

## LABOUR MARKET IN ASIA AND EUROPE: A COMPARATIVE PERSPECTIVE ON UNEMPLOYMENT HYSTERESIS<sup>1</sup>

*Fumitaka Furuoka*<sup>a+</sup>  
*Aida Idris*<sup>a</sup>  
*Beatrice Lim*<sup>b</sup>  
*Rostika Petrus Boroh*<sup>b</sup>

<sup>a</sup>Asia-Europe Institute, University of Malaya  
50603 Kuala Lumpur, Malaysia

<sup>b</sup>Faculty of Business, Economics and Accountancy,  
Universiti Malaysia Sabah  
88400, Kota Kinabalu, Sabah, Malaysia

<sup>+</sup>Corresponding author: [fumitaka@um.edu.my](mailto:fumitaka@um.edu.my)

### Abstract

The main problem of the European labour market is its high unemployment. By contrast, Asian countries do not face the high unemployment. In order to explain this differences, this paper aims to compare labour market outcomes, particularly unemployment rates, labour market institutions and unemployment protection mechanisms, in Asia and Europe. Despite numerous studies on this topic using econometric analysis, there is still lack of descriptive analysis of labour market in this important topic in the labour economics. Thus, this paper uses some descriptive statistics to explain the differences in the labour market between Asia and Europe. Results of secondary data analysis indicate that there is a remarkable difference in labour market outcomes between the two regions, especially in unemployment rates, where the rates for Asia are relatively lower than those for Europe. The main feature of Asian unemployment is that unemployment rates are quite stable, whereas for Europe they are persistently high. In Europe, unemployment rates tend to increase when a country faces an economic crisis and will reduce when the economy recovers from the crisis. However, the level of reduction often does not reach pre-crisis rates. This appears to be mainly due to provisions of the generous unemployment benefits in Europe, where policymakers often have to make a paradoxical balance between labour market flexibility and employment protection. By contrast, in Asian countries, unemployment rates do not seem to be affected by economic conditions. Some possible factors contributing to this trend include a weaker unemployment protection mechanism, a strong existence of an informal sector and a prevailing culture of self-help in the region. As a conclusion, Europe appears to face a greater problem with unemployment hysteresis while Asia's the severity of the unemployment problem is less because the effect of economic crisis on unemployment tends to be smaller in Asia than in Europe.

*Keywords:* Asia-Europe employment, labour market outcomes, non-standard labour, unemployment hysteresis, labour market institution, employment protection

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## Introduction

There is a remarkable difference in labour market outcomes, especially unemployment rates, between Asia and Europe. A recent analysis by The Economist (2018a) suggests that there is no similarity in unemployment patterns between the two regions. Simply put, unemployment rates in Asia are generally low while unemployment rates in Europe are relatively and persistently higher.

Persistently high unemployment rates among European countries have been a well-known fact among economists since the 1980s. Some of the leading researchers who have debated on this issue include two American economists, Olivier Blanchard of Massachusetts Institute of Technology and Lawrence Summers of Harvard University. They argue that, particularly in the 1980s, unemployment rates in Europe would increase during economic crisis but would not decrease to original levels even after the end of the crisis. This interesting phenomenon in the European labour market is called “unemployment hysteresis” (Blanchard and Summers, 1986).

By contrast, unemployment in Asia is typically low. A distinctive feature of the Asian unemployment pattern is that unemployment rates are quite stable and do not appear to be affected by economic conditions (The Economist, 2018a). This contrasts with the situation in Europe, where unemployment rates are much more volatile and react sensitively to the ups and downs of the economy.



