Labour Market Risks and Institutional Determinants
An International Comparative Study of Institutions and Non-standard Employment with a Focus on East Asia

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ABSTRACT

LABOUR MARKET RISKS AND INSTITUTIONAL DETERMINANTS: AN INTERNATIONAL COMPARATIVE STUDY OF INSTITUTIONS AND NON-STANDARD EMPLOYMENT WITH A FOCUS ON EAST ASIA

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Korea and Japan stand out in the group of OECD countries for their rapid increase in, and high levels of, non-standard employment. The empirical evidence leads us to a two-part puzzle: Why are there so many precarious workers in Korea and Japan? And what are the institutional determinants of such labour market risks? This thesis commences by introducing the concept of ‘risk shift’, and the fuzzy-set ideal type approach is employed to conduct a comparative study of 18 countries. The labour market risks in Korea and Japan are then compared in an international context with 16 selected OECD countries. Fuzzy-set Qualitative Comparative Analysis is employed to investigate the institutional determinants of labour market risks. It then focuses on the increase in non-standard employment in Korea and Japan. Taiwan is also included as a contrasting case, the study taking an institutional approach employing Comparative Historical Analysis. Chapters
employing CHA examine how the different welfare production regimes evolved and how they matter in explaining the high rate of non-standard employment in East Asia. The new risk discussion, the argument on the definition and impact of deindustrialization and lastly theories on East Asian welfare states are revisited in the conclusion of this thesis. Finally, I critically discuss the notion of precarious workers and highlight the centrality of social policy that their organizational configuration affects political culture, the formation of the production system, the structure of the labour market and the kind of risk a county could experience.

Keywords: New risk, risk shift, welfare production regimes in East Asia, Comparative Historical Analysis, Fuzzy-set Qualitative Comparative Analysis, non-standard employment, unemployment, institutional configuration and centrality of social policy.

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“A disposable life - Squeeze it to its last drop and simply chuck it away if not needed anymore”
(Kyunghyang News, August 13th 2010)

1.1 COMMODOIFIED WORKERS IN TWENTY FIRST CENTURY EAST ASIA

Kyonggi-Suwon metro station in Seoul, South Korea, 8 AM on the 4th of August 2010, three women are returning home from their work. Kim (aged 40), Lee (aged 40) and Park (aged 21) had started their work at 8:30pm the previous night, finishing at 7:30am. Now they are going for breakfast. They work in a small-medium sized company which supplies cell phones to LG Electronics and Samsung. They assemble cell phone parts and pack them. The three women are at work 11 hours a day, including an hour lunch break. Kim has been a dispatch worker for the last six years, Lee for the last 10 years, and this is Park’s third year. The three are skilled workers in their field, yet they always fear dismissal and, moreover, the level of work they are called to do is rarely consistent. They are paid by the hour so their income fluctuates according to the amount of work the company offers them. Kim says, “I received a text message that I was fired one hour before I was due to start work. One time, the company sent me back home after one hour’s work, informing me that there was no more work that day”. Since dismissal is so easy, this job is Kim’s fifth job and Lee’s tenth. They are paid
4,110 won (approximately £ 2.30) per hour, which is the statutory minimum wage. They are excluded from social protection and so they tend to cope by themselves even if injured during the work shift. The three women have, in effect, become commodities that are used when needed but, simply disposed of when there is no demand for their labour\(^1\).

This is one snapshot of the many precarious lives of non-standard employees\(^2\) who, according to data provided by the Korean Confederation of Trade Unions in 2007, comprise almost half of the Korean labour force. Incidentally, the working conditions of non-standard workers in Japan are not so different. The 2005 report on ‘Wage Structure of Japan’ states that, when comparing the wage difference between an average male earner who started his career in standard employment at age 22 and worked until 60, and an average male earner who started his career in a non-standard employment at age 18 and worked until 60, the lifetime income of the non-standard worker is only 22.7% that of the standard employment worker (Dakashi 2009). What is notable is that Korea and Japan stand out amongst the OECD countries for their rapid increase in and high rates of, non-standard employment even when we adopt their governments’ narrow definition of non-standard employment rather than the definition and statistics provided by labour unions. The non-standard employment rate rose from 27% (2001) to 36% (2007) in Korea and from 20% (1994) to 34% (2007) in Japan (OECD/Korea 2008). The proportion of temporary workers in Korea is the second highest among the OECD countries and the proportion of part time workers in Japan is also the second

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\(^1\) Source from Kyunghyang News, August 13\(^{th}\) 2010. Kyunghyang News press (one of the most influential news paper in Korea with a center left political view) had a special cover regarding the Korean labour market in their August issues focusing on non-standard employment. The coverage includes a number interviews and anecdotes on the lives of workers in non-standard employment.

\(^2\) The definition of the term is discussion further in the later part of this chapter.
highest in the OECD (OECD/Japan 2008). The attention paid to non-standard employment by both the mass media and academics in Korea and Japan mushroomed in the mid-2000s. This empirical evidence and large attention on non-standard employment led the author to a puzzle which was the start of the intellectual journey of this thesis: *Why are there so many precarious workers in Korea and Japan?*

The poor working conditions of non-standard workers and their increasing numbers go beyond being merely symptomatic of the problems of an unequal society. Rather, statistical snapshots and descriptions of non-standard workers brings to mind the classical debate on the fundamental contradiction of capitalism, a system that drives to commodify labour and which Marx posited as the activity of alienation (1844). The description above of the three Korean precarious workers, who have no other choice than to behave as a commodity in order to survive, is indeed similar to Marx’s description of wage workers in the nineteenth century in the West.

“And the labourer who for 12 hours long, weaves, spins, bores, turns, builds, shovels, breaks stone, carries hods, and so on - is this 12 hours' weaving […] regarded by him as a manifestation of life, as life? Quite the contrary […] the 12 hours' work, on the other hand, has no meaning for him […] but only as earnings […]. If the silk-worm's object in spinning were to prolong its existence as caterpillar, it would be a perfect example of a wage-worker.” Karl Marx, Wage Labour and Capital [1847]

Marx’s examination of the problems embedded in the commodification of labour is followed by Polanyi (1944) and Esping-Andersen (1990). Polanyi
distinguished between ‘fictitious’ commodities and ‘real’ commodities (Polanyi 1944). Esping-Andersen, adopting the concept of a ‘fictitious commodity’, argued that “workers are not commodities like others because they must survive and reproduce both themselves and the society they live in […] labour is unable to withhold itself for long without recourse to alternative means of subsistence” (Esping-Andersen 1990: 37). Taking an institutional approach, the focus on different policies concerning commodified workers has lead to the discussion of the variability of welfare state evolution, and this literature has been gaining much attention from students of social policy. While the commodification of labour was at the heart of the debate in the nineteenth-century, the social policy of de-commodification, which has been considered a necessity for the survival of the capitalist system (Polanyi 1944), has motivated a significant development of the scholarly work on social policy and welfare state regimes (Esping-Andersen 1990).

The New Risk literature which has emerged more recently, however, argues that the evolving welfare state and social policy that developed in the industrial period no longer covers sufficiently the risks of the post-industrial society (Esping-Andersen 1994, 1996, 1999, Pierson 2001, Iversen 2001, Taylor-Gooby 2004, Hackers 2004, Jenson 2004, Bonoli 2007). Not surprisingly, many studies embarked on an investigation of non-standard employment using different terms, such as precarious worker, the precariate (Standing 2009), atypical employment or non-regular employment (Keizer 2008). The suggested explanations for the increase of precarious employment are globalization, deindustrialization, demographic change and the increase in female employment.
Scholarly literature on “new risk” has focused on the increase of precarious work, tertiarization, destandardization or casualization of employment, increasing inequality, greater labour market flexibility, the weakening of labour unions and the fiscal burden on the welfare states that the social processes mentioned above have produced. It is suggested that the emergence of new risk is brought on by the gap between what post-war welfare states provide and the needs generated by this labour market transition (Esping-Anderson 1999; Pierson 2001, Bonoli 2007, Taylor-Gooby 2004). Hacker (2004) further argues that the mismatch between the new risks and the old state should be seen as a process that is highly mediated by politics. Analyzing the case of the United States, he concludes that risks have been privatized, i.e. left to individuals or families to cope with on their own.

As suggested earlier, the similarity between the precarious workers in the post-industrial period discussed in the New Risk literature and Marx’s and Polanyi’s portrayal of commodified labour in the industrial period leads us to rethink critically the argument of new risk. Is the increase of precarious workers a new risk? Is it simply the result of labour market transitions and the failure of state intervention in the market? Or is non-standard employment a modern example of commodified labour?

1.2 THE RESEARCH PUZZLE

The literature on commodified workers provoked scholars to examine the different levels of de-commodification achieved by social policies in different
welfare states. The New Risk literature argues that the welfare states that developed during the industrialization period no longer function sufficiently given that most post-industrial countries are encountering new risk such as the increase of precarious workers. However, there is a missing discussion between the literature on the commodification of labour and the new risk of increased precarious workers (Standing 2009). The gap between the two streams of argument lies in the different degree of their emphasis on institutions.

One of Polanyi’s main arguments centres on the state’s role in the economy. For example, in the case of ‘fictitious commodities’ (commodified workers), the effectiveness of the market price mechanism is reduced because automatic increases or decreases in supply cannot be assumed, and it is impossible to assume that the state can be outside the market. Concurring with Polanyi’s discussion on the centrality of state policy, Esping-Andersen (1990) in *The Three Worlds of Welfare Capitalism* highlights the variation in the de-commodifying potential of social policy, and argues that the variation is empirically identifiable across time and nation. However, the New Risk literature (Taylor-Gooby 2004), especially the literature on precarious workers (Standing 2009), pays less attention to the variation in new risks between countries, which could also possibly be the result of various social policy arrangements in different countries.

The omitted discussion between the two literatures could yield many more research questions that follow from the initial puzzle presented by precarious workers in Korea and Japan. Is the increase of non-standard employment a *new* risk and is it a phenomenon in East Asian developed countries only? If the causes of such labour market risks are globalization or deindustrialization, all advanced capitalistic economies should theoretically experience new risk. But is the actual
emergence of this non-standard employment an inevitable trend in every post-industrial welfare state?

Adopting the institutional approach to investigate empirically the new risk argument, this thesis hypothesizes; i) that the characteristics of new risks may differ across time and nations; ii) that the variation in institutional arrangements in different countries can explain the different trends of labour market risks; iii) that in addition to the impact institutions make through social policy, the timing and speed of socioeconomic changes also play an important role; iv) that the set of social policies that can ameliorate labour market risks can be identified.

Now I return to the initial puzzle generated from observation of labour market risks in Korea and Japan - why are there so many precarious workers in Korea and Japan? - to crystallize the orientation of the thesis. The peculiarity of the risks in Korea and Japan needs to be tested empirically. Are East Asian welfare states experiencing the same kind of new risks as suggested by the New Risk studies of Western countries? In order to investigate the cases of Korea and Japan in a comparative context, the establishment of a comparable concept is necessary. One of the most prominent limitations, however, from the New Risk literature is that it pays less attention to how new risk can be conceptualized. Hence the thesis commences by conceptualizing risk and tests empirically the new risk discussion. This thesis primarily focuses on the risks related to the labour market, in particular precarious workers, while the new risk discussion also encompasses risks to the family’s work and life balance.

The comparative study is continued by investigating the emergence of precarious workers and the institutional conditions related to this emergence.
Korea and Japan are set in an international context and compared with sixteen other OECD countries. This thesis then identifies how different institutional arrangements can cause different labour market risks, such as the increase in non-standard workers and/or the unemployment rate.

The thesis then questions why there is an increase in non-standard employment in both Korea and Japan but not in Taiwan. Most literature on welfare state typology groups East Asian welfare states together as developmental welfare states or Confucianism welfare states (The literature on East Asian welfare states is reviewed in detail in Chapter 7). However, despite the commonly suggested similarity among the three East Asian countries, Taiwan has a substantially lower non-standard employment rate. The question can therefore be moulded into: how do risks shift in Korea, Japan and Taiwan? If there are variations in the trend of labour market risks, how do institutions matter in creating these labour market risks in East Asia? The purposes of this part of the comparative study are to first examine the labour market risks in East Asia and then to verify the causes of the high rate of non-standard employment by taking an institutional approach.

In parallel to answering the questions above, the thesis gives equal attention to methodology in comparative social research, which will be explained further in the next section. The areas of study listed above can be summarized into the following research questions, which this thesis attempts to answer:

1) What is an ideal comparative research method in comparative social policies? (Chapter 3)

2) What is a new risk? How do risks shift differently across time and country
in eighteen developed countries? (Chapter 4)

3) What are the institutional conditions of labour market risks in 18 selected OECD countries? (Chapter 5)

4) Who is experiencing labour market risks in East Asia? (Chapter 6)

5) How do the welfare production regimes vary among East Asian countries and how did they evolve? (Chapter 7)

6) How do institutions matter in creating labour market risks in East Asia? (Chapter 8)

1.3 RESEARCH METHOD AND DEFINITIONS

Comparative research in social science generally refers to studies that address the experiences of two or more countries (Lijphart 1971), but it can also refer to studies on one-country that “situate empirical questions in a comparative context or make significant macro-level comparisons in causal argumentations” (Amenta 2003). However, comparative social research has been shifting toward large-N variable-oriented analysis and this shift has continued to gain momentum in recent years (Hall 2003). Lijphart (1971) stressed that political scientists shield away from comparative studies of case comparisons because of the methodological problems arising from "many variables but small N." He suggested that researchers should be aware of the advantages and disadvantages of statistical method and case-oriented method rather than deciding which method to use based solely on possible number of cases. Criticizing the research trend in
political science, Sartori (2009) asserted that the paradigm of the quantitative method in comparative studies which emerged from the 1970s has continued until present (Ferragina 2011).

Sartori (1970) also highlighted the importance of concepts in comparative social science and argued that they should be given equal weight to the method. Concepts are about ontology, which is to say that, “they are theories about the fundamental constitutive elements of a phenomenon” (Goertz 2006). Although some scholars have been successful in making a distinctive contribution to the discussion of concepts in social science (Sartori 1970, Goertz 2005), in fact, in much social science analysis, concepts are often neglected (Goertz 2005). Explaining the reason for such omissions of discussions on conceptualization, Goertz (2005) asserts that it is because a concept involves both a theoretical and empirical analysis of the object or phenomenon. This idea goes back to Locke or Aristotle who drew distinctions between “essential” and “superficial” characteristics of an object. Similarly to the way in which comparative research method has struggled to integrate qualitative and quantitative, encompassing both theory and empirical analysis for a conceptualization has been a challenge for social scientists. This thesis engages with the discussion on concept and conceptualization in social science and demonstrates how to conceptualize risk using a set-theory (see Chapter 4).

Historical institutionalism also provides an insightful theoretical basis for this thesis. It takes an institutional approach focusing on the differences in, and the persistence of, policies in each country. The historical institutionalists pay attention to how institutions structure a nation’s response to new challenges. They
use comparisons to test a hypothesis that can account for the observed differences between two cases (Thelen 1999: 374). Such theories of institutions provide an explanation both for the disparity between national political outcomes and for the inequalities that mark these outcomes (Hall & Taylor 1996).

Comparative Historical Analysis fits within this historical institutionalism. Skocpol asserts that the aim of Comparative Historical Analysis is “to develop, test and refine causal explanatory hypotheses about events or structures integral to macro-units such as nation states” (Skocpol 1979:36). Instead of referring to any studies that simply overlay historical patterns across cases, Mahoney and Rueschemeyer highlight three distinctive aspects of Comparative Historical Analysis (Mahoney and Rueschemeyer 2001). First, the method is concerned with explanation and the identification of causal configurations that produce major outcomes of interest. Second, the method analyzes chronologically and sequentially, examining the unfolding of processes over time. Last, it is distinctive because of its engagement in systematic and contextualized comparisons of similar and contrasting cases. In sum, Comparative Historical Analysis is characterized by its concern with causal analysis, the exploration of temporal process, and the use of systematic and contextualized comparison (Mahoney and Rueschemeyer 2001).

As mentioned in the previous section, this thesis pays close attention to methodology in comparative social research. To the question of what an ideal comparative research method is, a broadly consensual answer may be that it is one where there is a balance between the emphases on theory and on empirical data, between emphases on cases and on variables and a balance between subjectivity
and objectivity. Probing the ideal comparative method, this thesis engages with a number of methodologies in comparative social research such as Mill’s method of difference, Comparative Historical Analysis, Fuzzy-set ideal type approach and lastly the Fuzzy-set Qualitative Comparative Analysis (fs/QCA). Chapter 3 fully focuses on the methodology and discusses the ontology and epistemology of comparative social policy. It also highlights the advantages of the use of fs/QCA suggesting that it is an ambitious attempt to bridge the deep chasm in social science methodology between qualitative analysis, known as case-oriented analysis, and quantitative analysis, referred to as variable-oriented analysis.

Chapter 4 demonstrates how to conceptualize risk using a set-theory and also explains how a concept can be operationalized as measurable using the fuzzy-set ideal type approach.

Historical institutionalism and Comparative Historical Analysis are further discussed in Chapters 6 and 7. These two chapters take an institutional approach to explain the causes for different risk shifts and employ Comparative Historical Analysis. This part of the thesis examines how institutions evolved differently (or similarly) and how institutions matter in explaining the high rate of non-standard employment in Korea and Japan. The period of analysis is divided into two, post-war to the 1980s and from the 1990s onward. Empirical data is from each country’s statistics bureau or international organizations such as the International Labour Organization (ILO) or the Organization for Economic Co-operation and Development (OECD). Qualitative data is collected from governmental archives, literature on East Asian history and news articles from each period. In chapter 4 and chapter 8, the comparative study is conducted with additional cases other than Korea, Japan and Taiwan. In these chapters, a fuzzy-set research method is
employed. The data sources used are the OECD, the ILO, the World Bank, the CIA of the United States and each country’s statistical bureau. The source of data for each chapter is explained in more detail in relevant chapters. The research design and summary of each chapter follows in the next section.

In his thesis on concepts in social science, Goertz (2005) explains how a negative concept (i.e. one with the opposite meaning as our target concept) can help to crystallize what we intend to define. In this case, the discussion of non-standard employment pushes us to rethink the concept of ‘standard’ employment. Gorz (1999) described standard workers as the central core of the labour market and said that they are permanent and full-time employees. While some studies use different terms such as precarious worker, the precariat, atypical employment or non-regular employment instead of non-standard employment, the definitions for these types of employment mostly refer to jobs that are other than permanent full-time salaried employment. The OECD defines non-standard workers as those who are temporary workers or part-time workers. “Temporary worker” includes workers with fixed term contracts, temporary agency workers, seasonal workers and on-call workers. In the case of Japan, the Part-Time Work Law defines part-time workers as those workers whose scheduled working hours are shorter than those of regular employees in the same workplace, 35 hours usually taken as the dividing line (Araki 2002). While the definition of non-standard employment is controversial, this thesis uses a definition that includes temporary workers and part-time workers to make the data comparable. Data for non-standard employment is scarce and more recent compared to other labour market indicators. The discussion of the definition and data of non-standard employment is continued in Chapters 4, 5, 6 and 9.
Various other terms are discussed in relevant chapters: new risk (Chapter 2), unemployment (Chapter 4), risk shift (Chapter 4), long-term unemployment (Chapter 4, Chapter 5), deindustrialization and ‘post-industrial’ (Chapter 2, Chapter 7), globalization (Chapter 2), tertiarization (Chapter 7), welfare production regime (Chapter 7 and Chapter 8), East Asian welfare state (Chapter 7), and the precariate (Chapter 5 and Chapter 9).

1.4. RESEARCH DESIGN

Following the present introductory chapter, Chapter 2 starts by critically reviewing the literature on new risk. The chapter shows that the New Risk literature successfully draws attention from many disciplines of social science by showing the consequences of various socioeconomic changes in deindustrializing welfare states. However, some limitations are found such as the lack of clarity in the concept of risk and ‘new’ risk, the neglect of possible varieties in the characteristics of risks, and most importantly, the lack of attention given to the impact of different institutions in different countries. The second half of the chapter examines the changes in three selected institutions which were identified from the new risk literature: family, state and market. The theoretical discussion of the transitions of these three institutions, the causes of these transitions and their implications are critically reviewed. Transitions in the labour market are discussed in more detail as the thesis discusses labour market risks. The causes
and the implications of deindustrialization are discussed adopting Baumol’s cost disease theory (Baumoul et al 1985).

Chapter 3 examines the applicability of Fuzzy-set Qualitative Comparative Analysis (fs/QCA) on three studies in comparative social policy and critically reviews the methodology. The chapter begins by discussing the ontology and epistemology of comparative social policy. The fuzzy set logic and set theoretic nature of social science theory is then discussed to align the ontology with fuzzy set methodology. Then fuzzy-set method (fs/QCA) is introduced in detail.

The thesis starts with an international comparative study. Using the fuzzy-set method, Chapter 4 commences its inquiry with a scientific conceptualization of social risk with an attempt to critically rethink the argument of new risk. A re-evaluation of the concept of new risk is followed by an empirical investigation of whether there is such a thing as new risk and whether there may be a convergence in the characteristics of new risk among countries, as the literature suggests. The lack of comparative empirical evidence on new risk in the existing literature leads to an investigation of advanced economies both from the global West, as well as the East. Eighteen developed countries are examined through five time points from 1985 to 2007 to provide a comparative account with which to understand new risk. These are analyzed and compared using the fuzzy-set ideal type approach to discover different types of social risks and to measure degrees of change of these risks. This chapter answers two questions: 1) *What is new risk?* and 2) *How do the characteristic of risks differ in different post-industrial countries?*
In Chapter 5, fuzzy-set method is employed to investigate causation with a larger number of cases and continues the comparative study of risks by focusing on two forms of labour market risks: long-term unemployment and non-standard employment. Institutionalism including the Varieties of Capitalism (VOC) literature (Hall and Soskice 2001, Estevez-Abe, Iversen and Soskice 2001) once again provides a useful theoretical background to this study in investigating how different institutions have various ramifications for labour market risks. The chapter investigates how institutional conditions cause labour market risk using four policies, employment protection legislation for permanent workers, for temporary workers, a statutory minimum wage, and the net replacement rate for long-term unemployment. These are analyzed to examine how these conditions combine to have an impact on long-term unemployment rates and non-standard employment rates in Korea, Japan, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Spain, Sweden, United Kingdom and the United States during the period of 2001 to 2008 (8 time points).

Chapter 6 investigates the risk shift between different demographic groups, focusing on labour market risks in Korea, Japan and Taiwan. It presents empirical evidence on the three most prominent characteristics of labour market changes in East Asian economies: the change from a predominantly manufacturing sector to a dominant service sector, from a male dominated labour market to an increase of female workers, and from a stable employment structure to a flexible one. This chapter has three objectives: i) to examine empirically labour market transitions in the three East Asian economies, ii) to study the character of labour market risks and how these risks are shifting by gender, education level and by age in the
transitional period, and lastly, iii) to rethink the commonly accepted assumptions that deindustrialization and/or globalization are the main causes of new labour market risks. Three steps are taken in this inquiry. First, this study commences by examining empirically the three labour market changes mentioned above. Second, it challenges the idea of the emergence of ‘new risks’, arguing instead for the concept of ‘risk shift’: the feature of risk shifting to different demographic groups. Third, with the empirical evidence already used, it discusses whether deindustrialization and/or globalization are sufficient causes for risk shifts in Asian economies, proposing that institutional legacy may be an important factor in risk shift. The method of comparing the ratio changes is employed to examine the risk shifts between different demographic groups in East Asia.

In an attempt to explain the causes of the different trends of risk shift in the three countries, Chapter 7 examines how institutions evolved during the industrial period in Korea, Japan and Taiwan. This chapter commences with a theoretical discussion of Comparative Historical Analysis and welfare production regimes. It then compares Korea, Japan and Taiwan to examine how their welfare production regimes evolved during the industrial period, focusing on a combination of welfare policy, industrial structure, skill formation and labour union relations.

The puzzle of why Korea, Japan and Taiwan - commonly grouped together as East Asian welfare states and each in a similar stage of tertiarization - experience different kinds of labour market risks is answered in Chapter 8. In this chapter, Comparative Historical Analysis examines how institutions matter in de-industrializing East Asian economies. Mill’s Method of difference is incorporated to frame the causation suggested by the findings from the analysis in this chapter.
The conclusion, Chapter 9, revisits the puzzle and summarizes the main findings of each chapter. Then the concepts and theories are revisited to illustrate the contribution to the literature that this work represents. The new risk discussion, the argument on deindustrialization and lastly theories on East Asian Welfare states are revisited. Finally, I discuss the notion of precarious workers and highlight the centrality of social policy.
CHAPTER 2. SOCIOECONOMIC TRANSITIONS AND THE NEW RISK

‘Wealth-distributing’ society began to be joined by those of a ‘risk-distributing’ society. [Risk Society: towards a New Modernity 1992], Ulrich Beck

2.1 DISCUSSION OF THE “NEW RISK”

This chapter starts by critically reviewing the literature on the concept of new risk. It is only recently that ‘new risks’ are discussed in the arena of social policy and in relation to the welfare state. It is commonly suggested that the causes of new risks are deindustrialization and globalization. Deindustrialization is argued to exert pressure on the welfare state as economic growth, which was the foundation of post-war welfare states, become slower. Secondly, it is suggested that deindustrialization polarizes the labour market and increases the number of precarious workers. The literature explains that the expansion of the service sector, replacing the manufacturing sector, provides a high premium for skilled labour and educated people, while pushing the low skilled workers to low value added, low waged jobs that are at the bottom of the wage structure (Bonoli et al., 2000; Esping-Andersen, 2004; Kalleberg, 2009; Krugman, 1996; Pierson, 1994; Standing 2009). Another strain of inquiry has focused on the impact of globalization on advanced welfare states, suggesting that globalization exerts downward pressures on the welfare state and constrains new policy options
Similarly, Schwartz (2001) argues that Keynesian policy is no longer feasible in post-industrial societies. Mishra (1999) also explains that globalization produces long-term unemployment because it is untenable for countries to adopt Keynesian approaches to stimulate growth and job creation due to the relaxation and eventual abolition of government control over capital mobility (Mishra, 1999). Globalization as one of the suggested causes of new risks is argued to increase inequality in wages and working conditions through greater labour market flexibility.

In fact, although the speed varies, in most western countries deindustrialization and globalization emerged together starting in the 1970s (Bonoli, 2007; Esping-Andersen, 1999). Studies both on the impact of deindustrialization and globalization, respectively, focus on the increase of precarious work, tertiarization of employment, the de-standardization of employment, increasing inequality, greater labour market flexibility, weakening of the labour unions and fiscal burdens on welfare states. Although a number of scholars argue that either globalization (integrated market) or deindustrialization causes new social risks, many of the social and economic effects of these suggested new trends seem indistinguishable. For example, some argue that global trade and capital mobility are often considered as culprits of deindustrialization (Esping-Andersen, 1993).

Two concepts are often blurred because of their suggested similar consequences. However, it should be underscored that these concepts are different. Esping-Anderson (1993) explains that the post-industrial economy is the
one with a labour market which has gone through the decline of manufacturing industry, i.e. preceded with deindustrialization. From the late 1970s, industrial employment started to decline in most advanced economies. Between 1979 and 1993, the OECD countries lost an (unweighted) average 22% of their manufacturing jobs\(^3\) (Esping-Anderson, 1999). Esping-Andersen explains that during the post-war period, low skilled workers were predominantly employed in the manufacturing industry and strong mobilization among these workers through trade unions enabled them to sustain their wages. However, it is suggested that the expansion of the service sector, replacing the manufacturing sector, provided a high premium for the skilled and the educated people, pushing the low skilled workers into low value added, low wage jobs and to the bottom of the wage structure. Bonoli (2007) explains that the shift to a service-based employment structure has created labour market career profiles that are very different from that of standard male workers of the post-war time, characterized by full-time, continuous employment from an early age and with a steadily rising salary. It is suggested that those working in low skilled, low value added sectors are more exposed to low wages with small guarantees of full employment and that the emergence of new risks was generated by the gap between provisions of post-war welfare states and the needs generated from this labour market transition (Bonoli, 2007; Esping-Anderson, 1999; Pierson, 2001; Taylor-Gooby, 2004).

Technological advance is also suggested as a part of deindustrialization. It is argued that technological changes enhance the efficiency of production by reducing the demand for semi-skilled and unskilled workers in the manufacturing

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\(^3\) In fact, outputs for manufacturing did not decrease. Due to technology advancement, the productivity in manufacturing increased and so less labour force was required.
factor (Pierson, 2001; Taylor-Gooby, 2004). Therefore, technological advance tends to reduce the number of jobs and most of the jobs that are increasing are ‘lousy jobs’ in the service sector (Esping-Andersen, 1999).

The other concept, globalization, refers to “a process through which national economies are becoming more open and thus more subject to supranational economic influences and less amenable to national control” (Mishra, 1999). In his study of empirically investigating the impact of globalization, Castles (2004) refer the notion to an enhanced international competition which destructs the regulatory standard across the board. Mishra’s (1999: 15) argues that globalization undermines the ability of national governments to pursue the objectives of full employment and economic growth through reflationary policies and, consequently, it exerts a downward pressure on systems of social protection and social expenditure.

The changing family structures and the increase of women in the labour market are also suggested to create new risks. Studies demonstrate that welfare services that used to be provided by the family are now externalized either to the market or government. Bonoli (2005) argues that this transition implies that more families are at risk, especially women, as a result of attempting to reconcile work and family life. Also it is argued that the increase of non-traditional family structures, such as single headed families, poses new challenges to the welfare system as more families now deviate from the traditional male breadwinner model. Some suggest that demographic changes due to increasing life expectancy and declining fertility rate create a burden on the welfare state by contributing to the increasing cost of pensions and health care (Taylor-Gooby, 2001).
In summary, Taylor-Gooby (2004) argues that new risks emerge due to four changes. First is the increase of women in the labour market. Second is the increase of the number of elderly, which implies an increase in the costs of state pensions and health services. Third is the labour market change, which is both due to deindustrialization and globalization. The fourth change is the expansion of private welfare services resulting primarily from the attempt to constrain state spending. Similarly, Pierson (2006) highlights four causes for the emergence of new social risks. These are the change of gender roles and greater diversity of family structures, transitions in the labour market, inadequate social security coverage due to labour market changes for sections of the working population in the context of changed family structures and, lastly, the privatization of welfare provision.

2.2 LIMITATIONS IN THE “NEW RISK” LITERATURE

The literature on new risks makes a contribution by identifying the groups that are newly vulnerable or by identifying new kinds of risk. However, the literature reveals some limitations.

The first limitation is the lack of clarity regarding the concept of risk. New risks are often referred to both as cause and as outcome and much literature use the same indicators for both concepts of new social risks. The literature commences often without a clear conceptualization of social risk. It is this starting point which reveals some limitations. Discussion focuses more on the causes of
social risks without an investigation of the suggested concept ‘new risk’. Concepts are the building blocks of theory. However, the importance of conceptualization is often neglected in social science and to a certain extent the same shortcomings are found in the discussions on ‘new risks’.

Before explaining the concept of social risk, I proceed to defining risk. Just as many other concepts in the social sciences, risk is characterized or defined in various ways. However, it generally refers to a situation or an event which may or may not occur and which, if taking place, has negative or undesirable effects. An important aspect of risk which needs to be discussed is whether risk is referred to as an outcome or a cause. Risk can be referred to as the cause of an undesirable event which has a possibility to occur. At the same time it is frequently referred to as an undesirable event itself which either may or may not occur (Hansson and Ove, 2007). Beck (1992) argues that there should be a distinction between already destructive consequences and the potential element of risks and suggests that risks essentially express a future component.

Taylor-Gooby (2004) defines new social risks as “risks that people now face in the course of their lives as a result of the economic and social changes with the transition to a post-industrial society”. Here, the term risk refers to the undesirable event itself. It is an outcome of a change. However, Bonoli (2007) further elaborates new social risks with five categories such as i) reconciliation between work and family, ii) single parenthood, iii) having a frail relative, iv) possessing low or obsolete skills and v) insufficient security coverage. Here ‘risk’ is the cause of an unwanted event. His argument is that possessing low skill was not a social risk in the old welfare states, but it is a risk in the post-industrial
economies. In this context, it implies that possessing low skills is a critical income risk in post-industrial society and the unwanted event is poverty caused by possessing low or no skills. Risk refers to the cause. Also having a frail relative or single parenthood are considered risks, but which refer to the potential cause of an unwanted event.

The discussion becomes fuzzier when scholars argue that new social risks emerged because the welfare state did not adjust sufficiently to manage new kinds of social risks (Bonoli, 2007; Esping-Andersen, 1999; Hacker, 2004; Taylor-Gooby, 2004). The statement is contradictory because the term new social risk refers to both a cause and an outcome. Moreover, the literature uses the same indicators for both concepts of new social risk. For example, most scholars of new social risks argue that the kinds of risk have changed significantly and use indicators such as the rising levels of inequality, growing instability of incomes, increases of females in poverty, increased employment in services, long-term unemployment and increasing prevalence of single-parents or two-earner families etc. as both outcomes and causes of new social risks (Bonoli, 2007; Esping-Andersen, 1999; Hacker, 2004; Taylor-Gooby, 2004). However, these are the unwanted events, while the increasing prevalence of single-parents or two-earner families and increased employment in services are not by themselves undesired events, but rather causes of risks.

Furthermore, new social risks are often defined as ‘people who now face risk in the course of their lives as a result of the economic and social changes associated with the transition to a post-industrial society’ (Bonoli, 2003; Taylor-Gooby, 2004). Focus on new risks automatically brings to attention people who
experience some sorts of undesired events. This population, now more exposed to risks, has changed. For example, Huber and Stephens (2006) define new social risks as the increasing possibility for new social groups at risk of falling into poverty. They suggest that single mothers and children are a new risk group, while elderly people are regarded as an old risk group, explaining that the ‘old’ welfare state is conceptualized as transfer-heavy, oriented towards covering risks from loss of earning capacity due to old age, unemployment, sickness, and invalidity. Mothers with children do not fall into protection for these risks. The model client of the old welfare state is seen as a male blue-collar production worker who is the breadwinner for the family and the family is protected through the entitlement of the main breadwinner (Huber and Stephens, 2006). The authors explain that “there is no real modal client of the new welfare state, and it certainly is not the male breadwinner” (Huber and Stephens, 2006). Bonoli (2005) also argues that social risks are not shared by all people, but tend to be concentrated on certain vulnerable groups such as young people, working women and low skilled and little educated workers. So, the most vulnerable in society are a different group than in the past and scholars argue that the government should focus social policies on women, the young and the un- or little skilled.

However, another body of the scholarly literature focuses on the change in the characteristics of social risks rather then a change in the groups that are more exposed to social risks. Esping-Andersen (1996) argues that the post-war Western welfare states are based on an industrial mass production economy, non-inflationary demand-led growth, full employment, a male breadwinner family, high fertility rates and a standard life-course. It is suggested that the shift of the
employment structure from manufacturing to the service sector slowed down economic growth, and welfare states started to reach their limits as they matured. Here, the concept of new social risk focuses more on the change in the types of risk. It is argued that the characteristics of social risks have changed to high income inequality, unstable or precarious employment and greater stratification.

The concept of ‘new’ social risk becomes murky again. What is ‘new’ about social risks? Is it the characteristic of the risk itself that has changed or is it the population experiencing social risk that has changed? As argued earlier, some of the suggested changes in the characteristics of risk are actually socio-economic changes, but not the risk itself. Categorizing those socio-economic changes separately from the concept of risk, risk is the outcome, the undesired events themselves in this thesis. To describe changes in the characteristics or aspects of social risk, I term this change as risk shift. The concept of risk in this study is also confined to those risks that contain a characteristic of sociological regularity and risks that occur in a social context. Although risk may occur to anybody, Esping-Andersen (1999) suggests that ‘individual risks’ become ‘social risk’ when; i) individual risks lead to collective consequences, ii) the control of individual risks is beyond individuals’ capacity, iii) the society believes these risks need public consideration. A detailed explanation of the conceptualization of social risk and risk shift is presented in Chapters 4 and 5.

Secondly, the analyses of new risks are still somewhat in an embryonic stage in the sense that most studies suggest similar causes for the emergence of new risks without an analysis based on empirical evidence. In other words, studies fail to demonstrate how each social or economic change results in new risks using
empirical data. Studies present an increase of female workers in the labour market or an increase of service sector but the explanation of the relationship between the causal conditions and the outcomes are not sufficiently demonstrated to support the theory.

Thirdly, the literature on ‘new risks’ disregards the possible varieties in the kinds of risks and assumes an international convergence (Standing, 2009). Although some identified different trajectories of social policy development (Bonoli, 2007) and conducted a comparative study on how European welfare states responded differently (Taylor-Gooby, 2004), there seems to be a consensus that particularly women, the young and the little skilled face new risks. However, this study questions the convergence across nations in the characteristics of these ‘new risks’. Different institutions and institutional arrangements may have different effects on risk groups or risks. Also, most of the studies on post-industrialization and new risks focus on western welfare states excluding Asian economies. Socio-economic changes and institutional arrangements in Asia are quite distinctive when compared to Western countries.

2.3 TRANSITIONS IN THE INSTITUTIONS

Bonoli (2007) highlights three socio-economic trends such as deindustrialization, expansion of female employment and family instability to examine the social risks in different countries. Others describe ‘post-industrial’ changes as an increasing service sector, matured welfare states, aging population and radical changes in
household structures (Pierson, 2006). In most literatures, all of the socio-economic transformations are under the concept ‘post-industrial’ or ‘deindustrialization’. Taking an institutional approach, the new risk argument can be interpreted as follows: the ‘family’ and the ‘market’ are in the process of transition, while the ‘welfare state’ remains unchanged. The risk management achieved by the family or the market is no longer sufficient and since the welfare state hasn’t sufficiently adjusted itself to the new transitions, new risks occur. For example, Bonoli (2007) argues that while other countries struggle with the new social risks, the situation is less problematic in Nordic countries because the institutional arrangements are already suited to respond to the socioeconomic transitions. The argument is that since the state already plays a major role in managing risks, changes regarding families and the market do not result in substantial problems (Bonoli, 2007).

This study takes an institutional approach to understand the characteristics and causes of the risk shift (definition of risk shift is explained in Chapters 4 and 5). It takes the hypothesis that the institutional arrangements affect the trajectories and characteristics of the risk shift. This section reviews theories explaining the causes and implications of change in three institutions: the family, the welfare state and the market.

The welfare state is a unique historical construction and social policy has been a collective political action meant to address social risks (Esping-Andersen, 1999). Here I refer to the state as the government management of such risks. The family is also one of the core societal institutions which manages risks. A number of scholars argue that women’s unpaid domestic work and care remains a major
source of welfare. A breadwinner with a housewife who takes care of children and the elderly was the basis of post-war welfare state arrangements in many welfare states (Lewis, 1992). The market (labour market) is another very important institution that manages risks through employment and wages. Reciprocity and risk management are distributed among these three. Esping-Andersen (1999) argues that the ‘welfare regime’ can be defined as the combined, interdependent way in which welfare is produced and allocated between state, market, and family.

The recognition of the role of these three institutions is actually not so new (Esping-Andersen, 1990). Also, countries’ trajectories caused by different welfare state transitions have been discussed (Castles, 2004; Esping Anderson, 1990; 1993; 1999; Mishra, 1999; Pierson, 1994). Studies on new social risks also investigated how the different welfare states (mostly in Western countries) respond differently to new social risks (Bonoli, 2005; Esping-Andersen, 1999; Taylor-Gooby, 2004). This section will study the theoretical discussion of institutional transitions of family, states and the market focusing especially on East Asian economies.

2.3.1. THE FAMILY

As social welfare has never been based on just the state and market labour division (Pierson, 2001), family has always been the third institution of the tripartite division among state, market and family (Sainsbury, 1994). It has been
emphasized that women’s domestic work and care is the major source of welfare and that the post-war welfare states were heavily dependent on the informal welfare provision of women (Sainbury, 1994).

Lewis (1992), Sainsbury (1994, 1996, 1999) and Orloff (1993) contributed to recognizing families’, especially women’s role in the welfare state. All of them criticize the fact that mainstream typologies of welfare states exclude women in the conceptualization of the welfare state. Orloff (1993) stresses the importance of including the family in the state and market nexus and argues that Esping-Andersen’s typology based on decommodification and stratification (1990) should also examine women’s access to the labour market and women’s capacity of independence as variables of welfare regimes. Sainsbury (1996) argues further that to market and state arrangements, gender and family ideology play an important role.

Incorporating the critiques, Esping-Andersen (1999) introduced the concept of defamiliazation. Familialism refers to the welfare regime which assigns maximum amounts of welfare obligation to the household. De-familiazation is “a concept to capture policies that lessen individuals’ reliance on the family or maximize individuals’ command of economic resource independently of familial or conjugal reciprocities” (Esping-Andersen, 1999). He investigated the degree of defamiliazation in different regimes and explained how risks are managed by families in different regimes in combination with the state and market. However, there has been less attention paid to recognizing the changes in family and the implications of this change on welfare states. Family should not be examined as a static institution. Although they may seem slow, the changes are evident.
More families are deviating from the traditional male breadwinner model. Many features of the family have changed. An increase in working mothers, single parents, unmarried parents, increases in divorce rates and the increasing tendency of single adults and elderly to live on their own are the features that were either uncommon or to a certain extent considered immoral in the recent past (Taylor-Gooby 2004, Pierson 2006). This transition redefines the relationships between the market, state and the family in the context of providing welfare. However, changes in family structures are diverse among countries and regimes. The changes in families may either make individuals more dependent on the market or on the state. Insufficient market or state adjustment may create new social risks.

**CHANGES AND IMPLICATIONS**

Among many transitions in the family, the chapter highlights three transformations that are suggested to be taking place. First is the increase of female labour market participation and the greater incidence of working mothers. The labour market activity rates of women aged 15-64 increased from an average of 33.3% in 1960 to an average of 61.9% in the late 1990s in the high income OECD countries and it is argued that there are ‘new’ needs from families and women. For example, publicly covered childcare expanded to more than 50% in 13 of the 19 OECD countries over this period (Daly, 1998). Also the need for elderly care by either the market or the state is increasing due to population ageing and increases in female employment rates (Bonoli, 2007).
Second is the change in family structures. The shares of lone parents and divorce rates have increased. Studies suggest that lone parent households are more likely than other families to have low incomes and experience poverty and face more difficulties in reconciling work and family responsibilities. In the case of East Asia, the number of seniors who are living alone has grown. For example, 80% of people aged 65 or over lived with their children in 1980, but this has dropped to 49% in 2000 in Korea (Kim, 2004).

Third is the increase in the numbers of small sized families. Family has been the first welfare provider for individuals in the past, especially the extended family, where the old took care of the children and adult children earned money, providing for the entire multigenerational family. Other family members took care of the elderly and frail relatives and hence the resources and responsibilities were shared. However, small sized families are more likely to seek external care either in the market or from the state.

The changes explained above are also aspects of changing family in East Asia. Jones (1993) described East Asian welfare states as mainly based on traditional, Confucian, extended family structures and the state as the last resort for social security. Goodman and Peng (1996) also explain that Confucianism’s values such as filial piety and paternal benevolence have influenced East Asian welfare states. In this social context, the main income source for most old people is from their children rather than their own savings or pensions and the care for dependents is provided by family members. Therefore, private transfers from their children or other relatives’ households are an important part of the social welfare provision in these societies.
Kim (2004) highlights the importance of Confucianism in understanding the family in Asia and explains that changes in the family along with industrialization occurred in a different way when compared to western countries. She explains that while the family structure and values changed together with industrialization, the traditional family values of Confucianism were further strengthened in Asia. In other words, she argues that despite the fact that external aspects of family structure changed, the families’ ethics and values have not changed. Instead, these have further strengthened. However, when examining the empirical data, results indicate that more women are entering the labour market and also the number of elderly who are living alone has increased. Whether the core family ethics or values have changed or not, the external aspects of family surely demonstrate that it is changing.

CAUSES OF FAMILY TRANSITIONS

It is generally suggested that economic development and female labour force participation rates have a U-shaped relationship. It is suggested that female labour force participation rates decrease during the transition from an agriculture to an industrial economy because of the increase in the household income of men starting to work in the blue-collar job sector. Female economic participation rate is about 35% when the national per capita income level is around $2,500 (Mammen and Paxson, 2000). From that point onwards, Mammen and Paxson argue that female labour force participation rates start to increase gradually until
national income reaches $10,000 in general. It is also argued that during this period, women’s education levels increases and the service sector expands, the latter more likely to accept female workers compared to the manufacturing sector. Goldin (1995) explains that the increase in white collar employment and education levels is the main reasons for the increase of female labour force participation.

On the other hand, Chun et al (2004) argues that in most advanced countries, female labour force participation increases most rapidly during the period when the per capita national income increases from $10,000 to $20,000. During this economic development period, there is a shift from manufacturing to a service industry and knowledge-based or IT industries are developed. Also, the demand for education, health and welfare increases. However, he explains that the increase in demand for female labour and increased female education is not the only cause for increased female labour participation. In addition, governments’ active policies to increase female labour force participation are essential (Chun et al, 2004)

Neoclassical labour economics sees individuals’ supply of labour as an offset result between substitution effect and income effect. Chun et al (2004) explains that the working hours increase according to the real wage because the opportunity cost for not working becomes more expensive. The higher the potential market wage is, the more supply is likely to be generated. It is suggested that since the potential market wage is dependent on human capital such as education levels, women are more likely to participate in the labour market because of their higher education levels (Chun et al 2003).
However, this approach reveals problems in answering why countries have different reservation wages for raising children and explaining the different market wages of females in different countries. It fails to explain why women’s reservation wage is higher than men’s in certain countries or what reduces it. Most of all, it does not consider other sociological factors which influence women’s decisions to work. Other institutional arrangements that affect women’s decision to work are neglected.

The second demographic transition describes and explains the substantial and unprecedented progress of cohabitation, lone parenthood, childbearing outside marriage and low fertility observed in many western countries since 1960s and the parallel retreat from traditional norms of sexual restraint (Coleman, 2007). It is argued that these transitions are irreversible, universal and share common causes. Maslow (1954) developed a theory that human need starts from the material and when it is satisfied, it moves upward to the end with the spiritual and the individualist, which are more concerned with self-realization. Derived from Maslow’s theory (1954) and Inglehart’s work (1990), the theory of the second demographic transition “posits an emancipation from traditional deferential modes of behaviours once material needs and anxieties are mostly satisfied though the achievement of prosperity and, in Europe at least, the personal security offered by the welfare states which what prosperity sustains” (Coleman, 2007). In other words, individual, especially women’s, behaviours related to family are naturally changing, caused by the development of socio-economic progress in the society. The educated, secular population is able to emancipate itself from traditional rules regarding the family and individuals choose modes of life that is best suited for
their convenience. However, Coleman (2007) also explains that while numerous empirical studies on western countries support this theory, there are obstacles in interpreting the second demographic transition when examining the East Asian countries. He suggests that a flight from marriage, could be explained by the combination of two considerations. The first is that better educated women have more alternatives to marriage in the world outside the home. The second is the contrasting persistence in East Asian society of relatively traditional interpretations of marriage especially unattractive to educated women now presented with choices (Coleman, 2007).

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### 2.3.2 WELFARE STATE

The state has many functions which are not directly related to managing social risks. In order to confine the concept of the state, the definition for welfare state is presented to describe government’s function in managing social risks as followings:

- “The essence of the welfare state is government-protected minimum, standards of income, nutrition, health, housing, and education, assured to every citizen as a political right, not as charity.” (Wilensky, 1975: 1)
- “It is the institutionalization of the government responsibility for maintaining national minimum standards. In the post-war welfare state this meant primarily three types of commitment and institutions: policies of
full employment, universal services for meeting basic needs, and a variety of measures for preventing and relieving poverty.” (Mishra, 1990: 34)

- “Definitions of welfare state are generally based on the average standard of living, political democracy and the role of the state in the distribution of welfare in society […] The characteristics of the welfare state, the degree of equality or inequality in terms of the standards and conditions of living among citizens stands out as a basic variable.” (Korpi 1983: 185)

The commonality in the definitions above regarding the welfare state is that the government of welfare states has a collective responsibility for providing welfare to its citizens. In other words, the state is an institution for managing social risks collectively. Historically, states have sourced social protection against medical cost, unemployment, death of the earning spouse, retirement, disability, childbirth and poverty (Hacker, 2004). However, risk protection refers to a wider scope as Hacker (2004: 249) puts it:

“[…] not only are the largest social programs – pension, health insurance, unemployment compensation, survivors’ benefits – centrally about insuring against risks to income, but also many aspects of the welfare state that we do not typically think of as risk protection (such as child care and worker retraining) contain important insurance elements insofar that they cushion families against the income shock of major life events”.

State’s risk protection policies are those which protect individuals from risk and, in this sense, Hacker (2004: 249) also explained that ‘privatizing risk’ is “to
fragment and undermine collective insurance pools that offer reduced cost protection to higher-risk and lower-income citizens in favor of arrangements that leave individuals and families responsible for coping with social risk largely on their own”.

CHANGES: WELFARE STATE EXPANSION OR RETRENCHMENT?

Most literature in the social policy discipline focuses on state policies of risk protection rather than market’s or family’s functions in managing social risks. A large volume of literature focuses on welfare state transition, questioning whether there is a convergence or divergence and, if so, what the causes for such welfare state changes are.

Wilensky (1975) and Collier and Messick (1975) suggested that economic development and social modernization lead states to develop into a welfare state. After the so-called “Golden Age of Welfare States,” some suggested a global phenomenon of retrenchment of the welfare states using empirical data (OECD, 1981, O’Conner 2001, Offe 1982). These arguments have been challenged by scholars, such as Castles (2004), who empirically observed rising spending trends in all OECD countries between 1980 and 1998. He suggested a continuity of welfare states without crisis. Another group of scholars, though, have suggested an overall crisis and a “race to the bottom” in social spending due to globalization (Mishra, 1999). Iversen (2001) suggests that deindustrialization “has propelled much of the expansion of the welfare state since the early 1960s” by analyzing
fifteen OECD countries over a 35-year period. He argued that there is little evidence that globalization led to the retrenchment of the welfare state (Iversen, 2005).

