034						
In-Recession Period (1 or 0)	0.015	0.003	4.370	0.000						
TBILL_D(-1)*In-Recession	3.085	0.839	3.676	0.000						
MSPPLY_D(-1)*In-Recession	0.195	0.175	1.113	0.266						
RESRV_D(-1)*In-Recession	0.133	0.026	5.040	0.000						
<b>AR</b> (1)	0.205	0.061	3.346	0.001						

As shown in Table 6, the study found the two-way interaction terms associated with foreign exchange reserve and interest rates were significant in the positive directions. This implies that the coordinated efforts of the central banks' interventions in the foreign exchange markets using these monetary policy tools were highly effective during the recession period in comparison to the pre- and the post-recession periods. Forward rate percentage change is also a significant predictor of spot rate changes one month ahead in the opposite direction. Again, these results indicate the significant deviations of exchange rate determination from the parity theories under the highly coordinated central banks' interventions in the foreign exchange markets. However, the evidence of the coordinated interventions during the recession period was not apparent when the model was tested using the panel data of the emerging nations as presented in Table 7.

Table 7										
MODEL II TEST RESULTS										
	Emerging Nations									
Variable	Coefficient	Std. Error	t-Statistic	Prob.						
INTERCEPT	0.000	0.001	0.341	0.733						
FWD_CHG(-1)	-0.004	0.022	-0.179	0.858						
CPI_D(-1)	-0.208	0.114	-1.829	0.068						
MSPPLY_D(-1)	-0.097	0.032	-3.062	0.002						
SHARE_D(-1)	0.105	0.013	7.835	0.000						
RESRV_D(-1)	-0.005	0.013	-0.368	0.713						
TBILL_D(-1)	-0.027	0.006	-4.199	0.000						
TRADE_D(-1)	-0.004	0.008	-0.528	0.598						
INDEX_D(-1)	-0.012	0.006	-1.950	0.051						
In-Recession Period (1 or 0)	0.008	0.003	2.325	0.020						
TBILL_D(-1)*In-Recession	-0.718	0.482	-1.489	0.137						
MSPPLY_D(-1)*In-Recession	0.057	0.118	0.482	0.630						
RESRV_D(-1)*In-Recession	-0.037	0.037	-0.982	0.326						
<b>AR</b> (1)	0.123	0.032	3.867	0.000						

## CONCLUSION

The omnipresent quantitative easing, interest reductions and expansionary economic stimuli deployed by advanced industrial nations blunted the Great Recession and reverted the global economy decline. Since mid-2009, most advanced industrialized nations, except some eurozone, and emerging market economies have registered growth, even if it is anemic by pre-Great Recession period's standard. Foreign capital inflows into emerging markets, seeking relatively higher returns, was one of the major drivers for strong performance of equity and currency markets of emerging economies during the latter part of the Great Recession. It is observed that the action of advanced industrial nations to provide powerful monetary stimulus to revive their sluggish economies had triggered capital outflows seeking higher returns. Emerging nations experienced a parade of capital inflows amid strong economic recoveries. This situation created policy tensions between these two groups of economies on what the reversal of the capital inflows will do to the economy of the emerging nations. The reversal of capital inflows augmented by capital flights seems to have disrupted the positive performance of equity and the currency markets of these nations, particularly that of Indonesia, India, Thailand, South Africa, Turkey, Argentina, Russia, Brazil among others. In fact, the May 2013 statement by the Federal Reserve to taper the quantitative easing had destabilized the level of economic activity and growth prospect of most emerging countries. It is the temporary nature of capital inflows and outflows undertaken by bankers, arbitrageurs and hedge funders that encouraged the BRICS countries to establish the New Development Bank for long-term infrastructure development and Contingency Reserve Arrangement to make funds available for financial emergencies to be available mainly to emerging nations.

This study has argued that the tenuous parity relationships of exchange rates determinations that are entertained during normal economic conditions should be further tested

in this unfolding economic environment. The enhanced volatility of exchange rates triggered by differing economic performance and relatively different economic tools used by different nations should make the determination of equilibrium exchange rates much more difficult. Our study, thus, has examined the volatility of exchange rates before, during and post-recession, as measured by coefficient of variations, and the unbiased relationships of forward and spot exchange rates including relative changes in seven macro indicators in connection to direct and indirect market interventions by the central banks among advanced industrial nations and emerging nations.