Figure 1: Unemployment rates in Germany and Thailand (1980-2015)

Source: World Bank (2018)

For a typical example, the unemployment rates for the period of 1980-2015 in Germany and Thailand are depicted in Figure 1. These countries are chosen because pattern of the unemployment rates are different. In other words, Germany is a typical European country with relatively high unemployment rate and Thailand is a typical Asian country with relatively lower unemployment rate. As the graph clearly indicates, the unemployment rates for Germany are much higher and more volatile than for Thailand. In Germany, the unemployment rates in the

1980s were around 6 percent and increased to around 8 percent in the 1990s. Much of Europe, including Germany, faced an economic crisis in the mid-2000s. As a result, the unemployment rates in Germany were around 11 percent during this period. After a slow recovery from the crisis, by 2010 the rate had gone down to 7 percent (World Bank, 2018).

By contrast, unemployment rates in Thailand were around 4 percent in the 1980s. Southeast Asian economies, including Thailand, enjoyed a high economic growth in the first half of the 1990s, during which the unemployment rates in Thailand were around 1 percent. Even when the region faced the Asian Economic Crisis at the end of the 1990s, unemployment rates in Thailand increased to only 3 percent. After its recovery from the economic crisis, unemployment rates in the country decreased back to 1 percent (World Bank, 2018).

To understand the above differences between Asian and European unemployment patterns, this paper set out to examine labour market dynamics and their connection with unemployment rates in the two regions. This is done not only from an economic perspective, but also from a socio-cultural one. In other words, there is a relatively weak tendency of the mean-reversion in the unemployment rates in Europe. It would mean that there is a hysteresis in the unemployment rate in the European labour market. By contrast, there is a relatively strong tendency of the mean-reversion in the unemployment rates in Asia. It would imply that there is no hysteresis in the unemployment rate in the Asian labour market. In other words, unemployment rates in Thailand are relatively lower than Germany. These differences could be explained by the difference in social security. European countries tend to have a better social security system to protect their workers than Asian countries.

The paper consists of five sections. Following this introductory section, the second section offers a theoretical framework for unemployment dynamics. The third and fourth sections examine the main characteristics of European and Asian labour markets. The final section concludes with key lessons and implications of the study.

### **Theoretical perspectives on labour market dynamics**

There have been numerous empirical studies of labour market dynamics since the seminal publication on unemployment hysteresis by Phelps (1972), and Blanchard and Summers (1986). Some researchers have used the time-series unit root method to examine labour market dynamics (Neudorfer *et al.*, 1990; Brunello, 1990; Mitchell, 1993; Røed, 1996) while others opted for the panel unit root method (Song and Wu, 1998; Tieslau and Lee, 2001; Christopoulos and Leon-Ledesma, 2007; Chang *et al.*, 2005; Camarero and Tamarit, 2004; Ener and Arica, 2011). There are also those who have used more advanced methods, such as the Lagrange Multiplier (LM) test and the fractional integration method, et cetera (Romero-Avila and Usabiaga, 2007a; Romero-Avila and Usabiaga, 2007b; Sephton, 2009; Lee *et al.*, 2009). Geographically speaking, most of these empirical works have focused on European countries and there is very limited research on this topic done on Asia. Some notable exceptions are studies conducted by Smyth (2003), Lee *et al.* (2010), Furuoka (2012), Furuoka (2017a), and Furuoka (2017b).

More importantly, there is no formal theoretical model to describe labour market dynamics. However, an employment model suggested by Blanchard and Summers (1986) could be used for the baseline model to underline some basic characteristics of labour market dynamics. This employment model has been further developed by other researchers (Song and Wu, 1998; Bell and Mankiw, 2002; Furuoka, 2017a; Furuoka, 2017b). To summarise, the employment model assumes that money supply ( $m$ ) has a positive impact on the firm's output ( $y_i$ ). Additionally, it also assumes that the price level in the country ( $p$ ) has a negative impact on the output. In

this model, there is a difference between output price in the firm ( $p_i$ ) and the price level in the country ( $p$ ). This difference in price level would have a negative impact on the output. The output function is expressed as;

