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WORKING AS AN END : THE IMPORTANCE OF WORK CAPABILITY IN SHAPING EMPLOYEES' HUMAN DEVELOPMENT: AN EXAMINATION IN VIETNAM

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1. Introduction

According to Amartya Sen's Capability Approach, human development refers to an expansion of individual freedom (Alkire, 2010: 2, Fukuda-Parr, 2003). Sen argues that human life can be seen as a set of "beings and doings" (termed "functionings"). Capabilities are the alternative combinations of functionings that are feasible for a person to achieve well-being (Sen, 1985). Sen advocates that individuals with expanding capabilities will enjoy enlarging freedoms which allow them to have valuable and flourishing lives as well as an increase in their overall well-being (Sen, 1985, Sen, 1989: 54).

Since the first Human Development Report in 1990, the concept of human development is widely practiced all over the world. In measuring human development, the United Nations Development Programme (UNDP) considers individual well-being along three essential dimensions including a healthy life, rich knowledge, and a decent living standard (UNDP, 1990:12). However, the current popular measure lacks a focus on another essential element of freedom and well-being: working. It is a fact that well-being and individual freedom are strongly influenced by the way people engage with work. There is no doubt that work is the most important activity; it builds the life of humankind as a whole as well as the life of each individual. The Human Development Report 2015 (HDR15) titled "Work for human development" provides a key answer to the question: How does work contribute to human development? HDR15 presents the prevailing view in academia about the importance of work: Work as the means for the end of human development. In particular, HDR15 emphasizes that although work and human development are linked synergistically and reinforced mutually, work is beneficial or detrimental to human development depending on the quality of work, the conditions of work, and the societal value of work (UNDP: 1-25). However, this conventional view misses a critical aspect: Work is also an end in itself (Axelrod, 1999, Blustein, 2006, Super, 1957, O'Brien, 1986, Neff, 1985, Philipson, 2002). Studies

in multiple disciplines such as psychology and sociology affirm that working is not just a way of making a living but also a meaningful activity that bring intrinsic rewards to working people (Axelrod, 1999: 12, Super, 1957, O'Brien, 1986, Neff, 1985, Blustein, 2006:22, Hodson and Sullivan, 2012:57-76, Kalleberg, 2011:132-148). For each individual, working is also a way of self-realization in which an individual reveals himself through his labor. The chronic overlooking of working as an end not only leaves human development with an abstraction of freedom but also results in an incorrect evaluation of human development because a vital part of freedom has not been taken into account.

However, work is not automatically an end for every one but requires a necessary condition: having viable choices in working activities. In particular, I would argue that, in order to experience work as an end, working people need to be able to do desirable jobs and have some degree of control over the labor process of those jobs. Such a certain degree of working at will is the manifestation of work capability which I define as a set of working activities that create income, either in monetary or non-monetary forms, and be feasible for an individual to achieve. In other words, work capability refers to effective freedom in working activities that an individual is able to exercise. Work capability is comprised of two aspects: feasible opportunities to join working activities and feasible control of performing such working activities. Briefly, effective job opportunity and work autonomy constitute the capability to work. Those aspects reflect how free a working person can be in choosing job position as well as control over the labor process.

Because of the enormous significance of work in human life, the capability to work plays a decisive role in creating human well-being (Miles, 2014). The importance of work capability is usually recognized in the aspect of work autonomy in various empirical studies in psychology and sociology, though rarely in economics (De Jonge and Schaufeli, 1998, Rydstedt et al., 2006, Green, 2006, Wheatley, 2017). From both views of employees and their supervisors, autonomy at the workplace correlates positively with job satisfaction, life satisfaction, psychological health, self-esteem, spillover effects from a job, and work-life balance (Ilardi et al., 1993, Dikkers et al., 2010, Boxall and Macky, 2014). Those

employees having higher autonomy encounter less work-to-family conflict, less stress, less intention to find another job, less burnout, fewer accidents and injuries, less adverse events and unsafe behavior (Baard et al., 2004, Thompson and Prottas, 2006, Nahrgang et al., 2011). A quantitative review of 85 studies shows that work autonomy contributes positively to learning new knowledge and skills, and facilitates employees' ability and creativity through better involvement in motivational processes, meta-cognitive processes, cognitive processes, and behavioral processes (Wielenga-Meijer et al., 2010, Gallie, 2007: 212). Meanwhile, lower degrees of work autonomy imposes greater stress and reduces social interactions among employees, and is detrimental to their quality of life (Green, 2006: 94-110, 2008, Ogbonna and Harris, 2004). However, besides the above bright side, the dark side of work autonomy are found (Kubicek et al., 2017). Warr's vitamin model indicates that work autonomy affects employees' mental health similarly as the way some vitamins affect to human body: positive effects becomes detrimental if vitamins are used too much. Hence, an increase in work autonomy may result in detrimental decrement effects. Either too much or too little work autonomy are, thus, harmful to employees, for example higher degrees of irritation, or a lower degree of dedication, absorption and energy at work (Warr, 1994, Baltes et al., 2002, Kubicek et al., 2014). However, such findings are not consistent and are challenged by other studies (Kubicek et al., 2017, De Jonge and Schaufeli, 1998, Rydstedt et al., 2006).

Even though work autonomy is so important, working people are willing to trade-off this job characteristic for wage and job security because having a job and having higher income are usually the most important concerns of working people (Rosenthal, 1989). As such, the central argument of this paper is that the loss of work capability resulting from sacrificed work autonomy must be counted as a loss of freedom to work in particular and a loss of freedom in general, and eventually a loss of human development. Therefore, the measurement of human development needs to take into account the degree of work capability. The inclusion of both freedom in working and living would make a more comprehensive human development measure. Otherwise, being ignored in economics, the importance of work capability

is not well-understood and hence cannot be considered in economic analysis and policies for improving well-being of working people.

The paper reveals the importance of work capability in shaping human development by examining its relations with other essential capabilities (being healthy, being knowledgeable, and living decently). As capabilities are both multidimensional as well as not directly observable, each capability and the relationship between capabilities will be estimated by the Structural Equation Model (SEM) – a latent variable model (Krishnakumar, 2007, 2008, 2016, Di Tommaso, 2007, Kline, 2016). In this model, it would be expected that work capability has positive impacts on other three capabilities. Hence, the author would show that work capability contributes to human development through its direct impact on human development and indirect impacts on the three other constitutive capabilities of human development. The model is applied to Vietnamese employees using the Viet Nam Household Living Standards Survey (VHLSS). Scores of four capabilities (work capability, access to knowledge, being healthy, and decent living) will be estimated, and then they are used for calculating, following the HDI formula, the human development level of each individual. Using SEM, the relation among four capabilities will be tested in which work capability is hypothesized as a key factor affecting the three other capabilities. The importance of autonomy of labor will be tracked in two ways: the relations between work capability and the three other capabilities, and the differences between individual human development scores calculating by two formulas (included versus excluded work capability).

2. The importance of work capability in shaping human development

2.1 Human development

Human development is an expansion of the freedom to do or to be what people value (Fukuda-Parr, 2003: 303, Alkire, 2010: 7, UNDP, 2010: 22). Freedom is the final goal of development (Sen, 1989: 54, Sen, 1985). The more freedom an individual has, the higher level of human development he achieves.

Human development is both the process of expanding capabilities and an outcome of that process. Human development is the development of human beings because it enlarges human freedom, the

development by human beings because they actively contribute to the process, and the development for human beings because human life is ultimately improved (UNDP, 2016: 2).

