

The Tendency of Unemployment with Several Elements in Labour Market Institutions

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Abstract- Labour market institutions facilitate the arrangement of employment quality and working conditions that can influence the trend in employment and unemployment, thus, the elements regulated in labour market institutions are often contentious in public policy areas. Since unemployment can be jeopardised, the arrangement of effective and efficient policies in labour market institutions should prevent its growth. Hence, it is necessary to analyse the tendency of unemployment by the existence of several elements of labour market institutions such as the unemployment benefits system, collective bargaining, employment protection, and minimum wages. This takes into account whether there is a different tendency when comparing emerging and advanced economies. Moreover, the study also includes some factors outside labour market institutions to complement the analysis known as non-institutional factors consisting of macroeconomic variables such as GDP growth, exchange rates, and inflation and other relevant factors such as corporate tax and population growth. The study is analysed descriptively using cross-tabulation from thirty-two countries. The findings indicate that countries that have more generous unemployment benefits, higher collective bargaining coverage rates, minimum wage, inflation rates, corporate tax, and population growth tend to have higher unemployment rates. Meanwhile, countries tend to hold a lower unemployment rate with stricter employment protection legislation, a weak exchange rate of domestic currency, and higher GDP growth. Meanwhile, there are no different trends based on country economy comparison except for collective bargaining, employment protection legislation, and inflation.

Keywords – unemployment, labour market institutions, non-institutional factors

I. INTRODUCTION

Labour market institutions are thought to consist of policy interventions influencing how wages and employment in the market are determined as in [1]. Through the unemployment benefits system, collective bargaining, employment protection, minimum wages, active labour market programs, and labour taxation, it facilitates the configuration of employment quality through decent wages and working conditions and assists those who are incapable to get a job. Many works of literature have found that they relate to employment and unemployment issues. Consequently, the elements regulated in labour market institutions are often contentious in public policy areas. When discussing unemployment, it can be said that unemployment is one jeopardising problem for the economy both at macro and micro levels. It leads to down output at the macro level, thus, decreasing national prosperity and concurrently rising poverty. Hereafter, it prompts the reduction of subjective well-being and stimulates unfavourable effects on individual psychology, possibly encouraging pathological behaviour that may spill over to others ([2]-

[3]). Therefore, the arrangement of policies in labour market institutions is continuously proposed to boost employment and working quality, lessen unemployment, as well as to secure employees and the unemployed effectively and efficiently. The existence of the unemployment benefits system helps to give income protection enabling the unemployed to sustain a decent living standard while looking for a new job that concurrently, could encourage participation in the labour force as well as augment the rate in the job search as in [4].

This might be because activation measures in that system assist the unemployed in returning to work, thus, afterwards, promoting less unemployment. More advantageous, this system helps in preventing poverty and even reducing the crisis's duration and severity, especially when other government incentives supplement it as in [5]. Collective bargaining promotes successful working quality and has very considerable standing in wage determination since it encourages a strong bond between workers and employers. More precisely, it could ply pressure on wage augmentation which on top of the

market equilibrium level that useful for averting the poverty of the workers and advancing their productivity. Employment protection legislation designates restrictions to safeguard workers against discharges by prohibiting firms from terminating workers arbitrarily. As a result, to a certain degree, this element impacts the labour demand in the market as well as lessens turnover leading to a drop in unemployment as in [6]. The last element, legislation on minimum wage allows no employer shall remunerate workers less than a certain minimum salary, accordingly, making a higher real wage as in [7]. Despite the advantageous goal, empirical findings suggest that those elements determine the unemployment rate. On the one hand, some results suggest that all these elements increase unemployment, on the other hand, other literature finds the opposite outcomes.

The unemployment benefits system, indeed, secures the unemployed against deficiency and enhances employment as in [4], nevertheless, it can cause moral hazard behaviour that increases the reservation wage, thus, affecting the incentives for returning to work. If the real income offered in a new job is low while at the same time the unemployed are provided with generous benefits, disincentives for working are depressed because individuals prefer a higher wage to return to employment as in [8]. In other words, they remain unemployed until finding another job while receiving benefits. As for collective bargaining, a study indicates that it expands unemployment, particularly when the bargaining is less coordinated as in [9], while another finds the contradictory conclusion that it diminishes the unemployment rate as in [10].

