

**SEARCHING FOR THE LABOR MARKET FLEXIBILITY AND SECURITY**

**By**

**Pavla Kubínová**

**THESIS**

Submitted to  
KDI School of Public Policy and Management  
in partial fulfillment of the requirements  
for the degree of

**MASTER OF PUBLIC POLICY**

2011

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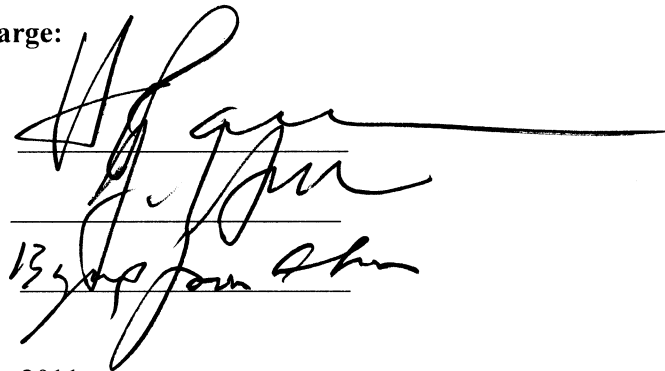
MASTER OF PUBLIC POLICY

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Approval as of July, 2011

## **ABSTRACT**

### **SEARCHING FOR THE LABOR MARKET FLEXIBILITY AND SECURITY**

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This thesis deals with the issue of labor market flexibility, its determinants and its connection with the security measures. It argues that the term “flexibility” has many different meanings, and thus one has to specify the term carefully to avoid misleading usage. The security, which plays an equally important role in the labor market, has also several types, and thus it needs to be appropriately implemented in order to create well functioning and efficient labor market. The present thesis first specifies several types of those two key components and then provides flexibility-security research in a selected set of developed countries in different world regions – Asia, Europe and the Pacific, although the main focus is on Asia.

## **ACKNOWLEDGEMENTS**

I want to use this opportunity to express my gratitude to the entire KDI School and its faculty which enabled me to study at such a great school and spent an unforgettable year in Korea. Especially my thanks belong to professor Hun-Joo Park, who is not only a distinguished lecturer, but also a person who was very of help to me in my studies and other issues which I really appreciate. Further I want dedicate my acknowledgements to professor Jong-Il You who inspired me during his classes and motivated me to think more about the science of economics as well as about my final thesis.

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## I. Preface

Prior to the main analysis of labor markets flexibility and security I think that reader should understand my incentives to write about this subject matter and why I regard it so important and relevant question nowadays.

I stayed one year in South Korea and its history, the process of democratization and admirable economic development highly captured myself. However, step by step I turned my interest on the labor market sphere and found out the big controversy and difficulties which Korean workers have to deal with. Since the 1997 crisis and subsequent market liberalization the labor market duality or polarization<sup>1</sup> (Peng, 2010; Yun, 2009) has caused a serious deteriorations of the labor-force conditions; non-regular workers lack sufficient social security coverage (Cho et. al, 2008) and they also suffer from lower wages<sup>2</sup>. I looks like that this is still highly relevant issue in Korea. One doesn't need to be an economist to realize that something is not working well. Many protests of union workers are taking place, many people run their own business such as restaurants or fast food stalls but due to its large expansion they cannot earn enough to keep sufficient living standard and they go bankrupt frequently. Labor market liberalization and subsequently formed concept of flexibility in Korea has apparently some serious flaws in its conception.

This observation compelled me to think more about the usage of the term “flexible labor market”. It looks like this phrase has been spread all around the world. For example Denmark is known for its highly functional flexible market, one of the best among the European countries (Bredgard et al., 2005). New Zealand, the Pacific country which executed a strong liberalization in 1980s and subsequently become a highly developed market economy with a flexible labor market (Kerr, Roger, 1997). And then we have the example of South Korea which also implemented its own concept of flexibility during the process of market liberalization at the end of 1990s (WB, KLI, 2001).

But what about the workers, do they experience the same labor market conditions in each country? In Denmark people used to have a high social benefits and welfare state tradition unlike in the New Zealand which is rather known for its highly liberalized markets. The Korean case speaks for itself, even if called flexible, labor market doesn't seem to work

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<sup>1</sup> This terms both refer to the situation when the portion of regular workers is reducing in size while the share of temporary (irregular) workers significantly increases (2010, Peng).

<sup>2</sup> “Wage gaps between regular and non-regular workers have persisted in parallel with the growth of the non-regular sector. The monthly average wages of non-regular workers remain half the level for regular workers” (Yun, 2009, p. 271).



satisfyingly. Having said that I came to a conclusion that the term “flexible” itself is not a sufficient word when evaluating a labor market in a certain country. Firstly there is not only one general type of flexibility and secondly, also the security plays an important role as it is seen in the Denmark case. This recognition eventually motivated me to attempt a deeper research of the labor market flexibility and security that follows.

## **II. Introduction**

How is it possible that some labor markets, which are called flexible, are working well while another markets, which also aspires to be flexible have a serious problems? And what is the role of security – does it impede the flexibility or it is an important component of any efficient labor market? Labor market is one of the key part of any economy and it is often a “hot” issue given the fact that its conditions affect almost everyone who is counted in a labor force. Countries which do not have sufficiently working labor market often experience serious economic problems. Therefore I regard the questions above quite relevant and searching for the different concepts of labor markets is in my opinion a way to answer them.

In my paper I develop the idea that any labor market consists of two main elements – flexibility and security; hence the final concept of any labor market depends on their combination. Therefore, in order to get an accurate market characteristics it is important to specify which element prevails and also what particular type of flexibility or security is predominant in a particular case.

The model of labor market flexibility differs from country to country and no one is exactly the same. It depends on the prevailing indicators of flexibility which determine conditions on certain labor market. The labor market flexibility thus has several forms and simple statement that any market is flexible can be misleading until we exactly define the meaning of the flexibility in that particular case.

Further, as some labor market scholars suggest (Wilthagen, Douglas etc.), the flexibility concept should be balanced with appropriate level of security so the labor market works well. This point of view is prevalent especially in Europe, but its logical argumentation implies that it should have an importance even in other regions. Efficient and well performing workers are those who are more and more needed in developed world. In order to create and maintain such a workforce some security measures must be applied to make a balance with appropriate level of flexibility. However, the importance of the security measures in the labor market are not everywhere the same because of different economic culture, customs and priorities.

I want to contribute to the theory of labor market by showing how the labor markets differ in their concepts by using an examples of countries from a different world regions.

I decided to put more emphasis on the Asian region, but not only because of my personal interest in Korea. The Asian economies developed very quickly during the second half of 20th

century. Most of those countries underwent democratic transition lately and on the top of that they were seriously hit by the 1997 financial crisis. This unstable, hasty and not always voluntary circumstances surrounding the developmental process together with a specific Asian working culture makes these countries a very interesting subject of labor market research. Moreover, most of the developed Asian economies are nowadays spread all around the world, their companies establish commerce in the western world while European and US companies more and more invest in Asia. The economical importance of this region is thus another reason why I regard the Asian labor market important to be understand at the present time.

Nevertheless, focusing only on the countries from one area could disable us to see some specifics within one region or similarities of the countries from a different geographical locations. That is why I applied the analysis also on the “western” countries which are either known for their well-functioning flexible labor market (Scandinavia, especially Denmark), for a high level of liberalization in the economy (Pacific countries) or they are simply the most developed European countries (Germany, UK).

In brief, the purpose of my analysis is to specify different types of labor market flexibility, find its most appropriate determinants and show how the flexible labor markets can differ within regions or across the world. But not only this. I also see the security measures as an important part of functioning labor market and necessary complement of the flexibility. Therefore a half of the analysis is devoted to the security issues. I want to clear up how balanced are the selected markets, what types of security prevails and where the security lacks due to excessive focus on the flexible side. In other words, the analysis doesn't only specify labor market flexibility. It also tries to highlight its connection with security and their mutual relationship in the framework of the labor market.

In order to support my thesis that flexibility types differ from country to country and that also security measures matters in a well-functioning labor market, the analysis is aimed at answering the following questions. First of all, what flexibility outweighs in Asia and in the comparative regions and which one is not represented enough? What kind of security prevails in the particular countries and contrariwise what security lacks and thus could make the labor market imbalanced? Further, based on these observations, can we generally say that the Asian labor markets are flexible? Or only a certain countries? In what sense? And finally, have the selected countries appropriately balanced labor market with the security measures?

The data analysis is based on the materials (databases and publications) provided by several world organization. I utilized data especially from the Asian Development Bank, World Bank, Fraser Institute, the Heritage Foundation, International Labor Organization, International Monetary Fund, United Nations and some others.

The theoretical part is based on the literature which deals with the labor market flexibility and security problematic. The main idea of my paper was inspired by the work of Ton Wilthagen and Frank Tros. Other authors who more or less contributed to the theoretical framework are Atkinson, William A. Douglas, Robert Boyer, Robert Sollow, Louise Haagh and various other supplemental works. I also used some articles from news which helped me to bring in the work a touch of a reality and which inspired me from the very beginning to deal with this issue.

As for the structure, the paper goes as follows. After introduction the second section introduces selected theories of the labor market flexibility and creates theoretical basis for the analysis. Next is the core part of my work – the analysis of labor market flexibility and security where I analyze in depth each type of these labor market components for the countries I selected. The fourth section summarizes the results of the analysis and discusses the main questions stated at the beginning. The last part concludes the paper.

### **III. Theoretical background, literature review and methodology**

In general, the term labor market flexibility is understood as an ability of market to quickly adjust to the sudden changes and fluctuations in the society, economy or production (Wikipedia, 2010). This is really wide definition which by itself says nothing exact. Because there are so many factors which influence the labor market functioning, it is understandable that there must be several different concepts of flexibility. We can search the flexibility of employers to adjust the number of workers or their salaries, as well as we can focus on the employees side and the ability of them to quickly change their jobs. We can focus on rather macroeconomic indicators such as the size of workforce or employment elasticity or we can rather inspect the law regulations and how it impede smooth working of the market. There are many aspects which can be more or less flexible and therefore there are many types of flexibility. Available literature offers numbers of works dealing with the theory of labor market flexibility. I chose a few of them, which I used as theoretical background for my analysis. The following I regarded the most interesting based on the author, comprehensiveness of the definition or some interesting ideas the work offers which inspired me.

A good characterization of flexibility can be found in the book of Robert Boyer (1988). He distinguishes five main definitions. Firstly it is the level of adaptability of company in terms of productive organization or simply how the firm reflect the product demand adjusting the technology and production methods. Second type focuses on worker's ability to move from one occupation to another. Then he emphasizes the importance of legal constraints in the employment contracts which influence the dismissal process. Fourth type of flexibility here deals with the ability of wages to adjust changing economic situation. And finally, the last definition of Boyer comes up with is about the difference in workers "take-home-wage" and total wage costs firm pays. It is focuses on the legislation and government interventions in terms of mandatory payments to the social security funds etc.

More general definition of "perfectly flexible labor market" mentions Robert Sollow (1998). According to him such a market doesn't make any obstacles to the process of matching unfilled occupational positions and an unemployed eligible workers. Sollow in his article uses the Beverage curve to describe level of labor market rigidity as it is possible to use in the macroeconomic theory of labor market. The curve depicts negative relationship

between the vacancy<sup>3</sup> and unemployment rate. The perfect flexibility when all jobless people fill all available occupations so the market reaches full employment is, however, only theoretical situation which is not possible in a real world. Moreover as Sollow adds, the labor market rigidities are inevitable and actually they allow the vacancies and unemployment to coexist (Sollow, 1998).

Louise Haagh is another author who deals with this issue, moreover she focuses on the Korean labor market in comparison with the South American experiences. In the theoretical part she offers slightly different view of labor market flexibility than the preceding authors when divides the concept into the corporative and individual-centered approach (2001). The first one takes into account mainly firm's needs when facing the sudden changes in economy. They can be in the forms of wage, tasks or contracts adjustments which solve the problems primarily in the short-term. On the other hand Haagh comes up with the individual-centered approach which emphasize individual worker as an active participant in the production process who have some opportunities and is able to make a choice. The most important role here plays the country's public policy making and functional labor market institutions which enable individuals to make their own choices (Haagh, 2001).