The attainment of capabilities such as life longevity, the absence of morbidity, and avoidance of undernourishment reveals improvements in human development because such achievements provide more freedom. As an ultimate criterion for human development, freedom is both a principal means and a primary end in the course of life. Sen identified five instrumental freedoms including political freedoms, economic facilities, social opportunities, transparency guarantees, and protective security. The interaction between those freedoms reinforces the enhancement of human development. Hence, human development requires removing economic unfreedom, social and political oppression, poor economic opportunities, systematic social deprivation, neglect of public facilities, and intolerance or overactivity of repressive states (Sen, 2000: 3).

It is necessary to make clear that "expanding people's choice" does not mean more choices are always better (Sen, 1992: 59). Expanding the quality of choice is more important than increasing the number of choices (Deneulin and Shahani, 2009: 34). Among the range of capabilities, Sen advocates promoting valuable capabilities. However, there is no fixed list of valuable capabilities for different societies, as the choice among capabilities is a value judgment that varies in different places (Alkire, 2010: 31).

2.2 Work capability as a basic freedom

For typical people, human development is achieved through working activities. Such realized working activities are derived from work capability. As mentioned above, work capability enables working people in two spheres of working activities: taking as-good-as-possible jobs and controlling as-much-as-possible work at the workplace. Hence, work capability includes the capability to get a job and the capability to work with some degree of autonomy at the workplace. In other words, work capability includes two aspects: the easiness of getting desirable jobs and work autonomy. Because more freedom in working activities ensures better quality in working life, the expansion of work capability will improve the quality of an individual's working life. Ultimately, the extent of work capability indicates the degree

of control over aspects of an individual's labor (i.e., job position, work organization, working time, working process, labor product).

Work capability is a basic freedom because of the centrality of work in determining individual well-being. Work is not only a means providing income and engenders disutility as mainstream economics recognizes but also an essential need and a meaningful end as psychology and sociology emphasize (Gill, 1999). In psychology, work is needed to meet psychological needs including sublimating instinctual energy (Axelrod, 1999, Blustein, 2006:18), and expressing individual talents, skills, ambitions, and interests (Axelrod, 1999: 12). Draining psychic energy during work is a way to earn satisfaction, accomplishment, and achievement (Super, 1957). According to O'Brien (1986)'s development of Maslow's actualization theory, when work lines up with individual's values and interests, working becomes a path to self-actualization. Neff (1985) recognized the needs of work for guaranteeing economic necessity, enhancing self-esteem, warding off boredom, preventing anxiety and aggressive impulses, providing social affirmation and status, and fulfilling an individual's need for creativity. In sociology, work is a necessary social action that goes beyond making income, and shapes one's sense of social identity and individual self-worth (Gill, 1999). In The Protestant Ethic and The Spirit of Capitalism, Weber emphasized working as a religious ethic to meet a Godly calling. Sociologists usually identify working as the primary gate opening to the social arena where the main part of adult life is embedded. In addition, work is the way to move upward in social mobility (Hodson and Sullivan, 2012:6). Across social disciplines, the role of work to human life transcends a means for survival and serves as a need as well as an end that must be satisfied. Therefore, work capability is an essential freedom that every individual wants. If work capability is shortened, working people's well-being, especially work and life satisfaction, may be severely damaged. For instance, either unemployed people or involuntarily retired people suffer numerous negative consequences of not meeting the need of working (McKee-Ryan et al., 2005, Bonsang and Klein, 2012, Ward and King, 2017). Thus, the expansion of work capability is also an expansion of freedom which contributes to human development.

2.3 The contribution of work capability to human development

Because of the central role of labor to human life, work capability would contribute an important aspect of human life constituting human development. Hence, I would argue that the expansion of work capability is vital for the expansion of human development. *First,* when the possibility to take desirable jobs is high, a working person can choose a desirable job position among feasible job opportunities. He is not coerced to work jobs he dislikes. Here, his job is meaningful to him twice. On the one hand, he is able to choose a preferred job. On the other hand, he likes that job. Regardless of which job he works, this first aspect of work capability is an intrinsic freedom for him. Achieving such intrinsic freedom contributes directly to his human development. *Second,* a high work autonomy, the second aspect of work capability, allows an individual to direct several aspects of the labor process: what, when, how much, and how to work. The improved work capability enhances the capability to manage working time, the capability to perform full working skills and potentials, and the capability to obtain a higher share in production outcome. In turn, such control itself increases satisfaction in working and brings a flow experience (Csikszentmihalyi, 1975, Hessels et al., 2018). On the contrary, working would become a burden or an uncomfortable activity for one with lower work capability. The satisfaction arising from work capability contributes to improving life satisfaction directly and to enhancing indirectly other activities which, eventually, bring greater subjective well-being for individuals (Erdogan et al., Andersson, 2008). *Third*, a higher degree of work autonomy would give a working person a capability to manage time. As time is, in Marx (1976: 54)'s words, "the room of human development", the capability to manage time provides an individual a freedom to meet other desirable needs such as education, intellectual development, social interaction, social functions, and so on. With increases in this capability, an individual would have a better work-life balance. *Fourth,* it is likely that more work autonomy enables a working person to take a larger share in the distribution of the labor product. Hence, the higher the work capability, in the sense of work autonomy, the more labor fruit a working person would capture. *Fifth*, enhanced work capability would allow working people to realize their potential because they can work in a way, a place, and a time they want. This converges with human development as Marx advocates (Marx,

1978: 160). Therefore, as work capability increases, it is expected that freedom in working activities would be expanded. As its core component expands, so does human development. Conversely, any loss in work capability may cause a direct degradation of human development.

2.4 The oppression of work capability under the capitalist relation of production

Employees' work capability in the labor process has been oppressed substantially under the capitalist relation of production. The employee experiences limited work autonomy under the supervision and direction from the employer. According to Marxian economics, this oppression originates from the commodification of labor power which leads to two special characteristics of the labor process. First, the laborer, now an employee, works under the control of the capitalist. Second, the labor product is taken by the capitalist, not the employee (Marx, 1990: 292).

The firm, thus, becomes a despotism where the employee's work capability in laboring is stripped away in many aspects ranging from employment, the appropriation of labor products, controlling the working process, working location, working intensity (working effort), working skill, and so on. At the work place, he is disciplined to a specific small task and follows the running of machines and the harsh capitalist establishment of the labor process. The oppression of employees' work autonomy is intentional for the ultimate purpose of obtaining more surplus value. Besides, the employee's performance is also governed by bureaucratic control (Gordon, 1996:33-60). This control is exercised through the systematic execution of firm rules and procedures which include all regulations of wages, job responsibilities, work tasks, work evaluation, rewards, punishments and other disciplines (Edwards, 1979: 131). Scientific management is institutionalized into such bureaucratic control. Braverman pointed out that scientific management like Taylorism and Fordism is developed to a complex level that allows enterprises to control more efficiently employees' labor (Braverman, 2003: 32). Ultimately, under the control of scientific management, the employee works like a machine which is monitored and corrected by higher supervisors. In such capitalist institutions, the employee has no freedom to define the goal of his labor. More importantly, he is not permitted to decide how to produce. The loss of method control to the employer make the employee becoming an alien, not the author, to the labor process. Furthermore,

Braverman (2003) pointed out, the employee is deskilled so he is easier to be replaced in the labor process. The bargaining power of the employee is weakened because his skills are no longer an advantage.

In this situation, the employee's capability to work at the workplace is not solely determined by him but largely by the employer. Whether capital is invested inefficiently or productively, the threat of unemployment is always hung over the employee. It makes him a potential member joining the reserve army of labor. The pressure from this reserve army forces the employee to overwork, and submit to capital (Marx, 1990: 789, Bowles, 1985). In modern capitalist production, Braverman (1974: 377-393) emphasized that the reserve army has been internationalized and that women become the prime supplementary reservoir of labor. This expansion of the reserve army narrows further the employee's work capability in getting a job.