$$y_i = (m - p) - a(p_i - p) \quad (1)$$

where  $a$  is a constant,  $m$  is money supply,  $y_i$  is the output in the firm  $i$ ,  $p$  is price level in the country,  $p_i$  is output price in the firm  $i$ . The demand of labour could be considered as a “derived” demand in which the firm’s output is proportional to labour demand in the firm. In this sense, the output function can be used for the employment function in the firm ( $n_i$ ). In this employment function, the price ( $p$ ) is replaced with the wage ( $w$ ) in the output function. It means that the employment function can be expressed as;

$$n_i = (m - w) - a(w_i - w) \quad (2)$$

where  $\alpha$  is constant,  $m$  is money supply,  $w_i$  is the wage level in the firm  $i$ ,  $w$  is wage level in the country. This employment function may be simplified by assuming that employment and wage level is the same in all firms. In this simplified version, the level of employment at time  $t$  can be expressed as;

$$n_t = m_t - w_t \quad (3)$$

where  $n_t$  is the employment level at time  $t$ ,  $m_t$  is the level of money supply at time  $t$  and  $w_t$  is the wage level at time  $t$ . The level of employment would be determined by the difference between the level of money supply ( $m$ ) and level of wage rate ( $w$ ). In the case that the increase in money supply is greater than the increase in wage level, this would cause a positive effect on the employment level. By contrast, in the reverse case that the increase in wage level is greater than the increase in money supply, this would cause a negative effect on the employment level.

Under the insider model of employment, the insider in the firm would have a maximum bargaining power to ensure that the expected level of employment ( $n^e$ ) is equal to the level of employment at time of the negotiation ( $n_{t-1}$ ). It would mean that the bargaining parameter ( $\beta$ ) is equal to unity under this insider model of employment. In the case that the insider’s bargaining power is less than the maximum value, the expected level of employment could be less than the level of employment at time of the negotiation. Therefore, the employment function can be reformulated as:

$$n_t = \beta(n_{t-1}) + (m_t - m_t^e) \quad (4)$$

where  $\beta$  is a bargaining parameter that would measure the level of strength of insider in the firm,  $n^e$  is expected level of employment,  $n_{t-1}$  is the level of employment at time of the negotiation. This employment formula indicates that some insiders who is currently working in the firm could lose their employment during an economic recession if  $\beta$  is less than one. More importantly, if the bargaining parameter is less than unity, the monetary shock will disappear in the long-run. It means that a monetary shock would have a transitory impact on the employment. In this case, the unemployment rates would follow a stationary process. In the stationary process, the unemployment would have a mean-reversion tendency and in the unit root process, the unemployment rate would not reverse to its mean value. In other words, a higher-than-normal unemployment rate would revert to an equilibrium level. However, if the bargaining parameter is equal to unity, a monetary shock would not disappear. In this case, the unemployment rates would follow a unit root process (Wang, 2009). Thus, the main point of this theoretical framework on the employment model is that the strength of the insider in the firm will determine the labour market dynamics. In other words, the insider power could be the main element which determines whether unemployment rate would follow the stationary process. It means that the unemployment rate could follow a unit root process if the bargaining parameter of the insider in the firm is equal to unity under the pure insider model. Otherwise, the unemployment rate would follow the stationary process<sup>2</sup>. In this context, the theoretical model suggests that unemployment rates in Europe may follow a unit root process because of stronger insiders' power while the unemployment rates in Asia may follow a stationary process due to the lack of strong insiders.

### **Main characteristics of labour market in Europe**

There are five major characteristics of labour market in Europe. The first characteristic of European labour market is the strong employment protection. In the European labour market, employment protection mechanisms, such as unemployment insurance, is seen as a potential cause of persistently high unemployment rates. It has been argued that the strong existence of employment protection in the region can prevent the labour market from becoming flexible enough to absorb negative shocks in the labour market. In other words, strong employment protection would prevent wage levels from becoming lower enough to provide job opportunities to unemployed workers during the economic crisis.

