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The Shift of Labour Market Risks in Deindustrializing Asian Economies: Taiwan, Japan and the Republic of Korea

2/2010
Authors’ Note: I am indebted to Robert Walker and David Coleman for their guidance and comments. I would like to extend my thanks to Martin Seelieb-Kaiser and Ito Peng for their useful comments. I also thank Poverty Journal Club of the Department of Social Policy in the University of Oxford for their discussion regarding this paper and Peter Lue and Pei-Yuan Tsai for their generous help in providing the data from Taiwan. Lastly I thank Fayyaz Muneer for his kind editorial help. (forth coming in “New Welfare States in East Asia: Global Challenges and Restructuring” Edited by Gyu-Jin Hwang. 2010. Edward Elgar)

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Abstract:

The transitions from a predominant 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 are the three most prominent characteristics of labour market changes in advanced economies. This paper has three objectives: i) to empirically examine labour market transitions in deindustrializing 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) in an attempt to rethink the commonly accepted assumptions that deindustrialization and/or globalization are the main causes of new labour market risks, this paper proposes the possibility of institutional legacy as an important factor for such risk shifts. This study focuses on the labour market risks in the Republic of Korea, Japan and Taiwan. Three steps are taken in this inquiry. First, this study commences by empirically examining 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. Lastly, with the empirical evidence already used, it discusses whether deindustrialization and/or globalization are sufficient causes for risk shifts in deindustrializing Asian economies, proposing that institutional legacy may be an important factor in risk shift. (8,697 words)
Introduction

Labour markets in advanced economies are changing and these changes are multidimensional. The transitions from a large manufacturing sector to a large service sector, 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. During the past 30 years, employment in manufacturing as a share of total employment has fallen dramatically in advanced economies, a phenomenon commonly referred to as ‘deindustrialization’ (Esping-Andersen 1993). Together with deindustrialization, some include the increase of female participation in the labour market and the increase of atypical employment under the term ‘deindustrializing’ (Pierson 2001). Unsurprisingly, many scholars in the field have started to pay attention to these labour market changes, becoming concerned about its causes and implications. Parallel to the vigorous debate regarding the labour market changes, notions of new risk, new risk society, new poverty or new crisis have also recently become buzzwords in many disciplines in social science (Huber and Stephens 2006, Esping-Andersen 1994, Esping-Andersen 1996, Esping-Andersen 1999, Pierson 2001, Pierson 2006, Iversen 2001, Taylor-Gooby 2004, Hacker 2004, Jenson 2004, Taylor-Gooby 2000, Bonoli 2007) as well as in the field of policy making. Many regard deindustrialization as having contributed to a widening of income inequality in the United States and high unemployment in Europe (Iversen & Cusack 1998) while some suggest that deindustrialization is a result of the globalization of markets (Esping-Andersen 1999). Another strand of inquiry argues that deindustrialization exerts pressure on the welfare state as the economic growth which was the foundation of postwar welfare state slowed, and the increase in the number of precarious workers polarized the labour market. (Esping-Andersen 1999, Pierson 2001).

In fact, many terms such as non-standard, non-regular, atypical or precarious employment started to be developed to describe the new employment structure. Literature linking the flexible labour market with new risk focuses on the increase of precarious work, tertiarization of employment, de-standardization of employment, increasing inequality, greater labour market flexibility, weakening of the labour union and fiscal burden on the welfare states (Esping-Andersen 1994 Esping-Andersen 1996, Esping-Andersen 1999, Pierson 2001, Iversen 2001, Taylor-Gooby 2004, Hacker 2004, Jenson 2004, Bonoli 2007). On the other hand, discussion regarding the work-life balance was partially triggered by the increase of female labour market participation and the change in family structure, which was a deviation from the traditional male breadwinner system and it is suggested to pose new challenges to the welfare system (Huber and Stephens 2006, Taylor-Gooby 2004, Taylor-Gooby 2000, Bonoli 2007). Commonly, scholars of new risks argue that risks are now more concentrated on young individuals, women and low skilled persons (Huber and Stephens 2006, Pierson 2006, Taylor-Gooby 2004, Bonoli 2007, Pierson 2001).

The trend of labour market change is not only visible in Europe and the US, but is also apparent in Japan and the four NIEs of East Asia: Hong Kong (China), South Korea, Singapore, and Taiwan. 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. 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 Asia are different from those of the western post-industrial economies. Rapid economic development, a fast transition to a post-industrial economy, simultaneity of the decrease of the agriculture sector, industrialization and deindustrialization, dramatic change in family structure and the singular of Asian welfare states are a few unique features of East Asian states among many. This 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 Asian deindustrializing economies.

