



บันทึกข้อความ

ส่วนราชการ มหาวิทยาลัยเทคโนโลยีราชมงคลตะวันออก เขตพื้นที่จักรพงษ์ภูวนารถ โทร. ๐.๒๖๙๒.๒๓๖๐

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เรื่อง ขอส่งแบบอนุมัติรางวัลแก่นักวิจัยที่มีผลงานวิจัยตีพิมพ์ในวารสารวิชาการระดับชาติและระดับนานาชาติ

เรียน ประธานคณะกรรมการบริหารกองทุนมหาวิทยาลัยเทคโนโลยีราชมงคลตะวันออก

ด้วย คณะบริหารธุรกิจและเทคโนโลยีสารสนเทศ มหาวิทยาลัยเทคโนโลยีราชมงคลตะวันออก มีความประสงค์ขออนุมัติรางวัลแก่นักวิจัยที่มีผลงานวิจัยตีพิมพ์ในวารสาร/บทความวิชาการระดับชาติ และระดับนานาชาติ จำนวน ๑ ราย ได้แก่ รายนางสาวอัมภินี ลากสมบูรณ์ดี ที่มีบทความวิจัยตีพิมพ์ประเภท บทความวารสารวิชาการที่ปรากฏในฐานข้อมูล TCI ๑ (ระดับชาติ) นั้น

ในการนี้ คณะบริหารธุรกิจและเทคโนโลยีสารสนเทศ ขอนำส่งเอกสารเพื่อขออนุมัติรางวัลแก่นักวิจัยที่มีผลงานวิจัยตีพิมพ์ในวารสาร/บทความวิชาการระดับชาติและระดับนานาชาติ ตามเอกสารที่แนบพร้อมนี้

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จึงเรียนมาเพื่อโปรดพิจารณา

(นางสาวสุมาลี สมนึก)

รองคณบดีฝ่ายวิชาการและวิจัย

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**แบบขออนุมัติรางวัลแก่นักวิจัยที่มีผลงานวิจัยตีพิมพ์ในวารสารวิชาการ
ระดับชาติและระดับนานาชาติ**

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Pornpimon Kampetch, Nongluk Lukanathinakorn and Parichart Sriharan

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Chawiang Wongjinda, Worapan Ratanasongtham and Nunmanus Homphian
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Piyawat Khamnuengsitthi, Rojana Thammajinda and Chanon Chingchayanurak
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Thitiporn Sumransat and Sawat Wannarat
- ◆ **The Effect of Long Term Care System for the Elderly on Labor Market**
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The Effect of Long Term Care System for the Elderly on Labor Market

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Abstract

This study aimed to analyze the effect of long term care for the elderly to labor market based on documentary research. The results show that long-term care for the elderly can increase the labor force participation rate, especially in the female workforce who are responsible for caring the elderly in the household. Formal care reduce the decision-making to quit employment, Working hours and wages are higher than those caring for the elderly, while informal care made workers more likely to leave the labor market, Change from full time to part-time work, face difficulties returning to the labor market, developing a long-term care system to link formal and informal care, meet the needs of household, which reducing the impact on the labor market in the short term and long term.

Keywords: 1) Long Term Care System 2) Labor Market

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Introduction

The transition to an aging society has brought about the confrontation of the demographic structure in which the number of the elderly is rapidly increasing while that of the working-age population is decreasing. The elderly population structure accompanies needs for long-term care due to chronic diseases and deteriorating health, especially of the middle-old and the oldest-old (Siciliani, 2014, pp.343-375). While the demand for the elderly care is growing, the number of potential working-age people to take care of the aged group is continuously declining. The responsibility in care provision for the elderly by family members affects their decision to withdraw from the labor market (Skira, 2015, pp.63-93; Figueira, et al., 2017, pp.206-213). In brief, an aging-society affects decision-making of the labor force participants, causing an impact on the labor market. The long-term care system has, thus, become the social welfare system essential for the elderly's quality of life, and has seriously affected the labor force context on the way to an aging society in the future unavoidably. Accordingly, acceleration of long-term care system development could be a concept to reduce the burden of the elderly care at home. It is expected that the number of workers withdrawing from the labor market to give care to their elderly parents would decline.