The second characteristic of European labour market is the lack of flexibility. There is an on-going debate on the relationship between worker protection provided by labour market institutions and the flexibility of labour market. This debate is known as the labour market flexibility debate. Some economists who believe in the importance of flexibility argue against employment protection. These neoclassical economists promote the importance of natural rates of unemployment, the efficiency wage theory and the job search theory to explain the market equilibrium of labour supply and demand. According to this school of thought, unemployment insurance can be seen as a "social wage" which contributes to high unemployment. This line of argument is promoted by some international organisations, such as the Organisation for Economic Cooperation and Development (OECD) and the International Monetary Fund (IMF). Thus, this economic thought is also known as the OECD-IMF orthodoxy for the labour market. For example, the OECD has proposed the OECD Jobs Strategy for all its member countries.

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<sup>2</sup> This paper's theoretical foundation is based on the employment function within the insider-outsider theory suggested by Blanchard and Summers (1986). More recently, Gustavsson and Österholm (2007) have provided empirical evidence to indicate a distinctive difference between unemployment and employment hysteresis. According to them, empirical tests tend to produce mixed evidence for hysteresis in unemployment. By contrast, unit root tests are able to produce more consistent results to support hysteresis in employment.

Under this policy recommendation, the OECD suggests that all member countries should promote higher flexibility of the labour market and recommend some policy reforms with respect to “working time”, “wage and labour costs”, “employment protection legislation” and “social security benefits” (Berg and Kucera, 2008).

The third characteristic of European labour market is the promotion of decent work. Other economists view employment protection as an important labour market policy in Europe to ensure decent working conditions for all workers. A number of international organisations, such as the International Labour Organisation (ILO), have made recommendations to its member countries to establish appropriate labour market policies and action plans to protect the rights of workers. These recommendations are known as the “ILO Standards” (Berg and Kucera, 2008). Thus, a most crucial challenge in the European labour market is to strike an effective balance in the relationship between labour market flexibility and employment security. On the one hand, policymakers need to ensure that the labour market is business-friendly by making it more flexible. On the other, there is an urgency not to destroy the existing high standard of employment security in the region. This is a fundamental paradox in labour market dynamics. As a result of this paradox, there is a rise of ‘non-standard’ labour in Europe. More precisely, during an economic crisis, European employers may face a difficulty to decrease the wage level of workers. This is mainly because strong wage-setting mechanisms, such as the employment protection laws, will resist any negative change in wages. In response to this, European employers may try to increase the usage of part-time workers who are not protected by employment protection laws. It means that the presence of non-standard workers has played the role of a “cushion” during economic crisis in the region (Muffels, 2008).

The fourth characteristic of European labour market is a change in work value. There has also been a tremendous change in work values across Europe. Current trends in demographic, cultural, economic and legal environments have had an impact on many aspects of employee recruitment and retention strategies globally (Idris, 2014; Vaiman *et al.*, 2012). Specifically the quest for work-life balance, considered nowadays as a basic requirement by an increasingly enlightened workforce, has contributed to the demand for flexible working practices (Smith *et al.*, 2011). Although monetary factors such as salary, bonus, and allowance are still important, non-monetary benefits including flexible working are increasingly being used as a tool in managing employee turnover. More significantly, there are scholars (Arvanitis, 2005) who argue that monetary benefits are not sustainable drivers of job motivation and commitment since social value shifts have resulted in a greater concern for work-life balance among the younger generations.

The fourth characteristic of European labour market is a decline in full-time job. There has been a rapid decline in permanent, full-time employment within the region. The standard career pattern in European countries is shifting toward a more diverse working experience with a richer variety of the non-standard work forms, such as flex-time and flexplace, part-time employment, temporary employment and labour-sharing. In the 1980s, only ten percent of European workers were employed as part-time employees. By the 2000s, this figure had increased to around twenty percent. With such a rapid increase in the number of workers engaged in non-standard employment in recent decades, currently a fundamental question in the European labour market is how to provide sufficient protection to this category of workers (Muffels, 2008).

