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Portability of Pension Benefits in Tanzania

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Abstract
This study attempts to identify determinants of pension funds benefits portability in Tanzania. This study used primary data collected from 100 members of pension schemes through questionnaires. Utilizing regression analysis, the study examined the influence of administrative costs, information availability, pension funds, membership and economic factors on members' preferences for portable pension schemes in Tanzania. The results reveal that factors that significantly influence the portability of pension funds include pension schemes factors, member factors and economic factors. The study recommends that to make effective portability, regulators should design portability policies that are beneficial to both pension schemes and members. Likewise, policies should take into consideration economic factors. One limitation of this study is that data was collected from a small sample and only five factors were tested. Hence, future studies can use large numbers and test more factors.

Keywords: Portability, pension benefits, pension funds, portable schemes, members' preferences

Introduction

Portability of pension funds has been a concern to many members of pension schemes worldwide (Cruz, 2004; Forteza, 2008; Holzman, Koettl and Chernetsky, 2005; Holzmann and Koettl, 2011).[1] According to Cruz (2004), the main reasons for this increased concern include increased

labour mobility from one country to another. In this aspect, portability is concerned with the capacity to help employees to move and work across countries without losing pension benefits (Romagna, 2008). To the members, the portability of pension benefits helps them to enjoy the same benefits they had from previous pension schemes. However, while this process may be advantageous to the individual members, may have negative consequences to pension fund schemes hence creating a challenge to regulatory authorities. The challenges may include costs to administer movement as well as accounting systems to integrate the data. This may reduce the earning capacity of the schemes hence reducing their investment capacity in the economy. This one aspect of the portability of pension benefits when viewed from those who consider that it should not be allowed. On the other hand, there are those who consider that portability of pension benefits may be a good thing because may encourage members to put their money in the pension schemes that are more efficient, hence assuring them better returns.

While studies of pension funds portability have concentrated on looking at international settings when employees move from one country to another, similar issues can be raised inside the country. This also has been an issue of concern in Tanzania. Inside the country, there are certain situations that can create the need for pension funds portability. For example, in a country where there are several pension schemes or operators, the members may wish to transfer to another scheme that they think provides much benefit.[2] The competition among pension schemes can create a need for establishing good mechanism of overseeing portability of pension funds benefits. Others consider that to reduce this situation then it is better to have only one pension scheme in the country (NAO, 2010). According to NAO (2010), merging pension schemes may reduce operational overhead costs hence leading to efficiency and effectiveness in managing pension schemes. Even though merging pension schemes may reduce the problem of portability but may create a problem of monopoly and reduces choices to members. In addition, merging of pension schemes may not be consistent with the current perspective of public sector reforms which have created regulatory bodies such as Social Security Regulatory Authority (SSRA).[3] Given the economic setting, it would plausible to argue that possibility of having only one pension scheme in Tanzania may not be

feasible in a near future. In that perspective, the portability of pension fund benefits will continue to be an issue of concern even in Tanzania.
This has been recognized for almost ten years (see Mchomvu, Tungaraza and Maghimbi, 2002). According to Mchomvu, Tungaraza and Maghimbi (2002), one of the weaknesses of the social security schemes in Tanzania is that there is no possibility of portability of members' benefits from one scheme to another. The same views were expressed by the National Social Security Policy of 2003 which identifies that one major problem in the Tanzanian pension schemes is lack of mechanism for portability of pension benefits. According to Social Security Policy (2003: p.16) this situation is brought by different legislations, operational rules and procedures hence proposed establishment of mechanism to enable portability of benefit rights when members move from one scheme to another. Indicating the concern for portability of pension benefits, the Social Security Act of 2008 provided power to the Minister responsible for social security to prescribe procedures and conditions for portability of pension benefits form one scheme to another.[4] However, that was not implemented leading to SSRA to conduct a study on portability problem facing members in 2010. Despite those efforts, (studies by SSRA and legislation passed by the government) up to now, there is no possibility of portability of members' benefits from one pension scheme to another.

Therefore, it can be argued that there have been numerous efforts to understand issues, which could help to create effective portability of pension benefits. However, there is a knowledge gap on the understanding of those issues. For example, most of the studies conducted so far have focused on international aspect particularly on the relationship between portability and labour mobility for migrating employees. As such, these studies have ignored a management perspective of understanding the portability of pension issues in developing countries like Tanzania. In Tanzania, efforts have been focused on policy aspects only. The questions which are still not addressed include, why portability of pension funds benefits is not functional in the country despite being raised as an issue for more than ten years ago? What can make portability of pension funds benefit more effective in the country? Moreover, what are the roles of pension schemes in ensuring that portability of pension funds benefits succeed? Even though this study does not address all these questions but attempt to provide contribution towards addressing these questions. This

study considers that by identifying factors influencing portability of pension funds benefits will provide a greater understanding to address those questions. Hence, the objective of this study was to identify critical factors influencing the preference of members on pension benefits portability in Tanzania. This study argues that portability of pension benefits is a function of information availability, administrative costs, pension schemes related factors, membership factors and economic factors of the country.

This study is arranged in six sections. The first section provides introduction and the objective of the study. The second section provides the literature review and hypotheses development. This section discusses further, how our settings allow us to contribute to the extant literature of portability of pension funds benefits. The third section covers the research design. The fourth section presents empirical results of the study. The fifth section offers discussion of the findings. The last section covers the conclusion of the study.

Literature and Hypotheses Development

The basis of this study is grounded on the perspective that portability of pension funds benefits is a function of information availability, costs of administering the transferability of benefits, pension schemes themselves, members as well as economic factors. The following sub-section presents literature and hypothesis for each variable.

