The Impact of Investments in Human Resources Activities on the Effectiveness of Investment in Human Capital: The Case of Commercial Banks in Jordan

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Abstract

The purpose of this study is to measure the impact of investment in human resources activities on the effectiveness of investment in human capital and investigated the relationship between human capital Investment and its effectiveness in commercial banks in Jordan A model which included independent variables: Staffing, Training & Development, Incentives, and Retention policy, also dependent variables: Human Capital Value Added (HCVA), Human Capital Return on Investment (HCROI), and Turnover Rate. Findings revealed that there is a significant impact on staffing, training & development, incentives, and retention policy on the effectiveness of investment in human capital. and there is a direct impact from both training & development and employee incentives system on the human capital return on investment and human capital value added. The study also revealed that there is a direct impact from retention policies on the turnover rate. The study recomand to empower human resources management with the tools and techniques needed to improve their role and impact on the overall performance of the banks. And establish a human resources information system to build an effective and accurate data for decision makers.

Keywords: Human Capital Effectiveness, Small Business, Financial Performance, Nonfinancial

1. *Introduction*

Many organizations nowadays derive their competitive advantage from their human capital, and it becomes critical for organizations to select human capital that matches their strategic goals. Human capital (HC) must be identified, and maintained, and it should be treated as investments instead of expenses in accounting records (Lin, 2005). The importance of human capital as a source of progress and economic growth has long been recognized in the literature of economics. Adam Smith was the first classical economist to include human capital in his definition of capital. Donkin refer to Adam Smith that he included in the capital stock of a nation the inhabitant's acquired and useful talents, because human skills increase wealth for the society as well as for individuals (Donkin,2002,).

In the economic perspective, the capital refers to factors of production used to create goods or services, The human is the subject to take charge of all economic activities such as production, consumption, and transaction. Thus, it can be recognized that human capital means one of production elements which can generate added-values through inputting it. Human capital could be defined as the knowledge, skills, abilities and capabilities possessed by people General human capital is 'to be defined by generic knowledge and skill, not specific to a task or a company, usually accumulated through working experiences and education' (Alan at al., 2008).

Human capital (Weatherly 2003, p10) is possibly the most valuable asset held by an organization today. It is also the most elusive asset to be managed for a variety of reasons. For organizations, measuring the value and return on investment in human capital (Frossman, pp. 1-7, 2005), is both a challenge and a strategic necessity for today's human resource profession. Since human capital is not like other types of capital, it is not easy to calculate its value. Human capital simultaneously represents the single greatest potential asset and the single greatest potential liability that an organization will acquire during business.

While there are other intangible assets (Benton & others, pp. 1-3, 2004), human capital is the only intangible asset that can be influenced, but never completely controlled, invested wisely, or wasted thoughtlessly, and still has tremendous value. These distinguished features make human capital a unique and elusive asset.

Human capital is a broad concept encompassing many components but essentially describing the quality of the manpower. Any activity that expands the productivity of labor can be considered an investment in human capital (Derek, 2001, pp1-36). The rate of return from investing in training, both for organizations and individuals, reflects the demand for supply of Human Capital (Blundell, 1999, pp. 1-27). Those individuals with greater capacity to transform training and education into higher earnings will tend to have a higher demand for human capital (Boverie, 2005, pp. 22-24), compared to those individuals with less capacity to convert training into earnings (Stockley, 2005, pp1-3).

The functions of the potential contributions of human capital are in Defining, evaluating and shaping the organization's culture designing the organizational structure and defining employees' roles, formulating staffing and performance management through training plans and designing programs, and formulating rewards strategies for human capital programs. The method to create the human capital can be categorized into two types. The first is to utilize 'human as labor force' in the classical economic perspective. This meaning depicts that economic added-value is generated by the input of labor force as other production factors such as financial capital, land, machinery, and labor hours. Until the monumental economic growth of the 1950's, most of economists had supported the importance of such quantitative labor force to create products. The other is based on the assumption that the investment of physical capital may show the same effectiveness with that of human capital on education and training (Little, 2003). Considering that the assumption accepts as a premise, the human capital expansively includes the meaning of 'human as creator' who frames knowledge, skills, competency, and experience originated by continuously connecting between 'self' and 'environment'