Hence, this paper has three objectives: i) to empirically examine labour market transitions in Asian deindustrializing 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) in an attempt to rethink the commonly accepted assumptions that deindustrialization and/or globalization are the main causes of new labour market risks, this paper proposes the possibility of institutional legacy as an important factor for such risk shifts in the three countries. This is a descriptive paper 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. While all of the five Asian countries hold many similarities, for example that they have all been influenced by Confucianism, the various pairs of the countries also have their own similarities and differences. In Korea and Japan, there were large government subsidies to the agriculture sector while Hong Kong and Singapore are city-states which never actually had a large agriculture sector. Korea stands out as a unique case with regard to the rapid decline of its agriculture sector and concurrent rapid expansion of its service. It experienced a decrease of manufacturing sector followed by an increase of the sector within two decades from 1980s to 2000s and the relative size of its manufacturing sector became smaller than Japan’s from the late 1990s. Excluding the two city-states among the five high-income Asian deindustrializing economies, this study focuses on the labour market risk in three Asian countries: The Republic of Korea, Japan and Taiwan.

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 paper: deindustrialization, the increase in the female labour force and the increase of atypical employment. Then, it investigates how risks are shifting and discusses the kind of risks in the labour markets of these countries. It challenges the arguments of ‘new risks’ by adopting the concept of ‘risk shift’: 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, and also in comparison to selected Asian countries. In other words, the second step attempts to answer how are risks shifting in Asian deindustrializing countries and what are the implications? Lastly, with the empirical evidence from the previous steps, it discusses whether deindustrialization or globalization are the only causes for risk shifts in these Asian economies.

This paper 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 deindustrializing 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 global-
ization on labour market to explain the labour market risks; this paper focuses on the importance of institutions.

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 four fold 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, Nagasima Osamu 2002, Jang et al 2009).

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. However, Japan has one of the world’s highest levels of crop yields per unit area, with an overall agricultural self-sufficiency rate of about 50%. 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 et al 2009). 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 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, 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, greatly impacting both Korea and Taiwan’s economy, and later causing both countries to adopt an export-promotion policy (Jang et al 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 sec-
tor. 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 et al 2009).

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 US or NEC in Japan (Jang et al 2009, Yoon 2003).
The Shift of Labour Market Risks in Deindustrializing Asian Economies: Taiwan, Japan and the Republic of Korea

Figure 1 Changes in the Employment rates (%) by sector in South Korea, Japan and Taiwan: 1963-2008

The general trend since the 1970s in these three Asian countries is similar to the trend of deindustrialization in Western deindustrializing countries (Figure 1). It is evident that labour markets in all three countries are in the deindustrializing stage, experiencing a decrease in manufacturing employment, with now more than half of their workers in the service sector. However, while all three countries conform to the trend of deindustrialization shown in Western post-industrial economies, in the three Asian countries, a simultaneous de-agriculturalization is also apparent. 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 rap-
idly 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 deindustrialization was 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).

**Figure 2 Female Labour Participation Rates (%)* in 8 countries: 1979-2007**

![Figure 2 Female Labour Participation Rates](image)

Source: ILO LABORSTA, OECD Labour Statistics Data base, For Taiwan, Directorate General of Budget, Accounting and Statistics. *Labour Participation rate is the ratio between the labor force and the overall size of their cohort.

An increase of female labour participation is another trend in most of the OECD countries. 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.
This trend is also visible in Asian countries. Korea and Taiwan experienced a rapid increase of female labour participation in the 1980s (Figure 3). The rate increased from 38.76% (1981) to 46.54% (1986) in Taiwan and from 41.2% (1984) to 47% (1990) in Korea. 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 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 2000s1.

The third transition in most deindustrializing countries was the increase of atypical employment, especially during the last two decades. 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 (Lee, 2009).

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1 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. 

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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. 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 comparable². 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.

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 employment³, the proportion is still substantially lower than in Korea and in Japan.

Figure 4 International Comparison of Temporary employment (excluding part-time workers) rate
(As a percent of total employment in 2007)

Source: OECD, Employment Outlook database

² 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.

³ “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.” Asia Pulse News, November 28, 2008.
Figure 5 Non-standard employment rates in South Korea, Japan and Taiwan: 1984-2008


Figure 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. 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 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)\(^4\). Japan’s unemployment rate started to increase from the 1990s hitting over 5% in the early

\(^4\) The unemployment rate for OECD area was 8.6% in 2009.
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 Asian deindustrializing labour markets is similar to Nordic countries (Lee, 2009). However, with respect to the relative poverty rate and inequality, the two regions no 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 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). 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 deindustrializing economies.