Pension Information Availability

In this aspect, it is considered that availability of information about various pension schemes will influence the members to move from one pension scheme to another. The information will enable members to know which pension scheme offers better benefits than the others do. The information availability is based on theory of consumer choice which is concerned with the ability of consumers to choose among competing products and services. In general, the consumer choice theory helps to relate consumer preferences for the consumption of goods and services to consumption expenditure based on budget constraints and goals which the consumer wants to achieve (Chernev, 2004). In the pension schemes, the consumer choice theory helps to analyse the choice or preference of individuals

towards a particular pension schemes depending on the utility expected from each pension scheme.

Studies on pension schemes have identified a number of factors influencing the choice of individuals for both defined benefit (DB) plans and defined contribution (DC) plans.[5] The factors identified include risk and returns from the pension scheme, past investment performance of the scheme, responsible investment practices, funding for the benefits, coverage ratio, experience of the scheme manager, affiliation and size of the pension scheme, investment style as well as past investment returns (Gözbaşı and Çıtak, 2010; Gupta, 2006: Ramasamy and Yeung, 2003; Rietjens, 2011). This study considers that the factors will be taken into consideration if the members and potential members have knowledge about them. In addition, this will only be possible if the information covering these issues is available to them. Studies by Antolín and Harrison (2012) as well as Larsson, Sundén and Settergren (2009) as well as OECD (2013) show the importance of pension information to the members for appropriate action. Even though these studies do not deal directly with pension benefits portability, in this study it is considered that appropriate action to be taken by members will include the decision to transfer the contribution from one pension scheme to another.

This is supported by the example of what happened between University of Dar es Salaam academic staff and PPF when they wanted to transfer their contributions to LAPF, which was considered a better scheme. Without availability of information to make comparison this could have been impossible since members would have not known the level of risks they are exposed once they shift. Lack of information will create uncertainties when individuals do not have idea of their contribution to a retirement plan. This argument is supported by Gough (2004) who found that women avoided switching pension schemes when changing jobs due to lack of information on portability provisions. Also, Edward (2000) shows that public information is very important in preparing for and promoting reforms and in ensuring that people understand choices open to them in the pension system. Public information should address, and ensure individuals understand the pension system. This therefore becomes an important variable to look at in this study; hence, the following hypothesis was stated:

H_1: There is a positive relationship between pension information availability and preference for portable pension schemes.

Administrative Costs

Another variable considered in this study is the costs associated with administration of the transfer of benefits from one scheme to another. This variable is based on the transaction costs economics (TCE). According to TCE theory, transaction costs are costs incurred in making economic exchange and include costs associated with information search, costs associated with bargaining and costs associated with reaching an agreement. As such, the costs for portability of pension benefits are not only incurred by pension schemes but also members who transfer their benefits. For example, members have to incur some costs to be able to identify which pension scheme provides benefits according to their goal orientation. Larsson, Sundén, and Settergren (2009) argue that costs of collecting pension information are greater than the benefits of understanding pension plans themselves. In addition, the transfer of contribution may result into members suffering certain losses if they move from a good pension scheme to a bad one (NCCB and USCC, 1990; Forteza, 2008). According to Forteza (2008), switching pension schemes may impose administrative costs that in most cases would be incurred by employees through lower pension benefits. This is consistent with Larsson, Sundén, and Settergren (2009) argument that what matters to the employees is the sum of all pension costs of different pension policies.

The literature also argues that not only employees who are going to bear the costs, but also employers and pension schemes. In case of employers, the costs include finding out how they should contribute and which pension scheme is effectively managed to provide better benefits for the employees (Mhango, 2012). Willborn (1998) argues that despite huge support on pension portability, the portability will have costs that will be distributed across employees and employers. These costs will pose empirical challenge because it is difficult to determine whether they are within an acceptable level. However, the administrative costs are not only incurred by employees and employers but also pension schemes themselves. The costs for pension schemes may include investment management fees, record keeping, educational programme, monitoring and evaluation, compliance costs such as upgrading of accounting

information systems (OECD, 2013), costs of producing pension information (Larsson, Sundén, and Settergren, 2009) as well as administrative arrangement costs to establish and monitor portability not to be misused (Holzmann and Koettl, 2011).

Even though it is considered that pension portability is likely to increase costs, some literature on administrative costs suggest that these costs are unlikely to be of a significant magnitude, so only a minor part of the portability losses could be explained on these grounds (Forteza, 2008). For example, Rietjens (2011) found that members preferred medium administrative costs to low costs and considered that members probably are making emotional decision rather than rational decision hence creating bias. Willborn (1998) observed that the ability of employees to transfer benefits through DC plans when they change employment does not involve increased costs or benefits. However, based on transaction costs economic this study considers that holding everything constant, employees, employers and pension schemes will choose approaches that will lower costs for pension schemes. As put by Rietjens (2011) that as there is a strong negative relationship between costs and a pension scheme's financial performance, a rational person would prefer a pension fund with low costs to a pension fund with medium or high costs. Hence, since most of studies in pension portability consider that adoption of pension portability is more likely to increase the cost, then it is considered that costs may act as barrier for pension portability. As such, the following hypothesis was tested:

H_2: There is a negative relationship between administrative costs and preference for portable pension schemes

Pension Schemes Factors

The third variable considered to influence pension portability in this study is factors related with pension schemes themselves. These factors are considered because of the potential benefits to pension funds coming from portable pension system. However, the pension schemes will always look for the system which can help them maximize benefits. For example, pension schemes may impose significant losses to employees moving from one scheme to another to discourage them. This perspective considers that pension schemes will not like competition brought by pension portability because they consider competition to reduce efficiency and

increasing the chances for them to collapse. These pension schemes therefore may prefer not-fully portable pension systems. However, Black and Orszag (1997) criticizes this perspective by arguing that not-fully portable pension system cannot serve as an efficiency enhancing mechanism for pension schemes. Black and Orszag (1997) are consistent with Forteza (2008) and Guardiancich and Natali (2012) arguments which divide the pension schemes into two categories occupational or supplementary pension schemes which tend to offer limited portability and statutory or social security schemes which offer greater portability.[6]