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2. *Review of literature*

Ukenna at el (2010) studied the Effect of Investment in Human Capital Development on Organisational Performance in twenty-five small scale business owners were purposively selected in Awka metropolis of Nigeria, using a structured five-point likert type. The finding is while keeping constant other factors that can impact on organizational performance, the study singled out human capital and it was shown that a high intercorelation exist among the four variable measure predictors of human capital effectiveness. A key finding of this study is that, training and skill are stronger predictors of human capital effectiveness over and above knowledge and education. This study, in no small measure, provides penetrating insight for small scale business owners in the area of human resources management. Managerial implications, limitations and opportunity for further research are discussed.

Al-Beshtawi (2006) identify current practices of Jordanian banks concerning accounting for human resources and the extent of use internal and external data and accounting information. the study has concluded that there is very limited use of accounting data and information in these areas. the results of the study indicate that there are important factors have contributed to this situation are: (1) the absence of an accounting standard for disclosing information of human resources in the financial statements, and (2) the absence of the foundations and fundamentals of cost systems. Finally, the study was provided some suggestions that could cause the development of cost system on human resources and accounting

Huang (2011) investigates how ROI is best used during the evaluation process to provide compelling data concerning the value of human resources and their contributions to the project so that companies may maximize the benefits of their investment in human resources. The impact of human resources on corporate profits is measured using a scientific and logical method that provides businesses with greater profits stemming from the effective use of human resources in the production process.

Weziak (2009) present both an alternative approach to measurement of intellectual capital of a country (IC) and a calculation of IC index using a method of operationalisation of conceptual model, which comprised: 1. method of transforming the theoretical concept and relations into more concise ones that enabled the measurement sensu stricto, 2. selection of indicators of each component of IC, 3. adoption of appropriate method of aggregation of indicators. Strong correlation between IC index and GDP per capita indicated that there was a significant level of information carried by the IC index. First of all, it should be pointed out that IC probably explains significant part of the difference in the level of development of various countries. Secondly, it does not carry the full information about the value of the GDP in economy, so it possibly carries also information about the future development of a country.

Almeida and Carneiro (2008) estimate the rate of return to firm investments in human capital in the form of formal job training, using a panel of large firms with detailed information on the duration of training, the direct costs of training, and several firm characteristics. the estimates of the return to training are substantial (8.6%) for those providing training. Results suggest that formal job training is a good investment for these firms possibly yielding comparable returns to either investments in physical capital or investments in schooling.

Hameed and Waheed (2008) analyzes the theoretical framework & models related to employee development and its affect on employee performance and develops a proposed model which explains the relationship between employee development variables (employee learning, skill growth, self directed, employee attitude) and employee performance variable. The employee performance will affect on organizational effectiveness.

Hansson at el review and analysis of an existing database on human resource management (HRM) (the Cranet survey). It focuses on research that connects human capital with the firm and asks whether education, skills/competence and training have any impact on company performance. The main results may be summarised as follows. It appears that training provided by firms for employees is not characterised by being general or specific but by what is needed to stay ahead of competitors. There is a growing body of literature suggesting that firms are financing both types of training. More recent research also suggests that investments in training generate substantial gains for firms even if employees can use this training in other firms. The evidence that employers profit from training investments comes from different countries including Britain, France, Ireland, the Netherlands, Sweden, and the US. Most of these studies indicate that training affects performance and not the other way around. The effects of education and skills/competence on aspects such as productivity and innovations are generally found to be positive and significant, though the connection with profitability might be less expected. Firms can also extract profit from prior education as they do from general training investments. Supporting employee development through training policies and methods for analysing training needs is important to explain the provision of training and training outcomes. Similarly, innovative (and comprehensive) HRM practices tend to be associated with positive company performance. Innovation and information technology (IT) both result in greater investment in training and also depend on education and skills in generating profits. Other findings suggest that training and comprehensive HRM practices are closely related to firms' innovative capacity. The lack of studies connecting small and medium enterprises (SMEs), labour market conditions (systems), and social partners with company training policies and performance measures such as productivity or profitability, makes it difficult to draw conclusions on these aspects. This suggests an incentive to research such matters more thoroughly in the future.

