CHARLES UNIVERSITY

FACULTY OF SOCIAL SCIENCES

Institute of Political Studies

Department of International Relations

Master's Thesis

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Social Irrationalism in the Era of Neo-liberal Crisis? The Role of Politics, Science, Agrochemical Industry, and Civil Society in the Context of the TTIP Debate

Master's thesis

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References

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Abstract

The Transatlantic Trade and Investment Partnership (TTIP) should have been a 'gamechanger' and a boost for the EU economy by creating more jobs and growth in the aftermath of the 2008 financial crisis. By eliminating the remaining trade barriers, it would have established a transatlantic trade area connecting the two most powerful economies in the world. This Master's thesis utilizes four concepts of the neo-Marxist theory: key premises of the Amsterdam School, State theory of Bob Jessop and Nicos Poulantzas, combines Ulrich Beck's notion of risk society with Antonio Gramsci's role of intellectuals, and outlines the premise of commodification as a part of political ecology. The theoretical neo-Marxist prism facilitates the mapping of the crucial social agents functioning as the proponents of the TTIP agenda as a hegemonic project and those forces opposing the deal as a counter-hegemonic movement. This thesis reveals how the TTIP agreement was legitimized by the proponents but issues of transparency and other contradictions revolving around the deal attracted the attention of various civil society organizations (CSOs) that were concerned about TTIP's impact on public health and environment. Three empirical cases focusing on the precautionary principle (PP), endocrine disrupting chemicals (EDCs), and glyphosate saga highlight why these debates, full of controversies, spilled over to the overall context of the TTIP debate and influenced decision-makers of the EU Member States (MSs) and the EU institutions. These cases explain why the concerned opponents of the neo-liberal TTIP agenda were perceived as irrational by the proponents once the legitimization process of the deal failed.

Abstrakt

Transatlantické obchodní partnerství (TTIP) mělo být 'game-changer' a oživit ekonomiku EU vytvořením více pracovních míst a podpořit ekonomický růst po dozvucích finanční krize z roku 2008. Odstraněním zbývajících obchodních překážek by byla vytvořena transatlantická obchodní zóna, spojující dvě nejsilnější ekonomiky světa. Tato diplomová práce využívá čtyři koncepty neomarxistické teorie: klíčové premisy Amsterdamské školy, teorii státu Boba Jessopa a Nicose Poulantzase, kombinuje pojem rizikové společnosti Ulricha Becka s rolí intelektuálů Antonia Gramsciho a nastiňuje premisu komodifikace jako součást politické ekologie. Neomarxistické teoretické prizma ulehčí zmapování stěžejních sociálních agentů v roli zastánců agendy TTIP jako hegemonického projektu a

sil bojujících proti dohodě jako proti-hegemonické hnutí. Tato práce dále odhaluje, jak byla smlouva TTIP legitimizována jejími zastánci, ale problémy transparentnosti a další rozporuplnosti kolem smlouvy přilákaly pozornost různorodých organizací občanské společnosti (CSOs), které byly znepokojeny potenciálním dopadem TTIP na veřejné zdraví a životní prostředí. Tři empirické případy zaměřující se na princip předběžné opatrnosti (PP), endokrinní disruptory (EDCs) a glyfosátovou ságu poukážou na to, proč se tyto debaty plné kontroverzí dostaly do celkového kontextu debaty o TTIP a ovlivnily politiky členských států a institucí EU. Tyto případy vysvětlují, proč znepokojení oponenti neoliberální agendy TTIP byli vnímáni zastánci smlouvy jako iracionální, jakmile jejich legitimizační proces dohody selhal.

Keywords

TTIP; EU; USA; neo-liberalism; neo-Marxism; hegemonic project; counter-hegemonic forces;

Klíčová slova

TTIP; EU; USA; neoliberalismus; neomarxismus; hegemonický projekt; protihegemonické síly;

Title

Social Irrationalism in the Era of Neo-liberal Crisis? The Role of Politics, Science, Agrochemical Industry, and Civil Society in the Context of the TTIP Debate

Název práce

Sociální iracionalismus v éře neo-liberální krize? Role politiky, vědy, agrochemického průmyslu a občanské společnosti v kontextu debaty o TTIP

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Univerzita Karlova Fakulta sociálních věd Institut politologických studií



Projekt diplomové práce –

Topic: Social Irrationalism in the Era of Neo-liberal Crisis? The Role of Politics, Science, Agrochemical Industry, and Civil Society in the Context of the TTIP Debate

Téma: Sociální iracionalismus v době neo-liberální krize? Role politiky, vědy, agrochemického průmyslu a občanské společnosti v kontextu debaty o TTIP

David Kučera

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Key words:

TTIP, Neo-Marxism, Amsterdam School, Transnational Capital, Accumulation, the EU, the US, Transatlantic Bloc, Agriculture, Agrochemical Industry

The topic of the thesis

Exchange of goods and non-material things such as knowledge and know-how on the global level has been rising in the past century. Furthermore, distances seem to be shorter year by year not only due to tremendous development in technology, but also thanks to improved communication channels and transportation infrastructures. World is in a way tied together, the globe is becoming one big village. Besides, the quality of life has been seemingly improving hand in hand with technical and economic development, at least in the countries of so called "North" or "Core." In contrast, the "Third World Countries" or "Periphery" countries experience difficulties and often find themselves in a vicious circle of various problems. In other words, those who simply do not adjust to the unwritten rules of the global game might easily find themselves on the verge of the playground or become expelled from the game. Furthermore, the healthy capitalism with moderate and regulated competition has been diminishing.

Grasping more markets and searching for new possibilities to simply sell production or services progressed to a new level. The deal between the European Union and the US should result in the largest free trade area in the world, expanding the possibilities of the large players to gain even more power, capital, and knowledge. Not only over their economic competitors, but also over the society who can either adjust to the rules of game or fight against the capitalistic system. However, with the current strength of the embedded neo-liberalism the group of counterhegemonic forces might face various difficulties.

The author believes that, if signed, the Transatlantic Trade and Investment Partnership (TTIP) would become a significant milestone for the inhabitants of the Transatlantic Area – especially on the part of the EU. The relationship of the state and large companies will be even more significant and the freedom of choice for citizens in this global game would become seriously limited due to increasing commodification of socioeconomic sphere of life under neo-liberalism. The author is interested in political economy, geopolitics, and sociological phenomena, and assumes that all mentioned spheres are critical for thorough investigation and understanding of the TTIP from the Neo-marxist perspective. The author believes that looking at the TTIP through the Neo-marxist lenses would allow him to explain societal struggles in the context of the TTIP debate. Last but

not least, the author will hypothesize if the neoliberal capitalism reached its limits and experienced a crisis moment as a result of the TTIP debate.

The aim of the thesis

The main aim of this work is to critically asses the ongoing trade deal between the two most significant markets of the world – the United States and the European Union. Since 2013 these two largest economies in terms of world's GDP share, have been laying out what should become the largest free trade area to date. Widely proposed as the win-win deal, the Transatlantic Trade and Investment Partnership (TTIP) according to preliminary outlooks does not provide equal benefits the both shores of the Atlantic Ocean. Indeed, the overall profit of the deal in terms of GDP growth for both sides is rather marginal. Whereas the deal might be beneficial to the US in some areas, the EU seems to be lacking behind and tends to deregulate its high standards particularly in the consumer safety and environment. In other words, in certain areas – most prominently the food safety and environment – the deal would mean various concessions in the European law system, food hygiene, and European agricultural tradition.

Another aim of this work is to explain for what reasons the transatlantic capitalistic bloc pushes through the agenda through the European Commission to diminish the remaining obstacles to the trade. With the eastern expansion of the EU in 2004 the markets gradually got saturated. Thus, the firms and companies search for possibilities to merge the two world's significant economies and remove the remaining obstacles to free flow of goods and services on both shores of the Atlantic Ocean. The TTIP would then allow the transnational capitalists to further expand their power and legitimize their hegemonic projects. However, since the first rounds the TTIP has been (un)famous for many controversies and resistance from the civil society organizations, especially on the side of the EU. Not only were the first rounds dealt behind the closed doors, but also various leaked documents proved that lobby and the role of the US and EU institutions are vital to success of the transnational capitalistic bloc.

Thus, the capitalists put pressure on the state/transnational institutions to turn this deal into reality. However, this bloc faces counter pressure, which resides in various initiatives of counter bloc against the TTIP and its makers. This bloc might comprise of various politicians, political parties, or petition signers such as various grass roots groups,

associations, farmers, and consumers. Their methods to resist this deal had differed - some strategies were more powerful than others. So is questioned success of the capitalists who, however, over the centuries of the established capitalistic system, found sophisticated ways how to reach their goals. These countervailing pressures and forces have played a decisive role in the history of the transatlantic capitalistic system.

The thesis will focus on how the agreement was attempted to be sold to the increasingly anxious public. In this sense the bloc of transnational capital along with the EC played significant role to legitimize the hegemonic project of TTIP under increasing embeddedness of neo-liberalism. However, this legitimization posed various contradictions and found its limits at the level of resistance of various social forces. The struggle at various levels has taken place at (transnational)state and the State in the neo-marxist perspective plays a vital role in articulating the interests of the capital.

Furthermore, the thesis will examine how the civil society organizations focused on approval process of agrochemicals and endocrine disrupting chemicals, which triggered a significant wave of opposition. This debate merged with the overall TTIP debate and reflected concerns regarding public health and environment. Of particular interest is the role of science which also attracted much attention in the debate and proved to have a crucial impact on political decision-making.

What seems to be the core of potential success and failure of this deal are different approaches to the agriculture, food safety, and environment in the EU and the US. For that reason, this work will be focused on agrochemical sector as countervailing pressures for and against the TTIP is most significant and obvious in this sphere. The author will strive to explain motives of various "pressures" for and against the TTIP. Also, the author will try to find out the core for expansionist forces of capitalism through the theoretical framework of the modern neo-marxist theories.

Methodology and Theoretical Framework

As outlined above, the thesis will be aimed at the countervailing forces involved in the TTIP deal – that is motives of the transnational capitalistic bloc to further expand their 'big capital', the role of the state/transnational organizations in this process, and counter forces of various kinds resisting these pressures. Furthermore, the thesis will be predominantly focused on the role of risk, role of science, the politics, since at these levels

the opposing forces are the most significant. Narrowing down the overall focus of this work to one sector will allow the author to choose decisive phenomena of potential success and unsuccess of TTIP, and evaluate motives of the multinational companies and countervailing social forces in the TTIP debate.

The thesis's theoretical framework will rely on the progressive neo-marxist approach of the Amsterdam School (Hank Overbeek, Bastiaan van Appeldoorn, Kees van der Pijl), British Academia (Bob Jessop), and the American Academia (Immanuel Wallerstein) as well as Nics Poulantzas or Ulrich Beck. The majority of authors also draw on notions of Antonio Gramsci which enabled them to enrich the neo-marxist debate. Modern neomarxist approaches will allow explaining the relationship between the capitalist bloc and the state as well as the social resistance to the expanding capitalism and 'big capital'. On one hand the thesis will explore various controversies regarding the TTIP such as "German" cars for agricultural products" or pressure from American politicians on the EU regarding food safety measures, on the other hand the author will also focus on groups resisting this deal. Also, the author will focus on the role of the state regarding of the TTIP. These countervailing blocs and pressures are social phenomena deciding whether the transatlantic capitalistic bloc would succeed or whether their pressure to broaden their influence, money, and power accumulation would be in vain. For that reason, the neo-marxist notion of the role of the State and the social forces operating within and beyond them in era of neo-liberalism, adequately describes the socio-economic and political reality in the TTIP debate.

It is modern neo-marxism that, in author's point of view, appropriately describes the ongoing struggle of countervailing forces regarding the TTIP. The author will strive to apply four lines of neo-marxist streams of thoughts.

First, a robust and historically rich theory of the Amsterdam School will explain the development of neo-mercantilist approach since 1980s into current embedded neo-liberalism and the role of transatlantic capitalism and the US hegemony in shaping the agenda of the EU. Second, Bob Jessop's and Nicos Poulantzas' theory of the state will explain the role of social forces operating within and beyond the state. In addition, their theory of state helps us understand the role of legitimation of hegemonic projects and social forces within and beyond the state operating against or for such projects. Moreover, the authors also explain the phenomena of authoritarian statism and contradictions and limits of the neo-liberalism. Third, Immanuel Wallersteins' notion of commodification will

be supplemented by ideas of political ecologists who draw attention to increasing commodification in the sphere of public health and environment. Last but not least, it was the role of scientists – or in neo-Gramscian terms organic and traditional intellectuals – who have seemed to play a crucial role in the (post)TTIP debate. Ulrich Beck's notion of the Risk Society at this point seems as a legitimate description of today's socio-economic and political reality. As it will be demonstrated, Beck's thoughts are neo-marxist and they will serve as an important framework for explaining the societal phenomena – particularly 'irrationalism' of citizens and civil society against 'rationalism' of the scientists and experts serving the purpose of the legitimation of agenda of the agrochemical industry.

The contradictions of TTIP will be examined to explain the phenomena of the heated TTIP debate. The author believes that by applying the above-mentioned lines of neomarxist theoretical framework will help to explain and reflect what was going on in the TTIP debate. Understanding the role of the State in the era of neo-liberalism and globalization and the social forces functioning within and beyond state in the TTIP debate is crucial. Operationalization of the social forces in the politics, transnational or transatlantic bloc of capital, the role of science and the civil society organizations against the above-mentioned theoretical framework would help us understand the contradictions and limits of the neo-liberalism.

Structure of the Thesis

1. Introduction

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- 2.1 Amsterdam School (Embedded Neoliberalism, Transatlantic Ties, State-Capital Nexus, Comprehensive Concept Control)
- 2.2 Theory of the State (State as a Social Relation, Authoritarian Statism)
- 2.3 The Role of Organic and Traditional Intellectuals (Between Beck and Gramsci)
- 2.4 Commodification of Ecosystems
- 3. Methodology
- 4. **Selling the TTIP** (Jobs and Growth, Transparency, CSOs)
- 5. Precautionary Principle
- 6. Endocrine Disrupting Chemicals
- 7. **Glyphosate Re-Approval** (The Role of the EU Agencies, Corrupted Science, Mergers)
- 8. Conclusion

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Introduction

The Transatlantic Trade and Investment Partnership (TTIP) ought to be a potential game-changer. Not only would it become the most important mega-regional trade agreement, it would also encompass the two largest economies in the world. Yet, as De Ville and Siles-Brügge suggested, it is a game-changer insofar as it might lead to restriction of alternatives within the democratic process. The underlying strategy of TTIP lied in strengthening the ties on both sides of the Atlantic, particularly in a reaction to the emerging BRICS countries. As far as the economic strategy of TTIP is concerned, quantitative assessments differ because of the various methodologies, scenarios and economic modelling used. For instance, the Commission's frequently utilized modelling presupposes 'significant economic gains'. In contrast, a different study predicts that if accepted, TTIP might result in 600.000 job losses in the EU. In general, what various studies bring into to the light is the fact that GDP growth as a result of TTIP's potential benefits would be somewhat insignificant.

Nevertheless, the European Commission (EC) along with some US officials and multinational companies vehemently promoted the agreement, especially in the context of the post-2008 financial crisis. Indeed, it was in this context that the EC 'sold' TTIP to the public by promoting the agreement in the name of economic growth and more jobs that were needed once the economic crisis hit the EU in 2008.⁴ Moreover, in terms of geopolitical implications, TTIP as a mega-regional deal should have been an answer to failed Doha Round at the WTO, TTIP also addressed energy security of the EU and as an 'ambitious deal', TTIP would be loud in setting future global standards.⁵ Similarly, as the European American Chamber of Commerce pointed out, both political thinkers as well as business leaders from both sides of the Atlantic believed that TTIP "is a once in a lifetime opportunity." Also, Barrack Obama and his German counterpart Angela Merkel very much

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¹ DE VILLE, Ferdi and Gabriel SILES-BRÜGGE. Why TTIP is a game-changer and its critics have a point. *Journal of European Public Policy* [online]. 2016, **24**(10), 1491-1505 [cit. 2018-05-02]. Available at: https://www.tandfonline.com/doi/full/10.1080/13501763.2016.1254273. p. 1492.

² GERSTETTER, Christiane. *The Transatlantic Trade and Investment Partnership (TTIP) and its relevance for global sustainable land use* [online]. Berlin: Ecologic, ©2015 [cit. 2017-03-18]. Availabile at: https://www.ecologic.eu/sites/files/publication/2015/ecologic_2015_globalands_ttip_issuepaper.pdf. p. 2

³ Ibid. p. ⁴

⁴ KAYLEIGH, Rose Lewis. TTIP has potential to create 'growth and jobs', says De Gucht. *The Parliament Magazine* [online]. London, 2014, 5 May 2014 [cit. 2018-02-05]. Available at: https://www.theparliamentmagazine.eu/articles/news/ttip-has-potential-create-growth-and-jobs-says-de-gucht ⁵ MALMSTRÖM, Cecilia. The Geopolitical aspect of TTIP. *Trade EC* [online]. Brussels, 2015, 3 June 2015 [cit. 2018-05-03]. Available at: http://trade.ec.europa.eu/doclib/docs/2015/june/tradoc 153511.pdf

welcomed the deal.⁶ In addition, industry associations joined forces under the European Business Alliance for TTIP and shared very similar rhetoric in promoting and legitimizing the agreement.⁷ As De Ville and Siles-Brügge pointed out, TTIP is problematic insofar as it advances the socially constructed interests of actors who simply perceive regulation as unnecessary and inefficient 'red tape'.⁸

As outlined, the drive for removing the remaining trade barriers - in an already liberalized world trade - by major transnational firms has been significant in TTIP. Apart from the very sensitive issue such as Investor-state Dispute Settlement (ISDS), which is not the main focus of this thesis, removing barriers has resulted in concerns particularly for the public on the EU side. Overall, public health, consumer protection, and environmental issues were focal points around which a heated debate took place within the context of TTIP. More specifically, regulatory and NTBs issues such as phytosanitary measures, agriculture, the environmental standards of the EU, EU's REACH directive concerning chemicals, GMOs or food safety became subjects of a lively debate. 10 For instance, the debate revolving around precautionary principle as a part of WTO's SPS measures, a barrier shielding public health and the environment, reflected the contradictions of deregulation and profit-maintaining politics of corporations. This high-standard EU measure, as some scholars observed, has been threatened by such trade treaties as TTIP.¹¹ In short, attempts to deregulate high protection standards in the name of unification, setting global standards and removal of trade barriers collided with an increasingly concerned public.

Consequently, strives for deregulation contradicted and stumbled over demands and expectations of the EU's civil society organizations (CSOs). As Teló stressed, there

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⁶ 11th Round of TTIP Launches in Miami. *The European American Chamber of Commerce* [online]. 23 October 2015 [cit. 2018-05-03]. Available at: https://www.eaccny.com/news/ttip-related/11th-round-of-ttip-launches-in-miami/

⁷ European Business United in Strong Support for TTIP. *European Round Table of Industrialists* [online]. Brussels, 2014, May 15 2014 [cit. 2018-05-03]. Available at:

 $https://www.ert.eu/sites/ert/files/generated/files/document/business_alliance_-lines/generated/files/document/business_alliance_-lines/generated/files/gener$

five reasons to support ttip - may 15 2014.pdf

⁸ DE VILLE, Ferdi and Gabriel SILES-BRÜGGE. Why TTIP is a game-changer and its critics have a point. *Journal of European Public Policy* [online]. 2016, **24**(10), 1491-1505 [cit. 2018-05-02]. Available at: https://www.tandfonline.com/doi/full/10.1080/13501763.2016.1254273. p. 1492.

⁹ TELÓ, Mario. Transatlantic Partnership and Global Governance from the EU's Perspective. In: MORIN, Jean-Frédéric et al. *The politics of transatlantic trade negotiations: TTIP in a globalized world*. Burlington, VT: Ashgate, 2015. p. 35. ¹⁰ Ibid, p. 38.

¹¹ READ, Rupert and Tim O'RIORDAN. The Precautionary Principle Under Fire. *Environment: Science and Policy for Sustainable Development* [online]. 2017, **59**(5), 4-15 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/00139157.2017.1350005. p. 4

were many indicators proving that TTIP had suffered from a democratic deficit. Indeed, demands for transparency, controversies regarding the primary negotiating mandate and distrust of lobbying by large enterprises gave rise to a myriad of pressures and cleavages that were particularly strong on the EU side. 12 Moreover, controversies such as leaks of negotiation documents and memos revealed the role of big transatlantic business in shaping the TTIP agenda. After all, Dür and Lechner suggest that on both sides of the Atlantic the enterprises use the strategy of inside lobbying with 'friendly' politicians who push the agenda in favor of big business. In addition, it can be expected that on both sides of the Atlantic business interests would play a key role in shaping the agreement negotiations.¹³ Furthermore, the leaks, particularly those of May 2016, more or less confirmed the CSOs' anxieties regarding the asymmetries in bargaining positions between the US and the EU.¹⁴ Growing public discontent was also reflected in positions of the MS. As Novotná claims, since the EU Member States did not participate in TTIP talks, their control over the final outcome of the agreement was diminished. As a result, in terms of the relationship towards the US and the creation of a common transatlantic market, the balance of power between the EU institutions and the MS would have been directed towards the supranational state.¹⁵ Also, once combined with the pressures by various mobilized social actors also the states had to react to growing opposition. This has certainly been the case for Germany. As Mayer points out, Germany and the US were central players in the project. While supportive of the deal in the beginning, by the end of 2014 Germany's support for TTIP decreased since critical voices of the deal had reached the political domain. 16 Also, opposition regarding the deal echoed in Brussels.

¹² TELÓ, Mario. Transatlantic Partnership and Global Governance from the EU's Perspective. In: MORIN, Jean-Frédéric et al. *The politics of transatlantic trade negotiations: TTIP in a globalized world*. Burlington, VT: Ashgate, 2015. p. 37.

¹³ DÜR, Andreas and Lisa LECHNER. Business Interests and the Transatlantic Trade and Investment Partnership. In: MORIN, Jean-Frédéric et al. *The politics of transatlantic trade negotiations: TTIP in a globalized world.* Burlington, VT: Ashgate, 2015. p. 71 – 73.

ALEMANNO, Alberto. What the TTIP Leaks Mean for the On-Going Negotiations and Future Agreement? Time to Overcome TTIP's Many Informational Asymmetries. *Journal of Risk Regulation* [online]. 2016, **2**, 1-12 [cit. 2017-02-05]. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2796621. p. 10 – 11.

¹⁵ NOVOTNÁ, Tereza. EU Institutions, Member States and TTIP Negotiations: The Balance of Power and EU Foreign Policy. In: MORIN, Jean-Frédéric et al. *The politics of transatlantic trade negotiations: TTIP in a globalized world*. Burlington, VT: Ashgate, 2015. p. 66.

¹⁶ MAYER, Hartmut. Between NATO for Trade and Pride in Angst: The German TTIP Debate and its Spillover into Wider Transatlantic Concerns. In: MORIN, Jean-Frédéric et al. *The politics of transatlantic trade negotiations: TTIP in a globalized world*. Burlington, VT: Ashgate, 2015. p. 46

The EC had to react to the opposition by a 'fresh start' with the appointment of Cecilia Malmström instead of Karl De Gucht as European Commissioner for Trade in 2014. Although the transparency in the deal increased after her appointment, continuing controversies and overall distrust has not disappeared. The 'fresh start' announced towards the end of 2014 should have legitimized the agreement and created a mood of more trust. 17 Nonetheless, by October 2015 an initiative called StopTTIP! reached nearly 3.3 million signatures¹⁸, notwithstanding the transparency initiative proposed by the Commission. The StopTTIP! movement also focused on topics perceived as proof that TTIP served as a Trojan horse for undermining the EU standards. Thus, TTIP was characteristic for spillovers in the debate. Not only in terms of bottom-up spillover of concerns towards politics, but also in terms of bringing to the spotlight issues simultaneously running with the TTIP negotiations and perceived as undermining elements of the EU standards. For instance, this was the case with CETA between the EU and the US which found its way to the forefront in 2014 and was widely perceived as a blueprint for TTIP and further instigated the TTIP debate. 19 Similarly, debate regarding the precautionary principle, endocrine disrupting chemicals, and glyphosate relicensing got much attraction from CSOs and resonated within corridors of national parliaments as well as Brussel. Similar to the StopTTIP! initiative, also the Stop Glyphosate or EDC Free Europe mobilized various social forces.

TTIP thus became a potential 'game-changer' but in a different fashion than its projectors and initiators intended.²⁰ As Schröder suggests, the anti-TTIP movement can be characterized by general concern regarding the EU's political crisis and distrust in the EU institutions.²¹ Furthermore, Mayer noticed that the TTIP debate gradually turned into what is called a 'Grundsatzdiskussion' in Germany. For instance, such a discussion revolved around such philosophical concerns as the role of the individual in the state and the relationship between them, and questions of personal freedom or more distant stance

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¹⁷ TTIP "fresh start" means more clarity, debate, and realism, Malmström tells MEPs. *European Parliament*[online]. Brussels, 3 December 2014 [cit. 2018-05-03]. Available at:

http://www.europarl.europa.eu/news/en/press-room/20141201IPR81714/ttip-fresh-start-means-more-clarity-debate-and-realism-malmstrom-tells-meps

¹⁸ Stop TTIP: About Stop TTIP [online]. Berlin, 2016 [cit. 2018-03-05]. Available at: https://stop-ttip.org/about-stop-ttip/

¹⁹ MAYER, Hartmut. Between NATO for Trade and Pride in Angst: The German TTIP Debate and its Spillover into Wider Transatlantic Concerns. In: MORIN, Jean-Frédéric et al. *The politics of transatlantic trade negotiations: TTIP in a globalized world*. Burlington, VT: Ashgate, 2015. p. 46.

²⁰ DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. T.T.I.P.: the truth about the transatlantic trade and investment partnership. Malden, MA: Polity Press, 2016. p. 95.

²¹ SCHRÖDER, Nora. A Civic Studies perspective on European citizens: in search for potential in the conflict surrounding TTIP. *European Politics and Society* [online]. 2017, **19**(1), 120-145 [cit. 2018-04-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/23745118.2017.1363507 p. 130.

towards the Anglo-Saxon form of capitalism, to name a few.²² These questions and concerns regarding TTIP quite remarkably resonated also in the online world, and TV, and certain groups were also successful in attracting trade specialists and academics.²³ Nonetheless, even the boost in credibility of the CSO clashed with the legitimization of the TTIP proponents. Those who raised concerns were seen as 'anti-globalists' and 'anti-growth' or 'liars' and 'scaremongers'.²⁴ As Siles-Brügge observes, the EC has delegitimized the CSOs' strategically emotive framing and argumentation by 'economic populism' connected with Brexit and Trump.²⁵ This provides the EU's technocratic repression with its own rationale over the emotive argumentation of CSOs. What is more, as Siles-Brügge further stresses, the EC's strategy has been just as emotive as that of CSOs, if not more.²⁶

To analyze the roots of such antagonistic cleavages and struggles in the context of the TTIP debate, the paper is conceptualized as follows: The first chapter explores the neomarxist stream of thought drawing on neo-Gramscianism and serves as a theoretical lens through which the empirical cases are examined. For proper explanation of the phenomena occurring in the context of TTIP debate four concepts and modern neo-marxist streams were chosen. First, the thesis utilizes the concepts of the Amsterdam School (or as scholars call it the Amsterdam Project) to track the roots of embedded neoliberalism in the EU project as the key hegemonic project. The Amsterdam School's concept of comprehensive control explains how class interests in hegemonic project(s) are created and subordinated and how certain social agents are controlled and their interests compromised for the sake of a superior interest. The concept of State-Capital Nexus explains to what extent corporate liberalism has penetrated the rooms and corridors of decision-makers. Also, thick historical excurses of the Amsterdam scholars help us understand the role of Atlanticism and transatlantic ties. Second, Bob Jessop's and Nico Poulantzas' understanding of the State as a social relation clarifies merit of debates in the context of TTIP. Although, the neo-

²² MAYER, Hartmut. Between NATO for Trade and Pride in Angst: The German TTIP Debate and its Spillover into Wider Transatlantic Concerns. In: MORIN, Jean-Frédéric et al. *The politics of transatlantic trade negotiations: TTIP in a globalized world*. Burlington, VT: Ashgate, 2015. p. 47.

²³ ELIASSON, Leif Johan a Patricia Garcia-Duran HUET. TTIP negotiations: interest groups, anti-TTIP civil society campaigns and public opinion. *Journal of Transatlantic Studies* [online]. 2018, **16**(2), 101-116 [cit. 2018-04-25]. Available at: https://www.tandfonline.com/doi/full/10.1080/14794012.2018.1450069. p. 106. ²⁴ VILLE, Ferdi de. a Gabriel. SILES-BRÜGGE. *T.T.I.P.: the truth about the transatlantic trade and*

investment partnership. Malden, MA: Polity Press, 2016. p. 123.

²⁵ SILES-BRÜGGE, Gabriel. Transatlantic investor protection as a threat to democracy: the potency and limits of an emotive frame. *Cambridge Review of International Affairs* [online]. 2018, , 1-25 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/09557571.2018.1461805. p. 3 ²⁶ Ibid, p. 18.

marxists presuppose that the state is an arena where social struggles and contradictions take place, the state is not a static entity in the neo-marxist understanding. It is a place where social forces operate within but also beyond the state and it is a place where changes in the balance of forces happen. Furthermore, Poulantzas' concept of authoritarian statism can be understood as a response to the crisis where exceptional measures became normalized under the rule of authoritarian capitalist state. In Jessop's understanding these concepts can be also applied to the transnational state. Third, the author believes that connection of Ulrich Beck's theory of risk society and Gramsci's concept of traditional and organic intellectuals helps to depict the role of experts and scientists in the context of TTIP debate. This bridge between Gramsci and Beck, the author believes, helps to grasp the reality of the debate. Fourth, the neo-marxist and political ecologists' concept of commodification of nature, which ultimately penetrates into the very social life in the era of neoliberal capitalism, has been omnipresent as a result of attempts to deregulate the trade barriers for the sake of TTIP.

The rich theoretical framework serves as an analytical tool for the empirical cases. In the second chapter this paper explains how the TTIP was sold by the proponents of the deal to legitimize this neoliberal project and what contradictions the proponents had to face. In particular, this paper will show how counter-hegemonic forces, represented by a wide base of well mobilized CSOs, posed a challenge for the deal, which led the apparent freeze in progress that has persisted into 2018. Also, the paper will demonstrated how spill-overs in the context of the TTIP debate attracted attention to topics such as the precautionary principle, endocrine disrupting chemicals, and what has become known as and glyphosate saga. These three topics, discussed in separate chapters, rose the forefront of the debate at the time when the TTIP discussions were still in full swing, instigating the TTIP debate and further becoming a focal point especially beyond the last round of TTIP. That is why the author frequently uses the term 'context of the TTIP debate' or 'post-TTIP debate', primarily to describe the period after the last round and to describe the fact that overall TTIP debate has brought increased awareness among CSOs and wider public to articulate the concerns posed by the agreement.

The three empirical cases demonstrate a very heated debate, reflecting significant societal struggle strongly present in the EU, which appeared at many levels. Therefore the role of the agrochemical industry, the politics, the role of the (transnational) state, and the role of science against the role of the public and CSOs is of utmost interest of this thesis.

As Bob Jessop suggests, TTIP is what he calls "the transnational deep state", reaching its own limits and contradictions. The agreement indeed proved to be full of contradictions and controversies which concerned those social forces which care about the public health, environment, transparency, and those who struggle against constantly increasing commodification under neoliberal capitalism. Once the counter-hegemonic social forces demonstrated the discontent of how the EC as well as transnational business class 'sold' the deal to the public, the latter actors restored to portraying the challengers of the agreement as irrational. Obviously the TTIP and the debates revolving around the deal reached the limits. Therefore, in line with the neo-marxist theoretical premises, this paper argues that TTIP has reached its limits and points to the overall crisis of neoliberal capitalism because of attempts to remove barriers which would have had impact on public health and the environment, which collided with a strong resistance of social forces opposing the agreement.

1. Theoretical Framework

The theoretical background will utilize four streams of neo-marxist approach towards theory in International Relations. In this context, TTIP and its ramifications will be looked at through the lenses of four theoretical concepts within the neo-marxist theory. Three main empirical cases – the EU's precautionary principle, the endocrine disrupting chemicals, and the glyphosate saga – will serve as mediators for the theoretical explanation. These three cases were chosen as examples where a heated debate was strikingly strong and included various actors – particularly a (transnational)state, politics, transnational corporations, science, and civil society movements. It was specifically in these three debates that societal elements entered a struggle of positions and diverging views when it came to the question of undermining human health and environment. These views contrasted with the agenda of the transnational corporations, which pursued its goals via various channels – mainly political sphere and the (transnational) state, but also strived to shape science to fit its agenda and the media also became an essential element in corporate and state power legitimation.

Yet, to describe the struggles in a David-Goliath fashion is not the aim of this thesis and the struggles were not always clear-cut. Although it is true that civil society organizations faced the power of the corporate and state elite in the chosen debates, it would not be in line with the neo-marxist theory to postulate things merely in either black, or white colors. For, neo-marxism suggests that societal struggles do appear within societal units, just like they do appear among them and beyond them. Thus, neo-marxist theory very well describes how societal patterns function and influence each other in the modern industrialist society. Our society is then driven by neoliberal mode of production which enters the very core of societal patterns – to what extent is our society willing to subordinate to or extricate from hegemonic position of the rule depends on the mobilization of counter-hegemonic forces.

To explain the very core of these societal struggles, the neo-marxist theory helps us to comprehend particularly strong divergence and convergence among the aforementioned actors.

First, Amsterdam School and its authors can provide us with the explanation of roots of the EU as a neoliberal project and the formation of the ties of capital on both sides of the Atlantic – the so called transatlantic capitalism. This helps us clarify why key

principles in public health and the environment got challenged in the context of TTIP and why especially the US showed displeasure with the high EU standards, perceiving them as a serious obstacle to the deal. Nonetheless, it was not only the US political representatives who voiced their discontent due to different perception of the key principles in human health and environment. Also, big agrochemical industry, with the transatlantic ties, played a key role in pushing their agenda through the doors and tables of the EU institutions. Thus, the Amsterdam Project and its analytical approach in line with neo-Gramscianism should serve as useful tool for these purposes.

Second, the neo-marxist authors such as Bob Jessop and Nicos Poulantzas, drawing heavily on Antonio Gramsci's theory, explain the key power and hegemonic relations on a state level. This stream of neo-Gramscian thought deals particularly with the state and its role in the context of constant corporate de-regulation under neoliberalism. Moreover, these thinkers go beyond explanation of the Amsterdam School, or rather supplement its views especially in the sphere of state order and hegemonic and counterhegemonic forces within a state system.

Third, since the science plays a vital role in three chosen empirical cases, the neo-Gramscian views will be enriched by Ulrich Beck's work, which deals with the role of the state, corporations, science, and society in industrial age. In this sense, Beck's work complies with Gramsci's notion of organic and traditional intellectuals and adequately complements the neo-marxist theory.

Third, the neo-marxist theoretical view will deal with commodification of environmental externalities. This stream of thought is used especially among political ecologists and critical political ecologists. In the context of political ecology, it will also be explained how political, economic, and social sphere interact regarding environmental issues. The concepts of commodification of nature will be explored thanks to great neomarxist thinker Immanuel Wallerstein.

I believe that these three lines of neo-marxist thought shall provide a solid base for understanding and explanation of the phenomena appearing in debates concerning the TTIP. Since the TTIP is a quite broad topic and incorporates various issues connected with the deal, the main focus of the thesis is to explore debates regarding agrochemicals in the context of TTIP. Narrowing down the overall focus of the thesis to the three cases, which proved to be significant for struggles among various societal actors, would open doors for testing validity of neo-marxist theory. Furthermore, by its nature the neo-marxist theory

(especially that of the Amsterdam School and that of Bob Jessop and Nicos Poulantzas) is a robust theory with tools for deep analysis, particularly due to neo-Gramscian focus on social agents. The theory should then explain whether the pressures exerted on the (transnational) state by the civil society – when fighting for the EU principles in terms of public health and the environment - were illegitimate and irrational, as often echoed from proponents of the TTIP and agrochemical industry.

1. 1. **Amsterdam School**

Amsterdam School is a stream of thought historically grasping critique of Functionalism and Federalism and contributing to the theories of European integration with Marxist explanations. The Amsterdam Project (AP) in international political economy (IPE) further dealt with the theory of capital fractions and formation of transnational classes and later added Gramscian approaches. Since the late 1970s the AP has enriched the international political economy and the members of the Department of International Relations as the University of Amsterdam have built a distinct position among IPE theorists.²⁷ Combination of neo-Gramscianism and Marxist view on the circuits of capital allowed Amsterdam School to define protoconcepts of control that describe the interests of both the productive and the money capital. AP's comprehensive concepts of control can be interpreted as "hybrid accumulation strategies, state projects, and hegemonic visions." 28 For Amsterdam scholars economic imaginaries are a core for class formation and are derived from 'transnational imagined communities' a concept of Kees van der Pijl who drew on Benedict Anderson's notion of nation formation. Capitalist class in neoliberal economies is spawned once positions as individual and contesting capitalists are overcome. Based on their mutual interests, common vision is then articulated via other social classes or groups and the state. To constitute themselves as class, these capitalist actors become a part of wider transnational community.²⁹ The contribution of the AP lies in identifying inter-state politics as well as state formation as a part of a process of the transnational

²⁷ OVERBEEK, Henk. Transnational class formation and concepts of control: towards a genealogy of the Amsterdam Project in international political economy. Journal of International Relations and Development [online]. 2004, 7(2), 113-141 [cit. 2018-05-03]. Available at: http://link.springer.com/10.1057/palgrave.jird.1800011. p. 113

²⁸ JESSOP, Bob a Ngai-Ling SUM. Putting the 'Amsterdam School' in its Rightful Place: A Reply to Juan Ignacio Staricco's Critique of Cultural Political Economy. New Political Economy [online]. 2016, 22(3), 342-354 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/13563467.2017.1286639. p. 6 ²⁹ Ibid.

dynamics of capital accumulation along with class formation. Among prominent scholars of the Amsterdam School belong Kees van der Pijl, Henk Overbeek, Ries Bode from the first generation and Bastiaan van Apeldoorn representing the second generation.

1.1.1. Comprehensive Concept of Control

This notion was developed based on criticisms that previous AP's thinking was too 'reductionist', 'deterministic' as well as absence of agency. Initially, the AP developed conception of the dialectical totality regarding structure and agency which would require incorporation of concepts capturing relationship between the politics and ideology on one hand and the structural dynamics on the other. The AP strived to avoid subordination of one of those relationships and developed the notion of the CCC, which enabled its theoretical framework to understand fractionation of the capitalist class as a process of class formation as opposed to a mere departure from this process or unimportant epiphenomenon.³⁰ The CCC captures the moments where class interests aggregates special interests or subordinate others. The CCC is an essential part of hegemonic concepts of control - a tactic to project appropriate fashion of public affairs and social control to legitimize the superior interest of the ruling elite to attract the majority of the population for a certain period of time. The process of CCC requires compromises "in which the fractional, 'special' interests are arbitrated and synthesized."³¹ In other words, a class compromise is required so that dominated classes and various class fractions are appropriately compensated, whether economically or ideologically, for complying with the domination of the hegemonic fraction. As Overbeek suggests, whether it comes to Poulantzas's term 'concepts of strategy', Gamble's 'class strategies' or Jessop's 'hegemonic projects', these all fall under the theoretical roof of comprehensive concepts of control.³²

For the AP, in the neo-Gramsican fashion, social actors are core units for explanation of relationships and their role in the global capitalist system. As Jessop suggests, CCCs are articulated by various actors – particularly "politicians, political

³⁰ OVERBEEK, Henk. Transnational class formation and concepts of control: towards a genealogy of the Amsterdam Project in international political economy. *Journal of International Relations and Development* [online]. 2004, 7(2), 113-141 [cit. 2018-05-03]. Available at: http://link.springer.com/10.1057/palgrave.jird.1800011. p. 114-115.