The employee cannot control working location which totally depends on the firm owner. The workplace is located where profit is maximized (Gordon, 1977, Peet, 1987, Olsen, 2010, Olsen, 2017). When a business situation happens to change, the firm can move to a new, more profitable location and leave the current employees behind. Indeed, the employee's capability to decide work location can be partly improved if his work capability is high. He can choose a workplace, among multiple locations, that is convenient for him without compromising other job characteristics.

Regarding working time, due to limited work autonomy, the employee has limited control over working schedule. Without time flexibility, the employee struggles to have time for other personal and social needs because he may already spend most of his productive time at the work site (Hernandez, 2005, Boris, 2005). The loss of work capability in terms of working time leads to work-life imbalances.

Regarding income, the employee has no control over the appropriation of labor products after selling labor power. He has no right to claim the ownership of his labor product (Fidlow, 1987). Without such ownership, he may double or triple what he produced yesterday but he may receives no or little additional

wages in return, and such additional wages may disappear after the new development of production is generalized (Braverman, 2003).

2.5 Work capability and human development measure

Human development is measured currently at the national level by HDI without considering work capability. Through all Human Development Reports, human development is identified with achievement in three dimensions including a healthy life, rich knowledge, and a decent living standard (UNDP, 1990:12). In the healthy-life dimension, the life expectancy index is calculated based on years of life expectancy at birth. In the knowledge dimension, the education index is calculated with expected years of schooling and mean years of schooling. In the living-standard dimension, the income index is assessed by gross national income per capita (purchasing power parity) (UNDP, 2018). None of these indicators is related directly to the dimension of working. Given such calculation standards, work capability has been largely ignored in UNDP's measurement of human development. Consequently, the current HDI may not reflect the degree of human development correctly.

Certainly, an argument can be made that income in the HDI calculation already incorporates the working dimension of people's lives. That is partly true because income is created from both working activity and non-working activities including saving, renting, investing, and so on. Income reveals how much a person earns in a period of time yet does not specify how such earning is made, nor what source, labor or non-labor, it comes from. Thus, income may partly reflect the result of working, however, it does not tell how that person engages in working activities. Indeed, income and other indicators used for HDI calculations have limited value for accessing various additional aspects of working activities discussed above. As there is no single indicator directly representing work capability, I would argue that the current human development measure lacks an essential part of human life and human freedom. Thus, it is suggested that work capability can be integrated into HDI.

3. Methodology

In order to demonstrate the importance of work capability in shaping employees' human development, this research applies SEM to Vietnamese employees. Particularly, work capability and human development of such employees are estimated with the VHLSS 2014 data.

3.1 Characteristics of capabilities and SEM

The major challenge to estimating human development and work capability is how to operationalize capabilities because they have special characteristics that traditional econometric models fail to capture. *First*, capabilities are affected interdependently by other capabilities. It is difficult to separate effects that each capability generates on other capabilities. In other words, capabilities are simultaneously and endogenously shaped. *Second*, capabilities are abstract, multidimensional constructs that cannot be observed directly (Addabbo et al. 2014). As such, capabilities can only be identified indirectly through manifested indicators. For example, the capability to work can be measured by multi-dimensions such as working time, wages, number of jobs, working position, and so on. To avoid biases, capabilities need to be manifested by various dimensions, not by a single indicator. In the case of this study, multiple indicators are used to operationalize four capabilities (work capability, being healthy, being knowledgeable, and living decently).

To deal with such characteristics of capabilities, it is possible to apply a latent variable model like SEM (Krishnakumar and Ballon, 2008, 2007, 2014). In this study, the above four capabilities are latent and dependent variables in SEM. This type of modeling captures not only the one-way causal relationship as traditional modeling does, but also the interdependent relationship between capabilities. SEM is a family of statistical techniques based on covariance structure and mean structure analysis for testing the hypothetical relationship between observed variables and latent variables (Kline, 2016 : 9-14). SEM allows the simultaneous relationship among variables so it is capable of capturing feedback effects between capabilities. This implies that latent variables of capabilities are endogenously determined within the simultaneous system of equations. Thus, SEM is able to regress equations of observed and latent variables simultaneously. Especially, SEM does not require latent variables to have a specific measurement, which is well suited to the Capability Approach because capabilities are unobservable and

not measured by real units. SEM is comprised of a system of equations manifesting the latent endogenous variables through appropriate indicators, and modeling mutual effects of the endogenous variables on one another. SEM can handle both the simultaneity of capabilities as well as the unobservability of such capabilities.

SEM had been applied effectively to the Capability Approach by social science researchers (Krishnakumar, 2007, Di Tommaso, 2007, Addabbo et al., 2014). Particularly, SEM is used to conceptualize and estimate capabilities of knowledge, health, political freedom, children's capabilities of knowledge and living condition by Krishnakumar (2007, 2008); the multidimensionality of poverty defined by five latent variables (subjective economic well-being, objective economic well-being, civic/cultural inclusion, economic inclusion, and political inclusion) by Wagle (2005); disabled individuals' consumption opportunity by Kuklys (2005); children's capabilities by Di Tommaso and Laura (2007); and children capabilities of sense, imagination, thought, play, and science education by Addabbo et al. (2014) and (2016). Moreover, SEM has already shown to provide an accurate estimation of the true latent capabilities (Krishnakumar and Chávez-Juárez, 2016).

3.2 Model specification

Proposing a model

In this research, SEM comprises two important sets of simultaneous equation systems. On the one hand, the structural equations consist of the relations between work capability and each of the three other capabilities. This structural part helps to explain whether work capability affects other capabilities. On the other hand, the measurement equations include capabilities as independent variables and functionings as dependent indicators. Factor loadings in the measurement part represent how much latent capabilities affect functionings.

The model is given by

$$y_{3\ \text{capabilities},i}^{*} = \gamma\, y_{\text{work capability},i}^{\ *} + \xi_i \qquad (1)$$

$$y_i = \Lambda y_i^{*} + \epsilon_i \qquad (2)$$

where $y_{3\ capabilities,i}$*is a 3x1 vector of three capabilities of individual i^{th}: Being knowledgeable, Being healthy, and Living decent. $y_{work\ capability,i}$ * is a 1x1 vector of work capability of individual i^{th} that affects other capabilities $y_{3\ capabilities,i}$*. $\boldsymbol{\gamma}$ is a *3x1* coefficient matrix of work capability as a predictor for the other three capabilities. $\mathbf{y_i^*}$ is a *4x1* vector of above latent capabilities of individual i^{th}. $\mathbf{y_i}$ is a *px1* vector of observed functionings that manifest each corresponding capability. Assuming $\mathbf{y_i}$ contains continuous data, the $\mathbf{y_i}$ and $\mathbf{y_i^*}$ relation can be specified as linear. Their linear coefficients would be $\boldsymbol{\Lambda}$, a *px4* matrix. Such coefficients are called factor loadings representing how functioning would change when capabilities changes one unit. $\boldsymbol{\xi_i}$ and $\boldsymbol{\epsilon_i}$ are error vectors, respectively, in the measurement equations and the structural equations. $\boldsymbol{\xi_i}$ and $\boldsymbol{\epsilon_i}$ are error vectors that follow the stochastic assumptions such that: $E(\boldsymbol{\xi_i})= 0$; $V(\boldsymbol{\xi_i}) = E(\boldsymbol{\xi_i}\ \boldsymbol{\xi'_i}) = \boldsymbol{\Phi}$; $E(\boldsymbol{\epsilon_i})= \mathbf{0}$; $V(\boldsymbol{\epsilon_i}) = E(\boldsymbol{\epsilon_i}\ \boldsymbol{\epsilon'_i}) = \boldsymbol{\psi}$; $\boldsymbol{\Phi}$ is a covariance matrix for residuals in the structural equations while $\boldsymbol{\psi}$ is a covariance matrix for residuals in the measurement equations.

