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CONTENTS

ARTICLES

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DEVELOPMENT PROSPECTS FOR TRANSIT POTENTIAL OF GEORGIA

Leila Kadagishvili[*]

The paper studies the current state and development perspectives of transit potential of Georgia. It's noted that favorability of the country's geographic location was proved after foundation of the "Baku-Supsa" and "Baku-Tbilisi-Ceyhan" pipelines. Ports and terminals of strategic importance, as well as two most important gas pipelines—North-South and Baku-Tbilisi-Erzurum pipelines, are located on the territory of Georgia. Georgian railway plays an important role in utilization of the country's transit potential. Baku-Tbilisi-Kars railway (the so called Silk Road) is the beginning of a very important, new era from the point of increasing transit capacity of Georgia and development of new businesses. Construction of a new Silk Way emphasizes transformation of Georgia into multiregional trade gateway connecting Europe, East Asia, India, Central Asia and the Middle East. Due to its strategically important location Georgia is given an opportunity to become actively involved in global integration processes and use the benefit gained from these processes to ensure high rates of economic growth and increase in the competitiveness of the country.

INTRODUCTION

Geopolitical and geo economic location, as well as its transit potential represents significant factors of the country's technological environment. Historically, Georgia is situated at the intersection of Europe and Asia, in particular, in the southwest of Caucasus. The Caucasus covers the territory between the Black, Azov and Caspian seas. The Caucasus Mountain Range divides the region into two parts: Northern and Southern, or Transcaucasus. Georgia is situated in the western part of Transcaucasus. Its territory is

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69,700 square kilometers, the general length of borders is 2,149 km, out of which 1,839 km is land and 310 km is sea border. Georgia is bordered by Azerbaijan on the east, north border with Russian Federation (Krasnodar Krai, Karachaevo-Cherkessia, Kabardino-Balkaria, North Ossetia, Ingushetia, Chechnya and Dagestan) goes along the Greater Caucasus Mountain Range at altitude up to 5,000 meters, southern border which separates Georgia from Turkey and Armenia goes along the Minor Caucasus Range and Javakheti Plateau. Greater Caucasus Mountain Range has always been a symbol of national and cultural identity. In addition, the Caucasus Mountains are the source of forest and hydroelectric resources of the country and account for an important share of its tourism potential. Western border of Georgia (between the confluence of the river Psou and Sarpi village) is represented by the coast of the Black Sea. About 40% of the total territory of the country is covered with forest. The country also has significant hydroelectric resources (which mostly meets Georgia's demand for energy). In addition, there are various types of mineral waters, some of them are recognized as international brands and represent successful businesses. At different times, manganese, silver, gold and copper were successfully extracted in Georgia[1] [2].

Georgia is part of the Caucasus, which itself is situated at the border of Europe and Asia. It's formal to say that Georgia is situated between Europe and Asia as the country makes choice in favor of Europe and "it can be said without exaggeration that the country has always been striving to be part of Europe not only geographic point of view; Unfortunately, in past centuries, due to the unilateral wish, the dream couldn't come true in Sulkhan Saba era or in 1918-1921,"[3] .On June 27, 2014 the EU and Georgia signed an Association Agreement, which will replace the "Partnership and Cooperation Agreement (PCA)" signed in 1996 and will create a new framework for cooperation between the EU and Georgia. EU-Georgia Association Agreement is an ambitious and innovative agreement, so called, the agreement of a new generation, as unlike other agreements signed before, it includes Deep and Comprehensive Free Trade Area (DCFTA)[4] and

[1] *Georgian Regional Development Programme 2015-2017*. Tbilisi, 2015. http://gov.ge/files/381_43285_728272_1215-1.pdf (last visit Apr. 20, 2016).
[2] *Natural Resources and Environment Protection in Georgia*. Statistical Publication, Tbilisi, 2015. http://www.geostat.ge/cms/site_images/_files/georgian/agriculture/Garemo_2014. pdf (last visit Apr. 20, 2016).
[3] Papava VL., *Political Economy of the Post–Communist Capitalism and Application for Georgian Economy*, at 408 (Tbilisi, 2002).
[4] Dagelishvili N., *Deep and Comprehensive Free Trade Agreement (DCFTA)—Reality or "Cooperation on the Paper?" Economics and Business N1*, at 91—98 (2013).

creates the basis for irreversible political and economic integration of Georgia.