Bapna at el (2011) study the impact of human capital investments in the context of the Indian IT services industry. They find significant a positive impact of training on employee performance. An additional training course, on an average, helps employees improve their performance by 3.6%. We also investigate the mediating role of employment related characteristics and the type of training on the link between training and performance. And they find that employment characteristics such as work experience and whether the employee is a direct hire from an educational institution or a lateral hire from another IT services firm play a significant role in shaping the impact of training on performance. Interestingly, we find it that there is systematic superiority in the high experience laterals' ability to extract value from firm-provided training. We find significant differences between the impact of specific versus general training and domain versus technical training on performance. In addition, the domain and technical training have a substitutive relationship. Taken together, these findings suggest that the value of training is conditional upon a focused curricular approach that emphasizes a structured competency development program.

Yahaya (2008) investigates the impact of investment in human resource training and development on employees' effectiveness in Nigerian banks. The results showed that Zenith Bank had the best Human Resource Management and Accounting practice performed best. The study also identified the main training and development activities in the three selected banks as orientation and on the job training, skills improvement training, utilization of the newly acquired skills, regular training and acquisition of job experiences in all areas of banking. It was also found that respondents were significantly different in the assessment of training and development activities in their banks based on length of service and job status. However, the respondents were not significantly different in their assessment of training and development activities based on qualifications. Thus, the paper recommends that Nigerian Banks should evaluate the quality of their human resource regularly and provides adequate training and envelopment opportunities to their employees. Also, the professional bodies in Nigeria should develop a standardized scale for the assessment of human resource in Nigerian banks and other corporate organizations. Similarly, training and development programmes designed for the employees should be comprehensive and related to their needs.

Price Water House Coopers Services (PWC) (2005) conducted a survey in the financial services sector across seven Pacific Asia countries. The survey findings confirm that Asia's industrial financial services needs more robust human capital framework alongside tools for measuring performance and recognition of the strategic value of human capital effectiveness among organizational activities. More organizations need to perform their overall people strategy and more rigorous approaches are needed to close measurement gaps. The survey concluded that Respondents in the Pacific Asia survey rank the top three people issues: retention of talent, performance management and leadership. The levels of learning and development investment per financial service were similar in both the banking and other finance sectors. They also reflect the fact that companies in these sectors are focusing on training in order to reach the competitive and innovative industry level. The survey reports that a majority of Asian organizations have currently invested capital initiatives in people and human resources strategy, leadership development and succession planning. Instead of measuring human capital information for effectiveness, the survey showed that a majority of organizations measure human capital information for management purposes. Ninety three per cent of respondents imply that people tools are used for budget and cost management purposes. This suggests that these measurements are not currently being used to their full potential for strategic human capital decision making.

Bontis and Fitz enz (2002) conducted research on 25 companies in the Financial Services industry in 2002 to study the causal relationship between human capital Management and economic and business results, The results of the study revealed a holistic causal map that integrated constructs from the fields of Intellectual Capital, Knowledge Management, Human Resources, Organizational Behavior, Information Technology and Accounting. The integration of both quantitative and qualitative measures in an overall conceptual model yielded several research implications. The resulting equation model allows responding organizations and researchers to gauge the effectiveness of an organization's human capital capabilities. This will allow practitioners and researchers to be more efficient in allocating resources related to human capital Management.

Voisey & Baty (2002) implemented a global Human Capital survey based on data from over 1000 organizations in 40 countries that participated in the survey. The survey showed that organizations have to consider three important issues: 1) Documented Human Capital strategy should be integrated into the business strategy. 2) Effective people policies, and practices that deliver the strategy across the business, and 3) Human Capital Management which can implement policy and strategy and can influence the business. Results showed that: (1) participants with a documented human capital strategy have higher revenues per employee than those with no documented strategy, (2) lower termination for participants based in Europe, a reward system that better supports business objectives. It also showed that profit margins are higher where the human capital management is satisfied with its influence on business strategy.