To derive coefficients of (1) and (2), the theoretical variance-covariance matrices are compared with the observed covariance matrix. Taking into account a priori constraints on the parameters, the former includes elements expressing by $\boldsymbol{\gamma}$, $\boldsymbol{\Lambda}$, $\boldsymbol{\Phi}$, and $\boldsymbol{\Psi}$. The latter includes numeric elements that manifest variances and covariances of observed $\mathbf{y_i}$, $\mathbf{x_i}$. Each variance and covariance of $\mathbf{y_i}$, $\mathbf{x_i}$ becomes a function of elements in $\boldsymbol{\gamma}$, $\boldsymbol{\Lambda}$, $\boldsymbol{\Phi}$, and $\boldsymbol{\Psi}$. Solving such simultaneous equation system produces the estimates of coefficients of (1) and (2).

Because functioning $\mathbf{y_i}$ include both continuous and categorical data, Krishnakumar (2007, 2008, 2014) and Tarka (2017) suggested that the generalized method of moments procedure performs well in minimizing the distance between the theoretical variance-covariance matrix implied by the model and the observed variance-covariance matrix derived from the sample. Within such an approach, the weighted least square mean and variance adjusted (WLSMV) estimators, proposed by Muthen (1984), is implemented. WLSMV is proved to be the most appropriate method to deal with both continuous and categorical data (Muthén, 1983, 1984, Asparouhov and Muthén, 2010, Jöreskog, 2005, Finney and DeStefano, 2013: 439-492). With this estimator, the fitting function

$$F_{WLS} = (\mathbf{s} - \hat{\boldsymbol{\sigma}})^T \mathbf{W}^{-1} (\mathbf{s} - \hat{\boldsymbol{\sigma}})$$

needs to be minimized. Here, **s** is a vector of sample statistics. **s** includes thresholds $\boldsymbol{\tau}$, the conditional moments $E(\tilde{\boldsymbol{y}}_i|\mathbf{x}_i)$ and $V(\tilde{\boldsymbol{y}}_i|\mathbf{x}_i)$, correlations, coefficients of exogenous variables, variances and means of continuous variables. $\hat{\boldsymbol{\sigma}}$ is a corresponding model-implied vector of the covariance matrix. $\mathbf{W}^{-1}$ is a positive definite weight matrix which is created by a consistent estimator of the asymptotic variance matrix of the sample statistics (Krishnakumar, 2007). To estimate this model, the robust version of WLSMV is applied. Particularly, only the diagonal of **W** is used in estimation, hence in a nutshell, WLSMV is diagonal weighted least squares (DWLS). Also, robust standard errors, a mean and variance adjusted test statistic are calculated with the full **W** (Rosseel, 2012). If the model is specified correctly, robust DWLS generates fairly accurate and unbiased parameters (Finney and DeStefano, 2013: 467). After estimation, the latent capability will be predicted by the maximum posterior likelihood approach (Krishnakumar and Nagar, 2008).

Description of the data

The data inputs for this model are the recent data of VHLSS which are conducted by the Viet Nam General Statistics Office (VGSO). VHLSS is taken every two years at the national level for all groups of people including ethnicity, regions, religions, occupations, and others. As a longitudinal survey, VHLSS is usually utilized for monitoring and evaluating living standards of Vietnamese people (VGSO, 2010: 6). Regarding sample size, the VHLSS 2014 survey contains data of 18,847 individuals in the working age (15-55 for women and 15-60 for men). Among working people, 9,122 people are self-employed and work mainly in agriculture; and 9,725 ones are employed. The regression on both self-employed and employed individuals may produce a biased result because differences among well-being and capabilities of workers may be caused by different characteristics among industries rather than other aspects of working conditions, such as employed or self-employed. Hence, self-employed individuals will be excluded from the sample. Instead, this research focuses on employees' work capability. Usually, this special relation is unequal between a relative strong labor-power buyer and relative weak labor-power seller because of the existence of the reserve army of labor. It makes more sense here, then, to analyze how different levels of affected work capability create different impacts on aspects of workers' lives. However, estimating

individual capabilities using household data raises a problem of nested data. Particularly, household members' data can be correlated because they interact frequently and share common household resources. For instance, the husband's income may correlate positively or negatively with the wife's income. To overcome this issue, an individual will be selected randomly from each household. This guarantees the independence of data among individuals in the sample. After this screening, 5875 observations remain in the sample.

The empirical specification of the model: Operationalizing four capabilities

As a principle for specifying this model, in the measurement part, each capability is measured by several observed functionings because capabilities are not measurable directly. Each functionings indicates an achievement in one aspect of that capability. Within the availability of data, *work capability* is manifested by five observed functionings: income, working hours, the complexity of performed working skills, the hardness of working, and a number of jobs. The income indicator reflects the feasible earning level that an individual can achieve within his work capability. The working hours indicator indicates the actual length and intensity of work that the working person can and wants to provide. The third indicator is included in the model because of the positive correlation between autonomy and labor skill (Green, 2006: 94). The hardness of working, which is represented by the ratio of working hours between the primary job and the second job in the most recent 30 days before the survey, indicates the austerity of working activities. It is expected that those with higher work capability spend less time for the second job because the first job provides them sufficient income and satisfaction. The quantity of jobs, the fifth indicator, shows whether the degree of work capability is high enough for a good primary job. Multiple job holding may occur because of various causes such as underemployment, low wage in the primary job, job insecurity, skill development, and individual preference (Pouliakas, 2017, Hipple, 2010, Paxson and Sicherman, 1996, Panos et al., 2014). Overall, multiple job holding exists when the primary job does not satisfy the working person's need to work. Such five indicators may not comprehensively

cover aspects of work capability but are sufficient to highlight an individual's overall freedom in working activities.

The Being Healthy capability manifests through four indicators: Degree of pain-free in the last year, Proportion of individual income remaining after medical treatment, Status of no illness in the last year, and No hospital treatment in the last year. Those indicators show the degree to which an individual avoids illness and other health problems. Especially, the second indicator implies both the ill-free condition and the financial reward for being healthy. The more reward a working person gained would indicate the healthier he is.

In terms of *Being Knowledgeable*, this capability is measured by Studying status, Number of schooling years, Being able to access the internet, Being able to phone others, and Being able to travel. Clearly, the first and second indicators relate directly to how much a person has access to knowledge. The latter three ones are very much relevant to this capability because knowledge is produced productively through communication, internet access, and traveling.