The study confirmed that the changes in exchange rates were more volatile during the Great Recession in comparison to the pre- or the post- recession periods for industrialized nations. The study also found that the exchange rates were more volatile for emerging nations. In addition, the study examined the effectiveness of coordinated efforts of the central banks' interventions in the foreign exchange markets. Panel database was used to test the significance of the 3 two-way interaction terms, that is, multiplicative terms of the dichotomous variable (1 for the in-recession period and 0 for other periods) and the three monetary policy variables (money supplies, foreign exchange reserves and interest rates). The study found that the two-way interaction terms to be highly significant in the positive directions. This implies that the coordinated efforts of the central banks' interventions in the foreign exchange markets using these monetary policy tools were highly effective during the recession period in comparison to the pre- and the post-recession periods. However, the evidence of the coordinated interventions during the recession period was not apparent when the model was tested using the panel data of the emerging nations. Undoubtedly, economic cooperation and coordination as expected are stronger among advance industrial nations relative to emerging nations. The creation of New Development Bank and Contingency Reserve Arrangement by the BRICS nations will pave the way for stronger coordination and cooperation among emerging nations.

A repeat scenario of destabilization might be unfolding on the expectation that the Fed will raise interest rates in December 2015 for the first time since 2006 and might indicate that it will have several sequential hikes in 2016. Given the managed direction of interest rates in the eurozone, Switzerland, Sweden, China and Japan among others in contrast to that of the expected direction of interest rates in the U.S., the end of cooperated and coordinated action may be looming. Thus, the action of the Fed will usher divergent monetary policy that will impinge on the relative value of currencies and fertile ground for future empirical studies.

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# **COSMOPOLITAN CONSUMERS: RESEARCH OVERVIEW AND RESEARCH OPPORTUNITIES**

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#### ABSTRACT

In the current globalized market, it is a primary challenge for international companies to identify the right customer segment, thereby targeting them in different countries (e.g., Steenkamp and Ter Hofstede, 2002). One such cross-cultural segment, which has received increasing attention from modern marketing literature, is the cosmopolitan consumer (Riefler, 2012). Regardless of its importance as a segment, it remains enough room to research cosmopolitan consumers especially from qualitative research method.

Past literature generally examined the relationship between cosmopolitanism and demographic, geographic, or psychographic variables to clarify the profile of cosmopolitan consumers, which is only valuable for segmentation purposes and is not sufficient to seize this business opportunity. Since cosmopolitanism should be considered a journey, rather than a destination (Hannerz, 1990; Thompson and Tambyah, 1999; Tomlinson, 1999; Cannon and Yaprak, 2011), cosmopolitanism should be regarded as a dynamic, rather than a static, process. Once cosmopolitan consumers' formation processes are clarified, marketers will be able to consider which processes they need to focus on.

Although the processes should differ individually, there will be some common processes as long as samples are properly extracted through the combination of newly developed scales, such as the C-COSMO and localism scales. It is also necessary to examine the validity of those scales; the CYMYC scale, the most popular scale in consumer cosmopolitanism, was revealed to be unclear in its dimensionality, with low internal consistency (Yoon et al., 1996; Yoon, 1998; Yoon et al., 2001; Riefler and Diamantopoulos, 2009).

While a precise number is unknown, several researchers agreed that the cosmopolitan segment is growing (see Riefler and Diamantopoulos, 2009; Cleveland et al., 2011a; Grinstein and Wathieu, 2012). To seize this market opportunity, and to achieve a more comprehensive understanding of cosmopolitan consumers, analysis of this segment is needed from a variety of angles.

Keywords: globalization, culture, ideology, country of origin, cosmopolitanism

#### **INTRODUCTION**

Globalization has accelerated the interconnection and interdependence of cultures and individuals, in addition to markets, countries, industries, and companies, and particularly since the 1970s (Steger, 2009; Robertson, 1992). Consumers are increasingly exposed to other cultures and consumption styles, directly or indirectly, through the mobility of individuals and the penetration of mass media (Beckmann et al., 2001). It has been argued that this exposure brings "a positive stance towards products and services originating from foreign countries" (Riefler and

Diamontopoulos, 2009, p. 407) and cultural flexibility (Nijssen and Douglas, 2008). It is in this context that scholars have begun to investigate what Cannon et al. (1994) have labeled as consumer cosmopolitanism.

Direct contact with other cultures is no longer solely for privileged individuals. Due to changes in the media environment and the lowering of international travel barriers, more consumers are able to develop a cosmopolitan orientation (Tambyah and Chen, 2012). Mass media, and especially Internet media, enculturates people instantly and indirectly regardless of physical distances, which is especially noticeable after the 2000s with the advent of high speed Internet. In contrast to the print era, when information was primarily domestic (Halsall, 2012), more people are exposed to overseas information through television (Walker, 1996) and Internet media. As Delanty (1999, p. 366) argues, "The new media of communication and consumption have made everybody cosmopolitan."

In this globalized society, cultures cannot be territorially bound (Appadurai, 1990; Craig and Douglas, 2006; Hannerz, 1990). As a result, the validity of national identity-based frameworks for understanding consumers, such as Hofstede's cultural dimensions theory (Hofstede, 1980; Hofstede et al., 2010), has been called into question (Cleveland et al., 2011a). In this regard, Riefler et al. (2012) have proposed that segmentation efforts should be shifted from country characteristics to consumer characteristics.