³¹VAN DER PIJL, Kees. *The making of an Atlantic ruling class*. New edition. Brooklyn, NY: Verso, 2012. p.

OVERBEEK, Henk. Global capitalism and National decline: the Thatcher decade in perspective. Boston: Unwin Hyman, 1990. p. 26.

pundits, trade union leaders, central bankers, experts, parties, think tanks, lobbies, intellectuals, diplomats, leading industrialists, bureaucrats, and diverse other social agents across quite different social fields, geographical scales, and sites of struggle."³³ CCC is characteristic of dynamic and contradictory tendencies rather than static phenomena. Indeed, contradicting trajectories require active interventions and strategies of social and political agents - these interventions are voiced through political and ideological domain.³⁴ Struggle for hegemonic positions of these actors depends on searching ways to mask a "specific, asymmetrical conception of the general capitalist interest as a general social interest."35 The AP historically recognizes four comprehensive concepts of control that have become hegemonic: classical liberalism from the nineteenth century, tendency towards the state monopoly during the early decades of the twentieth century, corporate liberalism between 1940-1970, and neo-liberalism during the 1980s.³⁶ The Amsterdam School analysis then provides a robust historical account of sequence of hegemonic CCCs or their ultimate dissolution, depends on a particular narrative account of competing strategies and policies, and is based on the examination of interpersonal networks, ties among corporations, and material interconnectedness. These analyses allow comprehending the class relevance to CCCs and social bases they are built upon. In addition, analytical approach of the Amsterdam School aims at class relations, interests, and strategies. Therefore, typical AP analysis does not explicitly provides semiotic analysis explaining why certain CCCs, tactics, and policies become more successful.³⁷

1.1.2. State-Capital Nexus

The concept of state-capital nexus of the Amsterdam School explains the complex and diverse inner relationship between capital and state and is examined in the context of

³³ JESSOP, Bob a Ngai-Ling SUM. Putting the 'Amsterdam School' in its Rightful Place: A Reply to Juan Ignacio Staricco's Critique of Cultural Political Economy. *New Political Economy* [online]. 2016, **22**(3), 342-354 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/13563467.2017.1286639. p. 7.

p. 7. ³⁴ OVERBEEK, Henk. Global capitalism and National decline: the Thatcher decade in perspective. Boston: Unwin Hyman, 1990. p. 27.

³⁵JESSOP, Bob a Ngai-Ling SUM. Putting the 'Amsterdam School' in its Rightful Place: A Reply to Juan Ignacio Staricco's Critique of Cultural Political Economy. *New Political Economy* [online]. 2016, **22**(3), 342-354 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/13563467.2017.1286639. p. 7.

p. 7. ³⁶ OVERBEEK, Henk. Global capitalism and National decline: the Thatcher decade in perspective. Boston: Unwin Hyman, 1990. p. 4.

³⁷ JESSOP, Bob a Ngai-Ling SUM. Putting the 'Amsterdam School' in its Rightful Place: A Reply to Juan Ignacio Staricco's Critique of Cultural Political Economy. *New Political Economy* [online]. 2016, **22**(3), 342-354 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/13563467.2017.1286639. p. 8.

global capitalist system. Since the AP has built on thick historical analyses of the development of the state-capital relationship, it dwells deep into history and the core of the capitalist system, tracing back to the roots of the mercantile capital relationship with the absolutist state in the seventeenth and eighteenth centuries. Later, the system transformed into the liberal state and established its ties with early industrial capitalists in the nineteen century, and further developed into the nexus between emerging welfare state and late industrial capital with phases of monopoly capitalism and corporate liberalism, which characterized first three quarters of the twentieth century. Finally, the AP defines last four decades of global capitalist system as the nexus between the neoliberal state and financial capital.³⁸

The AP strives to analyze neoliberalism and the evolution of the global order, particularly the role characteristic properties of the US imperialism in a transnational context.³⁹ Bastiaan van Apeldoorn and Naná de Graaff provide the state-capital nexus with historical analysis of what they call the Open Door imperialism. As the authors argue, the key driving forces of the US imperialism project are interests and ideas of US transnational capital, which are articulated and effectuated through the close ties between US state officials and the US corporations.⁴⁰ Transnationalization of the capital is inherently associated with current era of globalization but it has a much longer history, tracing back to the global rise of American capitalism. Driven by the need for expansion outside domestic market and sustaining profitability, the US emerging elite pursued its strategy through so much desired 'intelligent and spirited foreign policy' in consecutive waves stemming at the end of the nineteenth century, end of the 1930s, and 1970s onwards to expand beyond the US borders and avoid crises of over-accumulation. Since the US as a state became an articulator of these strategies pursued by the corporate elites, the US has shaped and created the entire liberal capitalist world order, especially from 1945 onwards.⁴¹

³⁸ VAN APELDOORN, Bastiaan, Naná DE GRAAFF and Henk OVERBEEK. The Rebound of the Capitalist State: The Rearticulation of the State–Capital Nexus in the Global Crisis. *Globalizations* [online]. 2012, **9**(4), 467-470 [cit. 2018-05-03]. Available at:

http://www.tandfonline.com/doi/abs/10.1080/14747731.2012.699960. p. 468.

³⁹ OVERBEEK, Henk. Transnational class formation and concepts of control: towards a genealogy of the Amsterdam Project in international political economy. *Journal of International Relations and Development* [online]. 2004, 7(2), 113-141 [cit. 2018-05-03]. Available at: http://link.springer.com/10.1057/palgrave.jird.1800011. p. 133.

⁴⁰ VAN APELDOORN, Bastiaan and Naná DE GRAAFF. The Limits of Open Door Imperialism and the US State—Capital Nexus. *Globalizations* [online]. 2012, **9**(4), 593-608 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/14747731.2012.699937. p. 594.

Historical accounts of how internationalization of finance capital led by the US influenced the capitalist world order, is well analyzed among Amsterdam School IR theorists. For van der Pijl, class formation in the North Atlantic area has to be understood as a consecutive process of reshaping actors of elite rule in terms of the dynamic of the capital internationalization which historically experienced several stages. The origins of transatlantic ruling class have to be traced, according to van der Pijl, to the American railway boom at the period after the Civil War. In this period an Atlantic circuit of money capital was established and its epicenter later shifted from London to New York, around the period of World War One. Partial disorganization of first transatlantic capitalist ties happened between 1930s and 1940s when national productive capital gained its dominance over internationally circulating capital. Restructuration of transatlantic capitalist ties came in the context of the Pax Americana after the World War Two and opened a way for circuits of both the money and the productive capital that got integrated at the transatlantic level. 42 As Overbeek observed, under auspices of American post-war restoration of the London's City, the City got even more distanced from domestic economy than during British hegemony prior to the World War Two. It was due to new American hegemony and by the global spread of Fordism accentuated through Marshall plan that City renewed its internal dominance. 43 Thus, connection between New York and London played a key role in shaping and articulating corporate elite's projects. Post-war spread of American multinational firms and banks finally opened a third stage of the capital internationalization.44

The notion of state-capital nexus has been historically articulated through what AP denotes as 'offensives.' Van der Pijl distinguishes among the Roosevelt's offensives in the President's third term, the Marshall offensive, and Kennedy offensive. In these political-strategic offensives a pursuance of the US corporate goals played an essential role. Thus, the relations between the US national state and the US transnational capital remain crucial, as Apeldoorn and de Graaff suggest, and are indeed appropriate for understanding the process of neoliberal globalization – once again enabled by the US

⁴² VAN DER PIJL, Kees. *The making of an Atlantic ruling class*. New edition. Brooklyn, NY: Verso, 2012. Introduction p. XXI.

⁴³ OVERBEEK, Henk. Global capitalism and National decline: the Thatcher decade in perspective. Boston: Unwin Hyman, 1990, p. 33.

⁴⁴ VAN DER PIJL, Kees. *The making of an Atlantic ruling class*. New edition. Brooklyn, NY: Verso, 2012. Introduction p. XXI.

⁴⁵ Ibid, Introduction p. XXXIII.

state.⁴⁶ The interconnectedness of the state and the aces of the US corporate elites lie in the personal ties with those officials who have been recruited from the US capitalist class since the outburst of industrial capitalism. This creates an environment where policy-planning is articulated through corporate-funded think tanks, lobbying associations, and campaign financing.⁴⁷ Also, this is where the ideas for CCC are born. As Apeldoorn and de Graaff found out, a large number of the grand strategy-makers in the post-Cold War⁴⁸ era switched their positions between government and corporations. This implies that these strategy-makers are not only in a significant proximity to the corporate elite, but they are also, as the authors further note, a part of this elite.⁴⁹

In the theoretical and empirical eyes of the AP, global capitalism is in a deep crisis. As the authors from the AP observe, since the outbreak of the 2007 crisis the world has dealt with crisis of overaccumulation and crisis of the neoliberal hegemonic project. These deepening political and economic crises are, as the AP suggests, "furthermore intimately linked to the deepening ecological crisis" and "power shift to the East within global political economy." This is an important moment from the theoretical perspective of the AP, since it explicitly mentions that global capitalism threatened the survival of the environment, in which humans live. In addition, it is in the context of these crises that project of marketization and commodification has taken place. Yet, this type of aggressive neoliberal privatization pays its prize in the form of pensions and wages erosion, privatizations in welfare and health care, and continuing creation of new markets while ignoring threats to ecosystems. As far as state-capital nexus is concerned, the post 2007 crisis (2008 respectively), as the AP assumes, will not drastically reconfigure close relationship between state power and capital accumulation, especially due to the reality of ongoing commodification and marketization in favor of the nexus. Secondary of the nexus.

⁴⁶ VAN APELDOORN, Bastiaan and Naná DE GRAAFF. The Limits of Open Door Imperialism and the US State–Capital Nexus. *Globalizations* [online]. 2012, **9**(4), 593-608 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/14747731.2012.699937. p. 597

⁴⁷ Ibid, p. 598

⁴⁸ Ibid. The authors examined participation of key US officials in the transnational corporations, following the Fortune 500 ranking. All US Administrations, including that of Barrack Obama had a substantial numbers of strategy-makers connected to the corporate elite.

⁴⁹ Ibid, p. 599.

⁵⁰ VAN APELDOORN, Bastiaan, Naná DE GRAAFF and Henk OVERBEEK. The Reconfiguration of the Global State—Capital Nexus. *Globalizations* [online]. 2012, **9**(4), 471-486 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/14747731.2012.699915. p. 471.

⁵¹ Ibid, p. 478.

⁵² Ibid, p. 483.

1.1.3. EU as a Project of Embedded Neoliberalism

The term embedded neoliberalism is theorized by the Amsterdam School as a reflection of a hegemonic project (coined similarly as the CCCs) which mediates and reflects agenda of those social and political forces connected with transnational European capital.⁵³

The AP does not rehearse a classical debate on the nature of the European Union as a regime. Indeed, as the Amsterdam School maintains, the state in an era of multi-level governance comprises of institutional structures of the EU through which the corporate elite "needs to be effectuated and legitimated, and through which conflicts arising out of its contradictions [are] mediated."54 The EU has to be understood as a process of 'marketisation of corporate control', which is a part of wider European marketization project. Therefore, current changes in the EU's corporate governance and European capitalism should be understood as a part of this project.⁵⁵ Although the question of how a national state under the cloak of the EU can be characterized echoes among the AP's scholars, they strive to distinguish whether it remains national, supranational, or neither national nor supranational. Still, the AP inclines to state's transnational nature. In addition, the AP also accepts Jessop's theory of the state as a part of the process of multi-scalar governance.⁵⁶ Drawing on neo-Gramscian premises of Jessop's theory, the AP is able to establish a conceptual framework on three logics for understanding of 'the state.' The 'three Is' incorporate a) social interests or domestic coalitions, b) institutions and the state, c) dominant ideas. This allows AP to conceptualize the state in broader sense of transnational political economy.⁵⁷

For Amsterdam School, social forces are carriers and key units in understanding and explaining the social phenomena within transnational political economy. The Amsterdam School posits that political and social agency enables and has an inherent impact on structural changes. For instance, in case of the EU, an essential role is played by the EU as an institution and "by the agency of the transnational social and political forces

⁵³ APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. *Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon*. New York: Palgrave Macmillan, 2009. p. 22. ⁵⁴ Ibid, p. 6.

⁵⁵ VAN APELDOORN, Bastiaan and Laura HORN. The Marketisation of European Corporate Control: A Critical Political Economy Perspective. *New Political Economy* [online]. 2007, **12**(2), 211-235 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/13563460701302984. p. 212.

⁵⁶ APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. *Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon*. New York: Palgrave Macmillan, 2009. p. 6. ⁵⁷ Ibid, p. 6-7.

in constituting what we see as a European political project."⁵⁸ Thus, processes and changes within as well as outside the EU has to be understood and analyzed as social phenomena where dominant social groups tend to influence political and bureaucratic apparatuses through myriad of channels, "including provision of material support, fraud, corruption, client[e]listic relations and other personal ties." For that reason, as the AP's argument goes, "The state is thus understood as an arena through which social struggle is waged."⁵⁹ As Apeldoorn et al. point out, particularly the European Commission is a stage where realization of hegemonic projects takes place and where social forces are the main driver. In this sense transnational social forces play prime, which favors the mobile capital over interests of other actors, in particular over labor. Yet, the AP does not provide this view as normative, since in Gramscian terms the hegemonic projects within this type of state-capital nexus do not remain uncontested and without contradictions.⁶⁰

Historically the European integration project has combined three strategies – namely neo-mercantilist conception, neoliberal project, and the social democratic project. The first two concepts have been most dominant and the dividing line both were interests of a 'globalist' fraction favoring neoliberal project. This group consisted particularly of Europe's globalized firms. The fraction for neo-mercantilist conception comprised of large industrialists serving the European market, protected by tariff walls if necessary. This dividing line has been particularly observable throughout 1980s and 1990s. ⁶¹ In the transition towards more globalized trend of neoliberal economy the European Round Table of Industrialists (ERT) established in 1983 ⁶² serves in the analyses of the AP as a platform of the aforementioned division of inclination to either of the projects and an arena where societal struggles, on the level of inclination towards either project, took place within the European integration. Thus, the ERT is perceived by van Apeldoorn as an organization where switches and thus struggles for hegemonic position has taken place. It was with the 1985 Commission's White Paper that the Europeanist fraction of the ERT gradually started losing ground of the envisaged neo-mercantilist vision. Indeed, the design of the internal

⁵⁸ VAN APELDOORN, Bastiaan and Laura HORN. The Marketisation of European Corporate Control: A Critical Political Economy Perspective. *New Political Economy* [online]. 2007, **12**(2), 211-235 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/13563460701302984. p. 212.

⁵⁹ APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon. New York: Palgrave Macmillan, 2009. p. 7. ⁶⁰ APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon. New York: Palgrave Macmillan, 2009. p. 13. ⁶¹ Ibid, p. 23.

⁶² European Round Table of Industrialists: About Us. *European Round Table of Industrialists* [online]. Brussels, 2018, 2018 [cit. 2018-05-03]. Available at: https://www.ert.eu/about-us

market rather opened up Europe's economies to the global economy and subordinated them to an extent under US-concentrated forces.⁶³ In addition, the platform of ERT along with transnational capital and close cooperation with the EC created notion of global competitiveness, which became an inherent part of the EU governance.⁶⁴ Embeddedness in this sense has to be understood as "the transnational struggle between the three rival elite projects ... and represents a strategy of incorporation on the part of the neoliberal project, neutralizing the opposition from the rival project."⁶⁵

1.1.4. Transatlantic Ties

Furthermore, in the view of the AP the way how contending projects are shaped also has to be understood in relation to transatlantic relations and geopolitical and geoeconomic trajectories. Indeed, as van Apeldoorn argues, openness of European markets depends in particular on strong ties of the transatlantic economic area. For, it rests with contradictions of the US 'new imperialism' that would influence and shape the hegemonic project within the EU.66 Apart from that, any separation of Atlanticism and neoliberalism is in vain since attempts to control capital and reduction of trends towards liberalization would not be received with applause especially from Washington and Wall Street as well as from large European corporations.⁶⁷ Therefore, it seems that return towards old neomercantilism as envisioned by the ERTs in the 1980s and the beginning of 1990s is for now rather unlikely. As Appeldoorn examined, primarily ERT maintains transatlantic links particularly with Amcham and relations between ERT and the US business groups have been deepening recently, particularly through such fora as Transatlantic Policy Network or Transatlantic Business Dialog. The latter forum is supported by the US government and the EC. Although the Atlantic class formation has deepened in past decades, the ties were marked by the 1960s disintegration and temporary crisis in Atlantic relations. It was the notion of the emancipation from declining hegemony of the US at that time that drove

⁶³ APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon. New York: Palgrave Macmillan, 2009.

⁶⁴ HAGER, Brian Sandy. 'New Europeans' for the 'New European Economy': Citizenship and the Lisbon Agenda. In: APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. *Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon*. New York: Palgrave Macmillan, 2009. p. 109

⁶⁵ Ibid, p. 25.

⁶⁶ Ibid, p. 35.

⁶⁷CAFRUNY, Alan W. Geopolitics and Neoliberalism: US Power and the Limits of European Autonomy. In: APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. *Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon*. New York: Palgrave Macmillan, 2009. p. 82.

Europe's own longing for continental firms which would be competitive internationally. Nevertheless, even though division between Europeanism and Atlanticism was observable in the 1980s, differences among these capitalist classes have been to a large extent eradicated. ⁶⁸ Yet, despite the growing role of Atlanticism and consequences of neoliberal restructuring in Europe, the 'social' European capitalism is not to be fully compared with 'liberal' US-American system. Indeed, as Bohle points out, "this so because European capitalism offers forces of the countermovement to liberalization[,] better institutional legacies and more points of intervention than US capitalism."69

Transatlantic ties were shifting between continental Europe, British Isles in various moments and the notion of Atlanticism does not necessarily relate to post-war reconstruction in Europe. As van der Pijl notes, this notion for a widening of Atlantic Community originated in Wall Street. 70 Even though the heartland of transatlantic connections was represented by Great Britain, also German business got into Atlantic capital circulation, particularly represented by bankers from Frankfurt, Hamburg, and Dresden but also chemical industry company BASF among other companies.⁷¹ That chemical and also oil cartels were interwoven was evident prior to the World War Two. In reality, prior to 1930s IG Farben dealt 162 separate cartel agreements with American companies.⁷² As discussed previously, important milestone in re-establishing and reshaping transatlantic links was the Marshall Plan, which funds were used also for the Monnet Plan and implementing of Fordism on larger scale. It was under auspices of Marshall Plan that allowed European liberal-internationalist bourgeoisie, whose money capital was to be found in colonial or Eastern European circuits, to get their interests restructured in new Pax Americana.⁷³ In particular, the former capital circuit could have contested submission to US hegemony due to revived colonial ambitions or resentment over the occupation, which created rollercoaster-like tendencies until Kennedy offensive of

⁶⁸ VAN APELDOORN, Bastiaan. Transnational Capitalism and the Struggle over European Integration[online]. London: Routledge, 2002. [cit. 2018-05-03]. Available at: http://sfx.is.cuni.cz/sfxlcl3/cgi/core/multi.cgi?sfx.request_id=12491595. p. 111 – 112.

⁶⁹ BOHLE, Dorothee. Race to the Bottom? Transnational Companies and Reinforced Competition in the Enlarged European Union, In: APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon. New York: Palgrave Macmillan, 2009. p. 169.

⁷⁰ VAN DER PIJL, Kees. *The making of an Atlantic ruling class*. New edition. Brooklyn, NY: Verso, 2012. p. 39.

Ibid, p. 45.

⁷² Ibid, p. 86.

⁷³ Ibid, p. 161.

1960s.⁷⁴ In this period it proved clear that pre-war connection of transatlantic capital was essential in pursuing goals for shaping the Cold-War Europe to the liking of the American imperialistic tendencies. For instance, as van der Pijl points out, "The establishment of a corporate-liberal synthesis in Western Europe as a bulwark against socialism was Monnet's ultimate ambition." As van der Pijl further notes, Monnet himself had ties to Blair and the Bank of America already in 1920s, later adding up to the spheres of Lazard Fréres, Lehman, and Goldman, Sachs. Also, Monnet's assistant Pierre Uri, one of the key architects of the European Community, was director of Lehman Brothers for Europe, while Robert Marjolin, another deputy of Jean Monnet and co-creator of the First Modernization Plan, joined the JPMorgan Chase Manhattan board. 75

As it was pointed out, transatlantic capital, despite various waves of opposition of counter-hegemonic capitalist classes and other social forces, gradually found its way and common language of legitimation throughout the history on both sides of the Atlantic. Nonetheless, the limits and ramifications of these ties have been described and mirrored in the key concepts of the Amsterdam School. In the era of what seems to be the post-2008 crisis period - actually a seemingly unresolved crisis - and in the era of continuing class compromises, legitimation of hegemonic neoliberal project and growing power of speculative capital along with continuing degradation of ecosystems under hunger for more profits, embedded neoliberalism might have found its own limits. Reaching these limits might be a rather dangerous precondition for further development of the transatlantic area. As van der Pijl and Yurchenko stress, "As financial and legitimacy deficits are increasingly covered by restricting the space for articulation of protest other than the rise of ultra-right populist and neo-fascist parties, this may well result in a growing politicisation of neoliberalism and deepening instability."⁷⁶

Poulantzas and Jessop on the State 1. 2.

Both Nicos Poulantzas and Bob Jessop are great contributors to the theory of the state, especially as far as neo-Gramscian views are concerned. While Poulantzas was one of the neo-marxist pioneers in giving Gramsci's concept of hegemony systematic as well

⁷⁴ Ibid, p. 177. ⁷⁵ Ibid, p. 226.

⁷⁶ VAN DER PIJL, Kees a Yuliya YURCHENKO. Neoliberal Entrenchment of North Atlantic Capital. From Corporate Self-Regulation to State Capture. New Political Economy [online]. 2014, 20(4), 495-517 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/full/10.1080/13563467.2014.923827.p. 513-514.

theoretical formulations⁷⁷, Bob Jessop has acknowledged Poulantzas as a source of his continuing inspiration, literally mentioning him as a source of "fresh insights and stimulation." The authors rely on presupposition that state is a 'social relation' and broaden Gramsci's postulates of hegemony. Likewise, the contribution of these authors for theoretical background of the state and social agents operating within them, through them and beyond them, enriched the modern stream of neo-marxist thought in International Relations. As it was mentioned above, the Amsterdam School shares very much of Jessop's and hence Poulantzas' theoretical framework and these two authors help us explore how social agents within the state operate in neo-Gramsican terms. For comparison of approaches of the AP and Jessop's and Sum's CPE, see Appendix no. 1.

Understanding the state as a 'social relation' would help us in explaining social phenomena occurring within the context of TTIP – in particular exerted pressures of agrochemical industry on the (transnational)state against the pressures of civil society organizations. It is in this context than we can speak of what Bruff describes as 'authoritarian neoliberalism' in the context of post-2007 crisis era where state is an important arena of social struggles. Also, it is in the very heart of state where contradictions and conflicts take place and where legitimation is increasingly challenged and, as Bruff further stresses, "the authoritarian neoliberal response could further heighten this crisis by way of the state's reconfiguration into a less open and democratic entity." 80

1.2.1. The State as a Social Relation

Throughout his path to finish Marx's theory of the state, Poulantzas got inspired by his own life experiences and the likes of Althusser, Gramsci as well as Foucauldian analysis of power which pointed him to return to Marx and even move beyond him⁸¹ This allowed Poulantzas to provide a multi-faceted theory of the state and his work can be categorized as both state- and society-centered.⁸² First, Poulantzas stressed juridicopolitical element of the state influencing social and political forces and stressed the state's

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⁷⁷ POULANTZAS, Nicos. *State, power, socialism*. New edition. London [u.a.]: Verso Books, 2000. p. IX Introduction.

⁷⁸ JESSOP, Bob. The state: past, present, future, Malden, MA: Polity Press, 2016, p. IX Preface.

⁷⁹ BRUFF, Ian. The Rise of Authoritarian Neoliberalism. *Rethinking Marxism* [online]. 2013, **26**(1), 113-129 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/08935696.2013.843250. p. 116. ⁸⁰ Ibid.

structures and capacities in articulating and maintaining the cohesion of society. Second, Poulantzas also addressed struggles for hegemonic position in capitalist societies as well as specifics emerging from within various divisions of the state apparatus based on peculiar state identities and ideologies. Last but not least, his contribution lies in offering his observations in shaping order of capitalist societies. In addition, attributing exercise of power to social agents rather than describing state as a static entity, Poulantzas opened a way for understanding state's power apparatus experiencing confrontations and resistances beyond the state. In other words, as Jessop sums it, "state power is an institutionally-mediated condensation of the changing balance of forces." As Jessop further notes, "The balance of forces in turn can never be class-neutral. State power is always already selective in class terms by virtue both of its structural selectivity and of the class character of the balance of forces."

In terms of selectivity, also ideology which legitimizes exercise of state's power, is never socially neutral but always class ideology and specifically constitutes power of the ruling class. The dominant ideology then enters various apparatuses such as army, police, judicial system, prisons, and state administration.⁸⁴ For what Poulantzas calls Scientist-State, ideology is turned into discourse and the apparatuses enjoy monopoly of knowledge and divides the society in the capitalist society between manual and intellectual labor and encompasses science itself. The monopoly of knowledge and rationality is expressed through apparatuses creating and enforcing law. As Poulantzas notes, modern law is characterized as "capitalist relationship between power and knowledge, as it is condensed in capitalist intellectual labour: outside the law, individuals-subjects contain no knowledge or truth."85 As Poulantzas further points out, power is materialized through certain apparatuses and institutions in which struggles always have primacy and go beyond these apparatuses or institutions.⁸⁶ The struggles among social agents are thus rather multilayered. As Poulantzas notes, the state encompasses not only those forces between segments of the power bloc, but also "relationship between that bloc and the dominated classes."87 In sum, the struggles do occur also within the apparatuses under hegemonic

⁸³ Ibid, p. 93.

⁸⁴ POULANTZAS, Nicos. *State, power, socialism*. New edition. London [u.a.]: Verso Books, 2000. p. 28 – 29.

⁸⁵ Ibid, p. 89.

⁸⁶ Ibid, p. 44-45.

⁸⁷ Ibid, p. 140.

power bloc⁸⁸ as well as through contradictions with the popular masses which are utilized by the power bloc to be enlisted for their support against the competing fractions of the bloc.⁸⁹ Therefore, concerning the fact that the state is a power mechanism, it is an arena where "the material condensation of a relationship" takes place.⁹⁰

1.2.2. Authoritarian Statism

In the eyes of Poulantzas, 'authoritarian statism' is connected with the decline of democracy and reflects considerable modification of the state in western capitalist societies. This modification is characterized by strengthened state control over socioeconomic sphere of life in combination with degradation of the democratic institutions and reduction of liberties. 91 Furthermore, authoritarian statism is the result of and response to the crisis⁹² - distinctive of favoring particular fractions of capital over others, while penetrating into various social areas. Consequently, the state in this phase of a crisis strives to balance out discrepancies and disruptions stemming in restructuring in socioeconomic spheres such as the environment or health, while dominated social groups are not guaranteed material concessions.⁹³ These further results in, as Poulantzas stresses, "considerable politicization of popular struggles related to these spheres: the popular masses are from now on directly confronted with the State." As Poulantzas further puts it, under the umbrella of 'social policy' and interconnected interests of capital and the state are revealed. From this moment on, the state faces considerable loss of legitimacy, which creates turmoil among the popular masses. 94 Such a trend of authoritarian statism has been observable especially since the 2007 when cumulating and artificially resolved crises lead to loss of political and economic legitimation. As a reaction, the state attempts to resort to, in Poulatzasian term coined as 'authoritarian fixes', which is, as Bruff observes, "potentially more of a sticking plaster than anything more epochal." 95

⁸⁸ Ibid, p. 142.

⁸⁹ Ibid, p. 144.

⁹⁰ Ibid, p. 145.

⁹¹ Ibid, p. 203-4.

⁹² Ibid, p. 206.

⁹³ BRUFF, Ian. The Rise of Authoritarian Neoliberalism. *Rethinking Marxism* [online]. 2013, **26**(1), 113-129 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/08935696.2013.843250. p. 119. 94 POULANTZAS, Nicos. *State, power, socialism*. New edition. London [u.a.]: Verso Books, 2000. p. 213

⁹⁵ BRUFF, Ian. The Rise of Authoritarian Neoliberalism. *Rethinking Marxism* [online]. 2013, **26**(1), 113-129 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/08935696.2013.843250. p. 125.

1.2.3. Strategic-relational Approach (SRA)

For Jessop who further broadens theoretical frameworks of Marx, Gramsci, Poulantzas, and Foucault as well as other thinkers, the state as an institutional ensemble does not exercise power. Thus, for Jessop state is not treated as a solidified, non-dynamic unit, for him the state does not equal a real subject. Rather, the state should be viewed as an ensemble of various power centers offering uneven chances to different social forces within as well as beyond the state acting for various political purposes. Moreover, the state is an arena of social action where "unacknowledged conditions influence the success or failure of their actions and there are always unanticipated effects."96 SRA is also an essential part of Jessop's and Sum's 'cultural political economy' (CPE) developed at the Lancaster University as an analytical tool for analyzing selectivity and strategic action where semiosis underlines the ontological significance. SRA strives to combine "material and discursive concerns in the description and explanation of selectivity and strategic action and their implications for social integration and social cohesion, their tensions and crises, and their reproduction and transformation."97 Drawing on Poulantzas, the theory of state is valid across political regimes due to focus on social agents. Thus, different types of state and political regimes will be either less or more vulnerable to various types of goals pursued by distinct blocs or alliances. This vulnerability means change in the overall balance of forces and presupposes a complex struggle of maneuver and tactics. 98

In terms of SRA, Jessop puts stress on significance of time and space, in other words spatiotemporalities. These analyses go beyond state's basic structures, institutional architectural, and organizational forms and architectures. Thus, looking at the state in spatio-temporal terms "builds on the issues of state territory, narrowly conceived, but also takes us well beyond it." While spatial differentiations might result in basic antagonisms, they could facilitate coordination and cohesion across spaces and scales through such elements as hierarchy, markets, solidary, networks as well as other governance mechanisms. This is particularly reflected in sociospatiality which incorporates promotion of specific accumulation strategies, hegemonic and state projects depending on various technologies and power bloc's practices which are typical for mixed motives,

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⁹⁶ JESSOP, Bob. State power: a strategic-relational approach. Cambridge: Polity, 2007. p. 37.

⁹⁷ Ibid, p. 50.

⁹⁸ Ibid, p. 133.

⁹⁹ JESSOP, Bob. *The state: past, present, future.* Malden, MA: Polity Press, 2016. p. 123.

intentions, and effects.¹⁰¹ Examining the state in its social relational and spatiotemporal complexities help us understand social relationships crystalizing not only within the state but also beyond the state. Such circumstances would be definitely valid of Jessop description:

"we may be witnessing a re-scaling of the complexities of government and governance rather than re-scaling of the sovereign state or the emergence of just one more arena in which national states pursue national interests. These complexities at the national scale may provide some insights into the emerging EU polity." ¹⁰²

Analyzing state as a lively organism which does not function as a sort of isolated 'power container', 103 but rather responses to economic strategies and those state projects, which reflect wide-range balance of compromise reflected by a changing balance of forces 104 would lead us to understanding the state in a much wider context. In particular, it is in this wider context, thus the context of intensification in the integration of the world market under neoliberalism, that nonetheless puts the state in the role of the addressee of last resort in terms of political, economic, and social issues. 105 Also, it is in this vain and connected with Poulantzas' notion of authoritarian statism that - in the increasingly integrated world market - contemporary and exceptional measures became normalized in authoritarian capitalist state as an answer to political and ideological crises. As a result, it is more difficult to manage globalized scope of economic contradictions and the crisis tendencies to tackle down new forms of popular mass struggle. 106

1.2.4. Authoritarian Statism at the Transnational Level

As Jessop points out, Poulantzas largely neglected the development of the tendencies towards authoritarian statism at the transnational level. This is rather logical since Nicos Poulantzas wrote in the mid-1970s. According to Jessop, the mega regional trade deals such us the TTIP fall under the term 'scale jumping' which posits actors' exercise of power, policy making etc. at the scale that suits their material and ideal

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¹⁰¹ Ibid, p. 139.

¹⁰² JESSOP, Bob. State power: a strategic-relational approach. Cambridge: Polity, 2007. p. 209

JESSOP, Bob. *The state: past, present, future*. Malden, MA: Polity Press, 2016. p. 42.

¹⁰⁴ Ibid, p. 207.

¹⁰⁵ Ibid, p. 209-210.

¹⁰⁶ Ibid, p. 224-229.

¹⁰⁷ Ibid, p. 230.

interests. Scale jumping is then a result of the goal to utilize scalar privileging inscribed in the structure - as well as strategies and policies in their spatiality - over others and redefine and recalibrate scalar divisions and selectivities. As Jessop observes, rescaling in the mega regional treaties would limit power of elected bodies to push forward agenda and rules that would hinder the transnational corporations from anticipated profits among other issues. Also, Jessop points out that secretive fashion of the deal as well as leaked documents into the public domain, which resulted in growing hostility to the TTIP, points to the limits of the power of what he calls "the transnational deep state." As he further points out, the development and current trends in the EU lead to "a transnational raison d'état" over classic representative principles insofar that the Commision - with its executive, legislative and to some extent judicial powers - gains on influence. Also, growing representation of informal networks such as working groups and committees becomes more visible – and producer groups among them in particular. 109

1. 3. Organic and Traditional Intellectuals – Between Ulrich Beck and Antonio Gramsci

As Laura Horn points out, although importance of 'organic intellectuals' is acknowledged in the emerging neo-Gramscian literature in terms of shaping and framing ideological constituents of the hegemonic project, not much research has been done on their actual manifestations. As Horn stresses, organic intellectuals play a vital role in formulating and distributing the ideological as well as strategic concepts of a political project. Simultaneously, these social agents help to define also interests of a social group. Importantly, rather than reproducing their class position or their class consciousness, they function as an element of a cohesion chain under a historic bloc. The latter falls under category a traditional intellectual. Aaron Zimmerman notes that Antonio Gramsci differentiated between traditional and organic intellectuals. As Zimmermann points out, traditional intellectuals in the sphere of conventional and funded (educational) research, thus working under hegemonic institutions, tend to fuel the ideas of neoliberalism. These

¹⁰⁸ Ibid, p. 137.

¹⁰⁹ Ibid, p. 230-231.

¹¹⁰ HORN, Laura. Organic Intellectuals at Work? The High Level Group of Company Law Experts in European Corporate Governance Regulation. In: APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. *Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon*. New York: Palgrave Macmillan, 2009. p. 129.

¹¹¹ Ibid, p. 130-131.

intellectuals are often not as independent or autonomous as they wish or believe they would be, as a research among the US scholars proved. Organic intellectuals on the other hand, do not have to necessarily be scholars, academics, or pundits whose arguments stem rather in practical matters and are a potent medium for ideological revolution. Also, organic intellectuals are conscious that their acting is political In sum, intellectuals play various roles depending on their social origin, spatiotemporal location, responsibilities in organization as well as relations with social forces, classes, and parties. Also, they might have a role in production and reproduction of hegemony, sub-hegemony, or counterhegemony.

Since science and scientists seemed to play a crucial role in production and reproduction of the abovementioned countervailing struggles which were mirrored in the context of the TTIP debate, indeed more research is needed to understand their role in the context of this debate. Therefore, to fill this gap I decided, for the sake of explanation of the role of scientists in the industrial age and under neoliberal mode of production in particular, to combine the notions of Gramsci's concepts of intellectuals with the Risk Society theory of Ulrich Beck. Beyond that, Beck's thoughts on the Risk Society describe societal phenomena and its implications for politics and mode of production in globalized world in general.

Although Dean Curran points out that Marx's and Beck's works are fundamentally opposed in terms of their view and analysis of contemporary society, in Beck's notion of risk society, meaning of risk employs the same structural position as class in Marx's historical materialism. Thus, Beck cannot be explicitly considered neo-Marxist. However, his notions and the level of structure used in his analysis of society, in fact, classify him as neo-Marxist. Moreover, both Marx and Beck engage with the same core problem situations in their analyses. As Curran points out the similarities, which arise from:

¹¹² AARON SAMUEL, Zimmerman. The Role of Organic Intellectuals in the Era of a Trump Presidency. In: *Berkeley Review of Education* [online]. Berkeley: Berkeley, 2017, January 27 2017 [cit. 2018-05-03]. Available at: http://www.berkeleyreviewofeducation.com/cfc2016-blog/the-role-of-organic-intellectuals-in-the-era-of-a-trump-presidency.

¹¹³ SHEAR, Boone W. Gramsci, Intellectuals, and Academic Practice Today. *Rethinking Marxism* [online]. 2008, **20**(1), 55-67 [cit. 2018-05-03]. Available at:

http://www.tandfonline.com/doi/abs/10.1080/08935690701739964. p. 56.

¹¹⁴ JESSOP, Bob. *The state: past, present, future.* Malden, MA: Polity Press, 2016. p. 73.

¹¹⁵ CURRAN, Dean. Risk society and Marxism: Beyond simple antagonism. *Journal of Classical Sociology*[online]. 2016, **16**(3), 280-296 [cit. 2018-05-03]. Available at: http://journals.sagepub.com/doi/10.1177/1468795X15600929. p. 281.

- a) the dynamics of the humanization of nature;
- b) increasing instrumental control over social and material life
- c) the revolutionary development of the forces of production
- d) the centrality of estrangement in contemporary society
- e) the power of genuine democractic control over social life to resolve these contradictions
- f) the need for the development of a collective social agent that can overcome this estrangement through general democratic control. 116

For Beck the society in industrial age is an industrial society particularly because the industry in joined forces with science is involved in the generation of risk in risk society. Since, it is in the age of advanced modernity that social production of wealth results in and is accompanied by the social manufacture of risks. In this context, ecological devaluations and expropriations enter into contradictions with the interests in profit and property, which are core advancements in the process of industrialization. Beck points out, many risks posed by pollutants are in general examined in isolation, never in concentration with other pollutants in people. Also, many of the risks are invisible and escape human perception (such as pesticides) and do not stay within one are but rather spread elsewhere. Then, determination of risks "require[s] a cooperation across the trenches of disciplines, citizen's groups, factories, administration and politics, or — which more likely — they disintegrate between these into antagonistic definitions and definitional struggles. As a result, the gap between scientific and social (ir)rationality (from the point of view of the industry and 'rational scientists') deepens. Indeed, as Beck aptly puts it:

"Those who point out risks are defamed as 'alarmists' and risk producers. Their presentation of the hazards is considered 'unproven'. The effects on man and animals they demonstrate are called 'outrageously exaggerated'. More research is required, they say, before one can be sure what the situation is and take the appropriate measures. Only a rapidly growing gross national product could

¹¹⁶ The similarities as listed here were taken from from Curran, Ibid.

¹¹⁷ BECK, Ulrich. Risk society: towards a new modernity. Newbury Park, Calif.: Sage Publications, 1992. p.

^{3 1118} Ibid, p. 19.

¹¹⁹ Ibid, p. 23.

¹²⁰ Ibid, p. 26-27.