Then, when employment protection is legislated strictly, it could come out of more unemployment as in [6]. References [11] and [12], meanwhile, found otherwise. Lastly, the minimum wage has a positive relationship with unemployment as in [29]. In contrast to a study where the minimum wage reduces the unemployment rate significantly as in [10]. Hence, all the gaps are the reasons why this study turns out to be more valuable.

Furthermore, although the topics about labour market institutions have been studied extensively in advanced economies, however, they are under-researched in emerging economies simply because most such countries still do not have an unemployment benefits system. Therefore, it is necessary the analysis involving emerging economies. Likewise, to complement the analysis, non-institutional factors or variables outside labour market institutions should be taken into account, consisting of macroeconomic variables such as GDP growth, exchange rates, and inflation and other relevant factors such as corporate tax and population growth.

Theoretically, inflation has a reverse relationship with unemployment according to the Phillips curve as also been revealed by some previous research as in ([13], [14]), nevertheless, reference [15] found that inflation creates higher unemployment. A higher exchange rate means domestic currency depreciation can boost more output exported causing demand for labour to rise, hence, unemployment decreases as in ([14], [16]). A higher GDP growth reduces unemployment as suggested by Okun's Law as in ([15], [16]). A higher corporate tax can reduce profitability and investment, thus, decreasing employment while rising unemployment levels as in ([17]). Population growth allows for the addition of people to the labour force which could degenerate the unemployment condition if the growth is not backed up by sufficient career chances, or by way of this explanation, population growth stimulates more unemployment as in ([15], [16]).

Ultimately, this study strives to respond to two research questions. First, how is the tendency of unemployment with several elements in labour market institutions? Are there any differences in variable trends when comparing advanced and emerging economies? By doing so, the conclusions developed from this study can furnish policies recommendation to decision-makers, in particular, in optimising the undertaking of some elements in labour market institutions and managing the measures tackling unemployment, especially in emerging countries.

II. METHODS

1. Samples and Data Collection

This study uses secondary datasets for the year 2018 from thirty-two countries that have implemented unemployment benefits systems (11 emerging economies and 21 advanced economies). The data are gathered in 2022 from several sources including the World Bank, OECD, ISSA, ILOSTAT, ILO-Eplex, and a report about minimum wage from ILO in 2020. As for the definition used, unemployment is represented by the unemployment rate as defined by the World bank.

The unemployment benefits system reflects its generosity represented by the average replacement rate within 6 months. Collective bargaining is illustrated by its coverage rate as the share of employees protected by one or more collective agreements. The minimum wage is reflected by the legislation on minimum wage consisting of statutory and no statutory legislation. The strictness of employment protection legislation employs the composite indicator provided by ILO-Eplex that is multiplied by 100. The exchange rate represents the annual nominal exchange rate (domestic currency/U.S. dollar). The inflation rate represents the annual price change as measured with the GDP deflator. GDP growth represents the real GDP growth (which is gross value added at constant 2015 prices). Population growth is measured as

the exponential rate of midyear population growth from year $t-1$ to t . All variables are in percentage except for minimum wages which are already categorical.

2. Analysis Method

To figure out the tendency of unemployment influenced by several elements in labour market institutions, data were analysed descriptively by using cross-tabulation. Cross tabulation is a powerful tool to make sense of data because it can reveal the distribution of data, relations of possibilities with one another, or their correlation. It summarizes the frequency of observed categorical data into a table (either raw or proportional) that fits by certain classifications indicating qualitative properties that enable the categorization into nominal categories as in [30]. These variables typically deal with discrete data that occasionally fixed, unordered values, with each likely defined as a “level.”

Since all variables are nominal except for minimum wage, to convert continuous data collected to be categorical, the characteristics of each variable are first determined by reflecting the standard values delivered by the relevant literature. For unemployment, the standard rate assumed as the ideal unemployment rate is when the value ranges from 4 to 5 per cent as in [18]. This range is specified with the assumption that unemployment befalls when an economy obtains full employment. This indicates that all measures taken in the economy would furnish employment to individuals who are prepared and keen to labour, in other words, this also expressed as the most down the unemployment rate. Also, in other conditions, the unemployment rate exists when inflation can be preserved stable, or with non-accelerating inflation, and could decline widespread poverty.