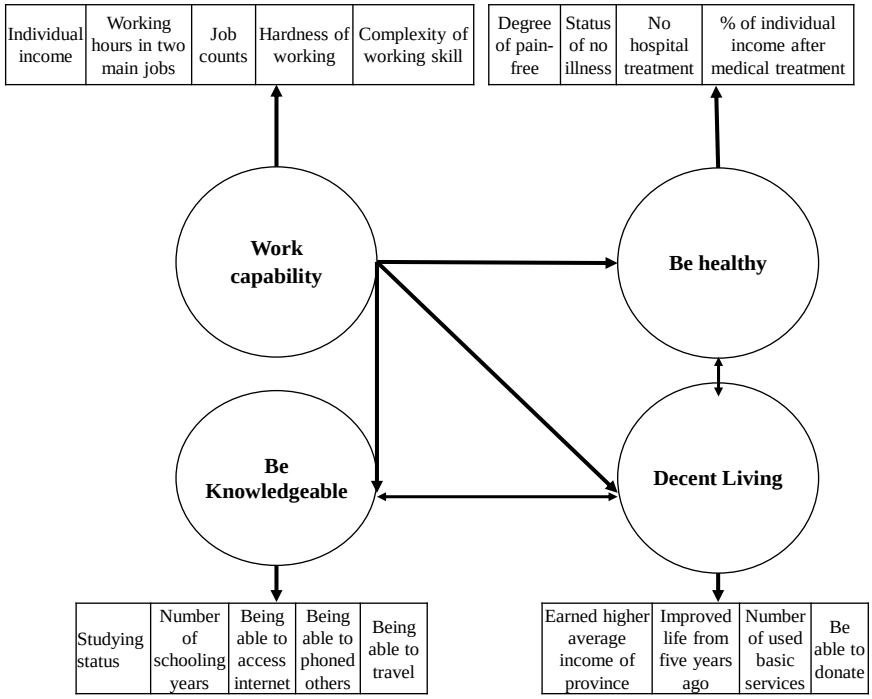
For the *Decent Living* capability, the manifest indicators are Being able to improve life from five years ago, Being able to donate, and Food sufficiency (the ratio between individual effective income and food cost per member in a family). The life improvement within five years is an important functioning that signifies the experience of living. The monetary donation indicator characterizes an improved living condition that allows a person and his household to donate, and the social need of helping others, which is a social action engaged in under better living condition. The last indicator expresses the decency of living in a way that a working person covers food consumption per member in a family.

In the structural part, work capability is an independent variable explaining Being knowledgeable, Being healthy, and Living decent as dependent variables. This model part examines the importance of work capability to each other essential capability. It is intuitive to expect that Work Capability positively affects other basic dimensions of human development including knowledge, health, and living standard. Besides formal education, employees can access to knowledge through their working experience. Particularly, they can accumulate knowledge over time by observing, experiencing, and doing.

Knowledge spillover is found at the workplace where information and knowledge are shared among employees (Battu et al., 2003, Riley, 2010). Thus, as Work Capability expands, employees would have more choices of workplaces as educational environments. For Be Healthy capability, overwork and over-intensification engender tiredness, stress, anger and other negative subjective well-being (Golden and Wiens-Tuers, 2006, Boxall and Macky, 2014, Danna and Griffin, 1999). The expansion of work capability may allow employees to choose or partially affect the length and pace of the labor process at a level that is healthier for them. For living standards, income and working schedule are two dominant factors determining the leisure and consumption of employees (Wheatley, 2017). Consequently, the capability to work also plays a role in defining lifestyles and living standard of employees. Hence, it is expected that coefficients of work capability are positive because of its positive expected effect toward those other three capabilities.

The proposed model is presented graphically in Figure 1. The one-way arrows represent causal relationships, while the two-way arrows manifest covariance correlations among latent capabilities.

Figure 1: The model specification



Identification and fit indices

As both the structural part and the measurement part are identified, the whole model is identified. The necessary condition for model identification is that the number of estimated parameters is smaller than the number of known variances and covariances provided from the sample (Krishnakumar, 2007). The proposed model has 650 estimated parameters, smaller than the 990 known variances and covariances. This model meets another necessary condition that every latent variable (including disturbances) is set to a scale. The structural part of this model satisfies the sufficient condition for identification because of its recursiveness. The measurement part of this model also satisfies the three sufficient conditions of identification for a nonstandard confirmatory factor analysis model with correlated errors suggested in Kline (2016: 203). *First,* for each factor, error terms of at least two indicators are uncorrelated and not related with the error term of another indicator emitted from another factor. *Second,* for every pair of factors, error terms of more than one indicator from this factor are not correlated with any error term of indicators from other factors. *Third,* for every indicator, its error term is not correlated with at least one error term of other indicators.

Fit indices for SEM include chi-squared statistic, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Standardized Root Mean Square Residual (SRMR). When CFI and TLI are closer to 1.0, and RMSEA and SRMR are closer to 0, the model fit is better. The cutoff levels are 0.95 for CFI, TLI, and 0.05 for RMSEA (Finney and DeStefano, 2013: p466, Schreiber et al., 2006). Unlike traditional regression, the null hypothesis, which is the equality of estimated and actual variance-covariance matrices, is desirable. Ideally, a zero chi-squared statistic implies a perfect fit between the model and data (Kline, 2016: 270). However, as chi-squared statistic is usually inflated because of a large sample size in this study, it is expected that this absolute fit index may reject the null hypothesis. Meanwhile, SRMR, another absolute fit index besides the chi-squared statistic, suggests an acceptable model fit if it is smaller than 0.08 (Hu and Bentler, 1999).

4. Result and Discussion

The model fit, presented in Table 6 below, meets conventional cut-offs with the exception of Chi-squared statistic. However, as mentioned above, the high value of the Chi-squared index (1928.639) may be biased because of a large sample in this study. Besides the Chi-squared index, other absolute fit indexes such as RMSEA (0.054) and SRMR (0.058), below the 0.08 cut-off, suggest an acceptable fit between the model and the data. Meanwhile, both relative fit indexes including CFI (0.984) and TLI (0.98) are above the 0.95 cut-offs and imply that the predicted model is 98% better than the Null model which has the worst fit.

The measurement part of the model is reported in Table 1. Standardized parameters suggest that the strongest manifest indicator (0.833) for work capability is the complexity of working skill. The capability to be knowledgeable associates closest to a number of schooling years (0.644) and being able to access the internet (0.98). Meanwhile, the largest effect of Being Healthy would be No hospital treatment (0.869). The capability to live decently is represented mostly by having a higher possibility to donate (0.422) and a higher food sufficiency (0.354).

The unstandardized factor loadings in the measurement part reveal how each capability is measured by functionings. The estimates indicate that those employees having higher Work Capability tend to earn a higher income, work more hours in fewer job counts, and occupy positions requiring the higher complexity of working skill. With the capability of Being Knowledgeable, those having more access to knowledge are likely to have a higher possibility of studying, accessing the internet, traveling, and more schooling years. Regarding the health dimension, a higher degree of Being Healthy capability would lead to a greater possibility of ill-free status and avoiding hospital treatment, a higher degree of pain-free, and more income saved from not paying medical treatment. For living standards, those having more Decent Living capability are likely to have a larger possibility of life improvement in the last five years, higher possibility to donate, and higher affordability of food consumption.

Table 1: The measurement part of the model

Indicators for each capability	Unstandardized Coefficient	Standard Error	z-value	P(>|z|)	Unstandardized Residual Variances	Standardized Coefficient	Standardized Residual Variances	R^2
Work capability								
Working hours in two main jobs	0.229	0.004	64.76	0	0.398	0.341	0.883	0.117
Complexity of working skill	0.833	0.007	115.575	0		0.833		0.694
Job counts	-0.612	0.01	-60.343	0		-0.612		0.375
Hardness of working	-0.395	0.004	-89.765	0	0.52	-0.48	0.77	0.23
Individual income	4.132	0.037	110.628	0	11.724	0.77	0.407	0.593
Be Healthy								
Degree of pain-free in the last year	0.171	0.007	25.656	0	0.046	0.626	0.609	0.391
Status of no illness in the last year	0.819	0.016	51.83	0		0.824		0.679
No treatment in hospital in the last year	0.863	0.015	57.113	0		0.869		0.755
Proportion of individual income remaining after medical treatment	0.359	0.005	68.281	0	0.499	0.456	0.792	0.208
Be knowledgeable								
Studying status	0.152	0.028	5.539	0		0.241		0.058
Number of schooling years	0.182	0.005	37.913	0	0.117	0.644	0.586	0.414
Being able to access internet	0.62	0.013	46.727	0		0.98		0.961
Being able to phoned others	0.261	0.015	17.612	0		0.413		0.171
Being able to travel	0.386	0.013	30.809	0		0.61		0.373
Decent Living								
Be able to improve life from five years ago	0.2	0.02	10.022	0		0.314		0.099
Be able to donate	0.269	0.027	9.947	0		0.422		0.178
Food sufficiency (the ratio between individual effective income and food cost per member in family)	0.883	0.087	10.207	0	13.335	0.354	0.874	0.126