¹²¹ Ibid, p. 29.

create the prerequisites for improved environmental protection. They invoke trust in science and research. Their rationality has so far found solutions to every problem, the argument goes. Critique of science and anxieties about the future are stigmatized in contrast as 'irrationalism'.", 122

In addition, contemporarily visible threat of death from starvation are favored to those invisible threats from toxic chemicals since without the widespread of (agro)chemicals 'endanger' would come, as the argument goes. 123 This is strikingly similar to what is 'sold' to public by today's agrochemical giants. Also, there is a clear distinction of the roles between science and population. For, it is science which determines risks and, on the other side, population, which perceives risks. As Beck stresses, departure from these patterns suggests the level of 'irrationality' as well as 'hostility to technology.'124 Furthermore, the risk society, due to increasing antagonisms among those affected and the risk profiteers, in the face of power over the media serving as knowledge creator and disseminator, can be also the 'science, media and information society.' 125

Last but not least, as Beck stresses, the roots of the critique of science as well as technology does not lie in the "irrationality" of its critics, but in the failure of technoscientific rationality in the face of growing risks and threats from civilization." 126 'Pure science', as Beck further maintains, serves as a tool for risk researchers to "... defend the 'high art of proving causality', thus blocking citizens' protests, choking them in infancy for lack of casual link. They seem to keep down costs for industry, and to keep the politicians' backs off the wall, but in reality they open the floodgates for a general endangering of life." For example, in terms of the residue values, non-poisoning is perceived as utopian, and poisoning became reality, hidden under the curtain of acceptable levels. 128 Since in Beck's view nature is society and society is nature and under the growing consciousness of the risk, continuation of the democratic political system is threatened, as conflict scenarios appear to point to these dangers while they collide with ways these urgencies would be suppressed or dealt with. 129

¹²² Ibid, p. 45.

¹²³ Ibid, p. 42.

¹²⁴ Ibid, p. 57.

¹²⁵ Ibid, p. 46.

¹²⁶ Ibid, p. 59.

¹²⁷ Ibid, p. 63.

¹²⁸ Ibid, p. 64-65.

¹²⁹ Ibid, p. 80 - 81.

As Horn points out, the role of organic (as well as traditional) intellectuals is vital for comprehending the ongoing changes in the EU under the developments of corporate governance. This leads one to possibility to understand socio-economic governance and particularly the corporate governance since role of an expert or the group of experts proved be important social agents in creating stage for popular consent and trustworthiness for policy choices. They are also very important agents in consolidating unanimity among social forces performing in the power formations under a hegemonic project. Also, establishment of rather alternative type of organic intellectuals contesting the hegemonic position of the embedded neoliberalism in the EU poses challenge to the system. 130 Even more so, comprehension of importance of the role of (organic or traditional) intellectuals and science in Beck's fashion help us explain the struggles of ideas and the deepening trenches between scientific rationality and social (ir)rationality in the context of TTIP debate.

Commodification of Ecosystems 1. 4.

In Wallerstein's words, as a result of accumulation, capitalists have strived to increasingly commodify social processes in wide range of economic life. 131 As we are close to the 'commodification of everything', due to endless pursue of capital accumulation, historical capitalism is in crisis. 132 As Wallerstein explains, it is because liberal thoughts in progress were strong to such an extent that commodification of everything was legitimated. Consequently, it erased the remaining opposition which drew attention to the negatives of capitalism. As Wallerstein further points out, progressivism blinded and justified socialism as well as capitalism. 133 Continuing extension of commodification would lead, as Wallerstein stresses, to the rise anti-systemic movements. 134

Significant tendencies towards commodification of nature, or put it differently, 'nature neoliberalization' has been evident in the era of (post) 2008 EU crisis, unveiling

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¹³⁰ HORN, Laura. Organic Intellectuals at Work? The High Level Group of Company Law Experts in European Corporate Governance Regulation. In: APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon. New York: Palgrave Macmillan, 2009. p. 138 – 139.

WALLERSTEIN, Immanuel Maurice. *Historical capitalism*. London: Verso, c1983. p. 15.

¹³² Ibid, p. 90.

¹³³ Ibid, p. 97- 98.
134 Ibid, p. 109.

the limitations of neoliberal system. 135 For Drahos commodification of nature and ecosystems belongs to a key process of collapse. 136 Furthermore, commodification of nature poses a new wave of transformation in the nature-society relationship as well as political economy. It can also be defined as 'accumulation by dispossession'. ¹³⁷ Especially in the context of TTIP the attempts of neoliberalization of nature conservation have increased in the EU. For, as Apostolopoulou et al. suggest, it is strong position of the (transnational)state, which opens its gates to and conjuncts with the capital to commodify the nature. In addition, it is in this context that (transnational)state strives to suppress those movements pointing to the issues of the strong rule of capital over the nature and thus inclines towards authoritarian position. 138 Also, it was under the TTIP that commodification attempts within this deal sought to ease EU's precautionary principle in agriculture domain to open markets for agrochemicals and GMOs. 139 However, the limits of monopolization of intellectual property relations in these types of mega-regional trade agreements are posed not only by the exhaustion of nature as such. Indeed, another limit of neoliberalism is reached by confronting new movements pointing to unsustainability of 'food security.' As McMichael puts it, these movements present an alternative to neoliberal capitalism: "how the world and its inhabitants might be organized according to ecological principles – instead of economic principles of commodification, efficiency and private interest.",140

The contradictions of capitalism in the era of neoliberalism reflected in interfering with socio-ecological relationships are debated by political ecologists. For political ecologists those social mobilizations proposing agroecology and food sovereignty against

¹³⁵ APOSTOLOPOULOU, Evangelia et al. Governance rescaling and the neoliberalization of nature: the case of biodiversity conservation in four EU countries. *International Journal of Sustainable Development & World Ecology* [online]. 2014, **21**(6), 481-494 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/13504509.2014.979904. p. 481 – 482.

¹³⁶ DRAHOS, Peter. Regulating capitalism's processes of destruction. DRAHOS, Peter. *Regulatory Theory: Foundations and applications* [online]. Acton: ANU Press, 2017, 759 - 783 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/j.ctt1q1crtm.56. p. 767.

¹³⁷ LIVERMAN, Diana. Who Governs, at What Scale and at What Price? Geography, Environmental Governance, and the Commodification of Nature. *Annals of the Association of American Geographers*[online]. 2004, December 2004, **4**(94), 734-738 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/369409.1 p. 734

¹³⁸ APOSTOLOPOULOU, Evangelia et al. Governance rescaling and the neoliberalization of nature: the case of biodiversity conservation in four EU countries. *International Journal of Sustainable Development & World Ecology* [online]. 2014, **21**(6), 481-494 [cit. 2018-05-03]. Available at:

¹³⁹ MCMICHAEL, Philip. Commentary: Food regime for thought. *The Journal of Peasant Studies* [online]. 2016, **43**(3), 648-670 [cit. 2018-05-03]. Available at:

increasing commodification represent the counter-hegemonic movements. Since, those are the social forces, which challenge the persisting state-capital nexus and struggle for agroecology and food sovereignty, while facing obstacles posed by social relational transformations. Some scholars call current era as 'post-democratic' - significant for legitimizing socially exclusive and environmentally destructive agendas under the cloak of emancipatory-progressive politics. In other words, as Blühdorn explains the paradox, the politics of unsustainability is 'democratized', i.e. the new models of governance are an essential tool "for the management of sustained unsustainability." The very unsustainability in the capitalist commodity system incorporates transfer of risk and hazards. Therefore, as Forsyth suggests, Ulrich Beck notions are not remote from political ecology notions. 144

Some political ecologists think of the role of the state in terms of commodification merely under capitalism as an economic system. Yet, the state is also influenced by other forces such as civil society, and thus strategic-relational approach provides more flexibility in explaining political-ecological phenomena. It is the state which has played a crucial role in generating accumulation under capitalism, with all its contradictions and counterhegemonic projects. These projects mobilized to challenge the capitalist commodification of nature and counter other forces — for instance business groups. While profit-driven accumulation strategies are frequently hegemonic social principle, various social forces might utilize short-time primacy to respond to crisis and contradictions. Thus, state is an arena where a mobilized civil society strives to accomplish economic democracy and ecosocial change. Increased commodification can be one of multiple answers to crises, having qualitative and transformative effects of social life. As Jessop stresses, "It becomes

¹⁴¹ TILZEY, Mark. Global Politics, Capitalism, Socio-Ecological Crisis, and Resistance: Exploring the Linkages and the Challenges. In: *Global governance/politics, climate justice & agrarian/social justice: linkages and challenges* [online]. 4 February 2016, s. 1-20 [cit. 2018-05-03]. Available at: https://www.iss.nl/sites/corporate/files/14-ICAS_CP_Tilzey.pdf. p. 17.

¹⁴²BLÜHDORN, Ingolfur. The governance of unsustainability: ecology and democracy after the post-democratic turn. *Environmental Politics* [online]. 2013, **22**(1), 16-36 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/09644016.2013.755005. p. 32.

¹⁴³ LOW, Nicholas and Brendan GLEESON. *Justice, society, and nature an exploration of political ecology*. London: Routledge, 1998. p. 123.

¹⁴⁴ FORSYTH, Tim. *Critical political ecology the politics of environmental science*. London: Routledge, 2003. p. 273.

¹⁴⁵ QUASTEL, Noah. Ecological Political Economy: Towards a Strategic-Relational Approach. *Review of Political Economy* [online]. 2016, **28**(3), 336-353 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/09538259.2016.1145382. p. 339. ¹⁴⁶ Ibid, p. 347 – 348.

a major vector of the colonization, commodification, and, eventually, financialization of everyday life – processes subject to friction, resistance, and tendency to crisis."¹⁴⁷

Control over agriculture posed by corporations has penetrated and commodified peasantry and agriculture insofar that farmers are obligated to purchase inputs such as pesticides or genetically modified seeds. This phenomenon is obvious in the US where state enabled transformation of agriculture by integrating industrial inputs. Also, academic research penetrated by corporations gave the rise of 'academic capitalism.' This state-capital nexus has driven the US to invest substantially to become a global leader in incorporating biotechnology and its supplements into agriculture. Classes challenging the commodification of agriculture and nature are then a target of critique. As Zimmerman and Eddens observe, especially educated middle class opposing the biotechnology advancements is compared to, or rather casted the same way as, for instance 'climate change deniers' and 'anti-vaxxers' who stand up for 'anti-science' in the world of 'science.' However, although this vague and overtly simplistic labelling is most likely welcomed by the industry, Zimmerman and Eddens stress that:

"... this is not simply a story of conspiracy. Rather, the resonance of this liberal discourse with the public relations aims of biotech companies is best understood as a contingent alignment that has come to make sense in the context of the destabilizing forces of neoliberalism, economic globalization, and the post-industrial labour economy as a formation we are calling the 'liberal, educated middle class' engages in a struggle over claims to authority, morality, and status." ¹⁴⁹

Thus, this kind of labelling of social forces resisting the increasing commodification of nature, agriculture as well as other means of life seems to be an important strategy in suppressing the opposing forces. Even though Zimmerman and Eddens pointed to the US as an example, similar discourse and struggles can be observed in the (post)TTIP debate in the EU.

JESSOP, Bob. The state: past, present, future. Malden, MA: Polity Press, 2016. p. 234.

¹⁴⁸ DAVID STONE, Glenn. The Anthropology of Genetically Modified Crops. *Annual Review of Anthropology* [online]. 2010, **39**, 381-400 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/25735118. p. 384-385.

¹⁴⁹ ZIMMERMAN, Heidi a Aaron EDDENS. Governing the liberal self in a 'post-truth' era: science, class and the debate over GMOs. *Cultural Studies* [online]. 2018, , 1-22 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/09502386.2018.1431301. p. 2 - 3.

2. Contradictions of TTIP

2. 1. 'Selling' TTIP to the Public in the 2008 (Post)crisis Era

2.1.1. Economic Growth and More Jobs

One of the key goals of TTIP was to react to the 2008 global crisis, resulting in more jobs and growth. Also, TTIP would boost the trade between the EU and the US, which accounts for 40% of global economic output. As De Ville and Siles-Brügge stress in their comprehensive book on TTIP, it was in the context of reaction to the financial crisis that has become the focal point of rhetoric of the key EU and US negotiators and proponents. As for key supporters of the deal, particularly Great Britain and Germany very much welcomed the deal. The latter was proposed by German's vision of a transatlantic free-trade zone as soon as in 2007. As Cafruny points out, transatlantic circuit of capital is characterized by Atlanticism and neoliberalism which are indivisible elements. Thus, any endeavors to reduce further liberalization would be opposed by Washington, Wall Street, and European big business. The economic crisis was appropriately utilized as the main driving engine to legitimize the TTIP agenda, which should result in more jobs and more economic growth as was projected. Therefore, selling TTIP required 'strong political communication' to the financial crisis, and the transatlantic circuit of the transatlantic circuit of capital is characterized by Atlanticism and neoliberalism which are indivisible elements.

Particularly the European Round Table of Industrialists (ERT) vehemently supported TTIP deal and used very similar legitimizing tools as the EC. The ERT became a part of larger coalition called The European Business Alliance for TTIP, which represents key industry associations formed at the European Business Summit in 2013. The alliance highlights five key reasons to support TTIP: 'setting global standards', 'job creation', 'increase in competitiveness and innovation', 'investment boost', and 'economic growth

¹⁵⁰ EU Chief Negotiator says EU-US trade deal not about deregulation, as third round of talks end in Washington. *Trade EC* [online]. Brussels, 2013, 20 December 2013 [cit. 2018-05-03]. Available at: http://trade.ec.europa.eu/doclib/press/index.cfm?id=1007.

¹⁵¹DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. *T.T.I.P.: the truth about the transatlantic trade and investment partnership.* Malden, MA: Polity Press, 2016. p. 15 - 16.

¹⁵² BUONANNO, Laurie a Dudek CAROLYN MARIE. Opposition to the TTIP in the EU and the US: Implications for the EU's "democratic deficit". *Archive of European Integration: University of Pittsburg* [online]. Pittsburgs, 2015, March 2015 [cit. 2018-05-03]. Available at: http://aei.pitt.edu/78895/1/Buonanno.Dudek.pdf. p. 8 - 9.

¹⁵³ CAFRUNY, Alan W. Geopolitics and Neoliberalism: US Power and the Limits of European Autonomy. In: APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. *Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon*. New York: Palgrave Macmillan, 2009. p. 82 ¹⁵⁴ DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. *T.T.I.P.: the truth about the transatlantic trade and investment partnership*. Malden, MA: Polity Press, 2016. p. 16.

and consumer benefits'. ¹⁵⁵ In the latter case the ERT mentions that the agreement would result in economic boost by €120 billion in the case of the EU and by €95 billion in the case of the US. Similar to the EC, however, the ERT utilizes economic modelling conducted by Centre for Economic Policy Research (CEPR) – that is the most ambitious scenario. ¹⁵⁶ As De Ville and Siles-Brügge point out, the economic modelling of CEPR not only serves to exaggerate the potential benefits of TTIP, but also downplays social costs of macroeconomic adjustment as well as deregulation in domains such as social, public health, and environmental protection. ¹⁵⁷

In terms of rhetoric of legitimation, both the EU and the ERT (or the EU Business Alliance for TTIP) share the same values. As the ERT urged in 2014, the agreement is required on both sides of the Atlantic due to economic and strategic reasons. As the position document further states, "With the continuing turbulence in the world economy, the US and the EU must build on the strength of our economic ties to generate jobs and growth." Similarly, the initiator of the deal, the EU trade commissioner Karel De Gucht, stated: "This deal has potential. It can create a lot of growth and jobs ... It can help both the EU and the US maintain our position in a changing world." In a similar yet slightly different vein, the United States Trade Representative (USTR), stresses importance of the US' competitiveness in the global economy, and promotion of jobs and growth as a result of the deal. Nonetheless, the importance of financial crisis is not widely mentioned. As De Ville and Siles-Brügge observe, the EU not only demanded the negotiations, it also gained somehow more political importance than other side of the Atlantic. 161

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European Business United in Strong Support for TTIP. *European Round Table of Industrialists* [online]. Brussels, 2014, May 15 2014 [cit. 2018-05-03]. Available at:

https://www.ert.eu/sites/ert/files/generated/files/document/business alliance -

five reasons to support ttip - may 15 2014.pdf

¹³⁶ DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. *T.T.I.P.: the truth about the transatlantic trade and investment partnership.* Malden, MA: Polity Press, 2016. p. 16 - 17. ¹⁵⁷ Ibid, p. 14.

¹⁵⁸ Regulatory Component in the TTIP – Key to Success. *European Round Table of Industrialists* [online]. Brussels, 2014, September 30 2014 [cit. 2018-05-03]. Available at:

https://www.ert.eu/sites/ert/files/generated/files/document/2014_09_30_-_final_statement_-regulatory_component_in_the_ttip.pdf

regulatory_component_in_the_ttip.pdf.

Tip KAYLEIGH, Rose Lewis. TTIP has potential to create 'growth and jobs', says De Gucht. *The Parliament Magazine* [online]. London, 2014, 5 May 2014 [cit. 2018-05-02]. Available at:

https://www.theparliamentmagazine.eu/articles/news/ttip-has-potential-create-growth-and-jobs-says-de-gucht ¹⁶⁰ Transatlantic Trade and Investment Partnership (T-TIP). *Office of the US Trade Representative* [online]. Washington, 2018 [cit. 2018-05-03]. Available at: https://ustr.gov/ttip.

¹⁶¹ DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. T.T.I.P.: the truth about the transatlantic trade and investment partnership. Malden, MA: Polity Press, 2016. p. 16.

As mentioned above, it is rather clear that agenda of the EC, the US and the European big business has converged. For instance, as Appeldoorn observed, the ERT's socio-economic agenda was already present in the Maastricht Treaty. 162 Even more so, ERT's vision of the Lisbon Treaty¹⁶³ and 'new Europeans', as an increasingly commodified formation of citizenship rights, were reflected in the Lisbon Agenda. 164 Thus, approving and supporting the TTIP by the top EU industrialists should not come as a surprise. Indeed, particularly BUSINESSEUROPE (apart from the ERT) along with the US Chamber of Commerce - through the platforms such as Transatlantic Business Dialogue or the above-mentioned Business Alliance for TTIP - were the key driving forces in lobbying for more convergence on the both sides of the Atlantic. 165 The Alliance, in similar vein as the EC, took a role of 'educators and advocates' for the successful completion of TTIP. 166 As De Ville and Siles-Brügge put it, big transatlantic business 'is on the same page.' However, the agricultural sector appears to be the least transnational and so the High Level Working Group on Jobs and Growth (HLWG) established an ambitious agenda to overcome the obstacles such as scientific risk assessment in terms of food safety. 167 Thus, the pressures exerted by big business the EC and the US via appealing rhetoric of the TTIP led to attempts for deregulation in the EU. 168

2.1.2. **Struggle over Transparency**

The struggle over transparency became a setback in pushing the TTIP agenda and a false hope of the EC communication strategy for a 'fresh start' of the talks to soothe concerned public. Van Ham observed that narrative regarding 'jobs and growth' simply did not work as expected since the EC: failed to consider (1)"what European citizens really want"; (2) "had sold out to special interest groups, most notably major corporations"; (3)

¹⁶² VAN APELDOORN, Bastiaan. Transnational Capitalism and the Struggle over European Integration [online]. London: Routledge, 2002, 234 p. [cit. 2018-05-03]. Available at: http://sfx.is.cuni.cz/sfxlcl3/cgi/core/multi.cgi?sfx.request_id=12491595. p. 155.

¹⁶³ VAN APELDOORN, Bastiaan., Jan DRAHOKOUPIL a Laura HORN. Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon. New York: Palgrave Macmillan, 2009. p. 31 164 HAGER, Brian Sandy. 'New Europeans' for the 'New European Economy': Citizenship and the Lisbon Agenda. In: APELDOORN, Bastiaan van., Jan DRAHOKOUPIL and Laura HORN. Contradictions and limits of neoliberal European governance: from Lisbon to Lisbon. New York: Palgrave Macmillan, 2009. p.

DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. T.T.I.P.: the truth about the transatlantic trade and investment partnership. Malden, MA: Polity Press, 2016. p. 72.

¹⁶⁶ Business Alliance for TTIP. AmCham Latvia [online]. 2014, May 8 2014 [cit. 2018-05-03]. Available at: http://www.amcham.lv/en/communications/news/business-alliance-for-ttip.

¹⁶⁷DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. T.T.I.P.: the truth about the transatlantic trade and investment partnership. Malden, MA: Polity Press, 2016. p. 72-73. ¹⁶⁸ Ibid, p. 81-83.

"does not negotiate with the United States in a transparent way, thereby undermining democracy." Consequently, the EC needed to address these concerns and under the new leadership of the EU Trade Commissioner Cecilia Malmström introduced a 'transparency initiative' for the 'fresh start.' However, even though the legitimizing of TTIP further developed into more 'transparency' and 'strengthening the EU's voice', as van Ham further observes, the corridors of the EU political elites isolated themselves from addressing the concerns due to elite's lack of respecting these voices.

The turmoil among citizens and civil society organizations gained momentum due to following reasons. First, the concerns particularly among civil society organizations spawned already in 2013, in the period of first TTIP rounds, and resulted in an open letter addressed to the then Commissioner for Trade Karel De Gucht in May 2014 signed by more than 250 CSOs on both sides of the Atlantic. All of them called for more transparency since the first few rounds were held behind the closed doors. Realizing that "Secrecy is business as usual in many trade agreements", as for instance BEUC noted, still the NGOs perceived TTIP as "far from being business as usual." ¹⁷³

Second, Investor-State Dispute Settlement, or ISDS, became 'the most toxic acronym in Europe', as Politico reported. The opponents of ISDS were concerned that this clause would give multinationals more power over national legislations, "while deterring authorities from passing laws in areas like health and the environment through fear of incurring multibillion-dollar compensation claims." While Eliasson and Huet claim that some of the key issues in CSO mobilization such as ISDS were "alarmist" and "fear-

¹⁶⁹ VAN HAM, Peter. Communicating TTIP Challenges for the European Union. *Clingendael* [online]. The Hague, March 2016 [cit. 2018-05-03]. Available at:

https://www.clingendael.org/sites/default/files/pdfs/Policy%20Brief%20Communicating%20TTIP%20-%20March%202016.pdf . p. 3.

¹⁷⁰ TTIP "fresh start" means more clarity, debate, and realism, Malmström tells MEPs. *European Parliament* [online]. Brussels, 3 December 2014 [cit. 2018-05-03]. Available at:

http://www.europarl.europa.eu/news/en/press-room/20141201IPR81714/ttip-fresh-start-means-more-clarity-debate-and-realism-malmstrom-tells-meps.

¹⁷¹ VAN HAM, Peter. Communicating TTIP Challenges for the European Union. *Clingendael* [online]. The Hague, March 2016 [cit. 2018-05-03]. Available at:

https://www.clingendael.org/sites/default/files/pdfs/Policy%20Brief%20Communicating%20TTIP%20-%20March%202016.pdf . p. 1.

¹⁷² Ibid.

¹⁷³ TTIP: Transparency now!. *BEUC* [online]. May 22 2014 [cit. 2018-05-03]. Available at: http://www.beuc.eu/blog/ttip-transparency-now/.

^{174*}AMES, Paul. ISDS: The most toxic acronym in Europe. *Politico* [online]. Brussels, September 17 2015 [cit. 2018-05-03]. Available at: https://www.politico.eu/article/isds-the-most-toxic-acronym-in-europe/.

filled",¹⁷⁵ Diependaele et al. stress that vast number of scholarly literature point to the fact that the majority of aspects of the ISDS are called into question and lead to the legitimacy crisis.¹⁷⁶ The EC strived to react to the public turmoil regarding ISDS by establishing and Investment Court System (ICS). Nevertheless, the authors warn that these reforms might serve to legitimize ISDS and make it more politically satisfactory on one hand. But on the other hand, an inappropriately legitimate system might be established once again.¹⁷⁷

Third, the wider debate concerning public health and environmental issues spawned around the precautionary principle and biotech products such as GMOs, particularly opposing the 2015 EU GM Directive. Thus, once unsuccessful attempt to push the biotech products to the EU markets in early 2000s repeated again. And once again a significant resistance from public and civil societies occurred.

Fourth, apart from position papers of the EU, the documents from TTIP rounds were accessible only in secret reading rooms in the EU member states. For instance, in Germany the access to the documents was possible for the members of the government in the premises of the US Embassy in Berlin only in May 2015. Later in February 2016, the reading room was established in the German Economics Ministry for members of the German government, the Bundesrat, and the Bundestag. The conditions under which the documents could have been viewed were rather strict – no electronic devices were allowed while reading, no notes could have been taken, and the view was possible only under strict supervision. As the title of the Deutsche Welle states, this was only a minor step towards transparency.¹⁷⁹

Furthermore, leaked documents stirred up controversies revolving around TTIP. A massive leak of TTIP documents released by the Greenpeace Netherlands in May 2016 reflected the transparency issue in the TTIP debate. As Greenpeace stated, "We have done

¹⁷⁵ ELIASSON, Leif Johan a Patricia Garcia-Duran HUET. TTIP negotiations: interest groups, anti-TTIP civil society campaigns and public opinion. *Journal of Transatlantic Studies* [online]. 2018, **16**(2), 101-116 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/14794012.2018.1450069. p. 110.

¹⁷⁶ DIEPENDAELE, Lisa et al. Assessing the Normative Legitimacy of Investment Arbitration: The EU's Investment Court System. *New Political Economy* [online]. 2017, , 1-25 [cit. 2018-05-03]. DOI: 10.1080/13563467.2017.1417362. ISSN 1356-3467. Available at:

https://www.tandfonline.com/doi/full/10.1080/13563467.2017.1417362, p. 6. ¹⁷⁷ Ibid, p. 16.

¹⁷⁸ ELIASSON, Leif Johan. The Transatlantic Trade and Investment Partnership: Interest groups and public opinion. *Archive of European Integration: University of Pittsburgh* [online]. March 2015 [cit. 2018-05-03]. Available at: http://aei.pitt.edu/79006/1/Eliasson.1.pdf. p. 5-6.

¹⁷⁹ TTIP Reading Room: A small step toward transparency. *Deutsche Welle* [online]. January 29 2016 [cit. 2018-05-03]. Available at: http://www.dw.com/en/ttip-reading-room-a-small-step-toward-transparency/a-19012651.

so to provide much needed transparency and trigger an informed debate on the treaty."¹⁸⁰ As Alemanno suggests, the leaks pointed to asymmetry in positions and transparency between the EU and the US. Also, concerns stemmed from imbalance between information accessed by corporate interest and CSOs. In addition, the US did not embrace the transparency approach as the EU strived to.¹⁸¹ Furthermore, Patz observes that TTIP leaks reflected not only discussions about EU transparency, but also catalyzed the role of transnational governance and the role of risk and its regulation. Patz further maintains that revealed information nurtures "this public perception of intransparency, undermining trust and ultimately putting at risk the consent of the European Parliament."¹⁸²

Fifth, countering the arguments and concerns of public and CSOs with a simple (and both side of the Atlantic very similar) counter-rhetoric did not add up to the power legitimation of TTIP nor to the credibility of the US and the EU side in the deal. Indeed, as echoed from the US Ambassador to the EU in 2014, at the time of growing concerns regarding the way TTIP was negotiated, TTIP 'triggered a wave of criticism that can only be described as scaremongering'. Similarly, De Gucht considered NGOs worried about food safety as scaremongers as well. Before the deal was declared frozen by Malmström and Merkel in November 2016, Is in September 2016 business representatives' task, on the request of the EC, was to disprove the 'myths' and sell the agreement to critics. While using a classic rhetoric of 'more jobs, more growth', the representatives also stressed that the agreement is an opportunity for SMEs or that TTIP might serve as a template for other trade agreements around the world. Particularly the European Chemical Industry Council

¹⁸⁰ TTIP Leaks. *Greenpeace* [online]. the Netherlands, May 2016 [cit. 2018-05-03]. Available at: https://trade-leaks.org/ttip/.

ALEMANNO, Alberto. What the TTIP Leaks Mean for the On-Going Negotiations and Future Agreement? Time to Overcome TTIP's Many Informational Asymmetries. *Journal of Risk Regulation* [online]. 2016, **2**, 1-12 [cit. 2017-02-05]. Available at:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2796621.p. 10-11.

¹⁸² PATZ, Ronny. Just the TTIP of the Iceberg? Dynamics and Effects of Information Leaks in EU Politics. *European Journal of Risk Regulation* [online]. 2016, **7**(2), 242-246 [cit. 2018-05-03]. ISSN 1867299X. Available at:

http://eds.a.ebscohost.com.ezproxy.is.cuni.cz/eds/pdfviewer/pdfviewer?vid=1&sid=3159b7ea-fa01-45e3-a0b8-c6facb657802%40sessionmgr4007. p. 246.

¹⁸³ FOX, Benjamin. 'Scaremongering' threatens trade deal, US ambassador warns MEPs. *EU Observer*[online]. Brussels, September 4 2014 [cit. 2018-05-03]. Available at: https://euobserver.com/news/125459.

¹⁸⁴CRISP, James. TTIP will sacrifice food safety for faster trade, warn NGOs. *Euractiv* [online]. Brussels, August 28 2014 [cit. 2018-05-03]. Available at: https://www.euractiv.com/section/health-consumers/news/ttip-will-sacrifice-food-safety-for-faster-trade-warn-ngos/.

¹⁸⁵ ELIASSON, Leif Johan a Patricia Garcia-Duran HUET. TTIP negotiations: interest groups, anti-TTIP civil society campaigns and public opinion. *Journal of Transatlantic Studies* [online]. 2018, **16**(2), 101-116 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/14794012.2018.1450069. p. 101.

would welcome the deal as it would save the sector up to €1.5m in trade tariffs annually. ¹⁸⁶ However, the overall suspicion and controversies revolving around the deal was stronger than attempts to sell the deal to the public.

2. 2. The Civil Society Resistance

The key above-mentioned controversies and intransparencies attracted attention of various actors and social forces concerned with the way TTIP was communicated and legitimized. These social forces drawing attention to the controversies in the context of TTIP also shaped the way politics within the EU MSs responded to the TTIP controversies. As Siles-Brügge and De Ville observed, rather pro-liberalization Germany adopted a critical stance towards the ISDS in March 2014 and was subsequently joined by other MS's national parliaments such as those of France, Austria, and the Netherlands. As far as the EP is concerned, the European Greens and the Left Group opposed TTIP and ISDS. 187 Opposition to TTIP was strong enough to present the EC with a European Citizens Initiative, an initiative led by StopTTIP! coalition in July 2014. By mid-2015 the Initiative gathered 2 million signatures 188, and by October 2015 reached almost 3.3 million signatures, with some 500 different organizations involved. 190 StopTTIP! also further focused its mobilization on the EU-Canada CETA agreement, which according to the coalition would serve as a 'Trojan horse' for TTIP. 191

In some MS the support dropped rapidly as a result of raised concerns, which found their way to the general public. In 2014, 39% of British citizens believed that TTIP would harm small business and more than 50% of respondents did not trust British government in negotiating the deal in Britain's interest. In 2015, only 19% of Brits thought

¹⁸⁶ BANKS, Martin. Business representatives defend TTIP. *The Parliament Magazine* [online]. London, September 16 2016 [cit. 2018-05-03]. Available at:

https://www.theparliamentmagazine.eu/articles/news/business-representatives-defend-ttip.

¹⁸⁷ DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. T.T.I.P.: the truth about the transatlantic trade and investment partnership. Malden, MA: Polity Press, 2016. p. 104.

¹⁸⁸ ELIASSON, Leif Johan and Patricia Garcia-Duran HUET. TTIP negotiations: interest groups, anti-TTIP civil society campaigns and public opinion. *Journal of Transatlantic Studies* [online]. 2018, **16**(2), 101-116 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/14794012.2018.1450069. p. 101.

¹⁸⁹ Stop TTIP: About Stop TTIP [online]. Berlin, 2016 [cit. 2018-05-03]. Available at: https://stop-ttip.org/about-stop-ttip/.

¹⁹⁰ SCHRÖDER, Nora. A Civic Studies perspective on European citizens: in search for potential in the conflict surrounding TTIP. *European Politics and Society* [online]. 2017, **19**(1), 120-145 [cit. 2018-05-03]. DOI: 10.1080/23745118.2017.1363507. ISSN 2374-5118. Available at: https://www.tandfonline.com/doi/full/10.1080/23745118.2017.1363507. p. 135.

¹⁹¹DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. *T.T.I.P.*: the truth about the transatlantic trade and investment partnership. Malden, MA: Polity Press, 2016. p. 105.

TTIP was a beneficial deal and 44% believed TTIP agreement would result in more jobs. Particularly in Germany the decline in TTIP support was rapid. While in an April 2014 survey 55% of Germans thought TTIP would be beneficial for the country, five months later the support dropped by 16% and in 2016 only one-in-five Germans supported TTIP. Also, Austria recorded rather similar pattern in decline of support for the agreement. In addition, in no MS was there any increase in support between 2014 and 2016. 192 For instance, protests in the streets of Berlin in the Fall 2015 brought 250.000 thousands opponents of TTIP, the German police assumed there were around 100.000 thousands protesters. 193 Furthermore, as Eliasson and Garcia-Duran Huet observed, Google and YouTube searches concerning TTIP topics in countries with significant anti-TTIP movements such as Germany, Belgium, and Austria correlated with those of most populous MS such as France, the UK, and Italy spanning between 2013 and 2017. In addition, hashtags such as #stopttip, #nottip and others in Tweets represented 99% of Twitter activity concerning TTIP, while only 1% of all tweets regarding this topic represented favorable voices. 194 Thus, social media played a crucial role in spreading the message regarding TTIP. 195

2.2.1. The Debate Spill-over: Glyphosate Saga, EDCs and Precautionary Principle to the Forefront

As De Ville and Siles-Brügge observed, a link between contradictions in pesticide regulations and TTIP has been suggested. Similar to spill-over, or put more concisely merging of CETA debate with TTIP, also debate regarding active substance glyphosate, regulatory proposal of Endocrine Disruption Chemicals (EDCs), and debate regarding Precautionary Principle (PP) attracted much attention of CSOs. Indeed, these debates in the

¹⁹² ELIASSON, Leif Johan and Patricia Garcia-Duran HUET. TTIP negotiations: interest groups, anti-TTIP civil society campaigns and public opinion. *Journal of Transatlantic Studies* [online]. 2018, **16**(2), 101-116 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/14794012.2018.1450069. p. 109.

Berlin protest against TTIP trade deal draws thousands. *BBC* [online]. London, October 11 2015 [cit. 2018-05-03]. Available at: http://www.bbc.com/news/world-europe-34498451.

¹⁹⁴ ELIASSON, Leif Johan and Patricia Garcia-Duran HUET. TTIP negotiations: interest groups, anti-TTIP civil society campaigns and public opinion. *Journal of Transatlantic Studies* [online]. 2018, **16**(2), 101-116 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/14794012.2018.1450069. p. 108.

¹⁹⁵ BAUER, Matthias. The political power of evoking fear: the shining example of Germany's anti-TTIP campaign movement. *European View* [online]. 2016, **15**(2), 193-212 [cit. 2018-05-03]. Available at: http://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?vid=9&sid=874d521c-3445-447f-af40-f54198b25b7c%40sessionmgr102. p. 197.

¹⁹⁶ DE VILLE, Ferdi. and Gabriel. SILES-BRÜGGE. *T.T.I.P.: the truth about the transatlantic trade and investment partnership.* Malden, MA: Polity Press, 2016. p. 86.

wider context of TTIP debate raised concerns of many NGOs, consumers, farmers and penetrated scientific laboratories as well as political arenas on the national and the EU level. In fact, similarities among the StopTTIP! initiative and Stop Glyphosate initiative or EDC Free Europe are obvious. These coalitions and initiatives have pursued similar goals - more transparency, democratic accountability of the EU institutions, and consumer as well as environmental safety. Also, the CSOs run their opposition simultaneously with the TTIP agenda and since September 2016, when the last round of TTIP negotiations took place, the debate concerning agrochemicals intensified. For instance, the Stop Glyphosate initiative gathered over a million signatures within mere 6 months. The composition of signatures is strikingly similar to the classical anti-TIIP MS, Germany again leading, followed by the UK, Spain, Italy, France, Belgium, and the Netherlands. 197 Also, the EDC Free Europe coalition gathered almost half a million signatures to demonstrate opposition against corporate pressures by agrochemical giants such as Monsanto, Bayer and BASF on the EC criteria for EDCs in pesticides. 198 It was in the context of increased social awareness about the contradictions of TTIP that gave rise to wider, pan European and even transatlantic mobilization of counter-hegemonic forces that moved the three abovementioned debates to the forefront.

Nonetheless, legitimation of the EC and big business positions continuously collided with demands from the CSOs, further instigating struggle among social forces. As Siles-Brügge draws on example of CSO mobilization regarding the ISDS and CETA, the groups used a polysemic and greatly emotional frame of injustice. This might have helped to mobilize the CSO coalitions and shape public opinion to exert pressure on decision-makers. However, the discourse strategy at the same time enabled the EC to justify reforms by "... accusations that civil society groups were siding with the 'economic populism' of Trump and Brexit." In this view, as Siles-Brügge further maintains, the dichotomies between liberal rational argumentation and hysterical populism makes little sense for the latter. Yet, emotions became a part of what Siles-Brügge describes as 'technocratic

¹⁹⁷ Ban glyphosate and protect people and the environment from toxic pesticides. *EC Europa* [online]. December 2017 [cit. 2018-05-03]. Available at: http://ec.europa.eu/citizens-initiative/public/initiative/successful/details/2017/000002

¹⁹⁸ EDC-Free Europe campaigners react to European Member States' vote on revised EDC proposal. *EDC Free Europe* [online]. December 15 2017 [cit. 2018-05-03]. Available at: http://www.edc-free-europe.org/edc-free-europe-campaigners-react-to-european-member-states-vote-on-revised-edc-proposal/. ¹⁹⁹ SILES-BRÜGGE, Gabriel. Transatlantic investor protection as a threat to democracy: the potency and limits of an emotive frame. *Cambridge Review of International Affairs* [online]. 2018, , 1-25 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/09557571.2018.1461805. p. 18.

repression' of the EC insofar as of the CSO argumentation. 200 Furthermore, Schröder brings a different perspective among authors and their research focusing on the European crisis and populist movements in the past years. She sees the movements such as the one against TTIP as a transformative force leading to a civic democratization, which might help to overcome 'European crisis'. 201 As the author further suggests, such movements on one hand opposed anti-democratic structures of the EU, on the other hand the CSOs did not protest against the EU as a whole.²⁰² The TTIP debate, for instance in Germany where opposition was significant, has reflected disturbing results in overall trust in democratic processes of the EU among opponents of the deal.²⁰³ In sum, a growing number of scholars in recent years point to the fact that the counter-hegemonic movement in the TTIP debate is not irrational but rather anxious and concerned about how the EU takes course towards less democracy and transparency. As Siles-Brügge mentioned, even though the EC perceives the CSOs as 'economic populists' using emotive arguments, the EC does not act differently in legitimizing its position.

²⁰¹ SCHRÖDER, Nora. A Civic Studies perspective on European citizens: in search for potential in the conflict surrounding TTIP. European Politics and Society [online]. 2017, 19(1), 120-145 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/23745118.2017.1363507. p. 124. ²⁰² Ibid, p. 126.

²⁰³ Ibid, p. 130.

3. Removing the Trade Barriers: Struggle for the Precautionary Principle (PP)

As Ravenhil points out, TTIP spawned a new re-distribution of interests. In general, two opposing forces stand against each other. The first group is represented by the transnational business, which favors trade facilitation. The second one has come especially from the environmental as well as consumer groups. 204 As the paper discusses, TTIP attracted much attention of particularly European civil society organizations (CSOs), which were concerned about dominance of business interests when setting the deal agenda. In particular, the CSOs' suspicion towards transnational corporations (TNCs) was particularly stimulated by secretive fashion of the initial rounds and fears that corporations would, as Buonanno indicates, "roll back consumer and environmental safeguards under the cover of economic growth."205 Also, as De Vogli and Renzetti point out, TTIP would have implications for the balance of power between multinational corporations and governments.²⁰⁶ It seems that tensions from WTO ministerial meetings in Seattle 1999 and in Cancun 2003 along with the latest developments of the Doha Round moved the focus to bilateral and regional trade deals in the international trade arena. After a period of relative calm the situation has changed with the TTIP debate and the debate regarding the PP was a focal point. The PP debate has been revolving around pesticides, which in our modern society contributed to a significant maintenance of world food production due to their crop protecting properties, resulting in the reduction of agricultural labor force and decreased dependence on rotation of crops. Nevertheless, the risks and costs regarding these toxic substances to the public health and environment are well documented.²⁰⁷

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²⁰⁴ RAVENHILL, John. The political economy of the Trans-Pacific Partnership: a '21st Century' trade agreement?. *New Political Economy* [online]. 2016, **22**(5), 573-594 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/13563467.2017.1270925. p. 3.