Bontis (2001) measured the antecedents of effective Human Capital Management in 76 individuals from 25 companies in the financial services industry in the USA. results allowed organizations to determine the effectiveness of their human capital capabilities. This will encourage senior managers to be more efficient in allocating resources with regards to human capital management. The potential outcomes of the study were limited since a program of consistent reevaluation can lead to the establishment of causal relationships between human capital management and economic business results.

The integration of both quantitative and qualitative measures is an overall conceptual model and yielded the following implications: The development of senior management leadership capabilities is the key starting ingredient for the reduction of turnover rates and the retention of key employees. Effective management leadership acts as a spark for organizational knowledge sharing which in turn allows senior management to align values throughout the organization; The effective management of intellectual capital assets yields higher financial results per employee. The development of Human Capital is positively influenced by the education level of employees and their overall satisfaction; Employee sentiment defined as satisfaction, motivation and commitment has far reaching positive impacts on intellectual capital management, knowledge management and ultimately business performance; Knowledge management initiatives can decrease turnover rates and support business performance if they are coupled with human resources policies; Business performance is positively influenced by the commitment of its organizational members and their ability to generate new knowledge. This favorable performance level subsequently acts as a deterrent to turnover which in turn positively affects human capital management:

3. Hypotheses of the Study

The research aimed at testing the following null hypotheses

Ho1: There is no significant effect of investment in human resources activities on the human capital return on investment.
Ho2: There is no significant effect of investment in human resources activities on the human capital value added (HCVA).
Ho3: There is no significant effect of human resources activities on the turnover rate.

4. Research methodology

4.1 The Model of the Study

In accordance with what has been said, and what has been elicited from previous studies, the researcher suggests the following model to work out the impact of investment in human resources activities (independent variable) on the human capital effectiveness in the commercial banks in Jordan (dependent variable)

1- The Independent Variables

Independent variable is the human resources investment, which is consisting of the following components:

1) Investment in staffing: the human resource polices and procedures in recruiting and hiring employees: the study discusses the workforce plan in selecting and hiring employees and its impact on the human capital effectiveness in the bank. The researcher focuses on how banks design and link its workforce plan with the bank's strategy to achieve its effectiveness.
2) The investment in employees training and development plans and programs: the study examined how banks identified their training and development programs and plans, and if these plans are taking into consideration the bank's needs for achieving the objectives, and also if these plans were designed for career advancement. The researcher tried also to study how banks measure the impact of training and development plans to increase the return on investment from those programs;
3) The investment in employees' incentives system: the effect of performance management in the banking sector on increasing the productivity and the quality of services to maximize its effectiveness. Compensation and benefits were studied to see the link between them and the impact on minimizing the Turnover rate and increasing the ROI when allocating a budget for incentives each year, and also to test how effective the evaluation system to assess the return on investment on employees;
4) The investment in the Retention policy: the study examined how banks not only attracting their employees but also to retaining them by investment to achieve their objectives. The retention policy impact the loyalty of the employees which in turn affect the effectiveness when minimizing the turnover and increasing productivity.

2- The Dependent Variable is the effectiveness of investment in the human capital of the bank through studying the following measurements:

1) Human capital return on investment: the researcher measures the profitability of employees by dividing the net income by the number of employees through analyzing the banks financial statement for the year 2004;
2) Human capital value added: the researcher examined the human capital value added by subtracting the employees' expenses from total salaries then divided it by the number of employees
3) Turnover rate: this factor is an indicator of human capital investment practices to retain employees and not losing them to their competitors. This percentage reflects employees' satisfaction and loyalty for their banks and also its impact on the recruiting and training costs for employees' replacement. The turnover rate is measured by dividing the number of employees leaving the bank by the number of employees as resulted from the Annual Reports of the targeted population and also from the interview with the human resource management;.

The model can be stated as follow:
Y3 = a + b1x1
Where:
Y: is the human capital return on investment, the on human capital value added, turnover rate.
a : constant
X1: human resources investment

4.2 Data collection

Data need for the model is obtain from two sources, the first is the data published by the Jordanian banks, and the second is the questionnaires. The data for the variables the human capital return on investment, the on human capital value added, turnover rate are computed from the annual reports of the banks. While the data for staffing, training & development, incentives and retention variables collected by structural questionnaire.