Studies show that the long-term care system provided in many countries contributed to the high labor participation rate (Mitchell, Piggott and Shimizutani, 2008, pp.694-709). The long-term care system, thus, is to support the

working-age population, an important factor in productivity to participate in the labor market which would enhance long-term economic growth (Lee, Mason and Park, 2012, pp.1-31). However, with the rapidly growing number of the elderly and its impact on long-term care system development, each country has different goals of care service. The system consists of formal care, the care by experts, such as care in medical centers or elderly care centers, and informal care, voluntary care given on the basis of social bonds such as care by family members or friends (World Health Organization, 2001, pp.120-121). Each type of care service has different impacts on the labor market.

Many countries worldwide have accelerated long-term care system development such as an increase in the number of elderly care centers to meet the number of older people that is likely to increase. The concept of the care system development potentially reduced the labor force participants' decision to withdraw from the labor market and a number of them returned to work (Loken, Lundberg and Riise, 2017, pp.247-271; Daly, 2018, pp.77-83). Although such an increase in the labor force brought about positive impacts on the labor market, afterwards, there arose an encounter of high expenditure burden caused by increasing extensions of formal care services in accordance with the continuously rising number of the elderly. The informal care, on the other hand, is the low-cost care when compared to the formal care (van den Berg, Brouwer and Koopmanschap, 2004, pp.36-45). Yet, it causes negative impacts on the labor



market both in the short term and in the long term, especially opportunity loss of income and job security which manifest themselves clearly after the end of the elderly care. In other words, use of the long-term care system that focuses on any care type is important because it affects both the labor market which is the foundation for country development and fiscal expenditure of the healthcare service system unavoidably.

Thailand is one of many countries in the world which has encountered changes of the population structure into an aging society, and each phase of such demographic transition is moving fast. In 2010, the number of the elderly was 2.56 million, constituting 4.52% of the whole population. It is predicted that by 2040 the number of the elderly will reach 17.6 million, constituting 25.76% of the whole population (United Nations, 2017). At the same time, the elderly support ratio shows that the aged care workload of the working-age population tends to increase in the future. In 1990, 14.45 working-age adults provided care to an elderly adult and in 2040, there would be only 2.36 working-age adults per elderly adult. When considering the elderly population structure, it was found that the proportion of the middle-old and the oldest-old individuals in Thailand has gradually been increasing. This reveals the structure of the elderly at a more advanced age. As aforementioned, the rapid transition into an aging society of Thailand reflects the great and abrupt impacts on both the labor market and fiscal expenditure of the healthcare service system.

When considering the aged care in

Thailand, it was found that 98.8% of elders who had caregivers assist them to do their daily life activities received informal care from family members, 42.0% from a daughter, the main caregiver, followed by the spouse. They also received 1.2% formal care from nurses and caregivers from healthcare centers. The data shows that family members played an important role in the elderly care in Thailand. Elderly caregivers in families generally have complex roles such as doing chores, earning a living, and taking care of other family members (Srimahapak, Joungsatiansup and Tengrang, 2014). Such circumstances affected their work. Some of them decided to leave the labor market to take care of home and family members (Leetrakun and Permpoonwiwat, 2016, pp.43-56). This caused a continuous decrease in the labor force in terms of the amount of work as well as working hours, especially among low-educated females who quit their jobs due to the family care burdens (Pinthong, et al., 2018)

At present, Thailand has developed the long-term aged care system by raising long-term care funds for the dependent elderly in 2016. The local administrative organizations are the administrators managing and supporting the pro-active long-term family care. It can be said that Thailand is in the early stage of long-term elderly care system development. Thus, the study on the effects of the aged long-term care services on the labor market aims at investigating and analyzing lessons learned from these services of formal and informal care. Its findings could be used to create a guideline for the elderly long-term care



services and a guideline for handling any problems that incur in order that long-term care system development for the elderly would correspond with the national population structure. This would turn the elderly long-term care system into a social welfare system which is sustainable and responds to needs of the population in alignment with well-balanced national development in the long run.