Although the bulk of global marketing literature that discusses the interaction between globalization and consumption practices has focused mainly on consumers' negative attitudes toward product-category stereotypes (e.g., country of origin effects) and foreign products (e.g., consumer ethnocentrism and animosity), few discuss positive orientations (Cleveland and Laroche, 2012). Consumer cosmopolitanism is related to the latter, centering more on the positive aspects of globalization in a consumer behavior context.

This being said, since the 1990s there have been attempts at both quantitative (e.g., Cannon and Yaprak, 1993) and qualitative (e.g., Thompson and Tambya, 1999) investigations into consumer cosmopolitanism. Cleveland et al. (2009a) and Riefler et al. (2012) have both developed a rigorous scale of consumer cosmopolitanism that includes detailed statistical validation processes. On the qualitative side, Tambya and Chen (2012) interviewed twelve expatriates to clarify their purchase behaviors during trips overseas. However, in contrast to the potential for research in this area, few studies have conducted empirical investigations into consumer cosmopolitanism (Bolton and Myers, 2003). Therefore, since prior research on this theme has been conceptual (Riefler and Diamantopoulos, 2009) rather than empirical, the practical implications of consumer cosmopolitanism are still not adequately understood. Furthermore, past literatures focus predominantly on the profiles of cosmopolitan consumers, neglecting the formation processes of cosmopolitan consumers.

Cosmopolitan consumers are generally regarded as global citizens who view the world as a marketplace, and whose consumption traits transcend any certain cultural setting (Cannon and Yaprak, 2002; Caldwell et al., 2006; Cleveland et al., 2009a). In the work of Delanty (2014), cosmopolitan consumers are also described as "citizens of the world" (p.375). Cannon and Yaprak (2012) argue that cosmopolitan consumers are proactive towards enculturation. This open-minded, diversity-oriented trait suggests that cosmopolitan consumers are early adopters (Rogers, 2004) and innovators, who influence opinions with their upscale taste (Cleveland and Laroche, 2012). Understanding consumer cosmopolitanism is important, therefore, as transnational companies may employ cosmopolitan consumers to sophisticate their market offerings (Tadmor and Tetlock, 2006; Tadmor et al., 2009), new product development (Cleveland and Laroche, 2012; Riefler, 2012), production processes (Yamanoglu and Ozdemir, 2012), product lifecycle strategies, and branding considerations (e.g., personality, positioning, and promotional appeals) (Cleveland and Laroche, 2012).

This paper analyzes the extant literature on globalization, cosmopolitanism, and consumer behavior, and proposes new directions for future research on consumer cosmopolitanism, the formation processes of cosmopolitan consumers. As consumer cosmopolitanism is a new area of research in the fields of globalization and consumer behavior, careful attention is paid to the conceptual dimensions of consumer cosmopolitanism through engagement with the latest empirical research. Furthermore, methods for classifying, sampling, and analyzing data on cosmopolitan consumers are reviewed in order to produce robust data for market research.

#### **COSMOPOLITAN CONSUMERS**

#### **Definition and Constructs**

Cosmopolitan as a term originates from the Greek words, "cosmos" (world) and "polis" (city), and denotes a citizen of the universe who has humanity and inborn diversity (Tambyah and Chen, 2012). Recently, many sociologists have researched cosmopolitanism as "an empirical phenomenon rather than as a normative ideal" (Igarashi and Saito, 2014, p.224).

The concept of cosmopolitan was first introduced to the research area of business management in the latter 1950s by Merton (1957) and Gouldner (1957). The former defines it as an individual who has personal orientation beyond the local community, while the latter describes it from an organizational behavior angle as "those low on loyalty to the employing organization, high on commitment to specialized role skill, and likely to use an outer reference group orientation" (Gouldner, 1957). Dye (1963) supports Merton's (1957) notion that cosmopolitans relate to "issues, events, and social organization outside of his local community."

Global business elite, refugees, and expatriates are the typical cosmopolitans (Skrbis et al., 2004), while Hannerz (1990) excludes exiles who escaped to New York during World War II; for example, the work of Rutkoff and Scott (1983) can be referenced. Migrant workers are not considered as cosmopolitans because they are unwilling to socialize with other cultures. Also, tourists are not categorized as cosmopolitans because they are "typically spectators and not active participants" in local culture (Hannerz, 1990). Cosmopolitanism has been noted among highly mobile, capital-rich elites, who live near privileged business centers, sports clubs, and international airports (Skey, 2012). Although elites, and typically expatriates, have substantial opportunities to be exposed to new cultures, ordinary people in the concurrently interconnected world can acculturate through indirect contacts with other cultures primarily through Internet media, increasing their cosmopolitan traits. Cosmopolitans are no longer a demographic segmentation, but a psychological segmentation.