Rietjens (2011) also shows that type of pension scheme may have influence on pension portability. However, Rietjens (2011) uses the types of DC plans and DB plans and argues that DC plans give more freedom of choice than DB hence considered to have greater portability or potential portability. Other pension scheme related factors include regulation (Guardiancich and Natali, 2012), level of funding of the pension scheme (Gupta, 2006; Rietjens, 2011), investment strategies as well size of the pension scheme (Rietjens, 2011). While these factors have been found to influence members' preference for a particular pension scheme, these factors have not been addressed in relation to pension portability. To address that gap this study makes an extension by combining these factors to their influence on pension portability. To be able to combine, this study uses the perceived benefits to the pension scheme as a combination of related factors. Benefits from portability are considered to have different influence on pension schemes depending on type, size, regulation, investment style and so on. The assumption here is that if the pension schemes consider pension portability beneficial to them, they will encourage and support. However, if they consider that pension portability will create more costs than benefits, they will discourage it. Based on this assumption, the following hypothesis was tested:

H_3: There is a positive relationship between the perceived benefits to pension schemes and the preference for portable pension schemes

Members' Factors

The fourth variable considered in this study is members' related factors. As argued under the pension scheme related factors, members-related factors are also concerned with perceived benefits to the members. Three items have been identified for this variable, freedom of choice, career

mobility and career focus. Rietjens (2011) focused on four behavioural factors, namely myopia, risk aversion, overconfidence and self-control that are considered to influence pension scheme preference. Consistent with consumer choice theory, when members are free to choose what they like, they maximise their utility. Such choices are only available through portable pension schemes. In addition, prospect theory explains why individuals will choose one fund and avoid another in order to avoid risky alternatives. Portable schemes will help such members avoid risks anytime they feel exposed to them.

This variable is also supported by a study conducted by Cocco and Lopes (2011) which showed that members choose pension schemes depending on their level of income/assets. When these individuals get more earnings may likely shift to pension schemes with higher contributions rates. Dorsey (1995) also argues that efficient allocation of workers is achieved when cost of job change is reduced through portability. Because pensions bind workers to jobs, employees are therefore better off in portable schemes than in non-portable schemes (Turner, 1993). Hence, this study considers that perceived benefits to members on portability of pension benefits will create an impetus to the regulator and the government to allow for portable pension systems.

$H_{4:}$ There is a positive relationship between the perceived benefits to members and the preference for portable pension schemes

Economic Factors

The last variable considered in this study is economic-related factors. Economic factors that are likely to influence portability pension funds includes reduction of contributions withdrawals, reduction of portability losses (which may be present even when there are no portable schemes), labour efficiency and economic integration. Liquidity preference theory shows that individuals prefer withdrawing their contributions rather than keeping them in the non-liquid pension funds. Portable schemes provide better alternative for such individuals.

Apilado (1972) states that in order to benefit the system; money should run in the open (formal) system. Withdrawals are not good for the economy. Moreover, portable schemes are expected to reduce portability losses especially those related with unclaimed contributions for job

switchers. Likewise, Forteza (2008) identifies another factor, economic integration as an advantage of portable pension schemes. Labour efficiency as a potential advantage is explained by CanagaRetna (2006) and others. All these characteristics are studied to evaluate how they affect the need for portable schemes in Tanzania. These factors are combined to form perceived economic benefits of pension portability and hence the following hypothesis was tested:

H_5: There is a positive relationship between perceived economic benefits and the need for portable pension schemes

Research Design

According to Kothari, (2004) research design is the conceptual structure within which research is conducted; it constitutes the blueprint for the collection, measurement and analysis of data. As such, the research design for this study is explanatory one. The study mainly employed quantitative research techniques with some input from qualitative techniques in the earlier stages in order to inform the survey stage. For the purpose of this study, the unit of analysis was members of pension fund schemes. These members formed the only entity that was analysed by the study. A sample of respondents was taken from the population comprising of members of the five operating pension funds in Tanzania which are GEPF, LAPF, NSSF, PPF and PSPF.

Due to the nature of the research problem, random sampling was considered appropriate to arrive at the desired results. Sample size selected for the study was 120 members of in pension schemes (funds) residing in Dar es Salaam. Out of 120 questionnaires distributed, 111 questionnaires were returned that is about 92.5 percent response rate. Out of the 111 returned questionnaires, 10 were rejected for being filled incorrectly and one questionnaire was dropped because of partial filling. As such usable questionnaire for this study were 100 (i.e. about 83 percent of the distributed questionnaires). These usable questionnaires were considered to be adequate for data analysis based on the number of variables in the study both independent variables and dependent variable. According to Hair, Tatham, Anderson, and Black, (1998), the sample size for each variable should not be less than 10. The dependent variable of this study is members' preference for pension benefits portability while the independent variables are grouped into five categories: information

availability, administrative costs, economic factors, members' factors as well as pension funds factors. Therefore, in this study there were six study variables that required a minimum sample size of 60 hence making 100 collected questionnaires adequate for the analysis.