²⁰⁵ BUONANNO, Laurie A. The new trade deals and the mobilisation of civil society organizations: comparing EU and US responses. *Journal of European Integration* [online]. 2017, **39**(7), 795-809 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/07036337.2017.1371711. p. 796. DE VOGLI, Roberto a Noemi RENZETTI. The Potential Impact of the Transatlantic Trade and

Investment Partnership (TTIP) on public health. *Epidemologia & Prevenzione* [online]. March-April 2016, **40**(2), 1-8 [cit. 2018-05-03]. Available at: https://www.ncbi.nlm.nih.gov/pubmed/27290886, 2016. p. 1

HAMLYN, Olivia. Sustainability and the Failure of Ambition in European Pesticides Regulation. *Journal of Environmental Law* [online]. 2015, 405-429 [cit. 2018-05-03]. DOI: 10.1093/jel/eqv021. ISSN 0952-8873. Available at: https://academic.oup.com/jel/article-lookup/doi/10.1093/jel/eqv021. p. 407.

3. 1. The Precautionary in the Centre of Transatlantic Disputes

In this chapter the paper argues that basic principles anchored in the EU law has been challenged by the TTIP agenda. This megaregional deal was about to overcome the differences in the areas of TBT and SPS, which would lead to more unified common market with improved regulatory cooperation. The domains of TBT and SPS have been key to maintaining a certain level of consumers' health within the EU. Yet, as it will be discussed, the Sanitary and Phytosanitary Standards in TTIP are expected to compromise legislation in the EU's food and agricultural sectors. The PP, which was adopted by the EU in 2000 and became a corner stone in EU law for consumer and environment protection. ²⁰⁸ In addition, interpretation and understanding of the PP has been thoroughly discussed in vast number of scientific literature. 209 Historically, the PP arguably originates in the German Vorsorgenprinzip legislation dating back to the 1970s. According to Lofstedt, the PP is based on German and Swedish law. The former used the PP even in the mid-eighteen century and the first application of the concept anchored in law was the 1969 Swedish Environmental Protection Act. The latter was used by West German government in its environmental platform. ²¹⁰ Thus, the PP has a long tradition in Europe. Nonetheless, it was not until 1980s when the notion of PP became part of international texts and later the included in 1992 Rio Declaration under Principle 15.²¹¹

Debates concerning the principles encompassing industry, regulators and citizens date back to the US in 1930s. At that time, there was a debate concerning first known endocrine disruptor, namely the first synthetic estrogen diethylstilbestrol (DES).²¹² In short, this principle serves as a tool for ensuring a certain level of health protection and analysis of risk assessment if negative effects on health and environment are detected and

²⁰⁸ Precautionary Principle. *EUR-Lex: Glossary* [online]. [cit. 2018-05-03]. Available at: http://eurlex.europa.eu/summary/glossary/precautionary_principle.html.

²⁰⁹ AVEN, Terje. On the Precautionary Principle, in the Context of Different Perspectives on Risk. *Risk Management* [online]. July 2006, **3**(8), 192-205 [cit. 2018-05-03]. Available at:

http://www.jstor.org/stable/pdf/3867876.pdf?refreqid=search:ffa7cbf45aef350c462729b6f0236cc6. p. 195.
LOFSTEDT, Ragnar. The precautionary principle in the EU: Why a formal review is long overdue.
Risk Management [online]. August 2014, **3**(16), 137-163 [cit. 2018-05-03]. Available at:

http://www.jstor.org/stable/pdf/43695442.pdf?refreqid=search:50dc041345667ed8ef1313f7034ffc28. p. 139. ²¹¹ DRATWA, Jim. Taking risks with the precautionary principle: food (and the environment) for thought at the European Commission. *Journal of Environmental Policy & Planning* [online]. 2002, **4**(3), 197-213 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1002/jepp.110. p. 199.

²¹²LANGSTON, Nancy. The Retreat from Precaution: Regulating Diethylstilbestrol (Des), Endocrine Disruptors, and Environmental Health. *Environmental History* [online]. January 2008, **1**(13), 41-65 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/25473193. p. 42.

scientific uncertainty prevails.²¹³ Nonetheless, other than a question of scientific uncertainty, the very essence of the PP lies in societal and ethical values.²¹⁴ Particularly this principle, since applied by the US in a significantly different fashion²¹⁵, has been a great obstacle to agricultural trade in what the EU recognizes as dangerous agricultural and food processing procedures. Despite the fact that different approaches to the PP prevail in the US and the EU, decisive elements, according to Wiener and Rogers, are contextual variables such as the law, the risk, the technology etc.²¹⁶ These contextual variables proved to be important elements in understanding and applying the principle and has differed on both sides of the Atlantic.

The PP was a core element in a dispute between the US and the EU at the WTO during the moratorium on GMOs from 1999 to 2004. Needless to say that application of this principle was recognized by the WTO as unjustified and the EU lost the trial, having been incurred sanctions worth \$116.4 million.²¹⁷ Thus, struggle within the biotechnological and agrochemical domain is nothing new and parallels can be found also in the TTIP debate. Indeed, Scott's description of the then situation within the GM crops debate illustrated as cartoon with bus drivers presented by the US Congress and the European Commission driving a vehicle labelled 'The GM Revolution' very well fits the situation in the TTIP debate. While the US side pushes full throttle, the EU has its foot on the brake, which on its own results in a significant scramble. Also, there are passengers with significantly diverging views, participating in the drive. As Scott describes it:

"On one side of the bus are a group of industry leaders and scientists who are calling for the bus to go forward. On the other side is a group of consumer activists, environmentalists, scientists and advocates of organic farming calling for the bus to stop. In the back of the bus are European

²¹³ REGULATION (EC) No 178/2002. *EUR-Lex* [online]. January 28 2002 [cit. 2018-05-03]. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002R0178&from=EN. p. 9.

²¹⁴BRUCE, Donald. Finding a Balance over Precaution. *Journal of Agricultural and Environmental Ethics*[online]. June 2001, (15), 7-16 [cit. 2018-05-03]. Available at: https://link-springercom.ezproxy.is.cuni.cz/content/pdf/10.1023%2FA%3A1013801408256.pdf. p. 15.

²¹⁵ STOLL, Peter-Tobias et al. CETA, TTIP and the EU precautionary principle. *Foodwatch* [online]. June 2016 [cit. 2018-05-03]. Available at:

https://www.foodwatch.org/fileadmin/Themen/TTIP_Freihandel/Dokumente/2016-06-21_foodwatch-study_precautionary-principle.pdf. p. 4.

²¹⁶ WIENER, Jonathan B. and Michael D. ROGERS. Comparing precaution in the United States and Europe. *Journal of Risk Research* [online]. 2002, **5**(4), 317-349 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1080/13669870210153684. p. 342.

²¹⁷ MARIQUEO-RUSSELL, Atus. Rights of Nature and the Precautionary Principle. *RCC Perspectives* [online]. 2017, (6), 21-28 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/26268372. p. 22.

consumers; they are telling the EC to keep pressing that brake pedal. Next to this group are US consumers, who, for the most part, are placidly staring out of the windows."²¹⁸

While the EU proposed the PP in its European treaties as the main regulatory policy in the consumer safety domain, the US regulatory culture is quite different. 219 The very core of the precautionary principle lies in different use of this measure and is generally more recognized in the EU regulation policies.²²⁰ For instance, as Mariqueo-Russell puts it, the US has been historically hostile towards the PP.²²¹ In contrast, the EU applies the principle when considering other criteria than those stemming from the scientific field. Indeed, this principle provides room for scientific uncertainty. Also, it allows for such an element in protecting consumer's health as social uncertainties and favoring health over economic considerations. 222 As the main concerns are revolved around processing and production of beef and poultry, pesticide regulations as well as biotechnology (GMOs),²²³ it can be expected that particularly these domains will be a focal point for struggle of countervailing interests and struggles. As Scott describes the difference between both the US and the EU, the former can be characterized as 'Nothing ventured nothing gained' while the latter's approach is 'Better to be safe than sorry.'224 As Scott further explains, the US is rather motivated to reject the PP due to its commitment to a fast technological transfer, which would bring economic gains and the benefits of new technologies. For this reason, the PP is viewed as 'unscientific, overcautious and unnecessary' by the US policymakers. In

SCOTT, Dane. Perspectives on precaution: the role of policymakers in dealing with the uncertainties of agricultural biotechnology. *Int. J. Global Environmental Issues* [online]. 2005, (5), 10-35 [cit. 2018-05-03]. Available at: http://www.umt.edu/ethics/docs/Persepctives on Precaution.pdf p. 11.

Available at: http://www.umt.edu/ethics/docs/Persepctives_on_Precaution.pdf . p. 11.

219 STOLL, Peter-Tobias et al. CETA, TTIP and the EU precautionary principle. *Foodwatch* [online]. June 2016 [cit. 2018-05-03]. Available at:

https://www.foodwatch.org/fileadmin/Themen/TTIP_Freihandel/Dokumente/2016-06-21_foodwatch-study_precautionary-principle.pdf. p. 8.

²²⁰ READ, Rupert and Tim O'RIORDAN. The Precautionary Principle Under Fire. *Environment: Science and Policy for Sustainable Development* [online]. 2017, **59**(5), 4-15 [cit. 2018-05-03].. Available at: https://www.tandfonline.com/doi/full/10.1080/00139157.2017.1350005. p. 5.

MARIQUEO-RUSSELL, Atus. Rights of Nature and the Precautionary Principle. *RCC Perspectives* [online]. 2017, (6), 21-28 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/26268372. p. 22.

p. 22. 222 Communication from the Commission on the precautionary principle. *EUR-Lex* [online]. February 2000 [cit. 2018-05-03]. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52000DC0001&from=EN. p. 4.

²²³ JOHNSON, René. Sanitary and Phytosanitary (SPS) and Related Non-Tariff Barriers to Agricultural Trade. In: *CRS Report* [online]. March 2014, s. 3-56 [cit. 2018-05-03]. Available at: http://www.trungtamwto.vn/sites/default/files/wto/r43450.pdf. p. 12-13.

SCOTT, Dane. Perspectives on precaution: the role of policymakers in dealing with the uncertainties of agricultural biotechnology. *Int. J. Global Environmental Issues* [online]. 2005, (5), 10-35 [cit. 2018-05-03]. Available at: http://www.umt.edu/ethics/docs/Persepctives_on_Precaution.pdf . p. 11.

contrast, the EU is motivated to apply the PP to protect health of its citizens, local agriculture and its environment.²²⁵ Since no algorithmic criterion cannot be applied to distinction between absurd and credible threats, democratic debate and sensible, intelligent approach should be decisive elements in identifying convincing threats.²²⁶

According to the WTO-SPS-Agreement the members should justify their measures according to scientific principles and appropriate scientific evidence. This allows countries to set up trade barriers on positive scientific evidence regarding dangers to environment and humans. Article 5.7 sets rules under which members might adopt provisional measures but only in cases without proper scientific proof and where evidence becomes insufficient. Once states obtain the necessary information, it is their obligation to assess the risk and reexamine the measure. This should be executed in a reasonable time period. Furthermore, the following Article number 8 stresses out that SPS ought to be maintained and based on pertinent international standards. If a member is constrained or perceives the potential to constrain, he has right to request an explanation of motives for a deployed SPS. As Stoll et al. point out, such rules under the SPS Agreement remarkably narrow down potential room for tolerable regulation and leads to restricted maneuvering for the EU's PP. 230

Problematic interpretation and narrow room for the PP historically led to disputes between the US and the EU, which had to be resolved by the WTO Dispute Settlement Body. Two distinctive cases pointed to fragility of this principle. First concerned import ban on US and Canadian hormone treated beef. This particular case dates back to the late 1980, still at the time when the world trade rules were set by the then GATT, and the two economic powers had a clash over hormones in beef in terms of commercial and scientific

²²⁵ Ibid, p. 25.

²²⁶ MARIQUEO-RUSSELL, Atus. Rights of Nature and the Precautionary Principle. *RCC Perspectives* [online]. 2017, (6), 21-28 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/26268372. p. 23.

p. 23.

HALFON, Saul. Confronting the WTO: Intervention Strategies in GMO Adjudication. *Science, Technology, & Human Values* [online]. 2010, **35**(3), 307-329 [cit. 2018-05-03]. Available at: http://journals.sagepub.com/doi/10.1177/0162243909337122. p. 310.

²²⁸WTO: Agreement on the Application of Sanitary and Phytosanitary Measures [online]. Washington [cit. 2018-05-03]. Available at: https://www.wto.org/english/docs_e/legal_e/15sps_01_e.htm. ²²⁹ Ibid.

²³⁰ STOLL, Peter-Tobias et al. CETA, TTIP and the EU precautionary principle. *Foodwatch* [online]. June 2016 [cit. 2018-05-03]. Available at:

https://www.foodwatch.org/fileadmin/Themen/TTIP_Freihandel/Dokumente/2016-06-21_foodwatch-study_precautionary-principle.pdf. p. 11.

differences.²³¹ In addition, the dispute became one of the longest-running trials in WTO history.²³² Similar pressures exerted on the EU as during the TTIP deal could have been observable in the history due to diverging views on agricultural practices and the meaning of precaution on both sides of the Atlantic. As the then US agriculture secretary under Clinton's administration commented on the EU's report: "The EU ban is not based on sound science and is wholly unjustified."233 This line of argument, that is dichotomy between 'sound' and 'junk' science, has been frequently used also in TTIP debates concerning agrochemicals. The second concerned the EU's position towards GMOs. In both cases the EU succumbed to the decision of the WTO and lost the dispute, which pointed to the insufficient juridical strength of this principle in the international law arena. This resulted in, as Stoll et al. point out, the PP having been significantly challenged by the rule of the WTO.²³⁴ Yet, since the institutional power of the WTO lost its ground after social uprisings during Ministerial Conferences in Seattle and Cancun and in the context of strengthening positions of developing countries, the US has pushed for bilateral and regional agreements such as TTIP. As Mbengue and Thomas are concerned, this results in a worse option for the endeavors of reconciling the global trade along with environmental preservation and public health. 235 As it implies, unsuccessful defense of the EU's PP in the two above-mentioned cases at the DSB in favor of the US, TTIP might set precedence for further challenge of the EU's tool for protection of the public health and environment. Leaked documents by Greenpeace in 2015 concerning the TTIP deal unveiled attempts to drop the PP from EU law and replace it by a "risk based" approach. The latter requires a cost-benefit analysis, which does not give a room to prevention of hazards but rather to

²³¹ MAKANE, Moïse Mbengue a Thomas P. URS. The precautionary principle: torn between biodiversity, environment-related food safety and the WTO. Int. J. Global Environmental Issues [online]. 2005, (5), 36-53 [cit. 2018-05-03]. Available at: https://www.environmental-

expert.com/Files/6471/articles/6275/f102124118793651.pdf. p. 41-42. ²³² WIRTH, David A. Geographical indications, food safety, and sustainability: conflicts and synergies. *Bio*based and Applied Economics [online]. July 2016, 2(5), 135-151 [cit. 2018-05-03]. Available at: http://www.fupress.net/index.php/bae/article/view/17155/18711. p. 142.

EURO Beef Ban Tests Precautionary Principle. Chemical Week [online]. August 11 1999 [cit. 2018-05-03]. Available at: http://people.ucalgary.ca/~pubconf/Media/chemweek.htm.

STOLL, Peter-Tobias et al. CETA, TTIP and the EU precautionary principle. Foodwatch [online]. June 2016 [cit. 2018-05-03]. Available at:

https://www.foodwatch.org/fileadmin/Themen/TTIP Freihandel/Dokumente/2016-06-21 foodwatch-

study_precautionary-principle.pdf. p. 11.

235 MAKANE, Moïse Mbengue a Thomas P. URS. The precautionary principle: torn between biodiversity, environment-related food safety and the WTO. Int. J. Global Environmental Issues [online]. 2005, (5), 36-53 [cit. 2018-05-03]. Available at: https://www.environmentalexpert.com/Files/6471/articles/6275/f102124118793651.pdf. p. 15.

manage them.²³⁶ The risk framework set by the WTO is characterized by implicit and explicit presumptions concerning the role of expertise, uncertainty, and nature of science. As Halfon puts it, the risk framework is "set of entailments, more than the notion of risk itself that stands in contrast to the competing framework of "precaution."²³⁷

3. 2. Diminishing Precaution under Neo-liberalism

Despite the ambitious agreements on SPS and TBT, it is expected that particularly the PP has been recognized as a key obstacle to a fruitful outcome in TTIP.²³⁸ Although the public is assured by the EU Commission that the PP will not be challenged or anyhow compromised and the MSs as well as parliaments are promised to be involved in order to protect public interest, there are concerns that these promises might be deceptive.²³⁹ As Wagner suggests, the example of Trans-Pacific Partnership agreement (TPPA) might have negative outcomes for those that prefer a different regulatory policies – particularly the EU. The US entered the TPPA negotiations late and under pressures of industry groups with the goal to craft new rules at the WTO level. However, these new rules would then set a template for other megaregional agreements. Consequently, the EU might find itself in a situation where their pillar policies are influenced by the developments at the WTO level, which would pose a considerable challenge for the EU.²⁴⁰ Thus, the PP as the key obstacle to the successful TTIP deal might be eliminated.

Indeed, as Read and O'Riordan put it, the very core of the PP currently does not comply with the ongoing deregulation processes, nor with profit-maintaining corporation politics. The most threatened is the PP in the EU, as the authors observe – particularly due

²³⁶ MARIQUEO-RUSSELL, Atus. Rights of Nature and the Precautionary Principle. *RCC Perspectives* [online]. 2017, (6), 21-28 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/26268372. p. 22.

p. 22. ²³⁷ HALFON, Saul. Confronting the WTO: Intervention Strategies in GMO Adjudication. *Science, Technology, & Human Values* [online]. 2010, **35**(3), 307-329 [cit. 2018-05-03]. Available at: http://journals.sagepub.com/doi/10.1177/0162243909337122. p. 311.

²³⁸BERGKAMP, Lucas a Lawrence KOGAN. Trade, the Precautionary Principle, and Post-Modern Regulatory Process. *European Journal of Risk Regulation* [online]. 2013, **4**(04), 493-507 [cit. 2018-05-03]. Available at: https://www.cambridge.org/core/product/identifier/S1867299X00003123/type/journal_article. p. 493-494.

p. 493-494. ²³⁹ MOOS, Pelle. Did TTIP push the EU to scrap precaution on endocrine disruptors?. *BEUC* [online]. July 14 2016 [cit. 2018-05-03]. Available at: http://www.beuc.eu/blog/did-ttip-push-the-eu-to-scrap-precaution-on-endocrine-disruptors/.

²⁴⁰ WAGNER, Markus. The Future of Sanitary and Phytosanitary Governance: SPS-Plus or SPS-Minus?. *Journal of World Trade* [online]. 2017, (3), 445-470 [cit. 2018-05-03]. Available at: http://www.kluwerlawonline.com.ezproxy.is.cuni.cz. p. 468.

to trade treaties currently under negotiation.²⁴¹ The very core of the PP resides in a context of risk, particularly risk assessment, risk management, and risk communication.²⁴² This implies that various interested parties with their stakes are involved in the process of PP policies, converging or diverging.²⁴³ Seizing the PP to provide all converging and diverging societal, scientific, economic, and political forces has been also a matter of debate. What is clear though is the fact that first, to find a consensus concerning safety of particularly an agrochemical is demanding. Second, assessment process with current system is not viable within a reasonable time horizon.²⁴⁴ Third, the PP encompasses a need for development of sophisticated understandings of risk.²⁴⁵ In addition, risk is a key element for a government's evaluation of SPS measures and there has been a great discussion about how risk assessment is mandated textually and how it is separated from risk management.²⁴⁶

Furthermore, as far as sustainability of pesticide use in the EU is concerned, the EU historically strived to implement directives such as the Sustainable Use Directive (SUD) in 2009,²⁴⁷ which functions in parallel to the 2009 Plant Protection Product Regulation (PPP).²⁴⁸ Still, as Hamlyn stresses based on her analysis of SUD, sustainability was reduced to tackling a risk, which creates ambiguity and hinders the very sustainability to less ambitious goals. Particularly, sustainability has remained restricted predominantly to safety in public health and environmental protection as well as risk assessment in terms

²⁴¹ READ, Rupert and Tim O'RIORDAN. The Precautionary Principle Under Fire. *Environment: Science and Policy for Sustainable Development* [online]. 2017, **59**(5), 4-15 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/00139157.2017.1350005. p. 4

https://www.tandfonline.com/doi/full/10.1080/00139157.2017.1350005. p. 4.

²⁴² DRATWA, Jim. Taking risks with the precautionary principle: food (and the environment) for thought at the European Commission. *Journal of Environmental Policy & Planning* [online]. 2002, **4**(3), 197-213 [cit. 2018-05-03]. Available at: http://www.tandfonline.com/doi/abs/10.1002/jepp.110. p. 201.

²⁴³ Ibid, p. 209.

²⁴⁴ CHAPMAN, Anne. Evidence in the Precautionary Assessment of Novel Substances. *Environment: Science and Policy for Sustainable Development* [online]. 2017, **59**(5), 16-25 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/00139157.2017.1350006. p. 24.

²⁴⁵BENNETT, Belinda. Expanding Horizons: Scientific Frontiers, Legal Regulation, and Globalization. *Indiana Journal of Global Legal Studies* [online]. 2012, **2**(19), 507-531 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/10.2979/indjglolegstu.19.2.507. p. 519.

²⁴⁶ WAGNER, Markus. The Future of Sanitary and Phytosanitary Governance: SPS-Plus or SPS-Minus?. *Journal of World Trade* [online]. 2017, (3), 445-470 [cit. 2018-05-03]. Available at: http://www.kluwerlawonline.com.ezproxy.is.cuni.cz. p. 451-452.

²⁴⁷ DIRECTIVE 2009/128/EC. *EUR-Lex* [online]. October 2009 [cit. 2018-05-03]. Available at: http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:02009L0128-20091125.

Regulation EC 1107/2009 – placing on the market of PPPs. *EC Europa* [online]. [cit. 2018-05-03]. Available at: https://ec.europa.eu/food/plant/pesticides/approval_active_substances/eu_rules_en.

of decision-making.²⁴⁹ As Hamlyn further testifies, although the idea of sustainable development in the EU was rather ambitious in the early 1990s, it later narrowed down to dichotomy between environmental protection and economic welfare, prioritizing the latter over the former. Crucially, this way was the social domain compromised as well. This development led to rather uncertain role of sustainable development in EU environmental policy.²⁵⁰ Thus, drawing on Hamlyn's observations, the EU's goal of sustainability in pesticide use is far from being fulfilled due to its, as it implies, reduced and compromised version. Also, as it will be further addressed, the EU decision-makers were reluctant to address even this reduced version of sustainability in the context of TTIP - the abovementioned domains of public health and environmental protection - unless public opposition was too strong to be ignored. Let us explore what role the risk played in the PP, how the risk is constructed and whether the already reduced version of sustainability, having been shrunk to the above mentioned attributes, was further compromised under the TTIP agenda.

3.2.1. The Meaning of Risk in the Context of the TTIP Debate

The very core of grasping the PP lies in perceptions of risk. Bennett pinpoints three core ethical viewpoints, which have important outcomes for legitimation of regulatory process of tackling risks: the utilitarian view dealing with human welfare; the human rights view concerned with individual autonomy, and dignitarian alliance focused on threats to human dignity.²⁵¹ For Aven, risk lies in combination of probability and consequence.²⁵² McLean stress that the PP posits differentiation between hazards and risks, while the two complement each other. Nonetheless, from analytical point of view they depend first on types of hazard and the way how probability and magnitude are understood. Also, both are subject to distinct arguments, particularly objective risk which is science-based and perceived risk falling into domain of cultural construct. As far as societal level is concerned, risk considers not simply objective risk measurements but such

²⁴⁹ HAMLYN, Olivia. Sustainability and the Failure of Ambition in European Pesticides Regulation. *Journal of Environmental Law* [online]. 2015, 405-429 [cit. 2018-05-03]. Available at: https://academic.oup.com/jel/article-lookup/doi/10.1093/jel/eqv021. p. 428.

²⁵⁰ Ibid, p. 427.

²⁵¹ BENNETT, Belinda. Expanding Horizons: Scientific Frontiers, Legal Regulation, and Globalization. *Indiana Journal of Global Legal Studies* [online]. 2012, **2**(19), 507-531 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/10.2979/indjglolegstu.19.2.507. p. 520.

AVEN, Terje. On the Precautionary Principle, in the Context of Different Perspectives on Risk. *Risk Management* [online]. July 2006, **3**(8), 192-205 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/pdf/3867876.pdf?refreqid=search:ffa7cbf45aef350c462729b6f0236cc6. p. 195.

societal strata as morality, politics, economics and cultural determinants.²⁵³ Beck's concept of risk society published in a book of the same name in 1986 shed a new light to understanding of risks. On one hand the book was recognized as very sociologically and politically relevant, on the other dismissed as an 'environmentalist manifesto' full of 'mythological discourse.' Nonetheless, the Beck's work brought food for thought in the risk society framework.²⁵⁴ For Beck risk society presupposes a substitution for industrial society, by the term he reflected a new, second kind of modernity in which mankind has been shifting towards more insecure society and 'man-made disasters.' The new risks then have a real substance and should not be understood as a 'culture of fear', surmising hysteria and irrational fears.²⁵⁵

Yet, as a matter of fact, discourse often used by the elites to suppress ongoing public concerns regarding safety of agrochemicals and power of the agrochemical industry in the context of TTIP contain words connected with fear and hysteria. Indeed, words such as "scaremongering" or "myths" are often used in connection with TTIP, describing in what is perceived by the TTIP proponents as 'exaggerated' public debate in the EU. 256 These converging forces and dialogues are very well captured by Sorensen's understanding of Beck's work. According to Sorensen, different kinds of oppositions, whether they are related to skepticism to GMOs, children vaccinations or various citizens' groups protests, will be frequently perceived as irrational by the authorities and scientific domain. However, this irrationality in the lenses of Beck's theory can be understood as a legitimate and rational action. As the author adds, "Risk society theory thus demonstrates how the new risks reinforce the general individualization process characterizing modernity and force individuals to find their own strategies with which to deal with them." Thus,

²⁵³ MCLEAN, Craig, et al. Risk Assessment, Policy-Making and the Limits of Knowledge: The Precautionary Principle and International Relations. *International Relations* [online]. 2010, **23**(4), 548-566 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1177/0047117809348704. p. 549-550. ²⁵⁴ JENSEN, Mette a Anders BLOK. Pesticides in the Risk Society. *Current Sociology* [online]. 2008, **56**(5), 757-778 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1177/0011392108093834. p.

<sup>758.

255</sup> SØRENSEN, Mads P. Ulrich Beck: exploring and contesting risk. *Journal of Risk Research* [online]. 2017, **21**(1), 6-16 [cit. 2018-05-04]. DOI: 10.1080/13669877.2017.1359204. ISSN 1366-9877. Available at: https://www.tandfonline.com/doi/full/10.1080/13669877.2017.1359204. p. 7-8.

²⁵⁶TRAYNOR, Ian. TTIP divides a continent as EU negotiators cross the Atlantic. *The Guardian* [online]. Brussels, 8 December 2014 [cit. 2018-05-04]. Available at:

https://www.theguardian.com/business/2014/dec/08/transatlantic-trade-partnership-ttip-dividing-europe-cecilia-malmstroem-washington-debut.

²⁵⁷ SØRENSEN, Mads P. Ulrich Beck: exploring and contesting risk. *Journal of Risk Research* [online]. 2017, **21**(1), 6-16 [cit. 2018-05-04]. DOI: 10.1080/13669877.2017.1359204. ISSN 1366-9877. Available at: https://www.tandfonline.com/doi/full/10.1080/13669877.2017.1359204. p. 14.

Beck's theoretical frame provides us with better understanding of nature of conflicts between authorities, experts from scientific circles, and ordinary citizens. McLean et al. note that science is not able to answer all the questions yet wider society's knowledge should be included rather than that of industry and science solely. Thus, societal sphere ought to become a part of the policy process, which implies that perceived risk overweighs objective risk measurement.²⁵⁸

Construction of risk helps us understand why the PP, which posits and incorporates risk, arouses a far-reaching discussion within the pesticide debate in the context of the TTIP debate. As Wales and Mythen suggest, Beck considers "science, technology, national governments, the legal system and the mass media ... as the key institutional agencies of risk definition."259 On an example of GMO debate in the late 1990s, which strikingly resembles the TTIP debate regarding pesticides, it was an optimistic discourse nourished by progress that was adopted by the majority of governments within the EU. It happened so especially due to lobbying pressure exerted by the multi-national industries.²⁶⁰ These industries are closely related to the state or supranational organization such as the EU. Also, it is also vital to distinguish how risk and benefits contrary to risk and needs are perceived and approached by society.²⁶¹ It then depends on how these are constructed and institutionally framed. Thus, concerning the fact that the (transnational) state is still key player in shaping its society, it is essential to understand how risks and needs are defined by the state. The core of the state is according to Dryzek et al. defined by five imperatives – domestic order, survival, revenue, economic and legitimation.²⁶²

²⁵⁸ MCLEAN, Craig, et al. Risk Assessment, Policy-Making and the Limits of Knowledge: The Precautionary Principle and International Relations. *International Relations* [online]. 2010, **23**(4), 548-566 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1177/0047117809348704. p. 552 WALES, C. and G. MYTHEN. Risky Discourses: The Politics of GM Foods. *Environmental Politics* [online]. 2002, **11**(2), 121-144 [cit. 2018-05-04]. Available at: http://www.tandfonline.com/doi/abs/10.1080/714000604. p. 123.

²⁶⁰ Ibid, p. 126.

²⁶¹ Scott draws and example on need as something necessary, whereas category of benefit posits something nonessential but advantageous. Nevertheless, to draw a clear-cut line between both is complicated. As Scott puts it on an example of GMO debate: "For example, the CEO of a biotech firm may see a GMO as 'needed' to stay in business. A farmer might see the same GMO as beneficial, but not essential, and a consumer could easily see the GMO as neither a benefit nor a need. It is clear that it is very possible for people to classify the same thing differently in terms of needs and benefits." See Scott, 2005, p. 26.
²⁶² DRYZEK, John S., Christian HUNOLD, David SCHLOSBERG, David DOWNES a Hans-Kristian

²⁶² DRYZEK, John S., Christian HUNOLD, David SCHLOSBERG, David DOWNES a Hans-Kristian HERNES. Environmental Transformation of the State: The USA, Norway, Germany and the UK. *Political Studies*[online]. 2016, **50**(4), 659-682 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1111/1467-9248.00001. p. 663.

It is the latter that became an inherent part of environmentalism, or rather, environmentalism became a part of thereof and stood against the economic imperative during the rule of Nixon's administration. Thus, under the threat of undermining of the US political system, Nixon strived to temper this movement by introducing environmental policy initiatives.²⁶³ Since then the environment and economy in the US, as Dryzek et al. observe, "remain cast in zero-sum conflict", 264 a scenario resembling the TTIP debate. Risk definers and managers in this debate play an essential role since their major objective is, as Wales and Mythen put it, to convince public to consent to the 'genuine' position and world-view of science. The science is then used as a carrier of a specific social authority, which helps to legitimize and acquire public acceptance for GMOs (read agrochemicals). 265 Making reference to Article 5.7 of the WTO on SPS, Halfon states that posture toward uncertainty becomes frequently adopted as scientific rather than precautious and inherently provides legitimation to the risk-based approach. Also, this gives rise to the 'sound science' arguments, which is used by its proponents. ²⁶⁶ Particularly the US has historically chosen to pursue a path where scientific, economic, and political domains become intermingled and to an extent blurred. This could also explain why under the cloak of TTIP the EU's position on precaution collides with the one of the US.

Also, this could also help to clarify why the environmental groups and the EU citizens became seriously concerned. As Scott stresses, the US is driven by economic growth because of scientific innovations. For that reason, the policies were instituted to boost the technological transfer by "writing and altering patent laws and by removing barriers between publicly funded science and private business." Consequently, the distinction between 'sound science' or 'fuzzy' science, 'emotional' or 'rational' approach leads to significantly heated debates when it comes to applying the PP. Whether public or scientific concerns are preferred to economic gains is the very core of the debate and questions about what would be the outcomes for society resonate. The abovementioned

²⁶³ Ibid, p. 665.

²⁶⁴ Ibid, p. 666-667.

²⁶⁵ WALES, C. and G. MYTHEN. Risky Discourses: The Politics of GM Foods. *Environmental Politics* [online]. 2002, **11**(2), 121-144 [cit. 2018-05-04]. Available at: http://www.tandfonline.com/doi/abs/10.1080/714000604. p. 131.

²⁶⁶ HALFON, Saul. Confronting the WTO: Intervention Strategies in GMO Adjudication. *Science, Technology, & Human Values* [online]. 2010, **35**(3), 307-329 [cit. 2018-05-03]. Available at: http://journals.sagepub.com/doi/10.1177/0162243909337122. p. 312.

²⁶⁷ SCOTT, Dane. Perspectives on precaution: the role of policymakers in dealing with the uncertainties of agricultural biotechnology. *Int. J. Global Environmental Issues* [online]. 2005, (5), 10-35 [cit. 2018-05-03]. Available at: http://www.umt.edu/ethics/docs/Persepctives_on_Precaution.pdf. p. 31.

development in interconnectedness of political and scientific (public) as well as private (business) entails what Kleinman and Suryanarayanan denote as 'the social production of ignorance.' This coinage postulates asymmetries in techno-scientific controversies and interests of leading agrochemical companies. The ignorance stems from written rules, procedures and protocols that shape various intellectual and professional domains of practice.²⁶⁸ Thus, the soil for a debate concerning the PP and a perceived risk brings undisputable question of power asymmetries of society and the industry. As Read and O'Riordan put it:

"Crucially, much of what is called evidence by those who want to downgrade the precautionary principle, in the name of science and in support of free enterprise, is not statistically significant, especially in relation to the potential for more or less catastrophic events. Such events are by definition rare, so usually barely evidenced. Where substantial evidence in the true sense of the word is lacking, the precautionary principle ought to fill the breach. In practice, it will only do so by a deliberate act of political or legal will, for the most part spurred on by the public interest lobbies."

The domain of public health and environment protection is often put in contrast with the power of large enterprises. As Chapman stresses, this poses an issues of individuals' freedom of action, their life according to their beliefs and choices against the power of corporation, which creates inequality and power asymmetries if the large organizations do not come under regulatory scrutiny.²⁷⁰ Nevertheless, industry advocates maintain that application of the PP would halt innovation in what otherwise could be life-saving progress.²⁷¹ Here the state machinery, the transnational organizations, and transnational corporations create not much room for political choices of citizens, which are compromised for the power of capital.²⁷²

²⁶⁸ KLEINMAN, Daniel Lee and Sainath SURYANARAYANAN. Dying Bees and the Social Production of Ignorance. *Science, Technology, & Human Values* [online]. 2012, **38**(4), 492-517 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1177/0162243912442575. p. 495.

²⁶⁹ READ, Rupert and Tim O'RIORDAN. The Precautionary Principle Under Fire. *Environment: Science and Policy for Sustainable Development* [online]. 2017, **59**(5), 4-15 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/00139157.2017.1350005. p. 5.

²⁷⁰CHAPMAN, Anne. Evidence in the Precautionary Assessment of Novel Substances. *Environment: Science and Policy for Sustainable Development* [online]. 2017, **59**(5), 16-25 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/00139157.2017.1350006. p. 19.

²⁷¹ LANGSTON, Nancy. The Retreat from Precaution: Regulating Diethylstilbestrol (Des), Endocrine Disruptors, and Environmental Health. *Environmental History* [online]. January 2008, **1**(13), 41-65 [cit. 2018-05-03]. Available at: http://www.jstor.org/stable/25473193. p. 42.

²⁷² WALES, C. and G. MYTHEN. Risky Discourses: The Politics of GM Foods. *Environmental Politics* [online]. 2002, **11**(2), 121-144 [cit. 2018-05-04]. Available at: http://www.tandfonline.com/doi/abs/10.1080/714000604. p. 137.

3.2.2. The Precautionary Principle under the TTIP Offensive

As Euractiv article points out, this principle might be further challenged because of the TTIP.²⁷³ Notwithstanding that it was defended by the top EU leaders. Nonetheless, taking a look into time span of the speeches in the overview made by the NGO Foodwatch,²⁷⁴ it is quite obvious that official defense of this principle came rather late, at the time when the TTIP leaks and citizens' resistance as well as doubts about the TTIP was at its peak. Stoll et al. adds a rather disturbing view - so far the drafts of TTIP do not anchor and safeguard the application of precautionary principle in a sufficient way. Various crucial chapters around which the pressures and struggles appear, especially the SPS and TBT measures along with the chapters on Trade and Labour as well as Trade and Environment, do not follow the EU's precautionary principle. The EU Commission not only tended to succumb to lower standards on endocrine disrupting chemicals (EDCs) and residues of pesticides, but also contemplated reducing residue levels of pesticides. As the authors stress, in both above mentioned cases, the EC publicly announced the defense of these topics differently²⁷⁵ than what for instance the main negotiation person, the EU Trade Commissioner Cecilia Malmström. In addition, obtained minutes from a meeting of the EU and the US officials (as well as Canada because of the CETA) proved that both countries heaped pressure over the EU's decision-makers particularly because of EDCs. As a lawyer from ClientEarth stresses, "The Commission claims that the change in how to manage endocrine disruptors was aimed to increase protection for EU citizens. But it turns out they were increasing satisfaction for trade partners instead."276

In the context of the PP having been contested by the TTIP a question arises. Is it not all the fuss about the EU's PP too exaggerated? Is the PP in reality based on, as Bergkamp and Kogan argue, "downplaying science" or "emotionally and politically based

²⁷³ BARBIÉRE, Cécile. CETA and TTIP threaten the EU's precautionary principle. *Euractiv* [online]. Brussels, 1 July 2016 [cit. 2018-05-04]. Available at: https://www.euractiv.com/section/trade-society/news/ceta-and-ttip-threaten-the-eus-precautionary-principle/.

²⁷⁴ Quotes on the precautionary principle and CETA/TTIP. *Foodwatch* [online]. 2016 [cit. 2018-05-04]. Available at: https://www.foodwatch.org/fileadmin/Themen/TTIP_Freihandel/Dokumente/2016-06-28 quotes TTIP CETA.pdf.

²⁷⁵ STOLL, Peter-Tobias et al. CETA, TTIP and the EU precautionary principle. *Foodwatch* [online]. June 2016 [cit. 2018-05-03]. Available at:

https://www.foodwatch.org/fileadmin/Themen/TTIP_Freihandel/Dokumente/2016-06-21_foodwatch-study_precautionary-principle.pdf. p. 7.

²⁷⁶ CRISP, James. New endocrine disruptor rules address your trade concerns, EU tells US, Canada. *Euractiv*[online]. Brussels, 12 December 2016 [cit. 2018-05-04]. Available at: https://www.euractiv.com/section/health-consumers/news/new-endocrine-disruptor-rules-address-your-trade-concerns-eu-tells-us-canada/.