To the author's knowledge, Riefler et al. (2012) could be the first researchers who explored key traits of cosmopolitanism in the context of the study of consumer behavior. The key traits are open-mindedness, diversity preference, and consumption that transcends borders.

In consumer psychology, most researchers argue that open-mindedness is one of the key traits of cosmopolitan consumers. Although open-mindedness is sometimes described as openness or cultural openness, this paper regards these terms as synonyms. Open-mindedness is defined as "openness toward the people, value, and artifacts of other cultures" (Sharma et al., 1995), or as "a conscious openness to the world and to cultural differences" (Skrbis et al., 2004,

p. 117). Also, open-mindedness involves a willingness to seek information (see Hannerz, 1992). Open-mindedness is not passive, but is a proactive attitude towards "something different."

Diversity appreciation is another key trait. Tambyah and Chen (2012) argue that cosmopolitans seek "differences in cultural diversity rather than similarities" and "enjoy the diversity in the global marketplace and also cherish the value of local brands." Holt (1997; 1998) explains that cosmopolitans search for diversity to eschew parochial culture. As diversity preference needs authenticity (e.g., Beverland and Farrelly, 2010), cosmopolitans carefully examine the authentic aspects of the local brands, which are defined by Kapferer (2000) as "compelling symbols of culture in the local market." Cosmopolitans are active seekers of divergent cultures, appreciating the value of authentic local market offerings. Cultural imperialism and cultural superiority are the antithesis of cosmopolitanism because they disregard mutual respect and mutual learning (Delanty and He, 2008).

In addition to openness and diversity, Riefler et al. (2012) suggest "consumption transcending borders," defining it as "a positive disposition towards consuming goods and services from foreign countries." Compared to openness and diversity, consumption transcending borders is a consumer behavior-specific construct. In the C-COSMO scale (Riefler et al., 2012), the dimension of consumption transcending borders is calculated through the consumption preference of overseas movies, music, and food, and so on. As cosmopolitans regard themselves as less provincial (Hannerz, 1990), they are active consumers in various overseas goods and services, including education and medical treatment, for instance. Those who return from studying abroad are generally familiar with overseas cultures and lifestyles, and thereby may choose to imitate them. Accordingly, academic qualifications signal cosmopolitan dispositions (Igarashi and Saito, 2014).



Figure 1 ASSUMED RELATIONSHIP AMONG CONSTRUCTS

Source: Author's elaboration

Generally, the constructs proposed by Riefler et al. (2012) overcome the overreliance on openness as a construct of cosmopolitan consumers, whereas openness might be considered as a prerequisite for diversity preferences and consumption transcending borders. In fact, Riefler et al. (2012) did not examine the discriminant validity of each construct even though they calculated the average variance extracted (AVE) of each dimension. Normally, to confirm

discriminant validity the AVE of two constructs must surpass their squared phi correlation. Given the explanation of each construct, the relationship among constructs could be hierarchical, as shown in Figure 1.

#### **Typology of Cosmopolitan Consumers**

In the previous section, the general definition and constructs of cosmopolitan consumers were examined, referring to classical studies such as Merton (1957) and Gouldner (1957) in addition to more recent work. Although an examination of the definition and constructs is still needed, the following reviews two works that propose the typology of cosmopolitan consumers for future research.

#### Figure 2 COSMOPOLITANISM AND LOCALISM

		Degree of ethnic/ national identity	
		Low	High
Degree of cosmopolitanism	High	Transnationals	Glocals
	Low	Marginals	Nationals
Source: Cleveland et al. (2011b)			

Cleveland et al. (2011b) employ two dimensions, such as the degree of cosmopolitanism and that of ethnic or national identity, to typify cosmopolitan consumers (Figure 2). Both transnationals and glocals are categorized as cosmopolitan consumers even though they are classified by the degree of their ethnic or national identity.

#### Figure 3 TYPOLOGY OF COSMOPOLITAN CONSUMERS



Source: Riefler (2012, p. 155)

Riefler (2012) developed a similar typology, employing the dimensions of cosmopolitan orientation and local orientation (Figure 3). Even though Cleveland et al. (2011b) largely regard localism as ethnic or national identity, Riefler (2012) does not identify it as a synonym. Riefler (2012) defines localism, referring to Grover (2012), as "territorially anchored or 'bounded' cultures involving face-to-face relations among people who do not move around a great deal."

Riefler (2012)'s definition is more versatile than that of Cleveland et al. (2011b), and can thereby be applied to a wide range of consumers. The consumption behaviors are similar among local and pure cosmopolitans, whereas local cosmopolitans pay more attention to country-of-origin (COO) information than pure cosmopolitans.