Data collected were analysed using both descriptive and inferential analysis. To ensure reliability and validity of the data, this study used multiple items (3 to 4 items) for each of the study variable. According to Nunnally and Bernstein (1994), Spector (1992) as well as Gliem and Gliem (2003), application of multiple items in the Likert scale type of questionnaire, helps to reduce measurement errors, increase the capacity to discriminate among fine degrees of attribute (i.e. precision) as well as increase the scope (i.e. the capacity to fully represent a complex theoretical concept). In addition, reliability which is concerned with how dependable and stable the data is (Lincoln and Guba, 1985; Pedhazur and Schmelkin, 1991) was assessed using reliability statistics of Cronbach's Alpha. Cronbach's Alpha coefficient, according to Clark and Watson (1995) is used to demonstrate that a scale shows an acceptable level of internal consistency. This means that the coefficient assesses how well the items measure the variables of the study. However, according to Clark and Watson (1995) major limitation of Cronbach's Alpha coefficient is the fact that there are no longer any clear standards regarding what level of reliability is considered acceptable. Despite, this limitation the test is widely used and accepted as a measure of reliability; hence, it was also adopted in this study.

Data collected were summarised using percentages and frequency tables. The summarised data were then analysed through hypothesis testing using regression analysis and correlation coefficients. Regression analysis shows the relationship between driving factors for portability and portability opinions. It is assumed that basing on the design of the study and the problem at hand, these tools are sufficient.

Empirical Results

Analysis of data was divided into two categories descriptive and inferential analysis.

Data Quality

Data is of high quality if it correctly represents the construct to which it refers. For the purpose of this study, procedures to ensure data quality included data cleaning, reliability and validity assessment and collinearity diagnostics for the variables. Procedures to ensure data validity were carried out during the early stages of research work. This ranged from questionnaire design stage to the process of selecting respondents. In case of internal consistency of the test items, Cronbach's Alpha coefficient values were computed as presented in Table 1. According to the results presented in Table 1, Cronbach's Alpha coefficient values ranged between 0.639 and 0.745. Clark and Watson (1995) argues that the original recommendation for Cronbach's Alpha coefficient was between 0.8 and 0.9, currently it is common to find that Cronbach's Alpha coefficient of between 0.6 and 0.7 to be classified as good or adequate. In addition, it is considered that having high Cronbach's Alpha coefficient may mean that some items are redundant. Therefore, it can be concluded that variables used by the study were internally consistent.

Table 1: Reliability Statistics

Variable of the study	Number of items	Cronbach's Alpha
Pension information Availability	3	0.657
Administrative Costs	4	0.733
Pension Scheme Factors	4	0.745
Members' Factors	3	0.725
Economic Factors	4	0.714
Portability Opinion	4	0.639
Overall	**48**	**0.827**

Source: Field data

In order to ensure that regression analysis results were credible, collinearity diagnostics were performed. The results of this test are shown in Table 2. The Variance Inflation Factors (VIF) for each variable range between 1.025 and 1.344 which are less than acceptable limit of 10.0. In case of tolerance level, the results indicate that the values range between 0.744 and 0.975, which are greater than accepted minimum level of 0.1. Hence, this study found limited evidence to support presence of multi-collinearity among predictors.

Table 2: Collinearity Diagnostics

Variable	Collinearity Statistics	
	Tolerance	VIF
Pension Information Availability	.952	1.051
Administrative Costs	.975	1.025
Pension Schemes Factors	.795	1.258
Members Factors	.775	1.291
Economic Factors	.744	1.344

Source: Field work

Demographic Details

In case of demographic details, they are shown in Table 3 which comprises of the distribution of the sample in terms of gender, age, experience and memberships of pension funds. From Table 3, in case of age, majority of the respondents were under the group of 26-35 years (about 57%) followed by the group comprising 36-45 years (about 26%). These results indicate that majority of the members are aged between 26 and 45 years which indicates that most of them are working members. In case of gender, the results indicate that majority of the respondents were males (66%) while female respondents formed a minority group (34%). These results are not surprising because males form majority of the employees in the Tanzanian organizations. On the issue of experience with pension schemes, the results as presented in table 3, showing that majority of respondents are those having experience between 1-5 years (comprising 44%) followed by those having experience between 6 -10 years (about 25%). The remaining groups have an average experience of about 10 years. On the issue of membership in pension schemes, majority of the respondents belonged to PPF (about 38%) followed by members of NSSF (about 29%). PSPF and LAPF had 19 percent and 11 percent respectively. The pension scheme with the least members among the respondents was GEPF having 3 percent only. Distribution of the sample in terms of memberships of pension schemes is not surprising because most of the surveyed members come from academic institutions whose majority members contribute mostly to PPF.

Table 3: Demographic Statistics

	n= 100	%
Age of respondents		
< 25 years	4	4.0
26 – 35 years	57	57.0
36 – 45 years	26	26.0
46 years <	13	13.0

	n= 100	%
Gender of respondents		
Female	34	34.0
Male	66	66.0
Experience with pension schemes		
1 – 5 years	44	44.0
6 – 10 years	25	25.0
11 – 15 years	11	11.0
16 – 20 years	10	10.0
20 years <	10	10.0
Membership in pension schemes		
PPF	38	38.0
NSSF	29	29.0
LAPF	11	11.0
PSPF	19	19.0
GEPF	3	3.0

Source: Field data

Furthermore, the demographic statistics were related with preference on portability of pension benefit as presented in Table 4. According to Table 4, it could be established that about 62 percent of the respondents preferred portability, 23 percent were neutral and 15 percent did not prefer pension benefits portability. In case of each demographic category it could be observed that in case of age, majority of those who prefer are between 26 and 45 years (51%), in case of gender, while both female and male respondents have majority in preference, the results show that more men prefer portability than women (i.e. 43% for men against 19% of women). Other variables include experience whereby majority who prefer are those with experience between 1 year and 10 years, and for scheme membership, majority of those who prefer are from PPF and NSSF (about 44%). Likewise, it can be seen that those who prefer portability are those who are members in two or less schemes (about 60%).