EU ideologies?²⁷⁷ According to the European Consumer Organization (BEUC), which represents 42 independent national consumer organizations from 31 European countries, the nature of the PP is neither unscientific nor does it have an anti-science nature. For organizations like BEUC, the PP is a safeguard of last resort for prevention of the EU citizens' public health and defending it is crucial for future generations.²⁷⁸

²⁷⁷ BERGKAMP, Lucas and Lawrence KOGAN. Trade, the Precautionary Principle, and Post-Modern Regulatory Process. *European Journal of Risk Regulation* [online]. 2013, **4**(04), 493-507 [cit. 2018-05-03]. Available at: https://www.cambridge.org/core/product/identifier/S1867299X00003123/type/journal_article. p. 507.

p. 507. 278 MOOS, Pelle. Did TTIP push the EU to scrap precaution on endocrine disruptors?. *BEUC* [online]. July 14 2016 [cit. 2018-05-03]. Available at: http://www.beuc.eu/blog/did-ttip-push-the-eu-to-scrap-precaution-on-endocrine-disruptors/.

4. First Controversy in the Context of the TTIP Debate: Endocrine Disrupting Chemicals (EDCs)

4. 1. To Define or not to Define EDCs? That is the Question

Based on the previous chapter on the PP, the paper points to an inherent interconnectedness of the PP and the heated debate converging around TTIP. In reality, the debate about the PP is also an essential part of struggles within the debate concerning the Endocrine Disrupting Chemicals and the Glyphosate Saga in the following chapter. All these debates supplement each other and in all of them diverging forces striving for their position add up to the societal struggle. Also, all these heated debates incorporate key players represented by political power, transnational or rather transatlantic capitalist bloc, citizens, and CSOs. Last but not least, building on assumption that we indeed are characterized as risk society, then science plays an essential role in these debates, too. Whether the PP really does downplay the science, as Bergkamp and Kogan argue above, comes into question when human health and environment are preferred to the agenda corporate neo-liberalism. To testify that topics converging around the agrochemicals in the context of the TTIP debate do resonate within the very essence of risk construction and perception, is obvious in Brett-Crowther's paper. As Brett-Crowther debates, influence of EDCs, particularly RoundUp which has been sprayed on crops worldwide since 1970s, and the role of the PP in our risk society makes one raise legitimate questions:

"The precautionary principle is relevant. But how can it be applied? It cannot be fair to punish the child for the choices of the parents; and if the parents did not have a choice – but consumed EDCs unknowingly through what was apparently available in an open market – were the parents to blame for the resulting obesity of the child? How can commerce, industry and government be held to account? Should the patient be exempt from responsibility but free to displace it to parents, industry, commerce, the government?"

Naturally, as Brett-Crowther further stresses, to remove a commercial product from the market would interfere with freedom to buy and sell and such removal would posit scientific certainty. Yet, as it will be further discussed in detail in the chapter devoted to

²⁷⁹ BRETT-CROWTHER, Michael. Turbulent politics, stable science, relevant ethics. *International Journal of Environmental Studies* [online]. 2017, **75**(1), p. 4 [cit. 2018-05-02]. Available at: https://www.tandfonline.com/doi/full/10.1080/00207233.2017.1406726.

glyphosate, how can one be sure about a substance's safety when empirical data suggest that industry, (transnational) state, and science go hand in hand to keep a substance on market at any cost. When a chemical is so widespread, one does not really have much of a choice when a substance can be found in foods and drinking water²⁸⁰. Thus, here stems a dichotomy between freedom to buy and sell and freedom to have access to, for instance, safe drinking water²⁸¹ and the right to food in the trend of what UN report observes as "aggressively" promoted pesticides. 282 The question of accountability for human health and environment are then overshadowed by hunger for steadily rising profits of agrochemical companies, pushing their agenda via the (transnational) state and scientific institutions. This claim is in line with Schram's political studies approach towards public health domain, which is constrained due to trade and investment policies. For Schram, ideas, institutions, and the interests are key determinants for explanation of challenges in public health domain under trade deals such as TTIP. The ideas and agendas shape policy development through institutions that form policy development with their rules and structures in place. In addition, interests are key for shaping the abovementioned, "including the actors, their agendas and their relative power and influence." ²⁸³ In reality, it is the state and its citizens who will bear the burden not only in terms of health, but also financially. Indeed, according to Trasande et al., disease costs across the lifespan of human exposure to EDCs in the EU are estimated to reach as much as a median of €157 billion per year across 1000 Monte Carlo simulations, accounting for 1,23% of GDP. 284 When EDCs

²⁸⁰ see for example Van Bruggen et al. VAN BRUGGEN, A.H.C., et al. Environmental and health effects of the herbicide glyphosate. *Science of The Total Environment* [online]. 2018, **616-617**, 255-268 [cit. 2018-05-04]. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0048969717330279.

According to WHO, "all people, whatever their stage of development and their social and economic conditions, have the right to have access to an adequate supply of safe drinking water." see Preface of Background document for development of WHO Guidelines for Drinking-water Quality http://www.who.int/water_sanitation_health/dwq/chemicals/glyphosateampa290605.pdf.

Report of the Special Rapporteur on the right to food. In: *Human Rights Council* [online]. January 24 2017, s. 3-22 [cit. 2018-05-04]. Available at:

https://reliefweb.int/sites/reliefweb.int/files/resources/1701059.pdf. p. 3.

²⁸³ SCHRAM, Ashley. When evidence isn't enough: Ideological, institutional, and interest-based constraints on achieving trade and health policy coherence. *Global Social Policy* [online]. 2018, **18**(1), 62-80 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1177/1468018117744153. p. 2-3.

²⁸⁴ TRASANDE, L., R. T. ZOELLER, U. HASS, et al. Burden of disease and costs of exposure to endocrine disrupting chemicals in the European Union: an updated analysis. *Andrology* [online]. 2016, 4(4), 565-572 [cit. 2018-05-04]. Available at: http://doi.wiley.com/10.1111/andr.12178. p. 565-566.

in Europe are used continuously, environmental costs worth \$217 billion are estimated. Nonetheless, as Jaacks and Prasad argue, these are expected to be much higher.²⁸⁵

Discussion and struggles concerning EDCs incorporation and definition into the EU legislature pointed to acuteness of the EDCs topic. This heated debate has to be understood in the context of growing number of studies pointing to negative effects of EDCs on human health and the environment. Also, this debate was exacerbated due to TTIP, which was seen as a threatening element of EDCs definition and a challenge to the core EU principles and standards in health protection. EDCs are defined, according to the WHO/UNEP report from 2012, as chemicals or its mixtures that "interfere with normal hormone action." ²⁸⁶ The report further suggests that these chemicals or its mixtures cause many disorders both in humans and wildlife populations, which are linked to diseases as resulted in laboratory studies. The EDCs, according to the report, lead to disorders related to these substances in both male and female reproductive system, neurobehavioral issues among children which rose over past decades, increasing genital malformations in baby boys or premature development of breasts in young girls which poses a risk factor for tumors in breasts. Also, rates of endocrine-related cancers over the past five decades have been increasing globally as a result of exposure to these substances. Breast, endometrial, ovarian, prostate, testicular and thyroid types of cancer are related to the exposure of EDCs. As the report further claims, growing number of people suffering from obesity and type 2 diabetes has dramatically increased and this is also linked to EDCs occurring in our environment. Our surroundings containing these substances have thus a negative impact on both humans and wildlife populations, as the report stresses.²⁸⁷

An issue in the process of agrochemical approval is that only a small portion of the substances have been studied thoroughly, not even mentioning their tests in mixtures and adjuvants. What is more, as Karlsson suggests, "the limited data brought to public attention by scientists, agencies and companies have more often than not been heavy

²⁸⁵ JAACKS, Lindsay M a Soumya PRASAD. The ecological cost of continued use of endocrine-disrupting chemicals. The Lancet [online]. January 2017, 5, 14-15 [cit. 2018-05-04]. Available at: https://www.thelancet.com/pdfs/journals/landia/PIIS2213-8587(16)30399-0.pdf. p. 14.

²⁸⁶BERGMAN, Åke et al. Endocrine Disrupting Chemicals 2012: Summary for Decision-Makers. In: WHO/UNEP [online]. 2013, s. 1-29 [cit. 2018-05-04]. Available at:

https://wedocs.unep.org/bitstream/handle/20.500.11822/17015/State Science Endocrine Disrupting Chemi cals.pdf?sequence=1&isAllowed=y. p. 4. ²⁸⁷ Ibid, p. 2-3.

disputed."²⁸⁸ The question is whether the EDCs should fall under the REACH regulation inherently based on the PP, particularly within the "substances of very high concern." Yet, incorporation of a substance under REACH is time-consuming and similar to the US Toxic Substances Control Act not enough information is available as they are come under the cloak of trade secrets.²⁸⁹

The blurred line between what is a trade secret and what can be perceived as a non-transparency under the TTIP offensive reverberated in the debate. All in all, the process of incorporation of Endocrine Disrupting Chemicals (EDCs) criteria into the EU legislature was perceived as a significant lowering of the EU standards. Furthermore, this particular case proved that the rhetoric of not selling the EUs principles was in contradiction to what was proposed by the EU officials.²⁹⁰ As the minutes from the meeting between the US and EU obtained by Euractiv indicate, there was a substantial pressure from the US for the risk-evaluation method of EDCs to be changed. As a result, this would lead to easier access of the US products on the EU's food market.²⁹¹

After many years that the EDCs criteria were on the table, the piece of legislation on identifying EDCs on the proposal of the EU Commission was refused by MEPs' 389 votes. The main campaign against adopting these criteria was led by the Swedish social democratic MEP Jytte Guteland and Dutch green MEP Bas Eickhout who opposed the unlawful steps of the Commission. A loophole was created so that the Commission was able to include some chemicals without being identified as EDCs, thus overstepping its powers. Instead of co-decision, which would open the doors for amending or approving a

²⁸⁸ KARLSSON, Mikael. TTIP and the environment: the case of chemicals policy. *Global Affairs* [online]. 2015, **1**(1), 21-31 [cit. 2018-05-04]. Available at:

http://www.tandfonline.com/doi/abs/10.1080/23340460.2015.977637. p. 23.

²⁸⁹ Ibid, p. 24-25.

NESLEN, Arthur. New rules to regulate Europe's hormone-disrupting chemicals. *The Guardian* [online]. London, 16 June 2016 [cit. 2018-05-04]. Available at:

https://www.theguardian.com/environment/2016/jun/16/new-rules-to-regulate-europes-hormone-disrupting-chemicals.

²⁹¹ CRISP, James. New endocrine disruptor rules address your trade concerns, EU tells US, Canada. *Euractiv*[online]. Brussels, 12 December 2016 [cit. 2018-05-04]. Available at:

https://www.euractiv.com/section/health-consumers/news/new-endocrine-disruptor-rules-address-your-trade-concerns-eu-tells-us-canada/.

Commission's proposal, the EC set the criteria by comitology.²⁹² These loopholes were perceived to be created to fit the agenda of the German chemical industry.²⁹³

Nevertheless, this was not the only blot on EC's reputation regarding to the EDCs legislative process. Issues in the legislative process trace a few years back into history. For instance, the Commission had a duty to put forward the EDCs scientific criteria by December 2013 but this deadline was further prolonged due to need to introduce an impact assessment. In July 2014 Sweden took the EDCs regulation at its own national level, filled a lawsuit against the EC and the case was decided in favor of the Nordic country. The EC argued that the scientific criteria had no scientific base and "that their implementation would affect the internal market", which led to further extension of setting up the criteria. The General Court did not regard this argument as legitimate and accused the Commission of failing to fulfill its duties under Regulation No 528/2012 on 16th December 2015. ²⁹⁴ EP as well as the Council supported Sweden's position, 21 EU Member States voted for, while a few states including the UK, which has been in favor for support of agrochemical business throughout the history of EDCs criteria regulation, refrained from the voting.²⁹⁵ In the meantime the issues revolving around EDCs spilled over from CSOs to the EP. In the second half of 2017 discussions about EDCs gained a momentum and pressures for inclusion or removal of certain chemicals were resisted by particular wings of the European Parliament. Mostly left-wing MEPs called to veto Commission proposal on 28th September 2017 on the grounds of more thorough inclusion of some suspected EDCs among the proposed regulation.²⁹⁶ That the debate was of high importance among MEPs was demonstrated by their stance towards the agrochemical industry. For instance, the agrochemical giant Monsanto and their lobbyists were refused access to the EP because the

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²⁹² Identifying endocrine disruptors: extracts from the vote and from the debate. *Multimedia European Parliament* [online]. 4 October 2017 [cit. 2018-05-04]. Available at:

http://audiovisual.europarl.europa.eu/video/I144693/identifying-endocrine-disruptors-debate-vote. ²⁹³ EVEN, Fabienne. Endocrine disruptors: EU definition contains 'too many exemptions and

loopholes'. *Euractiv* [online]. Brussels, 11 July 2017 [cit. 2018-05-04]. Available at:

https://www.euractiv.com/section/endocrine-disruptors/interview/endocrine-disruptors-eu-definition-contains-too-many-exemptions-and-loopholes/.

²⁹⁴ PRESS RELEASE No 145/15. *General Court of the European Union* [online]. Luxembourg, 16 December 2015 [cit. 2018-05-04]. Available at:

https://curia.europa.eu/jcms/upload/docs/application/pdf/2015-12/cp150145en.pdf.

HOREL, Stéphane. A Toxic Affair: How the Chemical Lobby Blocked Action on Hormone Disrupting Chemicals. In: *Corporate Europe Observatory* [online]. Paris/Brussels, May 2015, s. 4-23 [cit. 2018-05-04]. Available at: https://corporateeurope.org/sites/default/files/toxic lobby edc.pdf. p. 18.

²⁹⁶ Endocrine disrupters in pesticides: Calls to veto Commission proposal. *The European Parliament*[online]. 28 September 2017 [cit. 2018-05-04]. Available at: http://www.europarl.europa.eu/news/en/press-room/20170928IPR84908/endocrine-disrupters-in-pesticides-calls-to-veto-commission-proposal.

company's unwillingness to attend an organized hearing by the committees for environmental and agricultural issues, academics as well as regulators and campaigners. The meeting was called because of accusations that Monsanto influences regulatory studies excessively.²⁹⁷ It happened for the first time that the EP utilized rules adopted in the beginning of 2017 for access to the Parliament if it is not complied with the set rules by the EP.

As far as the final vote from December 2017 on definition of EDCs criteria is concerned, Nordic countries such as Denmark and Sweden were in line with their opposition towards the definition, while France switched in favor for the new definition. According to French socialist MEPs, it was particularly because of interest of the chemistry and agriculture lobbies.²⁹⁸ Interestingly, the UK's approach towards EDCs has been changing in the Brexit context and the UK reflects on concerns about these substances. Indeed, as the number of studies on impacts of pesticides on public health and environment has been growing along with public concerns, the UK political leadership has been on a mission to tackle down this issue, especially due to colony collapse disorder, which endangers the UK's profits in agricultural sector.

4.1.1. Pressing Issue: Neonicotinoids²⁹⁹ and Colony Collapse Disorder

According to a UN report from March 2017, honeybee populations in the UK as well as the US declined in 25 years by 50%. ³⁰⁰ Particularly in the UK but also in the rest of the EU, a significant decline in bee colonies led to growing concerns about the influence of neonicotinoids on bees. Also, an alarming study conducted in Germany points to 75% decline in insect numbers over the last 25 years, blaming pesticides as a key factor for such a dramatic plunge. ³⁰¹ Led by Environment Secretary Michael Gove, the UK is about to ban

²⁹⁷ NESLEN, Arthur. Monsanto banned from European parliament. *The Guardian* [online]. London, 28 September 2017 [cit. 2018-05-04]. Available at:

https://www.theguardian.com/environment/2017/sep/28/monsanto-banned-from-european-parliament.

298 Endocrine disruptors: A guilty definition. *Euractiv* [online]. Brussels, 3 October 2017 [cit. 2018-05-04].

Available at: https://www.euractiv.com/section/endocrine-disruptors/onlinion/endocrine-disruptors-a-guilty-

Available at: https://www.euractiv.com/section/endocrine-disruptors/opinion/endocrine-disruptors-a-guilty-definition/.

²⁹⁹ Neonicotinoids are confirmed to act as EDCs in bees. See: https://www.nature.com/articles/s41598-017-10489-6.

³⁰⁰ BERGMAN, Åke et al. Endocrine Disrupting Chemicals 2012: Summary for Decision-Makers. In: *WHO/UNEP* [online]. 2013, s. 1-29 [cit. 2018-05-04]. Available at:

https://wedocs.unep.org/bitstream/handle/20.500.11822/17015/State_Science_Endocrine_Disrupting_Chemicals.pdf?sequence=1&isAllowed=y. p. 9.

³⁰¹ CARRINGTON, Damian. Warning of 'ecological Armageddon' after dramatic plunge in insect numbers. *The Guardian* [online]. London, 18 October 2017 [cit. 2018-05-04]. Available at:

neonicotinoid pesticides,³⁰² a chemical in which seeds are coated before they are planted, thus containing toxic substances for pests but also for pollinate bees. 303 As a result, decline in bee population in the UK has been increasing as exposure of bee colonies to these residues has had an impact of the bee reproduction. 304 Baron et al. found out that exposure of queen bees to neonicotinoid pesticide resulted in their significantly lowered reproductive capabilities.³⁰⁵ In addition, a worldwide survey analyzed 198 samples of honey from across the globe, trying to monitor 5 of the nicotinoid substances - acetamiprid, clothianidin, imidacloprid, thiacloprid, and thiamethoxam. The authors of the survey found out that 75% of all samples contained at least one of the monitored neonicotinoids, 45% contained two or more types of this substance, and 10% had four or five of these substances in them. This may lead to, according to the authors, increased harm to pollinators. Especially alarming are those 45% of samples, which contain an entire cocktail of nicotinoids.³⁰⁶ These studies seemingly had an impact on the plan to ban these substances from the British fields. Besides, a research poll on pesticides taking place in the UK in September 2017 showed that 77% of Brits are for a complete ban of bee harming pesticides³⁰⁷ – a concern among British citizens that is difficult to be ignored by the British authorities. Although British government was initially in opposition to ban of neonicotinoids, risks that pose these chemicals to the environment and the weight of available evidence, led the environment secretary Gove to the change of position. There is also an economic reason behind the change of British stance, as Gove mentioned, risk of pesticides to bees and other pollinators play "a key part in our £100bn food industry [and] is greater than previously understood. I believe this justifies further restrictions on their

https://www.theguardian.com/environment/2017/oct/18/warning-of-ecological-armageddon-after-dramatic-

plunge-in-insect-numbers. ³⁰² UK 'will support' neonicotinoid pesticide ban. *BBC* [online]. London, 9 November 2017 [cit. 2018-05-04].

Available at: http://www.bbc.com/news/science-environment-41931670.

303 Farming Today: The future of farm chemicals. *BBC Radio* [online]. London, 10 November 2017 [cit. 2018-05-04]. Available at: http://www.bbc.co.uk/programmes/b09cvxbd.

WOODCOCK, B. A. et al. Country-specific effects of neonicotinoid pesticides on honey bees and wild bees. Science [online]. 2017, 356(6345), 1393-1395 [cit. 2018-05-04]. Available at: http://www.sciencemag.org/lookup/doi/10.1126/science.aaa1190. p. 1.

³⁰⁵BARON, Gemma L., Nigel E. RAINE a Mark J. F. BROWN. General and species-specific impacts of a neonicotinoid insecticide on the ovary development and feeding of wild bumblebee queens. Proceedings of the Royal Society B: Biological Sciences [online]. 2017, 284(1854), 20170123- [cit. 2018-05-04]. Available at: http://rspb.royalsocietypublishing.org/lookup/doi/10.1098/rspb.2017.0123. p. 6

³⁰⁶ MITCHELL, E. A. D. et al. A worldwide survey of neonicotinoids in honey. *Science* [online]. 2017, **358**(6359), 109-111 [cit. 2018-05-04]. Available at:

http://www.sciencemag.org/lookup/doi/10.1126/science.aan3684. p. 1-3.

³⁰⁷ UK: STRONG SUPPORT FOR BANNING PESTICIDES THAT HARM POLLINATORS. *Greenberg* Ouinlan Rosner Research [online]. London, 9 November 2017 [cit. 2018-05-04]. Available at: http://www.gqrr.com/articles/2017/11/9/uk-strong-support-for-banning-pesticides-that-harm-pollinators.

use. We cannot afford to put our pollinator populations at risk." Seemingly, risks must be too great to be overlooked to make regulators and political actors change their views.

In the context of what Kleinman and Suryanarayanan denote as 'politics of knowledge production', it can be explained why regulators' and political elites' views on safety of agrochemicals often do not converge with the views of concerned public. At this point one can trace to the 'production of ignorance', 309 in which the companies, regulators and science are key players in the process of knowledge production. In addition, it is within this context that diverging social forces and interests intermingle. In the interest of such agrochemical industry giants such as Bayer CropScience is to maintain ignorance concerning any alleged role of their neonicotinoid products safety to bee populations. Ultimately, Bayer does not have to conduct any data fabrication or restore to fraudulent activities to maintain status quo of uncertainty. Indeed, as Kleinman and Suryanarayanan suggest, "It is enough simply for the company to capitalize on the ignorance produced by the toxicological epistemic form that dominates academic and regulatory evidentiary norms and practices." As a result, persistence of uncertainty concerning safety of their neonicotinoid chemicals helps the company in maintaining position on the market. Thus, it is in the very core of company's interest to influence and shape standards and practices to gain legitimacy in the academic field.³¹⁰

Nevertheless, since the risks connected with the use of neonicotinoids proved to be too significant and number of scientific literature proved negative impacts on pests and pollinators, the EFSA recently came with a conclusion that neonicotinoids indeed pose a threat to bees. Also, awareness from public and NGOs has been remarkable regarding this issue. The EFSA's conclusion was received negatively by the producers - neonicotinoids in Europe have been widely used in Europe since the early 1990s and they

³⁰⁸ CARRINGTON, Damian. Total ban on bee-harming pesticides likely after major new EU analysis. *The Guardian* [online]. London, 28 February 2018 [cit. 2018-05-04]. Available at:

https://www.theguardian.com/environment/2018/feb/28/total-ban-on-bee-harming-pesticides-likely-aftermajor-new-eu-analysis?CMP=share btn tw.

³⁰⁹ The authors build their arguments concerning the systematic production of ignorance on works of various authors and perceive the problematic through the lenses of "undone science", "knowledge gaps", "strategic ignorance", and "scientific cultures of nonknowledge". KLEINMAN, Daniel Lee and Sainath SURYANARAYANAN. Dying Bees and the Social Production of Ignorance. *Science, Technology, & Human Values* [online]. 2012, **38**(4), 492-517 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1177/0162243912442575. p. 495-498.

³¹⁰ Ibid, p. 507.

Neonicotinoids: risks to bees confirmed. *EFSA* [online]. Parma, 28 February 2018 [cit. 2018-05-04]. Available at: https://www.efsa.europa.eu/en/press/news/180228.

³¹²See for exmple https://www.beecoalition.eu/ or http://www.savehoneybees.info/.

are produced by Syngenta and Bayer CropScience. 313 As Syngenta commented on the recent EFSA's conclusion: "Efsa sadly continues to rely on a [bee risk guidance] document that is overly conservative, extremely impractical and would lead to a ban of most if not all insecticides, including organic products."314 In fact, defense of the agrochemical industry position against scientific bodies should not be a surprise. Both Bayer and Syngenta fought back already in 2013 to counter the EFSA's conclusion on neonicotinoids since, as McGrath points out, the commercial value of their neonicotinoid products was testified, paradoxically enough, between the two companies in an intellectual property dispute in 2002. At that time Syngenta had to pay Bayer \$120 million to produce thiamethoxam. 315 In spite of this dispute, both companies joined forces and along with the European Crop Protection Association, an industry body, went on lobbying at the EC for opposition to French proposal for a unilateral ban in 2012. Also, both companies utilized the Humboldt Forum for Food and Agriculture to appeal to the agricultural and food industry as well as politicians to convince them that the ban would pose significant costs and job losses. In addition, Syngenta unsuccessfully attempted to change wording of the EFSA's initial draft and threatened the EFSA's director with legal action. 316 A rather typical counter-attack of industry when things do not go according to the plan can be observed in Syngenta's reaction to failed vote on the EC's proposal:

"The proposal is based on poor science and ignores a wealth of evidence from the field that these pesticides do not damage the health of bees. Instead of banning these products, the Commission should now take the opportunity to address the real reasons for bee health decline: disease, viruses and loss of habitat and nutrition." ³¹⁷

³¹³ ALEMANNO, Alberto. The Science, Law and Policy of Neonicotinoids and Bees: A New Test Case for the Precautionary Principle. *European Journal of Risk Regulation* [online]. 2013, **4**(02), 191-207 [cit. 2018-05-04]. Available at:

https://www.cambridge.org/core/product/identifier/S1867299X00003342/type/journal_article. p. 9-10.

³¹⁴CARRINGTON, Damian. Total ban on bee-harming pesticides likely after major new EU analysis. *The Guardian* [online]. London, 28 February 2018 [cit. 2018-05-04]. Available at:

https://www.theguardian.com/environment/2018/feb/28/total-ban-on-bee-harming-pesticides-likely-aftermajor-new-eu-analysis?CMP=share_btn_tw.

MCGRATH, Peter F. Politics meets Science: The case of neonicotinoid insecticides in Europe. *Surveys and Perspectives Integrating Environment and Society* [online]. July 2014, 7(1), 1-10 [cit. 2018-05-04]. Available at: http://sapiens.revues.org/1648. p. 5. ³¹⁶ Ibid, p. 6.

³¹⁷ EU Member States again fail to agree restriction on key crop protection technology. *Syngenta* [online]. Basel, 29 April 2013 [cit. 2018-05-04]. Available at: https://www.syngenta.com/media/media-releases/yr-2013/29-04-2013.

As McGrath further observes, based on Lynn Dicks comments, in the UK the farming press was literally flooded by headlines stating that without neonicotinoid insecticides, the yields would rapidly decline, which is 'disingenuous interpretation of the industry-funded report.,318

Despite all the growing evidence and public concerns regarding of the threat of the pesticides to environment and human health, dichotomies can be found in positions towards EDCs. For example, Britain is an example of diverging positions on the domestic and the EU political front. On one hand, Michael Gove has strived to consider the growing concerns about decline in bees, on the other hand, for instance, British MEP to the EP Julie Girling has been critical of the science on EDCs. Girling intended to oppose the ban of 3 types of neonicotinoids in June 2017³¹⁹ but the proposal was blocked by the EU environment committee.³²⁰ Thus, the struggles have been omnipresent at many levels, including the EU institutional apparatuses.

4.1.2. **Buying Time, Buying Science**

Apparently, struggle for preservation of the EU's key principles in terms of public health and environment against the interests of lobby groups and industry has demonstrated magnitude of ongoing debates. These debates, which gained on intensity in 2013, around the time of first rounds of the TTIP, should be thus examined within the context of TTIP. This poses core questions for better understanding of growing debates on EDCs and struggles they represent: Why was the EC so hesitant to adopt the EDC criteria promptly when the risks of these substances were defined by the WHO/UNEP? In its WHO/UNEP report from 2012 on State of the Science of Endocrine Disrupting Chemicals, the authors identify key areas of focus in the latest developments in science. As the report has a subheading Summary for Decision-Makers, the appeals and conclusions of authors are addressed to the political elites. Particularly, the report points out that increased probability of detrimental effects in humans as well as wildlife are marginalized and healthy risk

³¹⁸ MCGRATH, Peter F. Politics meets Science: The case of neonicotinoid insecticides in Europe. *Surveys* and Perspectives Integrating Environment and Society [online]. July 2014, 7(1), 1-10 [cit. 2018-05-04]. Available at: http://sapiens.revues.org/1648. p. 6.

Committee on the Environment, Public Health and Food Safety: Draft Agenda. European Parliament[online]. Brussels, June 2017 [cit. 2018-05-04]. Available at: http://www.europarl.europa.eu/sides/getDoc.do?type=COMPARL&reference=ENVI-OJ-20170621-1&secondRef=01&format=XML&language=EN.

³²⁰ Conservative MEP looks to derail proposed EU ban on bee harming pesticides. *Unearthed* [online]. 21 June 2017 [cit. 2018-05-04]. Available at: https://unearthed.greenpeace.org/2017/06/21/bees-julie-girlingmichael-gove-conservative/.

because of EDCs might be substantially underrated. Furthermore, the report stresses importance of government actions and mechanisms to tackle exposures to EDCs. Areas where measures such as bans and restrictions were adopted, achieved decrease in negative impacts on humans and wildlife. The report further suggests that uncertainties and knowledge gaps should by overcome by "an integrated, coordinated international effort ... to define the role of EDCs in current declines in human and wildlife health and in wildlife populations." Despite the appeal of the report and its scientific significance acknowledged by the EC, 322 the time span in which the EDCs criteria were about to be adopted was significantly delayed. This poses second question: Was the EC's unwillingness to define the criteria until the set deadline connected with context of TTIP? Answers can be found in an article mapping the practices of lobby in Brussels written by a French investigative journalist Stéphane Horel along with the Corporate Europe Observatory (CEO). Horel lists lobby techniques and legitimation strategies, which include:

- a) mobilizing of Derectorate General actors against one another, especially against DG Environment
- b) exaggerated economic losses for the industry sector,
- c) hired lobby consultancy firms and law firms which are utilized to set up strategies and meetings with key official and decision makers,
- d) orchestrating scientific critiques against official EU reports (Kortenkamp report concerning the EDCs study)
- e) purposive time buying to achieve a goal the EDC regulation is swept under the carpet
- f) utilizing TTIP to 'harmonize' safety rules in the food and environmental area, leading to lowering the EU standards

In: WHO/UNEP [online]. 2013, s. 1-29 [cit. 2018-05-04]. Available at:

³²¹ BERGMAN, Åke et al. Endocrine Disrupting Chemicals 2012: Summary for Decision-Makers.

https://wedocs.unep.org/bitstream/handle/20.500.11822/17015/State_Science_Endocrine_Disrupting_Chemicals.pdf?sequence=1&isAllowed=v. p. 3.

³²² Endocrine Disruptors. *EC Europa* [online]. Brussels, June 2016 [cit. 2018-05-04]. Available at: http://ec.europa.eu/environment/chemicals/endocrine/index en.htm.

³²³ KORTENKAMP, Andreas et al. EU regulation of endocrine disruptors: a missed opportunity. *The Lancet Diabetes & Endocrinology* [online]. 2016, **4**(8), 649-650 [cit. 2018-05-04]. Available at: http://linkinghub.elsevier.com/retrieve/pii/S2213858716301516. p. 649-650.

g) mobilizing groups of EDC criteria attackers (scientists, farmer organizations etc.324

Furthermore, Horel found out that campaigning is performed by influential industry associations such as European Chemical Industry Council (CEFIC), European Crop Protection Association (ECPA), and PlasticsEurope as well as Cosmetics Europe. Leadership of these associations consists of former managers of BASF and Bayer. In addition, it is not uncommon that top lobbyists for chemical corporations switched in their careers between governmental sector (even that of the EU level institutions) and lobbying. As a result, this way the lobbyists can utilize connections within the system and push forward an assigned agenda required by their employers. 325 As Horel stresses, the industry in the crucial year 2013 indeed managed to buy the time for the benefit of deregulation in terms of the ongoing EU-US trade discussion.³²⁶ Indeed, as Kortenkamp et all stress, it took the EC three years to propose amendments to the EU pesticide law and set criteria for the identification of EDCs. In its identification of EDCs from 2016, the authors stated that this would lead to an outcome that almost no EDCs used as pesticide will be withdrawn from the market. In short, the proposal of law from 2016 would undermine the high level of protection anchored in the EU pesticide and biocide laws.³²⁷ As Sylvia Maurer from BEUC commented, the EC's proposal undermined the precautionary principle. As Maurer further adds, "Sadly today's package seems to confirm our concerns that the Commission has lowered its ambition concerning strong EDC criteria so as not to jeopardise the TTIP talks with the US."328 How these types of clauses presented in the 2016 proposal came into being is of utmost interest. For instance, during an international group of scientists convened by the German Federal Institute for Risk Assessment (BfR)³²⁹ on how the EC

³²⁴ HOREL, Stéphane. A Toxic Affair: How the Chemical Lobby Blocked Action on Hormone Disrupting Chemicals. In: Corporate Europe Observatory [online]. Paris/Brussels, May 2015, s. 4-23 [cit. 2018-05-04]. Available at: https://corporateeurope.org/sites/default/files/toxic_lobby_edc.pdf. p. 7. July 2010, st. July 20

³²⁶ Ibid, p. 17.

³²⁷ KORTENKAMP, Andreas et al. EU regulation of endocrine disruptors: a missed opportunity. The Lancet Diabetes & Endocrinology [online]. 2016, 4(8), 649-650 [cit. 2018-05-04]. Available at: http://linkinghub.elsevier.com/retrieve/pii/S2213858716301516. p. 649-650.

MICHALOPOULOS, Sarantis. Pesticide industry critical of endocrine disruptors criteria. Euractiv [online]. Brussels, 15 June 2016 [cit. 2018-05-04]. Available at: https://www.euractiv.com/section/health-consumers/news/pesticide-industry-critical-of-endocrine-disruptors-

criteria/.

³²⁹ It will be further referred to the role of this German institution in the chapter devoted to the glyphosate reapproval proces. Similar to the EDCs debate, also there the BfR played an essential role in (re)viewing toxicity of the active substance glyphosate.

should regulate the EDCs, it was argued for the above mentioned hazard-based regulation which would dismiss the "relevance of potency, thresholds and dose-response dynamics, and without offering operational guidance on how EDs should be regulated" as Batta Gori and Dekant argue.³³⁰

That the above-mentioned UNEP/WHO report did not fit the goals of the agrochemical industry is rather obvious. In a defense to a critical article by Lamb et al. from 2014, a group of scientists out of which many worked on the report UNEP/WHO report, wrote an article to disprove claims of an industry-sponsored critical comments. As the authors state, Lamb et al. received funding support from organizations such as American Chemistry Council (ACC), CropLife America (CLA), CropLife Canada (CLS), CropLife International (CLI), European Chemical Industry Council (Cefic), and European Crop Protection Association (ECPA). The UNEP/WHO report was criticized by Lamb et al. due to its unsystematic framework for review, evaluation and identification of data, overt reliance on disease trends, suggesting correlation with EDCs, informal approach to evaluating causation from EDCs, and disregarding of exposures, doses in endocrine disruption. As Bergman et al. stress, Lamb et al. dismissed engagement with the scientific content of UNEP/WHO and instead focused to methodological issues. This tactic has, as the authors point out, "striking similarities with those employed by the tobacco industry and creates the false impression of bias, imbalance and subjectivity."331 Although Lamb et al. shift attention to "state of the science" throughout their critique, they do not define nor discuss a fashion and character of such an assessment. ³³² Paradoxically enough, Fuhrman et al. point to the very definition of EDCs set by not any other body than WHO. The authors mention that the definition of the substances was established via committee members that included representatives from industry. This resulted in narrower definition of EDCs categorization, which ultimately benefited the industry "as fewer chemicals under regulation would mean fewer risk assessments and restrictions on their products." In addition, the authors stress that due to precision of the WHO definition, the EC and the

³³⁰ GORI, Gio Batta a Wolfgang DEKANT. Deepening uncertainty on how the EU may regulate supposable endocrine disruptors. *Regulatory Toxicology and Pharmacology* [online]. 2016, **81**, 8-9 [cit. 2018-05-05]. Dostupné z: http://linkinghub.elsevier.com/retrieve/pii/S0273230016301787. p. 8.

³³¹ BERGMAN, Åke et al. Manufacturing doubt about endocrine disrupter science – A rebuttal of industry-sponsored critical comments on the UNEP/WHO report "State of the Science of Endocrine Disrupting Chemicals 2012". *Regulatory Toxicology and Pharmacology* [online]. 2015, **73**(3), 1007-1017 [cit. 2018-05-04]. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0273230015300350. p. 1008.

³³² Ibid, p. 1009.

EFSA adopted this definition.³³³ Thus, one cannot make early conclusions about any organization as even within the same body opinions diverge. Indeed, on one hand one can pinpoint the critical voice of industry in the WHO/UNEP report. On the other hand, the WHO defined EDCs with the 'help' from the industry.

Another issue, once again connected with the role of science in the process of giving these definitions somewhat tangible form, posits methodological questions in defining whether EDCs present a risk or not. Linkages and causations are often challenging to prove since the EDCs field is vast and despite well-established methods, EDCs are indeed very difficult to define as "their effects are not always definitively adverse as would be expected from a traditional toxin." 334 Also, in the WHO the definition of "adverse" effect is very vague and this rather imprecise definition further serves as a guideline for the regulatory bodies in the world – the EFSA according to Fuhrman et al., does not even define "adverse." In addition, toxicology studies relied on "empirically verifiable outcomes" and only recently has there been a movement which incorporates to detect intermediate toxicological effects in risk assessment instead of "relying solely on apical endpoints."336 In the Beck's view it is this strict insistence on proof which leads to decrease in recognition of contaminations caused by industry and civilizational diseases. Under the cloak of sound science the researchers significantly rely on proving causality which does not give room for citizens' protests, blaming them for lack of causal links. As Beck further points out, "They seem to keep down costs for industry, and to keep the politician's backs off the wall, but in reality they open the floodgates for a general endangering of life." ³³⁷ To avoid further endangering of humans and nature, it is vital to change approach to risk assessment methodology for EDCs. As Fuhrman et al. point out, both the scientific and risk assessment communities shall incorporate relationship between detection and public concerns of toxicity and risk. 338 However, the reality of the TTIP debate and definition of

³³³ FUTRAN FUHRMAN, Vivian, Alon TAL and Shai ARNON. Why endocrine disrupting chemicals (EDCs) challenge traditional risk assessment and how to respond. *Journal of Hazardous Materials* [online]. 2015, **286**, 589-611 [cit. 2018-05-04]. Available at:

http://linkinghub.elsevier.com/retrieve/pii/S0304389414009959. p. 592.

³³⁴ Ibid, p. 594.

³³⁵ Ibid, p. 594.

³³⁶ Ibid, p. 594.

³³⁷ BECK, Ulrich. *Risk society: towards a new modernity*. Newbury Park, Calif.: Sage Publications, 1992. Theory, culture & society (Unnumbered). p. 63.

FUTRAN FUHRMAN, Vivian, Alon TAL and Shai ARNON. Why endocrine disrupting chemicals (EDCs) challenge traditional risk assessment and how to respond. *Journal of Hazardous Materials* [online]. 2015, **286**, 589-611 [cit. 2018-05-04]. Available at:

http://linkinghub.elsevier.com/retrieve/pii/S0304389414009959. p. 597.

EDCs proved to be in line to Beck's description. In addition, what the TTIP debate revolving around EDCs caused is a new wave of (agro)chemical sustainability. Nevertheless, the question arises whether ethics, as Llored points out, could be "compatible with an economic system based on consumption, competition, and individualism."

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³³⁹ LLORED, Jean-Pierre. Ethics and Chemical Regulation: The Case of REACH. *Hyle* [online]. 2017 [cit. 2018-05-04]. Available at: http://www.hyle.org/journal/issues/23-1/llored.htm.

5. Second Controversy in the Context of the TTIP Debate: Glyphosate Saga

5. 1. A Common Re-Approval Process Resulting in Uncommon Turmoil

"A senior U.S. trade official told POLITICO the Obama administration is "worried about many recent developments on the EU side," not limited to the TTIP negotiations, but extending to the EU's unwillingness to re-approve the pesticide glyphosate."