For unemployment benefits, the basis is the optimal rate of replacement rate provided in the system that prevents disincentives to return to work and poverty out of work. The benefits that should be paid to the unemployed for up to six months is around 50 per cent of the previous income as in [18]. Collective bargaining is a crucial element in the labour market. It is needed as a means for labour unions and employers (or employers' organizations) to negotiate, for instance, in social dialogue. Bargaining promotes negotiations fairly and transparently which are necessary to construct fruitful decisions for all related parties. Through collective bargaining, labour disputes can be dissuaded, and decent work can be achieved through wage determination as well as employment matters. For this study, the collective bargaining coverage rate is used because it represents how many workers are covered by the collective agreements to measure to what extent collective bargaining is performed. A higher coverage rate should result in more employment quality. Since the literature does not depict

the baseline for this rate, however, the study uses the average collective bargaining coverage rate worldwide. Next, the basis for employment protection legislation scaled from 0 to 1 refers to the index supplied by the ILO as in [20]. The baseline standard determined for this study is 0.5. With this scale, written regulations in each sample are mostly available that represent more stringent legislations exist. On the minimum wage, the characteristic refers to two degrees, first, minimum wages are regulated through statutory legislation, and second, no statutory legislation on minimum wage exists in labour market institutions as in [21].

In macroeconomic variables, the categorisation of the exchange rate is according to the power of domestic currency if compared to foreign currency, U.S. dollars. The domestic currency is categorised as strong when it is worth more than U.S. dollars – in other words, if the conversion of U.S. dollars to the domestic currency is less than 1, the domestic currency would be much more powerful than the dollar, otherwise, it would be cheaper or weak. Then, the base for inflation reflects the top target for inflation rate fixed by the Federal Reserve, which is 2 per cent as in [22]. A more elevated inflation rate might downsize the public's capability to construct accurate economy and financial decisions by all corresponding actors, in contrast, a more downward rate would impact in the high possibility of falling into deflation which might direct to particularly delicate economic statuses. Retaining at least a slight inflation propels the economy will undergo a less detrimental deflation effect during fragile economic events.

Hence, the 2 per cent mark strives to maintain the general rise in the price level and boost economic resilience. For GDP growth, the category is according to the proliferation of the 2017 to 2018 real GDP. And since there is no definitive growth rate, the study utilizes the world average growth in 2018 as a basis. Meanwhile, the corporate tax is categorised based on its optimal condition, equivalent to 10 per cent as in [23].

This rate allows the governance to maintain neutrality in revenue, and without growing tax burdens, thus, the maximization of welfare would be more optimal obtained. As for population growth, it is associated with the net reproductive rate (r) value which is also used for the characterisation as in [24]. The value in percentage reflects the growth of the population after calculating the rate of births and deaths. When death and birth rates are balanced if $r = 0$, population growth is classified as stationary or with zero growth. When the birth rate is less or $r < 0$, population growth is classified as a decline or with negative growth. Lastly, when the birth rate is higher or $r > 0$, population growth is classified as positive growth.

III. RESULTS AND DISCUSSIONS

Table I illustrates that countries in emerging and advanced economies tend to have high unemployment rates, relatively generous unemployment benefits systems and heightened population growth, and all of the countries set the corporate tax higher than the optimal level. Thereby, no substantial disparity can be approximated between these two economic groups by considering those three variables. Meanwhile, employment protection legislation is relatively stringent in emerging compared to advanced economies, and collective bargaining coverage is more down in emerging economies. Regarding the distribution of data in these two elements of labour market institution, emerging economies may be indicated likely to have a lower unemployment rate.

Table I: Data Distributions Based on Countries' Economy

Variables	Emerging		Advanced		N
	N	%	n	%	
Unemployment rate					
Low	2	18.2	4	19.1	6
Ideal	3	27.3	5	23.8	8
High	6	54.6	12	57.1	18
Unemployment benefits					
Low	4	36.4	6	28.6	10
Ideal	2	18.2	0	0	2
Generous	5	45.5	15	71.4	20
Collective bargaining					
Low	10	90.9	7	33.3	17
High	1	9.1	14	66.7	15
Employment protection legislation					
Less strict	5	45.5	21	84.0	26
Strict	6	54.6	4	16.0	10
Minimum wage growth					
No statutory	1	9.1	7	33.3	8
Statutory	10	90.9	14	66.7	24
Inflation					
Low	1	9.1	14	66.7	15
High	10	90.9	7	33.3	17
Exchange rate					
Weak	11	100	7	33.3	18
Strong	0	0	14	66.7	14
Real GDP					
Low	4	36.4	17	80.9	21
High	7	63.6	4	19.1	11
Corporate tax					
Optimal	0	0	0	0	0
High	11	100	21	100	32
Population growth					
Decline	3	27.3	4	19.1	7
Stationary	0	0	0	0.0	0
Grow	8	72.7	17	80.9	25