Research Objectives

This study aims at investigating and analyzing lessons learned from elderly long-term formal and informal care service arrangements. It also aims at scrutinizing the impacts of the care on the labor market related to workers' decision on work withdrawal (extensive margin), and changes in types of work, reduction of working hours and wages (intensive margin), showing the cost of opportunity loss derived from caring for older adults in the family. The study purposes are to set guidelines for appropriate long-term care service arrangements and for handling potential problems arising in the labor market in the hope of providing arrangements appropriate for Thailand's population structure in the long run.

Methods

The researcher conducted this qualitative research by studying and analyzing data using documentary methods. The methods were suitable for the study because the current study focused on the authenticity of past events by examining documents published by the organizations responsible for the long-

term care system, and scholarly documents from well-accepted databases. The scope of study included an investigation on impacts of long-term formal and informal care on the decision of the labor force participants to withdraw from the labor market (extensive margin), and changes in types of work, reduction of working hours and wages (intensive margin). In addition, this study also explored potential problems, arising from the types of long-term care services, for setting guidelines for appropriate long-term care arrangements for the elderly.

Literature Review

Time allocation of individuals to do various activities affected their decision on working in the labor market. Those activities were divided into the ones that earned income i.e. labor, and the ones that did not earn income i.e. leisure. The individuals selected the most satisfactory labor-leisure proportion differently due to their tastes and financial limitations (Borjas, 2013, pp.27-34). Becker (2015, pp.418-442) stated that spending time on the activities that did not earn income included other activities in households such as doing chores. Caring for family members made them decide to budget their time in labor force commitments to the most optimal satisfaction of the family. Therefore, the increasing number of the elderly led the family to take responsibilities in the elderly care, making the family another important factor which influenced individuals' decision-making.

The structure of an aging society brought about the social welfare system development to meet the needs of the population



in a new face. The design of the social welfare system would affect the labor force by making individuals change their decision to withdraw from the labor market, the types of work, working hours and wages. The elderly long-term care service system would become the essential social welfare system. The system would influence the labor market both positively and negatively (Selahattin, et al., 2012, pp.96-127). It had an effect on decision making to spend their time in the labor market or for the aged care in households (Geyer and Korfhage, 2018, pp.1328-1339; Schmitz and Westphal, 2017, pp.1-18). The consequence of long-term care service arrangements on the workforce decision is summarized as follows

1. Decisions to withdraw from the labor market (Extensive Margin)

The goal of the long-term care service system is to meet the increasing demands for the elderly care when the number of elderly care-takers in households tends to decline. Yet, if it is necessary to give care to the elderly in the family, there would be impacts on working and their decision to leave the labor market during the aged care in households due to exhaustion from work and the elderly care provision (Figueira, et al., 2017, pp.206-213). Consequently, the long-term care system would become the important social welfare system that many countries have made attempts to develop so as to construct the long-term care system that is suitable for their countries. Previous studies found that the elderly long-term care system could decrease labor force participants' decision to withdraw from the labor market and could

make them return to the market even more (Kolstad, Løken and Lundberg, 2012, pp.8-24). This was clearly seen in the female labor force (Daly, 2018, pp.77-83; Siciliani, 2014, pp.343-375) that was the group to be responsible for the elderly care, especially the formal care in households, for example, care from elderly care centers. This is considered an important service form that substitutes the decreasing number of working-age population and lowering their decision to leave the labor market (Yamada, et al., 2006, pp.600-632). The formal care is, thus, an important policy in many countries to increase the labor participation rate of the labor force and decrease their visits for medical services at hospitals, reducing unnecessary healthcare service expenditures (Mitchell, et al., 2008, pp.694-709).

The phenomenon is evident in Japan where the proportion of the elderly is the highest in the world. Long-term care service system development has been performed, focusing on long-term care at service places. Also, community-based service places have been being developed urgently. The goal of such development is to meet the increasing number of the elderly, leading to the higher labor participation rate, especially among the female labor force participants that must take the burden of home-based care for the elderly (Kolstad, Løken and Lundberg, 2012, pp.8-24).