As Caldwell et al. (2006, p. 135) explain, "Consumers can have a cosmopolitan outlook while maintaining strong connections with their community of origin." Kurasawa (2004) also points out that cosmopolitanism embraces "the simultaneous existence of multilayered local, national, and global identities." To conclude, local cosmopolitans have dual identities, maintaining a local orientation in addition to a cosmopolitan orientation.

#### EMPIRICAL RESEARCH OF COSMOPOLITANISM

#### **Scales of Cosmopolitanism**

Until the work of Cleveland and Laroche (2007), few scales of cosmopolitanism were suitable for empirical studies of consumer cosmopolitanism. With the exception of the CYMYC scale (Cannon et al., 1994), many scales are largely irrelevant for marketing studies. The local cosmopolitan scale (Dye, 1963) and the cosmopolitan scale (Jennings, 1967) were developed in the area of political science, while the cosmopolitanism scale (Earle and Cvetchkovich, 1997) was developed to research cosmopolitan respondents and their risk management judgments. It was after the work of Cannon et al. (1994) that cosmopolitanism began to apply to marketing.

In addition, no reliability tests are conducted for many cosmopolitanism scales. For instance, the following scales do not demonstrate any reliability tests, such as Cronbach's alpha: the local cosmopolitanism scale (Dye, 1963), the cosmopolitanism scale (Jennings, 1967; Earle and Cvetchkovich, 1997), and the cultural cosmopolitanism scale (Robinson and Zill, 1997).

The CYMYC scale (Cannon et al., 1994) displays Cronbach's  $\alpha = 0.57$  with twenty-four items, though many articles do note its unclear dimensionality with low internal consistency (Yoon et al., 1996; Yoon, 1998; Yoon et al., 2001; Riefler and Diamantopoulos, 2009). Cleveland and Laroche (2007) develop scales of cosmopolitanism as part of an acculturation to global consumer culture, or AGCC, dimensions through careful validation processes of scale purification. This scale was employed in Cleveland et al. (2009a), decreasing the items from eleven to six, and Lee et al. (2014) adopt it to their research in the relationship between economic nationalism and cosmopolitanism, confirming the reliability of the scale ( $\alpha = 0.93$ ).

Following the contribution of Cleveland et al., Riefler (2012) develops C-COSMO, a consumption-domain specific cosmopolitanism scale. Compared to the scales of Cleveland et al., which are unidimensional, C-COSMO consists of three dimensions: (1) open-mindedness ( $\alpha = 0.87$ , CR = 0.87, AVE = 0.63), (2) diversity appreciation ( $\alpha = 0.78$ , CR = 0.86, AVE = 0.62), and consumption transcending borders ( $\alpha = 0.84$ , CR = 0.77, AVE = 0.47), with four items each. The reason Riefler (2012) proposes a three dimensional scale is that items in the work of Cleveland and Laroche (2007), as in the work of Cleveland et al. (2009a), primarily covers cultural openness, thereby lacking several theoretically relevant dimensions of consumer cosmopolitanism constructs.

Although replication studies of C-COSMO are still needed, it is presently reasonable to apply it to research various aspects of consumer cosmopolitanism.

#### **Cosmopolitanism and Related Variables**

Since the mid-1990s, researchers began to explore the relationship between consumer cosmopolitanism and its related variables. The related variables are largely categorized as the following three categories: demographic variables, geographic variables, and psychographic variables.

According to past research (noted in Table 1), cosmopolitan consumers are summarized as relatively young, well-educated, and rich in international experiences. Gender difference is revealed to be mostly irrelevant to cosmopolitanism in recent literature (see Cleveland et al., 2009a; Riefler et al., 2012; Lee et al., 2014). Income too is not a significant factor of cosmopolitan consumers; therefore, expatriates, assumed cosmopolitans, and high-income elites are not necessarily considered cosmopolitans even though "omnivorous consumption" associated with cultural openness is more likely to happen among elites than other groups (Bryson, 1996; Cheyne and Binder, 2010; Peterson and Kern, 1996). Other groups may include "banal cosmopolitans" (Skrbis et al., 2004; Tomlinson, 2002) who consume indigenous overseas products and foreign media, but do not make contact with foreign people regularly and directly (Igarashi and Saito, 2014). In demographic variables, multilingualism and Internet usage are still not thoroughly examined, even though these two variables are supposed to be positively correlated with cosmopolitanism.

