Time of Globalization: Union Density and Labour Market Flexibility

Stefan Tasić¹

Abstract

This paper explores the relationship between globalization and the decline in union density, as well as analysing the relation between these two variables conditioned on labour market flexibility. The argument is that globalization affected the decline in union density and that the effects of this mechanism might vary due to labour market flexibility. Labour market flexibility that includes increased uncertainty of job positions and more flexible employment contracts made it harder for labour to organize successfully. By applying OLS regression I came up with the results that globalization negatively affects union density, but this relationship is mitigated by the lower level of labour market flexibility. The structure of the paper proceeds as follows: in the first part I revise existing literature and offer a theoretical framework. The next part relates to methodology and empirical approach. The last part consists of a discussion, limitations and concluding remarks.

Keywords

globalization, union density, labour market flexibility

Stefan Tasić is a Master student of Political Science at University of Mannheim in Germany. Contact: stasic@mail.uni-mannheim.de

Introduction

"At any rate, the lesson from history seems to be that continued globalization cannot be taken for granted. If its consequences are not managed wisely and creatively, a retreat from openness becomes a distinct possibility." — Dani Rodrik (1997), Has Globalization Gone Too Far?

Before the 1980s the word *globalization* was not very popular and was not used as frequently as it is today, be it within the academic community or within the public sphere in general. However, around the 1980s the process of globalization was started – a process that represented political, economic, cultural and social connections between different points of the world. The economic dimension of this process includes economic integration and introduction of a global market (Guttal, 2007). Nowadays this term is widely discussed from different perspectives as well as analysed and criticized from different points of the ideological spectrum. Since the beginning it has been attracting the attention of many actors, scholars and institutions coming from different backgrounds who tried to interpret and explain globalization processes.

The political and economic importance of labour unions has proven to be of great significance when it comes to workers' rights and interests. The globalization zeitgeist did not bypass labour unions as a socio-economic category. Many scholars explored how and if globalization affects labour unions (e.g Drehet & Gaston, 2007; Spilerman, 2009; RoyChowdhury, 2004; Hessami & Baskaran, 2013, etc.). The results delivered by different research projects show contrasting signs. However, the overall impression is that emphasis was often on the global picture, while the effect of endogenous factors and domestic institutions was somehow neglected.

The focus of the research on the relationship of globalization and labour union density mostly concentrated on the general relationship between these two variables. The aim of this paper is to fill the literature gap related to this field by including the domestic category of labour market flexibility. Scholars mostly neglected intermediate factors, such as the level of flexibility of the labour market. The main research question I will try to answer is: What is the relationship between globalization and union density conditional on labour market flexibility? I argue that globalization

has affected labour unions in a way that has weakened them, and that the exclusion of intermediate factors leads to a problem of simplification.

The theoretical puzzle of this paper consists of two key parts which are correlated to one another: (1) *How globalization affects the decline in union density* and (2) *How the level of labour market flexibility affects this relationship*. At a glance, the literature review of this field shows that this particular topic is underdeveloped. Labour unions have always been attractive to social scientists, and particularly in the time of globalization. Their importance is multidimensional, ranging from changes in unionisation rates (e.g. Schmitt & Mitukiewicz, 2012) through collective bargaining (e.g. Gaston, 2002) to the relationship between trade unions and income inequality (e.g. Checchi et al, 2006). I will be testing this relationship by using quantitative methods and OLS regression. This will give a new dimension to the existing literature.

Literature Review

Globalization has a few perspectives, so it is no wonder that it drives changes and that it has created new conditions in social, political, economic and cultural spheres (Garret, 1998; Nepgen, 2008). It can be considered as a form of capitalist expansion that has established the global market (Guttal, 2007). Spilerman (2008) notes that for some globalization refers to driving forces that will reduce poverty and increase living standards in the whole world, while others see it as a phenomenon that is used by developed states and multinational corporations in order to exploit politically and economically weak countries.

Economic globalization is a significant piece in this puzzle. It can be defined as "the long distance flow of capital, goods and services as well as information and perceptions that accompany market exchanges" (Keohane & Nye, 2008: 106). It is also a process that goes beyond national boundaries and integrates national economies (Norris, 2004). Keohane and Nye (2008) argue further that processes such as information, people, armies and economic flows are connected in a way that the last two are followed by the first two and in this way bring changes to societies and markets.