Esping-Andersen (1994) suggests that many diagnoses of the welfare state crisis can be subsumed by three main headings. The first is that the welfare state distorts the market by eroding incentives to work, save and invest. The second diagnosis is the effect of population ageing on the welfare state. The third focuses on the impact of the new global economy, which allegedly pushes governments to be more competitive and efficient (Esping-Andersen, 1994: 2). However, he stresses the importance of distinguishing between exogenous and endogenous sources of the crisis. Stressing the role of national institutional traditions, he states that “while the post-war Western welfare states addressed fairly similar objectives, they differed both in terms of ambition and in terms of how they did it […] as these same welfare states today seek to adapt, they do so very differently” (Esping-Andersen, 1994: 6) and suggested reasons for this difference are institutional legacies, inherited system characteristics.

The endogenous causes for welfare states crisis, Esping-Andersen (1994, 1999) suggests, are “the growing disjuncture between existing social protection scheme and evolving needs and risks” (Esping-Andersen, 1994: 6). In other words, the welfare state crisis refers to the dysfunction of the welfare state in risk protection due to the growing disjuncture (Esping-Andersen, 1999). Inquiries on new risk also argue that new social risks emerged because the old welfare state did not adapt to new needs.
Most western states experienced an expansion of the welfare state after World War II. This expansion was parallel with economic growth and industrialization, which were common features of the so-called post-war ‘Golden Age’ of welfare states. In the 1950s and 1960s, the economy was growing, real income rose and income inequality declined. Workers were fully employed mostly in the industrial sector and unemployment would occur cyclically. The welfare state, argued Lewis (2001), has two key settlements. Lewis explains that the first settlement is between the capital and labour and the second is the settlement between men and women (Lewis, 2001). The male breadwinner model built into the post-war settlement assumed regular and full employment of men, who were mainly industrial workers and stable families with women taking care of most of the domestic labour. However, since the mid to late 1970s, many countries started to face transitions such as deindustrialization, the massive entry of women into the labour force, increased instability of family structures and the destandardisation of employment. In other words, the constellation of risks that individuals experience has changed due to the socioeconomic changes (Esping-Andersen, 1999; Katz, 2001).

Reinvestigating the case of the United States, Hacker (2004) argues that risks have been privatized being left to individuals or families to cope with on their own. Social policies’ effort to update them to changing social risks has failed and he terms this as the policy drift (Hackers 2004). So the mismatch actually caused not by the welfare state change but by it not changing.
This thesis primarily focuses on labour market risks. The following section examines the underlying theoretical argument and hypothesis relating to deindustrialization and the labour market risks associated with it. Existing literature suggests that the shift towards a post-industrial employment structure has created a labour market career profile that is very different from that of standard male workers in the postwar period, which was characterized by full-time, continuous employment from an early age alongside a steadily rising salary. Decreasing economic growth is one of the major changes that most OECD countries have witnessed in the past decades. Even in East Asia – a region traditionally characterized by remarkable economic growth in the post-war period – GDP growth rates have begun to slow down.

The mainstream arguments have pinned down globalization as the cause for increased unemployment and/or inequality. However, Iversen and Wren (2000) refute the argument that globalization constrains a government’s capacity to implement policies. They suggest that theories on globalization focus on the international integration of the manufacturing sector and that the non-tradable nature of the service sector is therefore neglected. For example, the low end of the wage scale is in the non-traded sector. Krugman (1996) stresses that “the decline in unskilled wages and the growing inequality of earnings between skilled and unskilled labor [...] in the US have very little to do with the growing trade links with the developing countries” (reviewed in Rowthorn and Ramaswamy 1997: 5). Iversen (2001) empirically investigated the impact of deindustrialization in
advanced welfare states and concluded that after controlling deindustrialization, globalization actually had a minor effect on the welfare state.

CAUSE OF DEINDUSTRIALIZATION

A number of causes are suggested for deindustrialisation. Firstly, the difference in productivity between the manufacturing and service sectors is suggested as the major cause. The development in the industrial period is explained by two factors (Rowthorn and Ramaswamy 1997). Firstly, the proportion of income spent - in relative terms - on food declines as per capita income rises (Engel’s law). Economic growth leads to a shift of demand from agricultural products to manufactured products and then to service products. Additionally, due to advancement in technology, the labour productivity in agriculture is said to have grown rapidly. Hence, it is argued that a decrease in labour demand in agriculture sector and an increase in supply from manufacturing has produced a large-scale shift in employment from agriculture to manufacturing.

The shift in employment from manufacturing to service is mainly caused by the difference in productivity between the two sectors led by technology advancement. For example, four musicians are required to play Vivaldi’s four string music piece now as was the case in the 19th century. The number of hairdressers required for a haircut is probably more or less the same as twenty or thirty years ago. So in order for the service sector to maintain the same level of output, it requires more labour compared to the manufacturing sector. Given the
stable relative demand for both services and manufacturers, given the increase of productivity in manufacturing, the employment will shift away from manufacturing into service sector, requiring the service sector to absorb a greater proportion of employment (Rowthorn and Ramaswamy 1997). This indicates that the difference in productivity plays an important role in explaining deindustrialization and more importantly. Empirically, most advanced economies have witnessed a continuous decline in the share of manufacturing employment in the last three decades. In the case of East Asia, it is evident that employment in the service sector has continuously increased since the 1960s, currently employing more than sixty percent of the labour force.

The second relevant development is the increase in the demand for services. Increasing incomes and improving living standards have enabled people to consume more services. The convergence theory of economic development suggests that when the average income level increases to a certain level, consumption for service increases and demand for manufacturing goods decreases relatively (Rifkin 1995). An increase in the demand for services is also related to the increasing number of women in the labour force, given that many of the domestic work previously completed by women are now externalized. The relative demand for manufacturing decreased because when average income reaches a certain point, the demand is no longer income-elastic. For example, the demand for a car does not continue to increase in correlation to an increase in income.

Thirdly, the growth of services can be promoted by government policy. Especially concerning the development of technology, governments invest in the
high value added to services rather than in manufacturing industries. The reasons for the government’s focus on the service sector are to produce more output with limited natural resources, labour and capital. For instance, the Growth Commission (2008) explained that the Rep. Korea was able to sustain economic development due to the government’s focus on the knowledge-based service sector.

Finally, Esping-Andersen (1999) argues that globalization is the culprit causing deindustrialization. It is based on the argument that due to the increase of South-North trade, most manufacturing goods are produced in the newly industrialized countries due to wage competition. However, Rowthorn and Ramaswamy (1997) conclude that North-South trade has only had a very small impact on the process of deindustrialization. Although the openness of trade may facilitate the deindustrialization process, it cannot be the main reason for the transition of the manufacturing to the service sector. Manufacturing goods may still be produced in developed countries if there is a supply of cheaper labour to lower the cost or a technology advancement, which reduces production costs (Wood 1998).

SLOWER GROWTH

Implications of deindustrialization also need to be discussed. The most obvious change following from deindustrialization is the slowdown in economic growth. Slower productivity growth is one of the most profound changes in the advanced
economies including East Asian countries. Often, deindustrialization has been identified as one of the culprits causing this declining productivity growth. Baumol, Blackman and Wolff (1989) use the terms “technologically progressive” and “technologically stagnant” to help express the nature of manufacturing and service sectors. They suggested that manufacturing is “technologically progressive”, as production in this sector can be standardized and information for production can be formalized and thereby easily replicated. However, services are “technologically stagnant” as they cannot easily be standardized for mass-production, as is the case for manufacturing. Since services are less likely to be standardized, traded and replicated, it is difficult for the service sector to generate increases in productivity (Rowthorn and Ramaswamy 1997). The slower growth in postindustrial economies is explained by the argument that the long-term average rate of growth will be determined by the activity in which productivity growth is the slowest. This theory is called “asymptotic stagnancy” (Baumol, Blackman and Wolff 1989). Rowthorn and Ramaswamy (1997) explain this theory using the example of computer industry that they identify as “asymptotically stagnant”. The overall productivity growth will asymptotically approach productivity growth in software production rather then the hardware production.

Another way to explain slow growth is by looking at the economic concept of elasticity. Due to increasing productivity, the relative price of manufacturing goods is likely to fall. However, the income elasticity of demand for manufacturing goods is low due to market saturation, while the real output of manufacturing has been relatively constant. The consumption for manufactures
does not increase according to the income increases. However, the relative price of services increases. If the demand for services is price-elastic, i.e., the demand remains high despite a rising relative price, it implies that the relative demand for both services and manufacturing goods will remain stable. When the demand for both manufacturing goods and services is stable, large differences in productivity will shift labour from the manufacturing to the service sector. Over time, more workers are involved in the service sector where productivity is lower than in manufacturing (Pierson 2001, Rowthorn and Ramaswamy 1997). Krugman (1994) also argues that in advanced economies, the overall growth of productivity will depend more on the productivity of the service sector. He further explains that the paradoxical principle that “the American economy has become supremely efficient at growing food; as a result, we are able to feed ourselves and a good part of the rest of the world while employing only 2% of the work force on the farm. [...] Industries that achieve rapid productivity growth tend to lose jobs, not gain them” (Krugman 1996: 212-13).

UNEMPLOYMENT

Due to the large job-shift from industrial or agricultural sectors to service sectors, some suggest that many of the former workers found themselves unemployed as a result. According to such arguments, those who were once involved in the former industries have had fewer opportunities to work and have therefore had to face an early exit from the labour market. The new risk literature explains that unemployment was a cyclical phenomenon during the postwar industrial period.
An increase in the long-term unemployment rate related to deindustrialization can be explained theoretically using four explanations.

The first involves the effect of decreased union power on employment security. It is suggested that it is more difficult to unionize workers in the service sector due to the wide difference in the nature of work and the size of enterprises across different activities (Rowthorn and Ramaswamy 1997). The nature of the service sector varies between high and low skills. Consequently, centralized wage bargaining is less feasible. However, while this theory is supported by empirical evidence from European countries where strong unions play an important role in the labour market, the argument is less supported when examining countries where a coordinated and strong labour union did not exist, such as in countries in East Asia.

The second explanation given involves the saturation of the market. During the ‘Golden Age’ of the welfare state, the demand for manufacturing goods was both income elastic and price elastic (Iversen 2000), because the demand for manufactured goods increased as income grew and consequently the price decreased. In other words, higher income increased the demand for manufactured goods and the increase of productivity lowered the price which further increased the demand. Furthermore, an increase of demand meant an increase of employment. This implies that productivity growth, demand and employment all have a positive link in the manufacturing industries. However, since the price-elasticity for the demand of manufactures decreased alongside the rapid increase of labour productivity, increasing output in manufacturing did no longer result in an increase in employment.
The third explanation used is that unemployment is caused by the cost disease problem in the service sector. According to Baumol’s theory (1967), the wage of one sector tends to be affected by other sectors and as the productivity of the manufacturing sector increases, the wage in the service sector increases. The productivity increases more slowly in the service sector compared to the manufacturing sector, but concurrently its wage tends to increase to the same level as in the manufacturing sector. Consequently the service sector’s labour will outprice itself. This has been dubbed the cost disease effect. For example, although the productivity of hairdressers in the year 2008 is similar to that of thirty years ago, the price of the hair cut has increased.

The cost disease of post industrialization can be filtered by institutions and three outcomes are possible. Each graph presented below indicates the supply and the demand curves in the service-based labour market. The cost disease problem can bring mass unemployment if the price of the service is not decided by the supply and demand curve in the markets but by other externalities such as minimum wage policy. Higher prices for services imply that a decrease in demand and a decrease in demand imply an increase in unemployment (Figure 2.1). In this case, because of the cost disease effect, a statutory minimum wage level could be higher than the level of wage for services decided by the supply and demand curve ($P_1$). If the price (or wage) of a service is set higher ($P_2$) than the market price ($P_1$), the demand decreases and the unemployment rate for the low skilled rises since the demand for low skilled service would be most sensitive to a higher price.
The fourth explanation suggests that unemployment is related to the nature of work in the service sector. The increase of labour productivity in manufacturing results in a surplus of labour in manufacturing. However, these workers cannot be expected to be easily absorbed by the service sector. Social care, waiting or personal service often require social or cultural skills and many of them typically represent a marketized version of domestic work (Esping-Andersen 1999). Esping-Andersen asserts that it is unlikely that a steel worker will be easily absorbed by the social care service sector. While surplus of labour from de-agriculturalization was easily absorbed by the manufacturing sector during the industrialization period, it is argued that the service sector has a limited capacity to absorb surplus workers from the manufacturing sector.
Deindustrialization is suggested to increase inequality and this can be explained theoretically in three ways. Firstly, during the postwar period, low skilled workers were predominantly employed in the manufacturing industry. Strong mobilization among these workers through trade unions enabled them to sustain their wage. However, the solidaristic wage policy, for example the Rehn-Meidner model, which used to work for the manufacturing sector by shifting the production to where the productivity was the highest, is not as effective for service sector. In a service based economy, a solidaristic wage policy leaves those with the lowest skills out of the market without creating a compensatory expansion in the overall level of employment (Iversen and Wren 1998). In other words, wage compression promoted the employment of the manufacturing sector because it kept down relative wages in highly dynamic sectors. Since these sectors faced price-elastic demand, the demand increased and it promoted employment.

However, in a service economy, wage compression has a different impact. While in the manufacturing sector, wage compression made less productive companies vanish and shifted the labour force to more competitive companies, a wage compression in the service sector implies a layoff of the low skilled and/or pushes them to the lower end of the wage spectrum. When relative wages are kept high in the least dynamic sector, demand is decreased in the lower end of the service sector as it is price-elastic to demand. Workers would have to choose between being unemployed and working with low wage.
Secondly, the stagnant productivity of the service sector hinders a wage increase. Low-skilled workers in post-industrial labour markets tend to work in a low-value added service sector where productivity is low such as in retail sale, cleaning, catering, etc. The expansion of the service sector and the replacing of the manufacturing sector provide a high premium for skilled and educated people displacing the low-skilled workers to the low value-added, low-waged jobs. However, since the service sector gives a high premium to the high skilled and the highly educated, there is a wider wage-gap between the skilled and low skilled.

Finally, inequality is also explained by the cost disease problem (Figure 2.2). Although the service is out-priced (which is influenced by the price of manufacturing goods), there could be a supply and a demand at a high price as long as there are consumers who are willing to pay the high price ($P_3$). Likewise, if there is a group of workers who are willing to supply services below the market price ($P_1$), then there is another set of supply and demand curves at a lower price ($P_2$). In other words, the same service can be supplied and consumed at various levels of prices. For example, the price of a hair cut can vary from $5 (P_2)$ to $50 (P_3)$. Where there is no wage compression policy or little intervention by the government, inequality in the service sector may be increased because the price and wage is solely decided by the market.
Service sector employment may expand as the price of services can be at a lower level (P₂) or at a higher level (P₃). As long as there is a workforce that is willing to work for a low wage, the wage of services can be further lowered. Low skilled workers may easily be trapped in low wage employment, especially in a labour market characterized by little state intervention.
Theoretically, the cost disease problem of services can be ameliorated by government intervention. The service sector can expand towards the public sector where the state can ease the cost disease problem through subsidies or service jobs provided by the government (Figure 2.3). The market price of the service is $P_1$. However, the government may provide employment in the service sector for a higher wage ($P_2$) than the wage that would have been decided by the supply and demand curve in the market.

**FIGURE 3.3 INCREASE OF PUBLIC SECTOR IN THE POST-INDUSTRIAL ECONOMY**
East Asian welfare states have challenged the welfare regime typology because of their uniqueness. Pempel (1989) describes the Asian welfare states using characteristics such as ‘sustained full employment, highly regulated internal labour markets, an industrial structure, compressed earnings, and a relatively egalitarian distribution of income, all overlaid by rather authoritarian employment practices, a conservative ‘one-party’ democracy, and ‘corporatism without labour’. The process of deindustrialization in Asia has a different dimension than those of the western post-industrial economies. Rapid economic development, deruralization, the simultaneous increase of the service sector with industrialization, the dramatic change in the family structure, expansion of welfare state systems and the demographic change are a few factors among many.

There are a number of features which are only found in East Asian economies. East Asian countries demonstrated sustained economic development that was close to seven per cent for more than twenty-five years. Regarding economic and social policy, Holiday (2000) suggests that East Asian regimes are ‘productive welfare regimes’ in which social policy is subordinated to the economic growth agenda. In other words, economic growth is regarded as the first priority in these countries and social policy is used as a strategy to facilitate economic growth (Goodman and Peng 1996). East Asian countries have a strong developmental ideology which allows them to invest towards enhancing productivity. Especially in Korea and Taiwan, the government has promoted industrialization and constrained the development of labour unions to enable efficient productivity growth (Deyo 1992). For example, the government of the
Rep. Korea supported the growth of a few large industrial companies - such as Samsung, Daewoo, Hyundai - during the industrial period.

Self-reliance and hard work was promoted and investments in welfare were solely devoted to the development of human capital, such as education, healthcare and housing (Aspalter 2006). However, while all of the countries achieved rapid economic growth, differences are found from their period of changes. Both Korea and Taiwan began the process of deindustrialization after the middle of the 1980s while in Japan, the decrease of the manufacturing sector was already evident from the late 1960s. Rowthorn and Ramaswamy (1997) explained that in East Asia, “the structure of employment in the deindustrialization phase is likely to follow similar patterns” to western post-industrial countries.

2.5 CONCLUSION

The first part of this chapter critically reviewed the literature on new risks. The literature successfully draws attention from many disciplines of social science including social policy. It introduced the consequence of various socioeconomic changes in deindustrializing welfare states. However, limitations were found such as the lack of clarity in the concept of ‘new risks’ and the omission of the discussion on the possible variation in the characteristics of risks. Most importantly, the literature paid limited attention to the impact of different institutions in different countries.
Taking an institutional approach, the second half of the chapter examined the changes in three selected institutions which were identified from the new risk literature: family, state and market. A theoretical discussion on the transitions of the three institutions, the causes and its implications were reviewed. Transitions in the labour market were discussed in detail as the thesis focuses on labour market risks. Regarding transitions in the market, the causes and implications of deindustrialization were discussed adopting Baumol’s cost disease theory. Finally, changes in the East Asian labour market were briefly introduced.
CHAPTER 3. INTRODUCTION OF THE FUZZY-SET METHOD IN COMPARATIVE SOCIAL POLICY

To have mastered 'theory' and 'method' is to have become a conscious thinker, a man at work and aware of the assumptions and implications of whatever he is about. To be mastered by 'method' or 'theory' is simply to be kept from working.”

[On intellectual Craftsmanship 1959] C. Wright Mills

3.1 INTRODUCTION

There have been many attempts to bridge the deep chasm in social science methodology between qualitative analysis, known as case-oriented analysis, and quantitative analysis, referred to as variable-oriented analysis. In search for an ideal comparative research method, the thesis also focuses on the methodology in comparative social policy. In the empirical part of the thesis, two chapters exploit the fuzzy-set comparative research method (Chapter 4 and Chapter 8) and another two chapters conduct a Comparative Historical Analysis (Chapter 6 and Chapter 7).

Prior to commencing an empirical investigation, this chapter discusses on comparative research methodology. In the first part, it studies the philosophical grounds of comparative methodology and further examines the merits of fuzzy-set qualitative comparative analysis (fs/QCA) in comparative social policy. It then reviews literature that employs fuzzy-set method in order to critically examine
fuzzy-set method’s application in comparative social policy. A more detailed review on comparative historical analysis is presented in chapters which employ CHA.

Fs/QCA is an ambitious attempt to bridge the deep chasm between qualitative analysis and quantitative analysis (Ragin 1987, Ragin 2000). It started with the introduction of the Qualitative Comparative Method (QCA) (Ragin 1987) and the later incorporation of ideas of fuzzy set logic into fuzzy-set qualitative comparative analysis (fs/QCA) (Ragin 2000). This methodological approach is still in the process of development (Ragin 2006, Smithson 2005, Verkuilen 2005) but has already been subject of much comment, some of it negative (Lieberson 2004, Seawright 2004). Nevertheless, an increasing number of scholars are employing QCA or fs/QCA, possibly without adequately understanding its rationale and properties. The purpose of this chapter is to examine the potential and functions of this relatively new method by critiquing three studies that have applied fuzzy-set methods in comparative analysis. In each case I focus on the validity of the claim by proponents of fs/QCA that they are able to combine theoretic discourse and evidence-based analysis.

Fs/QCA seeks to combine the strengths of qualitative and quantitative research. It recognizes the set theoretic nature of social science, particularly in comparative social research, and highlights the limitations of variable-oriented analysis in informing such theorizing while acknowledging that the latter provides measurement precision that case-orientated analysis often lacks. A case-oriented

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4 QCA often refers to dichotomous Boolean methods.
5 Fs/QCA describes the Fuzzy-set Qualitative Analysis. However it also applies Boolean methods as QCA does.
6 The number of published studies which applied QCA is more than 250 (Ragin, 2004a)
researcher often begins by orienting concepts within theoretical frameworks and then uses selected cases to help refine and elaborate those concepts (Ragin 2007). The fs/QCA draws on the set theoretic argument (from case-oriented analysis) to capture the nature of social science and the calibration of set membership (from variable-oriented analysis) to bolster measurement precision. This chapter does not discuss whether fs/QCA should, or even could, replace conventional approaches in social science. Instead, it examines the degrees of suitability for fs/QCA in comparative social policy that attempts i) to combine theoretical discourse and evidence analysis in ii) a comparative setting.

Against this background, it is not the intention to argue for the inherent methodological superiority of fs/QCA over other social science approaches. Rather it is presumed that there are different tools for different purposes of inquiries; imagine how futile it would be to argue the telescope’s superiority over the microscope. I shall therefore examine whether fs/QCA offers a useful tool for comparative social science. To this end the chapter is divided into three sections. First, I begin by discussing the ontological and epistemological foundations of comparative social research before asking the question, “What is the ontology and epistemology of comparative social science?” Second, I explore the fuzzy set logic and set theoretic nature of social science theory, asking, “Do methodologies in comparative social science align with the ontology and epistemology from section one?” Third, I provide a detailed introduction of the fuzzy-set method (fs/QCA) and examine its suitability in three comparative studies on welfare state:
All three of these comparative studies employ fs/QCA in an attempt to link theory discourse and evidence analysis and are representative comparative social policy studies using this technique applied to the welfare state. Thus, the third and final section of this chapter examines how fs/QCA contributes to grasping the nature of the welfare state and tracking its change over time.

3.2 ONTOLOGY AND EPISTEMOLOGY OF COMPARATIVE SOCIAL POLICY

Ontology relates to what exists in the world, the character of the world as it is; the epistemology refers to how one captures and understands this world. In social science, methodologies are based on different ontologies and epistemologies. Therefore, thinking about the underlying ontology and epistemology is a useful starting point for judging the appropriateness of a particular methodology such as fs/QCA.
Following Hall (2003a) who traced the ontological development of historical comparative politics starting with ‘institutionalism’, this section will commence with discussion of two alternative ontologies usually referred to as functionalism and conflict theory.

Functionalism views society as a unit and each institution within society as component having functions necessary for the well being of the society (Holmwood, J. 2005). Popularized by Emile Durkheim, one of the founding fathers of sociology and comparative sociology in particular, functionalism seeks to explain the presence of a phenomenon or an institution by reference to the contribution that it makes to broader society. Society is assumed as a whole to adjust to reach an optimal equilibrium such that, whenever an imbalance occurs, it responds trying to restore equilibrium by modifying the functions of existing functions or by creating new institutions out of necessity. A prominent explanation for welfare state development based on this ontology is that the welfare state developed as a necessary consequence of industrialization, modernization, or capitalism. Cutright (1965) and Wilensky (1975), for example, argue that welfare states were indispensable components of industrial societal structures.

The second ontology, conflict theory, treats society as a continuing conflict. Max Weber subscribed to this approach. He argued that all institutions, groups, or actors have interests of their own that are not necessarily consistent with the
interests of others with which they interact. It is this interactive process and its eventual outcome that determines the presence or form of institutions, social policy and other social phenomena. Compared to the functionalist approach, conflict theory approach focuses more on the level of individual behaviors. While industrialism theory based on functionalism views social policy as a necessary product of industrialization, the class relation theory, power resource theory and social democratic theory in different ways all explain the evolution of social policy in terms of social and political interactions and conflicts; the result of choice rather than necessity.

3.2.2 EPISTEMOLOGY

The central question tackled by epistemology is ‘How is it possible for us to gain knowledge of the world?’ (Hughes and Sharrock 1997:4-8). Within comparative social policy, epistemology seeks to discover how the nature of society, institutions social policy and the welfare state can be understood. To oversimplify, much of the debate is between epistemological externalism on the one hand, and epistemological internalism on the other.

Externalism postulates that the factors influencing an outcome are ‘external’ to an individual. To answer the question of how we can gain knowledge about the world, externalist researchers avoid using conditions such as culture, religion, history and psychological states to explain outcomes (Smelser 1976). Instead, they rely on empirical data that is observable and measureable, which are called
knowledge-yielding conditions. Externalistic researcher references statistical datasets as standardized expressions of social facts, instead of those generated from an individual’s mind.

By contrast, internalism focuses on internal factors acting on individuals. Researchers explain social phenomenon after attempting to grasp the motive of an individual actor. The research’s goal is to understand "what makes [the actor] do something at precisely this moment and in these circumstances" (Smelser 1976). In this sense, the context, history, and culture are fundamental both to examining and explaining human behavior. Typically, the cause of an outcome is multilayered and complex, which means that the theoretical significance of regularities between cases is found by interpreting subjective meanings. In short, an internalist comparative researcher would argue that statistical regularities in aggregated behaviors are meaningless unless reference is made to some kind of subjective explanation.

Methodologies are the means by which researchers verify, expand, and refine theories. Although it may reduce our understanding of both epistemologies by juxtaposing them with qualitative and quantitative research, we can assume that qualitative methodology is in most cases internalistic and quantitative methodology is externalistic.7

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7 Some would refer these two categories as rationalism versus empiricism, positivism versus constructivism
The matrix in Table 3.1 describes how these components of ontology and epistemology relate. In reality these dichotomies are not as clear-cut as described above, and one might argue that there are sub-ontology and sub-epistemology categories that could be discussed in the discipline of social policy. That being said, this matrix (table 3.1) provides an organizing framework for the purpose of our discussion. The dimensions that I have highlighted are among the most relevant to comparative social policy and capture many of the sub-categories.

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footnote: Methods for comparative social science are numerous. An overarching two branch could be deterministic method which assumes that the world is predictable given the right variables, methods, and measurement devices and probabilistic method which treat explanatory variables as to some specified degree such as almost always (see more on Mahoney, 2003).
### Table 3.1 Ontology and Epistemology of Comparative Social Policy

<table>
<thead>
<tr>
<th>Ontology</th>
<th>Epistemology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functionalism</strong></td>
<td><strong>Internalism</strong>&lt;br&gt;1. Examining the general functioning of institutions interpretively&lt;br&gt;(Durkheim)¹&lt;sup&gt;9&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td><strong>Externalism</strong>&lt;br&gt;2. Examining the general functioning of institutions empirically</td>
</tr>
<tr>
<td><strong>Conflict Theory</strong></td>
<td><strong>Internalism</strong>&lt;br&gt;3. Examining conflicts between entities interpretively&lt;br&gt;(Weber)</td>
</tr>
<tr>
<td></td>
<td><strong>Externalism</strong>&lt;br&gt;4. Examining conflicts between entities empirically</td>
</tr>
</tbody>
</table>

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¹ Hall (2003) states that the incipient field of comparative politics was less developed than those of sociology and economics categorizing both Durkheim and Weber together to be distinct from comparative research. However, Smelsor (1976) and Ragin and Zaret (1983) recognize Durkheim and Weber as two of the foremost comparative analysts in the history of sociology.
Some of the most prominent contributions to the comparative social policy literature are located in the shaded cells of Cell 2 or Cell 3. For example, the convergence theory of welfare state development is representative of Cell 2: Wilensky (1975) and Collier and Messick (Collier and Messick 1975) have suggested that economic development and social modernization lead states to develop into welfare states. Literatures suggesting a generality in the welfare state development as a necessity are included in this cell (Gough 1979, Offe 1984). After the so-called “Golden Age of Welfare States,” numerous authors have more recently suggested a *global* phenomenon of retrenchment of the welfare states using empirical data (OECD 1981). These arguments have been challenged by other scholars, such as Castles (2004), who empirically observed spending trends in all OECD countries from 1980 to 1998. He suggested a continuity of welfare states without crisis. Another group of scholars, though, have suggested an overall crisis and “race to the bottom” in social spending due to globalization (Mishra 1999). Yet another group of studies on the welfare state focuses on the impact of deindustrialization. Iverson (2001) suggests, based on analysis of fifteen OECD countries over a 35-year period that deindustrialization “welfare state expansion since the early 1960s has in large measure been driven by deindustrialization and the decline of the blue collar working class” (Iversen 2001: 48). Despite the varying opinions about the welfare state evident in these examples, each study shares a common feature: all of them focus on the functioning of institutions (including state, market, social policy) or entities (including workers, employers, policy makers, family), rather than interactions between actors.
Variable-oriented analysis with empirical data is both feasible and appropriate in functionalist studies since universality in causation is assumed when explaining the function of institutions. Quantitative analysis of large samples is required to test hypotheses but is less applicable to be internalistic enquires because of three limitations. First, quantitative analysis often relies on regression equations to examine the effect of one explanatory variable on the outcome variable while controlling for other variables. This hinders any interpretative approach explaining causation with a set of variables moving jointly. Second, because quantitative analysis relies heavily on measureable empirical data, deemed to be objective, it reduces the possibility of diverse interpretations. Third, methods with empirical approach can only examine the correlations between explanatory variables and observed variables, which do not align with the set theoretic nature of most of the verbal statements of internalism – an idea I will develop in the next section.

Whereas Cell 2 relies on a functionalist ontology and externalist epistemology, Cell 3 combines an ontology that focuses on the interactions between actors with the epistemology of internalism. These researchers are more likely to draw on theories that prioritize interactions between actors, paying particular attention to context, issues of process, timing, and the historical trajectories of the selected cases. In fact, Amenta (2003) states that one of the reasons why there has been such progress in comparative historical analysis is because of the broad conceptual agreement on the domain of social policy that was deemed worth developing and appraising but disagreement on the theoretical argument to explain social policy.
Skocpol (1979) used within-case chronologies as a basis for making causal inferences about the collective motivations for revolution in four selected countries. Pierson (1994) focused on voter behaviors in his refutation of theories of welfare state retrenchment. Drawing on rational choice theory, he focused on the constituencies of welfare programs and the dynamic interplay between policy makers. Influential literatures about path dependence (Mahoney 2000, Pierson 2000a, Pierson 2000b) show how interactions between actors at the beginning of an institution’s life shape subsequent development of social policy. In contrast to externalistic epistemology, internalistic epistemology allows more degrees of freedom in exploring explanatory variables derived from theoretic discourse. For example, Skocpol (1992) reinterpreted the variables and cases that were commonly used in social policy literatures. She claimed that, whereas the United States was commonly referred to as a laggard welfare state in many quantitative analyses, the benefits given to Civil War veterans were in fact more generous than the European old age program and disability program (reviews in Amenta 2003). To account for this difference, Skocpol analyzed the interaction between the federal and state governments in United States in shaping the process of policy change.

Much feminist social policy is also located in Cell 3 (Sainsbury 1996). Feminist scholars criticized the typology of ‘three welfare states’ (Esping-Andersen 1990) which neglected the role of females in proving welfare services. The interaction between male bread winner and female housewives was not displayed in the commonly used empirical data of social spending distribution (Lewis 1992).
Comparative historical analyses are fit best within an internalistic epistemology for four reasons. First, interactions do not lend themselves to easy measurement and may not even be directly observable. Secondly, the researcher begins by orienting ideas and broad concepts and then uses empirical cases to help refine and elaborate concepts. In other words, cases are carefully and purposively selected based on researcher’s detailed knowledge and thus offend against the structures of quantitative analysts that seek to avoid selection bias through random sampling and large sample sizes. Thirdly, because of a limited number of cases, comparative historical analyses are less likely to rely on empirically determined correlations between variables. Externalism, with its large number of cases, tends to blur the heterogeneities in cases when researchers intend to examine the different interactions among the societies. Cases are dismantled by different variables. Fourthly, externalistic research typically seeks to test specific hypotheses derived or the test competing theories rather than engaging with multiple theories as is more common with internalistic research concerned, for example, to understand interactions between policy actors.

Some prominent comparative studies may also be found outside the two cells above and are quite often difficult to categorize. For example, in Esping-Andersen’s (1990) study proposing that welfare states be categorised into three different regimes, it is suggested that the development of capitalism expanded the middle class (functionalism) and being supported by the expanded new class, the social democratic party played an important role in the development of welfare state (conflict theory). The epistemology of internalism and externalism are both found in his study. Moreover, concepts and theories of decommodification and
stratification across three different regimes were derived and supported through qualitative analysis but reinforced by regressions of empirical data. Korpi’s study on the social citizenship (Korpi 1989) also incorporated the power resource approach with an externalistic method.\(^\text{10}\)

There is no presumption in the use of the above matrix that comparative studies are only found in Cells 2 or 3. However, it is not surprising to find that most studies in Cell 2 used quantitative analysis while studies in Cell 3 mostly applied qualitative analysis. Ragin explains that case-study researchers aim to show “how different aspects mutually constitute the whole case and compare and contrast the different wholes” while variable oriented studies “constructs a generic representation based on patterns observed across many cases”(Ragin, 2000:23). These two methodologies can be complementary; fs/QCA attempts to leverage the complementarities to further develop comparative enquiries in social policy.

### 3.3 UNDERSTANDING THE FUZZY-SET METHODS

Comparative research in social science generally refers to studies that address the experiences of two or more countries (Lijphart 1971), but it can also refer to studies on one-country that “situate empirical questions in a comparative context or make significant macro-level comparisons in causal argumentations” (Amenta 2003). Beginning in the 1960s, however, comparative social research has been shifting to a large-N variable-oriented analysis and this approach has continued to

\(^{10}\) If forced, it could be placed in cell 4.
gain momentum in recent years (Hall 2003). This imbalance in methods has not
gone unnoticed (Hall 2003, Mahoney 2003, Mahoney, Rueschemeyer 2003, Ragin
1991). Although historical comparative analysis has also achieved impressive
development (reviews in Mahoney and Rueschemeyer 2003, Amenta 2003), it
was still recognized that the ontology of historical comparative analysis advanced
the methodology (Hall 2003) and so historical comparative researcher perceived
difficulties in engaging theories with data by applying conventional methods.
Comparative social research based on a functionalist ontology focuses more on
outcomes (the effects of causes\textsuperscript{11}) while studies adopting a conflict theory
ontology focus more on causes (the causes of effects). The ideal comparative
research model is likely to be one where there is a balance between an emphasis
on theory and one on empirical data, between an emphasis on cases and one on
variables and one which balances subjectivity and objectivity. This chapter
investigates whether fuzzy-set qualitative analysis might lead to a model for
comparative research that creatively blurs these traditional divides.

\textbf{3.3.1 FUZZY SET THEORY AND FC/QCA}

Fuzzy-set theory has many unique features that differ from variable- and case-
oriented analysis. First, compared to quantitative analysis, more degrees of
freedom are given to the researcher “to examine casual complexities under the

\textsuperscript{11} Comparison between the ‘effect of causes’ and ‘causes of the effect’ was discussed by
Katz, Hau and Mahoney (2005) to explain the different purposes of regression and fuzzy-
set analysis.
rubric of multiple conjunctural causations” (Ragin 2000). The fundamental logic of case-oriented comparative analysis rests on examining cases configurationally. Since case-oriented analysis assumes “different parts of the whole are understood in relation to one another and in terms of the total picture or package that they form” (Ragin, 2000:68), researchers focus on understanding context. To make sense of the heterogeneity within the case in an encompassing manner, researchers engage with diverse theories and investigate multiple aspects of the cases. Likewise, rather than estimating the effect of one cause on the dependent variable holding the other independent variables constant, fs/QCA develops a joint causal system fully allowing for the interaction effects among each characteristic of case. For example, instead of examining the independent effect of the presence of labor union and the presence of social democratic government on the development of the welfare states, fuzzy-set theory creates four causal configurative conditions and investigates their relationships with welfare state development: $X_1=$Presence of labour union and the presence of social democratic party ($L*S$)$^{12}$, $X_2=$Presence of labour union and the absence of social democratic party ($L*s$), $X_3=$Absence of labour union and the presence of social democratic party ($l*S$), $X_4=$ Absence of labour union and the absence of social democratic party ($l*s$). When $K$ is the number of attributes, $2^k$ configurations are possible.

The equation can be developed based on the qualitative analysis on cases applying “logical and” and “logical or.” “Logical and (*)” represents a compound set when two or more sets are combined. The “logical or (+)” refers to the union of sets and it is represented by an addition sign in the equation. For example,
12 cases are selected and eight of them are developed welfare states. Those eight cases are analyzed and the researcher finds that conditions in each case are either L*S or L*s or l*S but not l*s. This implies that the conditions for the development of welfare state can be three different configurations.

\[
\text{Welfare state development (W)} = L*S + L*s + l*S \quad (1)
\]

However, applying a Boolean approach, this can be further simplified into the equation below, which implies that “the presence of labor unions OR the presence of a social democratic party” (L + S) can create the condition for welfare state development.

\[
W = L*S + L*s + L*S + l*S = L (S+s) + S (L+l) = L + S \quad (2)
\]

Secondly, the fs/QCA approach allows more emphasis to be placed on cases rather than variables. In conventional variable orientated analyses, the historical and contextual nuances of each case is often veiled due to the pooling a large number of cases that causes individual cases to lose their uniqueness. The heterogeneity within the cases is easily neglected. The advantage of fs/QCA is

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13 The conditions for welfare state development are ‘Presence of labour union AND the presence of social democratic party (L*S)’ OR ‘Presence of labour union AND the absence of social democratic party (L*s)’ OR ‘Absence of labour union and the presence of social democratic party (l*S)’.

14 In set theory, L*S = L*S + L*S. So substituting yields \( W = (L*S + L*S) + L*s + l*S \) and re-arranging yields \( W = (L*S + L*s) + (L*S + l*S) \). Therefore factoring yields \( W = L(S + s) + S(L + l) \) and lastly simplifying yields \( W = L + S \).
that each case is considered as a whole and not disaggregated into variables. So, in the above example, the case ‘Sweden’ as a whole will be given a membership score for both L and L*S.

Thirdly, fs/QCA allows for degree of flexibility in terms of the way a case is characterized. Cases are assigned to membership groups (sets) in accord with particular characteristics of interest, for example, the presence of trade unions or a social democratic party. However, whereas in simple set theory a case would definitively be assigned to one set or another, fuzzy logic allows for degrees of membership. Set membership is determined by the researcher who defines qualitative breakpoints of 1 (fully in) and 0 (fully out) with a scaling of membership scores between 0 and 1 to allow for partial membership. In short, fs/QCA is “a fine-grained, continuous measure that has been carefully calibrated using substantive and theoretical knowledge relevant to set membership” (Ragin, 2000:7). Calibration\textsuperscript{15} allows qualitative concepts to be compared quantitatively. For example, whereas it might be comparatively straightforward to compare countries in terms of the generosity of their welfare provision, whether a country should be labeled advanced or not is likely to be less self-evident, a matter of degree. The method of calibration in fs/QCA, and hence the determination of the membership of sets can vary across concepts, reflecting the conceptual, theoretical, historical, and contextual considerations that the researcher prioritizes (Vis 2007). This feature of fs/QCA has two benefits: first, it appropriately reflects

\footnote{Calibration in fuzzy-set method is the membership scoring scheme. It is a standard developed by the researcher which makes measurement directly interpretable. In natural science for example, a temperature of 20 degree Celsius is interpretable because it is situated in between 0 degrees and 100 degrees (Ragin 2007).}
the normal process of qualitative comparative study but, secondly, the careful calibration creates the potential for quantitative comparison.

Fourthly, fs/QCA echoes the set theoretic nature of social science and thereby facilitates a close correspondence between theory and data analysis (Ragin, 2000: 4). Many theory based statements in comparative social research involve set theoretic relationships. For example, in the theoretic statement “Economic development is essential to the development of advanced welfare state,” the development of advanced welfare states is the subset of the presence of economic development. In other words, economic development is a necessary condition for an advanced welfare state. Ragin suggests that “set relations are the building blocks of verbal statements” and because these kinds of set relationship described in theories are usually transformed into “hypotheses about correlations between variables oriented toward the evaluation of the net effects of causal variables,” quantitative analysis distances itself from theoretical discourse (Ragin 2007). To examine causality with set theory, the membership values of the characteristic or condition postulated to be a cause ($X_i$) need to be calculated as do the membership values of the outcome characteristic ($Y_i$) (Ragin 2000). A condition is necessary when its value is consistently higher than the outcome ($Y_i \leq X_i$) and a condition is sufficient when its value is consistently lower than the outcome ($X_i \leq Y_i$).

In order to assess the necessity or the sufficiency of the conditions, referring to the Equation 2 above, researchers should calculate each case’s membership score for conditions L (strong labour unions) and S (social democratic party). If membership scores for L and S are consistently lower then the membership score
of W, then the conditions are sufficient. For example, eight countries that are considered welfare states will have different membership scores for L or S. If Denmark scores 0.7 for L, 0.5 for S and 0.8 for W, the maximum of causal expression is 0.7 and, since this is lower than the outcome score 0.8, the Denmark case supports the argument that (L+S) is a sufficient condition for welfare state development. If all of the eight countries consistently show the same result ($X_i \leq Y_i$), then one can conclude that the condition (L+S) is sufficient for welfare state development.

Thus, the basic steps for comparative research using fuzzy-set method can be summarized in five points.

1. Attributes for the ideal type or potential causal conditions for the outcome are selected based on qualitative analysis of the cases and existing theoretical knowledge.
2. Possible configurative conditions are presented ($2^k$), which can be simplified by applying Boolean approach.
3. A scoring scheme (calibration) is developed based on the substantive knowledge of the cases and related theories. Qualitative break points are then established.
4. Each case’s membership score is computed for each condition or configurative conditions.
5. Membership scores are calculated for both causal conditions and the outcome to assess the necessity and/or sufficiency of the conditions.
The fuzzy-set qualitative methodology obviates the need for certain of the assumptions associated with quantitative and qualitative methodologies while also addressing certain of their limitations. One of the most prominent restrictions of quantitative analysis is the limited lack of capacity to engage directly with theoretical discourse with data analysis. Since variable-oriented analysis relies on measurable, empirical data, it reduces the possibility of diverse interpretations and too much complexity. Put another way: quantitative methodologies struggle to accommodate a functionalist ontology with an internalistic epistemology. Moreover, since much quantitative analysis is used to examine associations between variables, it cannot capture the set theoretic nature in most of the verbal statements drawn from theories as explained above. However, the configurational strategy, qualitative membership scoring and use of set-theory combined in fs/QCA enable researchers to explore more theoretical possibilities. fs/QCA also enables researchers to select cases for comparison in ways not permissible in variable-oriented analysis that assumes homogeneity of cases, and hence to benefit from more degrees of freedom.
Furthermore, fs/QCA can address certain of the limitations that confront interactionist comparative researchers applying externalistic epistemology is that their data, most notably the fact that many of the concepts they employ are immeasurable or subjective thereby restricting methodologies to qualitative ones. However, the calibration and fuzzy set logic inherent in fs/QCA facilitates the quantification of qualitative data and can increase its objectivity. Since the aim of research interactionist comparative research is often to examine the diversity and heterogeneity within or among the cases, the aforementioned feature of Fs/QCA that it can embrace the careful selection of cases based on the knowledge of the researchers, rather viewing selection as adding bias, again emerges as a strength of the approach.

In summary, the unique features of fs/QCA make it a bridge for comparative social researchers between Cell 1 and Cell 2, and between Cell 3 and Cell 4 (Table 3.1). The Fs/QCA is perhaps most suited for comparative studies in “fuzzy” grey zones indicated in figure 3.1 where qualitative and quantitative

<table>
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<tr>
<th>Epistemology</th>
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<td><strong>Ontology</strong></td>
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<td><strong>Functionalism</strong></td>
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<td><strong>Conflict Theory</strong></td>
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FIGURE 3.1 APPLICATION OF THE FS/QCA IN COMPARATIVE SOCIAL SCIENCE
methods are not in themselves wholly adequate under either functionalist or conflict theory ontology.

3.4 CRITIQUES ON THE SELECTED STUDIES

Among a number of comparative studies that have applied fs/QCA (Braumoeller 2003, Castles 2001, Castles 2002, Ebbinghaus and Visser 1999, Hicks 1999, Koenig-Archibugi 2004, Kvist 1999, Pennings 2003, Schneider 2006, Stryker, Eliason 2003, Veugelers 2005, Katz and Vom Hau and Mahoney 2005) three studies are selected to examine and illustrate to applicability fs/QCA’s. All three studies focus on the topic of welfare state reform and show how fs/QCA can contribute to grasping the nature of the welfare state and its change within a comparative perspective.

3.4.1 WELFARE REFORM IN THE NORDIC COUNTRIES IN THE 1990S: USING FUZZY-SET THEORY TO ASSESS CONFORMITY TO IDEAL TYPE (KVIST 1999)

The purpose of Kvist’s study is clear: To inquire into the “actuality of change through an empirical investigation of welfare reform in the Nordic counties in the 1990s.” After pinpointing the limitation in the literatures of quantitative and qualitative analysis in comparative welfare state research, Kvist concludes that neither method has been successful in accessing the recent change of welfare states and instead exploits fs/QCA to examine difference in the kind of change by
multiple configuration and difference in degree by through the concept of the partial membership of multiple sets. He “evaluates cases relative to their membership of specified ideal type” and investigates the changes in the four Nordic welfare states in 1990s (Kvist 1999).

Kvist’s conceptualization of the welfare state engages various theories, which are qualitative in nature, but by applying the fs/QCA succeeds a quantitative comparison. He identifies the main features of Nordic welfare states as “comprehensiveness, full employment, equality, universality, high-quality benefits and generous benefits.” and argues that these various aspects interact and reinforce each other and “only together do they constitute the whole that we may describe as Nordic welfare model.” The strength of fs/QCA and, hence of the study, is that it can engage with this conceptualization of the Nordic welfare state to facilitate the ordering and interpretation of empirical data. Kvist accordingly examines three welfare policy areas - Child and Family Support, Unemployment Measures, and Welfare for Elderly People – in a holistic view across four Nordic countries.

Drawing on Weber’s (1949) original definition that an ideal type is “an analytical construct that serves as a yardstick for social researchers to determine the extent to which real empirical phenomena are similar and they are different from some predefined measures” (Kvist 1999:5), Kvist first constructs the ideal type Nordic welfare state. In so doing he undertakes an extensive and thorough review of relevant theories and complements this with in-depth knowledge of the Nordic countries, successfully underpinning his specification of a Nordic ideal type. Secondly, for each of the three policy areas, Kvist engages theories on
various aspects of the Nordic welfare state and assigns a membership score to each country for each attribute of each policy. For example, for the family policy area, he considers the (1) generosity of cash benefits (G), (2) universality of child care (U), and (3) quality of child care (Q). Taking generosity to be “the impact of family allowance on family income after tax,” Kvist establishes thresholds such that an increase in income of 6 percent or more defines a country as “fully in” the Nordic set while an increase of 1.4 percent or less places it “fully out.” Both breakpoints are essentially qualitative ones. For Denmark in 1996/1997\(^\text{16}\) he allocates a membership score of 0.65 in terms of the ‘generosity of cash benefits (G)’ for ‘family support’.

Since Kvist views each policy area holistically, the final membership score for ‘family support’ is calculated according to the minimum principle\(^\text{17}\) in fuzzy-set theory. That means that the degree each country’s membership in the ideal “Nordic model of child and family” reflects all three attributes for each year. Kvist then repeats this method for the other two policy areas: unemployment measures and welfare for people elderly. Finally, each country’s total membership score is calculated with respect to the three constituent policy areas, again using the minimum principle (C*U*O) and compared. As the analysis is completed across three different time periods, Kvist is able to track the degree of change in each policy area and the overall change in the welfare state.


\(^{17}\) For example, if the country (case)’s membership score for G is 0.8, 0.2 for U and 0.4 for Q. By the minimum principle, the country’s membership score for ‘Nordic model of child and family’=G*U*Q becomes 0.2, the lowest score on the three attributes.
Kvist’s study exploits fs/QCA to engage theoretical discourse with data analysis through careful calibration of an otherwise qualitative study. He suggests that the consistently high membership scores in each country demonstrate that none of the countries have abandoned the “Nordic welfare model” despite the recent social, economic and political developments which have raised a question over the sustainability of this model. However, study also suggests that certain welfare areas and specific programmes with a high membership score are most vulnerable to cut-backs while those with low memberships have tended to expand. Applying fs/QCA, multiple attributes of the welfare state were viewed as joint conditions, which provided a more holistic understanding of the nature of the Nordic model. Furthermore, by examining the partial membership scores for (1) three attributes of each policy area, (2) each policy area as whole, and (3) each country in total, diversity within the Nordic welfare states was more clearly conveyed than in existing literature that has used conventional methods. This study demonstrates an appropriate application of fs/QCA and highlights its ability to explain the concept as a configuration and examine the diversity both within and among cases. However, it is rather a simple application of fs/QCA since it does not examine any causal relationships using more sophisticated set-theoretic principles.
Vis’s study is similar to that of Kvist in that it aims to investigate the reality of welfare state change, rather than to examine causal conditions. However, Vis is specifically interested in discovering the nature of change distinguishing between two competing formulations found in the literature. The first, dominant in the “mainstream” literature, suggests a general resilience of welfare states with changes that do occur being specific to the type of regime. The second asserts a generalized movement affecting all types of welfare system from the Keynesian welfare state (KWS) to the Schumpeterian workfare regime (SWR) that prioritizes “the stimulation of innovation and flexibility” and in which social policy is subordinated to improvements the competitiveness. In pursuit of her objective, Vis conceptualizes two ideal types of welfare system, “welfare” and “workfare” states defined in terms of their attachment to three ‘common denominator principles’: (1) the obligation to work; (2) the objective of maximal labour participation; and (3) the provision of minimal income protection and examines 16 advanced industrial democracies from 1985 to 2002.