Next theoretical approach, which to a great extent influenced my work, are works of European authors Wilthagen, sometimes cooperating in his works with another author Tros. They bring into the theory a new concept of flexibility when emphasizes also importance of the security and trying to define a balance in the labor market. As Wilthagen stated "the key issue for employees, management, the social partners and policy makers alike is to strike the right balance between flexibility and security" (Wilthagen, 2002). As already mentioned, however, both authors focuses mainly on the European labor market where is high demand for the security measures. They are searching for so called flexibility-security nexus, or the concept of "flexicurity" which describes the above.

William A. Douglas also supports the idea of connection between flexibility and security on the labor market. According to him the flexible labor market means that workers can be reallocate from one economic activity to another quickly, smoothly, and without social disruption. He points out the classical neo-liberal theory of flexibility which says that there is unavoidable trade-off between labor market flexibility and security and emphasizes that it is not necessarily truth saying that "to just weaken or abolish a job-security provisions is not really creating labor flexibility, but rather just labor expendability" (Douglas, 2000).

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<sup>3</sup> Vacancy rate is a number of unfilled jobs expressed as a percentage of total labor force (Sollow, 1998)

The following labor market analysis is intended to apply adjusted theory of the flexibility-security nexus on the Asian labor market and compare it with some other regions. In order to do it, I used the labour market flexibility characteristics given by J. Atkinson (1984). Based on the strategies the companies use, he says, there can be four types of flexibility: external and internal numerical flexibility, functional flexibility and wage or financial flexibility. His theory contributed to the framework of the first part of my analysis.

In the second part of the analysis, which is devoted to the evaluation of labor market security, I bear on the definitions by International Labor Organization (ILO) of security types presented in the Socio-Economic Security Programme publication (ILO, 2010).

The labor market analysis is founded on the following methodology. Firstly I used the literature I mentioned above to choose the appropriate types of flexibility and security for my investigation. I could not search for all types mentioned by authors since some of them were almost impossible to quantify which is crucial for the analysis results.

As for the flexibility I made a group of 4 types – numerical and wage flexibility, then I used macroeconomic indicator of employment elasticity and finally the indicators of labor market regulations which impede the freedom on the labor market. The security types which are further developed in my paper are income, employment work and combination or rather life-work balance security.

For each mentioned type I defined several indicators which I found the most relevant in order to evaluate (calculate) the level of flexibility or security for each surveyed country.

After gathering all data I ranked them<sup>4</sup> from the best to the worst one. I made a ranking for each indicator where I assigned number one to the country with the best indicator's value and number 14 to the country with the worst indicator's value. Sometimes the ranking was descending, sometimes ascending, depends on the logic of the indicator's evaluation<sup>5</sup>.

Then I summarized each country's value of ranks for each indicator and get just one number which represents the overall level of particular type of flexibility or security – country

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<sup>4</sup> Where the information were not quantitative as in the case of the minimum wage I assigned them some quantitative formulation in order to be able to sum it together with other indicators. Where data were not available at all, for the ranking purpose I counted simple average of the region and use it for the overall ranking so the country which doesn't have a data available could be ranked. The average numbers are stated in the ranking tables in Appendix III., but in the tables which are in the text; there is written "n/a". The average is thus used only for the calculation purposes so the country do not show any extreme results such as zero, which would distort the results.

<sup>5</sup> In some cases the higher value of indicator was the best, sometimes the higher value was the worst

with the lowest number was the best, v.v. I analyzed this way also overall flexibility and security level as a summary of all its types ranking.

I am aware of the simplicity of this procedure which generalize the results and can to some extent blur the actual data. However, the aim of my analysis is in the first place to capture some common trend for the labor market in each country, rather than scrutinize each indicator and interpret it in details. Such a punctual study would not allow me to see the labor markets “from above” and hence it would make it difficult to see any common tendencies. Therefore I decided to apply rather a “top-view” approach in my analysis.

I chose seven Asian countries which are regarded as the most developed such as Japan, Singapore, Hong-Kong, Korea and Taiwan and I added also Malaysia and Thailand which are now one of the promising Asian emerging economies. I made this decision because searching for the labor market concept make sense when the country reaches some higher level of development and undergoes a process of market liberalization. Otherwise the flexibility and security components on the labor market are hard to find.

The analysis including only Asian countries would be interesting by itself, however for the purpose of my analysis I needed to see how are the conditions in other regions which are famous for a high level of flexibility or security. Only if I use these countries in comparative analysis I will be able to state whether the Asian labor markets flexibility and security is sufficient or not or whether these components are present at all - with regards to the regions where the flexibility or security has a high level. If we want to say that Asian labor markets are flexible or not, we need to have some benchmark of the flexibility. Therefore I added to my analysis three other groups of countries. The first are Scandinavian countries Denmark, Sweden and Norway which have a strong welfare state tradition but also are regarded (especially Denmark) as a highly flexible labor markets. Second region is Asian-Pacific (OECD label, further I use often only name Pacific). Australia and New Zealand underwent a strong economic liberalization in 1980s and their labor markets are suppose to be highly flexible (Quiggin, 1998); moreover the living standard there is quite high so I suppose them to have a high security in the labor market as well. Third group of comparative countries are Germany and United Kingdom. I decided to analyze them simply because they are the most developed European countries (actually together with USA and Pacific states they are the most developed in the world) but they don't belong to the Scandinavia so they can show the other European states labor market tendencies from another point of view.

Not all data were available for the same year, the dates range from 2005 to 2009. Therefore some time inconsistency can occur in the analysis. However, my work is not



intended to be an accurate snap shot of a labor market conditions in a certain year. It is aimed to be an analysis of labor market trends which have taken place in the selected countries in recent time period, say in the past 5 years. Moreover, most of the indicators included are hardly to significantly change in such a short time interval.

Further, all the conclusions in the paper are based exclusively on the selected indicators and comparison among the chosen countries. Therefore the results might not be in accord with some other researches or analysis with different methodology or another indicators used in them. The purpose of this study is not to deny other works or opinions about this topic, it aimed to offer another point of view to this problematic. I believe that it can suggest some ideas which can be helpful for better understanding of the labor market flexibility issue, particularly in the case of Asian developed countries. The conclusion stated in this paper doesn't effort to be definite but it rather want to inspire for another research which could answer another related question and help to make the overall picture of labor market issue more comprehensive.

## **IV. The labor market flexibility analysis**

The first part of labor market analysis evaluates the level of flexibility for each selected country. As it was already mentioned this section provides in depth research of four labor market flexibility components – numerical flexibility, wage flexibility, employment elasticity and finally the labor market freedom.

### **A. Numerical flexibility**

Numerical flexibility refers to the situation when organization employs such amount of labor as they need and it ensure that flux of the demand for employees goes just with the appropriate labor supply<sup>6</sup>. It can be also described as capability of company to adjust the quantity of labor intake with regard to the changes in demand or technology<sup>7</sup>. As the International Labor Organization defines it, it is basically the “situation where the number of staff and the number of hours worked can be increased or decreased depending on the demand for labour”<sup>8</sup>. The numerical flexibility is usually divided into two subgroups based on the way how the amount of labor is adjusted. First one is external numerical flexibility which deals with the process of hiring and firing workers from the external market<sup>9</sup>. The second type of numerical flexibility is called internal and it can be attained by optimization of working hours of employees already working for a firm based on the needs of market<sup>10</sup>.

When measuring numerical flexibility I used several indicators. The share of part time workers shows how flexible are companies in adjusting the job contracts. Such worker is defined as a person “whose normal hours of work are less than those of comparable full-time workers”(ILO, 2008). Next indicator is the share of self-employed workers which includes employers, self-account workers and contributing family workers (ILO, 2009). It gives us an idea about the availability of alternative job opportunities in the country apart from the regular employment – whether people can assert themselves in the labor market when the regular employers do not seek additional workforce. Hiring and firing regulations are another indicators of the (external) numerical flexibility. Firstly I take into consideration the difficulty of hiring index (WB, 2010) which shows the obstacles the firm has to overcome when need to

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<sup>6</sup> Source: <http://www.jrank.org/business/pages/YYYY/numerical-flexibility.html>

<sup>7</sup> Source: [http://www.worksproject.be/Glos\\_and\\_defint\\_n.htm](http://www.worksproject.be/Glos_and_defint_n.htm)

<sup>8</sup> Source: [http://www.ilo.org/public/english/dialogue/ifpdial/publ/infocus/ireland/Y\\_2.htm](http://www.ilo.org/public/english/dialogue/ifpdial/publ/infocus/ireland/Y_2.htm)

<sup>9</sup> Source: <http://www.eurofound.europa.eu/ewco/2007/08/CZ07080Y9I.htm>;  
[http://en.wikipedia.org/wiki/Labour\\_market\\_flexibility#External\\_numerical\\_flexibility](http://en.wikipedia.org/wiki/Labour_market_flexibility#External_numerical_flexibility)

<sup>10</sup> Source: <http://www.eurofound.europa.eu/ewco/2007/08/CZ07080Y9I.htm>

employ additional worker. Then I focus on the level of protection against dismissal which assess the protection of a worker granted by law or mandatory collective agreements (WB, 2005). In the case of internal numerical flexibility I used the indicator of working hours rigidity provided by World Bank (2010) which indicate how difficult it is for employer to adjust the number of working hours of his employees according to the changing market conditions.

The above indicators have, however, some limitations in measuring the level of numerical flexibility which we should be aware of. Firstly, each country has different number of working hours a week set by law so the part time jobs can be defined differently with regard to the number of hours worked a week. Then, the part timers can have different conditions of work. In some countries they can have same conditions and benefits as full timers, somewhere they could for example suffer from lower security – all depends on the local definition and laws. Thirdly, share of self-employed workers does not indicate the conditions the self employed workers have and the level of income they earn or whether they can get sufficient number of work they need to keep the living standard necessary for satisfactory life. Thus it is not necessarily the best indicator of labor market flexibility, high share of self-employed workers can be also result of rigid employment laws or unwillingness of firms to hire workers due to bad market conditions which result in high share of self-employed workers who have no other choice.

<b>Table 1 “The numerical flexibility indicators”</b>					
	Share of part-time workers	Share of self-employed workers (%)	Difficulty of hiring index	Protection against dismissal	Rigidity of working hours
<i>Sources:</i>	<i>(OECD, ILO)</i>	<i>(ILO)</i>	<i>(WB)</i>	<i>(WB)</i>	<i>(WB)</i>
<b>Hong-Kong</b>	6,5*	11,3	0	0	0
<b>Singapore</b>	9**	15,3	0	0	0
<b>Japan</b>	19,6	13,4	11	0	7
<b>South Korea</b>	9,3	31,8	44	0,29	40
<b>Taiwan</b>	n/a	24,9	78	0,14	20
<b>Malaysia</b>	n/a	25,7	0	0	0
<b>Thailand</b>	n/a	56,4	33	0,29	0
<b>Denmark</b>	18	8,9	0	0,29	20
<b>Sweden</b>	14,4	10,2	33	0,71	40
<b>Norway</b>	20,3	7,5	61	0,71	40
<b>Australia</b>	23,8	12,1	0	0,14	0
<b>New Zealand</b>	22,4	17,2	11	0,14	0
<b>United Kingdom</b>	22,9	13	11	0,14	20
<b>Germany</b>	22,1	10,7	33	0,57	53
<i>Data sources: for more details and definitions see the Appendix I.</i>					

The share of part-time workers in Asia is not available for all surveyed countries, however, except for Japan (19,6%) we cannot find a big share of this kind of workers. Hong-Kong, Singapore and Korea they all demonstrate less than 10% of part-timers out of all employed people. In contrast to this observation other benchmark regions shows significantly higher portion of part-time workers, usually over 20%. Scandinavian countries are little lag behind the others, particularly Sweden (14,4%), however, it looks like the usage of this kind of employment contract is much more often than in selected Asian countries.

As for the portion of self-employed workers we can see outright domination among Asian countries, namely in Thailand and Korea, closely followed by Taiwan and Malaysia. It is interesting that Hong-Kong, Singapore and Japan reach much lower share of self-employment compare those mentioned above and they are closer to the Asian-Pacific and Europe countries with the share around 15%. In Scandinavia is the self-employment even less common practice.