On the other hand, trade unions can be defined as organizations that represents workers' interests through solidarity and that are based on membership (Nepgen, 2008). It seems to be a

conventional wisdom that globalization weakened organized labour movements through domestic effects caused by integration of national economies into the global market, but some quantitative data opposes this view (Garret, 1998). As Nepgen (2008: 3) argues, globalization with newly created conditions made it "increasingly difficult for labour unions to function in traditional ways". Changes that occurred as a consequence of globalization processes have led to further diversification of labour unions and in this way increased the "uncertainty and helplessness of unions" (Nepgen, 2008: 39).

Since 1980 there have been two evident trends: the process of globalization measured by the multidimensional KOF index that has been continuously increasing and the decline in labour union density during the same period. The only period with small reversals was the post-2007 financial crisis period (Hessami & Baskaran, 2013) in which "economic globalization has slightly declined and union density rates have risen" (Hessami & Baskaran, 2013: 1). These authors argue that workers choose rationally whether to become members of unions and the declining trend shows that globalization has led to negative perception of labour of gains-costs from the union membership.

As stated by Dreher (2007), there was a convergent pattern in the decrease of union density during the 1980s. Furthermore, the decline in unionisation was most severe in English-speaking countries. There, the decline in the union membership rate was documented by 5 points in the United Kingdom, by 12 points in Australia and by 10 points in Ireland and the United States. One of the explanations for this could be that long-term social changes such as deindustrialization, the growth of part-time work forces and/or normative changes towards individualism instead of collectivism influenced these outcomes (Ebbinghaus 2002, according to Wallerstein & Western, 2000).

On the other hand, by analysing unionisation data of 21 advanced economies over the last five decades, Schmitt and Mitukiewicz (2012) found that unionisation trends have varied substantially across these economies. Union coverage (the share of workers whose terms of employment are covered by a collective bargaining agreement) changed slightly. Furthermore, Peters (2008) analysed the relationship between labour market deregulation induced by globalization and the decline of labour power in North America and Western Europe. He argues that from the 1980s and 1990s

globalization and labour market deregulation put labourers into a defensive position and the membership loss was evident.

In this paper, I emphasize the role of increased labour market flexibility (on average) as an important part of globalization and as an intermediate factor that might explain variation in unionisation rate over the countries. Labour market flexibility "refers to firms' ability under a jurisdiction's laws and regulations to make decisions regarding employees' hiring, firing, hours and working conditions" (Investopedia.com, 2017). It includes labour market regulations and institutions (Eamets and Pass, 2006). It may refer to several different dimensions but here we are mostly focused on deregulation in the relationship between employers and workers, more flexible hiring and firing rules, and introduction of part-time and temporary contracts. The conventional economic model proposes that "globalization has sharply increased the range of intensity of competition ... and labour markets are essential if firms are to survive in the new global economy" (Rodgers, 2007: 3).

Labour markets have been more flexible since the 1980s. For example, flexibility was used as a strategy proposed by OECD in 1994 in order to lead to higher job creation rates. A similar view was taken by the IMF and World Bank (Rodgers, 2007). Some of the central elements within this debate on flexibility are adaptability and stability. There is no universal formula and some countries are more focused on stability, others on mobility. Over the past few decades there was an evident trend in labour market deregulation that was more in favour of capital than labour (Peters, 2008). There is also huge pressure put forward by globalization, politics and institutions matter. Yet, domestic institutions vary, which can lead to different outcomes. Divergence in labour market regulation might affect labour capacities in various ways.

Theoretical Framework

The first part of the theoretical framework refers to the relationship between globalization and union density. The process of globalization has led to the establishment of a globalized market. The economic dimension of globalization has led to deeper economic integration between countries through liberalisation of trade (Bergsten, 1996). One of the consequences of free trade is the higher level of competition as probably one of the most important features of the new-order global economy. In order for firms to be

more able to adjust to the new globalised economy and new market dynamics, many countries implemented flexible labour laws. These reforms were not only implemented by right-centre and right-wing governments, but in many countries also by left-centre parties, for instance, SPD in Germany under G. Schroeder (Radio Free Europe, 2003).

The relationship between globalization and domestic institutions is mutual: externally, globalization triggered and influenced changes in domestic policies (Bonaglia et al, 2001), and internally, domestic (neoliberal) policies induced the process of globalization as a part of a new neoliberal agenda (Usman & Bashir, 2018). Here, I shall focus on overall globalization as well as on economic dimensions of globalization, and how the relationship between globalization and union density is conditioned by labour market flexibility.