All estimated loadings are significant statistically at the 5% level.
Data source: VHLSS 2014

As presented in Table 2, all positive estimated coefficients of the structural part indicate the importance of work capability in shaping human development. Particularly, these estimates suggest that Work capability does play a role in enhancing the three above basic capabilities. Holding other variables constant, an increase by one unit of Work capability would lead to an increase in Being Knowledgeable, Being Healthy, and Decent Living by 1.225 unit, 0.114 unit, and 1.207 unit, respectively. This signifies the importance of the Work capability in shaping human development because the above capabilities are important dimensions building human development. The lowest standardized coefficients (0.114) suggest that, among such three basic dimensions, Being Healthy is least affected by Work capability while both Being Knowledgeable (0.775) and Decent Living (0.77) are affected equally. Although the R-squared statistics of Being Healthy suggests that, with the sample and the model, Work capability only explains 1.3% variation of Being Healthy, it still shows that Work capability has an impact on Being Healthy though other possible determinants are left unmodeled here.

Table 2: The structural part: The importance of Work capability to three basic capabilities

Effect from Work Capability to	Unstandardized Coefficient	Standard Error	z-value	P(>|z|)	Unstandardized Residual Variances	Standardized Coefficient	Standardized Residual Variances	R^2
Being Knowledgeable	1.225	0.028	43.748	0	1	0.775	0.4	0.6
Being Healthy	0.114	0.014	7.92	0	1	0.114	0.987	0.013
Decent Living	1.207	0.115	10.467	0	1	0.77	0.407	0.593

All estimated path coefficients are significant statistically at the 5% level
Data source: VHLSS 2014

Based on the above estimation, scores of the four factors are predicted by the maximum likelihood method. These factor scores are used to calculate human development scores for individuals. Inspired by the official HDI formula for countries, the author suggests applying the same formula for calculating individual scores of human development. The individual human development index (iHDI) will be compared between two situations: with and without the incorporation of work capability. The regular iHDI is the geometric mean of three normalized factor scores of Being Knowledgeable, Being Healthy, and Decent Living. Similar to Krishnakumar (2007)'s calculation, each factor score is normalized by the following equation:

$$\text{normalized score} = (\text{actual score} - \text{minimum score}) / (\text{maximum score} - \text{minimum score})$$

Each normalized score is an index indicating how well and freely an individual is doing and being in comparison with other individuals in the sample. Normalized scores range from 0 to 1. The value 0 in one index of Being Knowledgeable, for instance, does not mean that an employee has no capability to be knowledgeable. Instead, it implies that he has the lowest capability of Being Knowledgeable among all sampled employees. Likewise, those ones having an index of 1 are the one having the broadest freedom of that well-being dimension within the sample. The regular iHDI ($iHDI_1$) is calculated by the following equation:

$$iHDI_1 = \sqrt[3]{S_{\text{Being Knowledgeable}} * S_{\text{Being Healthy}} * S_{\text{Decent Living}}}$$ where S is the normalized factor score.

The incorporated iHDI ($iHDI_2$) includes an additional normalized score of Work Capability. Its measure is presented by the following formula:

$$iHDI_2 = \sqrt[4]{S_{\text{Being Knowledgeable}} * S_{\text{Being Healthy}} * S_{\text{Decent Living}} * S_{\text{Work Capability}}}$$

If Work capability of an employee is equal to the levels of three other capabilities, $iHDI_1$ and $iHDI_2$ will be indifferent. Conversely, when the higher (lower) Work Capability are incorporated, $iHDI_2$ will be higher (lower) than $iHDI_1$.

Descriptive statistics of normalized factor scores and iHDI indices are reported at Table 3. When the work capability index is added to $iHDI_2$, the incorporated iHDI becomes lower than the regular iHDI by 0.0211. The difference between $iHDI_1$ and $iHDI_2$ represents the impact of work capability on human development. Evidently, the neglect of work capability inflates the value of $iHDI_1$.

Table 6: Normalized factor scores and iHDIs

	Mean	Median	Standard Deviation	Min	Max
$S_{\text{Being Knowledgeable}}$	0.2118	0.2082	0.0614	0	1
$S_{\text{Being Healthy}}$	0.7937	0.8533	0.1172	0	1
$S_{\text{Decent Living}}$	0.2091	0.208	0.0552	0	1
$S_{\text{work capability}}$	0.2488	0.2485	0.0414	0	1
Regular iHDI	0.3243	0.3255	0.0657	0	0.8952
incorporated-work-capability iHDI	0.3032	0.3036	0.0578	0	0.9203
Difference ($iHDI_1 - iHDI_2$)	0.0211	0.0225	0.0100	-0.0267	0.0548
Difference ($iHDI_1 - iHDI_2$) in percentage	6.1702	6.794	2.7611	-59.8405	14.4930

Data source: The author's calculation

The difference between iHDI indices is displayed in the change of histograms in Figure 1. The shape of $iHDI_2$ is more skewed to the left and less symmetric than that of $iHDI_1$. Hence, the inclusion of Work Capability not only reduces average value but also changes the distribution of human development scores. In other words, iHDI indices have changed in both absolute scale and relative scale. A common situation is that the Work Capability score is lower than the scores of other capabilities. Therefore, the human development index for individuals is usually not as high as the three regular capabilities indicate. The perspective of Work Capability offers a new and critical view on how human development of an individual is evaluated.