However, these studies provided an overall picture of the elderly care. When investigating each level of elders' care, it was found that the labor force served the elderly who needed help for their routine activities or those who needed the high level of care



(Niimi, 2018, pp.1039-1062). Although there was formal care support, the finding shows the working persons' decision to withdraw from the labor market, especially those in the aged care culture (Loken, et al., 2017, pp.247-271). In Thailand, for example, it was found that the family is the main institute for the elderly care. Due to the Thai social value, gratitude, it is the duty of children and grandchildren to take care of their elders (Srimahapak, Joungsatiansup and and Tengrang, 2014), making the labor force decision dependent on the family factor (Pinthong, et al., 2018). Older-adult caregivers in the family tended to make a decision to quit their jobs early. It is clearly seen that female labor groups aged 25-54, the prime age of the potential labor force, withdrew from work untimely to take care of the elderly in households (Leetrakun and Permpoonwiwat, 2016, pp.43-56). In addition, formal care services were inaccessible for low income persons due to conditions of service use such as the co-pay or health conditions eligible for formal services (Bakx, et al., 2015, pp.631-643; Paraponaris, Davin and Verger, 2012, pp.327-336). Most developing countries which are in the early stage of long-term care system development have encountered the limited scope of service provision, and that could not substitute care by family members (Abrokwah, Callison and Meyer, 2019, pp.1477-1491). The constraints made the labor force decide to withdraw from the labor market to take care of the elderly in the family. Moreover, the study shows that elderly long-term care system management, especially, the formal care in service places which requires space and personnel has some

constraints and cannot extend rapidly. In addition, that the elderly care is categorized into many levels makes the needs for long-term care service more complex. Therefore, the countries that mainly focus on care service provision in service places, after providing long-term care services for a while, would encounter insufficiency of service places and personnel for long-term care services. This is because the services are unique, multi-leveled, and require well-trained personnel (Arrow, 2001, pp.851-883). These are the important problems of long-term care services in the future (Paraponaris, et al., 2012, pp.327-336; Yamada, et al., 2006, pp. 600-632).

Uses of long-term formal care to substitute care from family members differ according to the levels of care. Elders who receive formal care services tend to be older or have more deteriorating health. This indicates that accessibility of long-term care is attributed to the elder's health conditions, not the needs of household members. The formal care will have high impacts on the decision on working in the small family or households with elders who need care at the high level or consistently need assistance in performing routine activities (He and McHenry, 2016, pp.829-843).

Another factor that influences the labor force decision-making is the culture in society in which the family members need to take care of the elderly. So, they decide to leave the labor market to care for the elderly at home despite provision of the formal care to encourage the labor force to stay in the labor market (Bakx, et al., 2015, pp.631-643). On the other hand, informal care such as care



by family members which is the care in elders' households is the type of care supported in many countries to be the main type of the aged care. This is because it is relatively low cost and is satisfactory for elders. It was found that in the countries which used the long-term care service system focusing on informal care by family members, there was a decrease in labor force in the labor market (Geyer, Korfhage, 2018, pp.1328-1339; Van Houtven, et al., 2013, pp.240-252). Family members who were elder's caregivers, especially females, tended to decide to leave the labor market when there was an extension of informal care services (Van Houtven, et al., 2013, pp.240-252). When examining how the informal care was supported, it was found that there were benefits in kind by supporting the elderly care during the daytime or having an assistant to take care of households when family members could not take care of the elderly. Also, there were benefits in cash by giving financial support for the aged care. This was like hiring a family member to care for the elderly. The finding shows that the latter benefits can motivate family members to make a decision to withdraw from the labor market to look after the elderly in families. For example, Germany supports informal health care. It was found that family members who had to take care of old adults tended to withdraw from their work to give the aged care, making the labor force in the labor market decrease continually. When examining long-term care development with the target to stimulate familial care, it was found that benefits in cash practically supported expenditures of familial caretakers and motivated them to

take care of their elderly parents (Geyer, Korfhage, 2018, pp.1328-1339). It was also found that 80% of service users, males more than females, chose benefits in cash for home care (Riedel, 2017). In addition to the effect of the labor force which was likely to decrease, it was also found that there was a change in how to do their work. Family members who had to take care of elders tended to change from working full time to working part time. Finally, they, especially females, tended to quit from the labor market due to exhaustion in working and taking care of the elderly (Schmitz and Westphal, 2017, pp.1-18; Wu and Chan, 2011, pp.513-526).