Table 4: Demographic Statistics in Relation to the Preferences

		Preferred		Neutral		Not Preferred	
		F (n=100)	%	F (n=100)	%	F (n=100)	%
Age of respondents	<25 years	3	3.0	1	1.0	0	-
	26 – 35 years	35	35.0	14	14.0	8	8.0
	36 – 45 years	16	16.0	5	5.0	5	5.0
	46 years <	8	8.0	3	3.0	2	2.0
Gender of the respondents	Female	19	19.0	11	11.0	4	4.0
	Male	43	43.0	12	12.0	11	11.0
Experience	1 – 5 years	18	18.0	9	9.0	7	7.0

	6 -10 years	23	23.0	7	7.0	5	5.0
	11 – 15 years	7	7.0	4	4.0	0	-
	16 – 20 years	8	8.0	1	1.0	1	1.0
	20 years <	6	6.0	2	2.0	2	2.0
Membership in Schemes	GEPF	1	1.0	1	1.0	1	1.0
	LAPF	9	9.0	2	2.0	0	.-
	NSSF	17	17.0	7	7.0	5	5.0
	PPF	27	27.0	3	3.0	8	8.0
	PSPF	8	8.0	2	2.0	0	-
Members	In 1 Scheme	47	47.0	20	20.0	11	11.0
	In 2 Schemes	13	13.0	3	3.0	3	3.0
	In more than 2 Schemes	2	2.0	0	-	1	1.0

Source: Field data

Descriptive Analysis

On the other hand, descriptive statistics are presented in Table 5. According to Table 5, the factor with the highest mean score is economic factors [ECON] (14.19) followed by transaction costs [COSTS] with mean of value of 12.6. On the other hand, pension schemes factors [PENS] and membership factors [MEMB] were almost equal with an average mean value of about 11.9. The factor with the lowest mean score is pension information availability [INFO] (11.77). In case of opinion on portability [PENS_PORTABILITY] which is the dependent variable, this has the mean score of 13.96 and standard deviation of 3.94. Hence, descriptive results as presented on Table 5 show that, of greater importance are the economic factors and transaction costs.

Table 5: Descriptive Statistics of Factors

Variable	Mean	Std. Deviation	Min.	Max
Pension Information Availability (INFO)	11.7700	3.51865	4.00	20.00
Administrative Costs (COSTS)	12.6100	3.86095	4.00	20.00
Economic Factors (ECON)	14.1900	3.62565	4.00	20.00
Pension Scheme factors (PENS)	11.9300	2.96190	4.00	15.00
Membership Factors (MEMB)	11.8600	3.15915	3.00	15.00
Portability opinion (PENS_PORTABILITY)	13.9600	3.94129	4.00	20.00

Source: Field data

Inferential Analysis

Five hypothesises were formulated for the study which were regressed to opinion on portability preference as a dependent variable. The multiple regression analysis was conducted using the following model:

$$Pens\_Portability = \alpha + \beta_1 INFO + \beta_2 COSTS + \beta_3 ECON + \beta_4 PENS + \beta_5 MEMB$$

Where:
PENS_PORTABILITY = represent the opinion on portability preference; β = represent beta values, INFO = represent pension information availability; COSTS = represent administrative costs factors; ECON = represent economic factors; PENS = represent pension scheme factors; MEMB = represent membership factors. The regression equation treated PENS_PORTABILITY as dependent variable while INFO, COSTS, ECON, PENS and MEMB were treated as independent variables.

The results from this model are presented in Tables 5, and in Table 6. In Table 6, the results show the model summary and ANOVA. The model summary shows that the prediction model was statistically significant, F (5, 94) = 10.761, p < .001, and accounted for approximately 33 percent (R^2 = .364, Adjusted R^2 = .330) of the variance of pension benefits portability preference. The portability preference was predicted by pension information availability; administrative costs; economic factors; pension scheme factors and membership factors.

Table 6: Model Summary and ANOVA

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.603a	.364	.330	3.22558	.364	10.761	5	94	.000

a. Predictors: (Constant), economic_factors, information_availability, administrative_costs, pension_scheme_factors, members_factors

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	559.829	5	111.966	10.761	.000a
	Residual	978.011	94	10.404		
	Total	1537.840	99			

a. Predictors: (Constant), economic_factors, information_availability, administrative_costs, pension_schemes_factors, members_factors
b. Dependent Variable: opinion on portability preference

Source: Field data

The raw and standardized regression coefficients of the predictors together with their correlations with portability preference, their squared semi-partial correlations and the structure coefficients are shown on Table 7. Structure coefficients were computed because they are useful in measuring independent variables' direct effect on the dependent variable in isolation from other independent-dependent correlations (Nathans, Oswald and Nimon, 2012). Authors such as Nathans, Oswald and Nimon (2012) as well as Courville and Thompson (2001) recognize the importance of structure coefficients in the interpretation of regression results because they reduce possibility of misinterpretation.

The results presented in Table 7 shows that membership factors received the strongest weight in the model followed by pension scheme factors and economic factors. Administrative costs received the lowest of the five weights. With the sizeable correlation between independent variables, the unique variance explained by each of the variables indexed by the squared semi-partial correlations ($\mathbf{sr^2}$), was relatively low. Membership factors uniquely accounted for approximately 9 percent of the variance of pension portability preference. On the other hand, economic factors and pension schemes factors each accounted for approximately 3 percent of the variance of pension portability preference. Administrative costs have the lowest effect on pension portability preference because they account for zero percent of the variation and even structure coefficient (0.095) is near zero in magnitude, also reflecting little effect. Inspection of the structure coefficients ($\mathbf{r_s}$) suggests that membership factors (0.842), economic factors (0.730) and pension schemes factors (0.663) were very strong factors influencing pension portability preference.