Glyphosate,³⁴¹ an active substance of the world's most used herbicide Roundup, became a focal point of debate during TTIP rounds and even past the last TTIP round in October 2016. What supposed to be a common re-approval process of an active substance glyphosate for another 15 years in the EU, turned into a wide-base societal debate addressing various issues connected with the re-licensing process. Needless to mention that what has become to known as "glyphosate saga", has had a transatlantic spillover effect of the debate. Particularly strong debate stroke the scientific circles and the saga has, as Thierry Vrain observes, striking similarities with the tobacco controversies from the past.³⁴² Indeed, a heated debate can be observed in the scientific domain especially due to the fact that glyphosate-based herbicides are so widely used around the world. Therefore, its impacts on public health have been examined extensively over the years, especially in the past two decades. According to Benbrook, when so-called genetically modified "Roundup Ready" crops tolerating the chemical were introduced in 1996, the glyphosate spraying has risen globally almost 15-fold. In the US alone, two-thirds of the total volume

³⁴⁰ HEATH, Ryan. EU and US trade sharp words on TTIP. *Politico* [online]. 30 May 2016 [cit. 2018-05-04]. Available at: https://www.politico.eu/article/eu-and-u-s-trade-sharp-words-on-ttip-phil-hogan-anthony-gardner/.

gardner/.

341 Glyphosate is an active substance used in the most-used herbicide worldwide called Roundup. Developed and introduced by Monsanto for weed control in agricultural fields in 1974 (see http://www.chemicke-listy.cz/docs/full/2017_02_101-102.pdf), its main ingredient glyphosate was originally used as a descaling agent for cleaning mineral deposits in pipes and boilers (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3945589/). Roundup is currently produced in various adjuvants and its effects, not only of glyphosate alone, on human health and environment have been studied recently. Active substance glyphosate, according to Van Bruggen et al. cause shifts in microbial community composition in soil, plants and animal guts. Also, glyphosate was found to "serve as one of the drivers for antibiotic resistance." see Van Bruggen et al. on the initial page.

³⁴² Dr Thierry Vrain: Glyphosate, Food, and your Gut (Food). In: *Youtube* [online]. 7.11.2017 [cit. 2018-05-04]. Available at: https://www.youtube.com/watch?v=YuYZxUxYZoQ&t=.

of this chemical has been applied just in the past decade since introduction of Roundup in 1974. As a result, after introduction of genetically modified crops, human exposure to glyphosate has increased by approximately 500 percent.³⁴³ In the UK and Germany the use of glyphosate accounts for 40 per cent of the total agricultural areas.³⁴⁴ Benbrook points out that the widespread use of glyphosate, out of which RoundUp is most commonly used, would lead to increased interest of its ecological and human health impacts.³⁴⁵ Especially with proved increasing resistance of plants to herbicides, it is expected that even more herbicides will be used exponentially. Thus, issues associated with intensified use of glyphosate, according to Van Bruggen et al., "are more encompassing than originally anticipated by the regulatory agencies." The authors call for more "independent research ... to revisit the tolerance thresholds for glyphosate residues in water, food and animal feed taking all possible health risks into account."346 Study of these scientists calling for more research to be done, especially with increasing use of agrochemicals, is one of many and reflects growing concerns. Examination of glyphosates' effects has been indeed increasing recently, particularly in the past two years³⁴⁷ – especially when the International Agency for Research on Cancer came with its assessment about glyphosate's possible carcinogenicity.

On 20 March 2015 the International Agency for Research on Cancer under the WHO stated that the herbicide glyphosate is probably carcinogenic to humans.³⁴⁸ Consequently, Growing public concerns about the safety of glyphosate led to an initiative from European citizens, which called for a ban on glyphosates and reform in the process of the EU pesticide policy. The petition was signed by 1.3 million concerned EU citizens. The deadline for final vote on glyphosate re-licensing was set on 15 December, 2017. On 9 November 2017, 14 Member states voted in favor of the license renewal, 9 voted against

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³⁴³ BENBROOK, Charles M. Trends in glyphosate herbicide use in the United States and globally. *Environmental Sciences Europe* [online]. 2016, **28**(1), - [cit. 2018-05-04]. Available at: http://www.enveurope.com/content/28/1/3. p. 1.

³⁴⁴ *Glyphosate: History* [online]. Darmstadt: Glyphosate.eu, 2013 [cit. 2018-05-04]. Available at: http://www.glyphosate.eu/glyphosate-basics/history-glyphosate.

³⁴⁵ BENBROOK, Charles M. Trends in glyphosate herbicide use in the United States and globally. *Environmental Sciences Europe* [online]. 2016, **28**(1), - [cit. 2018-05-04]. Available at: http://www.enveurope.com/content/28/1/3. p. 1.

³⁴⁶ VAN BRUGGEN, A.H.C., et al. Environmental and health effects of the herbicide glyphosate. *Science of The Total Environment* [online]. 2018, **616-617**, 255-268 [cit. 2018-05-04]. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0048969717330279. p. 264.

³⁴⁸ IARC Monographs Volume 112: evaluation of five organophosphate insecticides and herbicides. In: *IARC Monograph* [online]. Lyon, 20 March 2015, s. 1-2 [cit. 2018-05-04]. Available at: https://www.iarc.fr/en/media-centre/iarcnews/pdf/MonographVolume112.pdf.

and five abstained, which in the end did not lead to the required qualified majority criteria. 349 On 27 November 27 2017 the Appeal Committee consisting of experts from the EU member states and the EC finally voted for a re-approval. This time 18 states voted in favor, nine against, and one abstained.³⁵⁰ This vote put an end to seven previously unsuccessful attempts of proposals put forward by the EC in the last eighteen months, causing major controversies. First, the EP's resolution adopted (with support of the majority MEPs) in October to fully ban glyphosate and its immediate ban in use for public spaces was ignored. Second, it did not take into consideration the growing public concerns about the glyphosate safety, namely the above-mentioned EU citizens' initiative. The vote was negatively commented by voices both from the MEPs as well as NGO camps, while British Conservative Ashley Fox stated that the EU comes up with "emotional, irrational but politically convenient fudge" which "sets a worrying precedent." Third, the vote caused an internal tension within German government in the context of creating a new coalition. Agriculture Minister Christian Schmidt was accused of breaching trust when voting for the extension by Environment Minister Barbara Hendricks and Chancellor Angela Merkel. While Germany abstained in previous votes, this time it voted for the license renewal. In contrast, France planned to ban glyphosate within three years, searching for alternative pesticides and was surprised by decision of Germany. According to Euractiv, Monsanto wished re-authorization before forming of new German government. A Greek MEP pointed out that the sudden position change on glyphosates decided to satisfy "the needs of financial interests." Furthermore, a certain haste to finally re-approve the license extension before the deadline can be recognized in the Commission Proposal.³⁵³ In the Annexes it is stressed that Member States should pay

³⁴⁹ BANKS, Martin. EU Member states fail to reach agreement on glyphosate licence renewal. *The Parliament Magazine* [online]. London, 10 November 2017 [cit. 2018-05-04]. Available at: https://www.theparliamentmagazine.eu/articles/news/member-states-fail-reach-agreement-glyphosate-license-renewal.

³⁵⁰ MICHALOPOULOS, Sarantis. EU renews glyphosate for five years as Germany swings the balance. *Euractiv* [online]. Brussels, 27 November 2017 [cit. 2018-05-04]. Available at: https://www.euractiv.com/section/agriculture-food/news/germany-swings-the-balance-as-eu-renews-glyphosate-for-five-years/.

³⁵¹EU renews Glyphosate licence for five more years. *The Parliament Magazine* [online]. London, 28

³⁵¹EU renews Glyphosate licence for five more years. *The Parliament Magazine* [online]. London, 28 November 2017 [cit. 2018-05-04]. Available at: https://www.theparliamentmagazine.eu/articles/news/eurenews-glyphosate-licence-five-more-years.

³⁵² Merkel 'angry' with agriculture minister who voted in favour of glyphosate. *Euractiv* [online]. Brussels, 28 November 2017 [cit. 2018-05-04]. Available at: https://www.euractiv.com/section/agriculture-food/news/merkel-angry-with-agriculture-minister-who-voted-in-favour-of-glyphosate/.

³⁵³ SANTE/10440/2017 Rev. 1 (draft). *EC Europa* [online]. Brussels, 2017 [cit. 2018-05-04]. Available at: https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_glyphosate_commission_proposal_revision4.pdf.

particular attention to groundwater sources where the glyphosate is used frequently.³⁵⁴ This gives a room for doubts about Commission's certainty that the glyphosate is not harmful for humans. According to the Article 4 of Regulation (EC) No 1107/2009, an active substance shall not have any immediate or belated harmful effect "on human health, including that of vulnerable groups, or animal health, directly or through drinking water (taking into account substances resulting from water treatment), food, feed or air." Nevertheless, the decision regarding effects is under supervision of the Authority as a key agency evaluating safety of active substances.³⁵⁵

The glyphosate case proved to be full of peculiarities which lead one to ask whether the core principles on which the EU was built are not being sold out. While TTIP seems to be frozen at the time of writing this thesis, the key concerns around which the treaty has been diverging since 2013, namely preservation of the EU key principles and not "selling them out" as echoed in speeches of the EU officials, seems to be challenged as a result of political and corporate interests. The glyphosate case is particularly significant for obvious polarization on many levels of discussion stemming from various circles. While one side, represented by public and partially also by the elected public body, the EP, requires more democratic transparency and hearing out citizens' voice, the other side represented by the growing power of corporations, attempts to decrease weight of public as well as scientific opinion. Below it will be referred to, as an example, ongoing struggles within scientific circles which had wider ramifications in the public and, consequently, political debate.

5.1.1. Spill-over from Scientific Debate into Politics

As Jensen and Blok suggest, public skepticism towards science has been increasing since the 1960s since people 'suspect the unsaid.' The environmental movement plays a key role in criticizing the scientific forms of reasoning. As the authors claim in the light of Beck's risk society: "Here, critical biological counter-experts have been instrumental in sounding the social alarm on the destructive environmental consequences

³⁵⁴ SANTE/10440/2017 ANNEX Rev. 1. *EC Europa* [online]. Brussels, 2017 [cit. 2018-05-04]. Available at: https://ec.europa.eu/food/sites/food/files/plant/docs/pesticides_glyphosate_commission_proposal_annex4.pdf ³⁵⁵ Regulation (EC) No 1107/2009. *EUR-Lex* [online]. 21 October 2009 [cit. 2018-05-04]. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009R1107#ntr7-L_2009309EN.01000101-E0007.

of industrialization."³⁵⁶ Exactly around this core assumption the glyphosate re-approval process has been gaining momentum and spilled over from a mere scientific debate into a large-scale debate encompassing different spheres of discussion. The intensity of the debate concerning the glyphosate re-approval process can be thus derived from Sorensen's observations where many variables play key role in society's perception of risks and the role of science. As Sorensen puts it:

"We no longer accept scientific findings or what we are told by authorities as authoritative knowledge in the same manner as did past generations. As Lyotard already observed in his studies of the state of science in the highly developed societies, contemporary science has lost its monopoly on the truth (Lyotard [1979] 1984). This is partly the result of how institutionalized, scientific doubt and scepticism are leaked directly to the public via the media to a greater extent today than was earlier the case."

Society's acceptance of the work of toxicological experts in the age of second modernity derives from what Sorensen mentioned. Nevertheless, it is also influence of the agrochemical industry, the state, and the regulators who themselves create 'politics of knowledge production.' Under indirect influence of the industry, toxicologists restore to the prevalent epistemic form that "perhaps not incidentally, serves the interests of the firms they work for." ³⁵⁸

The main turmoil in scientific circles started with IARC's publication of glyphosates probable carcinogenicity in March 2015. European Commission reacted to the study promptly and mandated the EFSA in April 2015 to assess carcinogenicity in glyphosate. During the ongoing TTIP debates, the EFSA was originally mandated in August 2014 by the EC to assess whether glyphosate is able to meet conditions of the EC regulations for renewal of approval of glyphosate.³⁵⁹ The request for the renewal was initiated by the European Glyphosate Task Force, a consortium of 22 chemical

³⁵⁶ JENSEN, Mette and Anders BLOK. Pesticides in the Risk Society. *Current Sociology* [online]. 2008, **56**(5), 757-778 [cit. 2018-05-04]. Available at:

http://journals.sagepub.com/doi/10.1177/0011392108093834. p. 761

³⁵⁷ SØRENSEN, Mads P. Ulrich Beck: exploring and contesting risk. *Journal of Risk Research* [online]. 2017. **21**(1), 6-16 [cit. 2018-05-04]. Available at:

https://www.tandfonline.com/doi/full/10.1080/13669877.2017.1359204. p. 10

³⁵⁸ KLEINMAN, Daniel Lee and Sainath SURYANARAYANAN. Dying Bees and the Social Production of Ignorance. *Science, Technology, & Human Values* [online]. 2012, **38**(4), 492-517 [cit. 2018-05-04]. Available at: http://journals.sagepub.com/doi/10.1177/0162243912442575. p. 510.

³⁵⁹ Conclusion on the peer review of the pesticide risk assessment of the active substance glyphosate. *EFSA Journal* [online]. 2015, **13**(11), - [cit. 2018-05-04]. Available at: http://doi.wiley.com/10.2903/j.efsa.2015.430. p. 5.

companies, 360 while application was received by the Rapporteur Member State (RMS), in this case Germany, which forwarded the Renewal Assessment Report (RAR) to the EFSA.³⁶¹ The IARC's report slowed down the process of reassessing the safety of glyphosate and forced the EC to provide the EFSA with the second mandate. In October 2015, the EFSA reacted to the IARC's report and came to a conclusion that glyphosate "is unlikely to pose a carcinogenic hazard to humans and the evidence does not support classification with regard to its carcinogenic potential according to Regulation (EC) No. 1272/2008."³⁶² Furthermore, European Chemicals Agency (ECHA) was another European Agency, which reacted to IARC's results of potential carcinogenicity of glyphosate in humans. The ECHA's Committee for Risk Assessment (RAC) was assigned by the EC to adopt an opinion on harmonized classification of glyphosate within additional 18 months since the glyphosate as an active substance was about to expire by the end of June 2016. The ECHA's focus was to evaluate glyphosate's carcinogenicity, germ cell mutagenicity, reproductive toxicity, and environmental hazards as well as organ toxicity after longlasting exposure. Similar to the previous case concerning dossier for the EFSA, an incentive for ECHA originated from Germany, specifically from The German Federal Institute for Occupational Safety and Health (BAuA). 363

In March 2017, the ECHA came to a conclusion that glyphosate should not be classified as a carcinogen. The agency maintains current classification of substance as "causing serious eye damage and being toxic to aquatic life with long-lasting effects." In addition, the Agency concludes that "available scientific evidence did not meet the criteria to classify glyphosate as a carcinogen, as a mutagen or as toxic for reproduction." Furthermore, in May 2016, a month before previously extended substance's expiration in the EU, the Joint FAO/WHO Meeting on Pesticide Residues (JMPR) released its conclusions, stating that "glyphosate is unlikely to pose a carcinogenic risk to humans from

³⁶⁰ Glyphosate Task Force [online]. [cit. 2018-05-04]. Available at: http://www.glyphosatetaskforce.org/.

³⁶¹ EFSA explains risk assessment. *EFSA* [online]. 2015 [cit. 2018-05-04]. Available at: https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/efsaexplainsglyphosate151112en.p df.

Gonclusion on the peer review of the pesticide risk assessment of the active substance glyphosate. *EFSA Journal* [online]. 2015, **13**(11), - [cit. 2018-05-04]. Available at: http://doi.wiley.com/10.2903/j.efsa.2015.430. p.1

³⁶³ How ECHA is assessing glyphosate. *ECHA* [online]. Helsinki, 2016 [cit. 2018-05-04]. Available at: https://newsletter.echa.europa.eu/home/-/newsletter/entry/how-echa-is-assessing-glyphosate.

³⁶⁴ Glyphosate not classified as a carcinogen by ECHA. *ECHA* [online]. Helsinki, 15 March 2017 [cit. 2018-05-04]. Available at: https://echa.europa.eu/cs/-/glyphosate-not-classified-as-a-carcinogen-by-echa.

exposure through the diet."³⁶⁵ Last but not least, an agency authorized as the German RMS to provide the EFSA with an initial report in December 2013³⁶⁶, the Bundesinstitut für Risikobewertung (BfR), considered glyphosate as non-carcinogenic as well.³⁶⁷ As a result, the IARC's findings found itself in isolation as the conclusions of the two EU agencies, the JMPR, and BfR were contradictory. Consequently, these contradictory findings led to a heated debate within the scientific circles as well as various NGOs, accentuated by the ongoing public concerns brought about by the TTIP talks.

Indeed, EU citizens' awareness of transparency and political as well as corporation practices of the TTIP talks raised, and so intensified the debate concerning extensions of the license of glyphosate as an active substance. Needless to mention that a debate engulfed not only public and political spheres, but also, and even more exclusively, sparked intensive talks within scientific circles. Consequently, the debates led to a striking division of various camps and issues and struggles connected with glyphosate re-approval earned the name "Glyphosate Saga",368

5.1.2. Bundesinstitut für Risikobewertung (BfR)

Strongly intensified debate mostly revolved around not only different scientific approaches of the IARC and European agencies as well as the RMS, but also around transparency and the role of the industry in the process of the glyphosate re-approval. Let us begin with issues connected with the initial work of the BfR, the main conductor of the Germany's RAR, which was chosen by the consortium of agrochemical business companies. According to the Regulation (EC) No 1107/2009, a producer or a group of producers can choose rapporteur Member State (RMS) and provide the chosen country with a dossier containing regulatory studies and scientific literature and literature covering the past decade before the dossier is submitted to the RMS. If a certain study is omitted, it has to be described for which reasons a study has been excluded. Furthermore, The RMS

³⁶⁵ Joint FAO/WHO Meeting on Pesticide Residues (JMPR): Toxicological re-evaluation of glyphosate. *ECHA*[online]. Helsinky, 2016 [cit. 2018-05-04]. Available at: https://echa.europa.eu/documents/10162/22863068/glyphosate_jmpr_en.pdf/7dbc05a9-d81b-054d-e750-06762b5706a7

³⁶⁶ EFSA explains risk assessment. *EFSA* [online]. 2015 [cit. 2018-05-04]. Available at: https://www.efsa.europa.eu/sites/default/files/corporate_publications/files/efsaexplainsglyphosate151112en.p df.

³⁶⁷ BfR Communication No 007/2015. *BfR* [online]. Berlin [cit. 2018-05-04]. Available at: http://www.bfr.bund.de/cm/349/does-glyphosate-cause-cancer.pdf.

AgriLand. [The glyphosate saga is set to rumble on for a bit longer]. In: *Twitter* [online]. 25.10.2017 [cit. 2018-05-04]. Available at: https://twitter.com/AgrilandIreland/status/923238247060459520.

prepares the draft assessment report concluding whether a substance meets criteria for the approval or not, sent in a copy to the EC and the Authority. Then, based on consultation with experts, including experts from the RMS, the Authority hands its conclusions to the Commission, which considers both the RMS' draft assessment report and the Authority's conclusion. Finally, the EC should present the review report and a draft Regulation prepared for the Committee. The applicant, in the active substance glyphosate case, should be allowed to propose comments on the review report.³⁶⁹

At the end of 2013, the BfR stated that the available data concerning glyphosate does not lead to a conclusion that the substance is carcinogenic or mutagenic, nor does it have influence on fertility and reproduction. The EFSA used the BfR's draft report for further reexamination.³⁷⁰ As Unterweger points out, while the BfR in its official press release published on 20 January 2014 points to the above mentioned harmlessness in terms of carcinogenic and reproductive properties, on 31 March 2015, exactly ten days after publication of the IARC's report, the BfR's final assessment report contradicted its previous findings. While still being in line with non-carcinogenicity statement, the institute admitted glyphosate's influence on the 'slight increase in the incidence of malignant lymphoma', without statistical significance, though. As Unterweger further observes, the BfR's statement changed six months later again. The BfR's addendum classified glyphosate's influence on malignant lymphoma as, depending on a dose, significant in statistical increase.³⁷¹ Clausing's analysis of the March version of the BfR's draft report stresses the institute's neglect and faulty description of vital publications, failure to apply present-day statistical analyses and compare to those which were provided by the agrochemical industry, and misleading conclusions concerning key studies' results from carcinogenicity in mice experiments. According to Clausing, nearly one third of the literature concerning genotoxicity is missing in the report and at least one key study on

³⁶⁹ Regulation (EC) No 1107/2009. *EUR-Lex* [online]. 21 October 2009 [cit. 2018-05-04]. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009R1107#ntr7-L_2009309EN.01000101-F0007

³⁷⁰ The BfR has finalised its draft report for the re-evaluation of glyphosate. *BfR* [online]. Berlin, April 2015 [cit. 2018-05-04]. Available at:

http://www.bfr.bund.de/en/the_bfr_has_finalised_its_draft_report_for_the_re_evaluation_of_glyphosate-188632.html.

³⁷¹ UNTERWEGER, Josef. Ethics and Pesticides: The Precautionary Principle as Illustrated by Glyphosate. In: WESTRA, Laura et al. *The role of integrity in the governance of the commons: governance, ecology, law, ethics.* New York, NY: Springer Berlin Heidelberg, 2017. p. 218-219.

genotoxicity was evaluated inappropriately.³⁷² The author comes to a conclusion that BfR's approach arouses the suspicion of untrustworthiness due to "neglect of studies, failure of analysis and distortion of facts". Also, Clausing notes that the public comments phase did not bring any change of BfR's assessment in the analyzed parts by the author.³⁷³.

Furthermore, the BfR induced suspicion due to conflict of interests of its committee members. As of 2017 the BfR Committee for Pesticides and Their Residues, consists of three out of thirteen experts from BASF and Bayer as stated on the official website. 374 In addition, in a ZDF documentary 'das Stille Gift', Robert Then from the Test Biotech Institut, claims that out of sixteen experts in 2013 (at the time of compiling the draft report) seven committee members were connected with pesticide industry or agrochemical industry in the BfR. The documentary also points out that the BfR does not produce its own studies but substantially depends on studies submitted in the dossier³⁷⁵, i.e. submitted by the Glyphosate Task Force. In an open letter addressed to EU Commissioner for Health & Food Safety, Portier stresses that a list of mentioned supporting evidence is missing both in the RAR as well as the BfR Addendum. Furthermore, the author observes that authors or contributors are not listed in the documents, which is a usual practice in scientific journals. In contrast, the IARC lists all authors and publications as well as attachment stating conflicts of interest. Also, Portier stresses that BfR's approach is in contradiction with OECD guidelines regarding the core problems of historical controls and analyses of trends.³⁷⁶ Last but not least, BfR's ties to the industry might be simply questioned merely because of location of its headquarter. Indeed, in the very same building it can be seen that Bayer has its office, which naturally contributes to questions about institute's independence, ³⁷⁷ especially when taking into account the fact that some of the committees themselves are directly connected to the Bayer company. Thus, the way the BfR processed the dossier, subsequently worked on the report, and the way how industry

³⁷² CLAUSING, Peter. The Glyphosate Renewal Assessment Repor: An Analysis of Gaps and Deficiencies. *PAN Germany* [online]. Hamburg, 2015 [cit. 2018-05-04]. Available at: http://www.pangermany.org/download/Glyphosat-Studie_Campact_PAN_korrigiert.pdf. p. 1-2 ³⁷³ Ibid, p. 13.

³⁷⁴ Members of BfR Committee for Pesticides and Their Residues. *Bfr* [online]. Berlin, 2017 [cit. 2017-12-26]. Available at:

http://www.bfr.bund.de/en/members_of_bfr_committee_for_pesticides_and_their_residues-189322.html.

³⁷⁵ Das Stille Gift. *ZDF* [online]. Mainz, 2013 [cit. 2018-05-04]. Available at:

https://www.zdf.de/dokumentation/zdfzoom/das-stille-gift-100.html.

PORTIER, Christopher. Open letter: Review of the Carcinogenicity of Glyphosate by EFSA and BfR. *EFSA* [online]. 27 November 2015 [cit. 2018-05-04]. Available at:

https://www.efsa.europa.eu/sites/default/files/Prof_Portier_letter.pdf. p. 6-7

³⁷⁷Am besten Lobbyisten im Amt - Bundesinstitut für Risikobewertung (BfR) 2014. In: *Youtube* [online]. 14.6.2014 [cit. 2018-05-04]. Available at: https://youtu.be/n9eJCsI8zZU?t=3m40s.

ties to this institution were revealed, did represent the BfR in a suspicious manner. Also, as the main submitter of the RAR and the addendum to the EFSA, BfR's questionable approach set a doubtful ground for the further work of the EFSA.

In addition, Germany as the RMS and as the state played a key role in the scientific as well as political context in the glyphosate saga. First, Germany has a significant number of agrochemical companies producing weed killers headquartered in the country, particularly Bayer and BASF belong to the global giants of agrochemical industry. ³⁷⁸ In 2000 glyphosate's patent originally linked with Monsanto expired and since then on glyphosate is available in various adjuvants made by various companies.³⁷⁹ Apart from Monsanto and its world-famous product RoundUp, also other companies such as BASF, Bayer CropScience, Dow AgroSciences, DuPont, Syngenta etc. produce weed killers containing glyphosate.³⁸⁰ Also, Germany uses a quite substantial amount of glyphosate on its fields, applied on approximately 4.3 million hectares of arable areas.³⁸¹ Second, a significantly heated debate took place in Germany due to great number of grassroots movements, strong position of Greens in the Parliament and role of nature in German culture.³⁸² Also, it was most likely the TTIP protests with substantial number of participants in streets of German cities³⁸³ that brought the glyphosate re-approval discussion as well other issues to the fore. Third, it was Germany which in the end played key role in the final approval of the active substance relicensing for further five years. For these reasons, particularly strong politicization, polarization, and heated debate are observable in Germany.

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https://web.archive.org/web/20150924200327/https://www.reuters.com/article/2014/04/30/research-and-markets-idUSnBw306202a+100+BSW20140430.

³⁷⁸ Bayer-Monsanto Could Create Three Crop-Chemicals Giants: Chart. *Bloomberg* [online]. 19 May 2016 [cit. 2018-05-04]. Available at: https://www.bloomberg.com/news/articles/2016-05-19/bayer-monsanto-could-create-three-crop-chemicals-giants-chart.

³⁷⁹ *Glyphosate: History* [online]. Darmstadt: Glyphosate.eu, 2013 [cit. 2018-05-04]. Available at: http://www.glyphosate.eu/glyphosate-basics/history-glyphosate.

³⁸⁰ Research and Markets: Global Glyphosate Market for Genetically Modified and Conventional Crops 2013 - 2019. *Reuters* [online]. 30 April 2014 [cit. 2018-05-04]. Available at:

³⁸¹ STEINMANN, Horst Henning, Michael DICKEDUISBERG a Ludwig THEUVSEN. Uses and benefits of glyphosate in German arable farming. *Crop Protection* [online]. 2012, **42**, 164-169 [cit. 2018-05-04]. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0261219412001937, p. 164.

Available at: http://linkinghub.elsevier.com/retrieve/pii/S0261219412001937. p. 164.

Nature in German Culture: The role of writers in environmental debate. *University of Bath* [online]. 2007 [cit. 2018-05-04]. Available at:

http://opus.bath.ac.uk/10880/1/Axel_Goodbody_chapter_1_Nature_in_German_Culture.pdf . p. 10-11. Protests in Germany against transatlantic TTIP and Ceta trade deals. *BBC* [online]. 17 September 2016 [cit. 2018-05-04]. Available at: http://www.bbc.com/news/world-europe-37396796.

5.1.3. European Food Safety Authority (EFSA) and European Chemicals Agency (ECHA)

The Regulation (EC) no 178/2002 established the European Food Safety Authority and laid down the role of the agency in the area of food law and food safety. As stated in the regulation, "risk assessments should be undertaken in an independent, objective and transparent manner, on the basis of the available scientific information and data." This should be in line with the precautionary principle, which should serve as a mechanism "for determining risk management measures or other actions in order to ensure the high level of health protection chosen in the Community." The Authority might be appointed to provide the Commission, the Parliament, and the Member States with its scientific opinion and the Authority should incorporate and commission scientific studies when necessary.³⁸⁴ Furthermore, according to the Regulation (EC) No 1107/2009, it is mentioned that "In view of the amount of work connected with the approval procedure, it is appropriate that the evaluation of such information be performed by a Member State acting as a rapporteur for the Community." For the sake of consistency in evaluation, "an independent scientific review should be performed by the European Food Safety Authority." The EFSA's responsibility is to perform a risk assessment, while the Commission's task is to perform the risk management and take the ultimate decision regarding an active substance. 385 As set in the EU regulation, the EFSA (or the Authority) is mandated to process the submitted RAR and perform its own review where necessary. However, there is a core issue in the very approach of the EFSA to the evaluation processes and the way dossiers are compiled as observed by Robinsons et al. According to the authors, the EFSA undermines the very EU pesticide Regulation from 2009. Although seen as a breakthrough, since there would be a body to rely not only on the industry tests, but also on open literature that must be included in the dossier, the EFSA found a way around.

As the authors stress, main criterion of Good Laboratory Practice required by the EFSA and developed by industry itself, the BASF company, automatically excludes peer-reviewed studies from dossiers. As a result, the authors point out, "it steered pesticide risk

³⁸⁴ Regulation (EC) No 178/2002. *EUR-Lex* [online]. January 28 2002 [cit. 2018-05-03]. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002R0178&from=EN.

³⁸⁵Regulation (EC) No 1107/2009. *EUR-Lex* [online]. 21 October 2009 [cit. 2018-05-04]. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009R1107#ntr7-L_2009309EN.01000101-E0007.

assessment in the opposite direction that intended by the Regulation."³⁸⁶ Since the RAR prepared by the RMS Germany (hence by the BfR) already went under scrutiny and BfR's credibility was questioned, so were the EFSA's methods got under scrutiny. Particular attention to the EFSA was paid once the Authority came to contradictory conclusion about glyphosate's carcinogenicity on 12th November 2015. As previously mentioned, the letter by Portier addressed to the Commissions for Health & Food Safety dated November 27 2015 was not addressed only to question BfR's credibility, but also to the EFSA since both agencies worked closely together and complemented each other during the re-approval phase. In total 96 scientists from all around the world signed the letter as a disagreement about the EFSA's conclusion concerning carcinogenicity. The scientists are convinced that the IARC evaluation appropriately reflects available scientific sources on glyphosate. In contrast, as the scientists claim, the BfR evaluated unpublished studies and as a consequence, the EFSA evaluation does not reflect the published and available science.³⁸⁷ Furthermore, the scientists call for more transparency, open review of scientific evidence and its free availability, while maintaining objectivity. In addition, the scientists call for disclosure of financial support, conflicts of interest and authors' affiliations "due to the potential public health implication of this extensively used pesticide."388

Because of growing public concerns and requests for more transparency echoed from the scientific circles, the Commissioner Andriukaitis prompted the Glyphosate Task Force in April 2016 to make the unavailable studies to the IARC accessible to the public.³⁸⁹ The consortium decided to make 14 studies available through a physical reading room. Also, all 14 studies were published in an article by Greim at al.,³⁹⁰ whose authors are connected to the industry either directly, or indirectly in a role of independent experts. Nevertheless, according to International Chemical Secretariat, independency of an alleged

³⁸⁶ ROBINSON, Claire, Nina HOLLAND, David LELOUP a Hans MUILERMAN. Conflicts of interest at the European Food Safety Authority erode public confidence. *Journal of Epidemiology and Community Health* [online]. 2013, **67**(9), 717-720 [cit. 2018-05-04]. Available at: http://jech.bmj.com/lookup/doi/10.1136/jech-2012-202185. p. 718-19.

³⁸⁷ PORTIER, Christopher. Open letter: Review of the Carcinogenicity of Glyphosate by EFSA and BfR. *EFSA* [online]. 27 November 2015 [cit. 2018-05-04]. Available at: https://www.efsa.europa.eu/sites/default/files/Prof_Portier_letter.pdf. p. 8.

ANDRIUKAITIS, Vytenis. My letter to Dr. Richard P. Garnett, Chair of the Board of the Glyphosate Task Force. *EC Europa* [online]. Brussels, 4 April 2016 [cit. 2018-05-04]. Available at: https://ec.europa.eu/commission/commissioners/2014-2019/andriukaitis/announcements/my-letter-dr-richardp-garnett-chair-board-glyphosate-task-force-04-april-2016_en.

390 GTF proposes access to all 14 carcinogenicity studies via reading rooms. *Glyphosate.eu* [online]. 11 April

³⁹⁰ GTF proposes access to all 14 carcinogenicity studies via reading rooms. *Glyphosate.eu* [online]. 11 April 2016 [cit. 2018-05-04]. Available at: http://www.glyphosate.eu/gtf-statements/gtf-proposes-access-all-14-carcinogenicity-studies-reading-rooms.

independent author was contested due to his connections to the industry.³⁹¹ The reading room got opened to the public on August 24th 2016 in Brussels and the studies could have been accessed after registration and were accessible without any devices and security guard was present to overlook maximum four readers at a time. Ultimately, the Glyphosate Task Force made accessible 71 previously unpublished studies falling under intellectual property rights with confidential and sensitive data. However, the studies were not accessible in its full form since "All confidential and private data included in the studies has been deleted or redacted under the terms set forth by Article 63 of Regulation (EC) 1107/2009."³⁹² The situation thus strongly resembled that of reading rooms of the TTIP agreement.

Transparency of the EFSA was called into question prior to the glyphosate saga. Indeed, prior to the Séralini affair which directly concerned study of GM treated maize by Roundup herbicide (containing glyphosate) and the Authority's approach to it, there were also other striking issues with EFSA's independence. Robinson et al. observe that one of the EFSA's chair of management board had direct connection to the industry-funded International Life Sciences Institute (ILSI). In April 2010 the manager had to resign under pressures of the EP and the civil society but kept the seat in the EFSA until so called 'revolving door' issue, when finally fully resigning in 2012 and joining the ILSI as executive director. Robinson et al. further mention that some of the conflicts of interests went so far that the EP gave an incentive to postpone approval of the Authority's expenditures in 2010. Also, in one case The Ombudsman found conflict of interests in one EFSA's GMO panel, while the European Court concluded that its conflicts of interests were not managed appropriately in the Agency. 393 As far as Séralini affair is concerned, the authors conducted a long-term toxicity study on rats in 2012, testing how feed and water containing Roundup has implications for health. The authors observed issues in the area of kidneys and livers, hormone disruption and mammary tumors in females after a certain period of time. After more than a year, the paper was requested by the editor-in-chief of

³⁹¹ Occupational Cancer: Brussels accomplice of industry. *ChemSec* [online]. Göteborg, 6 March 2017 [cit. 2018-05-04]. Available at: http://chemsec.org/occupational-cancer-brussels-accomplice-of-industry/; see also how the topic was discussed in German media

https://www.facebook.com/monitor.wdr/videos/1541061065932828/_

Reading Room Rules. *Umwelt Institut* [online]. Munich, 2016 [cit. 2018-05-04]. Available at: http://www.umweltinstitut.org/fileadmin/Mediapool/Aktuelles_ab_2016/2016/2016_09_08/reading-rules-and-consent-combined.pdf.

³⁹³ ROBINSON, Claire, Nina HOLLAND, David LELOUP a Hans MUILERMAN. Conflicts of interest at the European Food Safety Authority erode public confidence. *Journal of Epidemiology and Community Health* [online]. 2013, **67**(9), 717-720 [cit. 2018-05-04]. Available at: http://jech.bmj.com/lookup/doi/10.1136/jech-2012-202185. p. 717.

Food and Chemical Toxicology to be retracted despite the fact that no intentional misinterpretation, misconduct or errors in data were found.³⁹⁴ Much of the criticism of the study came from authors affiliated to Monsanto Company or the ILSI, who misinterpreted the results of the study. For instance, Séralini et al. never used word 'cancer' in their study but the critics use this word to devaluate work of Séralini et al.³⁹⁵ More importantly, the paper was rejected by the EFSA³⁹⁶ and once again the heated debate engulfed many levels of public life for years to come. As Hong and Allard-Huver point out, the Séralini's presentation of the results of the study which spawned as a local controversy, turned into a large-scale debate regarding transparency and debate about risk assessment.³⁹⁷

Very similar yet slightly less controversial debate caused the ECHA's conclusion that glyphosate is not carcinogenic. Nevertheless, along with debatable approach of the EFSA and BfR, also the ECHA caused suspicion as it closely cooperated with the EFSA and hence BfR. The ECHA mainly deals with the regulation on the classification and labelling of active substances and mixtures and is concerned with assessing their hazardous properties. Similar to the EFSA case, also the ECHA evaluated glyphosate as an active substance in cooperation with a German agency. Based on proposal of The German Federal Institute for Occupational Safety and Health (BAuA), the ECHA's Committee for Risk Assessment (RAC) comprising experts from the Member States and appointed by ECHA, debated the BAuA's proposal in two meetings in December 2016 and March 2017. The scientific opinion was then considered on the ground of the relevant data provided by third parties and other bodies, thus the EFSA. 398 Similar to the EFSA, also in the ECHA's case professor Portier provided the BAuA with his views on glyphosate's carcinogenicity in an open letter dated July 8, 2016. The author found very disturbing the fact that "the review continues to disregard guidance set forth by the ECHA, OECD, IARC and others on how to evaluate carcinogenicity data, especially regarding the use of the limited

³⁹⁴ SÉRALINI, Gilles-Eric et al. Conflicts of interests, confidentiality and censorship in health risk assessment: the example of an herbicide and a GMO. *Environmental Sciences Europe* [online]. 2014, **26**(1), - [cit. 2018-05-04]. DOI: 10.1186/s12302-014-0013-6. ISSN 2190-4707. Available at: http://enveurope.springeropen.com/articles/10.1186/s12302-014-0013-6. p. 1-2 ³⁹⁵ Ibid, p. 3.

³⁹⁶ Séralini et al. study conclusions not supported by data, says EU risk assessment community. *EFSA*[online]. Parma, 28 November 2012 [cit. 2018-05-04]. Available at: https://www.efsa.europa.eu/en/press/news/121128.

³⁹⁷ ALLARD-HUVER, Francois and Sun-ha HONG. Governing governments? Discursive contestations of governmentality in the transparency dispositif. In: MCILVENNY, Paul, Julia Zhukova KLAUSEN and Laura Bang LINDEGAARD. *Studies of discourse and governmentality: new perspectives and methods*. Philadelphia: John Benjamins Publishing Company, 2016.. p. 160.

³⁹⁸ Hot Topics: Glyphosate. *ECHA* [online]. Helsinki [cit. 2018-05-04]. Available at: https://echa.europa.eu/en/hot-topics/glyphosate.

evidence category for the human data, the appropriate use of historical controls and the proper use of findings of a positive trend in an animal cancer study." Furthermore, according to Portier's experience in the case and after studying the ECHA Guidelines, the author concludes that the Agency should classify glyphosate into Group 1b. 399 In another open letter dated May 28, 2017 addressed to the President of European Commission Jean Claude Juncker, Portier expressed his concerns stating that both the EFSA and the ECHA did not identify statistically relevant findings in carcinogenicity studies. 400 Also, Portier claims that inaccessibility of the raw data to other scientists has been a great flaw in the hazard classification of the substance. Indeed, Portier believes that the glyphosate case have been a demonstrative example "of how lack of transparency regarding the scientific that underlies important public health decisions can erode public trust and raise concerns."⁴⁰¹ Furthermore, Greenpeace raised concern about the Agency's independence but unlike the EFSA, it seems that the ECHA does not have any serious conflicts of interests. 402 In his reaction to the Greenpeace's suspicion, Geert Dancet, the Executive Director of the ECHA, denied any conflicts of interests and stressed that the ECHA complied with the European Court of Auditors' requirements from 2012. 403 Nevertheless, overall suspicion that the ECHA deliberately omitted evidence pointing to the carcinogenicity in similar manner as all the previously involved agencies has been prevailing.

5.1.4. The Joint FAO/WHO Meeting on Pesticide Residues (JMPR)

Before the ECHA's conclusion on glyphosate in 2017, also the JMPR came with the same conclusion regarding glyphosate's carcinogenicity. This left the IARC on a lone island with their different conclusion. The JMPR consists of the WHO Core Assessment Group and the FAO Panel of Experts on Pesticide Residues in Food and the Environment

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%20glyphosate.pdf.