Vis’s research design has both strengths and weaknesses. She further refines the ideal types distinguishing “generous workfare” from “lean workfare” and between “liberal welfare,” “conservative welfare,” and “social democratic welfare.” These five types are defined with respect to three attributes, ‘Activation(A)’, ‘Generosity(G)’ and ‘Protection(P)’, such that, for example, Generous workfare =A*G*p (‘Strong Activation’ and ‘high generosity’ and
‘weak protection’)\textsuperscript{18}. Since combinations of the three attributes would allow for eight possible configurations (namely 2 to the power of 3, 2\textsuperscript{3}), Vis arbitrarily and without discussion defines three theoretical sets as empty. Indeed, Vis does not provide a thorough discussion of the theoretical basis for the various configurations that have to be taken on trust but can be contested. For example, one could argue that the nature of the social democratic welfare is not $A(\text{high activation})\times G(\text{high generosity})\times P(\text{high protection})\textsuperscript{19}$ as she suggests, but rather, on account of recent discussions on the welfare state model of ‘flexicurity’ in Nordic welfare states, $A(\text{high activation})\times G(\text{high generosity})\times p(\text{low protection})$.

However, in her next step, which establishes the membership scoring scheme for each set, Vis well incorporates theory discourse and sets qualitative breakpoints. For example, for the set ‘Generosity’, an index of replacement rates of unemployment insurance (UI) benefits and sick pay is measured as $[(\text{UI replacement rate } \times 2) + \text{ sick pay rate divided by } 3]$. Based on a qualitative analysis on the cases, she sets below 20\% as the ‘fully out’ breakpoint and 90\% or higher as the ‘fully in’ breakpoint. Since all five ideal types have a certain configuration (joint conditions), case membership score of each ideal type can be calculated by means of negation and minimum principles.\textsuperscript{20} Then, the scores for each five ideal types were calculated for three different years (1985, 1995, and 2002) so the diversity in partially belonging to each ideal type is revealed among different

\textsuperscript{18} The rest are: Lean workfare = $A\times g\times p$, Liberal welfare = $a\times g\times p$, Conservative welfare = $a\times G\times P$, Social democratic welfare = $A\times G\times P$

\textsuperscript{19} Vis suggests that ‘the employment protection is measured by an index of the strictness of employment legislation for temporary as well as for regular employment’.

\textsuperscript{20} For example, if the country (case)’s membership score for $A$ is 0.8, 0.2 for $G$ and 0.4 for $P$, by negation principle, membership score for $p$ is 0.6. Then by the minimum principle, the country’s membership score for Generous workfare = $A\times G\times p$ becomes 0.2.
countries for different years. Based on her findings, she concludes that in all countries, except Ireland, the majority of countries confirm the hypothesis of “an absence of radical change and the presence of regime-specific change.”

The strength of this study is that it advances knowledge about the nature of welfare state retrenchment by being able, though the application of fs/QCA, simultaneously to consider the multiple attributes of welfare systems rather than to treat each one independently. Moreover, by applying fs/QCA, Vis was able to assess both quantitative change and qualitative change. For example, in 1985 the membership score for New Zealand with respect to the “lean workfare” type was high (0.75) but by 1995, had dropped to 0.33, while that in relation to the “liberal welfare” type had risen to 0.67 from 0.19. Vis interprets these changes as constituting a shift in New Zealand from a lean workfare state to a liberal welfare state. Moreover, the shift was sustained through to at least 2002 since, although the membership score in that year had fallen back to 0.60, this, Vis determined, was still adequate for New Zealand to count as a liberal welfare state. Changes in the membership (if there were any) throughout time are traceable which is a common asset of qualitative comparative analysis. Finally, this study demonstrates the capacity of fs/QCA to handle a substantial number of cases, certainly many more than the conventional two-case comparison (Pierson 1994).
Pennings’ study of welfare reform is ambitious in that he endeavors to address many research issues with reference to 21 OECD countries over the period 1980 to 1998. He sets out to establish (1) whether the existence, nature and extent of cuts and retrenchment varies across welfare programs, the causal conditions for (2) high social expenditure, (3) cutbacks in general, and (4) cutbacks in different time periods and finally, (5) whether either generous or residual welfare states constitute a necessary and/or sufficient condition for economic prosperity.

He clearly states his conceptualization of the welfare state and his rationale for applying fs/QCA. Pennings argues that “welfare states have been confronted with similar problems which urged governments to introduce reforms in order to cope with the same problems.” (Pennings 2005:320). Due to similarity of the problems, states have adopted similar social policies, which make welfare states less heterogeneous. However, in opposition to conventional welfare state discourse since the introduction of Esping-Andersen’s (1990) introduction of the notion of regime types, Pennings believes it is important to conceptualize welfare states as differing in degree rather than in kind. He argues that welfare state regime typologies emphasize stability over change and state dependency rather than responsiveness whereas in reality certain countries may drift in and out of regime types. Therefore, Pennings’ conceptualizes welfare states as “sets” of welfare programs with imprecise boundaries that allow for a range of membership values from “fully out (a fully stringent one)” to “fully in (an ideally generous one)” according to which membership may vary over time.
Clearly Pennings’ conceptualization of the welfare state is highly congruent with fs/QCA. However, this study has its shortcomings, mainly revolving around the method of calibration and of assigning membership scores to each case. Eight categories of social expenditure are taken as indicators of welfare state membership with data extracted from the SOCX and expenditures grouped into three programme areas: namely, ‘sickness’, ‘family’ and ‘elderly’. Pennings assigns membership scores for each area of social expenditure for each country by calculating the Z-score of the expenditure and multiplying it by the share of spending as a percentage of GDP. He uses a similar method to generate membership scores for other sets relating to ‘social conditions’, ‘political conditions’, ‘economic conditions’, ‘demographic conditions’, ‘economic prosperity’ and ‘income equality’. However, Z-scores refer to the difference between the value of the variable and the mean of its probability distribution (Agresti & Finlay, 1997). Their use requires the probability distribution of samples to normal and values of the variables to be normally distributed around the mean value, assumptions that underpin most variable-oriented analysis.

Pennings’s approach to defining set membership arguably smacks too much of quantitative analysis, being empirically rather than theoretically driven. Most proponents of fs/QCA would argue that one of its great strengths is that it permits researchers to prioritize their qualitative knowledge and understanding of cases and concepts in calibrating set membership. Notions of full membership, full non-membership and cross-over points are inherently qualitative and ideally drawn

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21 OECD’s Social Expenditure Database.
directly from theory. This is not the case in Pennings’s study which might therefore be criticized for its lack of engagement with theory.

The relative lack of theorization is also evident in the conceptualization and operationalization of causality. For example, one of the possible causal conditions for welfare reduction, “economic conditions”, is indicated by only “the sum of imports and exports as a percentage of GDP.” However, many analysts would argue that welfare state spending has been much more influenced by processes of deindustrialization and the transition from a manufacturing to a service orientated economy than market openness and trade penetration (Iversen 2001, Pierson 2001). Since fs/QCA enables researchers to calibrate qualitative data while actively engaging with theoretical discourse, the different aspects of “economic condition” could, and arguably ought to, have been joined together to establish a configuration condition.

Pennings’s study demonstrates that fs/QCA can successfully be utilized to investigate causality while, perhaps inevitably, also revealing scope for further refinement. He adopts a two stage approach to investigate the causes in social expenditure. First, he suggests possible conditions, defined as conjunctures of two or more causes that are likely to be associated with high levels of social expenditure. He finds that different conditions turn out to be sufficient at three varying time periods (1980-1985, 1986-1991 and 1992-1998). For example, in the period of 1992-1998, the conjunct conditions are as follows.  

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22 This is done by the Boolean approach. QCA also applies this approach (see more in Ragin’s 1987 and 2000).
23 See table 2 of his study for more details.
(High) Social expenditure = Openness*Left + Openness*Elderly + left*elderly

As a second stage, Pennings substitutes “cutbacks” in expenditure for expenditure levels as the dependent variable using, as a measure, simply the difference between the total social expenditure score of the period of 1992-1998 and the total score of 1980-1985. He relates this to total social expenditures in 1980-1985, 1986-1991, and 1992-1998 taken as possible causal conditions and finds that cutbacks were highest when expenditure was high during the first two periods but low during the last period, which is mathematically obvious. However, he concludes that cutbacks were most likely in those countries with high expenditure during the 1980s, which he refers to as the highly expanded Nordic welfare states.

Pennings’s causal analysis is weakened by his reliance on a measure of total expenditure despite previously arguing that cuts in expenditure varied across the categories of “sickness,” “family,” and “elderly”. Also, when exploring exceptions to the conjunct conditions for high expenditure identified in the first part of his analysis, he focused exclusively on the period 1992-1998 and only calculated the sufficiency of “Openness (Left+Elderly).” Based on this restricted analysis, which revealed that some countries are in the exceptional group because

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24 ‘Openness’ is an indicator for ‘Economic conditions’ which he conceptualizes as ‘the sum of imports and exports as the percentage of GDP’. ‘Left’ represents ‘Political Conditions’ which indicated by ‘the Color of Party Government according to the Schmidt-index(Schmidt,1992). ‘Elderly’ refers to ‘Demographic conditions’ which is the percentage of people older than 65. Small letters indicate absence which Pennings sets as those below the membership score 0.5.
they had a social expenditure score lower than the sufficiency condition\textsuperscript{25}, Pennings nevertheless offers the general interpretation that the “Anglo-Saxon world cannot be explained by the four conditions” and that expenditure in Portugal lagged behind.

However, his study is praiseworthy since unlike the other two essentially descriptive studies, Pennings offers a glimpse of the potential of fs/QCA to exploit international comparisons to test causal hypotheses. He uses various techniques of fs/QCA such as benchmark of .80 which incorporates probability concepts, setting .5 to define the absence and presence of certain attributes, adjustment score of .17 to interpret the sufficiency of conditions and so forth.

3.5 CONCLUSION

Fs/QCA is an ambitious methodology that attempts to catch the strengths of both qualitative and quantitative analysis. When executed properly, it acts as a bridge between the two methodological approaches. Nonetheless, recognizing fs/QCA’s unique functions and applying them under the appropriate circumstances is critical. The above discussion of the ontology and the epistemology is not only intended to demonstrate when and where fs/QCA can be useful in comparative analysis of this thesis but also it is to invite scholars to ruminate on the appropriateness of fs/QCA for their research before applying it.

\textsuperscript{25} For a condition to sufficient, outcome score needs to be higher than the condition score.
Fs/QCA does not “seek to infer population properties from a sample nor does it seek to make casual inference” by examining correlations (Ragin 2007); its value is found in exploring cases configurationally and interpretatively. It advances quantitative comparative analysis by interpreting attributes as a configuration. By applying fuzzy set logic and the principle of calibration, it advances qualitative analysis by permitting theoretically-informed concepts to be quantified.

This chapter examined how fs/QCA can be applied in inquiries of comparative social policy. The studies of Vis and Kvist’s both illustrate how welfare systems can be conceptualized in ways that do justice to the complexity of reality and how change in complex institutions can be traced over lengthy periods of time using moderately large numbers of cases. The Pennings study further demonstrates that fs/QCA can be applied to examine causation with a set theoretic approach and hence to begin to give real explanatory power to comparative social policy. Many other aspects in each study exemplify how inherently qualitative and quantitative concepts and characteristics can be handled and combined in complementary and cumulative ways within a single methodological framework, fs/QCA.

Fs/QCA has advantages over other methods of comparative study when researchers are receptive to diverse theories and willing to countenance and exploit various interpretations of the phenomena of interest. It is of particular value to studies which aim to view cases holistically and to those interested in complex causal chains. It facilitates the grounding of scientific measures on substantive and theoretical knowledge and, through the calibration and membership scoring features, makes measurable the inherently immeasurable,
blending qualitative and quantitative approaches. However, the fs/QCA method is not suitable for all social science inquiries and, while John Locke was astute in recognizing that scientific knowledge is inherently successful because it possessed a method (Huges and Sharrock 1997), he would no doubt also have recognized that comparative social policy is likely to continue to rely on many methods. Researchers require a method to suit their purpose of inquiry and have the knowledge of when and how to use it most effectively. Fs/QCA may become the tool of choice for comparative researchers interested in exploring questions that are veiled in the fuzzy zone between qualitative and quantitative inquiries.

Acknowledging the method’s advantages in comparative research method, the thesis employs fuzzy-set ideal type approach and fuzzy-set qualitative comparative analysis. The thesis commences its empirical investigation in the following chapter by conceptualizing ‘risk’ and examining the risk shift in eighteen different countries with an attempt to rethink the new risk discussion. Later in Chapter 8, fs/QCA is fully exploited to investigate the causational relationship between the labour market risks and institutional arrangements. In both chapters, cases are not dissected into variables and the method allows us to return to the cases.
CHAPTER 4. RETHINKING THE NEW RISK DISCUSSION - RISK SHIFTS IN 18 POST-INDUSTRIAL ECONOMIES

4.1 INTRODUCTION: NEW RISK OR RISK SHIFT?


Despite the production of theories on new risk or new crisis, the literature on social risk seldom devotes itself to discussing the concept of new risk, neither does it fully exploit scientific methods to dissect the concept of risk. Thus, the concept of new risk is often blurred and the distinctions between old and new risks become inevitably ambiguous, leading to a lack of good empirical analysis. Therefore, it seems critically important to return to the discussion of the question of “what is new risk and is it really ‘new’ rather than ‘old’?”
In this chapter, I commence the inquiry with a scientific conceptualization of social risk with in ambitious attempt to critically rethink the argument of new risk. A rethinking of the concept is followed by an empirical investigation of the question of whether there is such a thing as new risk and whether its characteristics converge as the literature suggests. A lack of empirical evidence regarding new risk in the existing literature calls for an investigation of several advanced economies both from the global West, as well as the East. Eight-teen advanced economies are examined in order to ground a comparative perspective on the new risk using the ideal type approach with fuzzy-set method (Ragin 2000, Ragin 2009) to measure the changes of risk in degree and in kind. In sum, this chapter aims to answer two questions: 1) What is new risk? and 2) How do the characteristics of risk and the trajectories of risk shift differ in different countries?

4.2 PRINCIPLES OF CONCEPTUALIZATION

The critical review of previous discussion on new risk in chapter 2 leads us to the question raised in the beginning of this chapter: What is risk and how can it be measured? Although some scholars have been successful in making a distinctive contribution to the discussion of concept in social science (Satori 1970, Goertz 2005), in fact, concepts are easily neglected in social science analysis even though they are the central part of most theories (Goertz 2005). Lack of sound conceptualization is partly due to the deep difference between quantitative and qualitative analysis. While qualitative researchers are concerned with concepts,
their conceptualizations are often seen nonmathematical and deal with substantive issues. On the other hand, quantitative researchers have “focused on dealing with producing good quantitative measures” (Goertz 2005). Goertz argues that a concept involves both a theoretical and empirical analysis of the object or phenomenon. This idea would probably go back to Locke or Aristotle who distinguished “essential” and “superficial” characteristics of an object. Goertz (2005) who made a substantial contribution in the discussion of social science concepts, use the example of disease to explain the ontological aspects of a concept: “Symptoms are caused by disease; however, what the disease is differs from what the symptoms are.” (Goertz 2005:15). What makes a concept to be that concept is determined by the essential attributes which should be based on a theoretical discussion.  

The concept of social risk in this chapter also consists of two levels, the theory level and the empirical level. In the theory level, the essential characteristics of a concept are the necessary conditions for that concept. This level analyzes the necessary conditions that define a concept to be that concept. For example, the definition of risk can be very wide as to describe any kinds of undesirable events that may or may not occur. Risk can be ranged from as an individual’s sickness to a world war that impacts upon the whole world. The necessary conditions which are considered as the essential attributes pin down the boundary of the concept. The second level of the conceptualization is the

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27 However, when building a concept, one needs to consider the adverse relationship between the intension and the extension. Increasing the number of necessary conditions (intension) can decrease the empirical coverage (extension). Similarly, Satori explains
empirical level. It is the level where it is concrete enough to be operationalized by empirical data and indicators. However, each dimension should all satisfy the necessary conditions of the theory level. For example, Liberal welfare regime, Social democratic welfare regime and Corporatist welfare regime can be the three dimensions in the empirical level and they are concrete enough to develop indicators. In the theory level, it can be argued that old age pension health insurance and unemployment insurance are the necessary conditions for a state to be a welfare state. However, all of the three welfare regime must satisfy all the necessary conditions suggested in the theory level. The necessary conditions in the theory level limit the number of dimensions in the empirical level. All dimensions in the empirical level are sufficient conditions of the concept and therefore they are substitutable. In other words, if a country satisfies all the necessary conditions of the welfare state, i.e. old age pension, health insurance and unemployment insurance, it can sufficiently be a welfare state either as a Liberal welfare regime, Social democratic welfare regime or Corporatist welfare regime. The concept of risk is, too, multilevel and also multidimensional because both its ontological attributes that make it to be a risk and the epistemological dimensions are more than one.

that “The connotation and the denotation of a concept are inversely related” (Satori 2009: 118).

28 There is no doubt that underlying assumptions for this example can be contested similarly numerous studies contested Esping-Andersen’s typology of the welfare states. This chapter does not intend to engage with the discussion with welfare state typology but the examples is used merely to demonstrate how a concept can have two levels, theoretical level and empirical level.
Discussions of ‘risk’ are in fact not new and the concept has been widely used in various disciplines. Pinning down the boundary of the concept is important especially in order to combine the theoretical discussion with empirical analysis. I conceptualize risk to consist of two levels; the theoretical level and the empirical level. At the level of theory, what should be discussed are the essential characteristics that define risk to be a risk (Goertz 2005). Firstly, the ambiguity surrounding the concept in literature on new risk has resulted from the lack of a clear distinction between the concept of risk and that of socioeconomic changes. Some of the suggested changes in the characteristics of risk are actually socioeconomic changes not changes in risk. Secondly, to confine the wide coverage, I add ‘social’ to the concept of risk. Thus, I propose the analysis of ‘social risk’ instead of any kind of other ‘risk’. There are various kinds of risk that may happen to anyone. Sources of risk are suggested to be various, ranging from individual level, such as illness, injury, old age, crime and unemployment to macro level, such as earthquakes, drought, coup d’etat or war (Holsmann and Jorgensen 2000). However, the concept of risk in this chapter relates exclusively to those risks that contain a characteristic of sociological regularity and risks that occur in a social context. This chapter defines the concept of social risk to consist of three necessary conditions that make an event be a social risk (i.e. the essential characteristics of social risk): the threat to basic living, structural problem and social impact. These attributes are what mark the boundary of the concept of
social risk and a phenomenon has to have all three characteristics to be defined as a social risk.

**FIGURE 4.1 CONCEPTUALISATION OF SOCIAL RISK**

![Diagram showing the concept of social risk with three circles: Threat to Basic Living, Structural Problem, and Social Impact, intersecting to form Social Risk]

\[
\text{Social Risk} = \text{Threat to Basic Living} \times \text{Structural Problem} \times \text{Social Impact}
\]

*Threat to basic living* refers to situations or an undesirable event that threatens individuals’ standard economic level of living. In other words, falling into economic poverty is a risk for individuals as it is associated with the lack of material resources. In this chapter, economic poverty is related to poverty in the social context, understood through the concept of relative poverty. Theory suggests that as societies become more affluent, the standard economic level of living is also gradually adjusted upward and the level of standard living also becomes adjusted (Sen 1992; Townsend 1979). Normally, empirical studies or governmental databases adopt the definition of relative poverty as the percentage of persons living with incomes below 50 or 60 percent of the national median income.
Social impact refers to the risk that has an impact or influence in that society. The concept of social impact was theorized first psychologically by Latané (1981), but the concept developed to be more general and it is used to assess the consequences of policies, programs, projects and development etc. In this dimension of the theory level, risk refers to a risk that is not confined only to a limited number of individuals, but which has greater consequences for, influence or impact on substantial portions of society.

Structural problem refers to the kinds of risk that are manmade, but where the control of risk is beyond individual capacity. Social force or structural problem that is external to the individuals may affect, for instance, the increase in individuals’ suicide rates. For the concept of social risk, unemployment due to economic recession, market failure and/or government failure can be a few among many examples. The negative pole (something that is not a structural problem) could be unemployment (either temporary or long-term) due to personal choice for various reasons, e.g. laziness, health problem etc.
This chapter confines social risk as the concept which satisfies all three necessary conditions and mathematically a logical AND is applied to pin down the boundary of social risk. That means that a social risk is a phenomenon that is a threat to basic living AND a structural problem AND has a social impact (see figure 4.1).

Once the essential characteristics for social risk are defined, we need to discuss the empirical aspects of social risks. Based on the previous discussion of new risk, empirical dimensions of social risk that are to be analyzed in this

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Logical AND: —
Theory Level

Logical OR: ---
Empirical Level

---

29 In the fuzzy set method, “Logical AND (*)” represents compound sets when two or more set are combined. The “logical OR (+)” refers to the unions of sets and it is expressed with summation in the equation.
chapter are *unemployment*, *non-standard employment* and *individuals in poverty*. Each of these three dimensions of empirical levels of social risk satisfies the three theoretical conditions of social risk\(^\text{30}\). In other words, this level is structured by logical OR meaning that each dimension is a sufficient condition of social risk and each dimension is defined as social risk (figure 4.2).

*Unemployment* is one indicator of social risk. Walter (2000) explains that historians are in general agreement that the term ‘unemployment’ only entered into official and popular usage in the last decade. The International Labour Organization defines "unemployed workers" as those who are currently not in paid work, but are willing and able to work for pay, currently available to work, and have actively been searching for work. It has been widely discussed that unemployment increases individuals’ susceptibility to malnutrition, illness, mental stress, loss of self-esteem and that long term unemployment may lead individuals to fall into economic poverty. Unemployment and/or long-term unemployment also have a cost for society. Dehesa and Snower (2006: 1) describe unemployment as “a colossal waste of human potential and national product; it is responsible for poverty and inequality; it erodes human capital; it creates social and political tension wherever it strikes”.

The literature explains that unemployment, at least in the West, was a cyclical phenomenon during the post-war industrial period. However, it is suggested that in the post-industrial period, long-term unemployment has increased because the

\(^{30}\) However, just as new symptoms can be found from different person or in different circumstances even by the same disease, social risk may have more possible symptoms i.e. more indicators are possible.
market for manufacturing is saturated and the demand has decreased\(^\text{31}\) (Iversen 2001). During the ‘golden age’ of the welfare state, i.e. until the early 1970’s, the demand for manufacturing goods was both income-elastic and price-elastic (Iversen 2001). This implied that productivity growth, demand and employment all had positive links in manufacturing industries (see section 2.3.3 of Chapter 2). However, it is suggested that due to increasing labour productivity and market saturation, the price-elasticity of the demand of manufactured good decreased and due to the rapid increase of labour productivity, the increase of output stopped bringing an increase in employment (Iversen and Wren 1998). This increase of productivity in the manufacturing sector is another suggested reason for long-term unemployment in postindustrial economies (Baumol 1967) and the lack of capacity to absorb the surplus labour due to the soft nature of the service sector and increase in women’s labour force participation (Esping-Andersen 1993). As far as the poorly skilled are concerned, it is harder for them to be employed in a society which provides high premium to the skilled and those in possession of knowledge. However, this argument is testable in the context of Asian countries, where youth employment is often unachievable even to those with high levels of education.

*Non-standard employment* refers to employment other than permanent salaried employment. The characteristics of non-standard employment differ from informal work because the former denotes non-standard jobs by formal enterprises, while the term ‘informalization’ refers to the increase in traditional

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\(^{31}\) However, the variation in long-term unemployment rates among countries will be examined in the next chapter.
forms of informal employment. The discussion on non-standard employment continued in Chapter 5 (section 5.2) and Chapter 8 (section 8.3.4).

The conventional wisdom that states should apply labour policies of flexibilization and deregulation in order to benefit from globalization is widely spread (Lee and Eyraud 2008, Edward and Lustig, 1997). It is also argued that the increase of the share of the service sector in national output tends to create more precarious employment. Krugman (1996) stressed the paradoxical principle in postindustrial economies when he stated that “the kinds of jobs that grow over time are not the things we do well but the things we do badly […] it takes as many people to serve a meal or man a cash register” (Krugman 1996: 212-13). Non-standard employment is also precarious because of its informal employment arrangements. Many workers do not have a written contract specifying the terms and conditions for their employment and/or at best they have implicit contracts based on verbal agreements (Lee and Eyraud 2008). For example, the Republic of Korea reported that 39 per cent of employees had no written employment contracts in the mid 2000s. (Lee and Yoo 2008). Furthermore, the widening income gaps are suggested to be related to the ongoing deregulation and casualization of employment as non-standard workers tend to earn less than standard workers (Lee and Eyraud 2008). The OECD stated that “in Japan and Korea, workers holding irregular jobs are paid between 40% and 60% less per hour than regular workers, a gap that is too large to be explained by productivity difference” (OECD, 2008). The OECD report also states that this form of employment has a negative effect on society not only because of the increasing inequality in incomes, but also because non-standard workers tend to receive less
firm-based training than permanent workers and therefore it slows down and polarizes human capital formation and productivity growth (OECD 2008). The discussion on the working condition of the non-standard employment is continued in chapter 7 and chapter 8.

*Individuals in poverty* represent the third dimension of the empirical level understanding of social risk, which measures change in poverty. This dimension measures the change in relative poverty rate and also the ways in which poverty is distributed across society as a whole.

Declining wages among low skilled workers and the increase of inequality over the past quarter of century has been suggested to be the outcome of different socioeconomic changes (Blank, Danziger and Schoeni 2006). Globalization, skill-biased technological change, changes in policy and labour relations are some suggested reasons for the growing inequalities (OECD 2008). Some put emphasis on the fact that increase of inequality rates in some OECD countries are due to the absolute and/or relative decrease of wages. In the case of Western countries, low skilled workers were predominantly employed in the manufacturing industry during the postwar period and strong mobilization among these workers through trade unions enabled them to sustain high wages, as well as employment-related benefits. However, wage compression is not associated with positive effects on equality in postindustrial economies (Iversen and Wren 1998) and, although controversial, union power is suggested to have also declined (Esping-Andersen 1993). It is also argued that the stagnant productivity of the service sector hinders wage increase. Hacker (2004) discusses the change in the role assumed by welfare states in managing individuals’ income risks. He explains that 'privatizing risk'
means “to fragment and undermine collective insurance pools that offer reduced cost protection to higher-risk and lower-income citizens” (Hackers 2004: 249). Huber and Stephens argue that the socioeconomic changes of the 1990s and early 2000s “increased the social groups at risk and/or increased the risk of a given social groups to fall into poverty” and suggested that the populations represented by less-educated working age persons, single mothers and young adults are the new social risk groups (Huber and Stephens 2006).

4.4 INTRODUCING THE CONCEPT OF RISK SHIFT AND THE FUZZY SET APPROACH

Returning our focus to ‘new’ in the risk discussion, in fact many of the suggested concepts of risks-inequality, precarious work, low wage, people under poverty lines, homeless people, working poor, unemployment, female poverty, elderly poverty, etc are in fact not very new. For example, unemployment, which is commonly suggested as an ‘old risk’ in the new risk literature (Huber and Stephen 2006), still prevails and inequality which is commonly suggested as ‘new risk’ in fact can be very old. These social risks have always been at the centre of social policy or welfare discussions and they certainly are not new social risks. Hence, empirical analysis is critically important as the conceptualization of social risk is hypothetical until the empirical level is examined32. In this chapter, instead of simply adding an adjective ‘new’, the concept of ‘risk shift’ is introduced and the concept of ‘new’ is tested. Rather than arguing the emergence of new risk, this

32 Any concepts are hypothetical until it can empirically reflect the real world (Goretz 2006).
chapter investigates the shift in the characteristics of social risk by kind and by degree.

The method of fuzzy set qualitative analysis which was introduced by Charles Ragin (2000) is employed to measure the ‘risk shift’. Recognizing the methodological limitations of both qualitative and quantitative comparative research in social science, a number of scholars employed fsQCA to combine merits from both sides (Braumoeller 2003, Castles 2001, Castles 2002, Ebbinghaus and Visser 1999, Hicks 1999, Koenig-Archibugi 2004, Kvist 1999, Pennings 2003, Schneider 2006, Stryker, Eliason 2003, Veugelers 2005, Kats and Vom Hau and Mahoney 2005, Vis 2007, See for an overview Lee, 2009). In this chapter, two extended approaches of fuzzy set method are utilized, namely the configurational approach (Ragin 2000, Ragin 2009) and the ideal type approach (Kvist 1999, 2006). To make sense of the heterogeneity within the concept of social risk in an encompassing manner, diverse theories were engaged and I discussed multiple aspects of social risk above. This configurational approach allows us to examine different types of social risk. In other words, social risk is viewed as a configuration of the three dimensions (unemployment, non-standard employment and individuals in poverty) and 8 (2³) types (configuration) of social risk are possible, which allow for the complexity of social risk.

The ideal type approach which is an extension of the configurational approach exploits the notion of fuzzy sets, establishing a degree of membership (Kvist 1999, 2006). In the fuzzy logic, the fuzzy truth represents membership in sets, which are defined by the researcher by establishing qualitative breakpoints of 1 and 0. Between these breakpoints, cases are given a fuzzy membership score,
which is determined by the researcher as well and permits the scaling of the membership score and allows partial membership. Calibration in fuzzy-set method is the membership scoring scheme. It is a standard developed by the researcher which makes measurement directly interpretable. In natural science for example, a temperature of 20 degrees Celsius is interpretable because it is situated in between 0 degrees and 100 degrees (Ragin 2007). Calibration itself is pertinent for comparative social research in many aspects as a researcher can compare qualitative concepts quantitatively (Ragin 2007). With the three mentioned attributes, logically 8 different ideal types of social risk can be generated and each case has a membership score for each type of social risk. Highest membership score in certain social risk type represents that the degree of the case conforming to that type of social risk is highest compared to other types and we consider the case to be in a type of with highest membership score. For example, ‘U’ refers to high unemployment and ‘u’ is low unemployment. ‘N’ refers to high non-standard employment and ‘P’ refers to high level individuals in poverty. So for example ‘u*n*p’ would be a type that have low unemployment rate AND low non-standard employment rate AND low rate of individuals in poverty. If Korea/1981 has a membership score 0.3 for the ideal type U*N*P and 0.7 for u*N*P, the membership scores indicate that the case Korea/1981 is a u*N*P type rather than a U*N*P types because the membership score of u*N*P is higher than the U*N*P type.

When calculating the membership scores of each ideal type, two rules of fuzzy sets method are applied: logical negation and minimum rule (Ragin 2007). A case can logically have different fuzzy membership scores for different sets. A
case can have a fuzzy membership value for the set U but can also have a fuzzy membership value for the set not-U (here represented as ‘u’) which is 1-U. For example, if Korea/1981’s memberships score for the set U is 0.3, its membership score for not-U is 0.7. This is called the rule of logical negation. The minimum rule is applied to calculate the membership scores for each ideal type which are a combination of three different dimensions (U and N and P). A case’s membership score for each combinations which are formed by logical and (here represented by *) is equal to the lowest score in any of the dimensions.). Hence, if the membership score for U, N, P is 0.4, 0.6 and 0.8 respectively, membership score of the configuration U*N*P is 0.4. The concept of maximum rule which is for the logical OR is the opposite of minimum rule. If the membership score for U, N, P is 0.4, 0.6 and 0.8 respectively, membership score of the configuration U+N+P is 0.8.

The analysis commences with examining risks in 18 countries with advanced economies in order to investigate how risks are shifting in a comparative perspective. The time span stretches from 1981 to 2007 with 8 time points. Each case (for example Korea/1981, Korea/2007, US/1981, etc.) is assigned a membership score for each empirical dimension of social risk and these dimensions compose 8 logical configurations, or social risk types. When interpreting the membership scores, the fuzzy set ideal type approach is utilized. Membership score 1 indicates that a case is fully in the ideal type of that dimension and membership score 0 indicates that a case is fully out of the ideal type. Cases also have membership scores between 0 and 1, and 0.5 is the crossover point for a case to be fairly in or out of the type.
4.5 ANALYSIS OF THE RISK SHIFT

4.5.1 UNEMPLOYMENT

It is extremely difficult for any researcher or any policy maker to support their argument that a country has a high employment rate or a low employment rate. It is difficult because the assumed breakpoints for unemployment rate to be called high or low is qualitative. The strength of the fuzzy set approach is its ability to measure the changes in the unemployment rate not only quantitatively, but also qualitatively. Fuzzy set approach is qualitative as the breakpoints of fully in, fully out and the crossover point are decided by the researcher’s substantive knowledge on both context and knowledge of the country cases under discussion. This involvement of the researcher in deciding the qualitative breakpoints are open to criticism for not properly translating data into appropriate membership scores. However, by being as transparent about the logics of the choices made as possible is one way to resolve such a challenge. The fuzzy set approach is also quantitative since the data is calibrated to measure the changes in degree once the breakpoints are established.

In fact for the dimensions of risk such as unemployment, empirical facts are profoundly important. In other words, an accumulation of empirical facts actually provides important information for understanding the case in its own context and it enables a researcher to make qualitative decisions within a comparative perspective. As most countries experience an increase of service sector in the 1980s onward and due to the availability of comparable date, I start
by examining the unemployment rates in 18 countries from year 1981 to 2007. In order to examine a more apparent shift of different risks throughout the period, membership scores of different risk types are examined with 4 years gap except for the last year 2007. With some missing data, 475 cases are examined.

The mean for unemployment levels is 7.42 % and a standard deviation of 4.03. Giving more attention to cases, it is possible to notice that a few cases with certain time points have unemployment rates that exceed 20 per cent (the maximum being 23.88%) and these rates impact on the overall average. Cases with unemployment rates above 20 per cent are mostly from Spain, an exceptional country in this sense. Also, Nordic countries show exceptionally high unemployment rates around the year 1993 compared to their unemployment levels in different time points. This indicates the impact of the financial crisis in Nordic countries in 1993. Ireland also had a high unemployment rate, above 15% in the mid 1990s, but this sharply decreased in the 2000s. Ireland transformed itself from an agricultural economy to a post-industrial economy of high technology and was referred to as the ‘Celtic tiger’ in the 1990s. Some of that transformation was made possible by generous EU structural funds, a system in place to reduce inequalities across the Member States of the European Union. In addition, a quite light taxation regime was introduced to attract foreign companies. In contrast to the countries explored above, the average unemployment rate in the three Asian countries, Korea, Japan and Hong Kong is 3.52%, which is substantially lower than the mean of the 18 countries reviewed here.
Plotting the frequency of each unemployment rate among 475 cases, we can notice that most cases are concentrated to be under about 12 per cent (Figure 4.3). Since one of the aims of this thesis is to examine closely the changes in the Asian countries which have comparatively low unemployment rate, I intentionally pay less attention to the countries that have had exceptionally high unemployment rates like Spain, the Nordic countries after the economic crisis, and also Ireland in 1980s to mid 1990s. In other words, it is less important to examine the degree of high unemployment when the cases already have an exceptionally high unemployment rate. With this intention and knowledge on cases, the breakpoint for a fully in high unemployment ideal type is set to be 11%\(^{33}\). About 18 per cent of the cases have higher rates than 11% and they have a membership score of 1, 

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\(^{33}\)This is slightly lower than the sum of mean and standard deviation.
therefore. The lower 2 per cent of all cases has an unemployment rate lower than 2% and these cases show very little variance. Considering Asian countries’ low unemployment rates, the breakpoints for fully out of high unemployment ideal type, and membership score 0, is set to be 2%\textsuperscript{34}. Cases with unemployment rates between 2% and 11% are given continuous membership scores that are between 0 and 1. However, setting the 0.5 cross-over points that is based on qualitative knowledge of the case is challenging. Unlike other studies which employed the ideal type approach to measure cases’ conformity to the theory based ideal types, the ideal type approach for unemployment can be developed highly dependent on other empirical parameters like average, median and distribution. Since case specific knowledge is engaged when setting the anchors of 1 and 0, the cross-over point was set at the middle point of each anchor with the justification that the frequency of rates is evenly distributed. Hence, the 0.5 crossover point is at 6.5% unemployment.

| TABLE 4.1 FUZZY-SET MEMBERSHIP SCORES OF THE SET OF UNEMPLOYMENT RATES* IN 18 POST-INDUSTRIAL COUNTRIES FROM 1981 TO 2007 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Nationality                    |      |      |      |      |      |      |      |      |
| Rep. Korea                     | .18  | .13  | .05  | .06  | .05  | .13  | .11  | .08  |
| Japan                          | .04  | .05  | .04  | .05  | .09  | .25  | .17  | .2   |
| Hong Kong                      | .1   | .08  | 0    | 0    | .04  | .26  | .33  | .13  |
| Denmark                        | .92  | .72  | .77  | .96  | .3   | .15  | .22  | .1   |
| Sweden                         | .06  | .07  | 0    | .83  | .93  | .25  | .71  | .42  |
| Finland                        | .23  | .26  | .08  | 1    | 1    | .87  | .8   | .56  |
| Netherlands                    | 1    | 1    | .79  | .43  | .31  | .05  | .27  | .1   |
| France                         | .6   | .94  | .91  | 1    | 1    | .85  | .85  | .75  |

\textsuperscript{34} It is lower than the lower deviation of the mean of 18 countries, which is 3.39% (=7.42-4.03).
<table>
<thead>
<tr>
<th>Country</th>
<th>Membership Score</th>
<th>Employment/Activity</th>
<th>Unemployment Rate</th>
<th>Active Population</th>
</tr>
</thead>
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<td>-</td>
<td>-</td>
<td>.33</td>
<td>.73</td>
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<tr>
<td>Austria</td>
<td>.08</td>
<td>.01</td>
<td>.07</td>
<td>.16</td>
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<tr>
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<td>.95</td>
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<tr>
<td>US</td>
<td>.7</td>
<td>.63</td>
<td>.28</td>
<td>.58</td>
</tr>
</tbody>
</table>

*The membership score 1 represents that a country’s unemployment rate is fully high and 0 represents that the rate is fully low. The definition of unemployment rate: Employment/activity rates represent employed/active persons as a percentage of same age total population. Unemployment rates represent unemployed persons as a percentage of the active population. Source of the original data: OECD database, ILO labour statistics, European Labour Force survey.*

A membership score 1 indicates that a case is fully in the high unemployment ideal type and .5 is the breakpoint for a case to be considered a fairly high unemployment type. In other words, membership score (x) indicates; x≤0: fully low unemployment rate, 0<x<.5: fairly low unemployment rate, .5≤x<1: fairly high unemployment rate, 1≤x: fully high unemployment rate (table 4.1).

The membership scores of the three Asian countries are low in all time points showing no specific change. Austria is the only European country that has low membership scores in all time points. Finland and Sweden experience a rapid increase of unemployment rate from 1993 on, while the membership score falls after the mid-90s in Denmark and the Netherlands. The Southern European countries, Spain, Greece and Italy, are almost fully members of the high
unemployment ideal type all throughout the analysed period. UK and Ireland have high membership scores until the late 1990s, but these drop rapidly, scoring around 0.2 in the 2000s. No general trends in the change of unemployment rate are examined, though some countries cluster into groups: three Asian countries, Southern European countries and Anglo-Saxon countries (table 4.1).

FIGURE 4.4 LONG-TERM UNEMPLOYMENT RATES OF SELECTED 18 COUNTRIES FROM 1980 TO 2008

Source of Data: ILO Labour statistics
Unemployment is further examined by measuring how long-term unemployment rates (unemployed for more than 1 year) have changed over time (figure 4.4). The mean of the 426 cases (cases from 17 countries from 1981 to 2007 with missing data) is 3.14% and the standard deviation is 2.7. However, paying a closer attention to cases in the context rather than the descriptive statistics is required in order to make qualitative decisions. Spain and Ireland again stand out with their exceptionally high long-term unemployment rates until the late 1990s. The long-term unemployment rates in the rest of the countries vary from around 0% to 6%.

Similar to the observation made earlier, the calibration in this chapter does not intend to measure changes within the exceptionally high rates of unemployment. The long-term unemployment rate of Spain and Ireland are already high compared to other cases whether the rates are 15% or 10% or even 7%. Hence, a long-term unemployment rate that is higher than 6% is set as the criteria of fully high rate that is a fuzzy set score of 1. Two Asian states, the United States and Sweden show relatively low rates throughout all time periods, 1.5% being the highest of all three countries. Attempting to include the variance of rates in these countries in the examination, long-term unemployment of 0.5% is set as a fuzzy-set score of 0.5, which essentially indicates that unemployment rates very near to 0% has a fuzzy set score of 0. Hong Kong is omitted due to the unavailability of the data (table 4.2).

Korea, Japan, the United States and Austria show small changes and have very low membership scores throughout all time points for long time
unemployment. Although Finland experienced dramatic changes during the financial crisis, the membership score has fallen and together with that of other Nordic countries and thus they have fairly low membership scores. The Southern European countries have high membership scores throughout most of the time points, presenting no major changes, and this trend is similar in France and in Germany. However, the UK and Ireland show a change from fairly low long-term unemployment rates to high long-term unemployment rates from the late 1990s onwards (table 4.2).

**TABLE 4.2 FUZZY-SET MEMBERSHIP SCORES OF THE SET OF LONG-TERM UNEMPLOYMENT RATES* IN 17 POST-INDUSTRIAL COUNTRIES FROM 1981 TO 2007**

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*Definition: Long-term unemployed persons are persons who have been unemployed for one year or more. ** Fuzzy-set score of Korea 1989 is correspondent to long-term unemployment rate in 1990, Greece, 1983 is used instead of 1981. Source of the original data: OECD data base, ILO labour statistics, European Labour Force survey.

4.5.2 NON-STANDARD EMPLOYMENT

In this study, non-standard employment comprises temporary employment and part time employment as defined by the OECD, as well. Temporary employment rates and part-time employment rates are examined separately. In terms of part-time employment rates, full-time/part-time distinction in the main job is made on the basis of a spontaneous answer given by the respondent in most European countries. In Sweden, the Netherlands, the Republic of Korea and in Japan, part-time is determined on the basis of whether the usual hours worked are fewer than 35 hours per week or not. In the United States, part-time is determined by whether the usual hours worked are fewer than 30 hours. Data from all European countries has been retrieved from the European Labour Force Survey. Part-time employment rates for the Republic of Korea, US, Japan and Hong Kong are from each country’s Labour Force database.

The mean of all cases is 15.27% and a standard deviation of 8.28. Carefully examining the cases, the Netherlands stands out to have distinctively high part-time employment rates starting from the mid-1980s, ranging from around 26% to over 35%, while the rest of the cases vary between 4% to around 25%. Paying less attention to the Netherlands’ case which rates are higher than 26% in all time
points, the breakpoint for the *fully in* membership score is 26%. Hence any case over 26% part-time employment has a membership score of 1. As the variance in low part-time employment rate, less than 5%, is very small, 4.1% being the minimum. Therefore 5% or lower is considered to be fully out of the ideal type high part-time employment. The rest of the cases display fairly normal distributions around 15% and the crossover point for a case to be a member of fairly high part-time employment is thus 15% (table 4.3).

**TABLE 4.3 FUZZY-SET MEMBERSHIP SCORES OF THE SET OF PART-TIME EMPLOYMENT RATES IN 18 POST-INDUSTRIAL COUNTRIES FROM 1981 TO 2007**

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Unlike other Asian countries where part-time employment has been generally low, only Japan became a country with high rates of part-time employment from the early 1990s onwards. Interestingly, all of the southern European countries have low membership scores while they had high membership scores for unemployment rates, including long-term unemployment. In a quite different vein, Denmark, Sweden and also Ireland, which had low membership scores for long-term unemployment, in later period have high membership scores for part-time employment rates. This indicates that low rates of long-term employment may have been possible because the part-time jobs absorbed that surplus of labour force. However, Denmark, the Netherlands and the UK show high membership scores throughout all time periods despite the changes from high to low in the membership scores for unemployment rates (table 4.3).

Next, temporary employment rates are examined. Employees with temporary contracts are those who declare themselves as having a fixed term employment contract or a job which will terminate if certain objective criteria are met, such as completion of an assignment or return of the employee who was temporarily replaced. For Hong Kong, casual employment consisting of employment on a day-to-day basis or for a fixed period of less than 60 days is considered temporary employment. Most European countries have full data sets
regarding temporary employment from the 1980s onwards. However, data for Hong Kong and the United States are from special topic reports or a supplementary report, which provided temporary employment rates for 3 to 4 time points only.

Examining the cases, Spain and two Asian countries, the Republic of Korea and Japan, show exceptionally high rates compared to other cases. Temporary employment rates are around 30% for these countries, while other cases are fairly distributed between about 4% to around 22%. Hence the breakpoint for fully in the high temporary employment type is 22%, while 4% or lower is fully out and 13% is the crossover point for a case to be a member of fairly high temporary employment type (table 4.4).

Differing from the trend and patterns of membership scores for part-time employment, both Korea and Japan are fairly or fully in the high temporary employment ideal type, while Hong Kong is fully out throughout all its time points. All the three Anglo-Saxon countries have low membership scores throughout all time periods. However, membership scores of continental European countries, including the Netherlands, changed from low to high from around 2001. While all Southern European countries had low membership scores for part-time employment, patterns are diverse in terms of temporary employment. Spain is a high temporary employment type in all time points, while Italy joined the group of high temporary employment only since 2007 (table 4.4).
TABLE 4.4 FUZZY-SET MEMBERSHIP SCORES OF THE SET OF TEMPORARY EMPLOYMENT RATES IN 18 POST-INDUSTRIAL COUNTRIES FROM 1981 TO 2007

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Source of the original data: European household panel survey, National statistics bureau of Republic of Korea, National statistics bureau Japan, Hong Kong Special topic report, US Supplementary report to the labour force survey.
'Individuals in poverty' is measured by two different indicators: Gini coefficient and relative poverty rate. The Gini coefficient is a measure of inequality in income distribution. A low Gini coefficient indicates more equal income distribution while a high Gini coefficient indicates more unequal distribution. The Gini coefficient can be calculated differently depending on the coverage of the population (urban, rural or total), unit of analysis (household or persons) and whether it is the income after transfer/tax or before, gross income or disposable income. The Gini coefficient in this study is taken from the OECD database without exception and refers to households’ disposable income, except for the Republic of Korea. Here, the Gini coefficient represents governmental data and refers to urban households’ disposable income. Considering the fact that more than 70% of the population lives in an urban area and noticing that the Gini coefficient recalculated by the government from 1990 is only slightly lower than the recalculated OECD comparable data, for Korea I use the Gini coefficient of urban household’s disposable income for all available time points. Comparable Gini coefficients for Hong Kong are unavailable, so Hong Kong is once more excluded from the analysis.

The distribution of Gini coefficients in the selected countries is normal in reference to the mean. However, the United States, the UK, Spain and Portugal have high Gini coefficients of over 35% in most time period. The break point for fully in the high inequality type is 35%, 22% or lower is fully out and 28.5%,

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which is the mean of both ends, marks the crossover point for a case to be a member of fairly high inequality group (table 4.5).

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*Source of the original data:* OECD data base, Korean National Statistics Bureau.

None of the Nordic countries show any significant change. In all time points their membership score is substantially lower than the crossover point. Often points are even fully out of the inequality type. Although higher, Netherlands,
Austria and Germany have fairly low inequality in income distribution. All of the Southern European countries as well as the Anglo-Saxon countries have high membership scores indicating that they are in the high inequality type. Although there is a cluster of similar types, there are no significant changes of low to high or high to low in most of the countries. Interestingly, however, there is a substantial change in the Republic of Korea’s membership scores from low to high from the late 1990s onwards (table 4.5).

![Figure 4.3 Frequency of Different Relative Poverty Rates (%)](image)

Source of Data: ILO Labour statistics

Individuals in poverty as a dimension is measured by examining the relative poverty rates in each countries. Relative poverty rate refers to the rate of population living under 50% of the median income. A plot of the frequency of relative poverty rates shows that it is fairly distributed with two peak points.
(figure 4.5). However, there are some cases of exceptionally high rates, relative poverty being over 16%. The US at different points in time stands out having particularly high relative poverty rates in all time points, around 17%. However, Sweden and the Netherlands in the 1980s had relative poverty rates that were even lower than 4%. The break point for fully in the high relative poverty type is 16%, 4% or lower is fully out and 10%, which is the mean of both ends, is the crossover point for a case to be a member of fairly high relative poverty type (table 4.6).

Likewise, the membership scores for the Gini coefficients, membership scores for relative poverty, presents clusters rather than a change over time. All of the Southern European countries as well as most of the Anglo-Saxon countries have high membership scores in every time points except for the UK, which is fairly out of the high relative poverty ideal type in all time points. Nordic countries have very low membership scores and show almost no change over time. The Netherlands, France, Germany and Austria are also fairly out of the high relative poverty rate ideal type in all time points. However, there is a gradual increase in the membership scores in Austria and Germany. Next, the following section takes the analysis further to examine whether risk as a configuration has shifted in different trajectories.
### TABLE 4.6 FUZZY-SET MEMBERSHIP SCORES OF THE SET OF RELATIVE POVERTY RATES IN 18 POST-INDUSTRIAL COUNTRIES FROM 1981 TO 2007

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*Source of the original data:* OECD data base. Data for Hong Kong and the Republic of Korea originates from each country’s statistics bureau.
The fuzzy set method enables us to examine two modes of change: the change in type (difference in kind) and the change in the conformity to the ideal type (difference in degree). This study commenced with the question of whether there is diversity in the characteristics of risk and trajectories of risk shift.