From economic and geographic point of view, Georgia is located at the crossroads of Europe and Asia and it has always served as a bridge between the Western and Eastern civilizations. Seaside location of Georgia gives an advantage to the country compared with Azerbaijan and Armenia. Georgia connects to the Black Sea region countries through the Black Sea and to the Mediterranean countries through Bosporus and Dardanelles straits. It's possible to connect to the whole world through Gibraltar Strait and to East and Central European countries through the River Danube[5].

> Georgia has a unique location on the Eurasian continent. If you look at the map Georgia is quite small but it has a very strategic geographic location. The country has borders with very interesting countries. It is also interesting that we connect Asian part with the Black Sea region and European part and we have been doing this for hundreds of years. After the collapse of the Soviet Union, we realized our strategic role and our place in civilized world quite properly. Our role, as a connector between two global worlds, is development of transport highways and implementation of the concept called transit concept[6].

I. PECULIARITIES OF THE TRANSIT POTENTIAL OF GEORGIA

Strengthening of transit energy corridor is of great importance for Georgia due to its strategically important geographical location. Thanks to its transit and energy corridors, Georgia gained the status of the country that supports balancing of economic interests between European and Asian countries.

> A well-developed transport, energy, logistical and agricultural infrastructure is one of the most important factors capable of increasing the country's competitiveness and realizing its full transit potential. Logistics, as one of the most rapidly developing sectors of the modern world, would enable Georgia to make maximum use of its transit and trade potential. Correspondingly, state policy will be directed towards developing this sector, including through the development of infrastructure, attracting investments to the sector and integrating the country with international and regional transport systems[7].

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[5] https://sites.google.com/a/iliauni.edu.ge/turizmi-sakartveloshi1/ekonomikur-geograpiuli-da-geopolitikuri-mdebareobis-mnishvneloba (last visit Apr. 23, 2016).

[6] Margvelashvili G., (29. X. 2015), speech delivered at U.S. Foreign Relations Council during his visit to the US. http://www.interpressnews.ge/ge/politika/347479-giorgi-margvelashvili-saqarthvelo-sakmaod-pataraa-magram-dzalian-strategiuli-geografiuli-mdebareoba-aqvs.html?ar=A (last visit Mar. 23, 2016).

[7] *Government of Georgia, Social-economic Development Strategy "Georgia 2020"*. http://static.mrdi.gov.ge/55101c4b0cf24147438b1700.pdf (last visit Apr. 25, 2016).

Implementation of large-scale regional projects (transnational projects in the fields of energy and transportation), in which Georgia is involved, is an important factor for creating new jobs and strengthening competitiveness of the country. Construction of highways and development of infrastructure in the country resulted in higher rates of economic growth. Favorability of geographic location of Georgia proved and increased with the construction of Baku-Supsa and Baku-Tbilisi-Jeihan pipelines. Due to these pipelines Georgia "gains a very important international economic function… The pipeline is the 'touchstone' for Georgia to attract attention of strategic investors" [8].

The Western Route Export Pipeline (WREP) also known as the Baku-Supsa pipeline is the first investment by International Oil Consortium in Georgia. Through that pipeline the crude oil from the Chiragi oil deposit of the Caspian Sea goes through Sangachal terminal to the Supsa terminal on the Georgian Black Sea coast[9].

The intergovernmental agreement on the construction of the pipeline was signed between Georgia, Azerbaijan and Turkey in 1999 at the OSCE Istanbul Summit. Baku-Tbilisi-Ceyhan (BTC) pipeline is the first and shortest route to transport oil between the Caspian and the Mediterranean Seas. The full length of this one of the longest pipelines in the world is 1,768 km: 443 km stretches through Azerbaijan, 249 km through Georgia and 1,076 km through Turkey. BTC transports oil from Azeri-Chirag-Guneshli deposit to Mediterranean (Ceyhan) port in Turkey. This is the world's second longest pipeline. The longest one is Druzhba pipeline, which transports oil from Russia to Central Europe[10].