In macroeconomic variables, advanced economies tend to have inflation rates that are relatively lower than

emerging groups. Also, the exchange rates of countries in that economy are more powerful than emerging groups indicating they have more stable economies which are important to handle the labour market. Meanwhile, regardless of the fact that advanced economies have real GDP, which is much larger than in other groups, their GDP growth is much more down. First, this phenomenon can be driven by the consequence of marginal return diminishing. Advanced economies have either more physical capital or better human capital. They also have the leading technology. As a result, they can be owning more output than emerging economies. However, the more those countries invest, the less the amount acquired from the investment and returns on capital investments are not as large as would be in emerging economies. Furthermore, over time, emerging economies tend to replicate the methods, technologies, and even institutions (e.g. for production) applied in advanced economies, therefore, they may also undergo more rapid growth.

Table II: Data Distributions of Independent Variables Compared to Unemployment

Variables	Unemployment rates						N
	Low		Ideal		High		
	n	%	n	%	n	%	
Unemployment benefits							
Low	1	3.1	5	15.6	4	12.5	10
Ideal	1	3.1	0	0.0	1	3.1	2
Generous	4	12.5	3	9.4	13	40.6	20
Collective bargaining							
Low	3	9.4	7	21.9	7	21.9	17
High	3	9.4	1	3.1	11	34.4	15
Employment protection legislation							
Less strict	4	12.5	5	15.6	13	40.6	22
Strict	2	6.3	3	9.4	5	15.6	10
Minimum wage growth							
No statutory	1	3.1	2	6.3	5	15.6	8
Statutory	5	15.7	6	18.7	13	40.6	24
Inflation							
Low	3	9.4	4	12.5	8	25.0	15
High	3	9.4	4	12.5	10	31.3	17
Exchange rate							
Weak	4	13	5	16	9	28	18
Strong	2	6	3	9	9	28	14
Real GDP							
Low	4	12.5	5	15.6	12	37.5	21
High	2	6.3	3	9.4	6	18.8	11
Corporate tax							
Optimal	0	0	0	0	0	0	0
High	6	19	8	25	18	56	32
Population growth							
Decline	1	3.1	3	9.4	3	9.4	7
Stationary	0	0.0	0	0.0	0	0.0	0
Grow	5	15.6	5	15.6	15	46.9	25

Table II displays the tendency of independent variables to influence unemployment based on data distributions. According to the data, the tendency of unemployment rate in countries which have more generous unemployment benefits, higher collective bargaining coverage rates, and minimum wage, is high. Meanwhile, the stricter the employment protection legislation, the lower the unemployment rate. Thus, the tendencies of all labour market institutions are consistent with previous literature as in ([6], [10], [11]).

For macroeconomic variables, countries with higher inflation rates tend to have more unemployment which is indeed consistent with the literature, however, in contrast with the initial prediction. This can be impacted by several reasons. First, the moderately heightened prices of global oil emerged in several countries in the year 2018 or can be tagged as a supply shock. This shock might provoke cost-push inflation that forms the prices of other commodities become more expensive. As the price is higher, this would associate with less quantity to be made in production, then, causing less demand for labour, and roughly high unemployment. This also matters in several countries with high unemployment rates such as Egypt and Turkiye as in ([25], [26]). Second, the relationship and inflation in this study can be also explained theoretically by the phenomena of the money supply. The price rising would prompt an increase in money demand and as a consequence, interest rates upsurge rendering the fall of investment.

This reduction encourages the decrease of job chances, thus, creating more unemployment as in [27]. As for the exchange rate, a high unemployment rate can be caused by whether the domestic currency is weak or strong compared to a foreign country. Yet, if see the data thoroughly, countries that have weak domestic currency have relatively low unemployment rates than countries with strong domestic currency, hence, the results of domestic currency are still consistent as in [14]. Then, the higher the GDP growth, the lower the unemployment rate, consistent with previous findings as in ([15], [16]). The rationale is that more growth will boost more production that requires more workers involved, therefore, it can absorb people in the labour force, which can reduce unemployment. Other factors, corporate tax and population growth tend to boost unemployment when it is relatively high, in line with the previous studies as in ([16], [17]).