Globalization through flexibilization of the labour market affected the strength of labour unions. One of the ways this relationship was expressed is through a decrease in the probably most important measure of labour union strength in this case - union density, or more precisely, union membership rate. In globalised economy, which is much more diversified in comparison to the pre-globalised system, employers have more discretionary power in treatment of workers. They can now easily fire workers, as well as hire them easily in some cases. Also, the market is overflowed with a new type of contracts: part-time and temporary contracts (Fagan et al, 2014). These changes reshaped the relationship between employers and labour, as well as between the state and labour. So, how did these processes affect the decline in union density? A higher level of mobility, increased uncertainty of job positions, more flexible employment contracts (ilo.org, 2004) made it harder for labour to organize successfully. Workers are much less connected now than they were in the pre-globalised economic world. Often, the frequency of changing jobs - within countries and abroad - is on a higher level, and this prevents workers from getting together and protecting their rights and interests in an organized way. There are fewer incentives for labour to protect their interests through membership in labour unions.

The new globalised market, which is much more based on competition, may also affect the relationship between employers and workers. Employers now need more autonomy and less state regulation in order to compete and adjust to the dynamics of the global market. They increased the number of part-time and

temporary contracts (UN.org, 2015). This could also affect union density as part-time and temporary-contract workers can be considered as those who are less likely to become members of labour unions given their "temporary" status.

A flexible labour market involves a lack of constraints/restrictions on employers' treatment of workers. Entrepreneurs can hire and fire workers much easier than they used to, "without facing costs in adjusting either hours or workers at the margin" (Arulampalam & Booth, 1998). This might affect the power of trade unions as they are now facing structural changes and it is questionable and worth of analysing to what extent they succeeded in adjusting themselves to the new globalized market.

The deregulation of the labour market also affected the relation between employers/managers and workers. Especially now in a globalized economy and liberalised free trade, capital is significantly more mobile. A shift in bargaining power from workers to employers has occurred, as the latter can threaten to close down their plant and move it to some other place. This has led to the adoption of a more confrontational stance towards unions (Hessami & Baskaran, 2013). Labour market (de)regulation can be associated with different labour market institutions. For example, Blanchard and Wolfers (2000), as well as Bassanini and Duval (2006), distinguish between eight labour market institutions. These are employment protection, three measures of the unemployment insurance system: the replacement rate, benefit length and a measure of active labour policy, the tax wedge, and three measures of collective bargaining: union contract coverage, union density and coordination of bargaining (Potrafke, 2010).

I argue that different levels of labour market flexibility matter and can affect this relationship in both positive and negative ways. Negative ways include the fact that higher levels of flexible labour laws boost the decline in union membership. In such countries, law and regulation are less protective towards workers and uncertainty is higher. A market dynamic that includes a lot of temporary contracts, part-time contracts and other categories of flexibility deters the labour force from organizing successfully and advocating for their rights and interests. In this way, workers have less incentive to become union members as they do not see any benefits from a membership. This framework is in line with rational choice theory. Olson in his prominent book *The Logic of Collective Action: Public Goods and the Theory of Groups* (1965)

examined to what extent the individuals who share some common interests are able to organize successfully in order to meet their individual interests. He argues that labour unions provide "public goods" – good or services that are available to everyone – and that this situation causes a "free rider" problem, meaning that some actors would choose not to participate and contribute if they can already receive benefits.

On the other hand, this theoretical argument implies that less flexible labour laws will mitigate this declining relationship. Countries with a lower labour market flexibility level have a higher workers' protection level and less uncertainty. The dynamics of the market differs from those countries with a higher level of flexibilization. These markets can still be dynamic, but their dynamics is different as it implies more protection towards workers, different types of contracts and in general a different relationship within the triangle state-employers-workers. These factors make it more likely for workers to stay or become union members as they can perceive the union as a way of protecting their interests. This is because labour market flexibility (in this case, less flexibility) shapes the relationship between employers and employees/workers, which makes for a positive environment for union membership.

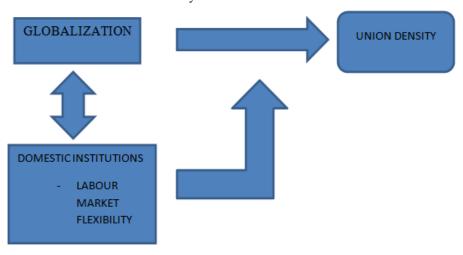
As it can already be concluded from the theoretical argument, there are two hypotheses that need to be tested:

H1: Globalization weakens labour unions by inducing decline in union membership.

H2: Given the process of globalization, the lower level of labour market flexibility (higher level of strictness of employment) will lead to an increase in union density.

Figure 1 shows that at the same time globalization affects both union density and the shape of domestic institutions, while on the other hand, domestic institutions and labour market flexibility drive globalization and have an intermediate effect on union density.