It can be contended that long-term care service management has impacts on the decision to leave the labor market and benefits gained from the support of the care services could motivate caretakers to choose caretaking. The consequence from this decision also affected an opportunity to work in the long run when the elderly care period ended. If they wanted to return to the labor market, it was found that the chance was slim (Wolf and Soldo, 1994) and that more than 50% of the caretakers, especially those responsible for elders with needs for the high level of care, could not return to the labor market (Schmitz and Westphal, 2017, pp.1-18). Consequently, in the countries with the target to manage significantly long-term aged care by family members in households, the aged caretakers should get benefits and more rights to take a leave so that they can take care of their family members, or rights to change how to work that serves needs for caring the elderly in the family. Such bene-



fits and rights would help reduce their decision to leave the labor market which would cause long-term impacts on the labor force participants' opportunities to earn incomes.

2. Impacts on working hours and wages (intensive margin)

In addition to an impact on labor force participants' decision to withdraw from the labor market, the long-term care service system also affects the intensive margin in households where elders need long-term care. According to earlier studies, it was found that those who provided the elderly care in households tended to work fewer hours so that they could spend more time caring elderly parents (Ettner, 1996, pp.189-205; Kotsadam, 2012, pp.269-283). The impact was clearly seen among the female labor-force participants. According to the study by Van Houtven, et al. (2013), it was found that in Germany which supported care by family members, the female labor force participants decreased approximately 3-10 hours per week and there was likelihood that the working hours decrease made it possible for them to withdraw from the labor market eventually.

Moreover, the findings show the impact on the working group wages for the elderly care in households. The wages reflected their opportunity loss in terms of money (Heckman, 2015, pp.403-409). Those who had to take care of the elderly in the family would earn less than those without the burden (Carmichael and Charles, 2003, pp.781-803; Van Houtven, et al., 2013, pp.240-252). Such an impact became another factor that influenced the labor force participants to decide to withdraw from

the labor market. This led to policy setting to support long-term formal care to allow the labor force to work at their full capacity. It was also found that the aged formal caretakers received higher working hours, hiring scales, opportunities to be promoted and wages. All of these were benefits for them in terms of incomes and long-term security. Wages were an important factor which affected the decision to work. The concept of an increase in wages to motivate the labor force to choose formal care services to the elderly in households so that they could work in the labor market became an important concept that led to a study on elasticity of wages. The finding showed wage increases motivated the labor force, especially among female groups, to reduce the aged care working hours and to work in the labor market more (Nizalova, 2012, pp.350-366). However, when considering the levels of the aged care, it was found that the caretakers of the highly dependent elderly, for example, elders who could not do their daily life activities, did not respond to an increase in wages because of elders' constantly high dependency on them or because of the culture in which elders were looked after with love and family care.

In addition, it was found that legal work support included permission for a temporary family leave, elasticity of work system management such as adjustment of working hours to encourage the labor force participants to take care of their family members (Inamori, 2017, pp.8-24). In Germany, it was stipulated that they could take a 6-month leave maximally, or could reduce half of the working hours for 24 months (Rhee, Done and Anderson, 2015,



pp.1319-1329). So, the elderly care in the family would be another option that makes it possible for workers to adjust their working hours. This way, they would have time to take care of the elderly in the households without any impact on their work and opportunity loss due to their withdrawal from the labor market.

Conclusion and Discussion

The aging society has impacts on the labor market in terms of labor force participants' decision to withdraw from the market, changes in types of work, working hours and wages in the short term and the long term. The long-term care service system is, thus, the social welfare system that meets wants and needs for the elderly care. The system has impacts on the quality of life of elders and family members who are elderly caretakers and efficient workers at the working age.