³⁹⁹ PORTIER, Christopher. RE: CLH Report for Glyphosate, EC Number 213-997-4. *Eomsociety* [online]. 8 July 2016 [cit. 2018-05-04]. Available at: https://www.eomsociety.org/images/PDF/PortierOLII.pdf. p.1 ⁴⁰⁰ PORTIER, Christopher. Open letter: Review of the Carcinogenicity of Glyphosate by ECHA, EFSA and BIR. *PAN Germany* [online]. Hamburg, 28 May 2017 [cit. 2018-05-04]. Available at: http://blog.pan-germany.org/wp-content/uploads/2017/05/Letter-to-Juncker28May2017.pdf. p. 2. ⁴⁰¹ Ibid, p. 5.

ECHA response heightens rather than alleviates conflict of interest concerns. *Greenpeace* [online]. March 9 2017 [cit. 2018-05-04]. Available at: http://www.greenpeace.org/eu-unit/en/Publications/2017/ECHA-response-heightens-concerns/

response-heightens-concerns/.

403 DANCET, Geert. Reply to your letter of 8 March. *Greenpeace* [online]. 10 March 2017 [cit. 2018-05-04]. Available at: http://www.greenpeace.org/eu-unit/Global/eu-unit/reports-briefings/2017/20170310%20ECHA%20reply%20to%20Greenpeace%20on%20conflicts%20of%20interest

and their evaluations contribute to basis for maximum residue levels of foods and agricultural commodities in terms of international trade. Having evaluated glyphosate in 2003, 2006, and 2011, the JMPR came with its updated evaluation on the basis of meeting in Geneva on May 9 - 13 2016⁴⁰⁵ and released the report on May 16, 2016⁴⁰⁶ - that is 3 days before a Commission's revised proposal for extension of the existing license by eighteen months. This rather suspicious timing attracted attention of the Green MEPs. As Bart Staes commented for the Guardian, "The timing of the release of this report by the FAO/WHO could be described as cynical, if it weren't such a blatantly political and hamfisted attempt to influence the EU decision later this week on the approval of glyphosate."

Furthermore, it was revealed that two members of JMPR's board have conflicts of interests. According to Testbiotech, the chairman of the JMPR glyphosate expert group as well as a rapporteur have long-lasting connections to the industry. Indeed, as the document points out, both were forced to leave the EFSA in the 2012 transparency turmoil and 2011 respectively. What's more, the chairman of the glyphosate expert group is very well known for his ties to the ILSI and played a part in tobacco industry controversies. In addition, the rapporteur worked for the ILSI and was a part of Risk21 steering group in which the JMPR's chairman co-chaired. According to Burtscher-Schaden et al., the ILSI received \$500,000 from Monsanto as a donation as well as a sponsorship totaling \$528,500 from Croplife International, a group comprising of Monsanto, Dow, and Syngenta. The expert group panel historically comprised of, as Testbiotech points out, members of the BfR

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glyphosates-cancer-risk.

https://www.bund.net/fileadmin/user_upload_bund/publikationen/umweltgifte/Glyphosat_und_Krebs_Gekau fte Wissenschaft BUND 23032017.pdf. p. 27.

⁴⁰⁴ *JMPR* [online]. Rome: FAO [cit. 2018-05-04]. Available at: http://www.fao.org/agriculture/crops/core-themes/theme/pests/jmpr/en/.

themes/theme/pests/jmpr/en/.

405 Results of joint FAO/WHO Meeting on Pesticide Residues (JMPR). WHO [online]. 24 May 2016 [cit. 2018-05-04]. Available at: http://www.euro.who.int/en/health-topics/disease-prevention/food-safety/news/news/2016/05/results-of-joint-faowho-meeting-on-pesticide-residues-jmpr.

⁴⁰⁶ JMPR: Summary Report. *WHO* [online]. 16 May 2016 [cit. 2018-05-04]. Available at: http://www.who.int/foodsafety/jmprsummary2016.pdf.

⁴⁰⁷EU delays vote on weed-killer glyphosate licence amid cancer row. *Reuters* [online]. 19 May 2016 [cit. 2018-05-04]. Available at: https://www.reuters.com/article/us-health-eu-glyphosate/eu-delays-vote-on-weed-killer-glyphosate-licence-amid-cancer-row-idUSKCN0YA1M1.

⁴⁰⁸ NELSEN, Arthur. UN/WHO panel in conflict of interest row over glyphosate cancer risk. *The Guardian*[online]. London, 17 May 2016 [cit. 2018-05-04]. Available at: https://www.theguardian.com/environment/2016/may/17/unwho-panel-in-conflict-of-interest-row-over-

⁴⁰⁹ BRUTSCHER-SCHADEN, Helmut, Peter CLAUSING a Claire ROBINSON. Glyphosat und Krebs: Gekaufte Wissenschaft. *Bund* [online]. 2017 [cit. 2018-05-04]. Available at:

involved in evaluations. Hous, the German element of the above mentioned institute has been omnipresent in the international body such as the JMPR. Despite the fact that both the IARC and the JMPR come under the cloak of the WHO their, there is a prevailing suspicion that JMPR omitted important studies, similar to its counterparts the BfR and the EFSA/ECHA. Indeed, Burtscher et al. observe that the report is insufficiently dedicated to studies about animal carcinogenicity or non-Hodgkin lymphoma. What is more, references or citations of scientific literature are missing and data sources unavailable. Hence, other scientists were not able to examine scientific approach of the panel's conclusions.

This implies that the pattern of basically all involved institutes and agencies in the glyphosate process evaluation was very similar. These bodies were often criticized for lack of transparency and conflicts of interests. In contrast, it was usually grass-roots groups and those scientists pointing to approach of the involved institutions, whose concerns were countered or their (un)scientific approach even discredited. Hardly any debate in the sphere of public health and the environment spanning over scientific circles, politics, civic society, state or even transatlantic level resulted in such countervailing arguments. Why so many countervailing forces encompassed the debate, especially after the publication of IARC findings? Can one distinguish who was 'the good guy' or 'the bad guy' when debate was so large-scale and heated? An answer can be found once again in a debate regarding transparency of the involved institutions in glyphosate evaluation – revelation of so-called 'Monsanto Papers.'

5. 2. Monsanto Papers

It is very likely that so called Monsanto Papers has brought new light to the glyphosate saga and revealed why the debate has been so polarized. First and foremost, it is needed to dwell into the core of the Monsanto Papers, which brings us over the Atlantic Ocean to the United States. The events in glyphosate saga gained momentum especially in 2017 when California added glyphosate to the list of chemicals causing cancer. 412 Monsanto fought back by appealing to the California's Supreme Court but their appeal was refused. This legislation will force glyphosate producers put labels on its herbicides but

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⁴¹⁰ (JMPR) and the review of glyphosate: Massive conflicts of interest. *Test Biotech* [online]. Berlin, June 2016 [cit. 2018-05-04]. Available at:

https://www.testbiotech.org/sites/default/files/Annex_COI_JMPR_2.pdf.

⁴¹¹Burtscher-Schaden et al., p. 36.

⁴¹² Glyphosate to be added to Proposition 65 list of chemicals. *OEHHA* [online]. Sacramento, March 28 2017 [cit. 2018-05-04]. Available at: https://oehha.ca.gov/public-information/press-release/press-release-proposition-65/glyphosate-be-added-proposition-65.

Monsanto fought back again and filed a lawsuit against California concerning the labeling later in 2017. 413 Nevertheless, it is Californian court in San Francisco which has been dealing with plaintiffs, mostly farmers, who filed lawsuit against the Monsanto company due to their health issues, namely the non-Hodking's lymphoma, as a result of their exposure to the substance. As of the end of 2017, approximately 3.500 plaintiffs alleged that Monsanto's Roundup caused their or their family relatives Non-Hodgkin's lymphoma. 414 The case allowed the key court records, particularly internal Monsanto emails and communication, to be unsealed in March 2017. 415 As Waldman et al. point out, plaintiffs in California do not only blame glyphosate as such, but particularly herbicide comprising glyphosate as an active substance with all its additives, thus Roundup. 416

The unsealed documents allowed the public look into strategies and practices of the Monsanto Company. For instance, to documents revealed that Monsanto ghost-wrote its own studies and performed behind the scenes editing of the glyphosate studies, particularly to rebut the IARC findings. 417 Some of the examples of Monsanto's influence on science surfaced further. In 1999 the Company hired a genetic toxicologist James Parry from Swansea University in Wales to discover glyphosate's genotoxicity on animals by research. At that time the Roundup Ready seeds were already available globally and Monsanto could not afford any negative findings. However, based on review of studies provided by Monsanto, Parry came to a different conclusion. The toxicologist claimed already 16 years before the IARC's evaluation that glyphosate can damage genes through oxidative stress. As the documents reveal: "We want to find/develop someone who is comfortable with the genetox profile of glyphosate/Roundup and who can be influential with regulators and Scientific Outreach operations when genetox issues arise." The email

⁴¹³ Monsanto, U.S. farm groups sue California over glyphosate warnings. *Reuters* [online]. 15 November 2017 [cit. 2018-05-04]. Available at: https://www.reuters.com/article/us-usa-pesticides-monsanto/monsantou-s-farm-groups-sue-california-over-glyphosate-warnings-idUSKBN1DF1LR.

⁴¹⁴ Monsanto Papers: proof of scientific falsification. In: Youtube [online]. 4 October 2017 [cit. 2018-05-04].

Available at: https://www.youtube.com/watch?v=1_s18Qetabo&t=2.

415 Monsanto Weed Killer Roundup Faces New Doubts on Safety in Unsealed Documents. *New York Times* [online]. New York, 14 March 2017 [cit. 2018-05-04]. Available at: https://www.nytimes.com/2017/03/14/business/monsanto-roundup-safety-lawsuit.html.

⁴¹⁶ WALDMAN, Peter et al. Does the World's Top Weed Killer Cause Cancer? Trump's EPA Will Decide. Bloomberg[online]. New York, 13 July 2017 [cit. 2018-05-04]. Available at: https://www.bloomberg.com/news/features/2017-07-13/does-the-world-s-top-weed-killer-cause-cancertrump-s-epa-will-decide.

⁴¹⁷ WALDMAN, Peter, Tiffany STECKER and Joel ROSENBLATT. Monsanto Was Its Own Ghostwriter for Some Safety Reviews. Bloomberg [online]. New York, 9 August 2017 [cit. 2018-05-04]. Available at: https://www.bloomberg.com/news/articles/2017-08-09/monsanto-was-its-own-ghostwriter-for-some-safetyreviews.

further states that Mr. Parry is not suitable and "it would take quite some time and \$\$\$\structure{\$}\$\$\structure{\$}\$\$\structure{\$}\$\$\$ to get him there. We simply aren't going to do the studies Parry suggests." Brown and Grossman provide another example of attempts to promote glyphosate at any cost. It is quite striking that the European Agencies followed the patterns of the US regulatory body, The United States Environmental Protection Agency (EPA). The article tracks back the Agency's evaluation back into history and as the authors conclude, the EPA used redaction, hid, deliberately missed or used incomplete information an relied on publicly inaccessible data supplied by manufacturers. This resulted in, as the authors suggest, non-transparent assessment of glyphosate's toxicity. Why there have been so many concerns about transparency and such a divergent fight on many fronts?

In fact, without license re-approval for glyphosate Monsanto would approximately lose \$100 million in sales. 420 Thus, Monsanto had quite much at stake. Gradual revelation of data allowed public and lawyers get deeper into the history of glyphosate approval. During her presentation on invitation of the Green MEPs, the US attorney involved in the glyphosate trial Kathryn Forgie, revealed what contained memos and letters exchanged among Monsanto and EPA's staff. As Kathryn Forgie found out, the EPA classified glyphosate as a Group C – a possible human carcinogen already in 1985, based on a mice study in which animals developed kidney tumors. However, Monsanto put into effect its machinery to put the EPA under pressure. This resulted in glyphosate classification in the beginning of 1990s as a Group E, therefore basically harmless to humans. 421 This historical excursion to the American regulatory process of glyphosate approval might help us understand why the debate in the EU became so heated and what was in stake for Monsanto in the EU. Although Monsanto was aware of potential weaknesses of glyphosate, its main goal was to dismiss any study that would threaten the sales of the world's most used herbicide.

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⁴¹⁸ WALDMAN, Peter et al. Does the World's Top Weed Killer Cause Cancer? Trump's EPA Will Decide. *Bloomberg*[online]. New York, 13 July 2017 [cit. 2018-05-04]. Available at: https://www.bloomberg.com/news/features/2017-07-13/does-the-world-s-top-weed-killer-cause-cancer-trump-s-epa-will-decide.

⁴¹⁹ How Monsanto Captured the EPA (And Twisted Science) To Keep Glyphosate on the Market. *In These Times* [online]. Chicago, 1 November 2017 [cit. 2018-05-04]. Available at: http://inthesetimes.com/features/monsanto epa glyphosate roundup investigation.html.

⁴²⁰ GILLAM, Carey. *Whitewash: the story of a weed killer, cancer, and the corruption of science* [online]. Washington, DC: Island Press, 2017 [cit. 2018-05-04]. p. 177.

⁴²¹ Monsanto Papers: proof of scientific falsification. In: *Youtube* [online]. 4 October 2017 [cit. 2018-05-04]. Available at: https://www.youtube.com/watch?v=1_s18Qetabo&t=2.

5.2.1. Politicization of the Glyphosate Re-licensing: The EP Hearing

Similar to June 2016, the EU found itself once again in the deadlock in terms of glyphosate approval in the Fall of 2017. As concerns were peaking at the time due to new studies and particularly Monsanto papers, The EP Committee on the Environment, Public Health and Food Safety (ENVI) and the Committee on Agriculture and Rural Development (AGRI) organized public hearing dated October 11th, 2017. The hearing was devoted to the topic "The Monsanto papers and glyphosate." The panel comprised of various interest groups such as the IARC scientists, EFSA and ECHA representatives and many others. 422 Christopher Portier, who worked for IARC as an Invited Specialist and has been constantly referring to shortcomings of the agencies involved in the evaluation of glyphosate, came to a conclusion that evaluation of the bodies is scientifically flawed. For instance, both the EFSA and the ECHA discussed only a half of the statistically significant tumor sites, which is strikingly similar to the American EPA. According to Portier, the results of the European Agencies are likely to be biased since no reanalysis of the data provided by the industry was not conducted, leading to fewer distinctive tumor findings. Portier stressed that independent panel of scientists is crucial in the EU for proper reanalysis of the data and all data need to be publically released to achieve transparency – a procedure not performed by any of the agencies to date. Nevertheless, as Portier points out, the evaluation concerned only carcinogenicity. Other scientists have no access to data concerning, for instance, reproductive and developmental toxicity. Portier further goes on by noting:

"What about 450-plus pesticides that have been reviewed? If there's one thing that's clear to me, after 2,5 years after the IARC review ... the one thing that's clear ...had not IARC done this review, today I would not be here telling you that half the tumors were missed in the reviews I was looking at. I would not be here to tell you that I am very concerned that this process is scientifically flawed."

Kate Guyton on behalf of the IARC explained that transparency of the IARC is set in its preamble and the institution does not accept any industry-sponsored secret studies since as

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⁴²² See http://www.europarl.europa.eu/cmsdata/128666/Joint%20ENVI-

AGRI%20Public%20Hearing%20on%20Monsanto%20papers%20-%20final 03%2010%202017.pdf.

Hearing on the Monsanto papers and Glyphosate: presentation by Prof Christopher J. PORTIER. *Multimedia EP* [online]. 11.10.2017 [cit. 2018-05-04]. Available at:

https://multimedia.europarl.europa.eu/en/hearing-on-the-monsanto-papers-and-glyphosate_I144771_02-V rv.

long as they are kept secret, the IARC would interfere with its preamble. The IARC reviewed more than a thousand studies that were available in the public domain. 424 José Tarazona from the EFSA defended the agency's practices and mentioned that conflicts of interests are out of question for the EFSA 425 while for Tim Bowmer from the ECHA, which closely cooperated with the EFSA, the ECHA's approach is scientifically sound. 426 Carey Gillam from an NGO U.S. Right to Know and a former journalist for Reuters claims that the Monsanto Papers show clearly that the efforts of the company to manipulate policy makers and public on the glyphosate has been going on for a long time.

The papers revealed that the Monsato has a network of the US and European scientists, under the cloak of transparency, to present glyphosate's safety to regulators. Furthermore, the communication documents show that the three top EPA officials were enlisted to block a glyphosate review from 2015 done by Agency for Toxic Substances and Disease Registry (ATSDR) on basis of fears that the agency would agree with the IARC classification. In addition, the internal communication demonstrated that Monsanto feared IARC's classification already in 2014 since the company was aware of the fact that the substance has weakness in epidemiology, toxicology, and genotox. 427 Being aware of the glyphosate's weakness, in an internal document titled 'Preparedness and engagement plan for IARC carcinogen rating of glyphosate', Monsanto mentioned classification that it is needed to "Orchestrate outcry with IARC decision." This strategy was prepared a month before the IARC classification. 428 Also, as Gillam points out, Monsanto established a global network and various strategies to discredit those scientists and regulators who oppose the glyphosate's safety. 429 The hearing in the European Parliament interest groups hear positions of the key players in the debate. Nevertheless, Monsanto Company or the

⁴²⁴ Hearing on the Monsanto papers and Glyphosate: presentation by Dr Kate Guyton. *Multimedia* EP[online]. 11.10.2017 [cit. 2018-05-04]. Available at: https://multimedia.europarl.europa.eu/en/hearing-onthe-monsanto-papers-and-glyphosate I144771 03-V rv.

⁴²⁵ #5 Q&A: Dr. Tarazona and Dr. Guyton EU Parliament Hearing on Glyphosate. In: *Youtube* [online]. 19.10.2017 [cit. 2018-05-04]. Available at:

https://www.youtube.com/watch?v=UDPJQFWafR4&index=10&list=PLWV10DaWzaWBSO7IXV3q85IJ5b PgIjxhe.

⁴²⁶ #12 Tim Bowmer (ECHA) Presentation EU Parliament Hearing on Glyphosate. *Youtube* [online]. 20.10.2017 [cit. 2018-05-04]. Available at:

https://www.youtube.com/watch?v=pv dpuZhFGI&list=PLWV10DaWzaWBSO7lXV3q85IJ5bPgIjxhe&ind ex=5.

⁴²⁷ #8 Carey Gillam Presentation at EU Parliament Hearing on Glyphosate. In: *Youtube* [online]. 18.10.2017 [cit. 2018-05-04]. Available at:

https://www.youtube.com/watch?v=OCdshA9oRvQ&list=PLWV10DaWzaWBSO7lXV3q85IJ5bPgIjxhe&in dex=14.

⁴²⁸ Ibid. ⁴²⁹ Ibid.

BfR did not attend the hearing. The BfR stated that the EFSA was present at the hearing as the main regulatory body preparing the final report and that "The BfR had offered to participate in the public hearing at the EU Parliament if there proved to be any special need to do so." Absence of the BfR as the main rapporteur was received with criticism from some of the panelists.

5.2.2. 'Orchestrating the Outcry'

The Monsanto papers indeed brought the discussion to a new level insofar as the Company's tactics to protect its product got revealed and spawned a wave of controversy. According to Horel and Foucart, the Monsanto Papers demonstrate that it was indeed the company's mission to attack the IARC in order to disprove glyphosate classification by this highly regarded scientific body. Also, as the papers demonstrate, there were attempts to cut IARC's funding and assault its scientists. In addition, the authors found out in the documents that Monsanto established a "let nothing go" campaign. Its aim is to hire third-party companies employing individuals who have no connections to the industry and spread positive messages about company's chemicals and products via social media and other outlets. The Monsanto papers also contain a PowerPoint presentation where a strategy to create a negative picture of the IARC in an academic article is outlined. As Horel and Foucart observe, in December 2016 an article fitting the Monsanto's offensive strategy was published. As the authors further found out, the authors in the article contain names connected with Syngenta, a member of the Glyphosate Task Force, and the ILSI – among them are the two leading scientists from JMPR. As

Furthermore, the Monsanto Papers help us understand why some of the scientists classifying glyphosate or RoundUp as toxic or those scientists who pointed out to controversies of the evaluation process in the EU, came under criticism. For example, Christopher Portier, among other scientists involved with the IARC, had to face various

⁴³⁰ Frequently asked questions about the "Monsanto Papers and Glyphosate" hearing at the European Parliament on 11 October 2017. *BfR* [online]. Berlin, 13 October 2017 [cit. 2018-05-04]. Available at: http://www.bfr.bund.de/cm/349/frequently-asked-questions-about-the-monsanto-papers-and-glyphosate-hearing-at-the-european-parliament-on-11-october-2017.pdf.

⁴³¹ HOREL, Stéphane a Stéphane FOUCART. The Monsanto Papers, Part 1 — Operation: Intoxication. *Environmental Health News* [online]. 20 November 2017 [cit. 2018-05-05]. Available at: http://www.ehn.org/monsanto-glyphosate-cancer-smear-campaign-2509710888.html.

⁴³² See http://www.sciencedirect.com/science/article/pii/S0273230016303038.

⁴³³ HOREL, Stéphane a Stéphane FOUCART. The Monsanto Papers, Part 2 — Reaping a bitter harvest. *Environmental Health News* [online]. 21 November 2017 [cit. 2018-05-05]. Available at: http://www.ehn.org/monsanto-takes-on-world-health-organization-2509721283.html.

allegations and attacks. Website Genetic Literacy Project published an article on the on 17 October 2017 – a few days after the Monsanto papers hearing in the EP. to discredit Portier on the ground of conflicts of interests. According to the article Portier was contracted and financially remunerated for initial work as a consultant regarding the litigations in the US. Article's author David Zaruk considers Portier as a member of the "ban-glyphosate movement," criticizes Portier's affiliation to the Environmental Defense Fund and describes the NGO as "running anti-pesticide campaigns since the 1960s." Furthermore, Portier is described as pushing "anti-glyphosate, anti-Monsanto agenda." In addition, Zaruk further attacks the IARC and reminds us the tobacco story and the lawyers involved in the then litigations and called them as "snakes." Then, "these lawyers had to go elsewhere for their cash-flow", Zaruk carries on by claiming that "Each IARC monograph creates a new potential industrial sector for these snakes to feed on." Zaruk further criticizes Carey Gillam and Green MEPs as well-paid activist lobbyists who "put all of their hate and energy" not to merely ban glyphosate, but to "win a cynical campaign that is funded by an industry that is building its market up on creating public fear."

Zaruk not only contributes to the Genetic Literacy Project, but also to his own blog where he devoted more than a dozen of articles to criticism of professor Portier and the IARC. However, his criticisms, as Horel and Foucart observe, They found their way to editorial offices spanning from Australia, the US to London, proving Zaruk's capabilities as a former lobbyist for chemical industry in Brussels. What is more, his articles were also published under other names, for instance an emeritus professor from the US whose connections to Monsanto were revealed in the Monsanto papers. Ultimately, Zaruk's blog at Euractiv was banned due to overt insults against French journalists in Le Monde and IARC.

Also, criticism of Portier and the IARC also appeared in Forbes and the author, Geoffrey Kabat, refers to Zaruk's Risk-Monger blog, which discovered the Portier-IARC controversy. Giving his article a title 'IARC's Glyphosate-gate scandal', Kabat attempts to

⁴³⁴ ZARUK, David. Viewpoint: Christopher Portier—well-paid activist scientist at center of the ban-glyphosate movement. *Genetic Literacy Project* [online]. 17 October 2017 [cit. 2018-05-05]. Available at: https://geneticliteracyproject.org/2017/10/17/viewpoint-christopher-portier-well-paid-activist-scientist-ban-glyphosate-movement/.

HOREL, Stéphane a Stéphane FOUCART. The Monsanto Papers, Part 2 — Reaping a bitter harvest. *Environmental Health News* [online]. 21 November 2017 [cit. 2018-05-05]. Available at: http://www.ehn.org/monsanto-takes-on-world-health-organization-2509721283.html.

⁴³⁶ 'Censorship' of Euractiv science blogger sparks free speech debate. *Politico* [online]. 19 April 2016 [cit. 2018-05-05]. Available at: https://www.politico.eu/blogs/on-media/2016/04/censorship-of-science-blogger-sparks-free-speech-debate/

discredit both Portier and the IARC. Even though the language used is much milder than that of Zaruk, Kabat puts Portier, the IARC, and the activist groups in the same pigeonhole. According to Kabat "IARC's 2015 opinion on glyphosate provided powerful ammunition to environmental activists, anti-GMO groups, NGO's, and organic foods industry lobbyists on both sides of the Atlantic in their campaign to ban glyphosate." Furthermore, the author gives reasons for the lengthy reauthorization process in the EU due to opposition of politicians in Member States "who have been swayed by the antiglyphosate crusade."

To create doubts of IARC's methodology, Kabat refers to an academic article written by Robert Tarone published in the European Journal of Cancer Prevention. This article describes how much is the IARC methodology flawed. Nevertheless, the IARC itself pointed out to Tarone's affiliation to Monsanto and even requested the journal's editors to mention Tarone's conflicts of interests in the article. As for Kabat, working as a senior epidemiologist, also he contributes with articles to Genetic Literacy Project webpage and also there one might find his attacks on the IARC. Furthermore, Kabat is a member of the American Council on Science and Health (ACSH). When one searches articles tagged 'IARC' or 'Portier' on the webpage, one can notice rather offensive headings and language.

To close the Genetic Literacy Project and ACSH circle, also Zaruk contributes to the ACSH webpage. Suspicion that overt criticism of people involved in what the aforementioned webpages and authors would call as "anti-glyphosate crusaders" is not coincidental. As the Monsanto Papers revealed, both webpages were used as a tool for the orchestrated outcry against the IARC and its scientists.⁴⁴¹

The Post-EP hearing on Monsanto papers that brought accusations on the grounds of non-transparency found its way even to the Congress of the United States. Nevertheless,

⁴³⁷ KABAT, Geoffrey. IARC's Glyphosate-gate Scandal. *Forbes* [online]. 23 October 2017 [cit. 2018-05-05]. Available at: https://www.forbes.com/sites/geoffreykabat/2017/10/23/iarcs-glyphosate-gate-scandal/#7fa5890e1abd

scandal/#7fa5890e1abd.

438 IARC responds to Reuters article of 14 June 2017. *IARC* [online]. Lyon, 16 June 2017 [cit. 2018-05-05]. Available at: http://governance.iarc.fr/ENG/Docs/IARC_responds_to_Reuters_15_June_2017.pdf.

⁴³⁹ See: https://geneticliteracyproject.org/writer/geoffrey-kabat/

⁴⁴⁰ See: https://www.acsh.org/profile/geoffrey-kabat

WALDMAN, Peter et al. Does the World's Top Weed Killer Cause Cancer? Trump's EPA Will Decide. *Bloomberg*[online]. New York, 13 July 2017 [cit. 2018-05-04]. Available at: https://www.bloomberg.com/news/features/2017-07-13/does-the-world-s-top-weed-killer-cause-cancer-trump-s-epa-will-decide. See also https://usrtk.org/hall-of-shame/why-you-cant-trust-the-american-council-on-science-and-health/.

in a letter dated 11 January 2018, the director of IARC disproves allegations against Portier raised by the American Congressmen. Professor Portier was not the only scientist against whom Monsanto utilized pressure tactics in order to maintain general opinion of its herbicide harmlessness.

Indeed, an outcry was orchestrated also against French toxicologist Gilles-Éric Séralini who did a laboratory testing which should have been done by Monsanto decades ago. As an internal e-mail communication from 2003 reveals, the Monsanto toxicologist Donna Farmer admits that Monsanto has not done enough necessary testing on formulations to back up the conclusion that RoundUp is not carcinogenic. In addition, Farmer further confesses that "The testing on the formulations are not anywhere near the level of the active ingredient." To cover up this gap in the research, Farmer recommends that "We can make that statement about glyphosate and can infer that there is no reason to believe that Roundup would cause cancer."443 Séralini was one of the first scientists to feed rats both with the water and the GMO corn that contained Roundup, not merely its active substance glyphosate. His consequent publication of the results ignited a heated debate and his article was retracted from the scientific journal under suspicious circumstances, as it was described above. It was not until 2015 when the French toxicologist cleared his name in front of the French court. First, he won a case against Marc Fellous, the president of the French Association for Plant Biotechnology, who utilized other scientist's signature to disprove Séralini's reassessment of his study. Second, Séralini won another case against a journalist from Marianne magazine, who word for word copied pejorative words of a Henry I. Miller pointed against Séralini. This was decided by the French court way ahead of the Monsanto papers affair. 444

As New York Times later investigated from the published papers, Miller was further utilized by Monsanto to attack the IARC in an article published in Forbes. As a consequence, in the wake of Monsanto papers, Forbes decided to retract all contributions

⁴⁴² IARC Letter Back to Lamar Smith. *USRTK* [online]. 11 January 2018 [cit. 2018-05-05]. Available at: https://usrtk.org/wp-content/uploads/2018/01/IARC-letter-back-to-Lamar-Smith.pdf.

⁴⁴³ Internal Monsanto E-mail - Carcinogenicity. *Baumhedlundlaw* [online]. [cit. 2018-05-05]. Available at: https://baumhedlundlaw.com/pdf/monsanto-documents/27-Internal-Monsanto-Email-You-Cannot-Say-That-Roundup-is-not-a-Carcinogen.pdf.

⁴⁴⁴ Séralini wins again in court against his attackers. *GMWatch* [online]. 26 September 2016 [cit. 2018-05-05]. Available at: http://www.gmwatch.org/en/news/latest-news/17236-seralini-wins-again-in-court-against-his-attackers.

of Miller and ended up relationship with him. 445 As USRTK points out, also Project Syndicate retracted Miller's articles. Similar to other authors used for the PR to defend the herbicide, also Miller is a member of the aforementioned ACSH. Furthermore, Monsanto papers provide reasons for retraction of Séralini's article in November 2013. As Spiegel reports, it might be a striking coincidence that Wallace Hayes was appointed to the advisory board of Food and Chemical Toxicology magazine six months before the article got retracted. 446 As New York Times stresses, in an interview Hayes denied any affiliation to Monsato while being at the board and claimed he was paid only after he left the board of the journal. Hayes claims: "Monsanto played no role whatsoever in the decision that was made to retract," he said. "It was based on input that I got from some very well-respected people, and also my own evaluation",447 Nevertheless, Monsanto Papers reveal, Hayes was contracted by Monsanto already prior to his appointment to the journal. 448 The fact that preparation for Séralinis's article removal was planned is rather obvious. Indeed, as a toxicology manager from Monsanto David Saltmiras in a communication with a British scientist mentions, "I hope scientist of your caliber and standing may consider penning a joint letter to the Editor focusing on scientific deficiencies and the flawed scientific review process." As Saltmiras further mentions: "I also suspect this paper may be in our own best interests – the last rites for Seralini's few remaining shreds of scientific credibility." 449 As it implies, similar to the "IARC outcry" and attempts to discredit Christopher Portier, also Séralini faced a long-lasting pressures both on the local, French front, but also from the global network of Monsanto's consulting scientists and PR people.

Prior to unsealing of Monsanto Papers in March 2017, Bernhard Url the head of the EFSA, admitted that the debate concerning glyphosate escalated beyond the scientific

⁴⁴⁵ Monsanto Emails Raise Issue of Influencing Research on Roundup Weed Killer. *New York Times* [online]. New York, 1 August 2017 [cit. 2018-05-05]. Available at: https://www.nytimes.com/2017/08/01/business/monsantos-sway-over-research-is-seen-in-disclosed-emails.html.

⁴⁴⁶ BETHGE, Philip. Monsanto Faces Blowback Over Cancer Cover-Up. *Spiegel* [online]. Hamburg, 24 October 2017 [cit. 2018-05-05]. Available at: http://www.spiegel.de/international/world/monsanto-papers-reveal-company-covered-up-cancer-concerns-a-1174233.html.

⁴⁴⁷ Monsanto Emails Raise Issue of Influencing Research on Roundup Weed Killer. *New York Times* [online]. New York, 1 August 2017 [cit. 2018-05-05]. Available at: https://www.nytimes.com/2017/08/01/business/monsantos-sway-over-research-is-seen-in-disclosed-emails.html.

⁴⁴⁸ Internal Monstanto Email - Consultation. *Baumhedlundlaw* [online]. 7 September 2012 [cit. 2018-05-05]. Available at: http://baumhedlundlaw.com/pdf/monsanto-documents/10-Monsanto-Consulting-Agreement-with-Food-and-Chemical-Toxicology-Editor.pdf.

⁴⁴⁹ Internal Monstanto Email - Relationship. *Baumhedlundlaw* [online]. September 2012 [cit. 2018-05-05]. Available at: http://baumhedlundlaw.com/pdf/monsanto-documents/12-Monsanto-Email-Confirming-Companys-Intimate-Relationship-with-Wallace-Hayes.pdf.

domain and became "a societal discussion with wider ramifications." According to Url, the mix of GMOs and the Monsanto Company in the debate "came together at once" and "food becomes a proxy for a much broader discussion on globalization, big business, multi-national companies, maybe even inequality." While Url understood relevancy of the debate at the same time it can be observed that Url joins counter-arguments to downplay the role of topics raised by concerned society. As Url maintains: "So to use the safety argument to say glyphosate is a carcinogen that needs to be banned is not relevant." This might imply that the head of EFSA refutes the importance of the precautionary principle, in which the concerned citizens believed. Url also mentioned that due to financial burden and the Horizon 2020 scientists are required to cooperate with industry. To point out how difficult it is for the EFSA to maintain credibility, Url mentions that the Agency drives scientists to collaborate with industry and that a major contradiction lies in the fact that they "have to pretend never to have spoken to industry in their life."

According to Gillam, the EPA, Monsanto and the EFSA were connected through an EPA official Jess Rowland who has had very close relationship with Monsanto, as the documents proved. It was Rowland, who in a teleconference with the EFSA in September 2015 attempted to convince the EFSA officials to reject a study from 2001, which found tumors in rodents after exposure to glyphosate. While the study was indeed excluded both from BfR and EFSA reports, for instance the BAuA in the dossier prepared for the ECHA from May 2016 is not sure about EPA's basis for rejection of this particular study. As Gillam found out, in an e-mail communication from September 2015, Monsanto appreciated Rowland's usefulness in what company called "ongoing glyphosate defense." Although the EFSA confessed Rowland's participation in expert consultation, the agency stood for its evaluation of glyphosate and maintained that its classification "did not change as a result of his [Rowland's] intervention." The EFSA justified Rowland's

⁴⁵⁰ EFSA: Glyphosate ban debate 'legitimate' but not about science. *Euractiv* [online]. Brussels, 16 January 2017 [cit. 2018-05-05]. Available at: https://www.euractiv.com/section/science-policymaking/news/efsa-glyphosate-ban-debate-legitimate-but-not-about-science/.

⁴⁵² GILLAM, Carey. *Whitewash: the story of a weed killer, cancer, and the corruption of science* [online]. Washington, DC: Island Press, 2017 [cit. 2018-05-04]. p. 177.

⁴⁵³ Did a Former EPA Official with Alleged Ties to Monsanto Influence EFSA?. *Baumhedlundlaw* [online]. 24 May 2017 [cit. 2018-05-05]. Available at: https://www.baumhedlundlaw.com/rowland-glyphosate-influence-efsa/.

⁴⁵⁴ GILLAM, Carey. *Whitewash: the story of a weed killer, cancer, and the corruption of science* [online]. Washington, DC: Island Press, 2017 [cit. 2018-05-04]. p. 177.

participation as a standard practice since teleconference was attended by the IARC, JMPR, and ECHA. 455

Further controversy was caused when it was discovered that some parts of the EFSA report are strikingly similar, actually copied word for word, from submitted documents by Monsanto. The EFSA's report originated from the RAR report by BfR which utilized the dossiers from the Glyphosate Task Force. In its statement, the BfR refuses any allegations that it copied and pasted interpretations of submitted studies and refers to a common scientific practice. Since, as the BfR states, when the applicants use common practices, "the European assessment authorities have in the past had no cause to rewrite these statements in the numerous authorization and approval procedures for plant protection products, chemicals and medicines."

5.2.3. Glyphosate Saga and Positions of the EU Member States

The entire glyphosate saga brought also significant ramifications among the EU Member States since the debate spilled over from the scientific and CSO level into public and eventually the political realm. The reauthorization process of glyphosate became a symbol of struggle for transparency and democracy. The first serious blow came in the beginning of 2016 when suspicions about the unpublished studies in the re-approval process surfaced. As Gillam observes, particularly French Agency for Food, Environmental and Occupational Health & Safety's (ANSES) report, which contradicted the EFSA conclusion, spawned a wave of insecurity among the EU MSs. The Netherlands, France, Italy, and Sweden joined the ANSES's position to convince the EC to postpone the re-approval vote from March to May. In addition, growing concerns in Germany forced the German officials to abstain from the May voting. Consequently, the EC decided on the very last moment, when the authorization for glyphosate was about to expire, that an eighteen-month extension for this active substance will be granted. 458 Furthermore, Gillam

⁴⁵⁵EFSA statement addressing stakeholder concerns related to the EU assessment of glyphosate and the

[&]quot;Monsanto papers". *EFSA* [online]. Parma, 23 May 2017 [cit. 2018-05-05]. Available at: https://www.efsa.europa.eu/sites/default/files/170523-efsa-statement-glyphosate.pdf.

⁴⁵⁶ Monsanto Papers: proof of scientific falsification. In: *Youtube* [online]. 4 October 2017 [cit. 2018-05-04]. Available at: https://www.youtube.com/watch?v=1_s18Qetabo&t=2.

⁴⁵⁷ Glyphosate assessment: BfR rejects plagiarism accusations. *BfR* [online]. Berlin, 20 September 2017 [cit. 2018-05-05]. Available at:

http://www.bfr.bund.de/en/press_information/2017/34/glyphosate_assessment__bfr_rejects_plagiarism_accu sations-201890.html.

⁴⁵⁸ GILLAM, Carey. *Whitewash: the story of a weed killer, cancer, and the corruption of science* [online]. Washington, DC: Island Press, 2017 [cit. 2018-05-04]. p. 183.

points out that the MEPs in the EP were particularly worried about Monsanto's influence on science and pointed to secretive contacts among EC representatives and Monsanto lobbyists. These concerns were addressed in a letter to Jean-Claude Juncker, who did not regard these concerns as legitimate. In addition, Juncker dismissed any further reasons to cast doubts on the glyphosate's assessment of safety. 459

While a coalition of states questioning the safety of glyphosate and consequently the very nature of the approval process, of particular interest is the position of Sweden. Sweden took regulation of EDCs as well as glyphosate into its regulatory hands. Indeed, Sweden maintained that glyphosate should be classified as carcinogenic. Its regulatory body Swedish Chemicals Agency recommended the government to reduce and restrict use of glyphosate, especially on the private use of PPPs (plant protection products) until 2019. As for EDCs of which PPPs might be a part, Sweden won the case against the EC for prolonged adoption of criteria for identifying EDC substance. In fact, Sweden was not alone among states disturbed by EC's approach, which admitted the slow-down of the process due to strong mobilization from the industry. The composition of states concerned by this saga resembled the coalition of states concerned about glyphosate. For instance, Sweden's support was gained by states active in the debate – France, Denmark, the Netherlands and Finland, and with the help of the EP, Sweden won the court trial.

Although discredited from its own French ranks, Séralini's struggle became a symbol for overall French position in the saga. It was Emmanuel Macron who mentioned shortly after the decision for glyphosate license extensions for another 5 years that France should ban the use of glyphosate. As Macron tweeted, he authorized French government to undertake necessary steps to ban glyphosate in France as soon as alternatives to glyphosate are found, within three years at the latest. ⁴⁶³ Particularly focused on glyphosate saga was French newspaper Le Monde, one of the most popular newspapers in France. Merely in 2017 there were 178 articles written about the topic 'glyphosate', which particularly

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⁴⁵⁹ Ibid, p. 186.