Figure 1. The relationship between globalization, union density and labour market flexibility



Dataset and Variable Description

I collected, prepared and adjusted the dataset that is being used for the purpose of this paper. The data for the independent variable, control variables, conditioning variables and dependent variable was collected from different sources. The dataset consists of 1296 observations of 14 variables. Labour unions with their density are observed and the selection case is based on 36

OECD countries. Given the limitations coming from the data and its availability, the time range is from 1980 to 2015 for the globalization index and for trade union density (H1). However, data on labour market flexibility ranges from 1990 and ends with 2015 (H2). The number of observations varies throughout the models. This is due to differences between time ranges of the globalization index, which begins from 1980, and labour market flexibility, which begins from 1990.

The dependent variable is *trade union density*: the membership rate of trade unions. One of the criteria for measuring labour union strength is the membership rate (union density). This can be the simplest measure by comparing the relative number of union members to the size of the labour force (Visser, 1991, according to Garret, 1998). It is measured in a percentage based on survey data available from the OECD website. This website includes administrative data, as well, but with much less years covered in

the dataset. I derived the dependent variable from the OECD/ICTWSS database which contains information from survey data on the number of employees that are members of a trade union, the number of employees and union density defined as the ratio of union members divided by the total number of employees (Visser, 2016).

The main independent variable is *the level of globalization* measured as the KOF globalization index established by KOF Swiss Economic Institute: "The KOF Globalization Index measures the economic, social and political dimensions of globalization" (Dreher, 2006). Social globalization includes personal contact, information flows and cultural proximity. Economic globalization consists of trade globalization and financial globalization, each of which weighs 50%. Here, I am focusing on the general globalization index (KOFGI) as well as on the economic dimension of globalization. The globalization index is made of social, political and economic globalization, all of which are aggregated using equal weights. The index ranges from 1 to 100 where 1 presents the lowest and 100 the highest level of globalization.

The conditioning variable is *labour market flexibility* operationalized in two ways: (1) strictness of employment measured through regular contracts and (2) strictness of employment measured through part-time contracts. Given the fact that labour market flexibility includes several dimensions, I have chosen the type of contracts as a specific measurement of labour market flexibility based on the assumption that change in this field was driven by globalization, but also because of the constraints and lack of availability around other categories. The data on these variables was also collected from OECT/ICTWSS database. It ranges from 0, the lowest strictness and the highest flexibility, and goes up to 5, the highest strictness and the lowest flexibility.

When it comes to control variables, I shall include the following categories: (1) economic globalization (*de facto* and *de jure*), specified as trade globalization that includes trade in goods, services and a trade partner diversification, (2) economic globalization (*de facto* and *de jure*), specified as foreign direct investments, portfolio investments, international debt, international reserves and international income payments, and (3) employment rate, measured as the ratio of the share of employment to the total population (variables taken from International Labour Organization database).

I shall include economic globalization as an additional control variable since some changes related to labour unions could be connected to economic processes, such as trade liberalization, for instance. With respect to this, a separate variable that includes these specific processes in some cases can reveal more than an overall variable such as KOF Globalization Index. Furthermore, I shall include two different measurements, de jure and de facto, as they encompass different categories: *de facto* includes variables that represent flows and activities, while de jure includes variables which represent policies that enable flows and activities (Gygli et al. 2018). The logic behind including the employment rate is pretty straightforward; it refers to control in the countries that have higher and lower rates of employment and how these variations are connected to union density. Globalization has unquestionably been on the rise since 1980. Figure 2 shows the growing trend of globalization measured by the KOF de facto index and KOF de jure for the period 1980-2015.



Figure 2. Globalization trend

(Source: www.kof.ethz.ch)

Table 1 shows the summary statistics of the independent variable, dependent variable and two levels of operationalization of the conditioning variable.

Table 1. Summary statistics

Variable	Min	1st Qu	Median	Mean	3rd Qu	Max
Globalization	43.00	67.13	76.52	73.72	81.85	90.67
Index						
Union density	6.20	15.80	26.90	30.55	38.37	95.60
Strictness of	0.000	0.630	1.310	1.697	2.770	4.880
employment -						
temporary						
contracts						
Strictness of	0.2567	1.5952	2.2302	2.1598	2.6508	4.8333
employment -						
regular contracts						

Data Analysis Modelling

In this section I will introduce the modelling I used to estimate the effect of globalization on trade union density, as well as how their relationship is conditioned by labour market flexibility. Given that the outcome is a continuous variable shown in percentage, I decided to run the multivariate OLS regression. The first hypothesis is straightforward: it implies a direct relationship between globalization and the decline in the membership rate of labour unions. The second hypothesis implies a conditional effect of the level of labour market flexibility on trade union density.