Overall, the aged long-term care system increases the participation rate of labor force, especially female working groups. The increasing amount is an important factor of economic growth. However, both the formal and the informal long-term care services have positive and negative impacts on workers' decisions in different aspects. An example is the formal caregiving to the elderly at a service place. Although this type of care could increase the labor force participation rate and the return rate into the labor market, the elderly caretakers work longer hours, and receive higher wages than those taking informal care of older adults. Furthermore, the formal care could also reduce the long-term impacts of job promotions such as higher positions

or wage increases in the long run. However, in some cultures, the elderly care at service places is not accepted and does not meet the needs of the family, making it unlikely to change labor force participants' decision to continue working in the labor market. Also, the criterion for receiving the long-term formal care is set on the basis of the elderly health conditions, making individuals in the workforce take care of the elderly and do their work at the same time. Thus, it is necessary to keep family members' needs in mind, especially working-age ones', when setting the criteria for the elderly care. This will allow the elderly to gain access to formal care and keep the labor force in the labor market.

In addition, the formal care requires service places and caretakers. Thus, the service system management of the long-term formal care requires accelerating elderly care training and service area expansion, which come with the continually increasing expenditure of the health service system. A plan for sufficient budget provision for the management is important and must be kept in mind. On the other hand, support for informal care, particularly financial support, motivates family members to take care of the elderly at home. Although this type of care can reduce expenditure on public health, it likely leads to the declining amount of the labor force and withdrawal from the labor market afterwards. The reduction of, and decisions on labor force participation, as well as changes from being full-time to being part time, cause impacts on participants in the labor force including the cost of opportunity loss, relatively lower



wages, fewer opportunities to be promoted, to receive higher wages, and to return to the labor market after the end of the elderly care. These impacts last their entire life. The loss of earnings should be compensated or the lost income should be collected as pensions, similar to the savings they would receive while participating in the labor market. Doing these would reduce the cost of opportunity loss in the long term. Thus, goals for long-term care should be established; meanwhile, support to caretakers should be developed to enhance their job opportunities to decrease impacts on the demographic structure in the long run, which would likely reduce the labor force participation continually. It is important to accelerate long-term formal care development to expand services to cover the needs of the elderly and households. Moreover, family members' working situations should be taken into account to stipulate the conditions appropriate for a request for formal care services. Opportunities for individuals to work and also take care of the elderly should be created e.g. labor legislation which grants the right for them to take a leave for the elderly care, and the right to adjust their working hours and the way they work to suit the elderly care in the family, making it possible to remain at work in the labor market continually. Individuals who withdraw from the labor market to do the elderly care should be granted opportunities to return to participate in the labor force e.g. training and developing working skills demanded by the labor market so that they would have a higher chance to return to the labor market.

From all the above, there are conflicts

between the formal and the informal care that affect the labor market. This is inevitably related to security in the healthcare system. In addition to short-term impacts from the elderly care by family members which reduce shortages of workers or work places, it is necessary to consider long-term impacts from changes in forms of work from the formal to informal system or from their being unable to return to the labor market despite their working age and potential. The cost of opportunity loss will be encountered by the labor force and the country in the long run. In other words, the long-term care system development should make a link between the formal and informal care. It should be designed to be flexible so that care recipients could select services at certain periods which meet the family needs. It is important to help those in the labor force to decide whether to accept the service and continue participating in the labor market. This support can reduce impacts on the labor market in the long run.

The long-term care service system needs to focus on care recipients i.e. the elderly, too. Their happiness is an important component. In giving care to elders, caretakers should consider the culture of the society in which family members take care of their elder parents as in Thailand. To establish the balance between working-condition support and responses to the increasing demand for elderly care, long-term elderly care services should be designed to support true home care and be able to manage when family members cannot take care of the elderly. Another consideration should be on setting directions of



long-term elderly care. Which type of care is fundamentally in focus? What are their strong and weak points? How do problems that follow be solved?

In conclusion, how to develop long-term elderly care service management is challenging for the aging society that Thailand

is encountering and searching for solutions rapidly in order to minimize prospective impacts, to make long-term care a stable social welfare, to give a guarantee of well-being to its population, and to reduce the impacts on the labor market which will affect the economic growth in the future.

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