Besides the above geo economically strategic and important pipelines, there are two more very important gas pipelines in Georgia—North-South and Baku-Tbilisi-Erzurum pipelines. The North-South gas pipeline was built in the second half of the 20th century and it carries Russian gas to Georgia and Armenia. Georgian section of the pipeline is 221 km[11].

South Caucasus gas pipeline (SCP), or the same as Shah Deniz gas pipeline was constructed to transport natural gas from Shah Deniz and other deposits of the Caspian Sea to Turkey and then from Turkey to European markets. Construction of SCP was ended in 2006. Georgia got gas from that

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[8] Papava VL., *Political Economy of the Post–Communist Capitalism and Application for Georgian Economy*, at 415 (Tbilisi 2002).

[9] *Natural Resources and Environment Protection in Georgia*. Statistical Publication, Tbilisi, 2015. http://www.geostat.ge/cms/site_images/_files/georgian/agriculture/Garemo_2014.pdf (last visit Apr. 20, 2016).

[10] http://www.gogc.ge/ge/projects (last visit Apr. 25, 2016).

[11] *Ibid.*

pipeline in 2007. According to the agreement on the pipeline project Georgia is not only a transit country but also a consumer country of natural gas[12]. Georgia has option to purchase 5% of the gas transported from Azerbaijan to Turkey at a preferred price. In addition, Georgia will buy additional amount of gas (half a billion cubic meters of gas per year) from the investors of the project at a special price during the first 20 years of the project functioning. In future, it's envisaged to connect the pipeline with Turkmen and Kazakh producers. 5 million tons of oil will be transported through Baku-Supsa pipeline per year, 50 million tons of oil through Baku-Tbilisi-Jeihan pipeline per year and 30 billion cubic meters of gas through South Caucasus Pipeline (SCP) per year. On the territory of Georgia the project is managed by BP, the largest shareholder of the Consortium. BP is one of the largest investors in Georgia having invested over 1.5 billion USD in infrastructural and social development projects.

In 2009-2010, an agreement was achieved at the negotiations held in the framework of the South corridor with the purpose to develop a new route for transporting gas. The agreement envisaged realization of AGRI—Azerbaijan-Georgia-Romania-Interconnector project, which was designed to transport natural gas (liquefied form) to Romania and then to the European market through Georgia and the Black Sea. AGRI responds to some of the challenges in Europe, such as energy diversification and designing alternative routes for the gas suppliers and it has international support[13]. New energy corridors are opened through Georgia not only due to the increase of export of oil in the Caspian Sea region, but also due to the wish of Kazakhstan and Azerbaijan to diversify flows of oil and be less dependent on Russian direction.

Full utilization of its transit capacity will be beneficial for Georgia both from political and economic point of view. Georgian railway plays an important role in utilization of transit potential. Rail transport has the history of almost 140 years in Georgia. Georgian railway with its developed infrastructure is a determining factor for successful functioning of Europe-Caucasus-Asia transit corridor. Baku-Tbilisi-Kars railway (the so called Silk Road) is the beginning of a very important, new era from the point of increasing transit capacity of Georgia and development of new businesses.

"Construction of a new Silk Way emphasizes transformation of Georgia into multiregional trade gateway connecting Europe, East Asia, India, Central Asia and the Middle East. Due to Georgia, billions of consumers in Asia and Europe will be easily accessible for both companies

[12] *Ibid.*
[13] http://www.gogc.ge/ge/projects (last visit Apr. 25, 2016).

and individuals and Asian goods and energy resources will reach European countries much faster when they are transported through Georgia." The "Silk Road" connects the countries with the short land route through Georgia. Geographic location of Georgia definitely helps "the country to become a regional hub"[14].

Roads and motorways are one the most important determinants of the current state and development perspectives of the transit potential of Georgia. The length of the roads of common use is 6,901 km in Georgia. The full length of the roads for transit purpose of international importance is 1,603 km and the length of secondary roads is 5,298 km. On average, transit through Georgia amounts is nearly 24.5 million tons of goods and 257 million passengers per year. Road transportation accounts for a large share (about 59.9%) of total transit goods[15].