In order to test these two hypotheses and to estimate the results meaningfully, I ran nine different models but I shall include only the six most relevant models made using R statistical programme. I shall start with a naive model that only shows the relationship between globalization and union density and continue by adding control variables. In the first part of the modelling, in order to check for the effect and to get robust results, I am combining the *de facto* and *de jure* indexes of two economic globalization parameters – trade and finance. Furthermore, I shall add an interaction term as it is necessary for testing the second hypothesis. Here, I shall also include different interaction terms: changing the globalization variable and the operationalization of labour market flexibility.

Table 2. OLS regression results using Union density as DV

Note		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Comparison	KOF Globalization Index	0.103	1.434***	1.534***	-2.433***	1.819***	2.785***
(0.112)		(0.114)	(0.432)	(0.441)	(0.663)	(0.662)	(0.585)
KOF fin facto	KOF trade facto		-0.297***		-0.546***	-0.321	0.922***
(0.205)			(0.112)		(0.106)	(0.229)	(0.305)
KOF trade jure 0.127	KOF fin facto		-0.055		0.377**	-0.227	-0.424*
Counting			(0.205)		(0.172)	(0.234)	(0.234)
Country Coun	KOF trade jure						
Employment rate	KOF <u>fin</u> jure			-0.385*			
Strictness of employment TC				(0.218)			
Strictness of employment TC	Employment rate		-1.708***	-1.079***	-1.955***	-1.825***	-1.416***
employment TC (27.161) (9.496) KOFGI: Strictness of emp. TC (0.345) KOFTrGIdf: Strictness of emp. TC (0.345) KOFTrGIdf: Strictness of emp. TC (0.173) Strictness of emp. TC (0.173) Strictness of emp. RC (0.173) KOFTrGIdf: Strictness of emp. RC (0.173) Constant 38.162*** 30.442 -14.161 320.683*** 13.133 -137.407** (8.486) (43.921) (51.678) (55.218) (66.684) (63.547) Chservations 256 89 89 76 76 76 76 Adjusted R² -0.001 0.589 0.528 0.803 0.611 0.664 Residual Std. Error 18.425 (df 12.002 (df = 12.856 (df = 8.239 (df = 11.574 (df = 10.745 (df = 8.254) 84) 84) 69) 69) 69) 69) F Statistic 0.820 (df = 32.489*** (df 25.619*** (df 51.836*** (df 20.598*** (df 25.744*** (df = 10.745) (df = 10.7			(0.329)	(0.361)	(0.253)	(0.374)	(0.344)
KOFGI: Strictness of emp. TC		f			-215.350***	4.510	
Constant 38.162*** 30.442 -14.161 320.683*** 13.133 -137.407** (8.486) (43.921) (51.678) (55.218) (66.684) (63.547) (63.547) (64.886) (43.921) (51.678) (55.218) (66.684) (63.547) (64.886)					(27.161)	(9.496)	
Constant 38.162 30.442		3			2.831***		
Strictness of emp. TC (0.173) Strictness of employment RC (9.030) KOFTrGldf: Strictness of emp. RC (0.155) Constant 38.162*** 30.442 -14.161 320.683*** 13.133 -137.407** (8.486) (43.921) (51.678) (55.218) (66.684) (63.547) Observations 256 89 89 76 76 76 Adjusted R² -0.001 0.589 0.528 0.803 0.611 0.664 Residual Std. Error = 254) 84) 84) 69) 69) 69) E Statistic 0.820 (df = 32.489*** (df 25.619*** (df 51.836*** (df 20.598*** (df 25.744**** (df	•				(0.345)		
$\begin{array}{c} \text{Strictness} & \text{of} \\ \text{employment RC} & & 43.468^{***} \\ & & & (9.030) \\ \text{KOFTrGIdf:} \\ \text{Strictness of emp.} & & -0.696^{***} \\ \text{RC} & & & & (0.155) \\ \text{Constant} & 38.162^{***} & 30.442 & -14.161 & 320.683^{***} & 13.133 & -137.407^{**} \\ & & (8.486) & (43.921) & (51.678) & (55.218) & (66.684) & (63.547) \\ \hline \\ \text{Observations} & 256 & 89 & 89 & 76 & 76 & 76 \\ & & & & & & & & & & & & & & & & & & $	Strictness of emp					0.049	
### ##################################						(0.173)	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	***************************************	<u>f</u>					43.468***
Strictness of emp.							(9.030)
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Strictness of emp						-0.696***
							(0.155)
Observations 256 89 89 76 76 76 Adjusted R² -0.001 0.589 0.528 0.803 0.611 0.664 Residual Std. Error 18.425 (df 12.002 (df = 12.856 (df = 8.239 (df = 11.574 (df = 10.745 (df = 254) (df	Constant	38.162***	30.442	-14.161	320.683***	13.133	-137.407**
Adjusted R ² -0.001 0.589 0.528 0.803 0.611 0.664 Residual Std. Error = $\begin{array}{cccccccccccccccccccccccccccccccccccc$		(8.486)	(43.921)	(51.678)	(55.218)	(66.684)	(63.547)
Residual Std. Error = 18.425 (df 12.002 (df = 12.856 (df = 8.239 (df = 11.574 (df = 10.745 (df = 254) 84) 84) 69) 69) 69) 69) E Statistic 0.820 (df = 32.489*** (df 25.619*** (df 51.836**** (df 20.598*** (df 25.744*** (df	Observations	256	89	89	76	76	76
Estatistic = 254) 84) 84) 69) 69) 69) E Statistic 0.820 (df = 32.489*** (df 25.619*** (df 51.836*** (df 20.598*** (df 25.744*** (df	Adjusted R ²	-0.001	0.589	0.528	0.803	0.611	0.664
F STATISTIC TO THE STATE OF THE	Residual Std. Error						
	F Statistic		*****	, ,,,,,		• •••	