**The Risk Shift**

Much discussion linking deindustrialization or deindustrializing transitions focuses on the increase of non-standard employment, increased inequality and relative poverty (OECD 2008), family and work reconciliation problems for women (Bonoli 2005), the increase of long-term unemployment (Iversen and Cusack 1998), increase of low wage, low quality jobs (Esping-Andersen 1999, Krugman 1996) and the privatization of risks to individuals (Hacker 2006). Amidst the diverse discussion around deindustrializing social risks, literature on “New Risks” (Esping-Andersen 1994 Esping-Andersen 1996, Esping-Andersen 1999, Pierson 2001, Iversen 2001, Taylor-Gooby 2004, Hacker 2004, Jenson 2004, Taylor-Gooby 2000, Bonoli 2007) focuses on the mismatch between old welfare states and new social risks due to deindustrializing transitions. Reinvestigating the case of the United States, Hacker (2004) concludes that risks have been privatized, ‘privatization of risk’ referring to risk being assigned to individuals or families to cope with on their own. In other words, the social policies’ effort to adapt itself to changing social risks has failed and he terms this as *policy drift* (Hacker 2004). 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 their analysis of the relationship of new risk and different welfare regimes, they regard single mothers with children as a new risk group and elderly people as ‘old’ social risk group (Huber and Stephens 2006). 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 to be 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 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.

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. 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 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.
Figure 7 The shift of unemployment risk between the Old and the Young (change of the ratio of unemployment rate of age 15-24 and of age 55+: 15-24/55+)

Greatly different patterns are evident when examining the ratio of the female to male unemployment rate. 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 8 The shift of unemployment risk between females and males (change of the ratio of unemployment rate of female and of male)

Figure 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)


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 unemployment rate by different education levels is examined. 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 12.39% in 1987 in Japan which increased to 32.8% in 2007. In Korea, the proportion was 17.5% in 1985 and increased to be 35.2% in 2007.

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 in-

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5 This is the percentage of highly educated (undergraduate and higher) of the total unemployment.

6 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.
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 more steep 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.

**Figure 10** The shift of non-standard employment risk between the Old and the Young (change of the ratio of unemployment rate of age 15-24 and of age 55+:15-24/55+)

![Graph showing the shift of non-standard employment risk between the Old and the Young](image)


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 ‘regular’ workers to 54.9% in 2005 (Lee and Yoo 2008). 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 countries. Comparing with the unemployment risk shift (Figure 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 old. 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. In Korea, the 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 (Figure11). 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 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).

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7 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.
8 Data on non-standard employment by different age group in Taiwan was not comparable to the other two countries.
Figure 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)

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. 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 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 12 International comparison of Female Part-time workers (Percentage as a share of total female employment)

![Graph showing international comparison of Female Part-time workers](image1.png)


Figure 13 The shift of non-employment risk between the lower educated and the higher educated (change of ratio of non-standard employment rate of those with primary and secondary education and those with university or higher education)

![Graph showing the shift of non-employment risk](image2.png)

Source: For Taiwan, Directorate General of Budget, Accounting and Statistics, National Statistical Office, The Republic of Korea. Data regarding education level and non-standard employment for Japan is partially available from *General survey on diversified types of employment*, 2003, Ministry of Health, Labour and Welfare (2003). However, it is omitted in this comparison as category of education level is not comparable.

Lastly, non-standard employment is examined with regard to differing education levels. 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 are 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.

### 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 the non-standard employment does 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 of social protection, lower wages compared to standard workers and the spectre of easy dismissal makes it inevitable that non-standard workers are considered more precarious than standard workers in these countries.

### Table 1 Different demographic groups which labour market risks have shifted toward

<table>
<thead>
<tr>
<th>Type</th>
<th>Japan</th>
<th>Rep. Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>Unemployment</td>
<td>Non-standard</td>
<td>Unemployment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>employment</td>
<td></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>Female*</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

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 1), most apparently in Korea (Figure 9 and Figure 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 9). A university degree no longer guarantees a job in deindustrializing Japan. Referring back to the new risk discussion, the examined Asian cases refute the argument that risk is concentrated to those who have a low level of education. 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 education levels (Figure 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, in contrary to the new risk discussion, risk of unemployment is shifting to the elderly both in Korea and in Taiwan (Figure 7). However, in Korea and Japan the risk of non-standard employment is shifting to the young (Figure 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 in 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 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 was 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. Criticizing the social democratic bias in traditional welfare state discussion, Estévez-Abe (2008) reanalyzed 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. Estévez-Abe 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 (constructions for 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 how 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 regulation index\(^9\) 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 cooperations,

\(^9\) The regulation index quantifies the level of regulation in industries by setting the degree of regulation in 1995 as a benchmark.
the deregulation has greater impact on the SMEs which accordingly makes their non-standard workers precarious. In 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 3). Conforming to the new risk discussion, the unemployment risk is shifting to females in Korea (Figure 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 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.

**Conclusion**

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 paper has attempted to empirically investigate how risks are shifting between different demographic groups during the past two to three decades and rethink the Western-biased new risk discussion. In contrast to most of the discussion on new risk, risks are not 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 the deindustrializing Asian context.

In this paper, 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 an institutional approach in understanding the labour market risks in the three Asian economies could yield important results. In sum, it should be concluded that risk, whether new or old, should be defined differently in different social contexts.
Reference


Woo, SH (2006), The 880,000 won Generation (in Korean), Seoul: Redian