The Asian Development Bank (ADB) supports development of the national transport policy of Georgia and corresponding action plan, which will contribute to increasing the effectiveness of transportation sector and improving competitiveness, attracting additional investments, development of multi-modal transportation, integration of transport systems of Georgia with the international ones, raising the level of safety and service, making full use of transit potential. The World Bank launched a project, which envisages development of logistics and transportation of goods, as well as development of multi-modal freight corridors and investment projects for green logistics[16].

Georgian aviation plays an important role in transit potential of Georgia. In 1994 Georgia became full member of International Civil Aviation Organization. Network of airports in Georgia is comprised of three international (Tbilisi, Batumi, Kutaisi) and three local (Mestia, Natakhtari, Telavi) airports. Due to the increase in tourist flows to Georgia, the number of passengers using international airports of Georgia also increased. In 2014 Georgian airports provided service for 2,008,171 passengers, which is 9.51% (174,364 passengers) higher compared with 2013. The number of passengers increased in all the three international airports of Georgia in 2014. 1,575,386 passengers passed through Tbilisi international airport in

[14] Gharibashvili, I., *Georgia Should Be Transformed to Multiregional Trade Gateway*, (15. X. 2015). http://bfm.ge/ekonomika/abreshumis-gza-akhali-shesadzleblobebi-da-realuri-perspeqtiva/ (last visit Apr. 24, 2016).

[15] http://www.georoad.ge/?lang=geo&act=pages&func=menu&pid=1386667041 (last visit Apr. 22, 2016).

[16] Kvirikashvili G., Meeting with the Diplomatic Representatives of Georgia Abroad—Ambassadorial, (Tbilisi, Sep. 3, 2015) http://www.economy.ge/uploads/news/2015/ambasadoriali/ministris_sitkva-ambasadoriali.pdf (last visit Apr. 24, 2016).

2014. The number is 9.7% (139,340 passengers) higher compared to the correspondent figure of the previous year. Just like the number of passengers, the volume of goods transported by air transport of Georgia in 2014 also increased. 19,659.075 tons of goods was transported in 2014, which is 2.8% higher compared with the corresponding figure (19,122.955) of 2013. Tbilisi international airport accounts for large share of the goods transportation [17]. In 2014 transportation of passengers on the aviation market of Georgia was carried out by three Georgian (Georgian Airways, Vista Georgia, Air Caucasus) and 32 foreign airline companies. During the last year, the following foreign companies began to carry out regular flights from Georgia: "Air Arabia", "YANAIR", "Dniproavia", "Air Cairo". Since September 27, 2014 regular flights between Georgia and Russia began to be carried out again. Flights between Tbilisi and Moscow are made by Georgian Airways from Georgian side and by S7 Siberia, Transaero and Aeroflot from Russian side[18]. Georgian airports are well connected with different countries through transit flights. However, one of the main priorities of the country is developing direct flights in the direction of Italy, Germany, France, Romania, Bulgaria, Slovakia, China, India and Japan. This will support development of tourism and have positive impact on the development of economic relations between the countries.

Georgian ports and terminals of strategic importance, such as Batumi, Poti and Kulevi are directly connected with the railway lines in Azerbaijan, Ukraine, Russia and Bulgaria. The history of Batumi sea port is practically the history of formation of Caucasus logistics center, which determined the role of Georgia, as a transit country. The Batumi Sea Port is an important part of Europe-Caucasus-Asia corridor, which begins in Europe and connects the region with the Caspian Sea region countries (Azerbaijan, Kazakhstan, Turkmenistan, etc) through Bulgaria, Romania, Ukraine and then the Black Sea. The key factor in the development of the port has always been the oil of the Caspian Sea[19]. Oil is delivered to Batumi oil terminal through Georgian railway with tank wagons, which are emptied on the modern railway platforms.

Construction of Kulevi port, LTD Black Sea Terminal, began in 2000. In January of 2007 the terminal was purchased by the State Oil Company of Azerbaijan Republic (SOCAR). The company has invested about 400 million dollars in the economy of Georgia so far. Kulevi oil terminal opened on May 16, 2008. Capacity of the terminal is 10 million tons of oil per year.