*p<0.1; **p<0.05; ***p<0.01 Note: TC – temporary contracts; RC – regular contracts

The regression tables show the results for the six models I ran. By looking at the significance levels and goodness-of-fit, we can see that the results vary across models. In order to test the robustness of the results, I rely on different combinations throughout models. I chose Model 4 as the best model, given its significance levels and diagnostics characteristics. The results above show that adjusted R squared signals that this model is better than the others. This can be concluded from the fact that the adjusted R squared increases from model to model and is much higher in comparison to the other models. This model, besides having other advantages, is comprehensive. It includes the overall index of globalization as well as the *de facto* measures of financial and trade globalization and each of this has a significant value. It also includes strictness of employment shown through temporary contract, the inclusion of which is important for testing the above-mentioned hypotheses and for the puzzle. It can be observed that the results for measures of labour market flexibility are different throughout models. In the end, by looking at the significance levels, we can see that p is strongly significant in Model 4 in almost all included variables, as opposed to the other models that I ran.

Discussion

The results from Model 4 support the stated hypotheses. In more readable and less technical language, this means that more globalization leads to fewer members of labour unions, all while controlling for other variables. This relationship is in line with my hypothesis 1, which states that an increasing globalization trend leads to decline in union density, meaning that fewer people are becoming union members. Thus, it can be observed that the relationship between globalization and union density is negative. The results are significant at 1%-level for the overall index of globalization and for trade globalization. For financial globalization it is significant at 5%-level.

The results for trade globalization and financial globalization are opposites. For trade globalization, there is a negative coefficient which is significant at 1%-level. On the other hand, the coefficient for financial globalization is positive and significant at 10%-level. This means that trade globalization leads to a decline in the number of union members. As opposed to that, financial globalization leads to an increase in the number of union members. Based on these results, one could conclude that trade globalization negatively affects union density; potentially in the way that trade

liberalization discourages workers from participating in labour unions through membership. On the other hand, financial globalization might have positive effects on union density. This contrast decreases the robustness level of the results and perhaps a deeper look at specific aspects of trade and financial globalization could reveal the reasons to such a direction.

The results for the employment rate might be interpreted as somewhat peculiar. The more employees a country has, the fewer workers will be members of trade unions. This finding is in line with the rational choice theory and can be explained by Olson's logic of collective action (1965), which states the more people there are, the harder it will be to organize successfully. This variable is measured as the ratio of the number of employed workers to the total population number. As this part was not more deeply analysed, perhaps disaggregation of the data could show certain trends. Also, it might be the case that more populated countries (or countries with higher employment rates) have more flexible labour laws and that this relationship has led to the obtained results.

When it comes to employment protection as an indicator of labour market flexibility, this model includes strictness of employment protection – individual and collective dismissals (temporary contracts). So, the variable itself has a negative coefficient, meaning that more strictness of employment protection, in other words less labour market flexibility, leads to fewer workers becoming union members. This is also significant at 1%-level. It is particularly important since the coefficient of the interaction term between the globalization index and strictness of employment is quite different.