Table 7: Standard Regression Results

Model	B	SE-B	$\hat{\beta}$	t	Sig.	Pearson r	sr^2	r_s
(Constant)	1.254	2.110		.594	.554			
Pension Information Availability (INFO)	.116	.094	.104	1.232	.221	.171	.010	.284

Administrative Costs (COSTS)	-.017	.085	-.016	-.195	.846	.057	.000	.095
Pension Schemes Factors (PENS)*	.277	.123	.208	2.253	.027	.400	.034	.663
Members Factors (MEMB)**	.418	.117	.335	3.586	.001	.508	.087	.842
Economic Factors (ECON)*	.232	.104	.213	2.236	.028	.440	.034	.730

Source: Field data

Note. The dependent variable was opinion on portability preference. R^2 = .364, Adjusted R^2 = .330. sr^2 is the squared semi-partial correlation. r_s = structure coefficient (computed by the Pearson correlation between the predictor and the criterion variable divided by the multiple correlation). B= Unstandardized Coefficient B, SE-B = Std Error Unstandardized Coefficient B, $\hat{\beta}$ = Standardized beta coefficient.
** p < .01, * p < .05.

Discussion

From these findings, it can be established that membership factors, pension scheme factors, as well as economic factors are significantly and positively correlated with pension portability preference. In terms of hypothesis, H_1 which stated that; there *is a positive relationship between pension information availability and preference for portable pension schemes* was not supported by the findings of this study (p = 0.221) at significance level of 5 percent. While it was considered in this study that information is crucial for pension portability because the lack of it can create uncertainties and knowledge gap, the findings of this study shows that availability of information about pension schemes is not that crucial for portability. These findings are not consistent with consumer choice theory (Chernev, 2004) as well as studies dealing with information importance on pension schemes (Antolín and Harrison, 2012; Gözbaşı and Çıtak, 2010; Gupta, 2006: Larsson, Sundén, and Settergren, 2009; OECD, 2013; Ramasamy and Yeung, 2003; Rietjens, 2011). One of the possible

reasons is that there is no policy on portability of the pension benefits hence most respondents did not consider information issue to be important. Most of the previous studies did not relate information availability with portability of pension benefits.

The second hypothesis (H_2) which was tested stated that *there is a negative relationship between administrative costs and preference for portable pension schemes* considered that increase in costs would discourage preference on portability pension schemes. Previous studies such as Forteza (2008), Larsson, Sundén, and Settergren, (2009), Mhango (2012), Holzmann and Koettl (2011) as well as Willborn (1998) argued that introduction of portability pension schemes may result into increased costs to employees, employers and regulatory bodies. However, the findings from this study do not support this hypothesis (p-value = 0.846) at 5 percent significance level. While the findings of this study are not consistent with the mentioned studies, some of the literature is consistent with the findings of this study (such as Rietjens, 2011). The main reason for the difference could be the fact that most of studies that argue that portability may increase the cost are only theoretical except Rietjens (2011) who found that employees are irrational when it comes to the costs of pension schemes.

Third hypothesis (H_3) which stated that: *there is a positive relationship between the perceived benefits to pension schemes and the preference for portable pension schemes* was supported by the findings of this study (p-value = 0.027) at 5 percent significance level. The findings of this study support extant literature (Black and Orszag, 1997; Forteza, 2008; Guardiancich and Natali, 2012; Gupta, 2006; Rietjens, 2011) which found a number of pension scheme factors that may have influence on pension benefits portability. The findings therefore show that if the pension schemes consider that portability of pension benefits will be beneficial to them, they will positively support the system.

Fourth hypothesis (H_4) which was tested stated that *there is a positive relationship between the perceived benefits to members and the preference for portable pension schemes* tested the importance of membership factors on the portability preference. The hypothesis was supported by the findings of this study (p-value =0.001) at 1 percent

significance level. The findings are consistent with studies such as Rietjens (2011) which focused on the importance of members' behavioural factors on pension scheme choice and Cocco and Lopes (2011) which found that members' income and assets are crucial when it comes to pension scheme choice. Likewise, the findings are consistent with Turner (1993) who considered that portable pension schemes make employees better hence to be used as a factor to encourage portability of pension benefits. The possible explanation on the significance of this factor is that members (employees) see portable schemes as an opportunity for them to choose their best retirement plans and focus on career through job mobility. For example, employees who move to high paying jobs may prefer new schemes which reflect their changed status as argued by Cocco and Lopes (2011) that employees have different tastes for pension schemes depending on their income and assets.

The last hypothesis (H_5) tested in this study stated that: *there is a positive relationship between perceived economic benefits and the need for portable pension schemes.* This hypothesis tested the importance of economic factors on the preference for portable pension schemes. The findings of this study support this hypothesis (p-value = 0.028) at 5 percent significance level. The findings support earlier studies such as (Apilado, 1972; CanagaRetna, 2006; Forteza, 2008) that considered economic factors to be essential for portable pension schemes to ensure that labour efficiency is achieved, withdrawals are reduced as well as reducing portability losses. The results therefore show the optimistic expectations of members regarding the economic advantages of portable pension schemes. For example, Apilado (1972) shows that contributions withdrawals will affect money supply in the formal economic system, as such portable pension scheme will reduce that by letting money remain in the formal sector.