First, the three dimensions of risk were further divided into two: unemployment (unemployment and long-term unemployment), nonstandard employment (part-time employment and temporary employment), and individuals in poverty (Gini coefficient and relative poverty rate). Utilizing the concept of logical OR, the highest membership score among the two indicators for each dimension represents the membership score of the dimension. For example, the case Japan/1985 has membership score 0.44 for the part-time employment indicator and 0.76 for temporary unemployment. Since the nonstandard employment dimension can be represented by part-time employment rate OR temporary employment rate\(^{35}\), the highest score which is 0.76 is the membership score of the nonstandard employment dimension for case Japan/1985.

Once the membership scores for each case in each dimension are assessed, risk as a combination of three dimensions is analyzed. Cases with membership scores that are higher than the crossover point (0.5) are fairly in the ideal type (high) and are presented with capital letters (U, N, P). Cases with membership scores lower than the crossover point is fairly out of the ideal type (low) presented

\(^{35}\) The logical OR is operated here as either high part-time employment rate or temporary employment rate indicates that a case is a member of a high non-standard employment type.
with \((u, n, p)\). For example, UK/1985 is U*N*P type, which indicates that the risk is a high unemployment, high nonstandard employment and high poverty type. The risk in Hong Kong/1989 is of a u*n*P type, which means that it is a low unemployment, low nonstandard employment but high poverty type. After eliminating cases which do not have membership scores for all three dimensions, the rest of the cases conformed to 6 ideal types (type U*n*p is neglected since it was only found once in West Germany/1989). 6 different types of risk are found: 

*Employment Insecurity* (U*N*p), *Flexicurity* (u*N*p), *Complicated Risk* (U*N*P), *Insecure Flexibility* (u*N*P), *Income Insecurity* (u*n*P) and *Insecure Inflexibility* (U*n*P).

Cases for the years 1981 and 2007 are omitted in the final table since less than half of the countries had complete combinations. Membership scores for unemployment rates and long-term unemployment rates show the same pattern, that is either both high or both low, in almost all cases except for the Nordic countries around the financial crisis. Regarding the unemployment dimension of the risk, this study aims to focus more on the long-term unemployment aspect rather than on cyclical unemployment or unemployment by shock, hence only long-term unemployment (table 2) is incorporated in the final configurational analysis.

Firstly, the change in type is examined. Contrary to the new risk argument, there is a divergence in the characteristics of risk. Countries tend to cluster in groups while there is a weak evidence of a general shift in kind from one type to another. Following graphs presents a picture of how countries’ risk shift from one type to the other in 20 years time\(^\text{36}\).

\(^{36}\) A case can have fuzzy membership score for all 6 risk ideal types. The sharp graphs
The *Insecure inflexibility* (U*n*P) type, which is a combination of high long-term unemployment, low nonstandard employment and high membership scores for individuals in poverty, occurs often. The risk is described as insecure because of the high membership score in the poverty dimension and high long-term unemployment without high nonstandard employment suggests an inflexible labour market. Italy, France and Ireland conform to this type in the beginning of the period which is 1985. Italy shows no shift in kind throughout the 20 years span (figure 4.6). However, France, Italy and Ireland start to diversify in the late 1990s (see also table 4.7).
FIGURE 4.6 RISKS SHIFTS IN GREECE, SPAIN, ITALY AND GERMANY

Greece

Spain

Italy

Germany
FIGURE 4.7 RISK SHIFTS IN KOREA, JAPAN, UK AND IRELAND

Rep. Korea

Japan

UK

Ireland
Greece, Spain and UK conform to the complicated risk type which is a combination of high membership scores in all three dimensions, in the beginning of the period. Spain is in the same type as Greece until the 1990s but shifts towards the insecure flexibility type from 2000s onwards. Greece, which was in the complicated risk (U*N*P) type in 1985 seems to follow the trend of Italy, insecure inflexibility (U*n*P) after the 1990s and exhibit an inflexible labour market (figure 4.6).

In fact, the insecure flexibility type, which is a combination of low long-term unemployment, high nonstandard employment and high in relative poverty rate, occurs most often especially in the later period. Ireland, the UK, the Republic of Korea and Japan start to cluster from the late 1990s around the insecure flexibility type (table 4.7). The Republic of Korea and Japan show similarity throughout the 20 years period only in terms of having low long-term unemployment and high nonstandard employment. But from the late 1990s on, Korea joins the group of insecure flexibility as its relative poverty rates increase (figure 4.7). Interestingly, the United States and Hong Kong cluster as an income insecurity type (u*n*P) without any shift to different kinds of risk (figure 4.8). Both countries have low membership scores for both long-term unemployment and non-standard employment, but very high membership scores for both relative poverty rates and inequality rates.

Finland and the Netherlands are in the employment insecurity type (U*N*p) before shifting to the flexicurity type (u*N*p) after the late 1990s. The employment insecurity type is associated with both high long-term unemployment and high nonstandard employment rates, but low membership scores regarding poverty. This indicates that a country secures individuals from falling in the
poverty through other institutions rather than market. Hence, individuals may have high post transfer income security despite their low employment and low wage security (figure 4.9). Germany is in this type until late 2000s and later shifts to the complicated risk type as its membership score for poverty increases. France shifts from insecure inflexibility to employment insecurity. As its non-standard employment rate increases, its membership scores for the poverty dimension decreases (figure 4.8).

FIGURE 4.8 RISK SHIFT IN FRANCE
FIGURE 4.9 RISK SHIFT IN US AND HONG KONG

US

Hong Kong

136
Interesting results are also found for the Scandinavian group and the Netherlands. The question of whether the concept of flexicurity is negative or positive is highly debatable, but here flexicurity appears as one of the 6 combinations. The *flexicurity* type refers to high flexibility in labour market while
being comparatively secured from poverty (high rates of non-standard employment, low rates of individuals in poverty). In fact, this notion of ‘flexicurity’ has recently become popular in describing the European Labour market reform which some describes it as a policy that “overcomes the tension between labour market flexibility on one hand and social security on the other” (Viebrock and Clasen 2009, Crouch 1999). The European Commission considers flexicurity as an integrated strategy to simultaneously enhance flexibility and security in the labour market. Recently, the European Council of June 2009 concluded that “in the current situation [of crisis], 'flexicurity' is an important means by which to modernise and foster the adaptability of labour markets.”

Denmark and Sweden belong to the flexicurity type without any shift during the given period and Finland together with the Netherlands joins the group of flexicurity type from the late 1990s onwards (figure 4.9). As examined above, there are diverse trajectories for multiple configurations of risk.
TABLE 4.7 FUZZY-SET MEMBERSHIP SCORES OF RISK IN IDEAL TYPES OF 15 POST-INDUSTRIAL COUNTRIES FROM 1985 TO 2007*

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<tr>
<td>DEN</td>
<td>$u^N*p$ Flexicurity .58</td>
<td>$u^N*p$ Flexicurity .79</td>
<td>$u^N*p$ Flexicurity .83</td>
<td>$u^N*p$ Flexicurity .81</td>
<td>$u^N*p$ Flexicurity .87</td>
<td>$u^N*p$ Flexicurity .87</td>
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<tr>
<td>SWE</td>
<td>-</td>
<td>-</td>
<td>$u^N*p$ Flexicurity .83</td>
<td>$u^N*p$ Flexicurity .93</td>
<td>$u^N*p$ Flexicurity .84</td>
<td>$u^N*p$ Flexicurity .87</td>
</tr>
<tr>
<td>FIN</td>
<td>-</td>
<td>-</td>
<td>Employment insecurity .77</td>
<td>Employment insecurity .79</td>
<td>Employment insecurity .7</td>
<td>Employment insecurity .74</td>
</tr>
<tr>
<td>NTH</td>
<td>$U^N*p$ Employment insecurity .8</td>
<td>$U^N*p$ Employment insecurity .63</td>
<td>$u^N*p$ Flexicurity .53</td>
<td>$u^N*p$ Flexicurity .63</td>
<td>$u^N*p$ Flexicurity .61</td>
<td>$u^N*p$ Flexicurity .67</td>
</tr>
<tr>
<td>DEU</td>
<td>-</td>
<td>$u<em>n</em>p$ Employment insecurity .51</td>
<td>$U^N*p$ Employment insecurity .67</td>
<td>$U^N*p$ Employment insecurity .6</td>
<td>Complicated risk .66</td>
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<tr>
<td>ITA</td>
<td>$U^N*p$ Insecure Inflexibility .75</td>
<td>$U^N*p$ Insecure Inflexibility .75</td>
<td>$U^N*p$ Insecure Inflexibility .87</td>
<td>Insecure Inflexibility .85</td>
<td>Insecure Inflexibility .77</td>
<td>Insecure Inflexibility .56</td>
</tr>
<tr>
<td>IRE</td>
<td>$U^N*p$ Insecure Inflexibility .88</td>
<td>$U^N*p$ Insecure Inflexibility .82</td>
<td>$U^N*p$ Insecure Inflexibility .78</td>
<td>Insecure Inflexibility .7</td>
<td>Insecure Flexibility .61</td>
<td>Insecure Flexibility .64</td>
</tr>
<tr>
<td>GRE</td>
<td>$U^N*p$ Complicated risk .61</td>
<td>$U^N*p$ Complicated risk .71</td>
<td>$U^N*p$ Insecure Inflexibility .69</td>
<td>$U^N*p$ Insecure Inflexibility .54</td>
<td>Complicated risk .6</td>
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<tr>
<td>SPA</td>
<td>$U^N*p$ Complicated risk .71</td>
<td>$U^N*p$ Complicated risk .7</td>
<td>$U^N*p$ Complicated risk .94</td>
<td>$U^N*p$ Complicated risk .95</td>
<td>$U^N*p$ Complicated risk .79</td>
<td>Insecure Flexibility .6</td>
</tr>
<tr>
<td>UK</td>
<td>$U^N*p$ Complicated risk .85</td>
<td>$u^n*p$ Insecure Flexibility .53</td>
<td>$U^N*p$ Complicated risk .83</td>
<td>$u^n*p$ Insecure Flexibility .55</td>
<td>$u^n*p$ Insecure Flexibility .85</td>
<td>$u^n*p$ Insecure Flexibility .89</td>
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<tr>
<td>KOR</td>
<td>-</td>
<td>$u^*N^*P$ Flexicurity</td>
<td>$u^*N^*p$ Flexicurity</td>
<td>$u^*N^*P$ Insecure Flexibility</td>
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<td>JAP</td>
<td>$u^*N^*P$ Insecure Flexibility</td>
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<td>$u^*N^*P$ Insecure Flexibility</td>
<td>$u^*N^*P$ Insecure Flexibility</td>
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<tr>
<td>US</td>
<td>$u^*n^*P$ Income insecurity</td>
<td>$u^*n^*P$ Income insecurity</td>
<td>$u^*n^*P$ Income insecurity</td>
<td>$u^*n^*P$ Income insecurity</td>
<td>$u^*n^*P$ Income insecurity</td>
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<tr>
<td>HK</td>
<td>-</td>
<td>$u^*n^*P$ Income insecurity</td>
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<td>$u^*n^*P$ Income insecurity</td>
<td>$u^*n^*P$ Income insecurity</td>
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* Austria, Belgium and Portugal are excluded in this last comparison because these countries did not have membership scores for one or more sets (U, N or P) from 1981 to 2007 due to the unavailability of original data. It is impossible to construct a configuration if any of the three sets are missing.
All countries conform to one or a maximum three different types of risk and the degree of change within the same type of risk is also measured. This enables us to compare different countries’ membership scores that belong to the same type of risk (table 4.7).

In terms of the *flexicurity* type, all three Scandinavian countries are in this type with membership scores over 0.7. Finland was highly in the *employment insecurity* type during the economic crisis, but immediately shifted to a *flexicurity* type in the later period. The Netherlands is fairly in the type together with the Scandinavian group, but its membership scores are lower than the Scandinavian countries. However, its membership scores of *flexicurity* type are increasing over time, which increases its conformity with the group. In fact, the finding supports recent literature that Nordic welfare states provide ‘flexicurity’ which is a combination of flexible labour market and generous welfare (Jørgensen 2000, Wilthagen and F. Tros 2004, Esping-Andersen and M. Regini 2000).

In case of US and Hong Kong, although they are both in the *income insecurity* type, the degree of change differs. The US’ status in the *income insecurity* type strengthens, while Hong Kong’s membership scores decrease in time. *Complicated risk* type occurs often in Spain and Greece. However, Spain’s membership score increases as high as 0.95 in late 1990s but decreases afterwards and shift to the *insecure flexibility* type.

The risk in five countries, Spain, UK, Ireland, the Republic of Korea and Japan, exhibits the *insecure flexibility* type at least once. The UK shifts from the *complicated risk* type to the *insecure flexibility* type and its membership score for *insecure flexibility* is increasing.
However, Ireland’s and Spain’s membership scores for insecure flexibility type are not very high compared to the two Asian countries. Ireland’s membership score of insecure inflexibility decreases gradually and the risk finally shifts to the insecure flexibility type. In a rather different way, Korea shows a rapid increase of membership scores in the insecure flexibility type, shifting from flexicurity type, while the membership score is gradually reduced in Japan. Korea’s membership score of insecure flexicurity is the highest in all cases, which indicates that a shift is taking place with speed.

4.7 CONCLUSION

This chapter focuses on the discussion of new risk introduced in chapter 2 of the thesis and set out with the question: “What is new risk and is it really ‘new’ rather than ‘old’?” This chapter compared 18 different countries including Korea and Japan to empirically investigate the different types of risks and their shifts. A conceptualization of social risk using set theory has been introduced and the fuzzy set method that encompasses merits of both qualitative and quantitative analysis is utilized. After a brief description of the method, three dimensions of risk were examined between 1981 and 2007 in order to ground a comparative analysis. Six types of risk have been found in fifteen countries and its changes in degree and in kind have been measured.

The six different types of risk identified are the following: Employment insecurity (U*N*p), Flexicurity (u*N*p), Complicated risk (U*N*P), Insecure
Flexibility (u*N*P), Income Insecurity (u*n*P) and Insecure Inflexibility (U*n*P). Countries conform to different types of risk and some countries tend to belong to certain types, suggesting a path dependency of risk shift. Social risk in Scandinavian countries and the Netherlands belong to the flexicurity type and the US and Hong Kong conforms to the income insecurity type. While Korea and Japan show similar trajectories, the UK and Ireland also join the group with these two Asian countries around the insecure flexibility type.

The findings of diverse types of risk and diverse trajectories suggest an interesting implication: different welfare state systems, social policy or patterns of socioeconomic change may result in different kinds of risk shift even if countries are argued to be in a similar stage of labour market transition. The investigation on the degree of change also indicates two conclusions. It attests that social risk shifts either belonging to the same type or gradually shifting to a different type. The other implication is that the speed of shift differs even when countries belong to the same type.

Finally, I return to the discussion of the issue of allegedly ‘new’ risk in post-industrial countries. The findings suggest that the types of risk are diverse and the speed or the directions of shift are also diverse. However, there is no evidence of an emergence of a uniform new social risk in the examined selected countries. The explication of the concept of risk in the beginning suggested that essential attributes of social risk are the same whether new or old. The risk may be new when its characteristics are distinctively different from the past or when the change is comparatively rapid. However, empirical evidence from this study
suggests that a country’s type of risk has shifted or is shifting to another type rather than a new risk, strikingly different from that of the past.

This chapter has investigated social risk in 18 countries to rethink the concept of new risk and contributes to the new risk discussion with its finding on diverse types and trajectories of risk. Returning to our focus on Japan and Korea, this chapter demonstrated that the two countries conform with each other belonging to an insecure flexibility type. The findings accord with the statistical description on high non-standard employment rates in Korea and Japan in the beginning of the thesis. However, the chapter suggests that an institutional approach can better explain the cause of different types of risks and the different risk shifts.
CHAPTER 5. THE INSTITUTIONAL CONDITIONS OF LABOUR MARKET RISKS: A FUZZY-SET ANALYSIS OF LONG-TERM UNEMPLOYMENT AND NON-STANDARD EMPLOYMENT IN 18 OECD COUNTRIES

5.1 INTRODUCTION: WHY DO LABOUR MARKET RISKS VARY AMONG OECD COUNTRIES?

One dilemma in comparative studies is whether to go up the ladder for abstraction or to go down the ladder for detail. It is more likely to find similarities among different cases when the researcher goes up the ladder to examine a more general phenomenon, while more differences are revealed as the researcher goes down the ladder to examine cases more closely. Most social scientists of comparative studies encounter this predicament of making the choice between focusing on differences (through greater detail) or similarities (through greater abstractisation).

This thesis commenced with a comparative study that goes up the ladder, examining Korea and Japan in a global context with the purpose of conceptualising social risk (see Chapter 4). In this chapter, the discussion of new risk was empirically tested and the risks in 18 OECD countries including Japan and Korea were investigated. I discussed how different types of risks are shifting by different degree and at different times. Countries conform to different types of
risks through different time periods. Both Korea and Japan conformed to the *insecure flexibility* type of social risk.

This chapter continues the comparative study of risks by focusing on two forms of labour market risk: long-term unemployment and non-standard employment. However, unlike the previous small-N comparative chapters, this one goes up the ladder again. 18 countries are included in the comparative analysis, which maintains the institutional approach. Institutionalism, including the VOC literature (Hall and Soskice, 2001; Estevez-Abe, Iversen and Soskice, 2001), once again provides a useful theoretical background for this study in investigating how different institutions have various ramifications for labour market risks.

More recently, a considerable volume of literature has been produced explaining the increase of long-term unemployment and non-standard workers (Blank, Danziger, Schoeni 2008; Gallie, White, Cheng, Tomlinson 2004, Houseman and Osawa 2006, Hacker 2006, Kalleberg 2000, Huber and Stephens 2006, Esping-Andersen 1993, Esping-Andersen 1996, Esping-Andersen 1999, Pierson 2001, Iversen 2001, Taylor-Gooby 2000, 2004a, 2004b Hacker 2004, Jenson 2004, Bonoli 2007). However, most researchers focused on the general trend of labour market change rather than on the differences in long-term unemployment and non-standard employment across different countries. Hence, despite the fact that large numbers of studies suggest policy remedies for reducing long-term unemployment or for improving the conditions of precarious workers, less attention has been given to differences in already existing institutions. The existing institutions may be critical in understanding the different trends in labour
markets. An institutional approach can be more valuable in developing remedied policies as examining institutions is closely linked to policy analysis.

However a limited focus on the different institutional arrangements across larger numbers of countries may limit the quantitative method. While an institutional approach requires an essentially qualitative method, the analysis becomes less feasible when the number of cases increases. Likewise, when conducting a comparative study with a large number of cases, it is difficult to take an institutional approach because a quantitative method focuses more on the net effect of a factor, while the institutional approach requires a more configurational approach as institutions function together, complementing each other. This chapter investigates the institutional conditions of labour market risks by expanding the scope of cases to 18 OECD countries. Fuzzy-set Qualitative Comparative Analysis is exploited in order to qualitatively investigate the institutional conditions of labour market risks and to conduct a comparative study with a larger number of countries at different time points.

The purposes of this chapter are threefold. Firstly, it aims to investigate the relationship between social protection and labour market risks. More specifically, this chapter assesses how employment protection legislation (EPL), unemployment benefit replacement level and statutory minimum wages are associated with long-term unemployment and non-standard employment. Secondly, this chapter aims to analyse the impact of institutions (employment, unemployment and wage protection) as a configuration rather than to examine the net effect of individual social protection forms. Using the fuzzy-set analysis, I examine how the configuration of employment protection, unemployment
protection and wage protection matters in causing long-term unemployment and/or non-standard employment. Thirdly, it provides empirical evidence on institutional conditions of labour market risks for a larger number of cases: Korea, Japan, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Spain, Sweden, United Kingdom and the United States during the period of 2001 to 2008 (eight time points).

5.2 SOCIAL PROTECTION AND LABOUR MARKET RISKS

5.2.1 SOCIAL PROTECTIONS IN LABOUR MARKET

The effect of social protection has been studied by a wide range of social science disciplines. Studies have examined how such policies and institutions affect productivity growth or labour market performance (OECD, 2007). Others focused on the link between social protection and inequality (Estevez-Abe et al., 2001).

The impact of stringent employment protection for permanent workers has also been studied, mostly focusing on its impact on employment, unemployment and job-to-job reallocation (OECD, 2010). Stemming from the same vein of research, this chapter examines how employment protection, unemployment benefits and the minimum wage affect the incidence of long-term unemployment and non-standard employment, respectively.
Examining the effect of employment protection on temporary workers, the literature suggests that stringent regulation on regular contracts should encourage the use of temporary contracts (OECD, 2004; Pierre and Scarpetta, 2004; Boockmann and Hagen, 2001). The OECD (2010) reports that in their analysis a reform involving a one-point reduction in employment protection for regular workers would bring about a reduction in the share of temporary workers of between 3.2 and 4.2 percentage points (see Figure 3.6 of their study). In his study on the impact of regulation for temporary workers on the incidence of temporary employment, Kahn (2010) explains that policies making it easier to create temporary jobs raise the likelihood that wage and salary workers will be in temporary jobs. For example, it is argued that the incidence of temporary employment rises after the enactment of reforms relaxing the restrictions on hiring temporary workers. Another argument is that policies that ensure the rights for full-time workers to request part-time work in order to reconcile work and family responsibilities can increase the number of part-time workers. However, the OECD (2010) reports that “there is no clear relationship between the generosity of laws granting employees a right to work part-time work and the incidence of part-time work” (OECD 2010: 219), leaving room for further investigation.

Studies on unemployment benefits have suggested that generous benefit levels appear to have a positive impact on workers’ flow, such as between-industry job relocation (OECD, 2010; Boeri and Macis, 2010). However, microeconomic literature also explains that generous unemployment benefits appear to increase job-to-jobless transitions, while they do not appear to have any major impact on job-to-job transitions. It is also suggested that unemployment
spells tend to become longer when unemployment benefits are more generous (OECD, 2010). Some argue that longer benefit duration and higher replacement rates tend to raise unemployment and economies respond well to exogenous shocks if they have an unemployment benefit system that discourages long-term unemployment such as unemployment benefits for a relatively short duration, e.g. 15 months or less (Layard, Nickell and Jackman, 1991). The OECD (1994: 213) also concludes that there is considerable evidence that benefits affect unemployment rates. Much discussion has evolved around the level of unemployment benefit, as well. The most common dilemma for policy-makers is whether to provide higher benefits to keep beneficiaries (and their families) out of poverty or to lower the benefit. Because higher benefits cost more and it may reduce the gap between out-of-work incomes and in-work incomes (OECD, 2010).

Linking unemployment with non-standard employment, Kahn (2010) explains that the effect of regulation of temporary employment on raising the incidence of temporary jobs is largest when unemployment is high. The level of unemployment protection may have a significant effect on the increase of temporary workers. In his earlier study, Kahn (2001) explains that the benefit which firms acquire from hiring temporary workers is the low cost of laying off workers and that this option is most valuable when productivity is low, e.g. in a period of recession. Therefore, unemployment insurance systems can subsidize employers’ strategies of hiring temporary workers (Kahn 2010, 2001). Hence, unemployment protection may also have an effect on increasing the incidence of temporary workers as well as long-term unemployment.
Furthermore, from the workers’ perspective, another hypothesis can be developed. When the replacement level of the unemployment benefit is high, the workers may not need to, nor want to work in non-standard jobs where the working conditions, such as the wage, are not satisfying. Workers may choose to stay unemployed with high replacement rates rather than work as precarious workers for low wages.

Statutory minimum wage policy is another institution of protection for workers. However, there is little consensus on the impact of minimum wage on employment and/or unemployment and almost no research has been conducted on its impact on temporary employment. Also, only few theoretical papers discuss the impact of minimum wages on gross workers’ flows and different empirical studies suggest different arguments (see OECD, 2010 and Siebert, 1997 for literature reviews). For example, Siebert (1997) suggests that minimum wages set by law have a greater effect on the level of unemployment as soon as they approach the market and clear the wage of lower-paid jobs. It is argued that the European countries with an explicit minimum wage are characterized by high unemployment rates (Jackman, 1995). The argued reasons are that first, the unemployed have a lower incentive to search for or to accept work at a low wage rate. Thus, a higher reservation wage traps people in unemployment and impairs the market clearing role of wages (Siebert, 1997). The second suggested consequence of a minimum wage is that the floor of the wage structure moves upward and the earnings distribution is truncated from below. Hence, it pushes up the reservation wage and causes unemployment among low-skilled persons (Siebert, 1997; Nickell, 1997). However, reviewing literature on minimum wage
and conducting empirical analysis, Brown et al. (1982) suggest that the effect of minimum wage on employment and/or unemployment is not single-handedly determined and more recent studies have generally found no significant impact on worker flows (Abowd et al., 2005).

Evidence on the effect of different social protection mechanisms working together as a package is provided by many studies (Bassanini et al., 2009, Dolado and Stucchi, 2008; Griffith and Macarney, 2010; OECD, 2010) and informs this study as well. This evidence suggests that productivity growth tends to be smaller in countries where labour market flexibility is reached through a high proportion of temporary workers while the workers’ relocation for permanent workers is compressed. That is, in countries where the employment protection is rigid for permanent workers and labour market flexibility is achieved through large temporary workers, the overall performance of the labour market is negative (Bassanini et al., 2009, Dolado and Stucchi, 2008; Griffith and Macarney, 2010; OECD, 2010). The findings suggest that the different combinations of employment protection for permanent workers and employment protection for temporary workers may yield different labour market outcomes. For example, if the dismissal cost for a permanent worker is high, while it is low for temporary workers, employers will substitute temporary workers for regular workers. This argument is supported by the comparative study conducted in Chapter 7. Both Korea and Japan, where the employment protection for permanent workers is strict, the non-standard employment rate is high. In Taiwan, on the other hand, the employment protection for permanent workers is loose and the country has low non-standard employment rates. The theoretical analysis on the effect of
regulation on temporary contracts done by the OECD (2010) explains that if the use of temporary contracts is liberalized while maintaining strict employment protection regulations for open-ended contracts, companies will prefer hiring temporary workers due to the smaller dismissal cost (Boeri and Garibaldi, 2007; Bentolila et al., 2008). Similarly, some other studies examine major Spanish reforms in the early 1980s that liberalised regulations for temporary contracts without changing stringent employment protection for regular contracts and found that this led to a very large increase in temporary workers (Bentolila et al., 2008, Aguirregabiria and Alonso-Borrego, 2009; OECD, 2010). In other words, the effect of employment protections or regulation for non-standard workers cannot be analysed in isolation because it is conditional on the stringency of employment protection for regular workers.

The effects of one protection institution on labour market performance are closely related to the presence of other institutions. The effect of employment protection is related to the statutory minimum wage or unemployment benefits as well. However, it is impossible to take into account multiple numbers of institutional interactions within a cross-country multivariate regression framework (Boeri and Jimeno, 2002). The advantage of this study is that it acknowledges the feature of institutions functioning together and examines institutions as a set of more than one institution in a large-N design.
There are many terms describing workers in non-standard jobs such as atypical workers, irregular employment, precarious workers (Bonoli, 2006), freeters (a combination of ‘free’ and *Arbeiter* in Japan), ‘permalancer’ (young workers employed on long-term freelance contracts) and the ‘precariat’ (Standing, 2010). In his argument on the new global class structure, Standing (2010) especially focuses on the emergence of a new class which he terms the ‘precariat’.

“Below the core are the new legion of the precariat, flitting between jobs, unsure of their occupational title, with little labour security, few enterprise benefits and tenuous access to state benefits […] Those in the precariat lack employment security, being in jobs usually regarding by employer as short-term or casual, and seen that way by those doing the work. Often they have no employment contract, or if they do it is casual. They are thus denied labour law protection by virtue of status and by precariousness” (Standing 2010: 110)

The description of the precariat is similar to the conditions for non-standard workers in many service-based labour markets, especially those in Korea and Japan, as explained in Chapter 1. Some empirical studies on part-timers suggest that part-time workers loom large among the working-poor (OECD, 2009). The OECD (2010) reports that part-time workers have lower hourly wages, on average, than full-time workers in almost all OECD countries. Part-time workers
are also less likely to participate in training than full-time workers and trade union membership is generally lower among part-time than full-time employees. Finally, part-time workers tend to have less job security than full-time workers (OECD, 2010: 221-222). Part-time workers’ hourly wages in Korea, Japan and the United States range between 50 to 60 percent of those of full-time workers (figure 5.1).

**FIGURE 5.1 RATIO OF MEAN HOURLY WAGE OF PART-TIME WORKERS TO FULL TIME WORKERS IN SELECTED OECD COUNTRIES**

Source: Wage data are from the European Structure of Earnings Survey and national sources. Working conditions data are OECD calculations using data from the European Working Conditions Survey (2005) and the International Social Survey Programme (2005).

In addition, findings from cross-country comparisons (OECD, 2010) suggest that the relative situation of part-time workers, in terms of both incidence and depth of poverty, tends to worsen when part-time workers are involuntarily working part-time. In another study of part-time workers in the United States,
Schaefer (2009) reports that 29% of part-timers who are primary earners fall below the federal poverty line for a family of three, compared with just 4% of part-timers who are secondary earners. Furthermore, empirical studies focusing on unemployment benefits find a clear penalty to non-standard employment in terms of coverage. Part-timers are especially disadvantaged in countries that operate earnings or hours thresholds for accessing this benefit (e.g. Leschke, 2007; Grimshaw and Rubery, 1997; OECD, 2010). Standing (2010) asserts that the precariat has few if any company benefits and limited access to public insurance. This is particularly true for those unemployment schemes which are based on social insurance, because neither the workers, nor their employers pay the necessary contributions (Standing 2010: 110). However, Leschke (2007) also underlines that difference across countries in unemployment insurance coverage rates among non-standard workers are closely linked to the overall coverage rate. To some extent, part-time or temporary workers who remain entitled to unemployment insurance receive relatively generous benefits as compared with the contributions they make. Hence, it is argued that the condition of non-standard workers can be better explained by a configurational perspective.

A large volume of literature in the social sciences has examined the effects and causes of unemployment and its implications (Jackman and Layard 1990). The new social risks literature argues that unemployment has become less related to cyclical downturns in the economy and the unemployed are in a spell for longer periods now (see Chapters 2 and 4 for the literature review). Standing (2010) also asserts that the rate of long-term unemployment has risen. Empirical studies suggest that it is less likely to exit from unemployment when the period becomes
longer. For example, Jackman and Layard (1990) argue that the overall fall in exit rates from unemployment is affected by a higher proportion of the unemployed being long-term unemployed.

**FIGURE 5.2 SHARE OF LONG-TERM UNEMPLOYMENT* AMONG TOTAL UNEMPLOYMENT IN OECD COUNTRIES, 2007 AND 2009**

![Bar chart showing the share of long-term unemployment among total unemployment in OECD countries, 2007 and 2009.](image)

Source: OECD STAT. *Long-term unemployment is an unemployment period longer than one year.

Empirical findings from the previous chapter, however, suggest that countries vary in their rates of long-term unemployment. When examining the share of long-term unemployment among total unemployment in OECD countries (figure 8.2), the share goes up to 56% in Germany in 2007 and 46% in 2009, while the share is much lower in most of the Nordic countries (Sweden 13%, Finland 17%, Denmark 9% and Norway 8% in 2009). Korea has an exceptionally low rate of long-term unemployment, below one percent.
The low incidence of long-term unemployment contrasts with Korea’s high rate of non-standard workers. Korea has the second highest rate of temporary workers following Spain in this sample. Furthermore, Sweden and Finland have higher rates of non-standard employment compared to Germany. Likewise, the incidence of long-term unemployment and non-standard employment varies across countries.

Chapter 2 explained how different institutions can theoretically have different consequences in service-based economies using Baumol’s cost-disease theory. The hypothetical explanation on the effect of minimum wage policy is parallel to the findings of Siebert (1997) discussed above. However, when extending the argument further to link the minimum wage with temporary
employment, it can further be argued that in the absence of a minimum wage, the incidence of non-standard employment can increase (see figure 2.2 in chapter 2). The theoretical argument is that the minimum wage may be higher than the wage decided in the market, especially in a service-based economy. Hence, a larger labour supply compared to the demand results in a high rate of unemployment. On the contrary, in the absence of a statutory minimum wage, employers have more choice to hire low-skilled workers at lower wages. Hence, while the presence of a statutory minimum wage may have a positive relationship on unemployment rates, the absence of such policy may have a positive relationship on temporary employment. In other words, there can be a trade-off between high unemployment and high non-standard employment as a result of a minimum wage policy.

**FIGURE 5.4 THE SHARE OF LONG-TERM UNEMPLOYMENT AMONG TOTAL UNEMPLOYMENT AND THE SHARE OF PART-TIME WORKERS IN TOTAL EMPLOYMENT (SIXTEEN OECD COUNTRIES IN 2007 AND 2009)**

Source: OECD Stat.
However, when plotting the share of long-term unemployment in total unemployment and the share of part-time workers in total employment in 18 OECD countries in 2007 and 2009, the trade-off is not clear (figure 5.4). But the plotting of the share of long-term unemployment in total unemployment and the share of temporary workers in total employment (sixteen OECD countries in 2007 and 2009), indicates a negative relationship, suggesting a trade-off between the two risks, although this is not robust (figure 5.5).

The possibility of different combinations of the two risks, long-term unemployment and non-standard employment, is fully incorporated to the investigation. In other words, a country can theoretically have i) high rates of long-term unemployment and high rates of non-standard employment (LN), ii) high rates of long-term unemployment and low rates of non-standard employment (Ln), iii) low rates of long-term unemployment and high rates of non-standard employment (IN) and, lastly, iv) low rates of long-term unemployment and low rates of non-standard employment (ln).

A conceptualization of social risks was conducted in Chapter 4, followed by an empirical comparison. Continuing further the discussion on labour market risks in this chapter, a theoretical possibility of the trade-off between unemployment and non-standard employment is also investigated. The institutional conditions for different combinations of labour market risks are examined and the result may give insights into the connections between long-term unemployment and non-standard employment.
FIGURE 5.5 THE SHARE OF LONG-TERM UNEMPLOYMENT AMONG TOTAL UNEMPLOYMENT AND THE SHARE OF TEMPORARY WORKERS IN TOTAL EMPLOYMENT (16 OECD COUNTRIES IN 2007 AND 2009)

Source: OECD Stat.

5.3 FUZZY-SET MEMBERSHIP SCORES AND INSTITUTIONAL CONDITIONS

Instead of estimating the net effect of one institution on the labour market risks holding the other institutions constant, fs/QCA develops a joint cause fully allowing for the interaction effects among institutions in the different countries. The method also allows this study to examine a larger number of cases, incorporating the advantages of quantitative analysis. Here, 18 countries are compared at 8 time points between 2001 and 2008. Hence there are a total of 144 cases. The number of countries is limited due to the availability of comparable
data, however, the number of cases is sufficient for exploiting fs/QCA (Ragin, 2000).

Three institutions are examined as attributes for the configuration of institutions: the strictness of employment protection legislation, the replacement rate for the long-term unemployed and the statutory minimum wage policy. However, the strictness of employment protection is further divided into two: the strictness of employment protection legislation for permanent workers and the strictness of employment protection legislation for temporary workers. Likewise, the outcome – i.e. the labour market risks – is examined as a combination of long-term unemployment and non-standard employment. Four different combinations are possible as outcomes (LN, Ln, lN, ln).

**Institutional conditions:**

- EPP (Employment protection legislation for permanent workers)
- EPT (Employment protection legislation for temporary workers)
- NRU (Net replacement rate for long-term unemployment)
- SMW (Statutory minimum wage)

**Labour market risks outcome:**

- L (Long-term unemployment rate)
- N (Non-standard employment)\(^{37}\)

---

\(^{37}\)The set of non-standard employment consist of two sets of temporary employment and part-time employment. See chapter 4 for further explanation.
Fuzzy-set QCA model:

Labour market risks \((L, N, LN, Ln, lN, ln) = f(EPP, EPT, NRU, SMW)\)

5.3.1 EMPLOYMENT PROTECTION

Employment protection policies for permanent workers and temporary workers are considered separately for the reasons discussed above. The OECD definition of temporary workers includes those on fixed-term contracts, temporary agency workers, daily workers, trainees, people in job creation schemes, workers on contracts for a specific task, those on replacement contracts and on-call workers (OECD 2002: 170-171). This study uses the strictness of employment protection legislation (EPL) scale developed by the OECD (see www.oecd.org/employment/protection for details in methodology regarding the scale). The strictness of employment protection is divided into three by the OECD: employment protection for permanent workers, employment protection regarding collective dismissal and the regulation of temporary contracts. This study uses the scale for employment legislation regarding permanent workers and temporary workers. The scale for employment protection for permanent workers incorporates “three aspects of dismissal protection: (i) procedural inconveniences that employers face when starting the dismissal process, such as notification and consultation requirements; (ii) notice periods and severance pay, which typically vary by tenure of the employee; and (iii) difficulty of dismissal, as determined by the circumstances in which it is possible to dismiss workers, as well as the repercussions for the employer if a dismissal is found to be unfair (such as
compensation and reinstatement)” (OECD STAT). The scale for strictness of EPL for temporary contracts quantifies the regulation of fixed-term and temporary work agency contracts with respect to the types of work for which these contracts are allowed and their duration. This measure also includes “regulation governing the establishment and operation of temporary work agencies and requirements for agency workers to receive the same pay and/or conditions as equivalent workers in the user firm, which can increase the cost of using temporary agency workers relative to hiring workers on permanent contracts” (OECD STAT) (for a detailed description of this procedure, see also OECD (1999), Employment Outlook, Chapter 2, Annex 2.B).

FIGURE 5.6 STRICTNESS OF EMPLOYMENT PROTECTION, 2007 (SCALE OF 1-6, 6 BEING MOST RESTRICTION)

![Bar chart showing the strictness of employment protection for different countries in 2007.](chart)

Source: OECD.Stat.

The scale ranges from 0 to 6 with 6 being the strictest. Countries vary in their level of strictness. When comparing the strictness level for overall employment protection legislation (EPL), the United States, Canada and UK stand out as
having the lowest rigidity while the level of the strictness of EPL in France, Greece and Spain are high, being close to 3 (figure 5.6). Countries vary in their level of strictness for EPL with some countries having a more rigid EPL for permanent workers and others a stricter EPL for temporary workers. The United States has the lowest level for EP for both permanent workers and temporary workers, while most of the countries have different levels of strictness when comparing EP for permanent workers and those for temporary workers. For example, Korea, Japan, Germany and Canada show a contrast in the strictness levels between the two EPs, having higher levels of EPL strictness for permanent workers compared to the EPL strictness for temporary workers. However, Belgium, France, Greece and Spain have higher levels of EPL strictness for temporary workers (figure 5.7).
FIGURE 5.7 STRICTNESS OF EMPLOYMENT PROTECTION FOR PERMANENT WORKERS AND TEMPORARY WORKERS, 2007 (SCALE OF 0-6, 6 BEING THE STRICTEST)

Source: OECD, Stat.

One of the merits of fs/QCA is that researchers can incorporate qualitative knowledge on cases when calibrating. The scale of EPL strictness developed by the OECD ranges from 0 to 6 and in order to analyze the institutions as configurations, first all data are transformed into fuzzy-set membership scores.

In the case of EPL for permanent workers, when examining the cases before calibrating them, all the cases that this chapter is examining are in the range 0.17 to 3.05. In the dataset, there are no cases which the strictness scores of EPL for permanent workers is higher than 4. Hence, the value below 0.17 is fully out of the set of strict EPL set and any value over 3.05 is considered fully in the set of strict EPL (see chapters 3 and 4 for details on how to develop fuzzy-set membership scores (table 5.1). With the same method, a fuzzy-set score is
produced for the set of strict EPL for temporary workers: 0.25 for fully out, 4.75 for fully in and 1.73 is the cross over point \(^{38}\) (table 5.2).

### TABLE 5.1 STRICT EMPLOYMENT PROTECTIONS FOR PERMANENT WORKERS (FUZZY-SET MEMBERSHIP SCORES OF THE SET OF STRICT EPL FOR PERMANENT WORKERS IN 18 OECD COUNTRIES FROM 2001 TO 2008. MEMBERSHIP SCORE 0 IS FULLY OUT AND 1 IS FULLY IN)

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Source of the original data: OECD, Stat.

\(^{38}\) Explanation on fully in, fully out cut-off points and the cross over point is presented in Chapters 6 and 7. The crossover point is the fuzzy-set membership score that is for a case to be fairly in or out of the set.
TABLE 5.2  STRICT EMPLOYMENT PROTECTION FOR TEMPORARY WORKERS (FUZZY-SET MEMBERSHIP SCORES FOR THE SET OF STRICT EPL FOR TEMPORARY WORKERS IN 18 OECD COUNTRIES FROM 2001 TO 2008. MEMBERSHIP SCORE 0 IS FULLY OUT AND 1 IS FULLY IN)

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Source of the original data: OECD
While much literature is devoted to examining the impact of minimum wage on unemployment and poverty reduction, there is no consensus on the ideal level of statutory minimum wage. The level of minimum wage varies in different countries and across time. In the United States, the level of minimum wage compared to the average wage ranges from about 35% to 55% between 1947 and 2009 (figure 5.8).

It is sometimes suggested that social assistance benefits, when payable to persons in employment (as in most countries they are), and refundable earned income tax credits are functionally equivalent to setting of a statutory minimum wage. Certainly both raise incomes in work and are therefore likely to increase work incentive for job seekers. However for the perspective of employers, social assistance payable in work is likely to be viewed as a wage subsidy whereas a statutory minimum wage will probably be treated as an employment cost to the employers. Moreover, the empirical analysis (see section 5.3.4) suggests that there is little relationship between the existence of a SMW and the generosity of in work social assistance. The impact of the existence of earned income tax credits and social assistance benefit payable to employed person is covered in the net replacement rate (see section 5.3.3 and 5.3.4).

For cross-country comparisons in this study, the data on minimum wage is the ratio of minimum wage to the median earnings of full-time employees. The calibration for the set of statutory minimum wage incorporates both the statistical information on cases and takes account of the purpose of this research. Statutory minimum wage policy is absent in 39% of all 144 cases. The lowest minimum wage level in proportion to the median wage is 28% (Korea in 2001) and the maximum level is 63% (France in 2006, 2007, 2008). However, cases without minimum wage policy are also included in the calibration and are given a membership score of 0. This implies that the cases with no statutory minimum wage policy are considered to be fully out of the set of statutory minimum wage level. However, the cut point for a fully out membership score is 28%, which is the lowest minimum wage level among all cases that have statutory minimum wage policy. Because of the high proportion of cases with no statutory minimum wages, the statistical mean is 27%, which is even lower than the lowest minimum
wage level 28%. Cases are fairly evenly distributed between the minimum wage levels of 28% to 63% and hence the cut off point for fully in is 63% and the crossover point is 45%. In sum, a minimum wage level that is lower than 28% is treated as equal to cases with no statutory minimum wage assuming that the economic effect of such a low minimum wage level is insignificant (table 5.3).

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Instead of using simply the unemployment benefit rate to calculate the level of replacement level, I use the after tax net replacement rate for the long-term unemployed. The OECD calculates the net benefit replacement rate for the long-term unemployed separately according to six different family types. Here, I use the net replacement rate for one family type; single without children in order to limit the effect of other benefits that the levels of which are dependent on family composition. This is appropriate because the other two variables, EPL (employment protection legislation) and SMW (statutory minimum wage), are policies applied to individual workers while net replacement rate for different family types is affected by family benefits and tax deductions related to the income of the spouse. Net replacement rates (NRR) capture the direct effects of all relevant types of taxes and benefits on current household incomes, including the higher amount of taxes paid by employees or country differences in the taxation of benefits. NRR is defined as the net income received while out of work as a percentage of net income while in work for those previously employed.

The six types of families are: single without children, one earner married couple without children, two earners married couple without children, lone parent with two children, one earner married couple with two children, two earner married couple with two children.

For example, for married couples, the percent of average wage relates to one spouse only, which is 100% of average wage, and the spouse is assumed to have full-time earnings equal to 67% of the average wage in a two-earner couple. Children are aged 4 and 6 and the childcare benefit can be included in the family benefits.
full-time basis with earnings at 100% of the average wage. The net income is the outcome of: Gross employment income - Income Tax - Social security Contributions + Social Assistance or minimum income benefits + Unemployment benefits + Housing related cash benefits + Family benefits + In-Work or employment conditional benefits. Unemployment benefits are not separately analyzed for non-standard workers and regular workers. The aggregate unemployment benefit spending for part-time workers is small in most of the countries, the average being around .02 percent of GDP. The effect of unemployment benefit separately for non-standard employment is either none or minimal and this study assumes its effect to be negligible.

While the net replacement rates for long-term unemployed single households across countries are spread from 0% (Italy and Greece from 2001 to 2008) to 64% (Norway in most years), replacement rates in most cases are distributed between 17% and 58% of the average wage and 35.76% is the mean. Although the maximum is 85%, Norway between 2001 and 2007\footnote{In 2006 the rate was 84%}, only a few cases are over 75%. The crossover point for calibration is 36%, 17% for fully out and 58% for fully in (table 5.4).

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Source of the original data: OECD

While there is a variety among countries in their generosity level of net replacement rate for long-term unemployment rate, most countries have stable membership scores over time. However, the net replacement rate for long-term unemployment in Norway drops in 2008 and that for Germany in 2005.

In case of Germany, the decrease in the replacement rate may be explained by the policy change which took place in 2004. This involved the merging, as of 1st January 2005, of the former unemployment assistance and social assistance for persons who are able to work to form a single benefit: jobseekers allowance (Grundsicherung für Arbeitssuchende). Social assistance was reformed as well, restricting eligibility to those who are unable to work. Different from the
unemployment benefit, the basic jobseekers allowance is a tax-financed, needs-based and means-tested public welfare benefit.

In the case of Norway, the net replacement rate for single person household fell from 64% in 2007 to 38% in 2008. The decrease in the net replacement may be explained by the policy change regarding unemployment assistance. Norway provided a “waiting benefit” (ventestønad) to long-term unemployed persons up to 2008 June. The "waiting benefit" was paid if the claimant had worked at least three years during the past four years, and had exceeded the period of entitlement to unemployment insurance benefits, but had no maximum duration (OECD 2008). The benefit was intended to be temporary while waiting for suitable labour market measures or work. However, in 2007, there were on average 1,900 waiting-benefit recipients in total and the policy was changed to terminate the “waiting benefit” from 2008 onwards.\(^{42}\)

The comparatively low level of net replacement rate for France compared to other continental European countries is rather counter intuitive as it stands out as having a lower net replacement rate. However, France has a generous level of statutory minimum wage which may constitute a functional equivalent to the social assistance or minimum income benefit which is included in the net replacement rate variable. Discussion on the functional equivalent policies is continued in the next section.

\(^{42}\) Net replacement drops for all family types except for the one-earner with two children family type. This may be explained by the generous family benefits and social assistance for families with children. Social assistance is generous for families with children and but the gross income (which includes Social Assistance) is taxed if there is an additional earner, but favorable for one-earner with two children family. Social Assistance compensates the loss by the termination of waiting benefit for this family type.
As stated above, it is sometimes suggested that some of the European countries with no statutory minimum wage may still have other policies that are functionally equivalent. Social assistance is a broad concept which refers to minimum income benefits that are generally available on the basis of financial need and are hence subject to a test of means (OECD 2009). Social assistance can provide a fall-back safety-net for low income individuals or families and it may be suggested to have a similar function as the statutory minimum wage if payable of people in employment.

The variable net replacement rate for long-term unemployment (NRR) encompasses other benefits including social assistance (social assistance or minimum income benefits, housing related cash benefits, family benefits, in-work or employment conditional benefits and refundable earnings tax credits. The indicator of social assistance can even exceed unemployment benefit levels if unemployment payments are low or are not differentiated according to family situation or need. In fact, the contrast in membership scores between NRR and SMW suggests that the two variables may compensate for each other, in some continental European and Nordic countries. For example, Austria, Denmark, Finland, Germany, Norway and Sweden have a membership score 0 for the set of high statutory minimum wage while having a high membership scores for the set of generous net replacement rates. In these countries with no statutory minimum wage, net replacement rates are generous. By contrast, France stands out having a high membership scores for the set of generous statutory minimum wage while
having a low net replacement rates (table 5.5). Other countries with limited degree of overall social spending such as Korea and USA have low level of both NRR and SMW.

**TABLE 5.5 COMPARISONS OF STATUTORY MINIMUM WAGE AND NET REPLACEMENT RATES FOR LONG-TERM UNEMPLOYMENT FOR SELECTED EUROPEAN COUNTRIES**

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<td>0.42</td>
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</table>

*NRR drops in Norway from 0.98 in 2007 to 0.57 in 2008 for the reasons explained in the previous section. The above table presented the membership score in 2007.

However, when further examining the social assistance in all selected countries, the levels of social assistance do not necessarily support the hypothesis that social assistance may be compensating the absence of statutory minimum wage. All of the countries have social assistance programmes for persons in employment with low income or low waged. In this sense, the social assistance may be suggested to function as a minimum wage affecting employers' and workers' decisions in the labour market. However, there is no consistent evidence that benefits are higher for those in countries without statutory minimum wage. For example, Germany and Sweden which have no statutory minimum wage have lower levels of social assistance (which are eligible for low income workers) than
Belgium or Ireland which has high level of statutory minimum wage (see appendix 1). Also there is also a variety among the Nordic countries as Norway and Denmark have high level of social assistance compared to Sweden\(^{43}\).