The difficulty of hiring worker indicator has no visible trend among any selected region, perhaps only Asian-Pacific demonstrate much lower difficulties than others. However, we can find both extremes among Asian countries where Hong-Kong, Singapore and also Malaysia have no restrictions in hiring workers at all, while especially Taiwan and Korea experience quite high barriers for employers to hire regular worker. Japan and Thailand remain with rather low difficulties of hiring. In Scandinavia we can see also both extremes – in Denmark are no restrictions while in Norway the difficulties are as high as in Taiwan which shows a

high labor market rigidity in this case. To sum it up it looks like region doesn't play important role in setting of hiring restrictions.

In the case of the dismissal protection Asian region holds first place since besides Korea and Thailand there are almost no restrictions. Also in Australia and New Zealand are the dismissal protection is quite low, compare to the most Scandinavian countries where the restrictions are really high (except for Denmark). In this sense I think we can see some trend in the Asian region where most countries have almost no restriction while in the other selected countries each of them set some barriers for employers to disable them easily lay off their employees.

Finally I evaluate a special indicator for a internal flexibility – the working hours rigidity. The results here are quite similar to those of the dismissal protection index. In the surveyed Asian region the higher restrictions in this case are in Korea, other countries seems not to have that rigid adjusting of working hours. In Scandinavia we can see the same level of rigidity as in Korea, only in Denmark the number is slightly lower. UK and Germany goes along with Scandinavia while in Asia-Pacific it looks like there is no working hours rigidity at all.

With the evaluation of all the indicators above I intend to come up with overall assessment of numerical flexibility. Asian countries seems to lack behind in the adjustment of job contract while the share of part-time workers is in general much lower than in the comparative regions, however it must be taken into account the lack of data for Asian countries and their actuality. Moreover part-time jobs are not the only way how companies adjust the contracts to their needs. As it is in the cases of Korea or Japan, the temporary jobs and irregular contracts are also quite often practices (OECD, 2005; Yang, 2006; Diamond, 2010) and they are not reflected in the part-time jobs indicators. With respect to the rest of indicators I chose it looks like Asian region is more flexible in this sense than other selected regions. Common trend in Asia can be found only when Korea and Taiwan are taken aside since they significantly diverge in hiring, firing and working hours regulations.

The conclusion is therefore following. In the selected Asian region is the highest numerical flexibility compare to all other countries – even to the Scandinavia - except for Korea and Taiwan which show significantly higher rigidities. Japan seems to be a special case closer to the European countries like UK or Asian-Pacific region.

I ranked all countries according to their data results. I am aware of the fact that it is not quite accurate due to the limitations the data have but it can serve as interesting comparison which allows us evaluate the overall flexibility and the share of its components for each country

selected. In the Asian region thus the higher numerical flexibility have Singapore, Malaysia followed by Hong-Kong. Japan is little behind, then Thailand, Taiwan and the last one is Korea.

## **B. Financial (wage) flexibility**

According to the theory, the financial (or wage) flexibility occurs when wages are determined individually between firms and workers. In this way the process reflects a real situation on the labor market better, than when the wage determination is done by a collective agreements (Wikipedia, 2011). The salary or wage that employee receive depends on the job done, hours worked, or the amount the organization can afford (Atkinson, 1984; ILO, 2006-2011).

Therefore the first indicators which is used in the analysis of the financial flexibility is the existence of minimum wage or its alternative. If there is in economy a minimum wage fixed by authority it can affect smooth functioning of labor market – high minimum wage can impede employer to hire a worker who would do the job for lower wage but due to the restriction it is not possible. For the second indicator of wage flexibility I used the share of variable pay and benefits in the total remuneration of employee. The higher is the portion of this indicator the more flexible is the determination of wages in the economy.

The pure existence of minimum wage does not necessarily mean that the labor market is not flexible if the natural wage level in economy<sup>11</sup> is higher than the minimum wage. In the case of variable pay the study does not provide detailed definition of this indicator and how the authors came up with the data. Also not all our selected countries are included and in Scandinavian region is thus only data for Sweden. Therefore I added in this case the data for Netherlands in order to be able to estimate probable trend for this region.

For the first sight we observe a clear trend in almost all regions (excluding the Europe). In Asia there is only Singapore which doesn't have a minimum wage at all. It is the only state which let the wages to be determined solely by the market forces. The rest of selected Asian countries have fixed minimum wage by authority and also in Hong-Kong, which used to be known by its highly free market economy, they introduced last year minimum wage (The Economist, 2010). Contrary to Asia in Scandinavia (except for Netherlands) no authority makes decision about the amount of wages. They are determined by collective bargaining and agreements between employers and workers (labor unions) which brings a higher level of

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<sup>11</sup> The wage level in economy which is defined by the intersection of labor demand and labor supply.

wage flexibility to this region. Australia and New Zealand remain the same trend as in Asia with minimum wage fixed by government as well as it is in United Kingdom. Finally in Germany there is also preferred bargaining.

When we turn our attention to the second indicator the clear picture of wage flexibility trends among regions suddenly disappears. The higher share has Singapore and Germany (both 63%) followed by UK, Malaysia and Scandinavian countries which still exceed 50%. South Korea and Australia are little behind, but the rest of Asian countries shows really low share of variable pays and benefits. Hong-Kong and Japan don't even reach 40% and Taiwan has less than 30%. Scandinavian region together with Europe hold similar trend where more than half of remuneration is made by variable units, in Asia, on the contrary, is hard to find any similarity. However, it is clear that in this region are all the lowest percentages so it can be inferred that in Asia is the labor market flexibility more likely to be impede by rigid wage determination compare to the other selected regions.

With regard to the indicators I chose it looks like wage flexibility is somehow low in Asia. Taking into account both indicators, only Singapore is shining exception in Asia which reaches really high level of wage flexibility – the highest among all countries included in the analysis.

The highest level of wage flexibility holds Singapore which really significantly diverges from the other countries. At the hypothetical second place is Malaysia followed by Korea, Japan, Hong-Kong and the last one is Taiwan. Thailand was not include in this ranking because of the lack of remuneration breakdown data.

<b>Table 2 “The wage (financial) flexibility indicators”</b>		
	Minimum wage settings*	Variable pay and benefits as % of total remuneration
<i>Sources:</i>		<i>(remuneration report)</i>
<b>Hong-Kong</b>	A, C	36
<b>Singapore</b>	X	63
<b>Japan</b>	A	37
<b>South Korea</b>	A	49
<b>Taiwan</b>	A	29
<b>Malaysia</b>	A	55
<b>Thailand</b>	A	n/a
<b>Denmark</b>	B	n/a
<b>Sweden</b>	B	56
<b>Norway</b>	B	n/a
<b>Australia</b>	A	42
<b>New Zealand</b>	A	n/a
<b>United Kingdom</b>	A	54
<b>Germany</b>	B	63

*\*(A) – fixed by an authority; (B) – fixed by collective bargaining; (C) – not available for everyone; (X) – no minimum wage at all (market based)*

### **C. Employment elasticity**

The term labor market flexibility, in its wider sense, refers to the situation when the market is quickly and with low costs able to adjust the amount of employed people to the firms' needs. In other words, the number of people who have a job is equal to the number of vacancies which are needed at the given time for the companies to work effectively. All the types of flexibility mentioned so far deal with some specific indicators which reflect some way of how the flexibility can be performed. However, it is also important to see the situation from the macroeconomic point of view which provide us with more comprehensive outlook – less detailed, less specific but more objective and based on data which are better comparable. Using macroeconomic indicators such as employment rate, quantity of labor force, GDP or number of vacancies in the whole economy and its changes makes the picture of labor market flexibility more clear and exhaustive.



<b>Table 3 “Employment elasticity”</b>			
	Employment elasticity	Ranking	Ranking
<i>Sources:</i>	<i>(ILO)</i>	<i>all countries</i>	<i>Asia</i>
<b>Hong-Kong</b>	0,33	10	4
<b>Singapore</b>	0,58	5	1
<b>Japan</b>	-0,1	14	7
<b>South Korea</b>	0,22	12	5
<b>Taiwan</b>	0,45	8	3
<b>Malaysia</b>	0,47	7	2
<b>Thailand</b>	0,21	13	6
<b>Denmark</b>	0,36	9	
<b>Sweden</b>	0,54	6	
<b>Norway</b>	0,68	3	
<b>Australia</b>	0,66	4	
<b>New Zealand</b>	0,79	1	
<b>United Kingdom</b>	0,26	11	
<b>Germany</b>	0,71	2	
<i>Data sources: for more details and definitions see the Appendix I.</i>			

I chose the employment elasticity as an appropriate indicator to reflect the labor market flexibility from the macroeconomic point of view. It measures how the employment changes when the total output of economy (GDP) changes by one percent. The closer the elasticity is to 1 the more the labor market suppose to be flexible, the closer the elasticity is to 0, the lower the flexibility is. The latter case for example reflects the situation when there are some rigidities in the market which do not allow firms to hire as many workers as they need at the certain time of GDP growth.

Although looks like simply and clear indicator, employment elasticity has some limitations when interpreting reality. Especially the fact that with higher development in the country the elasticity tends to gradually fall since the countries with high economic growth rates do not require high employment elasticity and the labor becomes more scarce as well (ILO, 2009). Our selected countries however suppose to be rather developed (with some exception for Thailand and Malaysia) so there is still some space for meaningful comparison.

Asian region shows again that it is quite heterogeneous in terms of the indicators. There are two extremes when Singapore illustrates highest elasticity (0,58) which is close to the average in Europe, Japan demonstrates, on the other hand, negative elasticity which is quite unique among all selected countries. According to the definition it means that change in GDP causes negative change in employment – the higher output of economy causes diminishing of

employment. Even if we take into consideration that data are few years old and also the fact that Japan is one of the most developed countries among all so it do not need such a big elasticity in labor market, still we must conclude that the flexibility in the Japan labor market from this point of view is considerably low. South Korea and Thailand also have very low elasticity, ensues Hong-Kong and the rest of the countries with elasticity somewhere between 0,4 – 0,5. When we look at the benchmark regions, except for UK most countries have elasticity over 0,5 and thus much higher than it is in Asia. Although it is not possible to find any common trend among Asian countries, in general it is possible to state that the elasticity is considerably lower there than in the other regions.

#### **D. Labor market freedom and regulations**

In order to get a comprehensive picture of the labor market flexibility it is very helpful to use the indicator which illustrates the level of freedom in the marketplace. I chose two indicators which are quite relevant for this purpose. First one is the Labor freedom – a part of the Index of Economic Freedom (IEF) and the second is Labor market regulations indicator taken from the Economic Freedom of the World index (EFW). They both are aimed at showing how high the level of labor market regulations<sup>12</sup> impede the flexibility. Even though they both includes some indicators which I already used in the analysis, they bring some value added. First of all they are formed into one single number which itself shows level of the market regulations and secondly they use some additional data<sup>13</sup> which enrich the labor market flexibility analysis.

Data shows that in Scandinavia the labor market is free of strict regulation only in Denmark; other states have much higher regulations. The Pacific states have almost fully free market in this sense, while in Asia we can see that the situation is little different for each country. Hong Kong, Singapore and Japan experience small regulation, in Korea and Taiwan in contrast it looks like they have the most restrictive labor market laws among all. Restrictions in Thailand and Malaysia are somewhere in the middle of the selected countries, lower than in Korea or Taiwan.

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<sup>12</sup> The particular regulations are following. IEF: Ratio of minimum wage to the average value added per worker, hindrance to hiring additional workers, rigidity of hours, difficulty of firing redundant employees, legally mandated notice period, and mandatory severance pay. EFW index: hiring regulations and minimum wage, hiring and firing regulations, centralized collective bargaining, hour's regulations, mandated cost of worker dismissal and the conscription.

<sup>13</sup> Both indexes are based mainly on the World Bank's doing business study (WB, 2005-2009) the second one uses in addition the Global Competitiveness Report from the World Economic Forum and incorporates the influence of conscription.