In the Nordic countries, part-time employment is a manifestation of ‘flexicurity’ (a combination of flexibility and security) which allows women more options depending on the stage of their life-cycle without having to opt for career breaks (Kinoshita and Guo, 2015, p.16). The flexibility in work arrangements allows women to juggle their work and family

responsibilities. The Nordic model of female labour supply which emphasises on work-life balance is highly successful, with Norway having the highest rate of female labour force participation among OECD countries (Kinoshita and Guo, 2015). Recent statistics show that about 83 percent of mothers with young children are employed (Kinoshita and Guo, 2015). This is attributed to comprehensive parental provisions and subsidised child day-care for working parents.

Nordic countries are often known as ‘welfare states’ and generally provide ample social security to their workers (Furuoka, 2017b). For example, Finland extends generous public support to families through high levels of maternity and parental leave allowances, long periods of payment and excellent day-care service provisions (Kinoshita and Guo, 2015). Additionally, strong gender equality in Nordic countries provides equal opportunity and labour market access to women (OECD, 2018). The utilisation of female workers, especially in view of their rising education level in the long term, can contribute to a country’s economic growth. Non-standard work forms provide more alternative to workers, enabling them to remain employed while enjoying greater personal autonomy, increased earning potential, flexibility, and more control over work-life balance (Walker, 2011). This can potentially reduce unemployment problems. Furuoka (2017b) suggests that this explains why some European countries, such as Nordic welfare states, may not have problems of high unemployment.

Figure 2 presents the unemployment rates of Nordic countries from 1980 to 2015. Despite some occasional differences among them, there is still a common pattern in the unemployment dynamics of these countries, especially since the mid-2000s. In the 1980s, the unemployment rates in Nordic countries, with the exception of Denmark, were low, at four percent or less. Although the mid-1990s saw a rise in these figures, instances of high unemployment were relatively short-lived compared to other European countries such as Germany, France, Spain and Italy. Norway, in particular, has maintained an unemployment rate of approximately four percent since the late 1990s, while the rates for Denmark and Sweden have been stabilising at less than eight percent over the past ten years. In other words, these countries seem to have smaller unemployment issues than other European economies. It should be noted that Norway is one of the wealthiest countries in the region and the country provides well-established social security for its workers. In spite of its provision of generous social security protection, Norway does not face the problem of unemployment hysteresis. In other words, existence of strong employment protection could result in a high unemployment problem in the Nordic countries due to the lack of sufficient flexibility to counter-balance the negative effects of business cycle. However, it is likely that existence of flexible working and non-standard employment practices would provide a good cushion to absorb the negative impact of business cycle. It would mean that the Nordic countries are exceptional European countries which would not suffer from the higher unemployment rates.