5.3.5 LONG-TERM UNEMPLOYMENT AND NON-STANDARD EMPLOYMENT

The two variables, long-term unemployment and non-standard employment, are examined as the outcome of different institutional arrangements. The data for the long-term unemployment rate is the proportion of people who have been unemployed for more than a year among the total unemployed\(^{44}\). Rates vary among countries from 0.56% in Korea in 2003 to 63.35% in Italy in 2001. 144 cases are normally distributed from 1 to 63 and the mean is 29. The cut off point for fully in is set as 60% as there are only few cases which have the rate higher than 60% and 3% for fully out for the same reason. 29% is the crossover point, which was the mean value (table 5.6).

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</table>

\(^{43}\) Germany has lower level of social assistance than Ireland or UK when housing benefits are also included.

\(^{44}\) Different data is used in chapter 7 where it generated fuzzy-set score for percentage of the long-term unemployed among total labour force.
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<td>0.47</td>
<td>0.31</td>
<td>0.28</td>
<td>0.28</td>
<td>0.28</td>
<td>0.31</td>
<td>0.36</td>
<td>0.36</td>
</tr>
<tr>
<td>USA</td>
<td>0.07</td>
<td>0.09</td>
<td>0.12</td>
<td>0.14</td>
<td>0.12</td>
<td>0.1</td>
<td>0.1</td>
<td>0.11</td>
</tr>
</tbody>
</table>

Source of the original data: OECD

Regarding non-standard employment, the definition of non-standard workers includes both part-time workers and temporary workers. Countries such as Japan and Korea have both high rates of fixed term employment and part-time employment. However, there are also a number of countries where only one of these values is high. While the definition of non-standard employment adopted in this study includes both part-time workers and temporary workers as non-standard workers, there is no comparative data set that produces the sum of the two. One reason may be that the two categories overlap: for example part-time workers can also have temporary contracts and vice versa. The logical ‘OR’ can ameliorate the
limitation of the datasets. A set of non-standard employment is a sum of two sets: the set of temporary employment and the set of part-time workers. If either the part-time rate is high or the temporary employment rate is high, then the non-standard employment is considered high. Hence, the higher fuzzy-set membership score between the membership scores of the part-time employment set and the temporary employment set is the membership score for the non-standard employment. For example, the membership score for the set of temporary employment of Germany in 2001 is 0.42 and for the set of part-time employment it is 0.71. Therefore, the membership score of Germany in 2001 for non-standard employment is 0.71. In calibrating the temporary employment rates, cases are fully in if the rate is higher than 22%, fully out if the rate is lower than 4% and 13% is the crossover point. For part-time employment, 26% or higher is fully in, 5% or lower is fully out and 15% is the crossover point. Membership scores for temporary employment rate, part-time employment rate and non-standard employment rate are presented in Table 5.7.

\footnote{See chapter 7 for more details on the calibration of part-time employment rate and temporary employment rate.}
### Table 5.7 Fuzzy Set Scores of Temporary Employment, Part-Time Employment and Non-Standard Employment

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TM</td>
<td>PT</td>
<td>NS</td>
<td>TM</td>
<td>PT</td>
<td>NS</td>
<td>TM</td>
<td>PT</td>
</tr>
<tr>
<td>AUT</td>
<td>0.16</td>
<td>0.32</td>
<td>0.32</td>
<td>0.12</td>
<td>0.38</td>
<td>0.38</td>
<td>0.12</td>
<td>0.4</td>
</tr>
<tr>
<td>BEL</td>
<td>0.21</td>
<td>0.63</td>
<td>0.63</td>
<td>0.16</td>
<td>0.67</td>
<td>0.67</td>
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<td>0.71</td>
</tr>
<tr>
<td>CAN</td>
<td>0.05</td>
<td>0.7</td>
<td>0.7</td>
<td>0.05</td>
<td>0.74</td>
<td>0.74</td>
<td>0.42</td>
<td>0.75</td>
</tr>
<tr>
<td>DEN</td>
<td>0.21</td>
<td>0.48</td>
<td>0.48</td>
<td>0.21</td>
<td>0.53</td>
<td>0.53</td>
<td>0.21</td>
<td>0.58</td>
</tr>
<tr>
<td>FIN</td>
<td>0.73</td>
<td>0.21</td>
<td>0.73</td>
<td>0.73</td>
<td>0.23</td>
<td>0.73</td>
<td>0.73</td>
<td>0.25</td>
</tr>
<tr>
<td>FRA</td>
<td>0.66</td>
<td>0.41</td>
<td>0.66</td>
<td>0.58</td>
<td>0.41</td>
<td>0.58</td>
<td>0.58</td>
<td>0.35</td>
</tr>
<tr>
<td>DEU</td>
<td>0.42</td>
<td>0.71</td>
<td>0.71</td>
<td>0.42</td>
<td>0.74</td>
<td>0.74</td>
<td>0.42</td>
<td>0.78</td>
</tr>
<tr>
<td>GRE</td>
<td>0.05</td>
<td>0.05</td>
<td>0.5</td>
<td>0.42</td>
<td>0.05</td>
<td>0.42</td>
<td>0.34</td>
<td>0.06</td>
</tr>
<tr>
<td>IRE</td>
<td>0.06</td>
<td>0.69</td>
<td>0.69</td>
<td>0.06</td>
<td>0.72</td>
<td>0.72</td>
<td>0.06</td>
<td>0.74</td>
</tr>
<tr>
<td>ITY</td>
<td>0.27</td>
<td>0.3</td>
<td>0.3</td>
<td>0.27</td>
<td>0.27</td>
<td>0.27</td>
<td>0.27</td>
<td>0.27</td>
</tr>
<tr>
<td>JAP</td>
<td>0.5</td>
<td>0.68</td>
<td>0.68</td>
<td>0.58</td>
<td>0.68</td>
<td>0.68</td>
<td>0.58</td>
<td>0.7</td>
</tr>
<tr>
<td>KOR</td>
<td>0.95</td>
<td>0.99</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
<td>0.98</td>
<td>0.98</td>
</tr>
<tr>
<td>NET</td>
<td>0.58</td>
<td>0.99</td>
<td>0.99</td>
<td>0.58</td>
<td>0.99</td>
<td>0.99</td>
<td>0.58</td>
<td>1</td>
</tr>
<tr>
<td>NOR</td>
<td>0.21</td>
<td>0.8</td>
<td>0.8</td>
<td>0.27</td>
<td>0.82</td>
<td>0.82</td>
<td>0.27</td>
<td>0.84</td>
</tr>
<tr>
<td>SPA</td>
<td>1</td>
<td>0.1</td>
<td>1</td>
<td>1</td>
<td>0.1</td>
<td>1</td>
<td>1</td>
<td>0.12</td>
</tr>
<tr>
<td>SWE</td>
<td>0.66</td>
<td>0.42</td>
<td>0.66</td>
<td>0.66</td>
<td>0.41</td>
<td>0.66</td>
<td>0.66</td>
<td>0.43</td>
</tr>
<tr>
<td>UK</td>
<td>0.12</td>
<td>0.89</td>
<td>0.89</td>
<td>0.09</td>
<td>0.9</td>
<td>0.9</td>
<td>0.09</td>
<td>0.91</td>
</tr>
<tr>
<td>USA</td>
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<td>0.34</td>
<td>-</td>
<td>0.36</td>
<td>-</td>
<td>-</td>
<td>0.37</td>
</tr>
</tbody>
</table>

181
Two merits of the fuzzy-set method are highlighted in this section. The first advantage, absent in other conventional methods, is that it adopts a set theory and the researcher can explore whether the conditions are either a necessary condition or a sufficient condition for the outcome. Here, these two types of conditions, necessary and sufficient conditions, are suggested to be relevant for explaining labour market risk. The evaluation of sufficiency can be tested by examining whether the cases displaying the causal conditions form a subset of the cases displaying the outcome. This means that cases displaying a specified causal combination should constitute a subset of the cases displaying the outcome. Necessity can be assessed by examining whether the outcomes constitute a subset of the cases displaying the causes. In other words, if outcome is a subset of membership in a relevant cause, then this relationship can be cited, along with other evidence, as support for an interpretation of causal necessity (see Chapter 3 for more detailed explanations).

The second advantage of fs/QCA for this chapter is that the method is able to discover multiple pathways rather than a singular pathway to an outcome. In other words, “a specific cause or combination of causal conditions constitutes one of several possible paths to an outcome” (Ragin, 2008). This aspect of the fuzzy-set method is related to the conditions sufficient for the outcome. Sufficiency means that when there is a high level of labour market risk, there can be multiple conjunctural causation stories which lead to the a particular outcome (Ragin,
1987). Each condition or combination of conditions could be equally sufficient for the outcome to be present.

However, Ragin (2008:108) explains that there are hardly any cases where strictly necessary or sufficient conditions are present. In other words, there tend to be diverse cases with assorted connections where necessity and sufficiency cannot match the ideal pattern perfectly. Hence, two measures, namely set-theoretic consistency and set-theoretic coverage, are developed for assessing two distinct aspects of set-theoretic connections (Ragin, 2008: 44). Because exceptions are almost always present, it is important to measure the degree to which a set relation has been approximated. That is, the degree to which the evidence is consistent with the argument that a set relation exists.

Set-theoretic consistency measures “the degree to which the cases sharing a given combination of conditions agree in displaying the outcome in question” (Ragin, 2008:44). In other words, consistency indicates how closely a perfect subset relation is approximated. Set theoretic coverage by contrast assesses the degree to which a cause or causal combination “accounts for” instances of an outcome. Ragin (2008: 45) suggests that consistency is like significance in statistical analysis i.e. signals whether an empirical connection merits the close attention of the investigator. Coverage is like the strength of a statistical relationship, i.e. indicates the empirical relevance or importance of a set-theoretic connection. When the causal condition is necessary for an outcome, consistency assesses the degree to which instances of the outcome agree in displaying the causal condition thought to be necessary, while coverage assesses the degree to which instances of the condition are paired with instance of the outcome. The
calculation of the coverage of a sufficiency relationship is identical to the
calculation of the consistency of a necessity relationship, while the calculation of
the consistency of a sufficiency relationship is identical to the calculation of the
coverage of a necessity relationship (Ragin, 2008: 63). Ragin summarised the
method for assessing consistency and coverage for these two types of set-theoretic
relations as the table 5.8.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Type of set-theoretic relations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cause (X) is a subset of outcome (Y) (sufficiency relation)</td>
</tr>
<tr>
<td>Step 1</td>
<td>Assess consistency using $\Sigma_{\text{min}} (X_i, Y_i)/ \Sigma(X_i)$</td>
</tr>
<tr>
<td>Step 2</td>
<td>If consistent, assess coverage using $\Sigma_{\text{min}} (X_i, Y_i)/ \Sigma(Y_i)$</td>
</tr>
</tbody>
</table>

Also see User’s Guide to Fuzzy-set/Qualitative Comparative Analysis (Ragin and Davey, 2008: 85)

Fs/QCA software is used in order to examine the necessary and sufficient conditions (or a combination of conditions) that lead labour market risks, non-standard employment and/or long-term unemployment. For both necessary and sufficient conditions, I set the cut-off consistency point at 0.85, meaning that a specific condition (or a combination of conditions) is almost necessary or almost sufficient for the outcome to occur.
The necessary condition(s) for the outcome is examined first. After examining the two labour market risks separately, i.e. high non-standard employment (N) and high long-term employment (L), different combination of the labour market risks are also examined as outcomes. Four combinations are logically possible: the risk of high non-standard employment AND high long-term unemployment (N*L), high non-standard employment AND low long-term unemployment (N*l), low non-standard employment AND high long-term unemployment (n*L), low non-standard employment AND low long-term unemployment. The equation can be presented as:

\[ f (EPP, EPT, NRU, SMW) = L, N, LN, Ln, lN, ln. \]

In the analysis of necessity, the consistency is defined as the proportion of causes on or under the main diagonal of the plot (for example see figure 5.10) and since I established the cut-off point to be 0.85, this means that if the consistency rate is over 85% of the cases plot on or under the main diagonal, then we can claim that the causal combination is “almost always” necessary for the particular outcome.

Testing the four institutional conditions, no institutional condition is proved to be a necessary condition for high non-standard employment to exist because the consistency levels are smaller than 0.85, the highest being 0.73. In the case of
long-term unemployment, strict employment protection for permanent workers (EPP) may be proved to be a necessary condition only if the consistency cut-off point is lowered to 0.75\(^ {46}\) as the consistency level is 0.79 (figure 5.10).

However, when examining the labour market risks as a combination, the institutional condition of strict employment protection for permanent workers (EPP) is proved to be a necessary condition for both combinations of L*N and

\(^{46}\) Consistency is recommended to be higher than 0.75 (Ragin, 2008: 45).
L*n. As strict EPP is already almost (as the consistency is 0.79) a necessary condition for a high rate of long-term unemployment to occur, the set of L*N and L*n are likely to have a higher consistency with lower coverage because the set is most likely to be smaller than the set L47. For example, the consistency rate (0.95) and the coverage rate (0.38) in figure 8.10 suggest that strict employment protection for permanent workers is a necessary condition for the combination of high rates of long-term unemployment and low rates of non-standard employment. Technically, the levels of consistency and coverage suggest that strict employment protection for permanent workers proves to be a necessary condition for a country to experience high long-term unemployment regardless of the level of non-standard employment rate.

FIGURE 5.10 STRICT EMPLOYMENT PROTECTION FOR PERMANENT WORKERS AS A NECESSARY CONDITION FOR HIGH LONG-TERM UNEMPLOYMENT RATE AND HIGH NON-STANDARD EMPLOYMENT RATE (L*N) (CONSISTENCY 0.87, COVERAGE 0.60)

47 The more conditions that are added, the smaller the set is likely to be.
In case of strict employment protection for permanent workers as a necessary condition for high long-term unemployment AND low non-standard employment, most of the cases are below the diagonal. However, there are also a few cases that are above the diagonal (Figure 5.11). Those cases are Italy between 2001 and 2008 and the United States in 2001 and 2005. In the case of Italy, all cases have low membership scores (0.4) for the set of EPP, but membership scores for the risks of L*n is higher than 0.4 for all cases (X<Y). Hence, in case of Italy, the EPP does not prove to be a necessary condition in explaining the combination of high rates of long-term unemployment and low non-standard employment rates. Apart from EPP’s relationship with long-term unemployment
rates, none of the conditions are proved to be necessary conditions for the rest of the risk types.

5.4.2 THE TRUTH TABLE AND SUFFICIENT CONDITIONS FOR LABOUR MARKET RISKS

The evaluation of sufficiency can be seen as a test of whether the cases displaying the causal conditions of institutional contexts form a subset of the cases displaying the outcome of labour market risks. When analyzing fuzzy sets to identify sufficient conditions for the outcome, firstly a truth table is built in order to compress all logical combination which might be used to explain the outcome (Ragin, 2008; Rihoux and Ragin, 2008). The truth table is a list of different logically possible combinations of conditions and outcomes. Each logical combination of institutions is represented as one row of the truth table. The number of cases represents the distribution of cases across the different logically possible combinations of casual conditions. The table also includes a column on the assessment of the consistency of the evidence for each causal institutional combination with the argument that the combination is a subset of the outcome (see Ragin, 2008: 74 for a more detailed explanation).

The data for fuzzy membership scores for both institutional conditions (EPP, EPT, SMW, NRR) and the various outcomes are minimised by using the truth table algorithm of the fs/QCA 2.0 software. A two-stage analytic procedure is incorporated into the truth table algorithm. The first step is creating a truth table from the fuzzy-set data. The second step is the assessment of the distribution of
I start with the analysis of institutional conditions that lead to high rates of non-standard employment. The outcome for each institutional configuration is specified and configurations to be included in the analysis are determined. At this stage, the number of cases is checked. The number of cases refers to the number of cases with a membership score of greater than 0.5 in that configuration of conditions. For example, the second row of table 8.9 indicates that there are 8 cases that have a membership score higher than 0.5 in the configuration of $epp*EPT*SMW*NRR$.

Next, the frequency threshold is established. Ragin (2008) explains that when the total number of cases included in an analysis is large, it is important to establish the frequency threshold and the configurations need to have enough instances to warrant conducting an assessment of the subset’s relation with the outcome. When the total number of cases in an analysis is relatively small, the frequency threshold should be 1 or 2. In case of large-N analyses, the distribution of cases across causal combinations is important (Ragin, 2008: 133). In this analysis, 95% of all cases conform to the configuration that has the frequency threshold that is higher than 5, while two institutional configurations have only four cases and two cases that conform to other two configurations, respectively. Another four configurations do not have any cases that conform to them. Hence,
the frequency threshold is 5 in this analysis, meaning that if the number of cases is smaller than 5 for a particular configuration, these configurations are deleted from the truth table. For instance, there is no case with a membership score of greater than 0.5 for the combination of EPP*EPT*SMW*NRR. Hence, six combinations out of sixteen are deleted from the truth table.

**TABLE 5.9 CAUSAL COMBINATION AND SET-THEORETIC CONSISTENCY OF INSTITUTIONAL COMBINATION AS SUBSETS OF HIGH NON-STANDARD EMPLOYMENT RATE**

<table>
<thead>
<tr>
<th>Employment protection legislation for permanent workers</th>
<th>Employment protection legislation for temporary workers</th>
<th>Statutory Minimum Wage</th>
<th>Net replacement rate for long-term unemployment</th>
<th>Number of cases</th>
<th>Non-standard employment (Outcome)</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>1.00</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>1</td>
<td>1.00</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>16</td>
<td>1</td>
<td>0.99</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>0.99</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>20</td>
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<td>0.99</td>
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<td>1</td>
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<td>0</td>
<td>8</td>
<td>1</td>
<td>0.98</td>
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<tr>
<td>1</td>
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<td>0</td>
<td>1</td>
<td>25</td>
<td>1</td>
<td>0.98</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>1</td>
<td>0.95</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>0.95</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>16</td>
<td>1</td>
<td>0.89</td>
</tr>
</tbody>
</table>

For sufficiency, the consistency is defined as the proportion of cases on or above the main diagonal of the plot. That is, the minimum fuzzy set membership scores of the four conditions (EPP, EPT, SMW, NRR) in each of the tested combinations should be consistently lower than the membership scores of the
outcome, which is the non-standard employment. Here again, I establish a parsimonious cut-off point for consistency at 0.85 because of the general high level of consistency rates (table 8.9). In other words, if the consistency rate is over 85% of the cases plot on or above the main diagonal, then we can claim the institution or the institutional combination to be “almost always” sufficient for the outcome Y. If the consistency score is below 0.85, it means that conditions are not sufficient for the occurrence of the outcome (high non-standard employment rate) and the outcome is coded 0 (if the consistency is higher than 0.85, the outcome is coded 1). This study uses the intermediate solution\textsuperscript{48} with a consistency of 0.85 and four institutional combinations are derived\textsuperscript{49}. In other words, four pathways to high non-standard employment rate are identified. However, among the four, two configurations have a low level of coverage at around 0.25. The coverage refers to “the number of cases following a specific path to the outcome, divided by the total number of instances of the outcome” (Ragin, 2008: 49) and it is an indicator of the empirical importance of a causal combination. Thus, the two combinations with a coverage smaller than 0.30 are disregarded. For the sufficiency analysis on the causal conditions for non-standard employment which is: \( N = f(\text{EPP, EPT, SMW, NRR}) \), the outcome follows.

\[
N = \text{smw} \times \text{EPP} \text{ (consistency 0.92, coverage 0.61)}
\]

\textsuperscript{48} From the analysis, three solutions are derived, the complex, the parsimonious and the intermediate. According the Ragin (2008: 119), intermediate solution is preferred in an extensive fuzzy-set analysis to the other two solutions.

\textsuperscript{49} The combination of high level of net replacement rate for long-term unemployment and low (or none) statutory minimum wage (NRR \times \text{smw}) has the consistency 0.83 and coverage 0.45. It could be suggested to be one solution if the consistency threshold is lowered to 0.80. However, it is disregarded in this study as the established threshold is 0.85.
+ smw x ept (consistency 0.94, coverage 0.59)

The above solution can be factored to form:

\[ N = \text{smw} \times (\text{EPP} + \text{ept}) \]

FIGURE 5.12 LOW STATUTORY MINIMUM WAGE AND STRICT EMPLOYMENT PROTECTION (SMW*EPP) AS A SUFFICIENT CONDITION FOR HIGH NON-STANDARD EMPLOYMENT RATE (N) (CONSISTENCY 0.92, COVERAGE 0.54)
FIGURE 5.13 LOW STATUTORY MINIMUM WAGE AND LOOSE EMPLOYMENT PROTECTION FOR TEMPORARY WORKERS (SMW*EPT) AS A SUFFICIENT CONDITION FOR HIGH NON-STANDARD EMPLOYMENT RATE (N) (CONSISTENCY 0.95, COVERAGE 0.53)

The above fuzzy-set analysis suggests that a low level of statutory minimum wage can lead to high levels of non-standard employment in combinations with either 1) strict employment protection legislation for permanent workers (figure 5.12) or 2) weak employment protection legislations for temporary workers (figure 5.13). The two combinations support the theoretical discussion in the earlier part of this chapter. Low levels (or no) statutory minimum wage allow employers to hire non-standard workers at lower cost. When the employment protection for temporary workers is limited and there is no statutory minimum wage or the level is low, it is more feasible for employers to hire non-
standard workers. Hence, the combination of none or low levels of minimum wage and loose protection of the temporary workers leads to high rates of non-standard employment rate.

Likewise, the strict employment protection of permanent workers implies that it is more costly for employers to hire and/or dismiss permanent workers. The combination of none or low levels of minimum wage and strict protection of permanent workers leads to high rates of non-standard employment because in such circumstances it is more tempting for employers to hire non-standard workers than permanent workers.

LONG-TERM UNEMPLOYMENT

For the causal combination and set-theoretic consistency of institutional combination as subsets of high rate long-term unemployment, the truth table is produced as table 8.9. The cut-off point is 5 (combinations are disregarded if the number of the cases is smaller than 5) and of the consistency is 0.85 (table 8.9). Also, the intermediate solution is adopted. For the sufficiency analysis of the causal conditions for long-term unemployment which is: \( L = f(EPP, EPT, SMW, NRR) \), the outcome follows.
TABLE 5.10 CAUSAL COMBINATION AND SET-THEORETIC CONSISTENCY OF INSTITUTIONAL COMBINATION AS SUBSETS OF HIGH RATE LONG-TERM UNEMPLOYMENT.

<table>
<thead>
<tr>
<th>Employment protection legislation for permanent workers</th>
<th>Employment protection legislation for temporary workers</th>
<th>Statutory Minimum Wage</th>
<th>Net replacement rate for long-term unemployment</th>
<th>Number of cases</th>
<th>Long-term unemployment (Outcome)</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>16</td>
<td>1</td>
<td>0.95</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>0.90</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>1</td>
<td>0.86</td>
</tr>
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<td>8</td>
<td>0</td>
<td>0.80</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0.80</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>25</td>
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<td>0.79</td>
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</tr>
<tr>
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<td>0</td>
<td>16</td>
<td>0</td>
<td>0.61</td>
<td></td>
</tr>
</tbody>
</table>

\[ L = \text{SMW} \times \text{EPT} \text{ (consistency 0.93, coverage 0.37)} \]^{50}

A high rate of long-term unemployment is suggested to occur when there is strict employment protection legislation for temporary workers in combination with high levels of minimum wage (figure 5.14).

---

\[^{50}\] None of the outcomes changed when moving the threshold higher to 0.90 rather than 0.85.
In the labour market where it is more costly for employers to dismiss temporary workers and the level of the minimum wage is high, the demand for workers may decrease while the supply of labour is large, resulting in high unemployment rates.

**FIGURE 5.14** STRICT EMPLOYMENT PROTECTION FOR TEMPORARY AND HIGH LEVEL OF STATUTORY MINIMUM WAGE (EPT*SMW) AS A SUFFICIENT CONDITION FOR HIGH LONG-TERM UNEMPLOYMENT RATE (N) (CONSISTENCY 0.95, COVERAGE 0.53)
In order to test the hypothesis of the trade-off between non-standard employment and long-term unemployment, the chapter further investigates the sufficient conditions for four combinations of outcomes: NL, Nl, nL and nl. The same cut-off point, 0.85, is used, as well as the same frequency threshold, 5, a coverage threshold of 0.30 and the intermediate solution was adopted for the analysis. Only one pathway, meaning one combination of institutional conditions is proved to account for the labour market risk of both high non-standard employment rate and high long-term employment. No pathways were found to explain any other combinations of labour market risk but the combination of N x L. The truth table for NL = f (EPP, EPT, SMW, NRR) follows (table 5.11).

<table>
<thead>
<tr>
<th>Employment protection legislation for permanent workers</th>
<th>Employment protection legislation for temporary workers</th>
<th>Statutory Minimum Wage</th>
<th>Net replacement rate for long-term unemployment</th>
<th>Number of cases</th>
<th>High Non-standard Employment and Long-term Unemployment rate (Outcome)</th>
<th>Consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>1</td>
<td>8</td>
<td>1</td>
<td>0.99</td>
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<tr>
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<td>11</td>
<td>1</td>
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<tr>
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<td>0</td>
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<td>0.84</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>16</td>
<td>0</td>
<td>0.84</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0.82</td>
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<tr>
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<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0.79</td>
</tr>
</tbody>
</table>
One pathway is derived for the outcome of high non-standard employment rate and high long-term employment rate.

\[ NL = \text{NRR*EPT* epp} \] (consistency: 0.85, coverage 0.42)

The solution suggests that an institutional arrangement of high levels of net replacement rates for long-term unemployment (NRR) and strict employment protection for temporary workers, together with loose protection legislation for permanent workers can lead a country to experience both high rates of non-standard employment and high rates of long-term unemployment. The effect of strict employment protection legislation for temporary workers in combination with loose employment protection for the permanent workers seems to be offset by generous net replacement rates for long-term unemployment. The impact of the loose employment protection legislation for permanent workers in combination with high levels of net replacement rates can explain the high rate of long-term unemployment rate, but does not explain why it leads to high non-standard employment as well. However, when examining the cases, cases with greater than 0.5 membership score for the configuration of NRR*EPT*epp are only from two countries: Belgium and Italy. Both countries have slightly higher membership scores than 0.5 for NRR*EPT*epp between 2001 and 2007. There may be unidentified conditions in these two countries that differ from institutions in the
rest of the countries. Further investigation is required for a theoretical discussion to support this pathway for a labour market which has high non-standard employment and high long-term unemployment rates.

<table>
<thead>
<tr>
<th></th>
<th>Low non-standard employment rate</th>
<th>High non-standard employment rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low long-term unemployment rate</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>High long-term unemployment rate</td>
<td>12</td>
<td>51</td>
</tr>
</tbody>
</table>

No pathways are proved to be sufficient for the other three logically possible combinations of labour market risks, i.e. Nl, nL and nl. This result challenges the trade-off hypothesis between non-standard employment and long-term unemployment. Also, when examining the number of cases distributed among the four types of risk, there are more cases with high non-standard employment rates than high long-term unemployment rates (table 8.11). Furthermore, if the hypothesis of the trade-off is to be maintained, cases should be concentrated in the upper right cell and lower left cell. However, most cases are distributed in the upper and lower cells in the right (table 8.11). The results from the analysis of causal conditions and the distribution of the cases suggest that the hypothesis of the trade-off between non-standard employment and long-term unemployment can be rejected. In addition, when examining the combination of unemployment and non-standard employment in Chapter 4, there are also a large number of cases that conform to the complex risk type, which consist of high unemployment rates and high non-standard employment rates (see Chapter 4)
One of the advantages of employing fuzzy-set method is that it allows the researcher to return to the cases. In fuzzy-set analysis, a case is not dissected into several variables as in most of the conventional comparative methods, e.g. OLS regression. Ragin (2008) explains that the conventional quantitative method, which treats each independent variable in a given analysis as analytically distinct and separate, differs from fuzzy-set analysis due to the latter’s focus on a set-theoretic method of studying cases of a phenomenon as configurations of cases and conditions. As the analysis focuses more on the configuration of conditions rather than on “independent” variables, it is possible to return to cases, examining their membership scores for certain institutional arrangements. For example, while a number of countries are experiencing high levels of non-standard employment rates, we can return to the cases to examine which are the countries that have certain types of institutional arrangements. Likewise, if different institutional configurations are identified as causal conditions, we can return to the cases to examine which of the institutional configurations do countries conforms to. This highlights another merit of fuzzy-set analysis, which is its capability to examine multiple pathways for the same outcome.

Here I return to the cases of Korea and Japan. The two countries have high membership scores for the set of non-standard employment together with other countries such as Germany, UK, Spain, Netherland and Sweden. However, different countries have different institutional combinations which are suggested
to be causal conditions for the presence of high levels of non-standard employment rates.

When comparing Korea and Japan, what becomes apparent is that while both countries have high non-standard employment rates, the causal conditions for this outcome differ in the two contexts. In Korea, the institutional combination of a low statutory minimum wage and strict employment protection for permanent workers is suggested to be the causal condition (figure 5.12), while the institutional combination of a low statutory minimum wage and loose employment protection for temporary workers is suggested to be the causal condition in Japan (figure 5.13). The findings suggest that while both Korea and Japan have low levels of statutory minimum wages, their employment protection legislations differ in the 2000s.

Korea has a more rigid employment protection for permanent workers and also has a stricter employment protection for temporary workers (although the level is not as high as for the membership scores be over 0.5) compared to Japan (see table 5.1 and 5.2). Incidentally, Sweden is similar to Korea regarding the causal conditions for high rates of non-standard employment rates having high membership scores for the set of low statutory minimum wage and strict employment protection for permanent workers (smw x EPP) (table 5.13). However, findings from Chapter 4 suggest that workers, including the non-standard workers, have high income security in Sweden, which indicates that even workers in non-standard jobs are less likely to be precarious workers in Sweden. The explanation might be that although Sweden does not have a statutory minimum wage policy, the more generous level of transfers in Sweden compared
to Korea prevents workers from working for low incomes. UK and Canada both have high non-standard employment rates, but their membership scores for the set of low level of statutory minimum wage and strict employment protection for permanent workers is low, indicating that a different institutional arrangement is the causal condition for the outcome.

Differing from Korea, in Japan the institutional configuration of a low level of statutory minimum wage and loose employment protection for temporary workers is suggested to be the causal condition for the high level of non-standard employment. Compared to Korea, Japan has less strict employment protections for permanent workers (table 5.14), which indicates that the Japanese life-time employment system favoring the standard worker working in large firms may

<table>
<thead>
<tr>
<th></th>
<th>Korea</th>
<th>Japan</th>
<th>Canada</th>
<th>Germany</th>
<th>Sweden</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
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<td>.4</td>
<td>.15</td>
<td>.87</td>
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<td>.4</td>
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<td>.92</td>
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</tr>
<tr>
<td>2003</td>
<td>.67</td>
<td>.39</td>
<td>.15</td>
<td>.87</td>
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<td>.12</td>
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<tr>
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<td>.38</td>
<td>.16</td>
<td>.95</td>
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<td>.11</td>
</tr>
<tr>
<td>2005</td>
<td>.64</td>
<td>.38</td>
<td>.15</td>
<td>.95</td>
<td>.92</td>
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</tr>
<tr>
<td>2006</td>
<td>.62</td>
<td>.38</td>
<td>.15</td>
<td>.95</td>
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</tr>
<tr>
<td>2007</td>
<td>.57</td>
<td>.38</td>
<td>.15</td>
<td>.95</td>
<td>.92</td>
<td>.08</td>
</tr>
<tr>
<td>2008</td>
<td>.53</td>
<td>.37</td>
<td>.14</td>
<td>.95</td>
<td>.92</td>
<td>.1</td>
</tr>
</tbody>
</table>
have been promoted by other arrangements when compared to Korea. In Japan, the loose employment protection for temporary workers is suggested to be more responsible than the strict employment legislation protecting the permanent workers for creating high numbers of non-standard workers (table 5.14). In fact, Japan’s looser employment protection for temporary workers compared to its employment protection for permanent workers supports the argument developed Chapter 7. In the cases of Canada and UK, the institutional combination of a low statutory minimum wage and loose protection for temporary workers, rather than the combination of smw*EPP, is suggested to be the causal condition for high rates of non-standard employment rates (table 8.13). In case of Germany, the country’s membership scores for the two causal institutional configurations are both high (being above the 0.5 crossover point), however, figure 5.2 and figure 5.3 indicate that the institutional configuration of smw*ept is demonstrated to be the causal condition for the high rates of non-standard employment.

### Table 5.14 Membership Score for the Set of Low Statutory Minimum Wage and Loose Employment Protection for Temporary Workers (SMW X EPT)

<table>
<thead>
<tr>
<th>Year</th>
<th>Korea</th>
<th>Japan</th>
<th>Canada</th>
<th>Germany</th>
<th>Sweden</th>
<th>UK</th>
</tr>
</thead>
<tbody>
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<td>.73</td>
<td>.65</td>
<td>.43</td>
<td>.55</td>
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</tr>
<tr>
<td>2002</td>
<td>.48</td>
<td>.72</td>
<td>.66</td>
<td>.61</td>
<td>.55</td>
<td>.56</td>
</tr>
<tr>
<td>2003</td>
<td>.48</td>
<td>.71</td>
<td>.67</td>
<td>.61</td>
<td>.55</td>
<td>.58</td>
</tr>
<tr>
<td>2004</td>
<td>.47</td>
<td>.7</td>
<td>.69</td>
<td>.73</td>
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</tr>
<tr>
<td>2005</td>
<td>.44</td>
<td>.7</td>
<td>.66</td>
<td>.73</td>
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</tr>
<tr>
<td>2006</td>
<td>.44</td>
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<td>.65</td>
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<tr>
<td>2007</td>
<td>.40</td>
<td>.7</td>
<td>.64</td>
<td>.73</td>
<td>.55</td>
<td>.4</td>
</tr>
<tr>
<td>2008</td>
<td>.46</td>
<td>.7</td>
<td>.6</td>
<td>.73</td>
<td>.85</td>
<td>.42</td>
</tr>
</tbody>
</table>
5.6 CONCLUSION

There is no country where a single policy or institution is implemented in isolation. All institutions or policies work together as a combination. Thus, it is closer to reality to examine the impact of the combination of policies on labour market risks rather than the impact of single policies. This chapter aimed to investigate how particular configurations of institutional conditions cause particular labour market risks. Four institutions (employment protection legislation for permanent workers and temporary workers, statutory minimum wage and the net replacement rate for long-term unemployment) have been analysed to examine whether the different combinations of these conditions have an impact on long-term unemployment rates and non-standard employment rates across 18 OECD countries between 2001 and 2008.

In the analysis of institutions as sufficient conditions for labour market risks it is suggested that combinations of institutions result in high rates of non-standard employment or long-term unemployment. Examining the causal institutional conditions for high rate of non-standard employment, three institutional conditions have proved to be almost always sufficient to lead to high non-standard employment rates. A low level of statutory minimum wage can lead to high levels of non-standard employment in combination with either strict employment protection legislation for permanent workers or weak employment protection legislations for temporary workers.

One institutional combinations are suggested to be sufficient conditions for high rates of long-term unemployment. The long-term unemployment rate is
suggested to be high when there is strict employment protection legislation for temporary workers in combination with high levels of statutory minimum wage. The result suggests that in labour markets where there is less demand (than supply) for labour due to the high level of minimum wage, unemployment will increase and the strict protection on temporary workers further contribute to the trend because there would be less non-standard jobs that could absorb some of the unemployed.

However, when investigating the causal conditions for the four different possible combinations of labour market risk, only one configuration of institutions is suggested to be sufficient to cause a labour market risk that is a combination of high non-standard employment rate and a high long-term unemployment rate. The result of the analysis on the different combinations of risk rejects the hypothesis of a trade-off between non-standard employment and long-term unemployment.

There are multiple pathways to the same outcome, which Ragin (2008) calls the existence of different ‘recipes’. However, many comparative studies on the impact of policies or institutions tend to highlight the impact of single policies, especially when conducting the research using some quantitative method of analysis. This chapter demonstrated how institutions can be examined as combinations using fuzzy-set Qualitative Comparative Analysis. Causal conditions can be a combination of institutions, with different combinations potentially leading to the same outcome. This chapter discussed and empirically tested which institutional configurations cause labour market risk and the result highlighted the importance of examining multiple policies together especially when identifying remedies for labour market risks.
CHAPTER 6. THE SHIFT OF LABOUR MARKET RISKS IN EAST ASIAN ECONOMIES: TAIWAN, JAPAN AND THE REPUBLIC OF KOREA

6.1 INTRODUCTION

Labour markets in advanced economies are changing and these changes are multidimensional. The increase in the service sector, transitions from male dominated labour markets to an increase of female workers, and from a stable employment structure to a flexible one are the three most prominent major characteristics of labour market changes in advanced economies. Although it must be emphasized that countries are transitioning in different degrees and at different times, it is empirically evident that these changes are taking place in most of the developed economies.

The trend of labour market change is not only visible in Europe and the US, but is also apparent in East Asian countries. However, literature on deindustrialization and post-industrial economies seldom includes these Asian states in their analysis yet there is much to be investigated around the labour market changes in these Asian countries. Statistics on economic growth indicate that 13 countries have sustained an annual growth rate of 7% or more for more than 25 years (The Commission on Growth and Development 2008) and nine of the 13 countries are from Asia. The report states that among these nine Asian countries, five countries (Hong Kong, Japan, Korea, Singapore, and Taiwan)
developed in a short period of time to become high-income economies. In these five Asian countries, manufacturing industry started to decrease from the mid-1980s, except for Japan and Hong Kong where it started from the early 1970s, and the share of service sector in all five countries is over 50 per cent today. However, some aspects of transition in East Asia are different from those of the western advanced economies. The difference in the speed of economic development, labour market change and a different institutional legacy lead us to inquire as to the possibility of different features of labour market risks in East Asian economies. In chapter 4, I compared 18 different countries including Korea and Japan and discovered that the two countries conform with each other belonging to a same type of risk.

While maintaining the focus on Korea and Japan, this chapter includes Taiwan as a comparative case which has a substantially lower rate of non-standard employment. The comparative analysis of this chapter has three objectives: i) to empirically examine labour market transitions in the selected Asian economies, ii) to study the character of labour market risks and how these risks are shifting by gender, education level and by age in the transitional period, and lastly, iii) an attempt to rethink the commonly accepted assumptions that deindustrialization and/or globalization are the main causes of new labour market risks, this chapter proposes again the possibility of institutional legacy as an important factor for such risk shifts in the three countries. This is a descriptive chapter of the dependent variable that is the labour market risks. It is a step to examine the association between institutional differences and labour market risks in the three selected East Asian countries.
Three steps are taken in this inquiry. First, this study commences by empirically examining the three labour market changes indicated in the beginning of this chapter: increase of service sector, the increase in the female labour force and the increase of non-standard employment. Then, it investigates how the risks of non-standard employment and unemployment are shifting between different demographic groups to further rethink the new risk discussion. It continues to challenge the arguments of ‘new risks’ by adopting the concept of ‘risk shift’ that is developed in the previous chapter: the feature of risk shifting to different groups of people. The changes in risk may differ in these countries compared to western deindustrializing countries as suggested by new risk literature. In other words, the second step attempts to answer: how are labour market risks shifting in Korea, Japan and Taiwan and what are the implications? Lastly, with the empirical evidence from the previous steps, it discusses whether deindustrialization or globalization can sufficiently explain the risk shifts in these Asian economies.

6.2 CHANGES IN ASIAN LABOUR MARKETS

At the end of World War II, the Japanese economy was in chaos with high rates of poverty and high inflation. However, the troubled economy with a high unemployment rate, declining consumption and a capital shortage for companies entered a new phase with the start of the Korean War in 1950. In addition, the fast catch-up effect in the global economy after the war played an important role in Japan’s recovery. The United States procured supplies for their military during the Korean War from Japan. The increase in exports led to an accumulation of foreign
capital, which allowed Japanese companies to purchase resources to expand their production, and led to a further increase in exports. Exports increased almost fourfold during the period from 1950 to 1960. The devastated state of the post-war Japanese economy immediately began to recover and expand production. During the period 1955 to 1970, the Japanese economy experienced rapid expansion in which annual GNP growth averaged 10.2% (Jang 2008). The Japanese government was also able to increase government investment as the budget for defence was substantially reduced after the World War II due to the United States’ demilitarization policy for Japan. Together with a high education level, compressed wage structure and the catch-up effect of economic development, Japan was set for a rapid economic development (Jang 2008).

In the beginning of the 1970s, the Japanese government changed its industrial policy to develop its knowledge-intensive industry from a heavy chemical industry (Jang 2008). In 1970, the proportion of employment in the service sector was already 45% while the manufacturing sector and agriculture sector were 35% and 19% respectively. The service sector continued to expand and reached 55% in 1980. In 2008, the service sector accounted for almost three-quarters of total Japanese employment. The agriculture sector decreased to 10% in 1980 and was around 5% by 2008. On the other hand, the decline of the manufacturing sector was not so rapid. In 1980, employment in the manufacturing sector was 35% and decreased only a little to 28% in 2008. The size of the manufacturing sector in Japan remains high but the sector developed to produce mostly high value manufactured goods, which rely on a high level of technology.

In comparison to Japan, economic development started later from the 1960s in both Korea and Taiwan. Both countries were colonized by Japan and
hence the industrial and economic structures that were established during this period were not so different (Jang 2008). Also, the role of aid from the US in their economic development is another critical feature common to both countries. However, it is questionable how much the industrial investment by Japan contributed to the Korean economy, since the well-known ‘Miracle on the Han river’ was achieved after the Korean War, which had rendered South Korea one of the poorest countries in the 1950s. While the great inflow of aids of agricultural products from the US to post-war Korea relieved people from hunger, it had a negative impact on the agricultural industry in Korea and increased Korea’s dependency on the US. In Taiwan, while the country was also receiving large amount of aid, the agricultural sector continued to contribute to Taiwan’s economy until the 1950s. However, in 1961, based on [Act of International Development] in the US, the aid changed in character, becoming a development loan fund. The change of aid to loan greatly impacted both Korea and Taiwan’s economy later causing both countries to adopt an export-promotion policy (Jang 2008).

With the start of this export-promotion policy implemented by the government, Korea gradually entered the era of rapid economic development and reached 15% GDP growth in 1969. From 1960 to 1971, Korean exports increased 33 fold, led by the growth of the manufacturing sector. In the 1970s, the Korean government adopted further policies to boost heavy industries and chemical industries such as ship and car building. The Korean government also invested heavily in developing social infrastructure during this period. However, the export of heavy and chemical industry in Korea developed within the international
division of labour instead of within the domestic. Hence, certain industries were disproportionately subsidized by the government which helped a few export-oriented companies to grow very large. This is the period when ‘Chaebol’ (a South Korean form of business conglomerate which are global multinationals owning numerous international enterprises. Samsung, LG are some examples) started to come to the fore. Korea’s economic structure is still highly reliant on exports, especially by the Chaebol companies (Jang 2008).

As in Korea, the manufacturing industry led the economic development in Taiwan in the 1960s. While the agriculture sector was decreasing, the growth rate was around 20% for the manufacturing sector in the early 1960s. Taiwan also moved from cheap, labor-intensive manufacture into an expansion of heavy industry and infrastructure in the 1970s, and then to advanced electronics such as personal computers in the 1980s. However, as distinct from Korea and Japan where large companies play a significant role, small and medium-sized businesses make up a large proportion of businesses in Taiwan. The export-led development was mainly by the SMEs in the private sector which exported goods by the OEM (original equipment manufacturing) system. In other words, SMEs in the private sectors exported subcontracted equipment to large companies such as IBM or Apple in the United States or NEC in Japan (Yoon 2003).
The general trend since the 1970s in these three Asian countries is similar to the trend of deindustrialization in Western de-industrializing countries (Figure 6.1). Employment in manufacturing sector is decreasing or stagnant while employment in service sector is dramatically increasing with now more than half of their workers in the service sector. However, while all three countries conform to the trend of increasing employment in serviced sector as in Western post-
industrial economies, in the three Asian countries, a simultaneous de-agriculturalization is also apparent (this is discussed further in Chapter 7). Korea, especially, has experienced a dramatic change in all three sectors between the late 1970s and the 2000s. The rapid decrease of agriculture during the period from the 1960s to the early 1990s coincided with a rapid increase of the service sector. The share of employment in the manufacturing sector also shows a dramatic change as it rapidly increased during the 1970s-80s and then started to rapidly decrease starting from the 1990s. The period of industrialization in Korea is short compared to Japan or Taiwan. Japan’s labour market transition was slow and steady during this period. In Taiwan, the trend of increasing service sector is apparent but employment in the manufacturing sector still makes up a large proportion compared to Korea and Japan (36.8% in Taiwan, 27.9% in Japan and 25.9% in Korea in 2007).
An increase of female labour participation is another trend in most of the OECD countries (figure 6.2). By different degree and speed, most countries experienced an increase in working women during the last 30 years. Already in 1980, Sweden ranked high (58.9%) and the United States scored 51.1% which increased to 58.6% in 2007.
FIGURE 6.3 FEMALE LABOUR PARTICIPATION RATES* IN KOREA, JAPAN AND TAIWAN: 1979-2007 (%)

This trend is also visible in Korea and Taiwan countries while the rate has been steady since late 1980s in Japan. Korea and Taiwan experienced a rapid increase of female labour participation in the 1980s (Figure 6.3). The female Population to Employment ratio presents a very similar trend for these countries: Korea 52.3%, Japan 47.4% and Taiwan 50.4% in 2007.

However, as distinct from other Asian countries, the female labour participation rate in Japan in the early 1980s was around 48% which was even higher than the UK, Germany and France in the same period. In Japan, after peaking to about 52% in 1992, the proportion of females in the labour market
remained stagnant during the 1990s and slightly decreased in the 2000s\textsuperscript{51}.

The third suggested transition in most deindustrializing countries is the increase of atypical employment, especially during the last two decades (Standing 2009). However, it should be noted that the increase of such employment is different by degree and by speed in different countries (Lee, 2009). Nordic countries, the Netherlands, the UK and both Korea and Japan showed a high increase of non-standard employment starting from the 1990s. It is noticeable that Korea and Japan both show a very high non-standard employment rate in the 2000s, Korea scoring the highest among 15 OECD countries (figure 6.4) (Lee, 2009).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure6_4.png}
\caption{International comparison of temporary employment (excluding part-time workers) rate (%) (as a percent of total employment in 2007)}
\end{figure}

\textsuperscript{51} However, it should be noted that some data indicates a steady increase of female workers in Japan. The data shown in the above graph defines the term as females who are over 15 years old and are participating in the labour market. Some use 25-54 years old age group which shows an increase from 55.7\% in 1980 to 70.4\% in 2007 (source: Le Monde Diplomatique, August, 2009). This study uses the definition of age 15+ to make the data comparable.
Data for non-standard employment is scarce and more recent compared to other labour market indicators that partially indicate that the term is comparatively new. The OECD defines non-standard workers as those who are temporary workers or part-time workers. Temporary worker includes workers with fixed term contracts, temporary agency workers, seasonal workers and on-call workers. However, different definitions are often used for non-standard employment.

The Korea Labor and Society Institute reported that the number of non-standard workers is approximately 8.6 million which is higher than the number of regular workers (7.4 million) and that is 53-54 per cent of the total working population (Korea Labour and Society Institute 2007). The labour union includes ‘contingent workers’ in the non-standard employment category while the government separates it. Contingent workers indicate daily workers and temporary workers with no formally agreed working period. Although it seems more sensible to include these workers in the non-standard employment, however, this study uses a parsimonious definition, which is from each country’s government statistical office to make it comparable with other international data. While the definition of non-standard employment is controversial, this study uses a definition that includes temporary workers and part-time workers to make the data comparable.

In case of Japan, the Part-Time Work Law defines part-time workers as those workers whose scheduled working hours are shorter than those of regular employees in the same workplace and usually 35 hours is taken as the dividing line (Araki 2002). However, a number surveys suggest that part-timers work more than 35 hours. Keizar describes them as “‘pseudo-part-timers’, employees who
have a part-time status but work about the same number of hours as full-time employees” (Keizar 2007:6). He summarized the definitions of different types of non-standard employment as in Table 6.1.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part-time workers</td>
<td>Workers whose scheduled working hours are less than those of regular employees in the same workplace. Usually 35 hours a week is taken as the dividing line in this respect (Araki, 2002). However, certain surveys (i.e. the Employment Status Survey by the Bureau of Statistics) consider those employees as part-time who are classified as such in their workplace (e.g. Passet, 2003; Rebick, 2005).</td>
</tr>
<tr>
<td>Arubaito</td>
<td>A job taken by someone still in school or with other reasons to work a small number of hours</td>
</tr>
<tr>
<td>Contract workers</td>
<td>Employees with specialist skills on fixed-term contracts.</td>
</tr>
<tr>
<td>Shokutaku</td>
<td>Employees on temporary contracts often re-hired after mandatory retirement. Certain firms also use this term to refer to contract workers as defined above.</td>
</tr>
<tr>
<td>Agency workers</td>
<td>Workers hired from an employment or temporary agency. A further distinction can be made between a registered type (to-rokugata haken) and employment type (jo-yo-gata or jo-ko-yo-gata haken). The first involves the registration of the potential worker at the dispatching company with employment matched to the periods of assignment. Under the second type, workers become regular employees of the employment agency (Shire, 2002).</td>
</tr>
<tr>
<td>(Ko-nai) ukeoi</td>
<td>An ukeoi arrangement does not qualify as non-regular employment but its role justifies inclusion in this table. Under an ukeoi arrangement, subcontracting companies send their workers to work at the facilities of the client. It was originally seen as an answer to the prohibition against agency work in manufacturing (Imai, 2003).</td>
</tr>
</tbody>
</table>
Both Korea and Japan experienced a sharp increase of non-standard workers to about one third of total employment. The non-standard employment rate steadily increased from the late 1980s receiving attention from many scholars, policy makers and media. However, deindustrializing Asian countries become more diverse when Taiwan is included. The total number of non-standard workers in Taiwan yields an interesting comparison. The proportion of non-standard employment in Taiwan is substantially lower than in Korea and Japan, only around 6% in 2008. While scholars and the media of Taiwan are recently becoming aware of the increase of non-standard employment\textsuperscript{52}, the proportion is still substantially lower than in Korea and in Japan (figure 6.5).