<b>Table 4 “Labor market regulations and freedom”</b>		
	Labor market regulations	Labor market freedom
<i>Sources:</i>	<i>(EFW 2009)</i>	<i>(IEF 2009)</i>
<b>Hong-Kong</b>	9,3	86,3
<b>Singapore</b>	7,7	98,1
<b>Japan</b>	8,2	82,5
<b>South Korea</b>	4	46,4
<b>Taiwan</b>	4,4	45,7
<b>Malaysia</b>	7,6	71,5
<b>Thailand</b>	7,3	76,5
<b>Denmark</b>	7,5	99,4
<b>Sweden</b>	5,1	55,5
<b>Norway</b>	4,9	48,6
<b>Australia</b>	8,5	94,7
<b>New Zealand</b>	8,5	89,6
<b>United Kingdom</b>	7,2	78,5
<b>Germany</b>	3,9	43,4
<i>Data sources: for more details and definitions see the Appendix I.</i>		

It is evident that derive any common trend in any region is not possible. In Europe it looks like Denmark is exemption from the other countries with quite high level of labor market restrictions. Among the selected Asian countries one would expect no restrictions at all however Korea and Taiwan demonstrate complete opposite; their low score represents fairly strong employment regulations. On the other hand, other Asian countries together with Australia and New Zealand they all shows no or just small regulations so it is possible to state that obstacles in the labor relations in the Asian-Pacific region are rather low and that this trend have lasted for at least for past five years as the data are available.

Looking closer at the Asian countries, we could divide them into two groups. Almost all of them shows in both surveyed indicators high scores which means that the regulations are not big obstacles for doing business. Hong Kong, Singapore and Japan are the freest and Thailand and Malaysia are not far behind. Compare to them, however, Korean and Taiwan’s labor market seems to be quite inflexible in terms of regulations of standard employment.

For a consideration of the causes of employment rigidities is necessary to look at its sources for each country. In Europe the biggest obstacle seems to be restriction of working time while in Asia the inflexibility stems from high redundancy costs . This is however not

valid for all selected countries, but for Korea, Taiwan little bit also for Malaysia and Thailand. The breakdown of employment rigidities makes more clear, where is the origin of this large gap between the Asian countries' labor market freedoms. Both Korean and Taiwan have remarkably high costs of dismissing an employee and inflexible working hours settlements (IEF, 2009). In addition to this, according to the World Bank (2009) both countries also have higher regulation of fixed-term contracts for permanent tasks compare to the rest Asian countries.

## **V. The labor market security analysis**

The second part of the presented analysis researches the area of labor market security. The following text states the main types of securities according to how relevant I see them for the analysis and also how feasible is to quantify them. Namely it is the income, employment, work and combination security which represents the life-work balance. Several indicators defines each type and all together they create a complete picture of the situation on the selected labor market. Because most of the security measures often holds exclusively for a regular employment it is important

to know the share of employment status in a particular country. For this reason is this indicator added at the end of the presented study.

### **A. Income security**

As the name suggests the aim of this security type is to ensure that worker's income will not decrease under a certain level of living standard which is needed for sufficient life. It denotes adequate actual, perceived and expected income, either earned or in the form of social security and other benefits (ILO, 2009).

According to several theories the income security includes a minimum wage machinery, wage indexation, comprehensive social security (insurance, assistance and income supplementation)<sup>14</sup>, and progressive taxation (ILO, 2009). However, in order to quantify the level of income security I chose the following indicators. Firstly it is an existence of minimum wage and the way it is realized (same as in the wage flexibility, but with different interpretation). However, pure existence of minimum wage says nothing about the level of income security. It can be too low so it do not provide much money for low paid workers, or it can be too high and thus it discourage employers from hiring or force them to firing because of rising costs. In these cases minimum wage do not provide any security but the other way around. I use this indicator rather to create more comprehensive picture about social security situation in each country. The second and much more important indicator is the level of unemployment benefits. This index encompasses information about the length of receiving the benefits, its amount and requirements necessary to be eligible for them. All together – higher index means benefits which provide better security for fired workers. Next is the index

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<sup>14</sup> Source: [www.socialpolicy.ca/i.htm](http://www.socialpolicy.ca/i.htm)

of social security laws which shows how comprehensive is the social security taking into account in addition old, disability, death, health and sickness benefits. Finally, the last indicator is the social security and welfare benefits expenditures as a percentage of country's GDP. This last numbers can give us some idea about the government's social policy – how role plays the social (income) security in the country.

Comprehensive social security is measured by the social security law index which predicate rather how the laws are established than how it works in reality – whether it is really comprehensive and beneficial for all people in need is a question which is not possible to answer using only this indicator.

<b>Table 5 “The income security indicators”</b>			
	Unemployment benefits	Social security laws index	Social security and welfare expenditures (%GDP)
	(WB)	(WB)	
<b>Hong-Kong</b>	0,69	0,8	2,3
<b>Singapore</b>	0	0,46	2
<b>Japan</b>	0,75	0,64	12,8
<b>South Korea</b>	0,72	0,68	4,6
<b>Taiwan</b>	0,82	0,75	n/a
<b>Malaysia</b>	0	0,2	1,1
<b>Thailand</b>	0	0,47	1,4
<b>Denmark</b>	0,79	0,87	22,4
<b>Sweden</b>	0,86	0,84	21,1
<b>Norway</b>	0,8	0,83	15,5
<b>Australia</b>	0,84	0,78	8,3
<b>New Zealand</b>	0,56	0,72	10
<b>United Kingdom</b>	0,76	0,69	15,9
<b>Germany</b>	0,79	0,67	19,8
<i>Data sources: for more details and definitions see the Appendix I.</i>			

We don't need to examine the data so carefully to see the biggest difference between Asian region and the benchmarks. Only Australia and New Zealand show a little lower level of social security expenditures compare to Scandinavia or UK and Germany, all the other comparative countries have quite high level of security indicators. On the contrary, in Asia there is only Japan which has all three indicators close to the benchmarks. Especially the level of social and welfare expenditures are much lower here, in the selected Asian economies there is obviously not any welfare state tradition, government financial support for those in

financial need is simply not an issue<sup>15</sup>. I think that this is one of the biggest differences where is also visible a strong common trend between Asian region and the others. Except for Japan which spend almost 13% of GDP on social and welfare, others vary around 2-3% while in European countries the social expenditures almost don't go under 10% but usually hit 20% and more. On top of that Singapore, Malaysia and Thailand probably do not offer sufficient unemployment benefits and we can hardly talk about comprehensive social security either. Other Asian countries at least show some higher values for the benefits and social security in general but when take into account such a low state social expenditures, question is whether they have in reality enough resources to cover the social security system they have.

To sum it up, Asian countries doesn't have a strong income security system. Only stands little apart from the this trend, it looks much closer to the benchmark trend. It is interesting to think about why - - where and when Japan gets this social awareness and put it into the government agenda. Singapore, Malaysia and Thailand illustrate the other "extreme", income security - at least according to the indicators chosen - is pretty low and hardly sufficient for unemployed people. South Korea, Taiwan and Hong-Kong albeit do not have high social expenditures, but still theirs security indexes are not as low as in the extreme cases so it can be inferred that some income security can be found there. Though there is a question, whether it is sufficient to avoid income inequality and deterioration of living standard of fired workers. I am aware of the fact that these data have its limitations and that the observation are not exhaustive, but still we can get a good idea and capture a basic trends in the income security this way.

Taking into account all the limitations of the data used above, we can go ahead and rank the countries according to their level of the particular indicators. Then we get some idea about the level of income security in particular countries and regions. The final data says that the most secure countries are in Scandinavia - its three countries occupy first three ranks. This region is therefore the most secure in terms of the income. Next is Australia, Germany and UK, followed by Taiwan, Hong-Kong and then New Zealand. The rest ranks are distributed between Asian countries. It can be inferred that in Asia the income security is quite low compare to the other regions. Even though Taiwan and Hong-Kong shows quite high level of unemployment benefits and social security law index, their share of social security and welfare expenditures is so low and therefore the level of actual income support is highly questionable. On the other hand, Japan is raked as 9<sup>th</sup> country from the overall income

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<sup>15</sup> To support this statement see for example Jacobs, D. "Low public expenditure on social welfare" in: Int'l J Social Welfare, Blackwell, 2000.

security point of view, but its social expenditure is the highest in Asian region and thus there the real security (what people really get, not what is “just” enacted) can be higher than in the other Asian cases.

## **B. Employment security**

Second type of security evaluates the possibility of keeping a job by worker in a company. Generally it is understood as a protection against loss of income-earning work. In the case when the dismissal is unfair this security focus on the opportunity of workers to redress it (ILO, 2009). If searching on the internet, we can find employment security defined as a “freedom from the fear of dismissal or job loss”<sup>16</sup> or the “confidence an employee will continue to work for the same employer as long as the employee is able and willing to provide the required services”<sup>17</sup>. Simply it says that labor market is secure in terms of employment when workers can keep their jobs or defend themselves when they are dismissed.

To display employment security I picked four indicators. Firstly it is unemployment rate – probably the most general and all-encompassing one. It means that the higher is the unemployment in a country, the lower is employment security. Secondly there are two indexes which reflect the law protection against dismissals and the cost of firing workers. The first one measures the protection of an employee guaranteed by law against the dismissal, the latter is calculated as the sum of the notice period, severance pay, and any mandatory penalties established by law in order to dismiss a worker (WB, data set). The higher the index is the stronger the protection is in the country. As a final indicator there is an amount of severance pay expressed as a percentage of annual basic compensation of a worker (in manufacturing sphere). This money company must give to its regular worker when he is dismissed against to his will. The indicators which measures the cost of firing a worker says that the higher are these costs, the less willing they are to dismiss the worker so the higher level of employment security is there.

Unemployment rate doesn’t explain why people lost their jobs. Therefore we cannot explicitly say whether it happened because of a low employment security or because of some other factors - for example global economic crisis or structural shock. The cost-of-firing-workers indicators, on the other hand, discourage companies from hiring a new regular employees so it is usually also a reason of higher unemployment rate. Therefore it is little ambiguous from the employment security point of view. If the costs are high, the current

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<sup>16</sup> Source: <http://www.answers.com/topic/job-security-computer-jargon#ixzzYBb1BXFAU>

<sup>17</sup>Source: <http://business.yourdictionary.com/job-security>



workers have stronger employment security, however, it is much more difficult to be hired for the people seeking a job.

<b>Table 6 “The employment security indicators”</b>				
	Unemployment rate	Law protection against dismissal index	Cost of firing workers index	Severance pay (% of total salary)
<i>Sources:</i>	<i>(OECD, ADB)</i>	<i>(WB)</i>	<i>(WB)</i>	<i>(remuneration survey)</i>
<b>Hong-Kong</b>	5,4	0	0,18	76
<b>Singapore</b>	4,1	0	0,6	105
<b>Japan</b>	5,3	0	0,08	0
<b>South Korea</b>	3,8	0,29	0,62	134
<b>Taiwan</b>	6,1	0,14	0,61	125
<b>Malaysia</b>	3,7	0	0,19	105
<b>Thailand</b>	1,5	0,29	0,63	n/a
<b>Denmark</b>	6,1	0,29	0,51	n/a
<b>Sweden</b>	8,5	0,71	0,53	0
<b>Norway</b>	3,2	0,71	0,53	n/a
<b>Australia</b>	5,7	0,14	0,53	31
<b>New Zealand</b>	6,3	0,14	0	n/a
<b>United Kingdom</b>	7,8	0,14	0,49	25
<b>Germany</b>	7,8	0,57	0,48	0

*Data sources: for more details and definitions see the Appendix I.*

There are no significant differences in unemployment rate among all countries, however, in average the rate seems to be lower in Asia. In this region the highest rate of unemployment was in Taiwan (6,1%) while the countries in other regions had usually 6% and more. Only Norway stands beside this trend with the second lowest unemployment rate among all surveyed countries (3,2%). This says that in Asia people were not unemployed as much as they were in Europe or Pacific. However, it says nothing about the living standard and income people had during this time if they were self-employed or had an irregular job contract. Therefore even people who were not unemployed in Asia could suffer from income inadequacy caused by underemployment contrary to the unemployed people in Scandinavia for example, where the level of social security benefits is much higher as we saw in the preceding part of analysis. Hence, this indicator cannot be used alone to illustrate the level of employment security. The following indexes focus more on the process of dismissal and the cost of firing workers. The law protection against dismissal is much lower in Asia than in Sweden, Norway or Germany. However, this is not the case of Denmark nor the Pacific

region or UK which makes it impossible to state that there is any significant trend among the benchmark regions. The only result we can get from observing the law protection index is that in Asia people struggle with weak employment security in this sense, than the European citizens. According to the costs of firing workers (including the indicator of severance payment) we can divide Asia region into two groups of countries. The first one consists of Hong-Kong, Japan and Malaysia where the costs are quite low, compare to the Singapore, Korea, Taiwan and Thailand where firing a full-time employee is pretty expensive. The percentage of workers salary which company must pay to worker as a severance payment is much higher in Asia (mostly over 100%) than in for example Sweden (0%), Australia (31%) or UK (25%).