[17] http://www.gcaa.ge/geo/annualreport.php (last visit Apr. 22, 2016).
[18] http://www.gcaa.ge/geo/annualreport.php (last visit Apr. 22, 2016).
[19] http://forbes.ge/news/188/saqarTvelos-portebi (last visit Apr. 22, 2016).

Due to the new complex for propylene shipment launched at Kulevi terminal in 2012, it became possible to ship chemical products through Kulevi terminal as well[20].

Port of Poti is a connecting link when shipping goods from Turkey, Middle East and Europe to the Central Asian countries and Afghanistan. 80% of shares of the port of Poti are held by APM Terminals, subsidiary of Danish giant company, AP Moller-Maersk Grup. The port of Poti carries out shipment in three main areas: 1. Shipment to Azerbaijan and Russia from the border line, Samur-Yalama; 2. Shipment to Turkmenistan, Afghanistan, Tajikistan, Uzbekistan; Baku-Turkmenbashi by ferry; 3. Shipment to Kazakhstan, Uzbekistan and Kyrgyzstan-Baku-Aktau by ferry[21].

Development of port infrastructure is one of the priorities for Georgia. For this purpose, construction of deep-water port in Anaklia is of special importance. The government of Georgia has already called for investors to express interest in this project. The port will be built in several stages and finally its capacity will be 100 million tons of goods. Construction of new port in Anaklia will contribute to attracting new investments, creation of hundreds of new jobs, development of logistic service centers nearby the port and full realization of the country's transit potential. In 2014, container shipments through sea ports increased significantly (by 11%) compared with 2013[22].

In 2013 Marmaray tunnel was opened under Bosphorus, which connects Europe with Asia through Bosphorus Strait. It's notable that "close cooperation of Georgia with Turkey, which grants priority to its ships to go through Bosphorus Strait, will enable Georgia to use full capacity of its oil terminals and become a mediator of the movement of other countries' tankers in the Black Sea and their sailing in offshore waters"[23].

CONCLUSION

Thus, geo economical role of independent Georgia, as a significant important transit artery linking East and West, North and South becomes even more important under globalization. Due to its geopolitical location, Georgia turned out to be in the area of strategic interests of the US, EU,

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[20] *Ibid*.
[21] *Ibid.*
[22] Kvirikashvili G., Meeting with the Diplomatic Representatives of Georgia Abroad—Ambassadorial, (Tbilisi, Sep. 3, 2015) http://www.economy.ge/uploads/news/2015/ambasadoriali/ministris_sitkva-ambasadoriali.pdf (last visit Apr. 24, 2016).
[23] A. Tvalchrelidze, A. Silagadze, G. Qeshelashvili, D. Gegia, *Georgian Social-Economic Development Programme*, at 287 (Tbilisi, 2011).

Russia, Turkey, Iran and China. As a result, developed countries have begun to actively cooperate with Georgia with the purpose of utilization of their predominant geopolitical and geo economical importance. Georgia is developing multilateral relations directed to global integration and the transit potential is one of the main preconditions of achieving competitiveness in these processes. "The country has good opportunities for economic prosperity and rapid growth. The main task in this regard is to avoid threats by careful maneuvering and suggest mutually beneficial economic projects based on equal partnership to the international community. All this makes it possible to introduce economic, social, political, legal and other kinds of achievements of the West adapted with national values in Georgia, which is a prerequisite for maintaining Georgian national identity and successful development of the country"[24]. Georgia is a full member of the United Nations, the Council of Europe, GUAM and its main geopolitical task is to integrate into the European Union and NATO. Due to its strategically important location Georgia is given an opportunity to become actively involved in global integration processes and use the benefit gained from these processes to ensure high rates of economic growth and increase in the competitiveness of the country.

[24] Kadagishvili L, *Economic Integration and the New Challenges of Georgia*, at 116 (Zeszyty Naukowe, Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach, Nr 107, Seria: Administracja I Zarządzanie, Siedlce (34), 2015).