Conclusion

In recent years, the concern for portability of pension benefits has grown tremendously in both developed and developing countries. In the process, several efforts have been made towards identifying issues influencing portability issues. This study which can be seen as an extension of previous studies was done to identify factors influencing preference on portability of pension benefits in Tanzania. To achieve its aim, this study tested five

factors namely pension information availability, administrative costs, pension scheme factors, membership factors as well as economic factors. Using multiple regression analysis to a sample of 100 respondents (members of various pension schemes in Tanzania), the study found that three factors have significant influence on portability of pension benefits. The factors are pension scheme factors, membership factors and economic factors. From these results, three conclusions can be drawn. First, for portability of pension benefits to be effective, there is a need of putting policies that can also benefit pension schemes. This is crucial because if the pension schemes see that portability system will be beneficial to them, they will support it. Second, for effective portability of pension benefits, members have to find that the system is helping them to be better. The system should be able to help those employees who moving from one job to another as well as helping employees achieve career progress. Last conclusion is that to have an effective system will require appropriate economic factors. As such in putting portability policies, there is a need of taking into consideration economic factors such as inflation, interest rates, labour efficiency and so on. However, despite the contribution of this study, some limitations need to be acknowledged. The data were collected to a small sample of respondents hence the interpretation of the results should be limited to this group of respondents. It is possible that other respondents will have different perceptions of the factors influencing portability of pension benefits. Likewise, factors tested were limited to five; even though these factors were supported by previous studies, it is possible that there could be other relevant factors. In order to be able to generalize these findings it is suggested that similar studies be conducted using large sample and more factors. Further limitation is that portable pension schemes in Tanzania are not yet formally provided in the country; as such, this poses challenges to respondents because some had no experience.

Notes

1. In this study, portability of pension funds benefits refers to the ability to preserve, maintain and transfer vested pension rights when one moves from one pension scheme to another.
2. A good example is what happened between 2009 and 2010 when University of Dar es Salaam Academic staff had a lot of fight with the government. One of the reasons was that the PPF scheme was

not paying good pension benefits hence they were asking for permission to move to other schemes (Source: Various newspapers in 2009 and 2010).

3. Social Security Regulatory Authority (SSRA) was established under the Social Security Regulatory Act No. 8 of 2008, with the main objective of regulating, supervising and promoting growth of the Social Security Sector in Tanzania through regulation and supervision of the provisions of social security services in the country. However, SSRA started its operation two years later in October 2010, with a vision of quality social security services to all Tanzanians. The establishment of SSRA is one of the public sector reform efforts that have witnessed establishment of several executive agencies and a regulatory authority in Tanzania.
4. For further details, see Social Security (Regulatory Authority) Act of 2008, Section 54, para 2(a) page 27.
5. Defined Benefit (DB) (traditional pension or fixed pension) Plan is a pension plan under which an employee receives a set monthly amount upon retirement, guaranteed for their life or the joint lives of the member and their spouse. This benefit may also include a cost-of-living increase each year during retirement. The monthly benefit amount is based upon the participant's wages and length of service. On the other hand, Defined Contribution (DC) Plan is a retirement savings program under which an employer promises certain contributions to a participant's account during employment, but with no guaranteed retirement benefit. The ultimate benefit is based exclusively upon the contributions to, and investment earnings of the plan. The benefit ceases when the account balance is depleted, regardless of the retiree's age or circumstances. For further details on the differences between DB and DC read Bodie, Z., Marcus, A.J. and Merton, R.C. (1988). In DC plans the individual bears increased risk and is required to make a variety of complex financial decisions (how much to save, in which funds, which retirement income product to choose, etc).
6. According to Forteza (2008, p. 6) occupational or supplementary pension schemes are a type of pension schemes organized and sponsored by organizations in which employees work and, in most cases, they provide supplementary pensions. On the other hand,

statutory pension schemes are schemes organized by government, usually provide the basic pension and nationwide coverage.

References

Antolín, P., and Harrison, D. 2012. "Annual DC Pension Statements and the Communications Challenge," *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 19, OECD Publishing. http://dx.doi.org/10.1787/5k97gkd06kth-en (accessed: January 10, 2014)

Apilado, V. P. 1972. "Pension Funds, Personal Savings, and Economic Growth". *The Journal of Risk and Insurance. Vol. 39, No. 3, pp. 397-404.* American Risk and Insurance Association.

Black, D and Orszag, M, J. 1997. "Portability and Preservation of Pension Rights in the United Kingdom". *Report of the Director General's Inquiry into Pensions, Vol. 3*. UK Office of Fair Trading, London, UK

Bodie, Z., Marcus, A.J., and Merton, R.C. 1988. "Defined Benefit versus Defined Contribution Pension Plans: What are the Real Trade-offs?" In *Pensions in the U.S. Economy, pp. 139-162*

CanagaRetna, S. M. 2006, June 30. **"**Pension Portability among Public Health Officials". *Southern Legislative Conference - The Council of State Governments' Southern Office.* Atlanta, GA

Chernev, A. 2004. "Goal-attribute Comparability in Consumer Choice". *Journal of Psychology*, *Vol. 14, No. 3*, pp. 141-150

Clark, L. A., and Watson, D. 1995. "Constructing validity: Basic Issues in Objective Scale. Development"*. Psychological Assessment*, 7, pp. 309-319.

Cocco, J. F., and Lopes, P. 2011. "Defined Benefit or Defined Contribution? An Empirical Study of Pension Choices". *Journal of Risk and Insurance, Volume 78, Issue 4*, pp 931–960. DOI: 10.1111/j.1539-6975.2011.01419.x

Courville, T., and Thompson, B. 2001. "Use of Structure Coefficients in Published Multiple Regression Articles: ß is not Enough". *Educational and Psychological Measurement*, Vol. 61, No. 2, pp. 229-248.