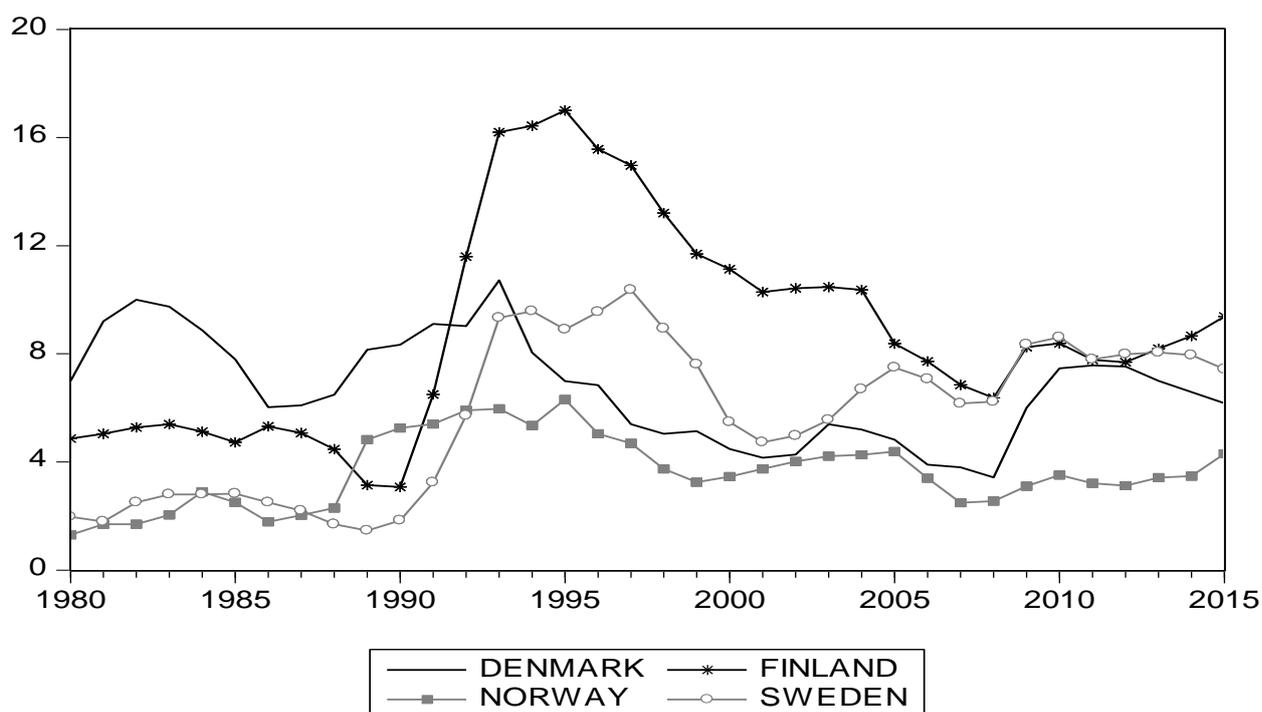


Figure 2: Unemployment rates in Denmark, Finland, Norway and Sweden (1980-2015)

Source: World Bank (2018)

### Main characteristics of labour market in Asia

The most salient characteristic of the labour market in Asia is that unemployment rates in the region tend to be low even during periods of economic crisis. It would mean that unemployment rate would not increase rapidly during the economic crisis in comparison with European countries. In other words, unemployment rates in Europe tended to be affected by economic condition. By contrast, in Asian countries, unemployment rates do not seem to be affected by economic conditions. This raises the question of why many Asian countries have consistently lower unemployment than European countries.

There are three main reasons which can explain the lower unemployment rate in Asia. Firstly, there is still a lack of adequate labour protection in the region, so much so that unemployment may be considered as a ‘luxury good’ (The Economist, 2018a). Simply put, Asians cannot afford to be unemployed. In many Asian countries, social security for workers is underdeveloped and unemployment benefits are patchy. Some countries, such as Thailand and Malaysia, have various types of unemployment insurance. However, the level of protection for unemployed workers is very weak. For example, in Thailand, they are entitled to receive only 1,650 baht (US\$52) per month for six month. Secondly, there is a strong informal sector which can readily absorb unemployed workers in Asian countries. Unemployed workers may earn temporary income by becoming a casual day-by-day labour for manual jobs such as selling lottery or washing dishes (The Economist, 2018a). Thirdly, the poor social security in Asia could have originated from the Asian culture of self-help. According to Hofstede and Bond (1998), most Asian societies share common cultural values such as masculinity and long-term orientation, which promote the importance of hard work, sense of shame, thrift and financial independence. Asians generally do not expect their governments to provide for their sustenance and instead accept the need to look after themselves (The Economist, 2018b).

In a study by Furuoka (2017a), it was found that labour market dynamics in Asia can be classified into two basic patterns. The first pattern highlights countries which have unemployment rates with a weak reversion tendency in some Asian countries, such as Japan and Singapore, whereas the second shows those that have unemployment rates with a strong reversion tendency in other Asian countries, such as South Korea and the Philippines. These patterns suggest that some Asian countries face the issue of unemployment hysteresis while others do not.