Based on the unemployment rate and cost of firing workers we can get an idea that in Asia there is quite high employment security. However, given the extremely low law protection against dismissal this statement cannot be entirely true. Moreover, Hong-Kong, Japan and Malaysia have low costs of dismissals and thus these three countries definitely do not rank high in terms of employment security. In the case of other countries, the law protection is little bit higher and the costs of firing are really high, even more than in other regions. The employment security seems to be little higher here, but given to the low law protection I think that it is rather a rigidity of labor market which secure the workers from losing their jobs. In addition, mainly the full-time workers are taken into account here. In the case of part-timers or workers with irregular contracts the security is probably much lower.

Compare to the other regions Asia seems to have quite high level of employment security. This observation, however, deserves deeper analysis because the real situation is not as good as it can be understand from this results. To make this more clear, let's take for example the case of labor market in Korea. Newspapers and some journals reflects the current situation on the labor market releasing articles which deal with the problem of underemployment. They write about the grievances of irregular workers in Korea when they frequently lose their minimum wage jobs or when they are treated like a low-class workers with minimum rights (NYT, 2009). Many cases show that because of an austerity measures of companies during the recent crisis even the experienced and skilled workers had to turn to manual labor and become contracted worker (NYT, 2009). Another thing is that to keep the regular workers were so expensive, employers started focus mainly on this kind of a job contract. In 2003 the OECD released alarming data which showed that Korea's share of temporary workers (almost 25%) is far above either EU15 or OECD average which did not reach even 15% that time (OECD, 2005). On the top of that, the Pacific Affairs (2008) pointed out that despite the

extension of unemployment insurance it is limited in practice and especially irregular workers remain uninsured.

To sum it up, the real labor market situation in Korea is not favorable at all and the employment security is not as good as the analysis says. The results contradicts the reality in the Korean labor market. How is this possible? In my opinion the problem is that in the analysis is not reflected the difference between regular and irregular workers, which is, especially in Korea, important. Non-regular workers can be easily dismissed with almost no obstacles for employers (for example see Cho et al. 2008) . Because unemployed people don't get much benefits (He, Tressel, 2004), it is obvious that they don't even officially report themselves as unemployed but rather find any other badly paid job or they try to work on their own account. Therefore it can be inferred that even if the unemployment rate is quite low, the underemployment (to some extend a "hidden unemployment") is probably much higher. Full time regular employees can have an employment security which is higher than in other comparable regions, but apparently this is not the case of majority of the workers. Therefore I have to conclude that despite the what the chosen indicators showed - that in Asia employment security is rather high - in the reality it is rather low and it holds mainly for the regular workers. I am not saying that other mentioned Asian countries deals with exactly the same problem, but given alike indicators we can infer some similarities.

### **C. Work security**

Unlike the employment security, which is based mainly on the quantitative indicators and reflect the probability of people to keep their job, work security focus more on the qualitative part of the employment relationship. It encompasses working conditions in the company and how they promote worker's well being (ILO). It means that work security measures the quality of working environment and the treatment employees have guaranteed by an employer or by the government.

To display work security I use the index of sickness and health benefits which measures the level of insurance against accidents and illness at work. It includes indicators which measure the qualification needed to be eligible for the benefits, waiting period for these benefits and percentage of worker's salary which is covered by it. Another indicators are focused on the limits on working time. Premium for overtime measures how expensive is the salary for overtime compare to the payments for regular working hours. The last indicator

deals with employees who don't work full time and evaluate how they are treated – indicator measures protection of part-time workers compare to the protection of full time workers.

<b>Table 7 “The work security indicators”</b>			
	Sickness and health benefits index	Premium for overtime index	Protection of part-time workers
<i>Sources:</i>	<i>(WB)</i>	<i>(WB)</i>	<i>(WB)</i>
<b>Hong-Kong</b>	0,91	1	1
<b>Singapore</b>	0,8	1,5	1
<b>Japan</b>	0,54	1,25	0,5
<b>South Korea</b>	0,72	1,5	1
<b>Taiwan</b>	0,75	1,33	1
<b>Malaysia</b>	0	1,5	1
<b>Thailand</b>	0,79	1,5	0,5
<b>Denmark</b>	0,99	1,5	1
<b>Sweden</b>	0,85	1,5	1
<b>Norway</b>	0,94	1,5	0,5
<b>Australia</b>	0,72	1,5	1
<b>New Zealand</b>	0,75	1	1
<b>United Kingdom</b>	0,68	1	1
<b>Germany</b>	0,53	1,25	1
<i>Data sources: for more details and definitions see the Appendix I.</i>			

Looking at the comparative regions, in terms of the insurance against illness and accidents Scandinavia is definitely the most secure country, followed by Pacific countries and then the European states with the lowest level of this index in Germany. In the non-Asian regions the countries show a similar trends but in Asia the results vary a lot. Japan is the example of low insurance level, one of the lowest, while in Hong-Kong there is insurance at the similar level as in Scandinavian region. Also Singapore ranks high and others do not go under the 0,7 which can be regarded as a good security level. The ratio of overtime wage over normal wage is highest in Scandinavia again, in Asia the lowest is Hong-Kong where is no difference between normal and overtime wages since the ratio is 1. Other countries have the ration between 1,2 – 1,5 so also here is not any sign of remarkably low security. Another index shows that in most of the countries part-time workers working half time enjoy at least half of the benefits or legal rights enjoyed by the full time workers (ILO). Only in Japan, Thailand and Norway this index is lower and thus indicate some problems for part-timers. However, measurement of the part-time workers can be difficult due to the different definition of part-

time jobs in each country so neither this index is much useful for the work security assessment. There is also any common trend to find among the countries so we cannot conclude that part-time worker's conditions would differ from region to region.

For the first sight the data indicate that the work security is not a problematic issue in any selected country. The comparative regions shows high level of this security as expected, the only exception can be in UK where is a little bit lower sick and accident insurance and the over time wage ratio is just one. In Asia there is Japan which, based on the indicators, shows little worse work security because of the lowest sick and accident insurance, not large overtime wage ratio and worse conditions for the part-time workers. In general, however, neither significant trend nor serious lack of work security for the regular workers is to find there.

Singapore, South Korea and Hong-Kong are the best ranked countries from Asian region among all selected countries in the analysis. Sweden, Denmark and Australia are the most work-secure countries from the comparative regions. The ranking is distributed evenly, each region includes better and worse levels of work security.

#### **D. Combination security (work-life balance)**

The last type of security reflects the work-life balance. As Wilthagen (2004) defines it, the combination security “enables a worker to combine his or her job with other – notably private – responsibilities and commitments than paid work“. In other words it measures how the work and its conditions affect the life of workers and whether they can save some time to do other activities than their jobs or are fully committed to their work without any time to relax. It measures quality of life, free time and living standard working people can enjoy in certain country.

It is hard to assess such values, but there are some indicators which can help us to get some idea about this type of security. One is the Economic Intelligence Unit's (EIU) index of the quality of life. It is determined by material wellbeing, health, political stability and family and community life. Apparently, well balanced working life have an influence on the quality of most these determinants – higher index thus implies a better combinational security. Next useful indicator in this issue is the number of working hours a year. This speaks for itself, more average hour people spend at work a year, the less balanced their life is. Finally I think it is appropriate to look at the income inequality. Since in the countries where the Gini

coefficient is higher, much more people can suffer from insufficient income and thus they must work harder and barely enjoy balanced working life.

The amount of hours worked a year, however, says nothing about how effective the time spent at work is and whether it brings satisfaction to the worker, or whether it is perceived as a burden. Therefore even those working more hours a year can have better balanced life if the work satisfy their needs and contributes to their quality of life. On the other hand also people who work less number of hours can have worse life-work balance if the work is bothersome or doesn't bring required outcome to the worker.

The combination security actually makes the picture of labor market much more clear. All the comparative regions keeps similar values between its countries which usually reflects high level of work-life balance.

In the first case of quality of life index, the better results are to find in Scandinavia where all three countries offers the highest values. Asian Pacific region is little behind followed by UK and Germany which have worst results out of the non-Asian countries. In Asia the average quality of life index is lower. The best result has Singapore and Japan, then Hong-Kong and Taiwan, other are more behind and the life-quality is the worst in all surveyed countries. South Korea especially lacks behind with the index only 6,9 out of 10.

The next observation is even more apparent. The average number of working hours a year is really issue in Asia. No country from the Pacific and European regions even reach 1800 hours, while in Asia this is minimum. Most of the countries significantly exceed 2000 headed by Korea and Singapore with 2300 hours worked a year. Only Japan is exception with 1772 hours which again makes this country special case in the Asian region, which is in many cases much more closer to the European labor market standards.

Finally we have the Gini coefficient to examine. The result is again quite clear. Scandinavia shows values around 25 – the lowest value and thus the lowest income inequality which, in general, makes pleasant living conditions. Germany is also quite equal. UK with Pacific countries are little worse with coefficients around 36, however, compare to the Asian average it is still acceptable. Japan maintain its trend of living standard close to the Europe when reaches values same as the Scandinavian countries. South Korea and Taiwan are also not bad (31 and 33), but the other countries have rather high income inequality. The worst it is in Hong-Kong, Singapore and Thailand where the coefficient exceeds 42 and thus signs serious disruption among its labor market participants .

<b>Table 8 “The combination security indicators”</b>			
	Quality of life index (EIU)	Annual hours worked per person (OECD)	Income inequality (Gini coefficient)
	<i>(EIU)</i>	<i>(OECD)</i>	<i>(CIA, UN)</i>
<b>Hong-Kong</b>	7,34	2232	43,4
<b>Singapore</b>	7,71	2307	42,5
<b>Japan</b>	7,39	1772	24,9
<b>South Korea</b>	6,87	2316	31,6
<b>Taiwan</b>	7,25	n/a	33
<b>Malaysia</b>	6,6	2244	37,9
<b>Thailand</b>	6,43	2228	42,5
<b>Denmark</b>	7,79	1611	24,7
<b>Sweden</b>	7,93	1625	25
<b>Norway</b>	8,05	1422	25,8
<b>Australia</b>	7,92	1721	35,2
<b>New Zealand</b>	7,43	1753	36,2
<b>United Kingdom</b>	6,91	1653	36
<b>Germany</b>	7,04	1432	28,3

*Data sources: for more details and definitions see the Appendix I.*

The work-life balance appeared to be much worse in Asia than in Europe or Pacific regions. This observation can imply several conclusions. For example that there is no welfare state tradition in Asia as it is in Europe. People are used to work much harder and longer and fast economic development in most countries caused high income inequality. People are also more committed to the company they work at and they spend much more time at work, even though the time effectiveness is questionable. In Europe people values work-life balance more and they used to have different priorities including family or social life apart from the working place. Moreover, gradual development enabled the countries to cope with the income inequality compare to the Asia, where still the economies are rather young and they need time to deal with many problems.

The best ranked Asian country in terms of combination security is Japan (no. 4). The second best is 8<sup>th</sup> Taiwan, 10<sup>th</sup> Singapore and 11<sup>th</sup> Korea – out of total 14 surveyed countries. Therefore this type of security, so far, has not enough space in the Asian labor market.