Figure 1: Histogram of iHDI indices

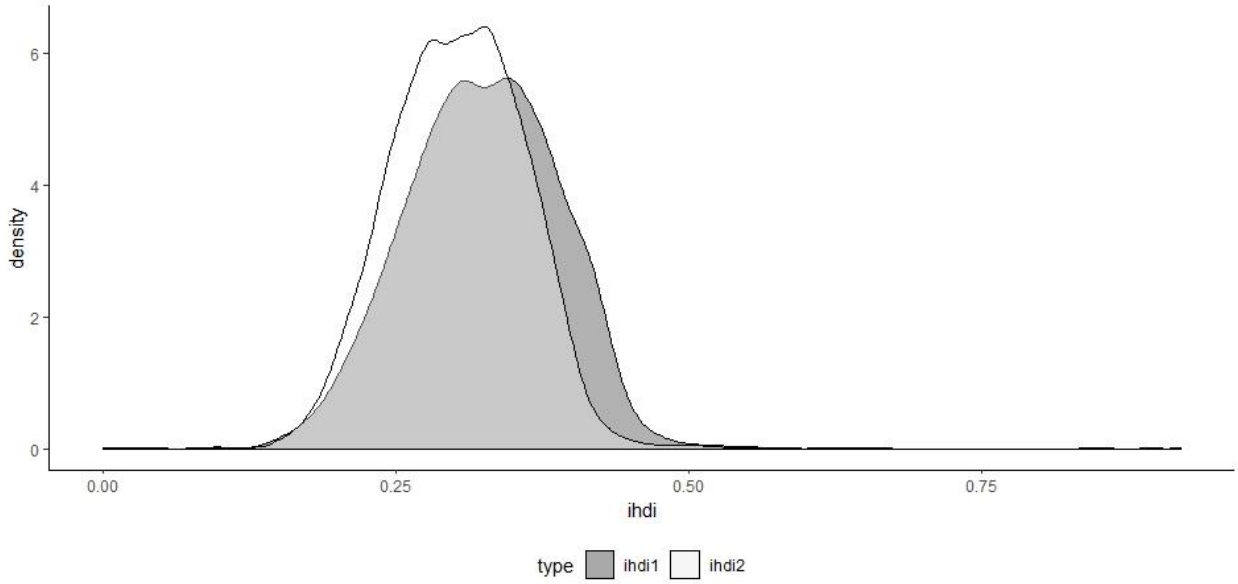


Figure 2: Difference between $iHDI_1$ and $iHDI_2$

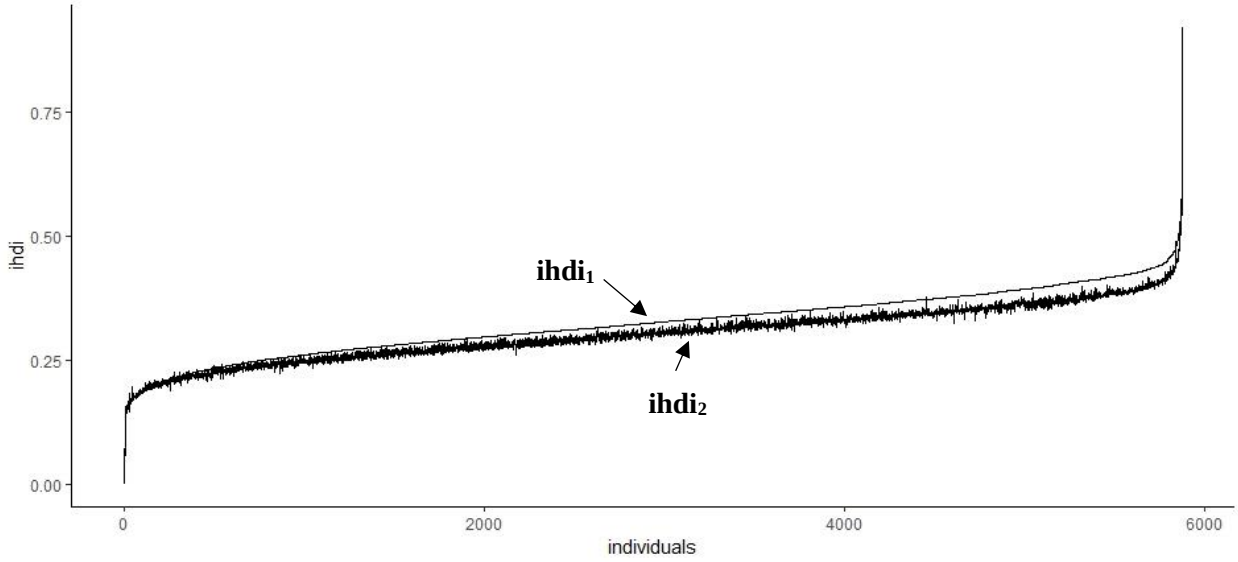


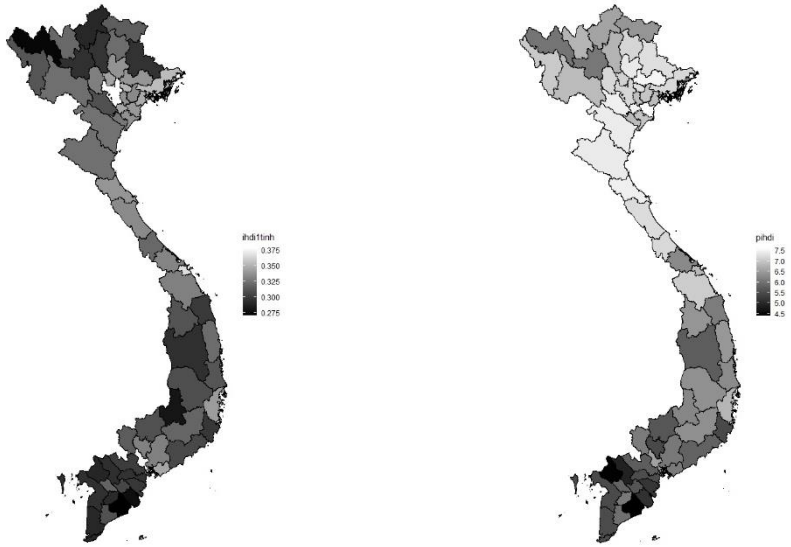
Figure 2 shows the actual difference between iHDI indices of each employee in the sample. Visibly, the $iHDI_2$ line is lower than the $iHDI_1$ one. The graph tells an inconvenient truth that employees' freedom is not as high as it is usually measured. When Work Capability is considered as an end of individual well-being and doing, the capability to work weighs down iHDI of those employees who have limited discretion at work. For Vietnamese employees, the fact of low Work Capability and its effect on other aspects of life exist. It is not surprising that employees' estimated scores of Work Capability are low because, since the very early development of capitalism in Europe, Marx already identified that

surrendering the control over employees' labor is a necessary condition and an inherent characteristic of capitalism (Marx, 1990). With employees, this is a trade-off for wage earning. Indeed, employees achieve other dimensions of their well-being by sacrificing their Work Capability. Clearly, Work Capability is not the top priority for those who need to satisfy other basic needs first. Hence, it is understandable to sacrifice Work Capability for surviving. However, because working is an important part of individual life, the loss of Work Capability should be counted as a deficit of individual freedom in working, and hence, a deficit of human development. The measurement of human development should take into account both the surplus gained by working and the deficit sacrificed at working, not just the former. In other words, it should count the totality of freedom in working and living. And when it is done as the above estimation showed in Figure 1 and 2, the level of real human development decreases. Differences between $iHDI_1$ and $iHDI_2$ prove that measuring human development by capabilities in health, knowledge, and decent living focused only on the surface of individual well-being. The current HDI measure ignores a fundamental factor contributing to human development and influencing other capabilities: Work Capability. Adding this capability to human development helps to measure more accurately and achieve the inclusion of human development as freedom. By doing so, the impression from the rapid increase of Vietnam's HDI in the recent years cannot hide the sacrifice of employees' Work Capability which reduces the overall quality of employees' life.

$iHDI_1$ and the change of iHDI after considering Work Capability is mapped out in Figure 3. The map on the left shows $iHDI_1$ grouped by province of 5875 individuals. The arithmetic mean of $iHDI_1$ in a province represents the average degree of individual human development of employees in that region. In this map, employees in northern and north-central provinces have higher scores of capabilities than their counterparts in southern provinces, except in Ho Chi Minh City. The map on the right indicates the percentage of decline in $iHDI_1$ after integrating Work Capability. It is interesting that the deeper decline occurs in provinces that have higher $iHDI_1$ including northern and north-central provinces. On average,

iHDI reduces by 6.17% after integrating Work Capability while the median iHDI declines by 6.79%. Such decline implies that iHDI has been over-evaluated when Work Capability is ignored.

Figure 3: Individual HDI grouped by provinces



As the importance of Work Capability is recognized for inclusive human development, there must be some policies and solutions to provide more working opportunity and improve the degree of work autonomy at workplaces. Because the main focus of this paper is not seeking solutions for improving Work Capability, the suggested solutions are discussed briefly in the following.