As demonstrated in Figure 3, the first category is represented by Japan and Singapore. Unemployment rates in these countries tend to increase during economic crisis but do not revert to normal levels or mean values after the Asian financial crisis in the end of 1990s. For example, like other Asian countries, Japan and Singapore went through the Asian Economic Crisis in the late 1990s. Thus there was a noticeable upward climb in their unemployment rates in the early 2000s. However, when the economy recovered in the late 2000s, unemployment rates in these countries did not immediately decrease to pre-crisis levels. A plausible explanation for this is the effect of aging population on unemployment rate (Serban, 2012). Since Japan and Singapore are two of Asia's fastest aging societies, unemployment among the older generation is an issue they have been struggling with for the past few decades. Thus unemployment hysteresis is more likely to happen in these countries than others in the region. In other words, some Asian countries also experiences unemployment hysteresis, but at a lower extend as compared to European countries.

By contrast, South Korea and the Philippines seem to belong to the second group of countries which have less problem with unemployment hysteresis. These countries are typical Asian economies have not hysteresis in their unemployment rate. In other words, their unemployment rates have a stronger mean reversion tendency. South Korea's unemployment rate increased during the Asian Economic Crisis in the late 1990s, but almost immediately reverted to a lower level after the crisis ended. In the case of the Philippines, its unemployment rates are relatively higher. Despite this apparent volatility, the country's unemployment rates have strong mean reversion tendency and reverted to a much lower level as soon as the economy recovered in the mid-2000s. Again this can be explained by the aging population theory (Serban, 2012). Since the aging population issue is not as severe in these two countries as it is in Japan and Singapore, they are likely able to overcome unemployment hysteresis more easily.

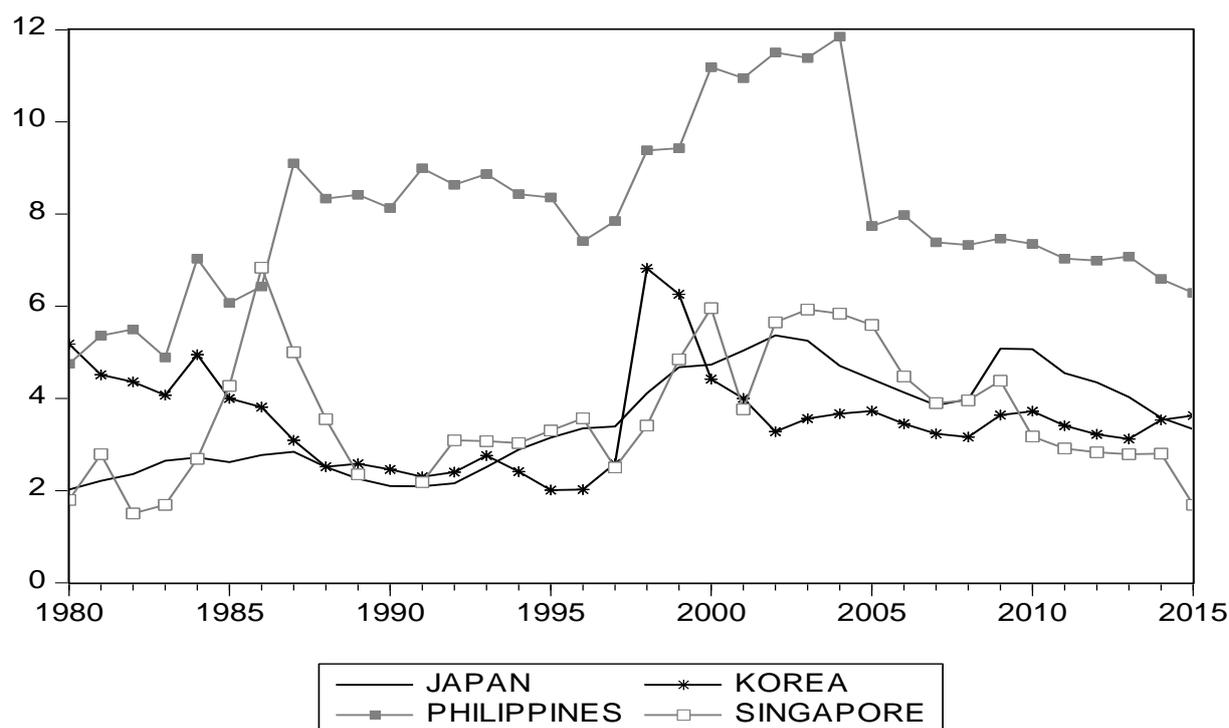


Figure 3: Unemployment rates in Japan, South Korea, the Philippines and Singapore (1980-2015)