## **E. Employment status**

The work security indicators reflect in most cases conditions of the regular employees – or the workers with standard contract<sup>18</sup>. However, some serious difficulties with low employment and work security can occur, although the indicators in our analysis show good results. The reason is the share of vulnerable employment. This kind of employees are usually own-account workers and contributing family workers, but very often also workers with irregular job contract<sup>19</sup>. They are more likely to lack elements associated with decent employment, such as adequate social security and a voice and treatment at work (ILO, 2009).

Therefore, in order to assess a real level of security in each country, we have to take into account the share of vulnerable employment which tells us how many workers probably lack sufficient work end employment security. The breakdown of employment status (expressed as a percentage share of total employment in the economy) indicate that in European and Pacific countries the majority of workers are employees receiving salary or wage (regular employees) – almost 90% in all depicted cases. In Asia Japan, Hong Kong and Singapore keep this trend as well, whereas especially Korea is standing little behind with ratio of regular employees lower than 70%. It implies quite high portion of irregular workers compare to other highly developed Asian economies (except for Taiwan) which are more likely to suffer from lower level of social security. Thailand and Malaysia have also very low portion of employees receiving wages and salaries, however, their economic development has not reached the level of leading Asian countries.

The share of vulnerable employment is significantly lower in Europe where it doesn't exceed 10% of total employment, whereas in Asia it is in average around 20%, second highest portion has 25% in Korea and even over 50% can be found in Thailand (ILO, 2009). Except of Hong Kong, Japan and Singapore where the ration is not higher than 11%, it is clear that working conditions and job securities in Asian labor markets are problematic compare to Europe because their portions of workers “in danger” exceed 20% . Especially Korea and Taiwan seems to have big troubles with this issue, despite their high level of economic development. However, looking at the time series since 1997 we can see clear decreasing

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<sup>18</sup> This do not necessarily mean only full time workers. Employees can work also part-time but have a standard contract which includes all benefits such as health and sickness insurance or high severance payment etc.

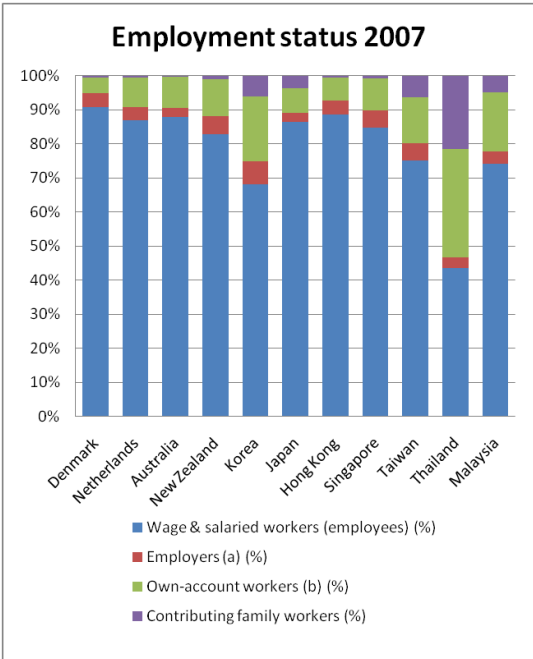
<sup>19</sup> Irregular workers are usually employed by work agencies and thus they are not eligible for employment benefits which firm give to its regular workers. Moreover those workers are paid less since company pay to the agency which deducts some profit before hired worker get his money.



trend in the number of vulnerable workers (ILO, 2009). It could promise further improvement in this issue, but due to the recent financial crisis continue of this trend is hardly to estimate.

Based on this observation, it is clear that the level of security in Asia is not as good as some indicators tells us. Especially in Korea the problem of underemployed people (those with irregular contracts) and people who don't earn as much as they need for covering all necessary living expenses is a big issue. As Jones (2005) mentions, the non-regular Korean workers are paid over 20% less and more than 30% of them are not covered by any kind of social insurance system (2005). Very similar conclusion can be found in the article released by IMF in 2004 which states that wages of regular workers grew over time while the non-regular payments stagnated which caused difference more than 20% in the year 2000 (He & Tressel). What this case indicates is that also in other Asian countries with high level of vulnerable employment many people may experience similar troubles in the labor marketplace.

**Chart 1 “Breakdown of an employment status”**



*Data source: Key indicators of the labor market 6th edition, ILO (2009)*

<b>Table 9 “The share of vulnerable employment”</b>			
	Share of vulnerable employment	Ranking all countries	Ranking Asia
	<i>(% of total employment)</i>		
<b>Hong-Kong</b>	7,1	4	1
<b>Singapore</b>	10,2	7	2
<b>Japan</b>	10,8	9	3
<b>South Korea</b>	25,2	13	6
<b>Taiwan</b>	19,8	11	4
<b>Malaysia</b>	22,3	12	5
<b>Thailand</b>	53,3	14	7
<b>Denmark</b>	5,1	1	
<b>Sweden</b>	6,7	3	
<b>Norway</b>	5,9	2	
<b>Australia</b>	9,3	6	
<b>New Zealand</b>	11,9	10	
<b>United Kingdom</b>	10,5	8	
<b>Germany</b>	7,1	4	
<i>Data source: ILO, OEC ( 2008)</i>			

## VI. Discussion and conclusion

The presented analysis brought us some interesting observations regarding the labor market and its functioning in different world regions. However, reader should not forget that these conclusions are based solely on the preceding analysis and thus only represents one point of view. It does not aspire to be a definite conclusion and it do not eliminate another opinions. It rather offers a alternative standpoint for this issue and possible inspiration for a further research.

Firstly, the overall evaluation of particular types of flexibility shows us that the most flexible labor market among all fourteen countries seems to be in Singapore. However, when assessing the regions, Asia is the one with worst average flexibility among all. The best region in this sense is Asian-Pacific because New Zealand and Australia have the second and third most flexible labor market, in Europe the best is Denmark (rank no. 5) closely followed by other countries. Asian region is diverged into two groups. Singapore together with Hong-Kong (no. 5) and Malaysia (no. 4) belong to the most flexible labor markets, while Japan, Thailand, Korea and Taiwan (respectively) occupy the last places in the whole analysis.

In Asia prevails numerical flexibility and the labor market freedom, while the wage flexibility and employment elasticity is usually not that good. Even better it is in Pacific, where is problem only with the wage flexibility, the other types are ranked the best here. In contrast to this Scandinavia shows the highest level of wage flexibility and also high employment elasticity, but quite bad numerical flexibility and not satisfying labor market freedom. Finally in the last two European countries there is no common trend, they are ranked somewhere in the middle of all the surveyed countries, only Germany shows really good (second best) level of wage flexibility and employment elasticity.

Secondly, the figures shows that the most secure region is Scandinavia where all types of security are ranked the highest. Australia is the 4<sup>th</sup> most secure country which is not in a line with New Zealand which seems to be quite unsecure in the sense of used indicators. Hence the Pacific region from this point of view doesn't show similar trend. European countries are ranked somewhere in the middle, not as secure as Scandinavia however.

In Asia the results are much more diverse. For the first sight the overall security is pretty low, especially the income security seems to be a big problem in this region; all comparative countries are more secure from this standpoint. The work-life balance is also not so good in Asia, only Japan stands significantly apart from this trend. The level of employment and work security seems to be much better, however, we must be aware of the fact that it refers mostly to the regular workers. Therefore Korea, Taiwan, Malaysia and Thailand do not deserve such a good evaluation of these securities because around one quarter (in Thailand more than half!) of all employees are vulnerable in the marketplace and cannot enjoy the work and employment security benefits as much as the regular workers.

Thirdly, as I already mentioned and the analysis supported, the term “labor market flexibility” has many variations due to the influence of numerous factors. It differs from region to region and often also from country to country which belongs to the same geographical and cultural area.

The question whether the Asian labor markets are flexible cannot be answered precisely because of many differences among the selected Asian countries. However, we can find some prevalent tendencies. As the deeper research on the flexibility showed, the external and internal flexibility outweighs in Asia since it is quite easy for employers to adjust the number of workers according to their needs. Nevertheless, in the case of South Korea and Taiwan there are many obstacles in this process concerning the regular employment. Especially in Korea it is costly to dismiss regular full-time employee (Peng, 2010), but on the other hand there is a high share of irregular workers (OECD, 2007)<sup>20</sup> which are so easy to lay off or to lower their wages. Evaluation of the numerical flexibility is not clear cut in these cases. Without including them in the analysis, however, the overall region would show similar trend in the high numerical flexibility. The same problem is with the level of labor market regulations.

Further, almost all countries in Asia demonstrate high level of labor market freedom, apart from Korea and Taiwan which are almost the worst among all scrutinized countries. Compare to the benchmark regions, the wage flexibility and employment elasticity lack behind in the Asian region (except for Singapore and to some extend Malaysia).

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<sup>20</sup> The share of temporary workers (including a fixed-time contract workers, temporary agency workers, on-call workers and those whose contract is not expected to continue due to involuntary reasons) was in 2006 28,8%, the second highest portion among all OECD countries (OECD, 2007).

From the numerical flexibility and labor market regulations point of view it can be inferred that the countries from this region have flexible labor markets. Especially Singapore, Hong-Kong and also Malaysia show the highest level of flexibility in the region and also in the sample of all surveyed countries. However, there are also exemptions such as Korea and Taiwan which indicators ranked them the lowest in the flexibility analysis. On the other hand, in the sense of wage flexibility and employment elasticity the Asian labor markets don't reach as high flexibility as it is in Europe or Australia.

Looking at the security evaluation, the analysis shows that it is not quite well established in the Asian region. Employment and work security might be sufficient in most countries, problem is that it holds mostly for the regular employees and the share of them is in some countries pretty high so the actual security is not as high as it looks like. Thanks to this observation the overall assessment of security is even lower than the numbers illustrate.

The literature (Wilthagen 2002, 2004) defines term flexibility-security nexus as a combination of these two components of labor market where surplus of one complete the absence of the second. There must be some trade-off between the flexibility and security because existence of some means of security (job assurance) require lower relevant flexibility (higher costs of redundancy dismissals). In my analysis I do not search for the specific trade-offs between the flexibility and security, I want to rather show which country has the best results in the both labor market components. The result is quite interesting, however not much surprising. Almost all the countries ranked in the first half are from the other regions than Asia. Australia has the best flexibility-security combination, followed by other European countries and New Zealand. An interesting exception is Singapore, which together with Denmark occupies second place just behind Australia, ahead of other European countries. Singapore is indeed a very special country which is the first best among all in the flexibility and seventh in the security (respectively third in the Asian region). Hong-Kong is second best country in Asia in the overall evaluation ranked 8<sup>th</sup> among all regions. Malaysia is 9<sup>th</sup> just behind H-K, followed by the rest of Asian region. Hence, based on the data outcome it can be said that Asian region, except for Singapore and to some extent Hong-Kong, has not sufficiently balanced labor market in terms of combination of the flexibility and security.

Finally there is a question about some common trend in the Asian labor markets. As one Czech economist wrote, "Asia is for economists the same as the Brazil rainforest for biologists" (Kohout, 2011). There is so much truth on this light parable since the countries in

this region are much more diverse than in the selected comparative areas. We can see many similarities among the Scandinavian countries as well as in the Pacific region. Germany and UK are little bit more diverse, but still as European countries they hold the main trends to a certain extent comparable. Contrariwise, it is really hard to find any common tendency in the labor market environment of the seven Asian representatives.

In the flexibility part of analysis we can only find some resemblance for a particular indicator between a small group of two or three countries. Usually common trend have Singapore and Hong-Kong, sometimes completed with Malaysia or Japan. The first three named represent the most flexible countries in Asia, together with Pacific region they are the most flexible among all. Japan doesn't always have comparable results with them, it is rather a special case, a group in itself. Another group can be found in Korea and Taiwan. These two countries have significantly worse flexibility, both show very similar trends in all the surveyed indicators of flexibility. Thailand sometimes has results closer to Korea and Taiwan, but sometimes is rather more flexible. As well as Japan is hard to assort it to any group.