IV. IMPLICATION

Based on the results discussed in the previous section, countries with generous unemployment benefits systems have a tendency to have high unemployment. This implies that keeping relatively low benefits is exceedingly necessary. However, benefits should sufficiently sustain the unemployed during their effort to fund a new job.

Reference [19] states that the standard of benefits is 50 per cent for up to six months. Since not all countries apply this suggestion, for this reason, it is necessary to set a regular evaluation of the benefits, for instance, per two years, especially for emerging countries which are rather new to implementing the system. Correspondingly, to guarantee that all the unemployed will not remain jobless, some eligibility criteria and other conditions should be arranged, for instance, set a mandatory requirement for the unemployed to participate in activation measures that are also provided by the system. By doing so, the expected result is they are more motivated to return to work as quickly as possible.

Collective bargaining may generate more unemployment rate when it is high. Reference [9] exposes that more coordinated bargaining results in higher employment and lower unemployment. In other words, to ameliorate collective bargaining, the unfavourable outcome should be prevented by taking into account the presence of coordination. Then, the more stringent employment protection legislation likely reduces unemployment. This means that the configuration of stricter legislation is necessary. Still, the monitoring process should be taken into account, for instance, by ensuring the compliance of the employers or firms towards the legislation set to mitigate undesired consequences.

The implications of the results in macroeconomic variables are as follows. First, a higher inflation rate leads to more unemployment. However, the most important thing is to maintain the stabilisation of price changes. For this goal, lessening imports quantity of energy sources is necessary, especially oil as the power source. This can be through the substitution with other energy sources, for instance, biodiesel or by considering developing other renewable energies. As for monetary policy, it is necessary to be more careful to determine monetary policy. This is important to prevent the decline of investment, which can negatively impact the labour market situation. Regarding the exchange rate, the result suggests that a weak domestic country portrays is necessary for the domestic currency depreciates, thus, it will fall the unemployment rate. Nevertheless, this does not mean that depreciating domestic currency is a sound decision, in contrast, it should be efforted appreciated or strengthened, so the country could compete internationally.

In other words, instead of depreciation, the appreciation of domestic currency should be the foremost purpose. Therefore, appropriate measures to produce more output along with the aim of domestic currency appreciation should be set to handle unemployment. This, on the one hand, is by preserving the demand of foreign countries for domestic products to be exported, for instance, by investigating the prerequisites of foreign countries' criteria for domestic products and providing qualified

products simultaneously. On the other hand, the consumption of local residents for domestic products should also be encouraged while the demand for imported goods and services from abroad should be declined to still maintain output. Also, steps are required to raise foreign exchange reserves, for instance, by raising the number of foreign tourists. With all those plans, production will increase, hence, unemployment would reduce.

For other factors, a high rate of corporate tax tends to have a positive relationship with unemployment. This can be explained by the result in previous literature that suggests that corporate tax is linked with the reduction in corporate investment, foreign direct investment, aggregate growth, and innovation. In other words, a reasonable tax for a corporation should be determined more carefully (not too high), thus, the tax can still grow the investment that is essential. It would contribute to economic growth as a whole and job prospects which help to reduce unemployment. As for the last substance, high population growth tends to have a negative impact on the economy. If the growth of the population is not counterbalanced with human capital, the availability of sufficient public means, or without sound possibilities for employment, the growth will result in damaging outcomes such as poverty and unemployment. Thereby, control of population growth and job prospects should be taken.

V. CONCLUSION

The study is only analysed descriptively to see the tendency of unemployment influenced by some elements in labour market institutions. However, using this method may lead to not insignificant results, or, the outcomes may not be meaningful. The reason is that there is no certainty that the tendency of the dependent variable can be precisely explained by the effects of independent variables if each analysis is restricted to only two variables (Thrane 2023). Hence, further research employing better analysis methods such as regression is required to obtain more reliable results. In addition, since the unemployment benefits system has recently been booming in several emerging countries, it is necessary to look at the trends in such countries. The availability of activation measures in the unemployment benefits system should facilitate integration into jobs more quickly, causing the reduction of unemployment. Therefore, by comparing those with the unemployment benefits system and those without the system, emerging economies can consider implementing the unemployment benefits system which will be more important when encountering crises.

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