Table 1			
COSMOPOLITANISM AND DEMOGRAPHIC VARIABLES			
Variables	Results	References	Samples
Education	Positively correlated.	Robinson & Zill (1997)	N/A.
	Losistic coefficient=.39 (p<0.01)	Phillips & Smith (2008)	Austrian National Identity
			survey 2001 (n=2,071)
	$\gamma$ =.151 (p<0.1) in aggregated samples, and significant in MEX,	Cleveland et al. (2009a)	Native-born nationals with
	GRC, HUN & SWE.		over 18 years old.
	r=0.360 (p<0.01)	Riefler et al. (2012)	Austrian consumers (n=429)
International	r=0.124 (p<0.05)	Riefler et al. (2012)	Austrian consumers (n=429)
experience			NY
Age	$\beta$ =038 (n.s.) in aggregated samples, but significant in KOR,	Cleveland et al. (2009a)	Native-born nationals with
	HUN & SWE.		over 18 years old
	r = -0.233 (p < 0.01)	Riefler et al. (2012)	Austrian consumers (n=429)
	$\beta = -0.25$ (p<0.01) in TWN, and $\beta = -0.07$ (n.s.) in KOR.	Lee et al. (2014)	Korean (n=257), Taiwanese
			(n=258)
Income	n.s. in both high and middle income respondents.	Phillips & Smith (2008)	Austrian National Identity
			survey 2001 (n=2,071)
	$\beta =004 \text{ (n.s.)}$	Cleveland et al. (2009a)	Native-born nationals with
			over 18 years old
	n.s. in both KOR and TWN.	Lee et al. (2014)	Korean (n=257), Taiwanese
			(n=258)
Gender	No significant difference in mean score. T-value=0.52 (p>0.1)	Riefler et al. (2012)	Austrian consumers (n=429)
	$\beta$ =121 (p<0.1) in aggregated samples, and significant in CAN,	Cleveland et al. (2009a)	Native-born nationals with
	GRC, HUN & SWE.		over 18 years old
	n.s. in both KOR and TWN.	Lee et al. (2014)	Korean (n=257), Taiwanese
			(n=258)
	Higher levels of COS orientation for female	Robinson & Zill (1997)	N/A.
	Females and males have similar levels of cosmopolitanism in	Cleveland et al. (2009a)	Native-born nationals with
	TUR, KOR, IND, MEX & CHL samples.		over 18 years old
Marital	n.s. in both KOR and TWN.	Lee et al. (2014)	Korean (n=257), Taiwanese
status			(n=258)
Multi-	N/A, Ray et al. (1994) hypothesize that it is positively correlated.	N/A	N/A
lingualism			
Internet	N/A. Halsall (2012) hypothesize that it is positively correlated.	N/A	N/A
usage			

Source: Author's elaboration

Geographic variables are explored through the differences in cosmopolitan orientation among urban and rural consumers. There are three topics of research that examine the difference, and these find that urban consumers show higher levels of cosmopolitanism than rural consumers (Table 2). As urban areas attract diverse people who are willing to work, study, and travel, urban residents are naturally exposed to multicultural environments. Although Cannon et al. (1994) and Yoon et al. (1996) employed the CYMYC scale, which was revealed to be unreliable, Riefler et al. (2012) confirmed the cosmopolitan orientation of urban residents by the C-COSMO scale, a newly developed scale with detailed validation.

Table 2 COSMOPOLITANISM AND GEOGRAPHIC VARIABLES				
Variables	Results	References	Samples	
Location	Consumers residing in urban areas show higher levels of cosmopolitanism	Cannon et al. (1994)	N/A	
	Correlation between reduced average CYMYC scale score and city size was .0736 (p=.038).	Yoon et al. (1996)	303 from a small city and 404 from two large metropolitan areas in Korea.	
	Significantly higher average score among urban consumers than among rural consumers (t-value=2.21, p<0.05)	Riefler et al. (2012)	Austrian consumers (n=429)	

Source: Author's elaboration

Table 3           COSMODOLITANISM AND DSVCHOCDADHIC VADIADI ES			
Variables	Results	References	Samples
Consumer innovativeness (Baumgartner & Steenkamp, 1996)	r=0.456 (p<0.01)	Riefler et al. (2012)	Austrian consumers (n=429)
Risk aversion (Donthu & Garcia, 1999)	r=-0.282 (p<0.01)		
Global Consumption Orientation	r=0.02 (n.s.)		
Consumer SNI (Bearden et al. 1989)	r=-0.238 (p<0.01)		
Materialism (Richins, 2004)	Largely uncorrelated	Cleveland et al. (2009a)	Native-born nationals with over 18 years old
Consumer Ethnocentrism	r=15 (p<0.1) in aggregated samples, and significant in CAN, KOR, HUN, IND, SWE.		
	r=-0.46 (p<0.01)	Riefler et al. (2012)	Austrian consumers (n=222)
SVS-10 (Schwartz, 1992; 1999) Universalism	β=.304, t=7.15 (p<0.01)	Cleveland et al. (2011a)	Canadian (n=511) and Turkish (n=327)
Security Benevolence Self-direction Stimulation	$\beta$ =209, t=-5.68 (p<0.01) $\beta$ =.150, t=3.61 (p<0.01) $\beta$ =.101, t=2.34 (p<0.01) $\beta$ =.098, t=2.81 (p<0.01)		students
SVS-7 (Schwartz, 1992; 1999) Intellectual autonomy Egalitarianism Harmony Conservatism Affective autonomy Hofstede (1994)'s Masculinity Individualism	$\beta = .194, t = 4.51 (p < 0.01)$ $\beta = .200, t = 4.35 (p < 0.01)$ $\beta = .152, t = 3.70 (p < 0.01)$ $\beta =131, t = -3.34, (p < 0.01)$ $\beta = .091, t = 2.66 (p < 0.01)$ Correlated <u>only for Canadians</u> ( $\beta =174, t = -3.99, p < 0.01$ ) Correlated <u>only for Canadians</u> ( $\beta = .095, t = 2.19, p < 0.05$ )		
Ethnic identity	Independent or positive relationship.	Cleveland et al. (2011b)	Consumers in GRC, HUN, SWE, MEX, CHL, CAN, IND.