In the case of labor market security, we can find many more common trends among the Asian countries. The most significant is a share of social and welfare expenditures, which is much lower than in comparative regions. This trend holds for all Asian countries except Japan. Again, this state stands apart from the others and in this special case is much closer to the European trend where this expenditures have double digit percentage share, compare to 1 – 3 % in average for other Asian representatives. Another example of uniqueness of Japan and strong common trend of the rest of region is clearly visible on the life-work balance indicators. In Asia, in general, this combinational security is so low, however, Japan is 4<sup>th</sup> best in the whole sample. Employment and work security is not for the first sight good in Japan, but when taking into account the share of vulnerable employees which is quite low compare to the others in Asian region, Japan doesn't need to have such a low level of these security types in reality.

Based on the presented analysis my paper offers several conclusions which could be helpful for better understanding of the term labor market flexibility and security as well as the specifics of the conception of Asian labor markets.

First of all the analysis supports the initial idea that labor market flexibility has a lot of meanings given by the type of prevailing flexibility and its balance with appropriate security measures. Therefore simply saying that certain labor market is flexible is quite inaccurate and can be misleading when we compare two different countries.

Secondly, despite some local similarities Asian labor markets are very diverse and it is hardly to derive a common trend. Hence any universal Asian-labor-market conception of flexibility doesn't exist. As for the security we can say that there are some specifics hold for whole region, especially a general low level of social expenditures given no tradition of a welfare state.

Thirdly, it is clear that the specific problems with labor market in Asia (as for example the duality in the Korea) is hardly to be solved using an experiences from a different world region. Even though for example in Scandinavia labor market flexicurity system works well, it would be almost impossible to establish in Asia because of the high level of social expenditures. The cultural and economical practices are fundamentally different.

Therefore I think that Asian countries must develop their own concept of labor market which would overcome the current problems. Albeit they can take some examples from Europe, but they must be adjusted into the specific Asian economic and social environment and this alteration might not work as well as in the country of its origin.

This paper showed that the concept of labor market flexibility differs from country to country, from region to region and the composition of its indicators differs in most cases. Thus we cannot generalize the term "flexibility" when characterizing any labor market but we should distinguish its particular type. On the top of that, also security plays an important role - therefore the efficient labor market should keep these both components well balanced.

## **APPENDICES**



## VII. **Appendix A** - Definition of indicators and data sources

### **The share of part-time workers**

“A part-time worker is an employed person whose normal hours of work are less than those of comparable full-time workers than those of comparable full-time workers” (ILO KILM, 2008).

*Source:*

*ILO, Key Indicators of the Labour Market (KILM), 6th edition. ILO, 2008.*

*On-line: [http://www.ilo.org/empelm/what/lang--en/WCMS\\_114240/index.htm](http://www.ilo.org/empelm/what/lang--en/WCMS_114240/index.htm)*

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### **The share of self-employed workers**

“A total sum of employers, self-account workers and contributing family workers – as % of total workers” (ILO KILM, 2008).

*Source:*

*ILO, Key Indicators of the Labour Market (KILM), 6th edition. ILO, 2008.*

*On-line: [http://www.ilo.org/empelm/what/lang--en/WCMS\\_114240/index.htm](http://www.ilo.org/empelm/what/lang--en/WCMS_114240/index.htm)*

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### **Difficulty of hiring index**

“The difficulty of hiring index measures (i) whether fixed-term contracts are prohibited for permanent tasks; (ii) the maximum cumulative duration of fixed-term contracts; and (iii) the ratio of the minimum wage for a trainee or first-time employee to the average value added per worker.<sup>9</sup> An economy is assigned a score of 1 if fixed-term contracts are prohibited for permanent tasks and a score of 0 if they can be used for any task. A score of 1 is assigned if the maximum cumulative duration of fixed-term contracts is less than 3 years; 0.5 if it is 3 years or more but less than 5 years; and 0 if fixed-term contracts can last 5 years or more. Finally, a score of 1 is assigned if the ratio of the minimum wage to the average value added per worker is 0.75 or more; 0.67 for a ratio of 0.50 or more but less than 0.75; 0.33 for a ratio of 0.25 or more but less than 0.50; and 0 for a ratio of less than 0.25. A score of 0 is also assigned if the minimum wage is set by a collective bargaining agreement that applies to less than half the manufacturing sector or does not apply to firms not party to it, or if the minimum wage is set by law but does not apply to workers who are in their apprentice period” (World Bank, 2010).

*Source:*

*The World Bank Doing business survey, 2010,*

*On-line: <http://www.doingbusiness.org/data>*

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### **Dismissal procedures**

“Indicator measures worker protection granted by law or mandatory collective agreements against dismissal. It is the average of the following seven dummy variables which equal one: (1) if the employer must notify a third party before dismissing more than one worker; (2) if the employer needs the approval of a third party prior to dismissing more than one worker; (3)

if the employer must notify a third party before dismissing one redundant worker; (4) if the employer needs the approval of a third party to dismiss one redundant worker; (5) if the employer must provide relocation or retraining alternatives for redundant employees prior to dismissal; (6) if there are priority rules applying to dismissal or lay-offs; and (7) if there are priority rules applying to re-employment” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line:* <http://data.worldbank.org/data-catalog>

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### **Minimum wage**

This indicators shows whether is in the country minimum wage. “A” (0 pt.) is assigned to the country where minimum wage is fixed by an authority; “B” (1 pt.) to the country where it is fixed by collective bargaining; “C” (0,5 pt.) for country where the minimum wage is not available for everyone and “X” (2 pts.) obtains country which has no minimum wage at all. Country with lowest score has the best minimum wage flexibility (ranked as number one) (ILO, 2009; Wikipedia, 2010).

*Sources:*

*Wages and Income: Minimum wage (ILO Travail Database, 2009)*

*On-line:* <http://www.ilo.org/dyn/travail/travmain.home>

*List of minimum wages by country (Wikipedia, 2010);*

*On-line:* [http://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_minimum\\_wage](http://en.wikipedia.org/wiki/List_of_countries_by_minimum_wage)

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### **Variable pay and benefits**

The survey breaks down the total remuneration to the basic compensation, variable pay, benefits and perquisites. The share of variable pay and benefits on the total remuneration shows how big is the flexible component of wages in a country. The share of perquisites is not significant. Indicator is expressed as a percentage share of total remuneration (Towers Perrin, 2006).

*Source:*

*Towers Perrin, Managing global pay and benefits - worldwide total remuneration report, 2006.*

*On-line:*

<http://www.towersperrin.com/tp/getwebcachedoc?webc=HRS/USA/2006/200601/WWTR.pdf>

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### **Employment elasticity**

“The employment elasticity is defined as the average percentage point change in employment for a given employed population group (total, female, male) associated with a 1 percentage point change in output over a selected period” (ILO KILM, 2008).

*Source:*

*ILO, Key Indicators of the Labour Market (KILM), 6th edition. ILO, 2008.*

*On-line:* [http://www.ilo.org/empelm/what/lang--en/WCMS\\_114240/index.htm](http://www.ilo.org/empelm/what/lang--en/WCMS_114240/index.htm)

### **Index of Economic Freedom (Labor market freedom)**

The labor freedom component is a quantitative measure that looks into various aspects of the legal and regulatory framework of a country's labor market. It provides cross-country data on regulations concerning minimum wages; laws inhibiting layoffs; severance requirements; and measurable regulatory burdens on hiring, hours, and so on. Six quantitative factors are equally weighted, with each counted as one-sixth of the labor freedom component: ratio of minimum wage to the average value added per worker, hindrance to hiring additional workers, rigidity of hours, difficulty of firing redundant employees, legally mandated notice period, and mandatory severance pay. Based on data from the World Bank's Doing Business study, these factors specifically examine labor regulations that affect "the hiring and redundancy of workers and the rigidity of working hours" (Heritage Foundation, 2010).

*Source:*

*The Heritage Foundation, Index of Economic Freedom, 2008 - 2010.*

*On-line: <http://www.heritage.org/index/explore>*

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### **Economic Freedom of the World (Labor market regulation)**

The labor market regulations index includes several sub-components. First is **hiring regulations and minimum wage** based on the World Bank's Doing Business survey. Second are **hiring and firing regulations** based on the Global Competitiveness Report's question: "The hiring and firing of workers is impeded by regulations (= 1) or flexibly determined by employers (= 7)." Third is **centralized collective bargaining** based on the Global competitiveness Report's question: "Wages in your country are set by a centralized bargaining process (= 1) or up to each individual company (= 7)." Fourth are **hours regulations** based on the World Bank's Doing Business, Rigidity of Hours Index, which is described as follows: "The rigidity of hours index has 5 components: (i) whether there are restrictions on night work; (ii) whether there are restrictions on weekly holiday work; (iii) whether the work-week can consist of 5.5 days; (iv) whether the work-week can extend to 50 hours or more (including overtime) for 2 months a year to respond to a seasonal increase in production; and (v) whether paid annual vacation is 21 working days or fewer. For questions (i) and (ii), when restrictions other than premiums apply, a score of 1 is given. If the only restriction is a premium for night work and weekly holiday work, a score of 0, 0.33, 0.66, or 1 is given according to the quartile in which the economy's premium falls. If there are no restrictions, the economy receives a score of 0. Fifth are **mandated cost of worker dismissal** based on the World Bank's Doing Business data on the cost of the requirements for advance notice, severance payments, and penalties due when dismissing a redundant worker. And the last sub-component is a **conscription**. Countries with longer conscription periods received lower ratings. A rating of 10 was assigned to countries without military conscription (Frazer Institute, 2008).

*Source:*

*The Frazer institute, Economic Freedom of the World, 2008.*

*On-line: <http://www.freetheworld.com/2008/EconomicFreedomoftheWorld2008.pdf>*

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### **Unemployment benefits**

"Measures the level of unemployment benefits as the average of the following four normalized variables: (1) the number of months of contributions or employment required to qualify for unemployment benefits by law; (2) the percentage of the worker's monthly salary deducted by law to cover unemployment benefits; (3) the waiting period for unemployment

benefits; and (4) the percentage of the net salary covered by the net unemployment benefits in case of a one-year unemployment spell” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line: <http://data.worldbank.org/data-catalog>*

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### **Social security laws index**

“Index measures social security benefits as the average of: (1) Old age, disability and death benefits; (2) Sickness and health benefits; and (3) Unemployment benefits” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line: <http://data.worldbank.org/data-catalog>*

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### **Social security and welfare expenditures (% GDP)**

Data are taken from each country’s breakdown of national (government) expenditures. The number is a sum of expenditures on social security and welfare benefits – the amount of money each government provides for the security of its worker’s income. It is expressed as a percentage of country’s GDP.

*Sources:*

*Asian Development Bank, Database and Development Indicators - Key Indicators, 2010.*

*On-line: <http://www.adb.org/statistics/>*

*Eurostat, Statistical database, 2010.*

*On-line: [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)*

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### **Unemployment rate**

People who do not have a job, who are officially registered as unemployed and who are actively seeking a new work opportunity.

*Sources:*

*OECD, Employment and Labour Market Statistics, 2010.*

*On-line:*

*[http://www.oecd.org/document/48/0,3746,en\\_21571361\\_33915056\\_39095792\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/48/0,3746,en_21571361_33915056_39095792_1_1_1_1,00.html)*

*Asian Development Bank, Database and Development Indicators - Key Indicators, 2010.*

*On-line: <http://www.adb.org/statistics/>*

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### **Protection against dismissal**

“Measures worker protection granted by law or mandatory collective agreements against dismissal. It is the average of the following seven dummy variables which equal one: (1) if the employer must notify a third party before dismissing more than one worker; (2) if the employer needs the approval of a third party prior to dismissing more than one worker; (3) if the employer must notify a third party before dismissing one redundant worker; (4) if the

employer needs the approval of a third party to dismiss one redundant worker; (5) if the employer must provide relocation or retraining alternatives for redundant employees prior to dismissal; (6) if there are priority rules applying to dismissal or lay-offs; and (7) if there are priority rules applying to re-employment” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line:* <http://data.worldbank.org/data-catalog>

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### **The cost of firing workers**

“Measures the cost of firing 20 percent of the firm’s workers (10% are fired for redundancy and 10% without cause). The cost of firing a worker is calculated as the sum of the notice period, severance pay, and any mandatory penalties established by law or mandatory collective agreements for a worker with three years of tenure with the firm. If dismissal is illegal, we set the cost of firing equal to the annual wage. The new wage bill incorporates the normal wage of the remaining workers and the cost of firing workers. The cost of firing workers is computed as the ratio of the new wage bill to the old one” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line:* <http://data.worldbank.org/data-catalog>

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### **Severance pay**

A compulsory pay company must give to the worker who is dismissed in addition to his regular salary. It is expressed as % of annual basic compensation for manufacturing employee.