In addition to this, the coefficient of the interaction term is positive, lying in the 99% confidence interval. This tells us that when globalization increases, given that strictness of employment is on a higher level, there will be an increase in union density. As a higher level of employment strictness means a lower level of labour market flexibility, this finding is in line with my second hypothesis, which states that labour market flexibility affects union density in a way that less flexible markets are favourable environments for labour unions. Therefore, the relationship between globalization and the decline in union density is intermediated by labour market flexibility.

Robustness

I shall rely on a combination of different models in order to check the robustness of the results. When looking at regression outputs, we can see that there is a high level of variation across the models. The coefficient of the main independent variable, KOF globalization index varies throughout the models. This variation applies to both the significance level and direction of the coefficient. The significance level changes from 1% significance level to no significance at all. In some models the coefficient is negative while in others it is positive and thus not in accordance with the expected direction. As for other variables: For trade globalization and financial globalization the results are more stable. For the employment rate the results are strong and robust – throughout the models the coefficient stays the same, keeping the same direction as well as the significance level, and the results are significant at 1%-level.

Some limitations related to the purpose of this paper exist, which limits it from producing stronger and perhaps more robust results. The dataset could be more comprehensive if there was no lack of data availability. Also, OECD and ILO databases have their limitations as well. Not all the years that could be considered relevant are covered. For some variables, such as indicators of labour market flexibility, the time interval begins from 1990.

Also, the data for some variables is not as available or does not cover as many countries as needed for this paper. This was the case with variable the size of public sector that could be an important part of the systematic component, but was not reachable at the moment, at least not in the way that would improve the empirical approach. Furthermore, some variables consist of NA values. Of course, some type of models can handle dealing with these values (e.g. OLS regression). However, replacing missing values with real values would contribute to the completeness of the puzzle. Therefore, limitations to this paper and solving and fulfilling its gaps could improve future research within this field. A more comprehensive and available dataset could lead to stronger results, independently of the sign or direction.

Additionally, this research relates only to one indicator of labour market flexibility. However, as has already been mentioned, there are different measures of labour market flexibility and including some of them or different operationalization levels could reflect on both the theoretical framework and empirical approach. Including different control variables such as the size of the public sector or

measures related to strength of labour market institutions before the time of globalization, or some type of union culture (although everything that is related to culture is hard to measure) could be beneficial as well.

Conclusion

Globalization has been the subject of research from many different aspects. The aim of this paper was not to repeat something that is already known or well-researched, but to give a new dimension to the relationship between the process of globalization and labour unions. This paper aimed at filling the literature gap by including labour market flexibility as an intermediate factor in the relationship between globalization and union density. Results of the research show certain support for negative effect of globalization on union density. Also, the results produced in this paper support a mechanism according to which this relationship could be conditioned by labour market flexibility. More precisely, during globalization, lower levels of labour market flexibility, or in other words, higher levels of employment strictness for temporary contracts lead to an increase in union density.

However, given the limitations of the paper and availability of data, as well as the lack of robust results, this mechanism is far from being unquestionable in the future. The subject of this research can be improved and developed in many ways that could be of bigger relevance in both the academic community and in the real world. Future studies should deal with creating more widely available and comprehensive data, which would in turn increase the empirical validity of the study. They should also include different operationalizations of labour market flexibility that could contribute both theoretically and empirically. Nowadays, due to the revitalization of ideological clashes and polarization, which has also not bypassed these socio-political and economic categories, this topic becomes even more important.

Bibliography

Arulampalam, Wiji & Booth, L. Alison (1998) Training and Labour Market Flexibility: Is There a Trade-off? *British Journal of Industrial Relations* 36:4 0007–1080: 521–536.

Bergsten, C. Fred (1996) Competitive Liberalization and Global Free Trade: A Vision for the Early 21st Century. Institute for International Economics, Working Paper: 96-15.