Table 3 COSMOPOLITANISM AND PSYCHOGRAPHIC VARIABLES			
Economic Nationalism	r=27	Baughn & Yaprak (1996)	95 UG students
	r=0.01 (n.s.); Economic nationalism may coexist.	Lee et al. (2014)	Korean (n=257), Taiwanese (n=258)
Social responsibility	N/A. Yamanoglu and Ozdemir (2012) hypothesize that it is positively correlated. See also Roudometof (2005)	N/A.	N/A.

Source: Author's elaboration

Compared to demographic and geographic variables, few studies research the relationship between cosmopolitanism and psychographic variables (Table 3). In addition, as some of the results vary according to nationality, it is problematic to generalize the findings without further research. Moreover, the findings related to psychographic variables were derived from two different scales in cosmopolitanism: the scale created by Cleveland et al. (2009a), and the C-COSMO scale (Riefler et al., 2012). In future studies, researchers must carefully validate the employed scale of cosmopolitanism, or evolve it to create their own scales.

Another issue regarding research in psychographic variables is that all studies to date disregard differences within cosmopolitan consumers. Cleveland et al. (2011b) divide cosmopolitan consumers into transnationals and glocals, while Riefler (2012) divides them into pure cosmopolitans and local cosmopolitans. Stratification of the survey samples is required for a more detailed understanding of cosmopolitan consumers.

#### **PROBLEMS IN PAST LITERATURE**

In the area of consumer cosmopolitanism, past literature primarily focuses on the relationship between cosmopolitanism and its related variables, employing quantitative research methods. In contrast, there is little work that employs qualitative research methods, with the exception of research by Yoon (1998), Thompson and Tambyah (1999), and Caldwell et al. (2006), for instance. Furthermore, no research adequately employs mixed methods, a concurrent triangulation approach, for this research area. To complement or overcome the methodological limitations, a prospective solution is to apply mixed methods to this research area.

Current literature neglects the formation processes of consumer cosmopolitanism. As several authors argue, people are not born cosmopolitan (e.g., Hannerz, 1990; Cannon and Yaprak, 2002), and consumer cosmopolitanism is formed in relation to external or internal factors. Even though there is no consensus concerning the inducing factors of cosmopolitanism, Riefler et al. (2009) proposed the following four antecedents: travel, expatriate stays (e.g., Cannon and Yaprak, 2002), cross-cultural training programs (e.g., Hannerz, 1990), and social status seeking (e.g., Thompson and Tambyah, 1999). These antecedents are predominantly related to first-hand contacts with different cultures, and lack indirect contacts, such as media.

The expected reason that literature seldom researches inducing factors is that consumer cosmopolitanism has not been studied as a formation process. However, even if the relationship between cosmopolitanism and its related variables is clarified, the formation processes of cosmopolitanism would remain unclear. Although the formation processes will differ with the individual, we cannot propose practical implications to approach cosmopolitan consumers without studying the formation processes.

#### NEW DIRECTIONS FOR FUTURE RESEARCH

#### **Significance of Cosmopolitan Consumers Formation Processes**

Contrary to western economics, emerging economies, such as BRIC (Brazil, Russia, India and China) and CIVETS (Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa) are growing rapidly, increasing the nations' disposable income. Economic growth has also led to an increase in consumer cosmopolitanism (Lee et al., 2014), stimulating the desire to own items in relation with a western lifestyle (Alden et al., 2006; Caldwell et al., 2006; Cannon and Yaprak, 2002; Cleveland et al., 2009a; Cleveland et al., 2011a).

Current understanding of the relationship between cosmopolitanism and its related variables, which is only valuable for segmentation use, is not sufficient to seize this business opportunity. As cosmopolitanism should be considered a journey, rather than a destination (Hannerz, 1990; Thompson and Tambyah, 1999; Tomlinson, 1999; Cannon and Yaprak 2011), cosmopolitanism should be regarded as a dynamic process. Once cosmopolitan consumers' formation processes are clarified, marketers will be able to consider the processes to focus on.