Source: World Bank (2018)

In recent years, changing work values and systems have also affected labour force participation in Asia, especially among women. Female labour force participation varies across Asian countries, reflecting differences in economic development, social norms and access to childcare (Asian Productivity Organisation, 2018). In other words, a relatively lower female labor force participation could be considered as fourth factor that would explain the lower unemployment rate in Asia. Kinoshita and Guo (2015) highlighted three main differences between Asian and Nordic countries that influence female labor force participation. First, childcare benefits and services are more generous in Nordic countries. The flexibility of the childcare system in Nordic countries reduces career breaks among female employees with young children. Second, paternal roles in childrearing are given equal emphasis as maternal role, resulting in higher work involvement for females. Third, family-friendly policies and flexible working arrangements enable women (and men) to balance work and family. Unlike the Nordic countries, the Asian region has less developed flexible work arrangements. Particularly in Japan and South Korea, long and inflexible working hours associated with full-time employment prevents qualified women to take up employment (Kinoshita and Guo, 2015). Nevertheless, due to the effects of globalization, there is now a growing awareness of the benefits of flexible working; hence an increasing demand for it (Asian Productivity Organisation, 2018; Idris, 2014). In Thailand, for example, flexible working arrangement has been found to increase female labour force participation (Asian Productivity Organisation, 2018).

This paper focuses on the response of labour market to economic crisis in Asia and Europe. This is basically because there are significant difference in their responses. Due to strong employment protection, European countries are more responsive in responding to economic crisis. Whereas, unemployment rate in Asian countries is rather stable because of lack of such employment protection.

## Conclusion

The basic problem in the European labour market is persistently high unemployment while Asian countries does not seem to face this problem. The current study made an attempt to compare labour market outcomes, namely unemployment rates, labour market institutions and employment protection mechanisms, in Asia and Europe. Results of secondary data analysis demonstrate that there is a remarkable difference in labour market outcomes, especially unemployment rates, between the two regions. On the one hand, the main characteristic of the Asian labour market is that the unemployment rates are more stable and relatively lower than those in Europe. This means that unemployment rates of Asian countries are less affected by economic conditions than those of European countries. On the other, Europe's unemployment rates are much more volatile and relatively higher than Asia's. With the exception of the Nordic welfare states, European countries generally show less capacity to absorb the shock effects of economic crisis on unemployment than Asian countries.

In addition, Europe appears to face a greater problem with unemployment hysteresis, where unemployment rates tend to increase during an economic crisis but do not immediately reduce to pre-crisis levels even after the economy has recovered. Although some Asian countries also demonstrate a similar trait, the severity of the problem is less because the effect of economic crisis on unemployment tends to be smaller in Asia than in Europe.

Main contribution of current paper could be its comparative analysis on the response of labour market to economic crisis in Asia and Europe. The above differences between Asian and European labour market outcomes can be explained by the unique characteristics of labour market institutions and socio-cultural background of the two regions. In the case of Europe, the persistently high unemployment rate may be caused by the provision of generous unemployment benefits. This has produced a challenge for policymakers to make a paradoxical balance between labour market flexibility and the employment protection. In the case of Asia, the relatively lower unemployment rates are mainly due to weaker unemployment protection mechanisms, the existence of a large informal sector and the prevailing culture of self-help in the region. However, an aging population poses its own threats for some Asian countries. In this regard, there is a possibility that both Asia and Europe may be able to benefit from non-standard and flexible work systems which meet the needs of the 21<sup>st</sup> century workforce.

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