- Bonaglia, Federico et al. (2001) How Globalization Improves Governance. CEPR Discussion Paper No. 2992.
- Dreher, Axel (2006) Does Globalization Affect Growth? Evidence from a new Index of Globalization. *Applied Economics* 38, 10: 1091-1110.
- Dreher Axel & Gaston Noel (2007) Has Globalization Really had no Effect on Unions? *KYKLOS* Vol. 60 2007 No. 2: 165–186.
- Checchi, Daniele et al. (2006) Inequality and Union Membership. The impact of relative earnings position and inequality attitudes. Available at: https://www.eurociss.eu/fileadmin/user_upload/Redakt ion/DFGFLEX ws07Checchi-Verfhorst-Visser_ZEW_.pdf (25 November 2018).
- Eamets, Raul & Paas, Tiiu (2006) Labour market flexibility and flexicurity. Nova Science Publishers. Inc, pp. 1.
- Fagan, Colette et al. (2014) In search of good quality part time employment". International Labour Office. Conditions of Work and employment series no. 43
- Garrett, Geoffrey (1998) *Partisan Politics in the Global Economy*. Cambridge: Cambridge University Press.
- Gaston, Noel (2002) The Effects of Globalization on Unions and the Nature of Collective Bargaining. *Journal of Economic Integration* Vol. 17(2): 377-396.
- Gygli, Savina et al. (2018) The KOF Globalization Index Revisited. KOF Working Paper, No. 439.
- Guttal, Shalmali (2007) Globalisation. *Development in Practice* Vol. 17, No. 4/5: 523-531
- Hessami, Zohal and Baskaran, Thushyanthan (2013) Has Globalization Affected Collective Bargaining? An Empirical Test, 1980-2009. University of Konstanz Working Paper, No. 2013-02, Available at: http://ideas.repec.org/p/knz/dpteco/1302.html (22 November 2018)
- Ilo.org (2018) Statistics and database. Available at: https://www.ilo.org/global/statistics-and-databases/lang--en/index.htm (22 November 2018)
- Ilo.org (2004) Enhancing the Employment Impact of Globalization. Available at: https://www.ilo.org/integration/themes/pci/internation al/WCMS_084539/lang-- en/index.htm (23 November 2018).
- Investopedia.com (2017) Labour Market Flexibility, Available at: https://www.investopedia.com/terms/l/labor-market-flexibility.asp (22 November 2018).

- Keohane, O. Robert & Nye, S. Joseph Jr (2000), Globalization: What's New? What's Not? (And So What?). Foreign Policy No. 118: 104-119.
- Nepgen, Arnold (2008) The Impact of Globalization on Trade Unions: Cosatu's Present and Future Engagement in International Issues. Master Thesis at Stellenbosch University
- Norris, Pippa (2004) Global Governance and Cosmopolitan Citizens, in: Joseph S. Nye and John D. Donahue (eds.) *Governance in a Globalizing World*. Brookings Institution Press: Washington D.C.: 155–177.
- Olson, Mancur (1965) *The Logic of Collective Action: Public Goods and the Theory of Groups.* Harvard: Harvard University Press.
- Visser, Jelle (2016) ICTWSS database, version 5.1 (Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts), Available at: http://www.uva-aias.net/en/ictwss/ (22 November 2018).
- Peters, John (2008) Labour market deregulation and the decline of labour power in North America and Western Europe". *Policy and Society* Vol. 27 (1): 83-98.
- Potrafke, Niklas (2010) Labor market deregulation and globalization: empirical evidence from OECD countries. *Review of World Economics / Weltwirtschaftliches Archiv*. Vol. 146 (3): 545-571.
- Radio Free Europe (2003) Germany: SPD Backs Reforms Giving Economy, Schroeder, A Boost, Available at: https://www.rferl.org/a/1103410.html (23 November 2018).
- Rodgers, Gerry (2007) *Labour Market Flexibility and Decent Work*. DESA Working Paper No. 47
- Rodrik, Danni (1997) *Has globalization gone too far*? Washington, DC: Institute for International Economics.
- Rodrik, Dani (2018) Populism and the economics of globalization. *Journal of International Business Policy.*
- RoyChowdhury, Supriya (2004) Globalization and Labour. *Economic and Political Weekly* Vol. 39 (1): 105-108.
- Schmitt, John and Mitukiewicz, Alexandra (2012) Politics matter: changes in unionisation rates in rich countries, 1960–2010. *Industrial Relations Journal* Vol. 43(3): 260–280.
- Spilerman, Seymour (2009) How Globalization Has Impacted Labour: A Review Essay. *European Sociological Review* Vol. 25(1): 73-86.
- Usman, Alabi & Bashir, Salihu (2018) Washington Consensus, Globalization, Neo Liberalism and the State in Africa: A

- Critical Exegesis. *Journal of Public Administration and Governance* Vol. 8 (1): 165-195.
- UN.org (2015) Most workers now employed in part-time or temporary jobs UN labour agency, Available at: https://www.un.org/sustainabledevelopment/blog/2015/05/most- workers-now-employed-in- part-time-or-temporary-jobs-un-labour-agency/(03.12.2019.).
- Wallerstein, Michael & Western, Bruce (2000) Unions in Decline? What Has Changed and Why. *Annual Review of Political Science* Vol. 10 (3): 355-77.