*Source:*

*Towers Perrin, Managing global pay and benefits - worldwide total remuneration report, 2006.*

*On-line:*

<http://www.towersperrin.com/tp/getwebcachedoc?webc=HRS/USA/2006/200601/WWTR.pdf>

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### **Sickness and health benefits**

“Measures the level of sickness and health benefit as the average of the following four normalized variables: (1) the number of months of contributions or employment required to qualify for sickness benefits by law; (2) the percentage of the worker’s monthly salary deducted by law to cover sickness and health benefits; (3) the waiting period for sickness benefits; and (4) the percentage of the net salary covered by the net sickness cash benefit for a two-month sickness spell” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line:* <http://data.worldbank.org/data-catalog>

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### **Premium for overtime**

“This variable measures the ratio of the overtime wage over the normal wage. The overtime premium is often two tiered which means it pays a certain premium for the first set of overtime hours and a higher premium for each hour thereafter. The threshold between both rates is the maximum number of overtime hours per week that can be worked under the lower premium” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line:* <http://data.worldbank.org/data-catalog>

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### **Protection of part-time workers**

“Measures the protection of part-time workers in the labor law as the average of the preceding two variables (a) Part-time workers are not exempt from mandatory benefits of full-time workers and (b) it is not easier or less costly to terminate part-time workers than full-time workers). It equals one if part-time workers working half time enjoy at least half of the benefits/legal rights enjoyed by the full time workers. Equals zero otherwise” (World Bank, 2005).

*Source:*

*The World Bank Labor dataset, 2005*

*On-line:* <http://data.worldbank.org/data-catalog>

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### **The quality of life index**

“Determinants of the index: 1. Material wellbeing (gdp per person, at ppp in \$. Source: Economist Intelligence Unit); 2. Health (Life expectancy at birth, years. Source: us Census Bureau); 3. Political stability and security (Political stability and security ratings. Source: Economist, Intelligence Unit); 4. Family life (Divorce rate (per 1,000 population), converted into index of 1 (lowest divorce rates) to 5 (highest). Sources: un; Euromonitor); 5. Community life (Dummy variable taking value 1 if country has either high rate of church attendance or trade-union membership; zero otherwise. Sources: ilo; World Values Survey); 6. Climate and geography Latitude, to distinguish between warmer and colder climates. Source: cia World Factbook); 7. Job security (Unemployment rate, %. Sources: Economist Intelligence Unit; ilo.); 8. Political freedom (Average of indices of political and civil liberties. Scale of 1 (completely free) to 7 (unfree). Source: Freedom House)); 9. Gender equality (Ratio of average male and female earnings, latest available)” (EIU, 2005).

*Source:*

*EIU, Human Development Report, 2005.*

*On-line:* [http://www.economist.com/media/pdf/quality\\_of\\_life.pdf](http://www.economist.com/media/pdf/quality_of_life.pdf)

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### **Average number of working hours a year**

*Singapore:*

*Asiaone*

*On-line:* <http://www.asiaone.com/Business/News/My+Money/Story/A1Story20100129-195280.html>

*Hong-Kong, Malaysia and Thailand:*

*ILO, Key indicators of the labour market, 2003), pg. 269.*

*On-line:*

*[http://books.google.com/books?id=rgS0c2VKQaAC&dq=Annual+hours+worked+per+person+malaysia&source=gbs\\_navlinks\\_s](http://books.google.com/books?id=rgS0c2VKQaAC&dq=Annual+hours+worked+per+person+malaysia&source=gbs_navlinks_s)*

*Other countries*

*OECD, Statistical databases, 2008*

*On-line: [http://www.ilo.org/empelm/what/lang--en/WCMS\\_114240/index.htm](http://www.ilo.org/empelm/what/lang--en/WCMS_114240/index.htm)*

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### **Gini coefficient**

“The coefficient which measures income inequality in a country. A value of 0 represents absolute equality, and a value of 100 absolute inequality. Inequality in income or expenditure” (UNDP, 2008; CIA, 2008).

*Sources:*

*UNDP, Human Development Report: Gini index. UNDP, 2008.*

*On-line: <http://hdr.undp.org/en/reports/global/hdr2007-2008/>*

*CIA, The World Factbook: Distribution of family income - Gini index. CIA, 2008.21*

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<sup>21</sup> There are some differences between the UN and CIA Gini indexes, the biggest is in the case of Hong-Kong (43,4 x 53,3), Singapore (42,5 x 48,1) and Japan (24,9 x 38,1). In the case of Taiwan there is only figure provided by CIA.

## VIII. **Appendix B** - The flexibility and security ranking

In order to evaluate the overall level of flexibility and security, each country is assigned a number according to its level appropriate indicator. The best level is assigned number one, the worst is associated with the highest number (usually 14). Number one could be either lowest or highest value of the relevant indicator, depends on its characteristics. For example in the case of “Share of part time workers” the country assigned number one (Australia) has highest share of these workers, while in the case of “Unemployment rate” the number one country has the lowest rate (Thailand). All the particular rankings for each type of flexibility or security are then summarized. This final number represents the overall level of particular flexibility or security type. Obviously, the lowest the ranking sum is, the better level of flexibility or security country has. Finally is the summarized ranking evaluated again and the result is overall level of flexibility or security. Tables offer ranking of all countries as well as the Asian region ranking only. The rankings are also expressed by a different shades of a green color – solid green stands for the number one ranking while the pale color indicates the worst level of each indicator.

The purpose of this entire analysis is to sketch a rough picture of the labor market in each country according to my best understanding of this issue. It doesn't aspire to offer an accurate and definite results and it can be in contradiction with some other researches which used different methodology and procedure. I am also aware of some level of simplification in this analysis, however, the main intent is not to put each indicator under a rigorous scrutiny but to catch the core trend in the particular labor market.



1. Numerical flexibility ranking							
	Share of part-time workers (2008)	Difficulty of hiring index	Protection against dismissal	Rigidity of working hours	Flexibility ranking sum	Total ranking all countries	Total ranking Asia
Hong-Kong	11	1	1	1	14	4	3
Singapore	10	1	1	1	13	3	2
Japan	6	6	1	7	20	6	4
South Korea	9	12	9	11	41	12	7
Taiwan	5	14	5	8	32	10	6
Malaysia	5	1	1	1	8	1	1
Thailand	5	9	9	1	24	8	5
Denmark	7	1	9	8	25	9	
Sweden	8	9	13	11	41	12	
Norway	5	13	13	11	42	14	
Australia	1	1	5	1	8	1	
New Zealand	3	6	5	1	15	5	
United Kingdom	2	6	5	8	21	7	
Germany	4	9	12	14	39	11	

2. Income flexibility ranking					
	Minimum wage settings**	Variable pay and benefits as % of total salary	Flexibility ranking sum	Total ranking all countries	Total ranking Asia
Hong-Kong	6	13	19	12	5
Singapore	1	1	2	1	1
Japan	7	12	19	12	5
South Korea	7	6	13	8	3
Taiwan	7	14	21	14	7
Malaysia	7	4	11	6	2
Thailand	7	7	14	9	4
Denmark	2	7	9	4	
Sweden	2	3	5	3	
Norway	2	7	9	4	
Australia	7	11	18	11	
New Zealand	7	7	14	9	
United Kingdom	7	5	12	7	
Germany	2	1	3	2	

3. Employment elasticity ranking		
	Total ranking all countries	Total ranking Asia
Hong-Kong	10	4
Singapore	5	1
Japan	14	7
South Korea	12	5
Taiwan	8	3
Malaysia	7	2
Thailand	13	6
Denmark	9	
Sweden	6	
Norway	3	
Australia	4	
New Zealand	1	
United Kingdom	11	
Germany	2	

4. Labor freedom regulations ranking					
	IEF 2008	EFW 2008	Flexibility ranking sum	Total ranking all countries	Total ranking Asia
Hong-Kong	5	1	6	1	1
Singapore	2	6	8	4	2
Japan	6	4	10	6	3
South Korea	11	13	24	12	6
Taiwan	13	12	25	13	7
Malaysia	9	7	16	8	4
Thailand	8	9	17	9	5
Denmark	1	8	9	5	
Sweden	10	10	20	10	
Norway	12	11	23	11	
Australia	3	3	6	1	
New Zealand	4	2	6	1	
United Kingdom	7	5	12	7	
Germany	14	14	28	14	

1. Income security ranking						
	Unemployment benefits	Social security laws index	Social security and welfare expenditures (%GDP)	Flexibility ranking sum	Total ranking all countries	Total ranking Asia
Hong-Kong	10	4	10	24	8	2
Singapore	12	13	11	36	12	5
Japan	8	11	6	25	9	3
South Korea	9	9	9	27	11	4
Taiwan	3	6	11	20	7	1
Malaysia	12	14	14	40	14	7
Thailand	12	12	13	37	13	6
Denmark	5	1	1	7	2	
Sweden	1	2	2	5	1	
Norway	4	3	5	12	3	
Australia	2	5	8	15	4	
New Zealand	11	7	7	25	9	
United Kingdom	7	8	4	19	6	
Germany	5	10	3	18	5	

2. Employment security ranking						
	Unemployment rate (2009)	Law protection against dismissal	Cost of firing workers	Flexibility ranking sum	Total ranking all countries	Total ranking Asia
Hong-Kong	7	11	12	30	12	6
Singapore	5	11	4	20	5	4
Japan	6	11	13	30	12	6
South Korea	4	4	2	10	3	2
Taiwan	9	7	3	19	4	3
Malaysia	3	11	11	25	9	5
Thailand	1	4	1	6	1	1
Denmark	9	4	8	21	8	
Sweden	14	1	5	20	5	
Norway	2	1	5	8	2	
Australia	8	7	5	20	5	
New Zealand	11	7	14	32	14	
United Kingdom	12	7	9	28	11	
Germany	12	3	10	25	9	

3. Work security ranking						
	Insurance against accidents and illness	Ratio of overtime wage over normal wage	Protection of part-time workers	Flexibility ranking sum	Total ranking all countries	Total ranking Asia
Hong-Kong	3	12	1	16	7	3
Singapore	5	1	1	7	3	1
Japan	12	10	12	34	14	7
South Korea	9	1	1	11	4	2
Taiwan	7	9	1	17	9	5
Malaysia	14	1	1	16	7	3
Thailand	6	1	12	19	10	6
Denmark	1	1	1	3	1	
Sweden	4	1	1	6	2	
Norway	2	1	12	15	6	
Australia	9	1	1	11	4	
New Zealand	7	12	1	20	11	
United Kingdom	11	12	1	24	12	
Germany	13	10	1	24	12	

4. Combination security ranking						
	Quality of life index (EIU)	Annual hours worked per person (OECD)	Income inequality (Gini coefficient)	Flexibility ranking sum	Total ranking all countries	Total ranking Asia
Hong-Kong	8	11	14	33	12	5
Singapore	5	13	12	30	10	3
Japan	7	8	2	17	4	1
South Korea	12	14	6	32	11	4
Taiwan	9	9	7	25	8	2
Malaysia	13	12	11	36	13	6
Thailand	14	10	12	36	13	6
Denmark	4	3	1	8	2	
Sweden	2	4	3	9	3	
Norway	1	1	4	6	1	
Australia	3	6	8	17	4	
New Zealand	6	7	10	23	7	
United Kingdom	11	5	9	25	8	
Germany	10	2	5	17	4	

5. Vulnerable employment share ranking		
	Total ranking all countries	Total ranking Asia
Hong-Kong	4	1
Singapore	7	2
Japan	9	3
South Korea	13	6
Taiwan	11	4
Malaysia	12	5
Thailand	14	7
Denmark	1	
Sweden	3	
Norway	2	
Australia	6	
New Zealand	10	
United Kingdom	8	
Germany	4	

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