Cruz, A.T. 2004. *Portability of Benefit Rights: Probability of Benefit Rights in Response to External and Internal Labour Mobility*: *The Philippine Experience*. Thirteenth Regional Conference for Asia and the Pacific, International Social Security Association, Kuwait, 8 – 10 March.

Dorsey, S. 1995. **"**Pension Portability and Labour Market Efficiency: A Survey of the Literature". *Industrial and Labour Relations Review*, *Vol. 48, No. 2,* pp. 276-292

Edward, W. 2000. "Pension Reform, Financial Literacy and Public Information: A Case Study of the United Kingdom". *Social Protection Discussion Paper*. 21312 No. 0004

Forteza, A. 2008. "The Portability of Pension Rights: General Principles and the Caribbean Case". *Development Policy Review*, *Vol. 28, Issue 2*, pp. 237-255. http://dx.doi.org/10.1111/j.1467-7679.2010.00483.x

Foster, A. C. 1994, July. "Portability of Pension Benefits among Jobs". *Monthly Labour Review*, *Vol. 117*, No.7

Gliem, J.A., and Gliem, R.R. 2003. *Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales*. 2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education.

Gough, O. 2004. "Why do Employees, particularly Women, Reject Occupational Pension Schemes?" *Employee Relations*, *Vol. 26 Issue: 5* pp. 480 – 494 http://dx.doi.org/10.1108/01425450410550464

Gözbaşı, O., and Çıtak, L. 2010. "An Evaluation of the Attributes Considered by Investment Professionals in Selecting Mutual Funds: The Case of Turkey". *International Research Journal of Finance & Economics,* No. 36, pp. 180-195

Guardiancich, I., and Natali, D. 2012. "The cross-border portability of supplementary pensions: Lessons from the European Union". *Global Social Policy*, Vol. 12, No. 3, pp. 300-315.

Gupta, V. 2006. "Pension risk: do employees care?" *Pensions,* Vol. 12, No. 1, pp 4-11.

Hair, J. F., Tatham, R. L., Anderson, R. E., and Black, W. 1998. *Multivariate data analysis* (5th ed.) Prentice Hall.

Holzmann, R. and Koettl, J. 2011. "Portability of Pension, Health, and other Social Benefits: Facts, Concepts, Issues". *Social Protection Discussion Paper*. 62725 No. 1110

Holzmann, R., Koettl, J., and Chernetsky, T. 2005. *Portability Regimes of Pension and Care Benefits for International Migrants: An Analysis of Issues and Good Practices.* Paper presented for the Global Commission on International Migration, May 23.

Kothari, C. R. 2004. *Research Methodology Methods and Techniques*, New Delhi: New Age International Publishers.

Larsson, L., Sundén, A., and Settergren, O. 2009. "Pension Information: The Annual Statement at a Glance". *OECD Journal: General Papers.* 2009, Vol. 8 Issue 3, p131-171.

Lincoln, Y. S., and Guba, E. G. 1985. *Naturalistic inquiry*. Newbury Park, California: SAGE Publications Inc.

Mchomvu, A.S.T., Tungaraza, F.S.K., and Maghimbi, S. 2002. **"**Social Security Systems in Tanzania". *Journal of Social Development in Africa. Vol. 17 No. 2.*

Mhango, M. 2012. "Pension regulation in Malawi: Defined benefit fund or defined contribution fund?" *Pensions,* Vol. 17, No. 4, pp. 270–282

NAO. 2010. A *Performance Audit on the Processing of Terminal Benefits of Retirees from the Central and Local Government of Tanzania*. A Report of the Controller and Auditor General of the United Republic of Tanzania.

Nathans, L.L., Oswald, F.L., and Nimon, K. 2012. "Interpreting Multiple Linear Regression: A Guidebook of Variable Importance". *Practical Assessment, Research & Evaluation*, Vol. 17, No. 9, pp. 1-19.

NCCB and USCC. 1990, November. "Final Report: Portability of Pension Benefits for Diocesan Lay Employees". *Resources for American Christianity.* Retrieved from http://www.resourcingchristianity.org/grant-product/final-report-portability-of-pension-benefits-for-diocesan-lay-employees (Accessed: November 2013).

Nunnally, J. C., and Bernstein, I. H. 1994. *Psychometric theory* (3rd ed.). New York: McGraw- Hill.

OECD. 2013. *Improving Pension Information and Communication: OECD Survey and Lessons Learnt.* OECD, Paris.

Pedhazur, E. J., and Schmelkin, L. P.1991. *Measurement, design, and analysis: An integrated approach* (Student ed.). Hillsdale, N.J.: Lawrence Erlbaum Associates.

Ramasamy, B., and Yeung, M.C.H. 2003. "Evaluating Mutual Funds in an Emerging Market: Factors that Matter to Financial Advisors". *International Journal of Bank Marketing*, Vol. 21 No. 3, pp.122 - 136

Rietjens, M. 2011. *Young People's Preference for Financial Versus non-Financial Attributes of Pension Funds.* Msc Thesis, Faculty of Economics and Business Administration, University of Maastricht.

Romagna, R.E. 2008. *Portability of Pension Benefits as a Means to Foster Trans-national below Mobility: Critical Recommendations on the*

Italia-Albania Case. Steering Economic and Social Cohesion in the CADSES Space: Valuing Migration as Development tool.

Spector, P. 1992. *Summated rating scale construction* Thousand Oaks, CA: Sage

Turner, J. A., Tabitha, A. Doescher and Phyllis, A. F. 1993. "Job Mobility and Pension Portability." *Pension Policy for a Mobile Labour Force*. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, pp. 1-9.

Willborn, S. 1998. "The Problem with Pension Portability". *Nebraska Law Review*, Vol. 77, No. 1, pp. 352.