\textsuperscript{52} “The number of atypical workers in Taiwan accounts for 6.24 per cent of the country’s labor force... DGBAS officials said compared with neighboring Japan and South Korea, the ratio of atypical workers in Taiwan is relatively low.” \textit{Asia Pulse News, November 28, 2008}.
FIGURE 6.5 NON-STANDARD EMPLOYMENT RATES IN SOUTH KOREA, JAPAN AND TAIWAN: 1984-2008 (%)


FIGURE 6.6 UNEMPLOYMENT RATES IN SOUTH KOREA, JAPAN AND TAIWAN: 1979-2007 (%)

However, the difference between Korea, Japan and Taiwan is much less visible when the unemployment rates in the three countries are examined (figure 6.6). All three countries maintain a comparatively low unemployment rate compared to other OECD countries and show similar trends during the past three decades except for in 1998, when Korea was hit by the IMF financial crisis. Although there was an increase in unemployment rate in all three countries, they are still substantially lower than in most de-industrialized countries in the west: Korea (3.2% in 2008), Japan (4% in 2008) and Taiwan (4.1% in 2008). Japan’s unemployment rate started to increase from the 1990s hitting over 5% in the early 2000s but has since decreased to below 4% in the late 2000s. The unemployment rate in Korea soared to around 7% during the 1998 economic crisis. However, it rapidly decreased again to around 3% from the early 2000s. This sharp increase and subsequent decrease suggests that the increase in unemployment in Korea was caused by an external shock rather than by gradual transition in the social-economic structure.

The increasing share of non-standard employment and the comparatively consistent low unemployment rate in Korean and Japanese labour markets is similar to Nordic countries (Lee 2009). However, with respect to the relative poverty rate and inequality, the two regions do not longer conform to each other. Both the relative poverty rate and inequality in Korea and Japan are higher than the OECD average and increasing (OECD 2008) while Nordic countries have the lowest rate on both indicators within the OECD. In Japan, the relative poverty rate (defined as an income that is less than 50% of the median) had risen to 15.3% in

53 The unemployment rate for OECD area was 8.6% in 2009.
2000 from 12% in the mid-1990s, scoring the second highest among OECD countries following the United States. The level of income inequality has also risen above the OECD average (OECD Economic Survey of Japan 2006). Referring back to chapter 4, both Korea and Japan had high fuzzy-set score for the set of high level of individuals in poverty while Nordic countries revealed the opposite. In Korea, the number of non-standard workers increased sharply and discussions on polarization have garnered large attention, especially since the 1997-1998 Asian financial crisis. Hence, the notion of labour market risk is subjective to other conditions in each country. This empirical overview of the transitional trends in the labour markets of these three countries leads us to question the characteristics of labour market risks in East Asian economies.

6.3 THE RISK SHIFT

welfare states and new social risks due to deindustrializing transitions. Huber and Stephens (2006) describe new risk as “risks that occur more frequently...because changes in the economics, demographics, and social structure increased the social groups at risk and/or increased the risk of a given social group to fall into poverty”. They argue that the people who face risk have now changed because of the transition to a post-industrial society. In general, the commonly made assumption is that new risk groups mostly consist of young individuals, women and low skilled persons (Esping-Andersen 1994, 1996, 1999, Pierson 2001, Taylor-Gooby 2004, Hacker 2004, Jenson 2004, Bonoli 2007).

However, the concept of new risk is highly relative to the society in which it is embedded and hence applying the new risk discussion, which is based on western post-industrial countries, can be misleading if applied to Asia. For example, while the poverty rate for the elderly, considered being an old risk group in the new risk discussion, decreased in majority of western countries (OECD 2008), it increased in Asia, South Korea scoring the highest elderly poverty rate in OECD countries, 44% (OECD 2008).

Therefore, the question in this chapter is “what are the characteristics of labour market risks specific to Asian deindustrializing economies?” In probing for the answer, this study uses the concept of risk shift to better understand the dynamics of risks shifting between different demographic groups and how it is associated with Asia-specific labour market risks. Focusing on the labour market risk, shift is defined as a change in the groups of people who experience unemployment and non-standard employment and it examines how risks of unemployment and non-standard employment are shifting between different
groups by age, by education level and by gender. Hence, six comparisons are conducted. A simple method of examining the ratio change is employed to investigate the shift. The time period of comparisons is from 1970s to 2000s in the three Asian countries.

6.3.1 SHIFT IN UNEMPLOYMENT RISK

To analyze how the unemployment risk is shifting between groups, rather than simply examining the general trend in total unemployment, unemployment is divided into three different sub indicators: 1) ratio of female unemployment rate to male unemployment rate, 2) ratio of youth unemployment rate to elderly unemployment rate, 3) ratio of low-educated unemployment rate to highly-educated unemployment rate. For example, the ratio of female unemployment rate to male unemployment rate is calculated by dividing the female unemployment rate by the male unemployment rate. It is operationalized to examine the shift of unemployment from male to female. This method tests the ‘new risk’ arguments that a group of people who newly face social risk are women. The ratio of youth unemployment rate to elderly unemployment rate is calculated by dividing the unemployment rate of those aged between 15 and 24 by the unemployment rate of those who are over 55. This indicator is to examine the unemployment shift from the old to the young as argued by the discussion on risk. To examine whether risk has shifted to the low skilled and the low educated, the ratio of low educated
unemployment rate to highly educated unemployment rate is calculated by dividing the unemployment rate of those with primary and secondary education by the unemployment rate of those with tertiary education.

Firstly examining the unemployment rate between the young and the old, a shift is clear. The unemployment rate in the 1990s for those aged 15 to 24 was substantially higher than the old in Korea (17.8 times higher in 1993) and Taiwan (17.16 times higher in 1990) but the risk of unemployment is shifting to the old in both of these countries (Figure 6.7). The decreasing ratio in Korea and Taiwan is due to the increasing unemployment rate of the 55+ age group. The unemployment rate for those aged 55+ in Taiwan increased dramatically from 0.73% in 1980 to 6.6% in 2003 and it is currently around 4% (2009). In Korea, the unemployment rate for the elderly was 0.5% in 1992 while it increased to be 3.4% in 1999 and it was around 2% in the late 2000s. However, the unemployment rate for the old is consistently high in Japan in comparison with the two other countries. The ratio between the 15-24 age group and 55+ groups does not show a significant change and the unemployment rate among the young people is about double that of the 55+ group all throughout the period. The unemployment rate for the elderly was already around 2% in early 1980s and increased to around 5% in early 2000s. However, since the unemployment rate for the young increased by a similar proportion, the ratio between the two groups has changed only a little. While the shift is not so clear in Japan, unemployment risk which used to be highly prevalent amongst the young is noticeably shifting towards the old in Korea and Taiwan.
Greatly different patterns are evident when examining the ratio of the female to male unemployment rate (figure 6.8). In Japan, the trend in unemployment is similar for both females and males and the ratio remains unchanged at around 1:1. However in Korea, the ratio doubled within two decades. This is explained by the decrease of unemployment rate for males in compare to females. The male unemployment rate was 6.19% in 1980 but decreased steadily to 3.66% in 2007, except for the sharp increase during the economic crisis in 1998. Although the
unemployment rate is still higher among males than females in Korea, the increasing ratio indicates that the unemployment risk is shifting towards females. While the increase in female unemployment in Korea may be explained partially by the increase in the female labour participation rate, Taiwan, which experienced a similar increase in female labour, experienced the opposite risk shift, from females to males. The increase in the unemployment rate was more rapid among males compared to females. While male unemployment risk is decreasing faster than females’ in Korea, male unemployment risk is increasing faster than females’ in Taiwan.

**FIGURE 6.8 THE SHIFT OF UNEMPLOYMENT RISK BETWEEN FEMALES AND MALES (CHANGE OF THE RATIO OF UNEMPLOYMENT RATE OF FEMALE AND OF MALE)**

*Ratio of Female unemployment rate to Male unemployment rate: Female unemployment

*FIGURE 6.9 THE SHIFT OF UNEMPLOYMENT RISK BETWEEN THE LOWER EDUCATED AND THE HIGHER EDUCATED (CHANGE OF RATIO OF UNEMPLOYMENT RATE OF THOSE WITH PRIMARY AND SECONDARY EDUCATION AND THOSE WITH UNIVERSITY OR HIGHER EDUCATION)*

![Graph showing the shift of unemployment risk between the lower educated and the higher educated](image)


While Korea and Japan show different trends in the risk shift when different age groups and different gender are examined, the two countries exhibit similar shifts when the unemployment rate by different education levels is examined (figure 6.9). The empirical evidence of this general increase in the unemployment rate for those with a high level of education directly challenges the studies reviewed above that suggest the low skilled are more at risk compared to the highly educated. In contrast to the argument of new risk, there is a clear trend of
unemployment risk shifting to groups with a higher level of education. The percentage of persons with lower education among the total unemployed population was 7 times higher than the highly educated in Japan and almost 5 times higher in Korea in the 1980s. However, due to the faster rate of increase of unemployment for those with high education levels compared to those with low education, the ratio between the lower educated and the higher educated decreased to be around 2:1. The proportion of the unemployed with higher education was 12.4% in 1987 in Japan which increased to 32.8% in 2007\textsuperscript{54}. In Korea, the proportion was 17.5% in 1985 and increased to be 35.2% in 2007\textsuperscript{55}.

The increase in unemployment for persons with higher education can be partially explained by the increase in the average level of education. In Korea, the number of universities more than doubled from 152 in 1970 to 368 in 2008 and the university entrance rate for high school graduates increased even more rapidly from 28.6% in 1970 to 83.8% in 2008. However, the increase in the university entrance rate does not fully explain the shift as it is steeper in Japan compared to Korea, while the university entrance rate in Japan has not increased as much as in Korea being only 49.1% in 2008. Comparing with the other two countries, unemployment risk in Taiwan is similarly spread between the lower educated and the higher educated, with the ratio being consistently around 1:1 throughout the period.

\textsuperscript{54} This is the percentage of highly educated (undergraduate and higher) of the total unemployment.

\textsuperscript{55} More interestingly the unemployment rate of those with tertiary education decreased during the economic crisis period in Korea which is when the total unemployment rate experienced rapid increase.
6.3.2 SHIFT IN NON-STANDARD EMPLOYMENT RISK

Next, non-standard employment is examined. It is suggested that non-standard employment can be related to poverty especially in Korea and Japan (Noh 2006, Woo 2006, Kadokura 2008). In Korea, the hourly wages of non-standard workers decreased from 64.3% of those of standard workers to 54.9% in 2005 (Lee and Yoo 2008).


![Graph showing the shift of non-standard employment risk between the old and the young.]


The precarious wage structure is also noticeable in the comparative investigation by the OECD which showed that in Japan and Korea, “workers
holding irregular jobs are paid between 40% and 60% less per hour than regular workers, a gap that is too large to be explained by productivity difference (OECD 2008)”, suggesting that there is an element of discrimination in the segmented labour market of non-standard jobs. Also non-standard workers are insufficiently covered by the social safety net and are precarious because of the limited coverage of their welfare benefits. In Japan, employers are exempt from social protection contribution if their employees work less than 30 hours per week. Non-standard workers in Korea and Japan are usually excluded from social protection which further increases the risk of becoming one of the working poor (Kadokura 2008). Non-standard workers are not strictly protected by employment protection legislation in the way that standard employment workers are and so non-standard workers “bear the brunt of the adjustment in employment during periods of economic weakness, resulting in their short average tenure compared to regular workers” (OECD Japan 2008). Both Korea and Japan have very high rates of non-standard employment compared to other OECD countries⁵⁶. Comparing with the unemployment risk shift (Figure 6.7), the risk of non-standard employment in Korea and Japan is shifting with regard to the ratio of the non-standard employment rate between the young and the old⁵⁷ (figure 6.10). Both in Korea and Japan, the increase in the non-standard employment rate for the youth between 15 and 24 years old is more rapid than the rate of increase in non-standard employment rate for those aged 55 years or older. Risk of non-standard employment is shifting more towards young workers (figure 6.10). In Korea, the

⁵⁶ However, when the term is divided, temporary employment rate is higher in Korea compared to Japan while the total part-time employment is higher in Japan compared to Korea. Temporary employment rate in Korea is almost 30% which is almost double of the OECD average while the rate is around 15% in Japan.

⁵⁷ Data on non-standard employment by different age group in Taiwan was not comparable to the other two countries.
proportion of those aged 55+ working in non-standard employment is higher than those who are between the ages of 15 and 24: 72% of those in non-standard employment were over 55 years old in 1992, which decreased to around 57% in 2008. Korean workers who are in their late 50s face greater risk of being employed in non-standard jobs (ratio is below 1) but the risk is also shifting to the young. In Japan, only about 18% of workers aged 15-24 were employed in non-standard work. However in 2009 this increased to around 33%. The percentage of non-standard workers who are 55+ also increased as the total share of non-standard employment rate steadily increased in Japan. However, the risk is also shifting to the young; the ratio of the non-standard employment rate between the young and the old exceeded 1 from 1997.

Gendered risk shift in non-standard employment is investigated by examining the change in the ratio of the female non-standard employment rate to the male non-standard employment rate in each country. In Korea, female non-standard employment rate is 1.5 times higher than that of male. However, the change in ratio in Korea suggests that there is no significant shift in non-standard employment from one gender to another (figure 6.11). In contrary to Korea, the ratio of the female non-standard employment rate and male non-standard employment rate in Japan has decreased since the mid 1990s indicating a shift of risk. While the ratio is still substantially higher in Japan compared to Korea and Taiwan, it is decreasing. The decrease of this ratio in Japan is largely due to the rapid increase of male workers in non-standard employment. The non-standard employment rate for males increased from about 7% in the early 1980s to 20% in 2008 while it increased from around 30% to 53% for females. The risk of non-
standard employment which used to be highly concentrated to women is now also an issue for male workers in Japan. The total rate for non-standard employment in Taiwan is 6% which is around one seventh of the rates in the other two countries (Figure 6.5). While the total non-standard employment rate in Taiwan is increasing slowly, there is a clear shift of risk towards women. In all three countries, by different degree, the total non-standard employment rate is increasing and a larger share of women is involved in non-standard work compared to males, most notably in Japan. However, in Korea and Japan, the risk of being employed in non-standard jobs has also increased for males (more rapidly than females in Japan).

**FIGURE 6.11 THE SHIFT OF NON-STANDARD EMPLOYMENT RISK BETWEEN FEMALES AND MALES (CHANGE OF THE RATIO OF NON-STANDARD EMPLOYMENT RATE OF FEMALE AND OF MALE)**

![Graph showing the shift of non-standard employment risk between females and males from 1983 to 2009.](image)

*Source:* For Taiwan, Directorate General of Budget, Accounting and Statistics, Japan Statistics Bureau Labour Force Survey and National Statistical Office, The Republic of Korea. In case of Korea, definition of non-standard employment specifically indicates the inclusion of part-time workers only from 2003 in their data base. Above data is from
1989 which includes temporary workers, daily employed workers. However, the ratio changes of the two definitions were similar to each other.

However, a unique characteristic of non-standard employment in Japan is the proportion of part-time employment in the non-standard employment (figure 6.12). In Korea, the proportion of part-time workers in the non-standard employment jobs is not as high as Japan where three quarters of the non-regular workers are part-time workers. When the female part-time workers are internationally compared (figure 6.12), Japanese women are highly involved in part time jobs scoring up to about four times higher than men in the decade starting from the mid 1980s and rate has increased from 28.4% in 1985 to 40.6% in 2007. The female part-time employment rate as a share of total female employment in Japan is the third highest among OECD countries following the Netherlands and Chile. In Korea, however, female part-time employment rate is about a third of that in Japan.

FIGURE 6.12 INTERNATIONAL COMPARISON OF FEMALE PART-TIME WORKERS (PERCENTAGE AS A SHARE OF TOTAL FEMALE EMPLOYMENT) (%)

Lastly, non-standard employment is examined with regard to different education levels (figure 6.13). Lower education comprises those with both primary and secondary education, and higher education refers to those with a university degree or higher. The proportion of the low educated among total non-standard employed people is three to four times higher than the highly educated in both Korea and Taiwan in early 2000s. However, the ratio has gradually decreased to around 2:1 in the late 2000s. This decreasing ratio is explained by the increase of highly educated people working in non-standard jobs. In Korea, the proportion of highly educated workers in non-standard employment increased
from 23.8% in 2003 to 30.4%. In Taiwan, it increased from 20.6% in 2001 to 29.4% in 2007. In contrary to the new risk discussion that the low skilled are highly concentrated in atypical jobs, the risk of non-standard employment is not only concentrated to low educated, but is also shifting to the highly educated in Korea and Taiwan.

6.4 ANALYSIS OF THE RISK SHIFT

It is incorrect to simply categorize atypical work as precarious. In countries where part-time work and temporary employment do not have large wage differentials with regular employment, either before or after transfers, working in non-standard employment does not indicate a risk of poverty (Lee 2009). However, in the case of the three Asian countries in this study, non-standard workers are paid 40-60% of the wage of standard workers (OECD 2008) and the main reason why companies hire temporary workers is because they are cheaper (OECD 2008). In addition, most of the non-standard workers are excluded from the social protection schemes in these countries, which further increase their risk of poverty. Non-standard employment is also precarious because of the lack of security. More than half of those non-standard employments do not have a written contract, especially in the case for part-time workers (ILO 2008), and labour protection law does not fully protect them. Hence, the exclusion from social protection, lower wages compared to standard workers and the specter of easy dismissal makes it
inevitable that non-standard workers are considered more precarious than standard workers in these countries.

**TABLE 6.2 DIFFERENT DEMOGRAPHIC GROUPS WHICH LABOUR MARKET RISKS HAVE SHIFTED TOWARD**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Japan</th>
<th>Rep. Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>UNPLY</td>
<td>NSTAND</td>
<td>UNPLY</td>
</tr>
<tr>
<td>The Young*</td>
<td>The Young</td>
<td>The Old</td>
<td>The Young</td>
</tr>
<tr>
<td>Male</td>
<td>Male</td>
<td>Female*</td>
<td>Male</td>
</tr>
<tr>
<td>Highly Educated</td>
<td>n.a</td>
<td>Highly Educated</td>
<td>Highly Educated</td>
</tr>
</tbody>
</table>

* For these cases, however, the ratio change is minor hence it is difficult to suggest a shift. UNPLY refers to unemployment and NSTAND refers to non-standard employment.

To which demographic groups are the risks shifting and what are its implications? While the unemployment rate in Korea and Japan is still comparatively low, the increase of non-standard employment is distinctive. In both cases, the labour market risks are shifting to the higher educated (table 6.2), most apparently in Korea (figure 6.9 and figure 6.13). This can be explained by the increased rate of higher education uptake in Korea but also a change in labour market demand. The mismatch of the education and labour markets pushed the highly educated to either unemployment or non-standard jobs. In Japan where the tertiary education level is only about half that of Korea, the unemployment risk is still shifting to the highly educated pointing to a clear change in labour market demand (figure 6.9). A university degree no longer guarantees a job in deindustrializing Japan. Referring back to the new risk discussion, the examined
Asian cases suggest that the argument of risk being concentrated to those who have a low level of education is confirmed, however, at the same time, the findings attest that there is a shift. On the other hand, Taiwan which showed a very similar trend in its unemployment rate with Japan in the 2000s, does not show a major shift between different educations levels (figure 6.9). Although the ratio is decreasing, the change is little. The substantially low level of non-standard employment and the small shift in unemployment risk between different education levels cast Taiwan as a contrasting case. Two distinctive differences in the labour market structure of Taiwan in comparison with the two other countries is the large size of its manufacturing sector and SMEs’ major role in the labour market of Taiwan. The comparison between the three countries indicates a possible association between the changes in the level of skills that the labour market demands and the decline in manufacturing. However, more importantly, it suggests that labour market structure acts as an important factor in shaping the risk shift trend.

Examining the different age groups, contrary to the new risk discussion, risk of unemployment is shifting to the elderly both in Korea and in Taiwan (figure 6.7). However, in Korea and Japan the risk of non-standard employment is shifting to the young (figure 6.10). While the unemployment risk shift can be explained by the increase of labour participation rate of the elderly, the risk shift of non-standard employment suggests that it is becoming more difficult for the young to have a standard job. The elderly are still more involved in non-standard jobs in Korea, and the ratio has increased to about 1:1 in Japan. However, the trend indicates that non-standard employment risk that used to be concentrated to
the old is also shifting to the young as well. Especially in Japan, the non-standard employment of the young is increasing while the unemployment ratio of the old to the young is steadily decreasing. Hence, it can be suggested that in Japan, risk is shifting to the young.

Compared to Taiwan, the wage difference and exclusion of social protection for non-standard workers should be understood in the context of the market structure in Korea and Japan where the non-standard employment rate is noticeably high. Two of the unique characteristics of the Japanese and Korean work environment are the lifetime-employment model and wage system based on seniority. Wages begin low but seniority is rewarded with promotions based on it. These two systems played an important role in increasing companies’ profit and maintaining a high level of employment security for the workers. In exchange for hard work and loyalty toward the company, employers provided training (‘on the job training’) and benefits other than salary, such as bonuses. As employees’ salary and welfare from the company were closely related to the profitability of the company itself, employer and employee interests were strongly aligned, and this was an important factor in the cooperative relationship between labour unions and companies (Jang 2008). The dual structure economy that is characterized as the coexistence of large corporations with small and medium sized enterprises is another important aspect to wage inequality. SMEs absorbed a large proportion of the labour force while paying comparatively low wages to their workers. The low wages for SME workers enabled large companies to accumulate capital more easily as the low priced goods provided to them by the SMEs enabled large companies to reduce the production cost. This dual structure employment model has been suggested to have played an important role in the rapid economic
development of these countries but is also recognized to have created a rigid division in the labour market between insiders and outsiders.

This distinctive form of capitalism, which is described as a dual labour market, cannot be explained without reference to the welfare system. Seeleib-Kaiser (2001) analyzed the Japanese welfare system highlighting how policies on the agricultural and the distribution sector had a functionally equivalent role to the unemployment and pension schemes (Seeleib-Kaiser, 2002). Criticizing the social democratic bias in traditional welfare state discussion, Estévez-Abe (2008) also examined the Japanese welfare state by focusing on Japan’s use of industrial policies as a form of social policy. She summarizes Japanese welfare policy as ‘work-based social protection’ and saving oriented welfare programs. She explains that the work-based social protection system helped “create and sustain a coordinated market economy in the absence of generous social security programs for wage earners” (Estévez-Abe 2008: 17). Privileged core workers in large firms in Japan’s dual labour market preferred company-based benefits over universalistic benefits, and large firms that have political influence often seek protective measures for themselves. Pension schemes differ by occupation, firm size and whether workers are part time or full time. For example, employers are exempted from enrolling their part-time workers in mandatory social insurance schemes such as the Employee Pension Scheme. Hence, there is a strong link between a person’s work and their welfare benefits (Estévez-Abe 2008).

The dual structure is further entrenched by the countries’ emphasis on “work” and favoring policies for large companies and full time workers. Seeleib-Kaiser (2002) explains that work policy is at the centre of the Japanese welfare system and it relies less on protectionism but more on fiscal policy and active
labour market policies to reduce the risk of unemployment for less productive workers and provide security against the risk of old age (2002: 760-761). Estévez-Abe also explains that Japan relies on a variety of functional equivalents to social security in areas where its social security benefits are meager. However, direct beneficiaries of such functional equivalents are firms and producers rather than the individual workers. For example, wage subsidies are paid to employers rather than to employees. This is argued to play a functionally equivalent role as income protection since companies can avoid firing their workers during downturns in the business circle (Estévez-Abe 2008), but the disparities in the dual labour market remain untouched. Government spending such as on public works (construction of social infrastructure) is another example which directly benefits employers of construction firms and related industries rather than providing benefits directly to the workers. Another example of Japanese social policy’s emphasis on work is the fact that its minimum wage is the lowest amongst the advanced industrial countries, while its tax relief is one of the most generous (Estévez-Abe 2008). These social policies which are argued to function as equivalents to other social protections in fact further strengthen the dual structure of insiders (employees in large firms, full time workers) and outsiders (SME employees and part time workers). In Korea during the 1970s, the government not only subsidized large companies in heavy industry and the chemical sector but invested in social infrastructure. These kinds of public work projects, such as construction, tend to employ contract workers or part time workers whose working conditions differ from those working in large companies who have company benefits. In contrast to public sector employment, these projects channel money primarily to construction, as opposed to directly paying wages to individual workers.
Strong employment protection regulation is also argued as an industrial policy that functions as social policy in Japan (Estévez-Abe 2008) and in Korea. Japan ranks high on the OECD index of the stringency of employment protection legislation (See Nicoletti et al. 2000 for detailed data). In Korea, large numbers of people were laid off during the economic crisis in 1998. However, the employment protections actually became gradually more rigid for standard workers after the recovery. The strong employment protection strengthens the dual structure by protecting the workers already hired in large firms, whilst deregulating the labour market for non-standard workers, exposing them to risk.

However, the relationship between economic development and the dual labour structure faced the challenge of whether it could be sustained in the period of globalization and deindustrialization, and furthermore the dual structure has been intensified. Japanese economic growth started to slow down from the 1970s and the collapse of its bubble economy in the 1990s ushered the government to deregulate and increase labour market flexibility. Economic growth in Korea and Taiwan has also not been as glorious as in the 1970s and 1980s. In Japan, the employment regulation index58 for the manufacturing sector decreased from 1 in 1995 to 0.32 in 1999 (68% decrease), 0.23 in 2005. Also for non-manufacturing sector, the regulation index decreased from 0.61 in 1999 to 0.33 (about 46% decrease) in 2005 (Jang 2008). Noting that the majority of non-standard workers are working in SMEs (where 91% of the service sector workers are employed in Korea) rather than in large cooperation, the deregulation has greater impact on the SMEs which accordingly makes their non-standard workers more precarious. In

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58 The regulation index quantifies the level of regulation in industries by setting the degree of regulation in 1995 as a benchmark.
other words, this institutionalized the dual market structure, which was further entrenched by deindustrialization and deregulation in Korea and Japan.

The female labour force increased in both Korea and Taiwan, while it was already around 50% from the late 1980s in Japan (figure 6.3). Conforming to the new risk discussion, the unemployment risk is shifting to females in Korea (figure 6.8). The increase of the female labour force in Korea partially explains the shift of unemployment risk between genders in Korea. However, the shift of non-standard employment risk toward females is less apparent in Korea. Women in non-standard employment are increasing; however, the steady ratio (1.5:1) of the non-standard employment rate between different genders in Korea indicates also that the proportion of male workers in non-standard employment increased at a similar speed (figure 6.11).

More interestingly, in contrast to the common argument that women are now facing more labour maker risks, the labour market risks are shifting to male workers in Japan. This does not, of course suggests that men are more likely to experience unemployment or work in non-standard jobs than women. However, it indicates that while the labour market risk has increased for women, the ramping up of risk was speedier for male workers in Japan. Hence, it is problematic to argue that new risk is concentrated toward women in deindustrializing economies.
Risk shifts rather than stays static, and it should be examined with an understanding of its dynamic nature. By examining the change in the unemployment rate and non-standard employment rate by educational level, age and gender, this chapter has attempted to empirically investigate how risks are shifting between different demographic groups during the past two to three decades. It also attempted to rethink the Western-biased new risk discussion. In contrast to most of the discussion on new risk, risks are not statically concentrated amongst females, the young and the low educated. The trend of groups experiencing risks varies and does not conform to a predetermined pattern even within East Asian context.

This chapter makes three contributions to the discussion of post-industrial labour market transitions and new risks literature. It is the first comparative study of these three East Asian economies, Korea, Japan and Taiwan, that empirically examines their deindustrializing labour market changes and risks. Hence, it widens the variety of cases, providing further possibilities to strengthen or refute the existing arguments about deindustrializing labour market change and new risks. Secondly, it empirically tests the argument that new risks are focused on women, young and the low skilled by examining how risks are shifting to different groups by gender, educational level and age. In other words, it examines how labour market risk shifts to different demographic groups over time. Lastly, while most of the studies point out the impact of deindustrialization and globalization on
labour market to explain the labour market risks; this chapter focuses on the importance of institutions such as labour market or social protection policies.

In this chapter, a descriptive study of the labour market risks was conducted to understand the risk shift and attest the differences of risks between countries with different institutions. The definition of risk is highly dependent on each country’s institutional structure such as wage difference, labour protection, social protection coverage and institutional legacy, etc. It should be emphasized that countries in a similar stage of deindustrialization or globalization can experience different risks, which suggest the importance of institutional differences. The sharp difference in non-standard employment rates between South Korea, Japan and Taiwan attests to the impact of the dual labour market structure, which is an institutional legacy from the period of rapid development that requires further analysis. This finding suggests that an institutional approach in understanding the labour market risks in the three Asian economies could yield important explanation. In sum, it should be concluded that risk, whether new or old, should be defined differently in different social contexts.
CHAPTER 7. HOW DID INSTITUTIONS EVOLVE IN EAST ASIA? THE VARIETIES OF WELFARE PRODUCTION REGIMES IN KOREA, JAPAN AND TAIWAN

*Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly found, given and transmitted from the past.*

[The Eighteenth Brumaire of Louis Bonaparte 1852], Karl Marx

7.1 INTRODUCTION: TURNING THE FOCUS ON THE INSTITUTIONS

Chapter 6 concluded that even within the East Asian context, risks are shifting differently despite the fact that they similarly have high rate of employment in service sector and stagnant or decreasing rate of employment in manufacturing sector. The most distinctive feature of labour market risk in Korea and Japan is their high rate of non-standard employment. Also, findings from the previous chapter show that labour market risks shift differently and are characterized differently. Why then do they differ in this regard? It is from here that this study takes an institutional approach. To examine how socioeconomic changes are mediated by country specific institutional arrangements that create different kinds of risks, the thesis turns its focus on institutional differences.

Despite the enthusiasm in explaining the unique features of Asian welfare states taken as a whole, the literature pays little attention to differences between these countries. Discussion of East Asian welfare states was sparked by challenging the welfare regime typology of Esping-Andersen (1990). Literature
on Asian welfare states argue that there are limitations in explaining the
development by class theory, industrialization theory, power resource theory, etc
and ‘Asian welfare state model’ can be introduced to explain its distinctive
features (Aspalter 2006; Croissant 2004; Ku, Jones Finer 2007; Kwon 2005;
Kwon, Holliday 2007; Lee, Ku 2007). The following is a synthesis of the traits
Gregory Kasza summarized that scholars examining Asian welfare states use to
describe the welfare state of Hong Kong, Japan, Singapore, South Korea, and
Taiwan 59 (Kasza, 2006:116).

- Centralized bureaucracies, one party domination, and weak labour
  movements characterize politics.
- States have directed economic development toward distributive and
growth objectives, producing egalitarian patterns of income
distribution.
- Rapid economic growth has allowed states to forestall the adoption of
  public welfare measures.
- The notion of public welfare as a social right of citizenship is weak.
- There is little public social protection for disadvantaged members of
  society, who are held responsible for their plight; welfare dependence
  on the state is stigmatized.
- Family, company, and community play major welfare roles.

59 Kasza states that this portrait is drawn from Tang, Social Welfare Development in East
Asian Welfare States,” 196-97, 202, 205, 208; Christian Aspalter, Conservative Welfare
State System in East Asia(Westport: Praeger, 2001) and M. Ramesh who does not endorse
the concept of an East Asian welfare model, also reviews the stereotype in this Social
Policy in East and Southeast Asia: Education, Health, Housing, and Income
• Welfare programs are highly segmented, offering differential benefits for various groups in a way that reinforces their relative shares of power and status.

• Political leaders use Confucian rhetoric to combat demands for Western style welfare. (Kasza, 2006: 116)

Simply comparing with the western welfare states, too often literature on welfare states, production regimes, industrial structure and power resource theory (labour union and corporatism) groups East Asian countries together as being similar without a close examination on their critical institutional differences. This lack of study of different institutions in these countries limits our understanding of the different characteristics of labour market change across East Asia.

In examining the institutions in East Asia, there are two approaches that are found to be useful: the historical institutional approach (Thelen and Steinmo 1992, Immergut 1998, Hall and Taylor 1996) and the welfare production regime theory from the Varieties of Capitalism Literature (hereafter VOC) (Hall and Soskice 2001). The welfare production regime refers to the “set of product market strategies, employee skill trajectories and social, economic and political institutions that support them” (Estevez-Abe, Iversen and Soskice 2001: 146). The argument is that a welfare system can be complementary to national production systems and that those different social protections have varying ramifications for inequality. Employing the method of comparative historical analysis, this chapter attempts to study the welfare production regime theory and answers the following questions: How did institutions, here the welfare production regime, evolve during
the industrial period in Korea, Japan and Taiwan and how is institutional change affecting the labour market risks in the deindustrialization period? In this chapter, I focus on examining the genesis of different welfare production regimes.

There are a few points to be made regarding the purpose of this chapter. Very often comparative studies regarding welfare states or production regimes have focused on Western countries and mostly include Japan only with a rather narrow view to treating Japan as a representative case of a theoretical East Asian model. The study commenced the comparative analysis by examining the similarities between the three countries Korea, Japan and Taiwan adopting a most similar system design which refers to a research design that ‘compares as similar cases as possible on the assumption that the more similar the case being compared, the more possible it should be to isolate the factors responsible for difference between them’ (Mahoney and Rueschemeyar 2003). The primary reason for the selection of these three countries lies in their similarities and differences discussed later in this chapter which provide a good methodological grounding for relating necessary causes for different labour market change. Then why examine especially their welfare production regimes when discussing institutions? Is it to test the validity of VOC and investigate its applicability to East Asian countries? No. The VOC approach is adopted for its advantageous use in examining different institutions as a configuration. Social protection and the characteristics of the welfare programme are highly associated with industrial structure and industrial relationships particularly in these three selected countries due to their historical backgrounds. Much of the industrial policy was functionally equivalent to social policy and companies were themselves a welfare provider in Korea and Japan.
Most importantly, the VOC has limits in its capability to explain the interaction between institutions and actors as the argument is based on a functionalistic perspective. However, a historical analysis on these selected countries can explain the complementary interactions there were and if there were such things, it enables us to understand the historical conditions that reinforced or limited those interactions. This chapter starts with a theoretical discussion of comparative historical analysis and welfare production regimes. It then conducts a comparative historical analysis of Korea, Japan and Taiwan examining how the welfare production regime evolved during the industrialization period.

### 7.2 HISTORICAL INSTITUTIONALISM AND COMPARATIVE HISTORICAL ANALYSIS

Historical institutionalism provides an insightful theoretical basis for taking an institutional approach to answer the questions as it focuses on the differences in, and the persistence of, the policies in each country. The historical institutionalists pay attention to the problem of how institutions structure a nation’s response to new challenges. Historical institutionalism also emphasizes combinations of multiple factors. In contrast to a functionalistic perspective, historical institutionalism privileges complexity and “rejects the traditional postulate that the same operative forces will generate the same results everywhere in favor of the view that the effect of such forces will be mediated by the contextual features of a given situation inherited from the past” (Hall & Taylor 1996: 9). The historical institutionalist uses a comparison to test a hypothesis that can account
for the observed differences between cases (Thelen 1999: 374). Such theories of institutions provide an explanation for the disparity between national political outcomes and for the inequalities that mark these outcomes (Hall & Taylor 1996). Historical institutionalism considers institutions not only as independent variables to explain other social phenomenon but also as dependent variables which need to be explained. It focuses on the interaction between individual behaviours and institutions and suggests that both the preferences of individuals and the decisions made are derivative of an institution or institutions (Immergut 1998).

Comparative Historical Analysis fits within historical institutionalism. Instead of referring to any studies that juxtapose historical patterns across cases, Mahoney and Rueschemeyer highlight three distinctive aspects of comparative historical analysis (Mahoney and Rueschemeyer 2001). First, comparative historical inquiry is concerned with explanation and the identification of causal configurations that produce major outcomes of interest. However, within this orientation, researchers pursuing a historical comparative approach can employ a wide range of methods of causal analysis. Secondly, the comparative historical approach analyzes chronologically and sequentially, examining the unfolding of processes over time. Events are not static nor at a fixed point and hence, the comparative historical approach incorporates consideration of the temporal structure of events. Also because events are located in time, comparative historical analysts explicitly considers the effects of the timing of events relative to one another. Lastly, comparative historical analysis is distinctive because of its engagement in systematic and contextualized comparisons of similar and contrasting cases. In sum, comparative historical analysis is characterized by its concern with causal
analysis, the exploration of temporal process, and the use of systematic and contextualized comparison (Mahoney and Rueschemeyer 2001). Skocpol asserts that the aim of comparative historical analysis is “to develop, test and refine causal explanatory hypotheses about events or structures integral to macro-units such as nation states” (Skocpol 1979:36).

Three deindustrializing East Asian countries, Korea, Japan and Taiwan, are examined in this chapter. From the many similarities between these countries, three institutional similarities are selected for analysis. This study will commence the comparative analysis by examining the similarities between the three countries.

7.3 SIMILARITIES IN THE THREE COUNTRIES

These countries have strong historical links as Japan colonized Korea and Taiwan, in 1910 and 1895 respectively, until 1945. A number of studies on Korea, Japan and Taiwan have sought to explain their rapid economic development and the uniqueness of their welfare state. However, much discussion, especially in the field of welfare state analysis, has been focused on the similarities among these countries, clustering them as an East Asian social welfare model, Confucian welfare states, developmental welfare state or even as ‘Japan-focused East Asian social welfare regimes’ (for references see Gwon 1997). Highlighting the similarities in the welfare systems of Korea, Japan and Taiwan, Goodman and Peng argue that “there is a general shift away from the pattern of social welfare
development along ‘Western’ lines, at least among the newly industrialized East Asian countries of Taiwan and Korea and post-industrial Japan” (Goodman and Ito 1996: 192). Among the many similarities exhibited by these countries, there are three common features relevant when discussing the institutions in these countries during the industrialization period.

First is the influence of Confucianism in all three countries. Confucianism is embedded in many social norms and institutions, and in much of the culture. Characteristics of Confucianism include respect for seniors, filial piety, paternal benevolence, putting the group before individuals, conflict avoidance, loyalty and dutifulness, lack of complacency, striving for learning, entrepreneurship, meritocracy, and family orientation with a patriarchal authority (Goodman and Peng 1996). Many studies have attempted to show how Confucianism promoted or played a negative role in the economic development in Asia. In relation to welfare state development, Jones (1990, 1993) identifies Asian welfare states as variants of ‘coporationism’ resulting in characteristics as “conservative corporatism without (Western-style) worker participation; subsidiarity without the Church; solidarity without equality; laissez-faire without libertarianism; an alternative expression for all thus might be ‘household economy’ welfare states - run in the style of a would-be traditional, Confucian, extended family” (Jones 1993: 214, quoted in White and Goodman 1998).

Secondly, all three countries had highly centralized bureaucracies and one-party domination or a political environment equivalent to that during the industrialization period. In Japan, the Liberal Democratic Party (LDP) which is a conservative party was in power from 1955 until 2009. While leftist parties were
almost entirely absent in Korea and Taiwan, the Social Democratic Party of Japan (SDP) was the main opposition party. However, the SDP was more concerned with international defense policies and was against the expansion of welfare. Welfare policies in Japan were developed and initiated by the Liberal Democratic Party (LDP) which is a conservative party (Gwon 2004).

In Taiwan, the Chinese Nationalist Party (Kuomintang of China, KMT) had been in power since the party fled from China until the Democratic Progressive Party (DPP), which is a left leaning party, took over power in 200060. In 1949, the Kuomintang (KMT), led by Jiǎng Jièshì, was defeated by the Chinese Communist Party which was led by Mao in mainland China. In the case of Korea, as soon as the end of World War II brought Korea’s independence from Japan in 1945, the north part of Korea was occupied by the Soviet Union and the South by the United States. South Korea established a separate government with Rhee Seungman as their first president in 1948 who ruled until 1960. In 1961, Park Chung-hee led a military coup d’état and ruled the country until 1979. Although the ruling party had less influence in Korea compared to Japan and Taiwan as it has a strong presidential system, the ruling party was characterized as rightist party until the Kim Dae Jung government was elected in 1998. The political systems are different in all three countries, Korea having a strong presidential system, Taiwan a semi presidential system and Japan a parliamentary system. However, the commonality is that they all had authoritarian characteristics, which allowed all three states to be authoritative in developing and implementing their policies. These states had independent, or autonomous, political power, as well as

60 However, in January 2008 the KMT won the election with the sweeping victory.
more control over the economy; the term development state was developed to describe the phenomenon of state-led economy in East Asia.

Lastly, all three countries set economic development as their priority during the post war period and practiced strongly interventionist government (table 6.1). After WWII, each society experienced economic hardships. In Japan, the economy was in chaos with high rates of poverty and high inflation. In 1949, the Ministry of Commerce and Industry was reorganized and the Ministry of International Trade and Industry (MITI) was established. The Japanese Economic White paper published in 1956 stated “no longer post-war” and established their goal as economic independence and full employment based on stable economy in their “5 years framework for economic independence” (Cho 2009:17). Pursuing a policy of state driven economic development, the country experienced rapid economic growth from the mid 1950s. From 1955 to 1961, GNP grew by 82% compared to 15% in the United States and 16% in the UK. The rate was almost twice that of West Germany (43%) which was the highest among all Western countries. In describing the miraculous economic development in Japan, Johnson (1982) highlights the role of the state, especially the MITI and suggests that Japan is a good example of a state in which the developmental orientation predominates.

In Taiwan, the first ‘4-year Economic Development plan’ was established in 1953 and the government implemented import substitution policies. From 1946 to 1962, financial aid from the US was $4428mn, second only to Korea. However, based on the [Act of International Development], US aid funds became a development loan fund in 1961, and it had a great impact on Taiwan’s economy, leading the country to implement an export-promotion policy during the 1960s

| TABLE 7.1 COMPARISON OF GNP PER CAPITA OF TAIWAN, SOUTH KOREA AND JAPAN WITH REFERENCE GROUP (%) |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Average Annual GNP/Capita Growth Rate, 1965-83     |                                                                                                  |
| Taiwan                                           | 6.5                                                |
| South Korea                                      | 6.7                                                |
| Japan                                            | 4.8                                                |
| Industrial market economies                      | 2.5                                                |
| Upper-middle income group                        | 3.8                                                |

Sources: Kuznets (1988).

In Korea, the military government in 1961 set economic development as one of their priorities as a way to gain legitimacy. The government led by Park implemented the five-year economic development plan which was established in 1962. With this export-promotion policy implemented by the government, Korea gradually entered an era of rapid economic development and reached 15% GDP annual growth in 1969. From 1960 to 1971, Korean exports increased 33 fold, led by the growth of the manufacturing sector. The economic development from the 1960s was highly government led.

Above are the three commonly discussed characteristics of post-war East Asian welfare states that connect the three countries under discussion here: the strong influence of Confucianism, an authoritative government and a strong government led economic development during the industrialization period. These
three countries with Confucianist backgrounds had relatively high autonomy and were able to implement policies for economic development during the post-war period. However, there were country specific historical events in each country, which determined the path of institutional arrangements and the subsequent developments. Many argue that Japanese industrial policy during the colonization period created similar industrial structures in Korea and Taiwan. However, when examined in detail, differences in the early stage of industrial development created different trajectories for the rest of the industrialization.

7.4 GENESIS OF THE DIVERGENCE

When accounting for historical change, path dependency emphasizes contingency. The contingencies are historical accidents that determine the subsequence continuities through a lock-in mechanism (Haydu 1998). Further to the argument, Krasner (1984) asserts that institutions encounter critical junctures and from then on new paths develop which create further path dependencies. He refers to this as punctuated equilibrium (Krasner 1984). All three countries experienced specific historical events that affected the trajectory of the evolution of their institutions, in this case the welfare production regime.

In Japan, after signing the Instrument of Surrender in 1945, the government had to cope with demilitarization and democratization. The establishment of a modern state was initiated from the top down by the elites in government rather than being driven by civil society or the public. In 1946, the Emperor of Japan
renounced his divinity and in April of that year, the first election for the House of Representatives was held. In the same year, Japan promulgated their new Constitution after the General Headquarters under the supreme commander for the Allied Powers (GHQ) revised it. The new constitution imposed Japan together with five New Directives issued by the GHQ to democratize, emphasising the concepts of sovereignty of the people, emancipation of women, the right of labour organization and a democratic economy, etc. Under the occupation of the GHQ, Japan had to implement three reforms in order to democratize the economy: land reform, dissolution of the conglomerate and democratization of labour (Jang 2008).

GHQ wanted to restrict the potential of a revival of a militaristic nation and avoid conglomerates’ monopolistic control over the market, and so it led the reform efforts. Ten conglomerate companies including, Mitsui, Mitsubishi, Sumitomo, Yasuda were dissolved and family companies were forced to offer stocks to the public. GHQ implemented policies for land reform, believing that the majority of peasants working under the feudalistic Japanese land system were the source of low waged labour and/or military force leading to a militaristic nation. Lastly, GHQ’s democratic reforms contributed to the introduction of the three fundamental labour laws, namely the Trade Union Act (October 1945), the Labour Relations Adjustment Act (September 1946) and the Labour Standards Act (April 1947) (Keizer 2010). In 1946, the unionization rate increased to 41.5% from 7.9% the year before. However, the harsh deflationary policies of the Dodge line61 forced firms to take a hard stance and employees to take moderate actions.

61 The Dodge Line was a series of economic measures, named after and under the supervision of the US envoy Joseph Dodge, to reduce inflation by slashing government subsidies.
This led to the emergence of a ‘management version of Japanese labour relations’ in the early 1950s (Gordon 1985: 366): ‘Most often a part of the yearly pay raise would be “automatic” or objective, linked directly to age and seniority and the remainder would depend upon an evaluation that took place concerning the issue of job security’ (Gordon 1985:390).

The process of industrialization was led by strong government intervention in Korea and Taiwan without the development of democracy. The Park Chung-hee government ruled Korea for about 20 years and in Taiwan, the military government governed with martial law for 38 years. In both Korea and Taiwan, the military government had to seek legitimacy and used the threat of communism to maintain authority. The economic environment was different in Korea from the other countries as the country suffered the consequences of the Korean War (1950-1954) which rendered the country one of the poorest countries in the 1950s having a similar GDP as Uganda. From 1946 to 1962, the amount of aid that Korea received from the US was $5434mn. However, as soon as the US changed the grant aid into a loan as in Taiwan, Korea had to switch its import substitution policy to an export-led one.

Korea emphasized the threat from the communist-governed North Korea and, because KMT was defeated by the communist party in China, also KMT was wary of any communistic movement in Taiwan. Korea and Taiwan suppressed labour unionisation and opposition parties’ activities in order to accumulate capital and to maintain the low wage system to implement a state driven export led policy (Gwon 2004). Martial law was maintained in Taiwan and in Korea as
the military security agency and administrative agencies were expanded through emergency measures.

However, Taiwan’s policy diverges from that in Korea due to its unique historical ethnic cleavage. About 2 million people including soldiers, intellectuals and business elites arrived in Taiwan around 1949 after KMT’s defeat. These Chinese from the mainland (Wai shung jen) only comprised about 15% of the total population of Taiwan. The KMT which fled from China was a minority that implemented policies that could prevent Taiwanese people (Bun shung jen), who comprise the majority of the population, from gaining political power. The KMT maintained their one-party system with a specific labour division along ethnic lines. Politics, military security positions and most of the essential positions in state led industries and large companies were occupied by people from mainland China (Wai shung jen). Taiwanese people (Bun shung jen) were only allowed to own small and medium sized companies. The Taiwanese government retrieved properties and industries from Japan in 1948 and nationalized rather than privatized them. Hence, a large proportion of the industry was owned and run by the government after the war. This planned industrial division was to prevent Bun shung jen’s economic capacity developing into political power (Fields 1997).

Historical events created a certain environment in each country, which led to a development of specific institutional arrangements during the industrialization period. This chapter takes the institutional approach in examining the different institutions that were formed in the three countries. The varieties of capitalism (hereafter VOC) literature has been developed contributing to the institutional approach and distinguishes between two types of market economies: coordinated
market economies (CMEs) which are rich in institutions that determine the behaviors of economic actors and liberal market economies (LMEs) which lack such institutions (Hall & Taylor 1996). It assumes that “certain types of institutions lock economic actors into long-term relationships that make it possible for workers and employers to commit to specific assets” (Estevez-Abe 2006: 148). The VOC literature made its contribution to the understanding of the welfare state by examining the link between models of capitalism and welfare state (Estevez-Abe 1999, Huber and Stephens 2001).

Further to this development, the link between social protection and the formation of skills is embraced (Estevez-Abe, Iversen and Soskice 2001) by the concept of welfare production regime. The welfare production regime refers to the “set of product market strategies, employee skill trajectories and social, economic and political institutions that support them” (Estevez-Abe, Iversen and Soskice 2001: 146). Skills are distinguished into three types: firm specific, industry specific and general skills. Firm specific skills are valuable to firms that provided on the job training and are the least portable as the skills are specific to the company. Industry specific skills are gained through apprenticeships and vocational schools. These skills are recognized by employers as long as workers stay within a specific industry. Lastly, general skills carry a value independent of the type of firms and industry and hence are the most portable.