Cosmopolitan consumers are also valuable as a segment for aging societies because they will stimulate the external demands, forming foreign markets for domestic products. Developed nations, typically regarded as aging societies, cannot grow solely by domestic demands due to a decreasing population. If developed nations successfully enculturate individuals overseas, they become new cosmopolitan consumers who consume the developed nations' products and services. Once the formation processes of cosmopolitan consumers are clarified, companies based in developed nations can intentionally approach prospective cosmopolitans, who will eventually promote external demands.



Figure 4 TENTATIVE FORMATION PROCESSES OF COSMOPOLITAN CONSUMERS

Source: Author's elaboration

The grounded theory approach, or GTA (Glaser and Strauss, 1967), is the methodology expected to develop cosmopolitan consumers' formation processes. GTA is a qualitative research method to generate a unique theory that explains an entirely new series of events or processes. When generating cosmopolitan consumers' formation processes, this methodology is needed to consider the powerful social incentives for interviewees to eschew the stigma of prejudice, and show a more reasonable and open attitude towards others (see Billig et al., 1988; Skey, 2012). Interviewers must carefully examine whether the research subjects overestimate themselves as cosmopolitans. Interviewees may present typical cosmopolitan-like experiences to hide a hidden parochial nature.

Figure 4 is a tentative cosmopolitan consumer formation process, based on past literature. Riefler and Diamantopoulos (2009) suggest the following four antecedents: travel, expatriate stays, cross-cultural training programs, and social status-seeking; these are categorized into external and internal factors, adding indirect contacts as an external factor. Indirect contacts, such as Internet media, television, and newspapers, should promote or generate cosmopolitanism even though they may not be as powerful as direct contacts. Demographic or geographic variables will function as moderators, rather than antecedents, as shown in Figure 4. As Figure 4 is a conceptual framework based on the past research, empirical research is needed to develop a renewed framework.

#### **Recommended Target of Cosmopolitan Consumers in Empirical Research**

As discussed in section two, Cleveland et al. (2009b) and Riefler (2012) each propose two types of cosmopolitan consumers; "transnationals" in the former literature, and "pure cosmopolitans" in the latter, are defined as the most acculturated cosmopolitans whose scores are high in cosmopolitan orientation, and low in national identity or local orientation, respectively. As noted previously, the combination of C-COSMO with the localism scale is presently superior to the scale proposed by Cleveland et al. (2009b), given the comprehensiveness of the scale's dimensions.

To understand the general formation processes of cosmopolitanism, pure cosmopolitans are the most suitable group for primary empirical research. This is because local cosmopolitans have a dual identity; they show "the highest level of local orientation while at the same time being highly cosmopolitan" (Riefler et al., 2012, p. 298).

However, future research must be conducted to clarify the similarities and differences between the formation processes of pure and local cosmopolitans. According to Riefler et al. (2012), the size of the clusters is equally 27%. This suggests that in research, local cosmopolitans are equally significant given the expected market size.

#### CONCLUSION

In the current globalized market, it is a primary challenge for international companies to identify the proper customer segment; thereby, companies target segments in different countries (e.g., Steenkamp and Ter Hofstede, 2002). One such cross-cultural segment that has received increasing attention from modern marketing literature is the cosmopolitan consumer (Riefler, 2012). Regardless of its importance as a segment, it remains enough room to research cosmopolitan consumers, especially with a qualitative research method.

Past literature has generally examined the relationship between cosmopolitanism and demographic, geographic, or psychographic variables to clarify the profile of the cosmopolitan

consumer. As cosmopolitanism should be considered a journey rather than a destination (Hannerz, 1990; Thompson and Tambyah, 1999; Tomlinson, 1999; Cannon and Yaprak 2011), it should be regarded as a dynamic process, rather than static. Once the processes are clarified, marketers can examine which processes they should focus on.

Although the processes should differ individually, common processes will exist if the samples are properly extracted, using a combination of newly developed scales, such as C-COSMO and the localism scales. The validity of those scales must also be examined; in fact, the CYMYC scale, which is the most popular scale in consumer cosmopolitanism, was revealed to be unclear in dimensionality, and to have low internal consistency (Yoon et al., 1996; Yoon, 1998; Yoon et al., 2001; Riefler and Diamantopoulos, 2009).

While the precise number is unknown, several researchers, such as Riefler and Diamantopoulos (2009), Cleveland et al. (2011a), and Grinstein and Wathieu (2012), agreed that the cosmopolitan segment is steadily increasing. To seize a market opportunity, this segment must be analyzed from a variety of angles for a more comprehensive understanding of cosmopolitan consumers.

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