⁴⁶⁰ See https://www.efsa.europa.eu/sites/default/files/Glyphosate-infographic.pdf.

⁴⁶¹ Sweden wins court case on criteria for endocrine disrupting substances. *Government.se* [online]. 16 December 2015 [cit. 2018-05-05]. Available at: http://www.government.se/press-releases/2015/12/sweden-wins-court-case-on-criteria-for-endocrine-disrupting-substances/.

⁴⁶² ROGER, Apolline J.C. Endocrine Disrupting Chemical Wars: the Saga Continues. *European Journal of Risk Regulation* [online]. 2016, **7**(03), 629-633 [cit. 2018-05-05]. Available at: https://www.cambridge.org/core/product/identifier/S1867299X00006152/type/journal article. p. 630.

⁴⁶³MACRON, Emmanuel. Make Our Planet Great Again. In: *Twitter* [online]. 27.11.2017 [cit. 2018-05-05]. Available at: https://twitter.com/emmanuelmacron/status/935194060062642176?lang=cs.

pointed to issues connected with the relicensing process. Also, Le Monde published in 2016 a petition pointing out the manipulation of science in the area of pesticides and EDCs and how influenced the EU bodies by industry are, stressing similarities with the tobacco industry affairs. The article is signed by more than one hundred scientists from all around the world. Thus, the awareness of the French public about the ramifications of the glyphosate saga can be expected as rather strong.

Italy also joined a coalition of states who opposed the extension of glyphosate license for 5 years. Particularly high rates of non-Hodgkin lymphoma among men observed in Italy led the Italy's Ministry of Health to restrict the use of the active substance in 2016. Especially the use in public spaces as well as glyphosate sprayings just prior to harvest would be severely restricted in Italy. As Gillam puts it, these restrictions belong to one of the widest in terms of consumer and agricultural use.

Despite the fact that relicensing was agreed upon to 5 years, thus a shorter period than expected in mid-2016, uncertainties among member states were pervasive. Indeed, a number of minsters for Agriculture or Environment from 6 MSs voiced their concerns in a letter in December 2017 addressed to Vice-president of the EC and the Commissioner for health and food security. Ministers of France, Belgium, Luxemburg, Malta, Greece, and Slovenia, in line with the proposals prepared by the EP, call for "the extensions of specific restrictions of use of glyphosate for weeding and pre-harvest desiccation." In addition, these countries also stress the importance of the citizens' initiative and EP's concerns. The ministers recommend carrying out a new study, which would be conducted by the European agencies, Member States and the IARC. It was further stressed that there is a need for reform of the assessment framework, with greater transparency and independence. Last but not least, the MSs demonstrated their commitment to search for alternatives to glyphosate.

As pointed out throughout this paper, greatest struggles can be observed in Germany. While abstaining because of uncertainties in glyphosate voting since 2016, in the final decision in November 2017 a controversy was caused when the German Minister of

⁴⁶⁴ For reference use the search engine on the webpage http://www.lemonde.fr/recherche/

⁴⁶⁵ Let's stop the manipulation of science. *Le Monde* [online]. Paris, 29 November 2016 [cit. 2018-05-05]. Available at: http://www.lemonde.fr/idees/article/2016/11/29/let-s-stop-the-manipulation-of-science 5039867 3232.html.

⁴⁶⁶ GILLAM, Carey. *Whitewash: the story of a weed killer, cancer, and the corruption of science* [online]. Washington, DC: Island Press, 2017 [cit. 2018-05-04]. p. 187.

Agriculture went around the Minister for Environment, 467 which resonated in the highest political circles. 468. In Germany alone, in the beginning of 2018, more than 30 thousand protesters crowded streets of Berlin to demonstrate their discontent with the glyphosate, influence of Monsanto on science and particularly to point to Monsanto-Bayer fusion. 469 Apart from Germany, also Austria has had a strong opposition to TTIP and was concerned about glyphosate re-approval. It should come as no surprise that both countries created a strong anti-TTIP/anti-glyphosate movement. Later this opposition bloc of NGOs was joined by organizations from Italy, France, and Portugal. As a result, an alliance of environmental organizations was established in order them to submit an official complaint against the BfR and the EFSA. As NGO Global 2000 states, both agencies "had not undertaken an independent, objective and transparent assessment of the health risks associated with glyphosate as required by the EU Pesticides Regulation 1107/2009."470 Also, on the level of the EP the Greens filed a lawsuit against the EFSA, addressing similar issues as the aforementioned alliance of NGOs. 471

Doubts and concerns which the Fall of 2017 and even in the aftermath of glyphosate approval, must have been considered in the EC in a reaction on the ongoing debate (particularly to the citizen's initiative on the ban of glyphosate). 472 In a document dealing with the refit evaluation of the General Food Law (Regulation (EC) No 178/2002) the EC addressed concerns regarding the EFSA's assessment based on industry studies, which are bound by confidentiality rules. This, as the EC notes, led the civil society into perception of transparency and independence deficiencies. Therefore, as the document stresses, there is "a need to address these issues in order to protect the reputation of EFSA's work." Furthermore, in the document the EC observed that EFSA suffers from

⁴⁶⁷ Germany's Christian Schmidt admits taking glyphosate decision alone. *Politico* [online]. 28 November 2017 [cit. 2018-05-05]. Available at: https://www.politico.eu/article/christian-schmidt-germany-admitstaking-glyphosate-decision-alone/.

⁴⁶⁸ Germany goes rogue. *Politico* [online]. 29 November 2017 [cit. 2018-05-05]. Available at: https://www.politico.eu/article/glyphosate-christian-schmidt-decision-angela-merkel-germany-goes-rogue/. ⁴⁶⁹Berlin: Großdemo "Wir haben es satt". In: *Youtube* [online]. 20.1.2018 [cit. 2018-05-05]. Available at: https://www.youtube.com/watch?v=016v8c6FeZw.

⁴⁷⁰Complaint filed against EU authorities after glyphosate approval. *Global 2000* [online]. 4 December 2017 [cit. 2018-05-05]. Available at: https://www.global2000.at/en/node/5346.

Action brought on 24 May 2017 – Hautala and Others v EFSA. *Curia* [online]. 24 May 2017 [cit. 2018-

^{05-051.} Available at:

http://curia.europa.eu/juris/document/document.jsf?text=&docid=193437&pageIndex=0&doclang=CS&mod e=req&dir=&occ=first&part=1&cid=1099977.

⁴⁷² Glyphosate: Commission responds to European Citizens' Initiative and announces more transparency in scientific assessments. Europa EU [online]. Strasbourg, 12 December 2017 [cit. 2018-05-05]. Available at: http://europa.eu/rapid/press-release IP-17-5191 en.htm.

underfinancing and inability to hire new panel members. Lengthiness of the authorization procedures then, according to the EC, "affects the innovation potential and the competitiveness of the EU food and drink industry as well as its capacity to address future challenges." Also, the report mentions that the EFSA has been criticized since 2012 and in its communication is not able to address "the societal, or political, choices in sensitive areas." Nevertheless, the overall discontent with the re-licensing process led the EP to establish a committee, which would examine the role of the Agency and the EC in the approval process. The position both of the states and the EP helps us understand how blocs of countervailing social forces are distributed within the EU represented by various interest groups.

5. 3. The Way Out of the TTIP Troubles? Mergers

Apart from that, it should be mentioned that the pressure of transatlantic capital has not been halted by the seemingly frozen TTIP deal. The transatlantic ties are about to be tightened in the wake of Bayer and Monsanto merger worth \$66 billion in what is supposed to be the greatest merger in German history. In its press release the Bayer CEO stresses a need to acquire Monsanto's innovations under the cloak of project called 'Science For A Better Life'. These innovations would then help to "safeguarding the world's food supply." As the press release further stresses, it is expected that by 2050 the planet will be populated by about ten billion people. In addition, as it is inquired in the press release: "How can all I these people be fed although the amount of available farmland per head is declining? That's one of the most pressing questions of our time." Thanks to innovation, word used eighteen-times in this particular press communication, and together with Monsanto, Bayer would be able to offer "a strong product portfolio" to farmers globally. This would include sales of seeds and treatment including pesticides and

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⁴⁷³ Executive Summary of the Refit Evaluation: General Food Law (Regulation (EC) No 178/2002). *EC Europa*[online]. January 15 2018 [cit. 2018-05-05]. Available at:

https://ec.europa.eu/food/sites/food/files/gfl_fitc_executive_summary_2018_en.pdf.

See part 2 of the Summary on p. 87

https://ec.europa.eu/food/sites/food/files/gfl_fitc_comm_staff_work_doc_2018_part2_en.pdf

⁴⁷⁵ Pesticides: Parliament to set up special committee. *European Parliament* [online]. 18 January 2018 [cit. 2018-05-05]. Available at: http://www.europarl.europa.eu/news/en/press-

room/20180118 IPR 92014/pesticides-parliament-to-set-up-special-committee.

⁴⁷⁶ Streben nach Grösse und Geltung. *NZZ* [online]. Zurich, 14 September 2016 [cit. 2018-05-05]. Available at: https://www.nzz.ch/wirtschaft/unternehmen/bayer-uebernimmt-monsanto-streben-nach-groesse-und-geltung-ld.116806.

fungicides.⁴⁷⁷ Similarly, also the CEO of Monsanto in its 2011 interview in Davos mentioned the same challenges the population would face by 2050.⁴⁷⁸ In addition, the Monsanto CEO mentioned that environmentalists' concern "drives [him] a little bit nuts". According to him, the environmentalists shall be worried more about a fast-growing population, temperatures rise, and water consumption.⁴⁷⁹

As Lamphere and East suggest, this type of apocalyptic narrative belong to very powerful genres. In other words, necessity to safe the future of humanity with a heroic intervention is a rather effective tool for public persuasion. As the authors point out, Monsanto pursues neoliberal discourse, combining its corporate strategy with sustainability while legitimizing life-science practice. As Nevertheless, Monsanto CEO's concerns are in reality pursued – right to the heart of glyphosate production. In South-East Idaho the company chemically processes the phosphate, which is the key substance of glyphosate. As Elmore suggests, the phosphate mining is substantially environmentally intensive process. The mining leaves behind vast amount of selenium which gets into underground water, the plants elicit serious air pollutants such as mercury. Also, the utilized for chemical processes consume, as Elmore puts it, as much energy as entire Salt Lake City in Utah. Therefore, if one can talk about sustainable system, which is promoted by Monsanto, glyphosate production is not the case, as Elmore suggests. Despite all the concerns and the mission of both companies to 'feed the world', the revelation of the planned merger did not come out of the blue in the EU.

First, Monsanto approached the Swiss based agrochemical company in 2014 with bid for takeover, overseen and advised by Goldman Sachs on the side of Syngenta and Morgan Stanley bank on the Monsanto's side. Apart from Syngenta's research and development capacities and position on the European market, particularly with GMOs,

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⁴⁷⁷ Financial News Conference: Address by Werner Baumann. *Press Bayer* [online]. 22 February 2017 [cit. 2018-05-05]. Available at: http://www.press.bayer.com/baynews/baynews.nsf/id/AJTCK4-Address-by-Werner-Baumann.

⁴⁷⁸ Davos 2011 - Hugh Grant, CEO Monsanto. In: *Youtube* [online]. 24.1.2011 [cit. 2018-05-05]. Available at: https://www.youtube.com/watch?v=VIL6rGVNkhg.

⁴⁷⁹ NEATE, Rupert. Bayer's \$66bn takeover bid of Monsanto called a 'marriage made in hell'. *The Guardian*[online]. New York, 14 September 2016 [cit. 2018-05-05]. Available at: https://www.theguardian.com/business/2016/sep/14/bayer-takeover-monsanto-66-billion-deal.

⁴⁸⁰ LAMPHERE, Jenna A. a Elizabeth A. EAST. Monsanto's Biotechnology Politics: Discourses of Legitimation. *Environmental Communication* [online]. 2015, **11**(1), 75-89 [cit. 2018-05-05]. Available at: https://www.tandfonline.com/doi/full/10.1080/17524032.2016.1198823. p. 81

⁴⁸¹ "Roundup from the Ground Up" by Bartow J. Elmore. In: *Youtube* [online]. 13.3.2017 [cit. 2018-05-05]. Available at: https://www.youtube.com/watch?v=cwmwPeDtW9Y&t.

Monsanto would welcome easier tax burden in Switzerland, as Reuters reported. 482 However, the merger was not successful after three Monsanto's attempts and Syngenta was taken over by Chinese ChemChina. 483 Second, within a short period of time there was another merger of DuPont and Dow Chemical. In total, this made 3 companies merging in the same time period. As a result, Sales suggests that merely these companies would control the majority of food supply globally in crop seeds and chemical production domain. 484 Out of these three agrochemical giants, according to Financial Times, DowDuPont will most likely sell its agribusiness unit in the foreseeable future. 485

As it was estimated prior to the merger carousel, six agrochemical global leaders – Syngenta, Bayer, BASF, Dow, Monsanto and Dupont – controlled 60% of the seed market and more than three quarters of market with agrochemicals. The merger of Monsanto and Bayer alone would combine Monsanto's 26% market share of seeds with Bayer's 3%, while Bayer's 17% market share in agrochemicals and Monsanto's 7%, leading to Bayer's substantially strong position on the market. Therefore, Monsanto needed to find the business partner to create a bloc of capital during this busy period of mergers. However, there are two obstacles to the fusions of Bayer and Monsanto. First, the EC has to investigate the acquisition due to concerns that the "proposed acquisition could reduce competition in a number of different markets resulting in higher prices, lower quality, less choice and less innovation." The EC is aware that the merged entity would "hold both the largest portfolio of pesticides products and the strongest global market positions in seeds and traits, making it the largest integrated company in the industry." To satisfy the EC's requirements, Bayer decided to sell its significant part of assets to BASF – namely herbicide glufosinate and cotton, soybeans seeds, and oilseed rape as well as its

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⁴⁸² Syngenta rejects \$45 billion Monsanto takeover offer. *Reuters* [online]. 8 May 2015 [cit. 2018-05-05]. Available at: https://www.reuters.com/article/us-syngenta-m-a-monsanto-reject/syngenta-rejects-45-billion-monsanto-takeover-offer-idUSKBN0NT0JM20150508.

⁴⁸³ Monsanto/Syngenta: cashing out. *Financial Times* [online]. 28 December 2016 [cit. 2018-05-05]. Available at: https://www.ft.com/content/15f0d924-bd51-11e6-8b45-b8b81dd5d080.

⁴⁸⁴ SALES, Louise. The great corporate takeover of our food. *Chain Reaction* [online]. 2016, (128), 32-33

⁴⁰⁴ SALES, Louise. The great corporate takeover of our food. *Chain Reaction* [online]. 2016, (128), 32-33 [cit. 2018-05-05]. ISSN 03121372. Available at:

https://search.informit.com.au/documentSummary;dn=552950499283940;res=IELHSS. p. 32

⁴⁸⁵ Monsanto/Syngenta: cashing out. *Financial Times* [online]. 28 December 2016 [cit. 2018-05-05]. Available at: https://www.ft.com/content/15f0d924-bd51-11e6-8b45-b8b81dd5d080.

⁴⁸⁶ DOUGLAS, Leah. Monsanto-Bayer mega-deal a nightmare for America?. *CNN* [online]. 23 May 2016 [cit. 2018-05-05]. Available at: https://edition.cnn.com/2016/05/23/opinions/monsanto-bayer-douglas/index.html.

⁴⁸⁷ Mergers: Commission opens in-depth investigation into proposed acquisition of Monsanto by Bayer. *Europa EU* [online]. Brussels, 22 August 2017 [cit. 2018-05-05]. Available at: http://europa.eu/rapid/press-release_IP-17-2762_en.htm.

biotechnology program for these seeds which would be resistant to glufosinate. The €5.9 billion transaction will be paid by BASF in cash. 488 Second, there is also a broad base of public concern about the acquisition. For instance, the EC had to consider more than 50.000 petition e-mails as well as more than 5.000 letters addressed to the EC with these concerns, as Reuters reported. 489 Also, greatest opposition to the merger can be observed nowhere else than in Germany. Indeed, German society is particularly concerned with possible ramifications of the mega-deal. 490 The mega-merger also raised concerns on the other side of the Atlantic. A survey of various farming associations uniting small and organic farmers across the US revealed obvious opposition to the merger. 83% are very concerned about Bayer's acquisition of Monsanto, while 11% are somewhat concerned. Among most striking concerns were 'dominance in one product to push sales of other products', followed by acquired 'control data about farm practices' and 'increased pressure for chemically dependent farming' as a result of the merger. 491 In the EU 54% of citizens believed that it is vital that the EC blocks the merger. 492

These agrochemical giants might in the future struggle with those producers, which might introduce an alternative to classic pesticides such as glyphosate. As an article published by Politico suggests, French, Italian, and Belgian chemical companies see the glyphosate ban as an opportunity. 493 Thus, it was not a coincidence that all the three countries voted against the glyphosate re-approval. 494 According to Politico, a Belgian-French-Italian chemical coalition has been collaborating since 2015 on an alternative – an herbicide based on pelargonic acid. A manufacturer called Jade, owned by Belchim Crop

⁴⁸⁸ Bayer makes new overtures to Brussels to clear Monsanto deal. *Financial Times* [online]. 5 February 2018

[[]cit. 2018-05-05]. Available at: https://www.ft.com/content/757285aa-0a85-11e8-8eb7-42f857ea9f09. 489 Bayer offers to sell businesses to win EU approval for Monsanto deal. *Reuters* [online]. 5 February 2018 [cit. 2018-05-05]. Available at: https://uk.reuters.com/article/uk-monsanto-m-a-bayer-eu/bayer-offers-to-sellbusinesses-to-win-eu-approval-for-monsanto-deal-idUKKBN1FP2G6.

⁴⁹⁰ Bayer und Monsanto: die Saat der Gier | WDR Doku. In: Youtube [online]. 17.1.2018 [cit. 2018-05-05]. Available at: https://www.youtube.com/watch?v=PyMQ5pt5zig&index=.

491 An Updated Antitrust Review of the Bayer-Monsanto Merger. FOE [online]. 6 March 2018 [cit. 2018-05-

^{05].} Available at: http://foe.org/wp-content/uploads/2018/03/2018-FINAL-White-Paper-with-PAN-3-7-2018.pdf. p. 5.

⁴⁹² EU citizens reject Bayer-Monsanto merger, says new polling. FOE [online]. 27 February 2018 [cit. 2018-05-05]. Available at: http://www.foeeurope.org/eu-citizens-reject-bayer-monsanto-merger-new-polling-

French and Italians sense golden opportunity in glyphosate ban. *Politico* [online]. 29 November 2017 [cit. 2018-05-05]. Available at: https://www.politico.eu/article/french-and-italians-sense-golden-opportunity-inglyphosate-ban/. 494 EU Renews Glyphosate for Five Years. *USDA* [online]. Washington, 23 January 2018 [cit. 2018-05-05].

Available at:

https://gain.fas.usda.gov/Recent%20GAIN%20Publications/EU%20Renews%20Glyphosate%20for%20Five %20Years Brussels%20USEU EU-28 1-23-2018.pdf.

Protection, is based nearby Bordeaux and has an agreement with an Italian company Novamont for an exclusive distribution. The ban of glyphosate would then be, as managing director of Novamont claim, a "great opportunity" for company, as Politico reports. Whether the EU would pursue an alternative way to the glyphosate, will most likely depend on the struggle for hegemonic position between the new emerging Franco-Italian bloc of industrialists and Bayer-Monsanto company.

There is no doubt that both capitalist fractions will strive to win hearts of politicians and wider public. It seems that the maintenance of the status quo of the agrochemical giants points to the limits of neoliberalism, which seems to demonstrate moments of authoritarian neoliberalism, accentuated by the heritage of the TTIP debate. As Zimmerman and Eddens point to the limits of agrochemical giant mergers and strategies:

"Against this backdrop, what are we to make of training regimes that call upon individuals to become the kinds of subjects who deride concerns about corporate control as misguided and irrational, as in the case of The Daily Show segment, in which anti-GMO protesters denouncing Monsanto are ridiculed as 'assholes'? Or the kind who dismiss them as fear-based distractions from the real issues of 'feeding the world' and addressing climate change with biotechnology, as Saletan argues?"

The observation of Zimmermann and Eddens pretty well sums up how the rationality of the agrochemical business treats the rationality of those forces resisting deregulated neoliberal corporatism, which has brought an increasing commodification of nature and human health that interferes with the very social life of people.

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French and Italians sense golden opportunity in glyphosate ban. *Politico* [online]. 29 November 2017 [cit. 2018-05-05]. Available at: https://www.politico.eu/article/french-and-italians-sense-golden-opportunity-in-glyphosate-ban/.

⁴⁹⁶ ZIMMERMAN, Heidi and Aaron EDDENS. Governing the liberal self in a 'post-truth' era: science, class and the debate over GMOs. *Cultural Studies* [online]. 2018, , 1-22 [cit. 2018-05-03]. Available at: https://www.tandfonline.com/doi/full/10.1080/09502386.2018.1431301. p. 14.

Conclusion

TTIP should have been a game-changer – this is how it was 'sold' to the public on both sides of the Atlantic. Also, it should have been an answer for the economic crisis of 2008, a once-in-a-life-time chance, a boost for the economy and growth of jobs, as it was advertised by the proponents of the agreement especially in the EU. However, even a 'fresh start', as a transparency initiative proposed by the EC, did not help to attract voices for the deal and ongoing controversies and issues regarding transparency intensified and instigated the resistance against the deal in the EU. Paradoxically enough, although TTIP was supposed to be an answer to the crisis and the deal was 'sold' under the cloak of that crisis as a must-have deal, TTIP accentuated multiple crisis to which the CSOs and public reacted – the legitimacy crises of the EC and the EU institutions involved in transparency controversies.

The paper pointed out the key obstacles to successful conclusion of the agreement in the first chapter, which suggest that TTIP was a game-changer but in a fashion the proponents of the agreement could have barely imagined in 2013 when the first rounds of negotiation began. The representatives of large transnational enterprises along with the EC attempted to remove the remaining barriers to transatlantic trade, which would not normally have attracted much attention if TTIP was a classic agreement. However, the issues of transparency, the role of transnational enterprises in shaping the TTIP agenda, and concerns that the deal would interfere with some of the standards that the citizens of the EU were used to, triggered a pan-European mobilization of CSOs. While the CSOs were assured that high standards of the EU would not be sold, leaked documents and transparency controversies revealed the fact that CSOs and the public's concerns were legitimate. Also, the suspicion that there are asymmetries between the EU and the US was confirmed. Throughout the period between 2014 and 2016 a large number of CSOs gathered under the StopTTIP! movement, which influenced the perception of TTIP among the public and politicians of the Member State through a successful use of the social media and other media outlets. This resulted in some MS changing their position towards the agreement. For instance, a strikingly obvious change of position took place in Germany. This happened because CSOs brought to light key issues that stirred up the mobilization of forces opposing the deal – these issues concerned the ISDS clause and the lowering of standards in public health and environment. In addition, the mobilization brought to the

forefront the debate regarding the CETA agreement, which was perceived as a blueprint for TTIP. Similarly, the debates regarding precautionary principle, endocrine disrupting chemicals and glyphosate re-approval attracted much attention simultaneously during the period of TTIP rounds and found their way to the forefront once the agreement got frozen. All three debates were perceived by the proponents of the deal as a crucial obstacle for successful conclusion of TTIP.

The paper discusses these three debates as the core empirical cases in individual chapters by examining them through the four concepts of neo-marxist theoretical stream in International Relations as outlined in the theoretical framework. First, the empirical data provided evidence that precautionary principle, as an SPS measure, was a key obstacle for finishing the trade agreement since on both sides of the Atlantic the measure is used in a different fashion. As outlined, the PP became a core issue in attempts to introduce biotechnology products on the common European market in the past. Two cases of the import of hormone treated beef in the late 1980s or GMOs in the early 2000s turned into a dispute brought to the WTO Dispute Settlement Body and resulted in a loss for the European side. Particularly the past GMO debate caused a heated debate in the EU and the PP was at the core of this debate. Similarly, the role of PP was discussed in the context of the TTIP debate because predominantly the agrochemical industry strived to exert pressures on the EC to downgrade this measure, which stumbled upon resistance from CSOs concerned about the consumer and environment safety and overall 'regulatory chill.' Since the PP serves as a measure to protect consumers and the environment in cases where scientific uncertainty regarding, for instance, biotech or agrochemical products prevails, the discussion revolved around the role of science and the way that risk is perceived and constructed under increasing pressures of corporate neoliberalism. Also, the PP was an essential subject of debate in the two cases regarding EDCs and active substance glyphosate.

Second, the debate regarding EDCs demonstrated remarkable pressures of industry for extending the EC's criteria on EDCs, which should have been approved by 2013. However, it was not until 2016 that the criteria were set and this was perceived as a deliberate loophole so that the TTIP talks would not be jeopardized. In addition, the US pressure exerted on the risk-evaluation method of EDCs was reported, which would potentially allow the US food products on the EU market. Furthermore, the delay was welcomed by the agrochemical industry and lobbied for by chemical and agrochemical

associations since stricter criteria would have had an impact on their products. Nonetheless, Sweden filed lawsuit against the EC and The General Court, stating in 2015 that the EC's time-span to set the criteria was exceeded. Denmark also called for timely and proper definition of the criteria. France for a long time backed up the Nordic countries but with the newly elected government in 2017 revised its position and afterwards suspicions were raised that it had succumbed to the lobby of the industry. Overall, the EDC debate ignited an exchange of opinions and positions at many levels. A growing number of studies in recent years have stressed the negative impact of EDCs both on human health and the bee colonies in our environment. Moreover, recent studies have further stressed that the costs of human exposure to EDCs accounts for a substantial part of GDP. Nevertheless, as this paper has demonstrated, scientists and bodies pointing to the issues of EDCs and the way criteria were designed were suppressed by counter-arguments of scientists sponsored by the agrochemical industry. Also, the agrochemical business went as far as to orchestrate critique of the EU bodies or EU reports in cases which would threaten sales of their products. In addition, the EC's acting also raised suspicion as it put aside position of the Environment Directorate-General and along with the delay of the criteria in the period of TTIP rounds going, created a sense of distrust.

Third, the glyphosate saga has been significant for its controversies. It was in the wake of increased awareness of transparency issues in the TTIP debate that CSOs focused their attention on the re-approval process of the active substance used in the world's most used herbicide Roundup. What instigated a heated discussion was the IARC's statement that glyphosate is a probable carcinogen. From this point on, a heated debate engulfing scientific circles and occupying CSOs resonated in the highest political circles of the EU. In particular, the so called 'Monsanto Papers' brought the discussion to new light and demonstrated that Monsanto strived at any cost to suppress any evidence pointing to the carcinogenicity of the substance. The 'Papers' and analysis of the way that the re-licensing process initiated at German's BfR through the EU's EFSA and ECHA pointed to the limits of transparency of the involved bodies. Also, the internal communication revealed company's strategies to suppress critical voices by paying scientists and experts who would counter-attack the opponents, once again, by calling them 'scaremongers' etc. The severity of the debate attracted attention of MS as well as the left-wing in the European Parliament. Apart from that, the glyphosate saga strongly resonates also in the US. At the MS level, the debate led even to the rift among German politicians after the final vote on glyphosate relicensing in December 2017. Also, some of the MS have called for ban of the herbicide in the foreseeable future.

To sum up, the three chosen empirical debates demonstrated that corporate neoliberalism attempted to interfere with public health and the environment at certain points in the context of TTIP. This confirms that these moments potentially confirmed a 'regulatory chill'. The three chosen cases further proved that they could have set a dangerous precedent, confirming the concerns that the CSOs and public raised in the TTIP debate. As scientists and academics observed, the EDCs and Glyphosate Saga debate in particular resembled the controversies of the tobacco industry. Similar to the StopTTIP! initiative, these controversies gave rise to the Stop Glyphosate initiative and EDC Free Europe movement, which successfully attracted experts particularly from the field of toxicology. In this regard, the role of science – in neo-Gramscian terms organic versus traditional intellectuals - played a crucial role since scientists introducing new methods or criticizing the criteria thresholds collided with scientists defending the position of agrochemical industry. In addition, the merit of importance was also of utmost interest and was touched upon these debates. Therefore, the author's combination of Gramsci's notion of the role of intellectuals and Beck's description of risk society to serve as a theoretical bridge adequately explains the severity of the debate among scientists in the era of neoliberal capitalism. As the empirical evidence in the debates proved, the agrochemical business bought scientists and experts to suppress any opposition in the name of 'sound science.' As for agrochemical lobbying and grey zone practices, influencing the TTIP agenda and penetration of industry-sponsored experts pointed to the state-capital nexus premise, resembling the one in the US. Last but not least, the paper examined why the struggles among opponents of TTIP and proponents were so significant. The neo-marxist premises that the state matters and that the state is a social relation provides a solid base for description of these struggles. First, it has to be stressed that there were many struggles in the context of the TTIP debate. These occurred within and among the EU institutions and within the EU Member States as well as among them. Naturally, the struggles occurred also among the blocs of agrochemical capitalists and will most likely occur in the future if alternative agrochemicals are found. In the era of embedded neo-liberalism of the EU the (transnational) state has indeed mattered insofar as it enabled to push through the corporate agenda of TTIP. The underlying question of this paper was why the opponents of the deal were portrayed as irrational. From the many struggles at many levels, in the (transnational)

state, which is an arena of constant changes in balance of forces, the overreaching struggle appeared to be the one among the counter-hegemonic forces, i.e. those forces challenging the hegemonic position of corporate liberalism that further strived to increase the role of embedded neoliberalism of the EU through the TTIP project. The agenda of TTIP supposed to be the hegemonic project and was sold and legitimized accordingly but came across its limits and produced various contradictions. In this sense, the concept of comprehensive control of the hegemonic project met with strong resistance.

The strength of this paper lies in understanding the role of state and social forces operating within and beyond the state in the era of neoliberal capitalism. Also, the key concepts of the Amsterdam School, Bob Jessop, Nicos Poulantzas, Antonio Gramsci and Ulrich Beck and understanding of commodification provide a rich base for explanations of phenomena occurring in the context of the TTIP debate. Drawing on these concepts, this paper strived to capture key moments in the context of the TTIP debate that explained the severity of the struggles among opponents and proponents of the debate. It was not goal of this paper to explain exactly why in certain contexts various social forces acted in line with the hegemonic project or against it. To draw an example, there is not enough empirical data available for EFSA's decision to keep glyphosate on the market or its decision to ban neonicotinoids. An assumption could be that glyphosate is so widespread that an immediate ban would pose significant issues for farmers or that the pressure on the Agency from the agrochemical industry in this particular case was too strong, while in the case of neonicotinoids the collapse of bee colonies was so alarming that the EU had to act. Nonetheless, these are only assumptions and scholars will never have access to all of the data. From this point of view, the explanatory strength of the employed theoretical concepts might be perceived as a limit of this work.

To conclude, TTIP should have been an answer to the 2008 economic crisis but instead it created its own crises. As it seems, the goal of the agreement to remove barriers at the cost of public health and environment was too ambitious. The TTIP debate proved to be full of peculiarities and controversies regarding transparency from the initial rounds, which caught attention of CSOs that gradually mobilized into a pan-European movement, resembling the one from Seattle. The CSOs brought to light key issues that touched upon the issues of commodification of public health and environment. They were successful in highlighting key topics via social media and other outlets, which attracted broader base of public and politicians. Despite attempts of the EC and the transnational business to

legitimize the TTIP project, the CSOs and public posed a significant challenge for the proponents in 'selling' the deal. Consequently, as a reaction to the mobilization, the proponents resorted to as emotive a framing as the counter-hegemonic forces were accused of. The social forces opposing interference with health and the environment in the context of the TTIP debate were portrayed as scaremongers, science-deniers, anti-globalists, economic populists, etc. The concerns of counter-hegemonic forces revolving around the agreement were seen as irrational. Once the proponents felt they lost solid ground under their feet because of controversies such as document leaks, evidence of corrupted science, transparency issues or revealed revolving-doors lobbying that shaped the TTIP agenda, they deviated to authoritarian statism and started using their own argumentative rationality. Nonetheless, the resistance was strong enough to challenge the hegemonic TTIP project and prevent the EU standards in public health and the environment from being degraded and commodified. As the thesis stresses, TTIP proved to be a neo-liberal project that reached its limits and was full of contradictions and pointed to the overall crisis of neoliberal capitalism.

The EC should take TTIP as a lesson and be aware of the fact that European citizens will be alert if the future trade deals bring 'regulatory chill'. On a positive note, the EC and the EP recently brought new initiatives for more transparency of risk assessment in food safety⁴⁹⁷ and an initiative for protecting whistleblowers,⁴⁹⁸ which is a positive outcome of the struggles which seemed to worth fighting for in the context of the TTIP debate. Nevertheless, the CSOs and public should continue in advocating its positions and closely watch if these initiatives are turned into reality, especially in the context of the recent agrochemical mega-mergers where corporate pressures might be again significant. Corporate agenda simply has not stopped with the freeze of TTIP and transnational (in case of the 'Baysanto' merger Transatlantic) capital will continue in strengthening its position. Furthermore, the EC should not suppress the critical voices and see them as irrational in the future. Since, as van der Pijl and Yurchenko aptly point out: "As financial and legitimacy deficits are increasingly covered by restricting the space for articulation of

⁴⁹⁷ EU Food Safety. [Transparency of risk assessment...]. In: *Twitter* [online]. 26.4.2018 [cit. 2018-05-05]. Available at: https://twitter.com/Food EU/status/989508947295031297.

⁴⁹⁸ EC. [Whistleblowers should not have...] In: *Twitter* [online]. 29.4.2018 [cit. 2018-05-05]. Available at: https://twitter.com/EU_Commission/status/990594050234421248.

protest other than the rise of ultra-right populist and neo-fascist parties, this may well result in a growing politicisation of neoliberalism and deepening instability."⁴⁹⁹

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⁴⁹⁹ van der Pijl and Yurchenko, 2015, p. 513 – 514

Summary

Using the four concepts of neo-Marxist theory outlined in the theoretical framework, this paper analyzes the reasons why the proponents of TTIP labeled the concerned social forces opposing the agreement as irrational. The paper examines how the proponents of the deal attempted to legitimize the TTIP agenda as a hegemonic project and suppressed counter-hegemonic forces struggling against deregulation and commodification of public health and the environment.

Chapter one is devoted to the key concepts of the Amsterdam School and the State theory of Bob Jessop and Nicos Poulantzas. Furthermore, the theoretical bridge between Ulrich Beck and Antonio Gramsci explains the role of traditional and organic intellectuals and the role of risk in society. In addition, touching upon political ecology, the chapter also outlines the concept of commodification.

Chapter two focuses on identification of key social agents 'selling' the deal to the public and on which grounds the TTIP is legitimized as a hegemonic project. The chapter further aims at how controversies revolving around TTIP led to concerns and spill-overs in debates that resulted in a mobilization of counter-hegemonic forces resisting the imposed TTIP agenda.

Chapter three examined the reasons why counter-hegemonic forces were concerned about the role of the precautionary principle under the TTIP agenda. It discusses the key differences in perceiving and using the PP on both sides of the Atlantic. The chapter also outlines potential challenges for this measure in the era of neo-liberalism and debates whether the concerns raised by the deal's opponents might be legitimate.

Chapters four and five explore controversies in the EDCs debate and glyphosate debate respectively. The chapters focus on the role of social agents in science, agrochemical industry, politics and the wider public in these debates. Also, both chapters strive to map key drivers that spawned a heated debate regarding agrochemicals. Empirical cases in both chapters point to concerns raised by the counter-hegemonic forces. In particular, the chapters stress the role of revolving doors lobbying on the EU level and marginally touch upon examples of the way the science and lobby work in the US. Furthermore, both cases stress the role of the agrochemical industry in shaping scientific and political agenda and reveal how the forces opposing the hegemonic agenda of corporate neoliberalism come under pressure. As the cases testify, this is done through

corrupted science and paid media. Last but not least, the chapter devoted to glyphosate outlines a possible future scenario in the context of agrochemical mergers occurring recently that might pose a challenge for the EU.

Seen through a neo-Marxist theoretical prism, the chosen empirical cases provide an important base of phenomena that allow for detection of the key hegemonic and counter-hegemonic forces within and beyond the transnational state. This helps to answer the question whether the opponents of the neoliberal TTIP agenda were indeed irrational as echoed by the proponents of the deal. The proponents, once the opposition grew strong as a result of the controversies, strayed to authoritarian neo-liberalism as an answer to the legitimation crisis of the TTIP agenda. Therefore, TTIP proved to be a neo-liberal project that was full of contradictions and accentuated the overall crisis of neoliberal capitalism.

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List of Appendices

Appendix no. 1: Comparison of Amsterdam approach and Jessop's and Sum's cultural political economy (picture)

	Amsterdam approach	CPE
Principal concern	Improbable interscalar integration of the circuits of capital	Improbable régulation-reproduction of the capital relation as a whole
Entry-point	Integral class-theoretical analysis of rival concepts of control tied to the positions and interests of differently conceived and constructed fractions in multi-scalar circuits of capital	Integral capital-theoretical analysis starting from semiosis (accumulation strategies) and then integrating structuration (institutional and spatio- temporal fixes), or vice versa
Analytical horizon	Transnational class formation in a world market structured through a dominant CCC that reflects the interests of one capital fraction and wins support from other fractions and subalterns	Variegated capitalism in a world market organised in the shadow of a dominant variety of capitalism that shapes scope for other regional economic spaces and varieties of capitalism to engage in accumulation
Key concepts	Circuits of capital, fractions of capital, productive and money protoconcepts of control, synthetic CCCs, variations in the capital–labour relation	Form analysis of capital relation, structural contradictions and strategic dilemmas, economic and political imaginaries, accumulation strategies, state projects, and hegemonic visions
Secondary concepts	Capital–state nexus; articulation of geoeconomics and geopolitics; Lockean heartland versus Hobbesian periphery; imperialism, militarism	Institutional, spatio-temporal, and semantic fixes; institutionalised class compromise; disjunction between the world market and the world of states
Methods	 Network analysis to identify principal capital fractions in a given period Narrative strategic and policy analysis oriented to class formation Historical analysis of key events or crises that confirm or reorient hegemony of capital fraction 	 Form analysis to identify principal contradictions in a given period Analysis of institutional, spatio-temporal, and semantic fixes Variation, selection, and retention of imaginaries and/or institutional and spatio-temporal fixes
Primary agents	Rival fractions of capital, their allies, and intellectual supports oriented to imagined communities of interest	Class-relevant social forces, identified in terms of effects of pursuit of their specific projects in given conjunctures
Class struggle	Alternation of periods of bourgeois offensive (oriented to hegemony) and of bourgeois defense (resort to force)	Changing conjunctural mixes of offensive and defensive strategies, offensive and defensive tactics
Periodisation	 Interwoven temporalities, including la longue durée, long waves, short-term cycles, specific conjunctures 	 Changing articulation of continuities and discontinuities considered at different macro- micro scales
	 Historical succession of hegemonic CCCs and associated struggles plus their effects in interscalar relations 	 Strategic-relational focus on periods, phases, and steps analysed in both structural and strategic terms
Early crisis explanation	Exhaustion of an extensive or intensive accumulation regime Failure of the hegemonic CCC to maintain unity of the dominant class	Changes that undermine fixes and lead to crises of crisis management Political, ideological, and hegemonic crises in wider social formation

Source: JESSOP, Bob and Ngai-Ling SUM. Putting the 'Amsterdam School' in its Rightful Place: A Reply to Juan Ignacio Staricco's Critique of Cultural Political Economy. *New Political Economy* [online]. 2016, 22(3), 342-354 [cit. 2018-05-03]. DOI: 10.1080/13563467.2017.1286639. ISSN 1356-3467. Available at:

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