Estevez-Abe et al examine the link between skills and social protection by investigating three social protection systems, namely i) employment protection (institutionalized employment security), ii) unemployment protection (protection from income reduction due to unemployment) and iii) wage protection (protection
of wage levels from market fluctuation). They argue that strong employment protection encourages workers to invest in firm specific skills as employees require some measure of credible protection. In a country with weak employment protection, workers would prefer general skills. However, in the case of industry specific skills, unemployment protection matters more as it secures earnings-related benefits and keeps skilled wages high even when supply exceeds the demand for those industry specific skills. In the absence of such unemployment protection, workers would have to find a job outside of their industry when they lose their job, undermining workers’ incentive to invest in the industry specific skills in the first place. Accordingly, weak employment protection and/or unemployment protection leads individuals to invest in general and portable skills. Moreover, if the country’s production regime is based on general skills, low employment protection actually provides an advantageous environment for the firm to be competitive as they can easily fire and hire new workers according to their level of general skills. The key to this argument is that the distinctiveness of particular welfare production regime is reinforced by the institutions of the social protection system (Estevez-Abe, Iversen and Soskice 2001).

This chapter attempts to take the argument of VOC further, first by examining four institutions in countries as the components of the welfare production regime: the production system, skill formation, industrial relations and the welfare system. Secondly the arrangements will be examined through historical comparative analysis because one limitation of the VOC literature is its suggestion that different types of welfare production regimes are static arrangements.
However, taking the historical institutional approach, this study suggests that institutions evolve through time by solving problems they encounter. Haydu argues that “analysis of events or data from two or more periods should also help the observer explain differences between them...by casting causal analysis in the form of sequenced events, with earlier happenings leading to and accounting for later ones” (Haydu 1998: 354) and proposes to link facts from different periods into a larger sequence of explanation. The difference from path dependency is that this explanatory approach would focus on the “outcome of a given switch point as products of the past rather than historical accidents” (Haydu 1998: 354). Hence, the approach aims to account for why at a given time an actor pursued one solution rather than another and how that generates the institutional trajectories. Although it resembles path dependency, the problem solving approach provides insight on how to link the past and the present. This study divides periods into the industrialization period (post war-1980s) and deindustrialization (1990s-) and examines how institutional solutions differ by historical context and previous institutional arrangements. In this chapter, I first examine how institutions evolved during the industrialization period in the three countries.
7.5 INDUSTRIALIZATION (-1980S): EVOLUTION OF INSTITUTIONAL ARRANGEMENTS

7.5.1 PRODUCTION SYSTEM

The production system of each of the three countries is closely linked with their politics and history. Although both Korea and Taiwan implemented export led policies, production for export was driven by SMEs in Taiwan and by large companies in Korea. In Taiwan in the early 1980s, the proportion of small and medium sized companies was 98% and workers in SMEs consisted 70% of the total labour force. The production from SMEs was 76.7% of the total export. Although the Taiwanese government initially did not implement policies to support SMEs, they developed a strong export orientation out of necessity since a large part of the domestic market and the financial resources were dominated by public companies and large private companies which had strong ties with the KMT party (Yoon 2003). It was only in the 1980s that the government recognized SMEs’ role in its export led economic development and introduced policies to support SMEs, Chu (1999) highlighting the KMT’s ‘politics of survival’. While the Korean government made a policy priority of using financial instruments to support large private companies for economic development, KMT considered the growth of large private companies owned by Taiwanese (Bun shung jen) to be a threat. Hence, most of the resources from financial institutions were only made
available to government owned companies and to a few companies that had strong ties with the KMT party (Cheng, 1993, Yoon 2003).

While Taiwan is right to be classified as small/medium sized firm-based familial capitalism (Gerlach 1992), the Korean production system is better considered as Chaebol-based rent-seeking capitalism (Gwon 2006). When the Korean government implemented export-led policies, certain industries were disproportionately subsidized by the government helping them to grow large. Park Jung Hee’s government led the economic development based on the development of heavy industry during the 1970s. This is the period when ‘Chaebol’ (a South Korean form of business conglomerate which are global multinationals owning numerous international enterprises; Samsung, and LG examples) started to come to the fore. Korea’s economic structure is still highly reliant on exports, especially by the Chaebol companies (Jang et al. 2009).

The three countries had different financial systems and they were also closely linked with different production systems and welfare systems in each country. Japan is categorized as stakeholder capitalism rather than shareholder capitalism, emphasizing the importance of sustainable relationships between companies and financial institutions and of seeking to benefit all stakeholders. Companies rely more on banks or insurance companies for financing rather than on stock markets and financial institutions actively take part in supervising the management of their affiliated customers. (Gwon 2006). The development of such relationship between companies and financial institutions started from the late 1940s when GHQ imposed reforms on the Zaibatsu (Japanese conglomerates equivalent to Chaebol in Korea) after defeat in WWII. However, the conglomerates were reorganized
into corporate groups in which affiliate companies were stakeholders and the bank lending money became a stakeholder holding shares in component companies.

However, in Korea, most of the large companies have been owned and managed by the head of the conglomerate and his family members. In this hierarchical structure, financial institutions were considered only as vehicles to carry out government financial policies. In the 1960s, the Korean government implemented export-led policies, developing heavy industry, expanding its support for companies by increasing investment, the availability of loans and tax cuts. The government secured massive foreign loans through subsidized governmental channels (Brinton et al. 1995). Hence, during this period of export led policies, large amounts of capital started to be accumulated by business conglomerates and the dual structure of the Chaebols and SMEs started to be formed. Both Korea and Japan had large private-company based production system but the GHQ in Japan dissolved Zaibatsu while Chaebol were developed through generous financial support by the military government creating two different types of capitalism.

In Taiwan, while the government did not implement financial policies that explicitly favoured SMEs, the increase of exports and economic development were both led by the SMEs. Unlike Japan where companies relied on the main banking system, or Korea where financing through government played a large role, SMEs in Taiwan procured financial resources through family, friends and acquaintances (Lee 1990). Linking it with the welfare system, Taiwanese companies had a more paternalistic management strategy which led employers to make higher contributions to social protection (see below).
In the 1970s, Taiwan’s organization of production moved in the opposite direction from that promoted by the Korean government which focused on capital intensive production. In Korea, a great influx of foreign capital was funneled to Chaebols through governmental financing, whilst Taiwan had little foreign borrowing and loans. The Korean government’s policy to support Chaebols led to greater capital intensity while government policies in Taiwan resulted in labour intensity. By the 1970s in Korea, over half of all private-sector enterprises with 10 or more workers had more than 200 workers (Brinton et al. 1995). Thus, Brinton et al suggest that connections between employer and employee were likely to be more informal in Taiwanese companies (Brinton et al. 1995). The development of capital intensive production in Korea kept the labour demand lower than in Taiwan. Furthermore, foreign loans to the Korean government were allocated principally to Chaebol fueling the growth of large firms.

TABLE 7.2 PROPORTION OF SMES IN KOREA, JAPAN AND TAIWAN (%)

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<tr>
<td>Number of Companies</td>
<td>97.5%</td>
<td>99.1%</td>
<td>99.6%</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>51.6%</td>
<td>71.8%</td>
<td>76%</td>
</tr>
<tr>
<td>Output</td>
<td>35.4%</td>
<td>50.5%</td>
<td>62.8%</td>
</tr>
<tr>
<td>Value Added</td>
<td>37.6%</td>
<td>54.7%</td>
<td>56%</td>
</tr>
</tbody>
</table>


However, in both Korea and Japan, the large companies dominated a large proportion of the market (Gwon 2004). In Japan, because of the dual structure of
large companies (and their affiliates) and SMEs, there was a vertical relationship between a parent company and affiliated contractors creating a dual structure (Gerlach 1992). This kind of corporate governance was structured from 1950 to 1960 when Japan was experiencing economic development. In sum, Korean and Japanese economic development though large companies created a dual production system during the industrialization period with companies of different size providing different working conditions with regard to wages, employment and corporate welfare.

7.5.2 SKILL FORMATION

Industrialization in Japan started after the Meiji restoration in late 19th century decades earlier than in Korea and Taiwan. Taking an historical approach, Kathleen Thelen (2004) examined how the individual artisans (oyakata) were incorporated to skill formation after the Meiji restoration and during the industrialization period. Traditional artisans were integrated into large factories for apprentice training through “continuous” teaching, adapting traditional skills to new tasks (Thelen 2004). However, this form of in-plant training increased dramatically when the metal working sector developed with large private firms in the 1920s. During this period when companies had high demand for large number of skilled workers, firms started to take inducements steps to secure their workforce (Thelen 2004: 161). Moreover, because such programs were costly,

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62 Meiji Restoration restored imperial rule to Japan in 1867. The Restoration was a chain of events that led to enormous changes in Japan's political and social structure.
other measures to draw skilled workers into a more dependent relationship with the company were taken. In the 1920s, a large number of companies, especially firms in heavy industry, started to follow the practice of recruiting young people directly out of school (in April of each year), and founding a training school for their workers (Thelen 2004). With this historical background of skill formation evolution, skill formation in Japan was characterized as extensive firm-based training in the context of stronger internal labour markets. The skill formation was strongly associated with complementary personnel policies (Thelen 2004, Dore 1973: 399-400). During the interwar period, the government imposed strict regulation on labour mobility and encouraged training within companies. Weiss explains that during this period training programs were very widely established within the private sector (Weiss 1993: 346, Thelen 2004). Thus, skill formation in Japan took place alongside some measures of job security. For example, key workers received a broad company-specific training designed to allow firms to deploy their workers flexibly in response to the company’s need. But companies tried to “offset the reluctance of workers to invest in such company-specific training by employing compensative measures like offering long-term employment commitments, instituting seniority based wages and internal career ladders, and introducing company welfare schemes” (Thelen 2004: 164, Levine and Kawada 1980: 114-18).

Permanent employment is defined as a special form of Japanese employment custom. However, the custom of permanent employment developed in Korea as well. Companies regularly hired graduates and trained them to have firm specific skills and employed them until the retirement age. For recruiting companies, a
university degree was for screening and hence the ranking of the university was important. This employment custom was mostly carried out by large private sector companies or the public sector, however not by SMEs. In the beginning of the 1960s, the Park Chung-Hee government replaced its industrial development strategy based on import substitution with an export-led development strategy and collectivized financial institutions. The government started to establish strong ties with private large corporations and large corporations made use of the cheap labour for light industry based export-led industrialization. During the 1960s when labour intensive light industry was promoted, large numbers of low-skilled workers who used to work in agriculture migrated from urban areas. Labour demand for skilled workers was not yet high and the need for companies to secure their workers was low as well. However, from the 1970s, the government focused on heavy industry and the number of large companies (or factories) with 500 or more workers started to increase rapidly. A scheme to develop six major industries was financed through a specially developed National Investment Fund which mobilized public employee pension funds and a large proportion of private savings (KOIS 1990). From the mid-1970s to early 1980s, Chaebols grew large and the government’s control over the allocation of foreign funds and other credit made the state the major player in investment decisions.

The transformation of the Korean government’s development policy from light industry to heavy industry changed the demand for skills (table 6.3). Male skilled workers became the main labour force for the heavy industry in large companies but from 1975, companies experienced labour shortages, and started to
compete on quality rather than price, with the result that the need for large companies to train and secure their workers started to increase (Yang 2004).

<table>
<thead>
<tr>
<th>Employed workers</th>
<th>Managerial, Office Skill</th>
<th>Manufacturing Skills</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Shortage</td>
<td>1,279,925</td>
<td>1,846,005</td>
<td>3,125,930</td>
</tr>
<tr>
<td>% of Shortage</td>
<td>0.88</td>
<td>2.35</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Source: Yang Jae-Jin (2004), Yoo Won-sang (1987),

In Korea, government policy on skill formation model was closely linked with government policy on economic development. In the 1960s, the Park Chung hee government strengthened its authoritarian control over educational policy. The slogans were ‘education for economic development’ and ‘nation-building through education’ (Adams and Gottlieb 1993:26). Skill formation plans were informed by economic development plans and the state encouraged expansion of education during the 1960s and the number of schools increased. Vocational high schools were established in the 1960s to provide craftsmen for labour-intensive light industries. In the 1970s when the government implemented policies to develop heavy and chemical industry, the government promoted vocational education and training to provide the new industries with semi-skilled and skilled labour (Ashaton et al 1999). In 1972, the Ministry of Science and Technology predicted that there would be a shortage of scientifically and technically skilled labour and forecasted that public training centres could not cover the shortage of skilled labours (Lee JH 1996, Ashaton 1999). Therefore, the government enacted
the Special Measures Law for Vocational Training in 1974, under which companies of over 500 employees were required to train at least 15% of their workforce within the firm. The penalty for non-compliance was a fine. From 1976, the coverage was expanded by lowering the thresholds to 300 employees (Ashaton 1999). The number of skilled workers with in-plant training centres rose by 90 percent in the five years following the law’s enactment (Ashaton 1999).

During this period of rapid development of heavy industry, large companies in Korea adopted the OJT (on the job training) system which had been carried out in Japan (Park Yong-Bum 1994). Both in Korea and Japan, on the job training included features of rotating the workers in different locations or departments so that the employer could gain broad skills across the firm’s functions. In addition, in order to secure their labour force, companies developed internal labour markets in which the allocation and the pricing of labour were governed by sets of rules and procedures within the company. Once workers were employed, they were shielded from the competition of the external labour market and competed within the company for promotion or higher pay.

Skill formation in Taiwan was different from Korea and Japan. The provision of education and vocational training was highly controlled by the government and it changed according to the economy’s labour demand. Thus, Taiwan’s manpower policy was coordinated with different stages of economic policies. The distinctive feature of Taiwanese skill formation system compared to Korea and Japan has been the existence of a comprehensive public training system and a lack of on the job training in most private firms (Ashaton et al 1999). Having fewer resources compared to large companies, SMEs had fewer resource
for training their employees. In comparison to the large companies in which workers were also expected to stay for a longer period of time, the SMEs had substantial disincentives to spend on training as a high rate of labour turnover could nullify their investment. In the late 1960s, on the job training was carried out in state-owned enterprises and in 1971, the government encouraged private companies to provide training for their workers. Ashaton et al explain that in-plant training programs were to be used in state-owned enterprises to demonstrate their value to the private sector (Ashaton et al 1999: 90). However, these were not successful. Although the state attempted to encourage private firms to take a part in vocational training, the state was unable to shift responsibility for training to the private sector (Ashaton et al 1999) and most of the training was provided by the public training centers or the state education system (table 6.4). Because the manpower planning was organized by the state, the education and vocational training system was changed according to the economic policies. For example, the structure of the higher education was changed to produce more engineers and the percentage of students enrolled for engineering-related subjects increased in the late 1960s (Law 1994, Ashaton et al. 1999). Also in response to the shift to capital- and skill- intensive industrialization, the Science and Technology Development Programme planned for manpower at the tertiary levels in 1979. In sum, as the Taiwanese economy has been dominated by SMEs, it was difficult for the government to engender formal vocational training in these enterprises. Skill formation was organized in schools and public training centers and led by the state through general educational institutions such as universities, vocational high schools.
TABLE 7.4 PROPORTION OF STUDENTS IN DIFFERENT HIGH SCHOOLS IN TAIWAN (1960-2000)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General high</td>
<td>60</td>
<td>43</td>
<td>28</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Vocational high</td>
<td>40</td>
<td>57</td>
<td>72</td>
<td>70</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Green et al. (1999), originally from Chang (1995).

Another important aspect of skill formation in Taiwan is that firms had competed in occupational labour markets rather than developing an internal labour market as in Korea or Japan. The duration of the working period in a firm, the worker’s age and firm-specific skills are important factors in an internal labour market. However, in an occupational labour market, work experience in a certain industry is the important factor for wage-determination or promotion (Osterman 1988, Song 2000). In an occupational labour market, it was easier for workers to move from one company to another as long as they were in the same industry compared to workers working in firms with internal labour markets. Therefore workers in Taiwan had industry-specific skills rather than firm-specific skills (Song 2000).

7.5.3 INDUSTRIAL RELATIONS

In 1955, the Japan Productivity Center (JPC, Nihon Seisansei Honbu) was established as a tripartite organization with representatives of labour and
management and academic experts. The JPC developed an agreement that ‘tied
the protection of employment and the increase in wages to rising productivity’
(Keizer 2010:16). However, the agreement on the exchange of increased
productivity and the increased wage were made at the level of the firm, which
could have resulted large differences in wage among companies. It was in the
mid-1950s that Japan started its rapid development as well. Hence, the demand for
skilled labour increased and companies sought to secure the workers that they had
invested in training. This led unions to coordinate their actions regarding the wage
level within and between industries so that they could strengthen their bargaining
power by developing identical wage demands. This led to the development of
shunto (which means “the spring struggle”) which refers to the annual wage
negotiations between the unions and the employers. The Trade Union Federation
in Japan, Rengo, was established in 1987 merging the Japan Confederation of
Labour (Domei) and the Federation of Independent Labour Unions (Churitsu
Roren). Unions were firm-based and active mostly in large enterprises. Rengo
customarily set a specific target for the annual wage increase to aid the collective
bargaining Shunto.

The relationships between unions and companies were very close and union
members' fate was dependent on the companies’ success. For example, officers of
the union usually maintained their seniority and tenure while working exclusively
on union activities and being paid from the union's accounts. Many union officers
would go on to higher positions within the corporation if they were particularly
effective. Many managerial level employees were former union members.
Another characteristic of Japanese labour unions was that the regular workers
automatically became the member of the union but temporary workers and part-time workers were excluded in the union. Hence, the firm-based unions of most large companies created disparities between temporary workers and part-time workers.

The relationship between the government and private enterprises had a clear hierarchy in Korea during the industrialization period and labour unions. After the coup, the Park Chung Hee government dissolved all the labour unions and established the Federation of Korean Trade Unions (FKTU). It was the only legal labour union during the authoritarian period until the establishment of the Korean Confederation of Trade Unions in 1995. The structure of FKTU was similar to an industry-based union. However, it was an alliance of firm based unions with hierarchal characteristics rather than an industry-based union structure of a horizontal collation. After political democratization in 1987, workers of large enterprises organized themselves demanding wage rises, job security and an increase in welfare provision (Peng 2010) and developed firm-based labour unions. Like in Japan, workers’ were closely tied to the success of their companies and had little incentive to form nation-wide or sector-wide union together with the unions of SMEs.

Korea and Japan’s labour unions were similar in having a firm-based union system while Taiwanese unions were more often occupation or industry based. Adopting the explanation of differencing corporatism into societal corporatism and state corporatism, Chen et al (2003) suggest that Taiwan fall into the category of state corporatism which refers to “a top-down relationship in which the state dominates associations whereas societal corporatism provides more autonomy for
the associations” (2003: 317). When comparing Korea and Taiwan, both governments suppressed the union activities but the Taiwanese government suppressed union activities by promoting the formation of state-controlled trade union (Frenkel, Hong and Lee 1993). In other words, the industrial relation was determined by the corporatist practices of the KMT. Until the democratization in the later 1980s, KMT pursued political stabilization in order to provide a necessary environment for rapid economic development that could legitimize the authoritarian government (Chen et al 2003). Hence, the state, party and the union had a hierarchical relationship (Deyo 1992, Song 2000) and trade unions were administrative arms of the government for the implementation of the economic policy (Chen et al 2003).

<table>
<thead>
<tr>
<th></th>
<th>Enterprise Union</th>
<th>Craft unions</th>
<th>Enterprise Union</th>
<th>Craft Union</th>
<th>Unionization rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>1,637</td>
<td>-</td>
<td>1,028.7</td>
<td>-</td>
<td>20.4</td>
</tr>
<tr>
<td>1984</td>
<td>1,924</td>
<td>-</td>
<td>1,370.6</td>
<td>-</td>
<td>22.8</td>
</tr>
<tr>
<td>1986</td>
<td>1,201</td>
<td>989</td>
<td>478.4</td>
<td>1,067.7</td>
<td>26.9</td>
</tr>
<tr>
<td>1989</td>
<td>1,453</td>
<td>2,009</td>
<td>577.3</td>
<td>1,766.8</td>
<td>32.6</td>
</tr>
</tbody>
</table>

Source: Gwon (2004)

It should be noted that there are two different types of unions defined by the law in Taiwan, enterprise\(^{63}\) and craft unions and due to suppression by the KMT, craft unions declined and enterprise unions developed in public companies

\(^{63}\) The literal translation from Chinese would be industrial union.
and in the few private large companies (Frenkel et al 1993). Only few SMEs with less than 30 workers had enterprise unions but craft unions were more comprehensive including the self-employed, workers of companies less than 30 and not to mention employees of SME. Chen et al (2003) explain that this kind of craft union is similar to *associational unionism* in the United States. The craft unions in Taiwan played a different role in the industrial relations compared to unions in Korea or Japan because they did not have specific employers which to bargain and partly because many joined the union to participate in publicly subsidized labour insurance programs (Chen 2003). However, in 1987 when the imposition of martial law was abolished and democratization was sparked, workers of SMEs formed occupation-based unions call *Jiopkongwhe* and the unionization rate increased rapidly (table 6.5). Thus, two types of industrial relation emerged in Taiwan: firm-based unions in public firms/large private companies (*enterprise unions*) and occupation-based in SMEs (*craft unions*) (Scitovsky 1986, Sharma and Sephton 1991). Another unique characteristic is that Taiwanese craft unions (occupation-based) were location-based meaning that workers in SMEs in different location formed unions that are both occupation and location specific (Song Ho-Keun 2000). In other words, since the craft unions are organized at the firm level, they were normally city wide or county wide.

7.5.4 WELFARE SYSTEM

In both Korea and Japan where the production system, skill formation and industrial relations were large company oriented, employment protection
(institutionalized employment security) and wage protection (protection of wage levels from market fluctuation) was high for those working in these companies while the unemployment protection (protection from income reduction due to unemployment) was comparatively higher in Taiwan. Strong internal labour markets with an expectation of lifetime single-firm employment and seniority based wage determination protected workers from employment insecurity and wage level changes due to the external labour market’s fluctuations. The bonus system also played a role as welfare benefits and protections were motivated by companies’ desire to secure their workforce. From the mid-1970s in Korea, more large manufacturing companies with skilled employees provided training and developed a structured promotion policy with promotion often being based on seniority. Since training employees is costly, companies offered the employees job security, which helped employers to secure a stable workforce whilst providing employment security for the workers. For example, POSCO \(^{64}\) introduced a structured promotion policy in 1976. In order to be categorized as a ‘Meister’ (highly skilled worker), an employee had to work at least 10 years and be over 40 years old. Their pay could be as high as on the managerial level and the company provided special support for housing and full tuition for highly skilled employees’ children. If the employee worked another 10 years after being nominated as a Meister, their children could be employed in the company with priority and the workers could continue to work until 65 (Yang Jae Jin 2004). In other words, large companies that provided training for their workers had other mechanisms to secure their workforce that later led to the increase of a firm based

\(^{64}\) The world’s second largest steel maker by market value and Asia’s most profitable steelmaker
welfare policy (Choi 1992, Han 1999). This firm based welfare system in Korea and Japan created a dual structure between employees in SMEs and large firms. For example, in Japan in 1965, if the welfare provision level in companies of 500 or more was 100%, workers in companies of 30 to 100 employees received only 61.7% of welfare benefits of that of large company. The kind and level of welfare benefits were different between worker in the large companies and SMEs in Japan as well. Large companies in both Korea and Japan gave comprehensive welfare benefits to their workers in order to secure their workforce and discourage worker mobility. The welfare systems in Korea and Japan complement their production structures and helped generate the dual nature of welfare provision between large companies and SMEs.

In addition to the welfare services provided by the companies, Korea’s national pension and insurance system initially encompassed only workers in large firms. In Korea, to secure financial resources, medical insurance was introduced to large companies and the disparities in welfare protection between large companies and SMEs was large. Medical insurance started in 1977, initially only provided to workers in companies with 500 or more employees. This coverage later expanded to workers in firms with 300 or more employees in 1979 and 100 or more in 1981. The introduction of medical insurance in Korea is a good example of how a welfare system can complement a production regime. Large companies in the heavy and chemical industries grew large in the 1970s and it was during this period that medical insurance was created in the interest of employers who wanted to secure their workers by providing incentives, and also so that employers could utilize the fund for the company. Of course, the
government which was highly supportive of large companies which led economic
development also supported this large company-based medical insurance.

Japan increased the coverage of healthcare and pensions to a universal level in 1961, but social spending on social protection never exceeded 10% of GDP until 1980. For example, in 1974, the social expenditure on social protection was 5.5% of the GDP in Japan while it was 23.9% in Sweden. The contribution by employers was also low in Japan, at 29%, while in European countries it was 41.2% in Germany, 58.4% in France and 59.8% in Italy.

In 1979, when medical insurance in Korea was compulsory to companies with 300 or more employees, in Taiwan the coverage was compulsory for firms with 5 or more employees and included self-employed workers as well (table 6.6). Moreover, in Taiwan, social protections were introduced covering the SMEs from the beginning. Medical care was obligatory to companies with 10 or more workers in 1970 and the coverage was increased to cover companies with 5 or more in 1979. Another unique characteristic in the Taiwanese social protection system is that the share of contribution by the employer is higher than Korea and Japan.
<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>Taiwan</th>
<th>Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Protection</strong></td>
<td>Occupational (health and Injury) Insurance</td>
<td>Medical Insurance</td>
<td>Occupational Insurance</td>
</tr>
<tr>
<td><strong>Coverage</strong></td>
<td>Employee</td>
<td>Universal</td>
<td>Employee</td>
</tr>
<tr>
<td><strong>Percentage of Coverage</strong></td>
<td>34%</td>
<td>76%</td>
<td>9.6%</td>
</tr>
<tr>
<td><strong>Contribution Share</strong></td>
<td>Private company: Employer contribute 0.4% to 6.9%. Public sector: government contributes 100%</td>
<td>Employer 50% and Employee: 50% (Private sector) Employer 50% and Employee: 50%</td>
<td>Employer 100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employer 0.9% and Employee: 0.55%</td>
<td>Employer 80% and Employee: 20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employer 100%</td>
<td>Employer 100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General Benefit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medical Insurance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In contrary to Japan and Korea where the lifetime employment and seniority based wage system functioned as employment protection and wage protection, SMEs in Taiwan had high turnover. Managers in SMEs were often the owner him or herself or a member of the owner’s immediate or extended family resulting low organizational commitment for the workers who are non-family members. In addition, workers were usually paid less than in large firms and had less mobility to go upwards (Chen 1997; Farh 1995). In other words, the company did not provide any functionally equivalent employment protection and wage protection. Instead, social protection encompassed the workers in SMEs (and self-employed workers) from the very beginning of the development of welfare system. In addition, employers applied a more paternalistic management style which was rooted in Confucian values to secure their workers and prevent high turnover (Chen 1995). For example, employers developed personal ties with employees and managers created an atmosphere of harmony in their companies or departments. The relations between employers and employees could be highly personal because employer authority stemmed from moral superiority rather than competence (Chen et al 2003, Chen 1997). When comparing three countries’ social protection, it is noticeable the contribution for medical insurance by employers in Taiwan was 80% while it was 50% in Korea and Japan (table 6.6). In Taiwan, the contribution by the employer is four times higher than the employee. This is counter-intuitive, as SMEs would have less financial resources than large companies would and Gwon (2006) explains that the more family and acquaintance based working condition in Taiwanese SMEs may be a factor.
7.6. CONCLUSION: THE VARIETIES OF WELFARE PRODUCTION REGIMES

All three countries had highly centralized bureaucracies, which made economic development a priority and were successful in achieving that goal. However, the historical events in each country created a certain path for the development of welfare production regimes in achieving economic development. Historical events created a critical juncture for these three countries to develop certain institutional arrangements: in Japan, the end of WWII and the occupation by the GHQ, in Korea, the large amount of foreign aid followed by the Korean War and the militant government, and in Taiwan, the defeat of KMT and the ethnic cleavage.

Korean companies grew as conglomerates, Chaebol, during the industrialization period while GHQ dissolved Japanese Zaibatsu. However, comparing the countries on a larger scale, Korea and Japan had a number of similarities in their welfare production regimes that were formed during the industrialization period. In both countries, the production system, industrial relations, skill formation and the welfare system were oriented to large private firms (figure 6.1, figure 6.2). Large private companies led their economic growth and development and there was a clear hierarchical system among the large firms and the affiliated companies. The rapid growth in the manufacturing sector required skilled labour and firms in this sector had to compete with each other to secure their workforces. Hence, workers gained firm specific skills through on the job training which gave little incentive for the workers to move to another firm. Also welfare system development was heavily dependent on large firms and these firms played a large role in providing welfare to their workers. Firms wanted to secure their workers as they had invested much on their workers’ training and
developed an internal labour market within firms that had a number of unique systems such as a seniority based wage system and lifetime employment. Keizer (2010) summarized the institutional character of Japanese employment practices with three pillars: lifetime employment, seniority wages and enterprise unionism. Lifetime employment is defined as ‘the practice whereby a worker is hired immediately after school and is expected to stay with the same firm until retirement’ and ‘the firm, in return, is expected to retain him until the age of mandatory retirement (typically 55 to 60) regardless of business conditions’ (Odagiri 1994:48, re-quoted from Keizer 2010). Enterprise unionism ‘implies that the employees of the firm, including both blue-collar and white-collar workers but excluding those in managerial positions above a certain rank, are presented by a single union’(Odagiri 1994:49, re-quoted from Keizer 2010).

**FIGURE 7.1 WELFARE PRODUCTION REGIME IN JAPAN DURING INDUSTRIALIZATION PERIOD**
Together with the firm specific skills and the welfare provided by their companies such as subsidies for housing, bonuses and employment protection, Japanese workers had little incentive to move to another firm. In addition, firm-based labour unions had very little incentive to encompass the needs of the workers outside their firm. Employment and wage protection for regular workers in large firms and welfare provided by large firms created a dual structure between the workers who were working in large firms and SMEs.

In the case of Taiwan, the origin of KMT and the authoritative government created a different kind of welfare production regime compared to Korea and Japan (figure 6.3). The Taiwanese developed a welfare production regime that was oriented to SMEs and was occupation-based during their industrialization
The unique historical background of ethnic cleavage and the politics related to it created a production system that was SME-led and the welfare system, industrial relations and skill formation developed in response to it. Hence, there was a dual structure between the two ethnic groups but not between the large companies and the SMEs. Workers had higher mobility within the same occupation and the public vocational schools played a larger role in providing skilled workers compared to Korea and Japan.

FIGURE 7.3 WELFARE PRODUCTION REGIME IN TAIWAN DURING INDUSTRIALIZATION PERIOD

The start of the divergence was explained by the critical juncture created by specific historical events in each country. By examining four different institutions,
production system, skill formation, industrial relations and welfare system, the concept of the welfare production regime introduced by the VOC literature has here been further developed. The formation of the institutional arrangement was examined with a historical institutional approach and in order to explain how the present is conditioned by the past, periods were divided into two; this chapter has explained the formation of varieties of welfare production regime during the industrialization period in the three East Asian countries.

While a number of similarities were discussed on East Asian economies or East Asian welfare state, only a limited number of studies examined their differences. This chapter examined how political background, production system, industrial relations, skill formation and welfare system were developed with a certain arrangements in Korea, Japan and Taiwan. The three countries developed different welfare production regimes during the industrialization period, Korea and Japan being large firm oriented and Taiwan being SMEs oriented.
“Even you climbed all the way up to be a Meister in a large company, if you are fired, that’s the end of the world”, Says Mr.Kim who has been working as temporary worker since his dismissal from the large company. Now his job usually last from one day to two month. (Kyunghyang News, August 14th 2010)

8.1 INTRODUCTION: THE PUZZLE

Chapter 6 presented empirical evidence of labour market risks in Korea, Japan and Taiwan and however, there were differences in the trend of risk shift in the three selected Asian countries. How do we explain the differences in the change of labour market among the three East Asian countries? For example, why is there an exceptionally high increase of non-regular employment in Korea and Japan but not in Taiwan? Why are almost three-quarters of the non-standard workers in Japan part-time workers while the proportion of part-time workers is small in Korea? Why do we witness more gender segregation in the Japanese labour market? Why are highly educated people in all three countries more exposed to labour market risks than in the past? Why do countries cope with the pressure of flexibility differently? Why do they differ and how do we account for the
identified differences between Korea, Taiwan and Japan? How do different welfare production regimes mediate new challenges resulting in different dual labour markets?

The lack of focus on institutional difference in East Asia limits our understanding of the different characteristics of labour market change. In contrast to most discussion on new risks, empirical evidence suggests that labour market risks are not uniformly concentrated on females, the young and people with limited education even within East Asia, here Korea, Taiwan and Japan (see Chapter 6). Hence, it was contested whether deindustrialization or globalization sufficiently explain the risk shifts in East Asian economies, and proposed that institutional legacy may be an important additional factor. Following this argument, the previous chapter (Chapter 7) emphasized the limitations of literature on East Asia which lack of focus on institutional differences and proceeded to examine the development of various welfare production regimes in East Asia during the industrial period.

Focusing on the features of exceptionally high rates of non-standard employment and dualization of labour market associated with this atypical employment in East Asia, this chapter attempts to answer two questions: i) *Why are Korea and Japan experiencing an exceptionally high increase of precarious workers while Taiwan is not?* ii) *How do welfare production regimes feature in an explanation of various dual labour markets in East Asia?*

Period is divided into industrialization period and post-industrialization period which I term it as the tertiariization (explained more below) period. This
chapter examines how institutional solutions differ by historical context and previous institutional arrangements in the later period. It focuses on the persistence of and changes in institutions during the latter period, and implications of institutional persistency. Then an investigation on labour market segregation, which is closely related to the increase of non-standard employment in each country, is conducted. This is linked with the welfare production regime in each country to examine how new challenges are mediated by different institutions and its implication on labour market risks and labour market dualization.

8.2 DEINDUSTRIALIZATION VERSUS TERTIARIZATION

After the decline of the ‘golden age’, numerous scholars started to explain the changes and challenges that most advanced economies are experiencing using notions such as globalization, neo-liberalism, the great transition (Polanyi 1944), the global transformation (Standing 2009), deindustrialization, etc. The three countries considered here are also experiencing changes in their industrial structure and facing new challenges. An increase of reliance on the service sector, slower growth rates and casualization of employment are a few examples of these changes among many.

Saeger explains that the phenomenon of a sharp contraction in both relative and absolute manufacturing employment across the developed economies of the Organization for Economic Co-operation and Development (OECD) is commonly referred to as “deindustrialization” (Saeger 1997). Similarly, Esping-Andersen
defines the “post-industrialized economy” as an economy with a labour market which has gone through a decline of the manufacturing industry (Esping-Andersen 1999). While there has been comparatively less attention on deindustrialization compared with the effect of integrated international market, more recently scholars have been focusing on the causes and implication of deindustrialization in developed economies. Saeger emphasizes that empirically there was a major change in the structure of employment within the OECD between 1970 and 1990 and that the relative importance of manufacturing has sharply declined (Saeger 1997).

However, the term deindustrialization does not sufficiently describe the transitions that labour markets are experiencing in East Asia. The sharp decrease of the manufacturing sector does not apply to all OECD countries. The great transition in the labour market that many other countries including Korea, Japan and Taiwan are experiencing is better captured by focusing on the increase of the share of service employment in total employment. Hence, I use a new term, *tertiarization*, and it refers to a substantial increase in the relative size of the service sector. A service based economy is an economy where more than half of the workers are participating in the service sector. Tertiarization differ from deindustrialization because it refers to an increase of the service sector while deindustrialization refers to a decrease of employment in the manufacturing sector and the two are not necessarily identical. Unlike the western developed countries where the transition from an agricultural to an industrial economy and then to a service based economy took place gradually, countries that joined the league of developed countries more recently have experienced or are experiencing the
transitions rapidly and often simultaneously. Also the period of decreasing employment in manufacturing varies by countries and in some countries, the rate is not even decreasing. In other words, the transition to a service-based labour market is not necessarily a natural consequence of a full maturation of industrialization as suggested in chapter 2. The agricultural sector can contract simultaneously with an expansion in the service sector; the decrease of the manufacturing sector and the increase of the service sector may take place simultaneously. Hence, deindustrialization does not explain the transition to a service based labour market because a contraction of the manufacturing sector does not necessarily imply an increase in the size of the service sector or vice versa.
For example, with the reference year 2005 (2005=100), the share of employment in the manufacturing sector shrunk by 60-70 per cent from its rate in
1970 in the United Kingdom and Sweden, and the employment rate in manufacturing continues to decrease (figure 8.1). However, in the case of Germany, the slow decrease is followed by an increase in the early 1990s. In the case of Korea, employment in the manufacturing sector increased rapidly in the 1980s and has been decreasing from the 1990s. The rapid increase of manufacture employment lasted only about 10 years before it started to decrease. On the other hand, Italy and the United States did not experience a substantial fall in the employment rate in manufacturing sector between 1970 and 2008. The trend of change in employment structure varies by country and hence it is incorrect to claim that most OECD countries are experiencing or have experienced deindustrialization. However all selected countries are experiencing an increase of employment in service sector (figure 8.2). Among the selected countries, employment in the service sector increased most rapidly in Korea and also very fast in Germany in early 1990s. The employment rate in the service sector was already high in Sweden in the 1970s compared to other countries and hence the rate has been increasing rather more slowly. In sum, countries are experiencing an increase of employment in the service sector which is separate from the trend of a decrease in the employment rate in the manufacturing sector. In other words, the change in employment structure is better described by tertiарization; deindustrialization may be a subset of tertiарization.
FIGURE 8.2 SHARE OF EMPLOYMENT IN SERVICE SECTOR (INCL. CONSTRUCTION) WITH 2005 AS A BASELINE. (2005=100%) (%)  

Source: OECD STAT database
Together with the expansion of the service sector, agricultural employment in Korea and Taiwan fell substantially during the 1980s and continued to fall in the present, 2010. Agricultural employment in Japan was below 10 percent even in the 1980s but only fell to this level in the late 1990s in Taiwan and early 2000s in Korea. Compared to Japan, tertiarization in Korea and Taiwan has been taking place simultaneously with de-agriculturalization. The decrease of agricultural employment has been most rapid in Korea during both its industrializing and tertiarization periods (see figure 6.1 in Chapter 6).

Compared to other OECD countries, the three countries have high rates of self-employment, Korea having one of the highest rates. Contrary to the trend of increasing self-employment in most countries in the OECD countries (OECD 1992), self-employment is decreasing in all three countries (albeit from a higher base). However, when comparing the proportion of self-employed workers and contributing family workers in the three countries, Korea and Taiwan stands out as having a rate two to three times higher than that of Japan. Especially, Korea has

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65 “Status in employment distinguishes between three important and useful categories of the employed – (a) wage and salaried workers, (b) self-employed workers, and (c) contributing family workers – with each being expressed as a proportion of the total employed. The method of classifying employment by status is based on the 1993 International Classification by Status in Employment (ICSE), which classifies jobs held by persons at a point in time with respect to the type of explicit or implicit employment contract the person has with other persons or organizations. Self-employment jobs are those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits)”, ILO 1993 ICSE

66 “Contributing family workers are those workers who hold a "self-employment" job in a market-oriented establishment operated by a related person living in the same household, who cannot be regarded as a partner, because their degree of commitment to the operation of the establishment, in terms of working time or other factors to be determined by national circumstances, is not at a level comparable. ILO 1993 ICSE
an exceptionally high rate compared to other OECD countries (25.8% in Korea and 18.6% in Taiwan, compared to 9.7% in Japan, 10.7% in Germany, 13% in the UK in 2007). In the case of Taiwan, the non-standard employment rate is low but the share of self-employment is large at around 25% including contributing family workers, while it is less than 15% in Japan. In Korea, the proportion of waged and salaried increased from around 47% in 1980 to 68.15% in 2007 which is more than 20% increase (figure 8.3). However, the proportion of self-employed decreased only about 10% from about 35% to 25% (figure 8.4). Majority of the self-employed workers were participating in the agriculture sector but the changes in the rate of self-employed and wage/salaried workers indicates that only around half of the self-employed workers, majorly from the agriculture sector, shifted to waged and salaried jobs.

How can we explain the mismatch between the decrease and increase of each labour type? This may be explained by the speedy de-agriculturalization and tertiarization. While the proportion of agricultural workers from the total labour force rapidly decreased (approximately 30% decrease between 1980 and 2007), many of the former agricultural workers became self-employed workers in service sector of low skills such as restaurants, retail service, cleaning services, etc. This phenomenon is a distinctively different shift of labour compared to many of the western developed countries where the transition from an agricultural to an industrial economy was more gradual and also where the industrialization period was longer. Hence, the labour force in the agriculture has shifted to work in the informal sector of the service industry skipping the manufacturing industry.
Agricultural employment is below 10% in all three East Asian countries in 2000s (see figure 6.1 in chapter 6) while there is still a large difference in self-employment rates. The higher share of the informal sector in Korea and Taiwan in the 1980s and early 1990s is explained by the large size of the agriculture sector. However, the high rate of self-employment in the late 1990s up to the present in both Korea and Taiwan indicates that the majority of self-employed are now working in the service sector. For instance, the employment rate in the agricultural sector decreased from about 32% in 1980 to around 9% in 2009 in Korea while the total self-employment rate only decreased less than 10% in Korea. This suggests that the labour force may have shifted from the agricultural sector to the service sector due to the rapid expansion of the service sector and the short
transitional period of deindustrialization. In other words, the comparatively high rate of informal employment in Korea and Taiwan is explained by the speedy changes in the employment structure. Lee and Eyraud (2008) use the term ‘casualization’ to describe the more frequent use of non-standard jobs by formal enterprises, while the term ‘informalization’ refers to an increase in traditional forms of informal employment such as self-employment. In the case of Korea, the country stands out among the three in having a high proportion of informal sector workers as well as a high rate of casual workers.

Standing (2010) explains that casualization refers to a shift from quasi-permanent to short-term employment (see Standing 2010: 70-72 for more casualization).
FIGURE 8.4 TOTAL SELF-EMPLOYED WORKERS (%) AND CONTRIBUTING FAMILY WORKERS (%) IN KOREA, TAIWAN AND JAPAN

As summarized above, from the early 1990s, labour markets in Korea, Japan and Taiwan had service sector employment rates higher than 50%. Tertiarization in Japan started about a decade earlier than in Korea and Taiwan but the increase in the service sector was speedier in Korea and Taiwan (figure 6.1 in chapter 6). Along with the transition in employment structure, the GDP growth rate has slowed down and the labour productivity rate decreased in all three countries compared with their industrialization period (figure 8.5). The majority of workers are now employed in the service sector where their productivity is lower than in the manufacturing sector. Manufactured goods in Korea and Japan
are losing their comparative advantages, partly due to the rapid industrialization in China and the lower cost in production. Korea and Taiwan which were depicted as the newly industrializing countries in the 1970s following Japan’s emerging as an industrial power in the 1960s are now replaced by China and India’ (Standing 2010: 64). Annual GDP growth dropped from around 12% in the 1960s to about 2% in the 2000s in Japan (figure 8.5). The rate averaged 1 per cent annum between 1992 and 1999 in Japan compared with 3.9 per cent from 1981 to 1991 (Genda and Rebick 2000). Likewise, Korea and Taiwan followed their rapid development of the 1970s with a growth rate that decreased to approximately 3% in the 2000s68. The relative price of labour increased as companies had to compete with the fast growing Chinese economy in the integrated international market. Furthermore, companies had to cope with the Asian financial crisis and the collapse of asset price bubble69 in the case of Japan in the 1990s.

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68 Korea’s GDP growth rate dropped to -6.85 % in 1997 when the country hit the IMF financial crisis.

69 The Japanese asset price bubble was an economic bubble in Japan from 1986 to 1991, in which real estate and stock prices greatly inflated. The bubble's collapse lasted for more than a decade with stock prices bottoming in 2003, until hitting an even lower low amidst the current global crisis in 2008. The Japanese asset price bubble contributed to what the Japanese refer to as the Lost Decade.
8.3 INSTITUTIONAL PERSISTENCY AND CHANGES

While the structural changes in employment took place and the three countries faced new challenges from the 1990s, the institutional change has been more gradual. The welfare production regimes of each country have been adjusting to
the new challenges in the labour market whilst some of the core institutional arrangements have persisted. In Chapter 7, I compared the different welfare production regimes in Korea, Taiwan and Japan during the industrialization period. The problem solving approach in institutionalism suggests that the outcome of a given switch point is a product of the past (Haydu 1998) and thus the institutional arrangements of each country’s welfare production regime that were structured in the industrialization period can account for what happened in later periods. The institutional legacy together with different institutional responses to structural change and challenges have created different labour market risks and intensified the dualism in the labour markets. In this section, the persistency and changes in the welfare production regime are examined.

When examining the 1990s, the dual structure between the large private firms and SMEs in Korea and Japan is rather persistent despite the changes in the labour market. The contribution of large companies to the total GNP is still high. In 1993, the economic contribution to GNP by the five largest companies in Korea was 52.4% while it was 10.3% in Taiwan and the contribution to GDP of Korea’s 50 largest companies was 93.8% while it was only 31.7% in Taiwan. In the 1970s in Korea, over half of all Korean private-sector enterprises (of the size of 10 or more workers) had more than 200 employees and in the 1990s, still over one-third of Korean private sector employees were in large enterprises (those with 300 or more workers). Moreover, heavy chemical industries still dominate the manufacturing industries, accounting for 83.5 per cent of Korea’s total industrial output in 2007 (OECD 2009). In contrast, in Taiwan, less than 10% of workers in private firms (with 10 or more workers) were employed in large firms of 500 or
more (Brinton et al. 1995). In 1995, 65 percent of the workforce in private sector was working in companies with fewer than 30 workers and workers in companies of 500 or more only comprised 5.5 percent of the work force in Taiwan.

Many studies have highlighted Japan’s lifetime employment and seniority based wage practice in explaining that the productivity and competitiveness of firms by maintaining the positive long-term investment environments for entrepreneurs and providing worker incentives (Kato and Morishima 2002, Rebick 2005, Junya et al 2010). It was predicted that the slowdown of economic growth and subsequent recession might have transformed the economic structure that preconditioned this Japanese labour practice resulting in some sort of labour adjustment (Dore 1996, Chuma 2002). However, a number of studies discovered no major change in seniority-based wages and lifetime employment in the 1990s (Hattori and Maeda 2000, Rebick 2001, Kato 2001, Kambayashi and Kato 2009, Genda and Rebick 2000) and the employment practices in large firms in Japan and Korea continue to be persistent. For example, more than 76 per cent of the Japanese firms replied in 2003 that the lifetime employment system should be maintained or only partially be adjusted while only about 20 percent of firms agreed that the lifetime employment system needs a fundamental review or abolition (table 8.1).
Table 8.1: Attitude of Firms Towards the Future of the Lifetime Employment System in Japan (1999-2003)

<table>
<thead>
<tr>
<th>(Percentage of firms)</th>
<th>1999</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basically maintain the practice</td>
<td>34</td>
<td>36.1</td>
</tr>
<tr>
<td>Partial adjustment is inevitable</td>
<td>44</td>
<td>40.0</td>
</tr>
<tr>
<td>Fundamental review is necessary</td>
<td>17</td>
<td>15.3</td>
</tr>
<tr>
<td>Do not have lifetime employment</td>
<td>4</td>
<td>5.2</td>
</tr>
<tr>
<td>Cannot forecast</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Unknown, no response</td>
<td>-</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Source: Keizer 2010 (quoted from Hattori and Maeda 2000 and JILPT 2004)

The employment practice in large companies with an internal labour market still offers high employment protection for their workers. When comparing the strictness of employment practice in some selected OECD countries, Taiwan’s labour market is flexible for regular workers while the strictness of employment protection is higher for temporary employment (table 8.2). In Korea, the strictness of employment protection for regular workers is higher than the OECD average while the strictness for temporary employment is lower than the average (Chapter 8 examines the employment protection of permanent workers and temporary workers in more details). In Japan, the strictness for temporary employment is even lower than Korea. Most temporary workers in Korea and Japan are working

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70 “For each country, employment protection legislation is described along 18 basic items, which can be gathered in three main areas: (i) employment protection of regular workers against individual dismissal; (ii) specific requirements for collective dismissals; and (iii) regulation of temporary forms of employment. A four-step procedure has been developed for constructing cardinal summary indicators of EPL strictness that allow meaningful comparisons to be made, both across countries and between different years”. Calculation of Summary indicators or EPL Strictness (for a detailed description of this procedure, see also OECD (1999), Employment Outlook, Chapter 2, Annex 2.B).
in SMEs while regular employment is more common in large firms. Hence, the employment protections in Korea and Japan are favourable to regular workers, in other words, the employees in large firms. The contrast between Korea, Japan and Taiwan suggests that the large firm oriented welfare production regime in Korea and Japan and a SMEs oriented welfare production regime in Taiwan are persistent. However, in the case of Taiwan where the non-standard employment rate is low, the employment protection of most workers does not have to be strict. The skills that workers obtain in Taiwan are occupation or industry specific rather than firm specific. Hence, workers have more choices in moving to another firm as long as they are in the same industry or occupation group. In addition, more employment protection is provided to the temporary worker which also prevents an increase of non-standard workers in Taiwan. The contrast of employment protection strictness between Taiwan and the two other countries in 2003 suggest that the dualistic employment protection in Korea and Japan is still persistent (at least up to 2003).