The expansion of job opportunity, which gives individuals more freedom in choosing working activities, does not solely rely on individual working capacity but also on the available jobs created under government economic programs. Hence, while each individual takes his own responsibility to sharpen working skills, his Work Capability can be expanded through a job creation program initiated by the government. In the past, the government used two main ways to create more jobs: either boosting domestic demands by government spending or stimulating the private sector by trickle-down policies. The latter received harsh criticism for deepening inequality and multiple social ills (Galbraith, 1982). Meanwhile, the former became unfavorable because the abuse of expansionary policies based on government spending to fine-tune employment level and aggregate demand potentially undermines

macroeconomic stability like the 1970s economic crisis in the West (Snowdon and Vane, 2005:18-32). Unlike such a top-down approach, the Job Guarantee program can be a viable bottom-up solution, if being decentralized, to provide job opportunities, and hence to improve Work Capability. According to Post Keynesians and Modern Money Theorists, in a Job Guarantee program, the government is the employer of last resort in making "a job available to any qualifying individual who is ready and willing to work" (Wray, 2015: 222). Thank to the job stabilizer function of a Job Guarantee program, working people always have a choice to work in any phase of business cycles because the program expands in bursts and contracts in booms. Besides improving Work Capability for working people, a job guarantee program brings numerous benefits: fighting inequality (Darity, 1999), poverty reduction, improvement of social ills generated from chronic unemployment including mental and physical illness, crime, alcohol and drug abuse, as well as macroeconomic and price stability (Wray, 2015:221-247, Mitchell and Wray, 2005), promoting environmental sustainability, and economic flexibility (Forstater, 2000). Vietnam can apply a Job Guarantee because this program is possible for both developing and developed countries regardless of the size of government (Wray, 2015:229-232).

However, the Job Guarantee program only helps to improve one aspect of Work Capability. The other aspect, autonomy at the workplace, can be enhanced through replacing scientific management and bureaucratic control by a new form of management that allows employees' freedom at the workplace. In recent decades, an initiative-freeing radical organizational form has been adopted successfully by multiple corporates. For Isaac Getz (2009), by adopting a liberating leadership, corporates are organized in a freedom-form in which employees are given complete freedom and responsibility to act on their own initiative. Such employees' offered freedom is not anarchy if corporate leaders share a corporate's vision with them and make them a feeling of intrinsic equality. In a freedom based organizational form, managers do not need to motivate employees, instead, the latter self-motivate because they have both a natural tendency to motivate themselves and an instinct of workmanship (Deci and Ryan, 2000, Veblen, 1898). If corporates successfully build a nourishing, non-controlling environment for self-motivation,

employees will work with intrinsic freedom and be able to at least partially control working schedules and the labor process. As the successful leader of the 3M Corporation, William L. McKnight, pointed out "If you put fences around people, you get sheep. Give people the room they need." (Carney and Getz, 2009). There are numerous cases where allowing more freedom at workplaces improves employees' well-being significantly and still achieves corporates' high efficiency (Getz, 2009, Carney and Getz, 2009). Besides liberating leadership, job crafting is another way to enhance work autonomy and, eventually, Work Capability. Job crafting is employees' efforts to "redesign their own jobs in ways that can foster job satisfaction, as well as engagement, resilience, and thriving at work" (Wrzesniewski and Dutton, 2001, Berg et al., 2008). By utilizing available resources, employees proactively align their job duties with their needs, values, and preferences (Black and Ashford, 1995, Callero, 1994). Several common crafting techniques require employees to change the number, type, nature of tasks, interactions with clients and colleagues, and cognitive perceptions of work (Wrzesniewski and Dutton, 2001, Grant et al., 2007, Berg et al., 2010, Caza, 2007). Job crafting has been brought into practice in multiple jobs including dentists, educators, midwives, hairstylists, and personal fitness trainers. This bottom-up approach is helpful even in positions that have low work autonomy (Berg et al., 2008). The application of job crafting does not work against organizational goals when employees understand and share the vision of the firm with their managers. Both liberating leadership and job crafting would be practical and effective solutions to enhance employees' Work Capability with no harmful consequences to the firm. Further details of suggested solutions go beyond the scope of this paper.

5. Conclusion

Using the interdisciplinary approach presented above, this paper recognizes various roles of work in human beings' lives. Unlike the perspective of mainstream economics, work is not just a means for getting pecuniary rewards. Indeed, nonpecuniary benefits, in the perspectives of psychology and sociology, make work a necessary need and an end for individuals. Hence, work capability which includes job opportunity and work autonomy is an essential freedom that individuals desire. Taking the

Capability Approach view – human development as an expansion of effective freedom – this paper, on the one hand, recognizes the importance of work capability in shaping human development. On the other hand, it advocates integrating work capability into measuring human development. The current measurement of human development - the human development index - is insufficient and overestimated because it neglects work capability and thus fails to take it into account. As the employee sacrifices work capability for other capabilities, such sacrifice is a true loss of human well-being, and thus, of human freedom. For these reasons, in evaluating the employee's human development, such loss must be integrated. The estimation of the human development of Vietnamese employees shows that the integrated HDI is significantly lower than the regular HDI. It implies that the real human development of Vietnamese is not as high as the national HDI of Vietnam suggests. By extrapolation, it can be hypothesized that HDI indexes around the world are likewise inflated, as subject calling for extensive empirical analysis by many economists and other social scientists. The inclusion of work capability makes human development measures more comprehensive and accurate. The paper contributes to raising the attention of academia and policymakers in creating legal frameworks and working environments that support and improve working people's work capability. Particularly, the first aspect of work capability – job opportunity – can be significantly enhanced by implementing a job creation program such as the Job Guarantee program. Meanwhile, work autonomy – work capability's second aspect – can be offered to employees through an organizational reform at the firm level. The suggested reforms could adopt liberating leadership which give employees more freedom and responsibility to initiate uncoerced actions, or enable job crafting in which employees redesign their jobs characteristics in a way that matches organizational goals with their own preferences. Such reforms would not undermine firms' productivity as they substantially boost employees' well-being.

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7. Appendix

Table 1: Descriptive statistics of continuous data

	Mean	Standard Deviation	Min	Max
Individual income (VND 10 million)	6.1275	5.3671	0.1692	143.7467
Working hours in two main jobs (1000 hour)	2.0323	0.6715	0.01	5.76
Hardness of working (working hours in primary job vs secondary job)	0.3479	0.8221	0	24
Number of schooling years (10 years)	0.9642	0.4478	0	2.2
Degree of pain-free in the last year (100%)	0.867	0.2744	0.0175	1
Proportion of individual income remaining after medical treatment (10%)	9.8372	0.7937	0	10
Food sufficiency (individual effective income vs food cost per member in family)	5.8037	3.9057	0	65.1983

Source: VHLSS 2014

Table 2: Descriptive statistics of categorical and ordinal data

	Value	Frequency	Percent	Cum.
Individual				
Complexity of working skill	*1*	*2,105*	*35.83*	*35.83*
	2	2,665	45.36	81.19
	3	*389*	*6.62*	*87.81*
	4	716	12.19	100
Job counts	1	2,964	50.45	50.45
	2	*2,365*	*40.26*	*90.71*
	3	546	9.29	100
Studying status	*No*	*5,767*	*98.16*	*98.16*
	Yes	108	1.84	100
Being able to access internet	*No*	*4,876*	*83*	*83*
	Yes	999	17	100
Being able to phoned others	*No*	*472*	*8.03*	*8.03*
	Yes	5,403	91.97	100
Being able to travel	*No*	*5,325*	*90.64*	*90.64*
	Yes	550	9.36	100
Status of no illness in the last year	*No*	*311*	*5.29*	*5.29*
	Yes	5,564	94.71	100
No hospital treatment in the last year	*No*	*1,262*	*21.48*	*21.48*
	Yes	4,613	78.52	100
Be able to improve life from five years ago	*1*	*280*	*4.77*	*4.77*
	2	600	10.21	14.98
	3	*3,442*	*58.59*	*73.57*
	4	1,553	26.43	100
Be able to donate	*No*	*1,152*	*19.61*	*19.61*
	Yes	4,723	80.39	100

Data source: VHLSS 2014

Table 3: Model fit

Fit indices	Value
Chi-squared	1928.639
Degree of freedom	105
P-Value	0
RMSEA	0.054
CFI	0.984
TLI	0.98
SRMR	0.058