Before analysis of the data each of the variables collected by questionnaire is averaged for each bank, so that 16 observations is estimated for the 16 banks.

4.3 Research instrument

A set of structural questionnaire was developed which contains three sections was designed depending on literature review. The first section consisted of a set of personal questions of the respondent, such as gender, age, qualification, specialization, job title and years of experience. The second section consists of set questions about human capital investments in the Jordanian banks. In this section request the respondents to indicate their opinion based on 5 point Likert Scale. The answers were preordered with the preponderance weights that suit the level of importance for each case of measurement. (5) Represents “I strongly agree” and (1) to “I don’t agree”.

The questionnaire was distributed to all banks working in Jordan; the total number of banks is (16) banks (CBJ: 2012). (174) Questionnaires were distributed to all top management officials, and human resources managers in the Jordanian banks. The number of retrieved questionnaires suitable for analysis was (155) questionnaires. The retrieved questionnaires represent (%89) of the total number of questionnaires. This meets the acceptable response rate, 40%, as suggested by Sekaran (2000). A reliability test is done on Section two of the questionnaire, which the Cronbach's alpha value is 0.8248. (Sekaran, 2000) state that the closer is the Cronbach’s alpha to one, the higher the internal consistency reliability. Therefore, these results indicate that the data collected are reliable since the alphas are very close to 1.

4.4 Statistical Analysis

Descriptive statistics techniques used to describe the demographic characteristics of respondents and opinions, such as frequencies, percentage, means and standard deviations. Simple and multiple regression Linear Regression model was used to test the relation between dependant and independent variables, and test the hypothisis using the model of the study.

5. *Result and discussion*

5.1 Description of the variables

The results related to measures of dependent and independent variables are presented in table (1), these dependent variables are the return on investment, human capital value added, and the turnover rate and independent variables the human resources invest.

The return on investment (ROI) for each bank reflect the contribution of each employee to generate profit or return and the number is an indication that the bank can generate more return with a minimum number of employees, the more the investment in employees the more generation of return or profit. The maximum value of the return on investment (ROI) is 92.4 while the minimum value is (5.3) with an average of (29), this reflect the contribution of each employee to generate profit or return and the number is an indication that the bank can generate more return with a minimum number of employees, the more the investment in employees the more generation of return or profit.

The value of Human capital value added (HCVA) is ranging from 1.8-97.7, this reflect how effective each employee for the Bank and how much can the Bank operate with a minimum number of employees. Human capital value added (HCVA) this number reflect how effective each employee for the Bank and how much can the Bank operate with a minimum number of employees. This shows that investing in employees increase the value added and the overall effectiveness of the bank.

The turnover rate is ranging between 7-38 with an average of 18% this means that turnover rate is in average equal (18) comparing to what the banks are investing in their employees in training and development, incentives and rewards policies, retention policies, and in staffing still they are losing employees.

The other variables of the human resources investment shows values above 2.5, that is the respondents feel that the extent of these variables is moderate or high, however some banks shows high presents of these variables.

5.2 Testing the Study's Hypothesis

1. The first hypothesis:

Ho1: There is no significant impact of human resources investment on the human capital return on investment.

This study intends to see if there is any relationship between the human resources investment on the human capital return on investment. Thus linear regression is used to test this hypothesis. Table (2) summarized the result of the regression.

Result from the table (2) shows a statistically significant relationship between the two variables (p= 0.000) which is less than (0.05). Meanwhile the coefficient (B) in the regression for 'the human resources investment.' is 1.09 and statistically significant at (0.05) (p=0.000). This indicates that for every one unit increase in the the human resources investment, there would be 1.09 change in 'the human capital return.' The Adjusted R^2 for this analysis is 0.96. This indicates that 96 % of the variance in the 'human capital return on investment.' can be explained by variation in the 'human resources investment'.

In conclusion, the results confirm that there is a significant relationship between 'human resources investment on the human capital return on investment'. Therefore (Ho1) is rejected. That is there is significant impact of human resources investment on the human capital return on investment.

2. The Second hypothesis

Ho2: There is no significant effect of human resources investment on human capital value added.