**TABLE 8.2 STRICTNESS OF EMPLOYMENT PROTECTION IN KOREA, JAPAN, TAIWAN AND OTHER SELECTED OECD COUNTRIES IN 2003**

<table>
<thead>
<tr>
<th></th>
<th>Regular employment</th>
<th>Temporary employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>1.9</td>
<td>1</td>
</tr>
<tr>
<td>Korea</td>
<td>2.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Germany</td>
<td>2.7</td>
<td>1.8</td>
</tr>
<tr>
<td>France</td>
<td>2.5</td>
<td>3.6</td>
</tr>
<tr>
<td>UK</td>
<td>1.1</td>
<td>0.4</td>
</tr>
<tr>
<td>US</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>OECD average</td>
<td>2.1</td>
<td>1.8</td>
</tr>
</tbody>
</table>
The seniority based wage systems in large companies and SMEs in Korea and Japan have not changed radically again and it is attested when examining the wage difference between the workers in large firms and SMEs. Comparing the median wage profile of a group of university graduates and high school graduates in both the manufacturing sector and the non-manufacturing sector across three different periods of 1989/1990, 1998/1999 and 2007/2008, the trend of wage increases in proportion to age is clear and persistent in Japan (figure 8.6 and figure 8.7). However, the increase in wage is steeper in large firms compared to SMEs in both manufacturing and non-manufacturing sector meaning that the senior based wage system is more practiced and persistent in large firms.

In Japan when comparing the wage gap between the wages of the workers in their early 20s and mid-50s in large firms of manufacturing industry, the wage increases to more than three times and this trend prevails until 2007/2008 (figure 8.6). The trend is similar for both university graduates and high school graduates and this evidence shows that in large firms of manufacturing sector, seniority is still as important as workers’ education level. There is a wider wage gap between the firm sizes rather than between different education levels in manufacturing industry. However, it is also noticeable that when comparing the wage profiles of high school graduates between large firms and SMEs, the wage difference is not so large compared to university graduates and also compared to high school
graduates in the non-manufacturing sector. The lower educated are comparatively more well off when working in the manufacturing sector.

In the non-manufacturing sector, the wage gap between workers in large firms and SMEs is also apparent. However, the wage profiles of different time periods show rather different trends. First of all, while there is a positive relationship between wages and age in 1989/1990, the wage increase is more sluggish in the latest period (2007/2008) for both university graduates and high school graduates. Compared to the manufacturing sector, the median wage in the non-manufacturing sector has been decreasing during the last decade (see figure 8.6 and figure 8.7). The wage difference between different education levels is also minor among the SMEs as well. Likewise in the manufacturing sector, the university graduates are not better off than the high school graduates. Hence, while the dual structure between large firms and SMEs is still persistent in Japan, there is less importance in the education level compared to seniority in non-manufacturing sector and this evidence contests the new risk argument that the low-skilled are at risk in the de-industrialized economy. However, it should be noted that gradual change in the wage system is taking place more recently. Secondly, it suggests that the seniority based wage system may have started to weaken in the service industry while it is still rather persistent in the manufacturing sector. However, despite the recent trend of gradual change in the wage profiles in the service sector, the wage gap between the workers of large firms and SMEs suggest that there is no evidence of dramatic change in the dual structure of large firms and SMEs in Japan.
FIGURE 8.6 THE MEDIAN MONTHLY WAGE PROFILE OF THE MANUFACTURING INDUSTRY IN JAPAN (100,000 YEN)

University graduates, Large-sized firm

University graduates, SMEs

High school graduates, Large-sized firm

High school graduates, SMEs
FIGURE 8.7 THE MEDIAN MONTHLY WAGE PROFILE OF THE NON-MANUFACTURING INDUSTRY IN JAPAN (100,000 YEN)

- University graduates, Large-sized firm
- University graduates, SMEs
- High school graduates, Large-sized firms
- High school graduates, SMEs
In the case of Korea, the dual structure is rigid and the dualism being further more intensified than during the industrial period. The wage difference between large firms and SMEs has been wider in recent years, with the wages of workers in firms with 500 or more workers being more than two times higher than the wages of workers in companies of less than 10 workers (figure 8.8). While Korea has also been experiencing tertiarization and slower growth since the economic crisis in 1997, the wage increases in large firms of 500+ has been more rapid than in the 1980s. In other words, after the restructuring during the economic crisis in Korea, employees of large firms have had the privilege of continuous wage increase while wage increases has been rather stagnant in SMEs.
The rigidity of the large firm oriented regime in Korea can also be found when examining voluntary corporate welfare by firm size during 1986 and 2008 as well. When comparing corporate provision of welfare by firm size, the gap between large firms and SMEs has been increasing. Voluntary corporate welfare is a cash transfer provided by the firm other than wages, such as bonuses or for the purpose of workers’ welfare. The amount of voluntary corporate welfare
provided by the 1000 worker or more firms is about two times higher than that provided by the companies with less than 300 workers (figure 8.9). Moreover, while the level of provision has been staggered in SMEs, firms with 1000 or more have been increasing their provision of welfare. In other words, the dual structure of large firm oriented welfare has not been experiencing dramatic change but has been rather rigid, if not more intensified.

FIGURE 8.9 DIFFERENTIAL OF VOLUNTARY CORPORATE WELFARE BY FIRM SIZE IN KOREA (1986-2008) (UNIT: 1,000 WON/MONTHLY)

Lastly, the different patterns of industrial relations in the three countries have also been relatively persistent. For example, in Korea, the unionization rate of workers in companies with 300 or more employees was 45.4% in 2008, whereas the rate for companies with 100 to 299 employee was 13.6%, and for companies with less than 30 workers, 0.2% (Peng 2010). In Japan, the power of Rengo has been decreasing since 1990s. The unionization rate increased during the industrialization period but the rate of labor union membership, which was 35.4% in 1970, had declined considerably by the end of the 1980s. While the overall unionization rate had decreased, the dualism in industrial relations is still persistent in Japan. The unionization rate of workers in companies with 1000 employees is 57.6% in 2007 while it is 4% for workers in companies with less than 99 employees (Peng 2010) and the patterns between the firm size and unionization rate a more or less linear pattern (Peng 2010).

In the case of Taiwan, there has been gradual change in industrial relations. Chen et al (2003) suggest that privatization of the state-owned companies from the late 1980s has influenced industrial relations in Taiwan. Taiwan had one of the largest public enterprise sectors in the world during 1980s but since 1990s, companies such as China Steel Company, First Bank, Hwa-nan Ba and Chinese Petroleum Company started to be privatized. Many other state-owned companies are also undergoing privatization. Zhu et al (2000) explains that workers in state-owned companies have enjoyed more employment and wage security and better welfare benefits from the company compared to workers in private sector companies (which are mostly SMEs). Hence, privatization of the state-owned companies was considered a threat to the union members and workers, causing
some changes in industrial relations from state-sponsored unionism to more autonomous unions. Moreover, the replacement of the KMT by the Democratic Progressive Party (DPP) as a ruling political party in 2000 left more room for Taiwan’s industrial relations to be developed along the lines of societal corporatism rather than state corporatism (see Chapter 7 for the definition of the two).71

However, while it is noticeable that enterprise unions gradually started to change their relationship with the government (explained in Chapter 7), the level of membership has been decreasing and on the other hand, the unionization rate of the craft union had increased up to more than 60% in 1992 and 1993 (table 8.3) (see chapter 7 for explanation on enterprise unions and craft unions). When comparing the unionization rate since democratization in 1987, the membership and the unionization rate of enterprise unions have been consistently lower than those of craft unions. Hence, the SMEs oriented industrial relations have been rather persistent together with the gradual degradation of hierarchical enterprise unions.

As explained above, despite the challenges and changes that labour markets in the three countries are facing, their institutional arrangements did not go through a radical change. Hence, employers and workers sought alternative options to cope with the misalignment between the new economic environment and old institutional arrangements.

71 The KMT won the election again in 2008 and ended 8 years of DPP (Democratic Progressive Party) Presidency.
TABLE 8.3 UNIONS AND UNION MEMBERSHIP IN TAIWAN, 1987-2000

<table>
<thead>
<tr>
<th>Year</th>
<th>Enterprise Unions</th>
<th></th>
<th>Craft Unions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Membership (in thousands)</td>
<td>Unionization rate</td>
<td>Membership (in thousands)</td>
<td>Unionization rate</td>
</tr>
<tr>
<td>1987</td>
<td>703</td>
<td>30.7</td>
<td>1396</td>
<td>36.3</td>
</tr>
<tr>
<td>1988</td>
<td>696</td>
<td>29.5</td>
<td>1564</td>
<td>42.8</td>
</tr>
<tr>
<td>1989</td>
<td>698</td>
<td>30.6</td>
<td>1721</td>
<td>42.8</td>
</tr>
<tr>
<td>1990</td>
<td>699</td>
<td>31.3</td>
<td>2057</td>
<td>50.7</td>
</tr>
<tr>
<td>1991</td>
<td>692</td>
<td>29.3</td>
<td>2249</td>
<td>59.7</td>
</tr>
<tr>
<td>1992</td>
<td>669</td>
<td>28.9</td>
<td>2389</td>
<td>59.7</td>
</tr>
<tr>
<td>1993</td>
<td>651</td>
<td>28.5</td>
<td>2521</td>
<td>61.2</td>
</tr>
<tr>
<td>1994</td>
<td>637</td>
<td>27.4</td>
<td>2641</td>
<td>60.3</td>
</tr>
<tr>
<td>1995</td>
<td>598</td>
<td>25.4</td>
<td>2537</td>
<td>58.1</td>
</tr>
<tr>
<td>1996</td>
<td>587</td>
<td>23.6</td>
<td>2461</td>
<td>56.7</td>
</tr>
<tr>
<td>1997</td>
<td>589</td>
<td>23.0</td>
<td>2364</td>
<td>53.3</td>
</tr>
<tr>
<td>1998</td>
<td>576</td>
<td>22.0</td>
<td>2346</td>
<td>52.1</td>
</tr>
<tr>
<td>1999</td>
<td>613</td>
<td>22.5</td>
<td>2313</td>
<td>50.3</td>
</tr>
<tr>
<td>2000</td>
<td>589</td>
<td>20.9</td>
<td>2279</td>
<td>49.2</td>
</tr>
</tbody>
</table>

Source: Chen, Ko and Lawler (2004), originally from Council of Labour Affairs, Monthly Bulletin of Labour Statistics, Taiwan Area, Republic of China, Executive Yuan, November 2001, Table 3-1

8.4 DUAL LABOUR MARKETS AND NON-STANDARD WORKERS

Why are Korea and Japan experiencing an exceptionally high increase of precarious workers and how do welfare production regimes matter in creating
various dual labour markets in East Asia? This section examines how new challenges are mediated by the institutions existing in different countries resulting in different labour market risks and patterns of labour market segregation.

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**8.4.1 DUALISM BETWEEN WORKERS OF SMES AND LARGE FIRMS**

Slower growth rates, an increase in the size of the service sector and pressure from the integrated international market created a new economic environment for the labour markets in East Asia different from their glorious period of economic development. Non-standard workers, especially part-time workers are concentrated in the service sector and SMEs where the employment practices are less strict. For example in Japan, non-standard workers are highest in the service sector (41% of all workers in service sector in 2008) and the proportion of non-regular workers in Japan is twice high in firms with five to 29 employees, at 37.9%, as in firms with more than 1000 workers. Also, in Korea, the majority of non-regular workers are employed by SMEs rather than large firms and a high proportion of temporary workers are working in service sector.

Firstly, it should be noted that in Korea and Japan, the majority of non-standard workers are concentrated in SMEs of services sector. For example in Korea, 67% of the total labour works in the service sector and 91% of the service sector firms are SMEs (OECD Economic Survey/Korea, 2008). In other words, there is a very close correlation between the service sector and SMEs. One notable characteristic of the service sector in Korea (and in Japan) is its low productivity.
compared to other OECD countries, not to mention compared to the productivity rate of the manufacturing sector in Korea and Japan during the period of economic development. The low productivity in the service sector therefore implies lower productivity in SMEs and a need for employers to keep cost down.

The institutional arrangement further encourages the employment of non-standard workers in SMEs in Korea and Japan. Comparing the strictness of employment protection for regular workers and non-regular workers, employment protection is still strong for regular workers who are mostly employed by large companies while it is less strong than the OECD average for non-regular workers who are mostly working in SMEs. Hence, it is easier to dismiss non-standard workers than standard workers. According to surveys by the OECD, firms hire non-regular workers to reduce labour costs and to increase employment flexibility, given the difficulty of laying off regular workers due to the high degree of employment protection and the power of trade unions in large firms (OECD Economic Surveys: Korea 2007). Non-standard workers are also excluded from the social protections available to standard workers. In Japan, virtually all regular workers are covered by the social insurance schemes while less than half of non-regular workers are covered by employees’ pension and health insurance, and two-thirds are covered by employment insurance (Keizer 2010). Hence, the large firm-oriented welfare system in Korea and Japan also contributes to the dual structure of non-regular workers being concentrated in SMEs and regular workers in large firms. Less than half of non-regular workers are included in social protection and hence, it is easier for employers to save on their contribution of social insurances if they hire non-standard workers.
There is then much motivation for SMEs to hire non-standard workers as it is cheaper and easier to hire them due to i) the lower wage that employers have to pay to their workers, ii) lower mandatory contributions for social insurance, iii) easy dismissal as employment protection is weak for non-regular workers, and lastly iv) there are only weak collective unions that protect the rights of non-regular workers. Although fewer non-standard workers are working in large firms in Japan and Korea than in SMEs, through hiring dispatched workers and outsourced workers, the number of non-standard workers in large firms is also increasing (table 8.4). Like for SMEs, it is cheaper for large companies to hire non-standard workers. Despite the fact that the wage differences are large between the non-standard workers and standard workers in large firms, firm-based unions in large firms have less motivation to encompass the interest of non-standard workers (see chapter 7 for more explanation). The persistence of this employment arrangement still provides employment protection for those who are selected to work as standard workers. Companies have reduced the inflow to their permanent core workforce but the workers who have already entered this secure core have been protected. To reduce the cost, the number of new hires is reduced in large companies and hence a large group of employees has had to accept non-standard employment in spite of the low pay either in the large firm or in SMEs. From the employer’s perspective, it is much easier to hire easily dismissible non-standard workers instead of hiring a standard worker who is more expensive to hire and more difficult to dismiss.
TABLE 8.4 THE PROPORTION OF NONSTANDARD EMPLOYEES IN LARGE FIRMS (300 OR MORE EMPLOYEES) IN REP. OF KOREA, 2010.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Proportion of non-standard workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipbuilding</td>
<td>61.3 %</td>
</tr>
<tr>
<td>Vehicles</td>
<td>16.3 %</td>
</tr>
<tr>
<td>Steel</td>
<td>43.7 %</td>
</tr>
<tr>
<td>Electronics</td>
<td>14.1 %</td>
</tr>
<tr>
<td>Chemical industry</td>
<td>18.8 %</td>
</tr>
</tbody>
</table>


As explained above, the system of life time employment and seniority based wage system in Japan and Korea did not show a dramatic change in the last two decades. Hence, cutbacks in large firms due to unfavorable economic conditions (such as increased international competition) pushing companies to lower their costs has not been through dismissing workers but rather through the transfer of employees within the firm or to other firms in the same corporate group (Genda and Rebick 2000) and by sharply reducing the number of new hires of recent graduates. Existing employees and wage protection were maintained by reducing overtime work, freezing new graduate recruitment and by transferring employees to subsidiaries (Chuma 1994, 2002, Genda and Rebick 2000, Rebick 2001). Chuma (2002) explains that the ratio of firms that leaned toward encouraging voluntary retirement or dismissal increased as the recession became more severe in Japan in the late 1990s. In addition, labour unions agreed to low wage growth in exchange for job security which contributed to the low rate of employment mobility. As a result, the lifetime employment system survived the recession in Japan in the 1990s. The employment practice of large companies with internal
labour markets still affords high employment protection for their workers and hence rather limits the entry of recent graduates. In sum, the employment system in Korea and Japan that is more favorable to permanent workers working in large firms is rather persistent which resulted an increase of non-standard employment. In contrast, the employment protection is more rigid to for temporary workers than permanent workers in Taiwan. This also indicates that the employment system in Taiwan did not experience much change and continues to contrast with Korea and Japan.

8.4.2 GENDER SEGREGATION IN THE DUAL LABOUR MARKET

The VOC literature made a prominent contribution to enhancing understanding of the welfare state by highlighting the impact of welfare institutions on the skill formation which in turn impacts income inequality and gender segregation. Most literature linking the welfare state and inequality focuses on the redistributive effect of welfare benefits. The gendered consequence of the varieties of capitalism have also been theorized (Estevez-Abe 2006). Compared to other institutional theories, the literature VOC focuses on the impact of welfare policies on gender segregation suggesting “a skill based institutional theory of segregation” (Estevez-Abe 2006: 148). The core argument is that “institutions such as employment protection and vocationally based educational systems, which facilitate specific skill investment” increase gender skill gaps that lead to gender segregation in the labour market (Estevez-Abe 2006). The assumption is that due to women-specific risks which are caused by motherhood and caretaking roles in the family, strong
employment protection, which is accompanied by a firm specific skill system, is more discriminatory to women than other regimes. Firms that invest in on the job training would be reluctant to hire women, as they are more likely to leave the company or at least to be less prepared to work for long working hours due to the particular characteristics of women’s life cycles. In addition, females would invest less on the firm specific skills but more on the general skills that are portable. Likewise, on the job training and apprenticeships are less accessible to females because their working period is more likely to be interrupted due to woman specific life cycles. Hence the argument is that a school based general education system provides more (and gender-neutral) opportunities for women to invest in their own human capital (Estevez-Abe 2006).

The gendering of VOC (Estevez-Abe 2006) provides insight to this study. Another major change in the servicealized labour market period compared to the earlier period is the increase in female labour participation together with the overall increase of non-standard employment. In her study of the gender consequences of varieties of capitalism, Estevez-Abe (2006) empirically demonstrated how different skill formation systems can create occupational gender segregation in developed countries. Sharing the premises of her study, this study develops the argument further to explain the large proportion of females in part-time work.

The employment practice of preferring workers with firm specific skills, lifetime employment, and a seniority based wage system in large firm oriented welfare production regimes tends be both less feasible for and less attractive to females. It is less possible for married women to take time off and return to work
as a regular worker or be hired as a regular worker in the first place. Also single women are less attractive than males of the same cohort to employers because employers worry those female workers may leave their job after marriage. From the perspective of the female job seeker, they are reluctant to invest in firm specific skills due to the uncertainty of employment security. Therefore, women are more likely to invest in general skills rather than firm specific skills.

In Japan where three quarters of non-standard jobs are part-time jobs, two thirds of part-time workers are females (OECD Japan 2008). In other words, non-standard employment in Japan is gender segregated. In Japan, the rate of females in non-standard employment was more than four times higher than the rate for males from the late 1980s to late 1990s (see figure 6.11 in chapter 6). The number of female non-standard workers is still approximately 2.5 times higher than the male number in Japan.

Because of firm specific training and employment protection, it is costly for large firms to hire standard workers. Since employers train their employees, employers would prefer to hire workers with less mobility and high commitment. However, female workers have women-specific risks, experiencing a different life cycle and tending to have more domestic responsibility, which makes female workers less likely to be prepared to fully commit to the company compared to male workers. For female workers in the welfare production regime of Japan or Korea, the two possible options are either to obtain general skills and continue their career or to work as a part time worker. In fact, the number of females in high status jobs that do not require firm specific skills (such as managers, lawyers and doctor) has increased (Estevez-Abe 2006) as well as the number of female
part-time workers in Japan. In the case of Korea, while the overall number of non-standard workers has been increasing, the number of female non-standard workers has been consistently around 1.5 times higher than the number of male workers. In other words, more women are working as non-standard workers in Korea as well. However, in Taiwan where the welfare production regime is SMEs and industry-specific skill oriented, females have more freedom to leave and enter the job market as long they have an occupation specific skill. Hence, the level of gender segregation is lower (figure 6.11)

Compared to Taiwan, non-standard employment in both Korea and Japan is gender segregated. However, the different degree in gender segregation between Korea and Japan can be explained by the different kind of non-standard employment available in the two countries due to the different speed of their shift in industry. The gender segregation in Korea is not as severe as in Japan where two third of part-time workers are female. In Japan, the proportion of non-standard employment was 20% in 1994 and it increased to 34% in 2007. Among the non-standard workers, three quarters are part-time workers which is not only higher than in Korea but it is one of the highest in the OECD countries (OECD Economic survey Japan 2008). In Korea, the proportion of part-time workers amongst non-standard workers was only 14% compared to 30-50% in other OECD countries, including Japan. In other words, the temporary employment (fixed-term employment) rate is high among the total non-standard employment in Korea while the rate of part-time employment has increased with the majority being women in Japan. In Korea, the majority of non-standard workers are fixed-term workers rather than part-timers. Also in contrast to other OECD countries,
the incidence of temporary workers in Korea is high among all age groups and also not particularly concentrated in any particular education level.

In Korea, as in Japan, the increase in non-standard employment is explained by both the increase in the size of the service sector but also by the rigidity of employment arrangements. However, in Korea, the increase in the service sector took place simultaneously with the rapid decrease of the agriculture sector and this has had implications for gender segregation as well. A large portion of the labour force in the traditional informal sector shifted to work in the service industry, which has a large proportion of non-standard employment, skipping the manufacturing sector. The self-employment rate is more than two times higher in Korea than in Japan suggesting that a large proportion of the labour force in the agriculture sector shifted to work in either SMEs or to become self-employed. This indicates that temporary employment is less related to work and life balance related flexibility for women in Korea (OECD Economic Survey: Korea 2008) but rather related to the rapid shifts in employment structure from agriculture to service sector. The rapid expansion of the service sector increased the demand in the labour market for service work. But the newly hired are mostly working in temporary jobs in SMEs where employers tend to hire more non-standard workers to reduce costs. However, in Japan, the shift in employment structure took place more gradually, similar to western developed countries. The labour force in manufacturing has been casualized with the increase in non-standard workers.

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72 Literature on ‘new risks in post-industrial economies’ argues that workers that used to work in the industry sector such as metal producing are now at risk of unemployment because it is difficult for this population of workers to shift to work in the service sector which, they argue, are mostly service jobs with feminine characteristics.

73 Lee and Eyraud (2008) use the term ‘casualization’ to describe the more frequent use of
8.5 CONCLUSION: COMPARISON OF THE THREE COUNTRIES

The Method of difference has for its foundation, that whatever cannot be eliminated is connected with the phenomenon. Mill explains that “if an instance in which the phenomenon under investigation occurs, and an instance in which it does not occur, have every circumstance in common save one, that one occurring only in the former; the circumstance are in which alone the two instances differ, is the effect, or the cause, or an indispensable part of the cause, of the phenomenon” (Mill 1882, 280). In Chapter 7, the similarities among the three countries were discussed before explaining how different institutional arrangement started to evolve. Confucianism, an authoritative government and an economic development led by the government are the three similarities that are identified. In this chapter, I examined how both Japan and Korea, in developing a large private firm oriented welfare production regime during their industrialization period, experienced an increase of non-standard employment. In contrast, Taiwan which has a SMES oriented welfare production regime has substantively lower rate of non-standard employment. While governments had to cope with the new challenges of tertiarization and decreased growth in Korea and Japan, institutions were persistent or only showed little change. Their particular institutional arrangements, which were different from those in Taiwan, explain the rapid increase of non-standard employment. All three countries conform to each other non-standard jobs by formal enterprises, while the term ‘informalization’ they refer it to the increase in traditional forms of informal employment.

74 The Method of Agreement is explained as “if two or more instances of the phenomenon under investigation have only one circumstance in common, the circumstance in which alone all the instance agree, is the cause (or effect) of the given phenomenon (Mill 1882, 280)”.

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regarding the three similarities but the difference in welfare production regimes between Japan, Korea and Taiwan explains the different labour market risks. Both Korea and Japan differ from Taiwan in having a large firm oriented welfare production regime. This institutional arrangement which was evolved during the industrialization period remains rather persistent in the post-industrialization period (1990s-). Comparing labour market risks, Korea and Japan differs from Taiwan again by having high rate of non-standard employment rate and gender segregation in the labour market, especially related to non-standard jobs (table 8.4). Especially in Japan where gender segregation is most severe, the increase of non-standard employment was mainly due to the increase of part-time workers which was highly concentrated on females. The persistency of life time employment and the seniority-based wage system together with firm-based skill formation discourages female employees from working in large firms as a permanent worker. Consequently, many work as part-time workers in large firms or SMEs.

When examining the high self-employment rate, Korea and Taiwan can be explained with similar ideas. Here, the simultaneous decrease of agricultural employment and the increase in service sector employment seems to be associated with the relatively high rate of self-employment. Both Korea and Taiwan differ from Japan in their speed of transition in employment structure. De-agriculturalization and tertiарization took place simultaneously in Korea and Taiwan (table 8.4, also see figure 6.1 in Chapter 6). In case of Korea, the rapid decrease of employment in manufacturing sector and the increase of the service
sector not only resulted in an overall increase of temporary workers but is also resulted an high rate of self-employment.

Among the three countries, Korea seems to be facing a dual challenge of both a high rate of non-standard employment and self-employment. Also the high proportion of temporary workers is a drag on growth as it increases worker turnover and hence wastes firm-provided and firm-specific training (Chun and Lee, 2005). It raises equity issues as non-regular workers face precarious jobs, wage discrimination and less social protection. The wage difference between non-standard employment and standard employment is wide and the inequality is increasing (OECD Korea 2007). Korea faces a complicated labour market dualism between large firms and SMEs, standard employment and non-standard employment, together with self-employed workers that are not sufficiently covered by the social protection.

The welfare production regime in Korea and Japan is large-firm based. The welfare provision regime, skill formation system, production system and pattern of industrial relations created a dual labour market between the large companies and SMEs. The increase of the service sector’s size decreased the overall productivity rate and companies had to reduce their production costs and prefer non-standard workers for new hiring while the employment protection for existing insiders has been strengthened. Consequently, both countries experienced a rapid increase of non-standard employment and high inequality between the regular workers and the non-standard workers. In Taiwan, the welfare production regime is SMEs based and the proportion of manufacturing is still comparatively high with a low non-standard employment rate. The dual structure in Korea and Japan
was formed during the industrialization period but it was strengthened by increased disparities between the standard and non-standard workers. In addition, the increase of non-standard employment introduced a gender segregation of employment status in the labour market. While most of the previous studies on gendered labour markets focus on occupational gender segregation, this chapter has explained how the welfare production regime contributes to the concentration of women in non-standard employment.

**TABLE 8.5 WELFARE PRODUCTIONS REGIME AND THE LABOUR MARKET RISKS IN JAPAN, KOREA AND TAIWAN: A COMPARISON WITH MILL’S METHOD OF DIFFERENCE**

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Japan</th>
<th>Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confucianism</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Authoritative government</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Government led Economic development</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Welfare Production Regime</th>
<th>Japan</th>
<th>Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large firm oriented Production system</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Firm specific Skill formation</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Large firm oriented Industrial relations</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Large firm oriented Welfare system</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Labour Market Risks</th>
<th>Japan</th>
<th>Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>High non-standard employment rate</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
<tr>
<td>Gender segregation in non-standard jobs</td>
<td>0</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shift in industries</th>
<th>Simultaneous de-agriculturalization &amp; tertiarization</th>
<th>Japan</th>
<th>Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>High rate of self-employment</th>
<th>Japan</th>
<th>Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
This study engaged with various theories to understand the present labour market risks by understanding the past. The investigation started with the puzzle of why Korea, Japan and Taiwan, commonly grouped together as East Asian welfare states and similarly in the stage of tertiarization, experience different kinds of labour market risks and dualism. Starting from the previous chapter, a historical institutional approach was taken to examine how institutions matter in de-industrializing East Asian economies. The method of difference was employed to summarize the causation in the Comparative Historical Analysis in this chapter. In understanding the differences in labour market risks and dualism amongst the three countries, historical institutional approaches have proved to be useful in filling the gaps that quantitative research might have missed.

Countries are responding to new challenges in the post-industrial period through different institutions, causing different labour market risks and forming different dual labour markets in East Asian countries. The institutional arrangements, created during the industrialization period, faced new challenges and in solving their problems, the dualism has been further strengthened. Changes of tertiarization and slower economic growth have been mediated by the dual structure between large firms and SMEs in Korea and Japan, creating risks of dual labour markets of non-standard employment and standard employment. In addition, the dualism contributed to a gender-segregated labour market. In Korea and Japan, dualism in the welfare production regime offered advantages to firms when hiring non-regular employees and the main advantage is lower labour costs.

Some studies suggest evidence of gradual changes in institutions and explain that the skill formation in Japan is changing. It was found that large
service companies such as retail companies also provide firm-specific training by relocating their part-time workers to different departments (Kim 2005, Keizer 2010), and that the duration that part-time workers spend working in one firm becomes longer as their firm-specific skills increase. However, part-time workers’ wages were still only 50 to 60 percent of regular workers (Kim 2005). Also the Korea Employer Federation (2006) estimated that the productivity of non-regular workers is 22% below that of regular workers, while their wages are 44% less. In conclusion, it seems to take longer period for a rearrangement of the set of institutions in welfare production regime than a change in a single institution.
CHAPTER 9. CONCLUSION

*Philosophers have hitherto only interpreted the world in various ways; the point is to change it.* [Theses on Feuerbach 1845], Karl Marx

9.1 REVISITING THE RESEARCH PUZZLE

The thesis began with a descriptive empirical observation on the increasing number of non-standard workers in Korea and Japan. The initial question regarding the wide spread of workers who are working in precarious conditions was developed further with its engagement with literature on new risk. Contrary to the claim that the wide spread of precarious workers in deindustrialized economies is a *new* risk, the author noticed that the precarious workers described by the strain of the New Risk’s literature is similar to the description of wage-workers during the industrialized period, as described by the literature on commodified labors (Marx 1844, Polayni 1944, Esping-Andersen 1990).

A number of social scientist provoked the discussion of new risk, relating it to social change and economic transition, such as Polayni’s the *Great Transformation* (1944), Beck’s *Risk Society* (1992), Taylor-Gooby’s *New Risk and New Welfare* (2000), Rifkin’s *End of Work* (1995), and others such as Webster, Lambert and Bezuidenhout’s analysis of recent change in “Second Great Transformation” (2008). Focusing more on the labour market risk, an increase of
precarious work has also gained wide attention in sociology, economics, politics and in social policy (Standing 2009, Blank, Danziger, Schoeni 2008; Gallie, White, Cheng, Tomlinson 2004, Houseman and Osawa 2006, Hackers 2006, Kalleberg 2000). Yet a consistent limitation acknowledged in the literature was the restricted attention given its the variety: the variation in the kinds of labour market risks, their degree and characteristics, and the variation of institutional arrangements internationally which may in turn be the key factor in explaining the variation in labour market risks across countries. Thus, the puzzle was distilled into two main research questions; what is new risk? And how do institutions matter in explaining the emergence of various risks?

Before undertaking a comparative analysis of the questions, the thesis paid large attention to methodology to discover an ideal comparative method for the set of questions suggested in the introduction. Lipset, as he suggested that “those who only know one country, know no country” (Lipset 1996:17, quoted in Ferragina 2011); he argued that it is only by comparing institutions and countries that it is possible to describe the complex social and political phenomenon in society (1996). The thesis probed for a comparative research method capable of comparing large number of cases while maintaining an institutional approach. The shortcomings of the institutional approach in bridging quantitative and qualitative analysis has, in fact, stimulated many comparative social scientists to develop innovative methods to overcome the limitations. Chapter 3 is devoted a discussing and a critical review of the methodology in comparative social policy, and introduced Fuzzy-set Qualitative Comparative Analysis. Fs/QCA is a unique and useful method for comparative social policy. It advances quantitative comparative
analysis by interpreting attributes as a configuration, and by applying fuzzy set logic and the principle of calibration; it advances qualitative analysis by permitting theoretically-informed concepts to be quantified. This method has a number of advantages in conducting a comparative research in examining the impact of institutions.

Chapter 4 tested empirically the new risk argument and highlighted the importance of concepts in social science, and demonstrated that conceptualization can be undertaken using the set-theory. Moreover a fuzzy-set ideal type approach is used to attest that concepts can be measured. With the exploitation of the fuzzy-set method, the chapter suggests a variation in types of, and the degree of, social risks across countries and time. Risks may be new when their characteristics are markedly different from the past or when the change is comparatively rapid. The chapter demonstrated that in most of the countries studied, the types of risk has shifted or is shifting to another type rather than a new risk, strikingly different from that of the past has emerged. Chapter 4 concludes by suggesting that an institutional approach can better explain the cause of risk shifts in different countries.

Findings from chapter 4 showed that Korea and Japan conformed to each other, having high membership cores for the insecure flexibility risk type. In Chapter 5, the author continued the international comparative study with large N and demonstrated that fs/QCA is capable of taking an institutional approach with a large number of cases. The chapter attempted to answer: what are the institutional conditions for labour market risks? In the analysis of institutions as a causal condition for the existence of labour market risks, it is suggested that
certain institutional arrangements result in a high rate of non-standard employment or long-term unemployment. Firstly, a low level of statutory minimum wage can lead to high level of non-standard employment in combination with either strict employment protection legislation for permanent workers or weak employment protection legislations for temporary workers. Also two institutional combinations are suggested to be sufficient conditions for high rate of long-term unemployment. Firstly, a long-term unemployment rate is high when there is strict employment protection legislation for temporary workers in combination with a high level of statutory minimum wage. Secondly and as importantly, strict employment protection of temporary workers can cause a high long-term unemployment rate if it is combined with a high level of net replacement rate for long-term unemployment and loose protection legislation for permanent workers.

The result suggests that there are multiple pathways to the same outcome which Ragin (2008) terms as different ‘recipes’. This chapter demonstrated how institutions can be examined as a configuration using fuzzy-set qualitative comparative analysis. It discussed and tested empirically how different institutional configurations cause labour market risk and attempted to highlight the importance of examining multiple policies together.

Following the international comparative study above, the thesis continues its comparative focus by examining Korea, Japan and Taiwan. The latter is chosen as a hypothetical counter-example for the former two, as Taiwan has a low non-standard employment rate compared to Korea and Japan. Chapter 6 examined how labour market risk shifts among different demographic groups in order to re-
examine the new risk discussion. Taiwan, which has a substantially lower rate of non-standard employment, is included in the comparative study as a contrast case to Korea and Japan. The chapter examined the changes in the unemployment rate and non-standard employment rate by educational level, age and gender. In contrast to arguments made by the new risk literature, the findings suggested that risks are not statically concentrated on females, the young or the low educated. The trend of groups experiencing risks varies and does not conform to a predetermined pattern even within an East Asian context.

Chapter 7 investigated the causes of the labour market risks in East Asia. In her eminent work “State and Social Revolution” (1979), Skocpol highlighted the significance of the historical approach in comparative methodology in social science, and adopted Mill’s method of comparison; her work furthered the course of Comparative Historical Analysis. Inspired by her approach of comparative method, Chapter 6 discussed the centrality of institutions to explain the different risk shifts in the three selected East Asian labour markets. In order to understand the institutional arrangements in Korea, Japan and Taiwan in the serviced based economy, the chapter examined how institutions evolved during the industrialized period. Taking the view of historical institutionalism, the Varieties of Capitalism (Hall and Soskice 2001) provided a theoretical grounding in analyzing the variation of welfare production regimes in East Asia. The chapter argued that historical events (in Japan, the end of WWII and the occupation by the GHQ; in Korea, the large amount of foreign aid followed by the Korean War and the military government; in Taiwan, the defeat of KMT and the ethnic cleavage) created a critical juncture for these countries to develop certain institutional
arrangements. While all three countries developed their own institutional arrangements, both Korea and Japan conform to a large firm oriented welfare production regime while Taiwan developed a SMEs oriented welfare production regime.

Chapter 8 continued the comparative historical analysis of the three countries, and looked at the theory of path dependency and the problem solving approach which stemmed from historical institutionalism. Since the path dependency theory fails to provide an overarching tale, chapter 7 highlighted the merit of problem solving approach (Haydu 1998), and the period was demarcated on the basis of contrasting solutions to problems. Chapter 6 covered the post-war period to the 1980s, while chapter 7 examined the service based economy from the 1990s onwards. Countries are responding to new challenges in the later period through different institutions, causing different labour market risks and forming different dual labour markets in East Asian countries. The institutional arrangements created during the industrialization period, faced new challenges, and by meeting these challenges, the dual institutional structure has been further strengthened. The increase of service sector and the slower economic growth have been mediated by the dual structure between large firms and SMEs in Korea and Japan, creating dual labour markets of non-standard employment and standard employment. In Korea and Japan, dualism in the welfare production regime offered advantages to firms hiring non-regular employees over standard workers and the main advantage was lower labour costs. In addition, dualism precipitated a gender-segregated labour market. The labour market risks were linked to welfare production regimes with an institutional approach using historical comparative
analysis and a comparative analysis of the labour market risks in the three countries was investigated. Chapter 6, 7 and chapter 8 focused on the risk shifts in East Asian economies over the period of industrialization, deagriculturalization and servicisation, and the ways in which institutions matter in explaining the labour market risks.

9.2 REVISITING THE CONCEPTS AND THEORIES

In what follows, the substantial contributions to the literature are preceded by recalling some of the key concepts and notions that underlie the research questions. The concepts and theories are revisited to adumbrate the contribution to the literature that this work proposes.

By introducing the concept of new risk, the literature successfully evoked the discussion on precarious workers and the need for a new welfare state. The new risk literature suggests that certain demographic groups are facing new risks and the welfare state does not sufficiently maintain certain groups—women, the young and the lower-educated or low-skilled workers. While the literature on new risk makes an eminent contribution to the understanding of welfare states and labour market transition, it reveals some limitations. In an attempt to fill this gap, the thesis made three contributions to the literature of new risk.

First, the thesis contributes in refining the concept of ‘new risk’. Instead of viewing risks as a static concept, the author suggested the concept of ‘risk shift’ to better describe the characteristics of risks. The types of risk, whether new or old, and the speed or to directions of shift may vary across countries and time. In contrast to the explanation made by the new risk literature, in the three East Asian
countries, labour market risks are shifting towards men and to the higher educated faster than to women or the lower educated. Hence, although the argument that women, the less educated and the young are more exposed to risk is still valid, it is inaccurate to describe them as the new risk groups as the three demographic groups may have always been precarious. For example in Korea and Japan where non-standard employment used to be dominated by women, the less educated and the young, the risk of working in a precarious job is also shifting to the male, the higher educated and the old.

Secondly, the thesis contributes to the literature by assessing the new risk argument comparatively with empirical evidence. Most of the literature on post-industrial transition and new risks pay less theoretical attention to the empirical data or only concentrate on Western countries. By conducting an empirical comparative study, it has been shown that the degree and characteristics of labour markets risks vary across countries, and this contests that all welfare states with a service based economy are experiencing similar types of risks. The study drew attention to the value of adding an empirical study to the literature of risk and labour market transitions.

Thirdly, this study highlights the advantages of examining institutions and comparing them across countries in understanding labour market risks. The empirical findings highlighted the role of different institutions on labour market risks. Findings from the thesis bring the institutional arrangements and policy decisions to the centre of the discussion on risk.

By way of concluding the contribution of this study to the new risk literature, it is insightful to refer to Lyotard’s explanation of knowledge that
“inquiry is not the search of truth but a necessary reminder that what we think of as the truth is always dependent upon a particular context” (Lyotard 1984). This thesis demonstrates how the concept of risk can vary according to the context and asserts the importance of turning the focus to institutions when explaining labour markets such as the increase of precarious workers and unemployment rates.

Another concept to be recalled is deindustrialization. As introduced in the thesis, deindustrialization refers to a substantial decrease in the manufacturing sector, which Esping-Andersen has argued, has decreased an average by 22% in Europe. The term post-industrial includes deindustrialization as it refers also to an economy undergoing a transition from the production of goods to the provision of services, and the term was analyzed in Daniel Bell’s *The Coming of Post-industrial Society* (1973). However, post-industrial has a wider coverage in its definition and refers to more than the substantial decrease of employment in the manufacturing sector. Bell explains that “the concept of the post-industrial society deals primarily with changes in the social structure the way in which the economy is being transformed and the occupational system reworked, and with the new relations between theory and empiricism, particularly science and technology” (Bell 1974:13). Both notions of deindustrialization and post-industrial are useful in their own terms, and this study does not claim to counter argue the proposed definitions. Rather this study introduces the term tertiarization which refers to a substantial increase in the relative size of the service sector. A service based economy is an economy where more than half of the workers are participating in the service sector. Tertiarization differs from deindustrialization because it refers to an increase of the service sector while deindustrialization refers to a decrease of
employment in the manufacturing sector, and the two are not necessarily identical. The term is more concrete and closer to the empirical reality than deindustrialization for some countries such as Korea and Taiwan.

Lastly, the discussion of East Asian Welfare States is revisited. Arts and Gelissen, in their study systematically reviewing literature of welfare state typologies, argued that “typologies are only fruitful to an empirical science that is still in its infancy” (Arts and Gelissen 2002: 139). And they suggested that since the comparative macro-sociology of welfare states is still in its developing stage, the formulation of typology could be useful (Arts and Gelissen 2002). Critically reviewing Esping-Andersen’s The Three Worlds of Capitalisms (1990), Arts and Gelissen suggest a fourth and fifth type of welfare state regime by discussing on the Mediterranean and the Antipodes. Literature on East Asian welfare states also joined the discussion challenging Esping-Andersen’s typology.

Arts and Gelissen rightly discussed the usefulness of welfare state typology. However, too often East Welfare States have been grouped together without critical attention to their differences. The commonly suggested characteristics are: centralized bureaucracies, one party domination, and weak labour movements characterize politics, states led economic development, rapid economic growth that has allowed states to forestall the adoption of public welfare measures, the large role that family, company, and community play, and use of Confucian rhetoric by politicians to combat demands for Western style welfare (Kasza 2006). However, when explaining the different trends in labour market risks, the typology of grouping East Asian Welfare states together proves to be insufficient. Incorporating the East Asian Welfare states discussion with the
Varieties of Capitalism literature, it was demonstrated that the three countries developed different welfare production regimes during the industrialization period. Instead of comparing the welfare system alone, the institutional arrangements of the welfare system, production system, industrial relations and skill formation system were considered together. The comparative analysis on welfare production regimes in this thesis suggests that after the WWII, in the case of Japan, and the Korean War, in the case of Korea, both countries underwent rapid economic development, oriented towards large companies. Whereas in Taiwan, a SMEs oriented welfare production regime was developed. The verification of the differences in the welfare production regime contributes to the literature on East Asian Welfare states and enhances our understanding on the labour market risks. Baldwin (1996) has emphasized that the purpose of typologies is as important as the question of what to group together. A sound justification for focusing either on the similarities or the differences among the East Asian welfare states depends on whether it leads to a theoretically more satisfying comparative analysis that is empirically attested as well. The thesis does not intend to counter argue the East Asian Welfare States discussion but rather to highlight the advantage of going down the ladder of comparative analysis and dissecting the difference between the countries with the purpose of understanding the causes of labour market risks.
As introduced in the first chapter of the thesis and throughout the process of answering the research questions, the thesis has also given weight to a discussion of comparative methodology.

Sartori’s major contribution to the literature on comparative methodology starts from his call for attention to the concepts in social science. This study also emphasizes the importance of scientific and theoretic conceptualization. His metaphor of the ladder of generality and the ladder of abstraction on concept is related to how the extension (empirical coverage) of a concept varies with its intention (i.e. the concept itself). The intention can be explained as the concept while the extension is related to the cases that fall under the concept. For example, if the concepts are intended to be applicable to more observations, one can “stretch” the concept by reducing attributes. This negative relationship between the intension and the extension can be translated into the necessary and sufficient condition structure of the concept which was demonstrated in Chapter 4. The more the number of attributes, i.e. the necessary conditions for the concept, then the coverage becomes smaller reducing the possibility of individual cases falling under the set as sufficient conditions. Engaging with this theoretical discussion on concept, the thesis demonstrated how risk can be conceptualized. In the same chapter the discussion on concepts was continued by engaging with the ideal type approach, made famous by Weber’s methodological essay (Weber 1949) which he suggested should be used ‘as conceptual instrument for comparison with and measurement of reality’ (Watkins, 1969:458-9). This study employs fuzzy-set
method to compare how, since the 1980s each country conforms to the ideal type and also demonstrated how a concept can be measured.

This study encountered the classical fork of qualitative method and quantitative method in searching for an ideal comparative method. Concurring that method of comparative analysis is adopting more quantitative method rather than qualitative method (Mahoney and Rueschemeyer 2001), the thesis stresses that there should be a balance between the qualitative method and quantitative method in comparative research.

There is an ontological difference between the quantitative statistical method and qualitative method. While statistical analysis attempts to define causal effects, historical analysis focuses more on identifying the causal mechanism that connects causes and effects (George and Bennett 2005). Skocpol (1979) suggested that qualitative analysis such as Comparative Historical Analysis may be useful in developing explanations of macro-historical phenomena. This study also employs the Comparative Historical Analysis to examine the narrative story of how certain institutional arrangements affects the emergence of labour market risks such as non-standard employment.

One of the methodological problems of qualitative analysis is its limited capability of employing a scientific method (Ragin 1997). Ragin argues that qualitative analysis more commonly focuses on diversity but it is more difficult to extend the number of cases while one of the most prominent restrictions of quantitative analysis is its limited capacity to engage directly with theoretical discourse and data analysis. The thesis puts forward fuzzy-set qualitative comparative analysis, which in many aspects overcomes the limitations found in
both qualitative and quantitative analysis as one method. The fuzzy-set qualitative methodology obviates the need for certain assumptions associated with quantitative and qualitative methodologies, while also addressing a number of their limitations. This study demonstrated the advantage of using fs/QCA in examining institutional arrangements. The configurational strategy and use of set-theory combined in fs/QCA was suggested to be appropriate for such inquiry. Conventional quantitative method is also capable of examining combinations of conditions using multiplicative interaction terms. But it is more difficult to interpret them and they also tend to be highly collinear with each other and their component variables (Ragin 2008). The value of fs/QCA is found in exploring cases configurationally with the idea of multiple casual pathways, or causal recipes (Ragin 2008). It advances quantitative comparative analysis by interpreting attributes as a configuration; it advances qualitative analysis by permitting theoretically-informed concepts to be quantified by applying fuzzy set logic and the principle of calibration.

9.4 PRECARIOUS WORKERS AND THE CENTRALITY OF SOCIAL POLICY

Finally I return to the discussion on precarious workers and commodified labour before making the final argument of the thesis on the centrality of social policy.

In his recent work, *Work after Globalization* (2009), Guy Standing brings the notion of commodification to the centre of his discussion on labour in the global transformation period, concurring with many arguments made by Polanyi
(1944). Although only limited attention is given to the cause of the global transformation, mostly mentioning globalization, the new class structure suggested by Standing (2009) provided a useful insight to the discussion on non-standard workers and precarious workers of this study. He argues that the class restructuring driven by changes following from the development of a global market society is creating a growing inequality and below the core of this class structure are the precariat.

Many would argue that the commodification of labour in a capitalist economy is inevitable. However, when more than a third of the working population is involved in precarious jobs, the discussion of de-commodification and the new forms of work should come to the fore again, following Marx, Polanyi, Esping-Andersen and more recently Gorz (1999). Gorz explains that in 1986, Wolfgang Lecher had predicted that the proportion of stable, full-time jobs would fall to 50 per cent by 1996, and France and Britain are on the same path (Gorz 1999). Gorz described the dual labour market of standard and non-standard employment as “the […] split into two major categories: a central core made up of permanent and full-time employees, who are occupationally versatile and mobile, and around that core, a sizeable mass of peripheral workers, including a substantial proportion of insecure and temporary workers with variable hours and wages” (Gorz 1999: 48).

The living and working conditions of the non-standard workers in certain countries such as Japan and Korea matches the characteristics of the ‘precariat’ described by Standing (2009) and the ‘outworkers’ described by Gorz (1999). Non-standard workers are excluded from income security, employment security
and, moreover, in Korea and Japan where the welfare production regime is proved to be persistently geared towards large-firms suffer from less mobility in their labour markets: once workers enter the category of non-standard employment, they are likely to continue working in non-standard jobs.

Marx’s analysis of alienation (1844) stresses the need for workers to “be able to work creatively and cooperatively upon their work, transforming it in order to gain and develop their self-consciousness”. The suggested positive aspects of a flexible labour market require re-examination. Stressing on the ‘generalized insecurity’ in globalizing post-industrial societies that all individuals are potentially unemployed, under-employed, insecure or temporary workers or part-time workers, Gorz suggests as alternative concept of work as the following:

“All the forms of passively suffered discontinuity of employment, passively suffered flexibility of working hours and staffing levels, should be transformed into opportunities to choose and self-manage discontinuity and flexibility.”

(Andre Gorz 1999: 96)

While this study agrees that the global market economy may facilitate the increase of the precariat, it questions the suggested homogeneity of global class structure across countries. Together with the impact of globalization, the transformation of employment structure caused by the increasing service sector is suggested as one of the sources of change. What is neglected is the variation among countries in their trends of labour market risks and the impact of different
social policies, i.e. how external or internal pressures are filtered by different policy arrangements.

As Polanyi (1944) asserted that ‘institutions matter’, this study suggests that different institutional arrangements determine the presence and the absence of labour market risks in difference market economies, and it challenges the simplified generalization that the same pressures create the same new risks. The argument of this sort of convergence may discourage the optimistic view that changes can be made by social policy. Different policy arrangements, meaning policies as a configuration, mediate the external and internal pressures affecting various trends related to workers’ lives. However, it should be highlighted that when we assert the importance of a state’s intervention, it should go beyond the perspective that the state is “as an actor whose independent efforts may need to be taken more seriously than heretofore in accounting for policy making and social change” (Skocpol 1985: 21). This assertion should not entail an overestimation of policy efficacy. State and policies matter because their organizational configuration affects political culture (Skocpol 1985), the formation of the production system, the structure of the labour market and the kind of risk a county could experience. Bringing back social policy to a more central place inspires our explanatory approaches to labour market risks and stimulates our positive imaginative vision for reframing ‘work’ and an improved labour market in which to participate.
1. Net incomes of social assistance recipients (2005), Percentage of median equivalent disposable household income.