To test this Hypothesis, linear regressions is used to explore the relation between human resources investment on human capital value added. Table (3) Model Summary for this hypothesis

The result in the table shows a statistically significant relationship between the human resources investment on human capital value added (p= 0.003) which is less than (0.05). Meanwhile the coefficient (B) in the regression for 'human resources investment.' is 45.38. This point out that for every one unit increase in human resources investment, leads to 45.38 unit change in 'human capital value added.' The Adjusted R^2 is 0.49. Therefore, 49 % of the variance in the 'human capital value.' can be explained by variation in the added human resources investment.

Based in the above results, it can be concluding that there is a significant relationship between 'human resources investment and the human capital return on investment'. Therefore (Ho2) is rejected, and alternate hypothesis is accepted that is there are impact of human resources investment on human capital value added.

3. **The third hypothesis**

Ho3: there is no significance effect of Human resources investment on the turnover rate.

Linear regression analysis is used to see if there is any relationship between the Human resources investment on the turnover rate. Table (4) Summarized the result of the linear regression for the this Hypothesis

Linear regression result shows that there are a no statistically significant relationship between the two variables (p= 0.468) which is greater than (0.05). Meanwhile the coefficient (B) in the regression for 'the Human resources investment.' is (-4.69) but it not statistically significant. This indicates that for every unit increase in the Human resources investment, there would be 4.69 decreases in 'the turnover rate.' The Adjusted R Square for this analysis is 0.03. This indicates that 0.3 % of the variance in the 'the turnover rate.' can be explained by variation in the 'human resources investment'.

In conclusion, the results confirm that there is no significant relationship between 'the Human resources investment on the turnover rate'. Therefore (Ho3) is accepted, that there is no significance effect of Human resources investment on the turnover rate.

6. Results and recommendations

6-1 Results discussion:

The study showed the following:

1. There is an awareness of the effectiveness of investment in human capital, as they agree that human capital investment enhances the capabilities and competencies to effective outcomes.
2. Investing in training and development has significant effect on human capital return on investment. Also we conclude that retention has significant effect on human capital return on investment
3. human resources investment has an impacts on human capital value added
4. The staffing, training and development, and incentives policies, retention variable has a negative insignificant effect on the turnover rate.

5. Recommendation

The following recommendations to shed light the importance of investing in human capital to decision makers in the commercial banks in Jordan:

1) It is important for all investment in staffing, training & development, incentives, and retention policy to be aligned with the bank's strategy and objectives.
2) To support and empower the human resources function to implement their plans and strategies.
3) To publish financial measurements and results of investing in human capital and to shed light on its importance to the stakeholders of the bank.
4) Investing in human capital is one of the factors that have a direct impact on minimizing the turnover rate, through preparing and implementing a retention policy to focus on such as building professional loyalty within employees by creating an appropriate working environment, strengthen the relationship and communication channels, career development.

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Table (1) Variables Analysis

Variables	Average	Maximum	Minimum
VAE	3.60	4.24	3.00
PORFIT	28.28	92.36	5.26
HCVA	27.02	97.69	1.76
TURNOVER	18.71	38.00	7.00
HR staffing	3.57	3.91	2.89
Training & development	3.63	4.09	2.96
Rewards & incentives:	3.43	4.00	2.44
Retention policies	3.48	4.23	2.90
Human investment	3.53	4.02	2.86

Table (2) Linear Regression Model result for the First Hypothesis

model	**B**	t Stat	P-value	Adjusted R Square	F	Significance F
Intercept	-0.24	-1.09	0.296	0.96	299.7	0.000
Human Resources Investment	1.09	17.31	0.000			

Table (3) Linear Regression Model result for the Second Hypothesis

model	B	t Stat	P-value	Adjusted R^2	F	Significance F
Intercept	-131.9	-2.98	0.011	0.49	13.24	0.003
human resources investment	45.38	3.64	0.003			

Table (4) Linear Regression Model result for the First Hypothesis

turnover	**B**	t Stat	P-value	Adjusted R^2	F	Significance F
Intercept	35.28	1.59	0.138	0.03	0.56	0.468
Human Resources Investment	-4.69	-0.75	0.468			