TRANSATLANTIC COOPERATION REGARDING CHINA

Zdzisław W. Puślecki[*]

In this research work, author focus on the analysis of the transatlantic cooperation regarding China P. R. In the recently launched Transatlantic Trade and Investment Partnership (TTIP) negotiations between the USA and the European Union, it has been emphasized that the talks will make reducing regulatory barriers a signature issue. The emphasis on tackling these barriers has generated some excitement, with large figures being offered as estimates of the resulting economic gains. New agreements to remove trade barriers aim at reducing dead-weight costs and at increasing net social gains from international trade. This article examines the problem of regulatory barriers and offers an assessment of what can be achieved. Ideally, the best way to address problems arising from regulatory divergence would be on a multilateral basis also with taking into account the relations among EU and USA with China. The main aim of the paper is to present important problems of transatlantic cooperation regarding China. The particularly objective of the research task are the regulatory trade barriers in USA-EU foreign trade policy, the nature and the promoters of the Transatlantic Trade and Investment Partnership (TTIP), interrelationship between regulatory standards and international cooperation in the TTIP, TTIP impact for China.

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INTRODUCTION

The United States of America (USA) and European Union (EU) combined account for over 45% of the world GDP in nominal value and 38% in terms of purchasing power parity. Foreign direct investment is intense between the two regions and more than a third of the trade consists of intra-company trade, between subsidiaries of companies established both in the EU and in the United States (US).

The US and the EU are heavily invested in each other's market, with nearly $3.7 trillion in two-way foreign direct investment at year-end 2011. Meanwhile, US-EU trade in goods and services totals about $1 trillion annually. However, trade growth has been sluggish in recent years because of the effects of the financial crisis of 2008-2009 and competing subsidy and regulatory policies that impede commercial activity. A new trade accord would remove impediments to bilateral trade and investment. While it would not be a magic potion for prosperity, such reforms would improve the climate for investment and job creation and provide a modest boost to economic growth, since removing even relatively low barriers across a large volume of bilateral trade can have a significant impact.

New agreements to remove trade barriers aim at reducing dead-weight costs and at increasing net social gains from international trade. The World Trade Organization (WTO) was established with the mandate to lower trade barriers among its 159 member countries through rounds of trade negotiations. The WTO's principle of "Most-favoured nation" states that preferred treatment of one country must be extended to all other members of the WTO. However exceptions to this principle are frequent due to the complexity of multilateral negotiation. There are hundreds of regional free trade agreements, sometimes called preferential trade agreements as a reminder that third countries are excluded from the free trade gains.

The project of trade agreement between the US and the EU, at first also known as the Transatlantic Free Trade Area and after the Transatlantic Trade and Investment Partnership began with the 1995 Madrid Agreement on a Transatlantic Agenda, followed by various resolutions and negotiations by and between the US and the EU. In a recent report, the EU-US "high

level working group on jobs and growth"[1] analyses a range of options far beyond simple tariff removal, including: Elimination of non-tariff barriers to trade in goods, services and investment, enhanced compatibility of regulations and standards and improved cooperation to achieve shared economic goals.

On July 8, 2013, the United States and the European Union launched negotiations on a Transatlantic Trade and Investment Partnership (TTIP). The negotiators aim to deepen what is already the world's largest commercial relationship, thereby "promoting greater growth and supporting more jobs", and to look beyond this particular accord "to contribute to the development of global rules that can strengthen the multilateral trading system." Beyond the important news that the world's two largest economies would be negotiating to liberalize trade, there was also a significant development in terms of the substance of the proposed talks. While past trade negotiations have dealt with domestic regulation as trade barriers in only narrow and limited ways, these talks would make reducing regulatory barriers a signature issue.

Traditional trade barriers, such as tariffs, are relatively low between the two economies, and regulatory barriers are an area that offers great potential economic gain. One widely cited 2009 study suggests some substantial benefits from addressing "non-tariff measures", including regulatory divergence issues, within the context of US-EU trade. After noting that the "total elimination" of such barriers would amount to a 2.5-3.0% increase in GDP, the study then tried to identify those barriers that are "actionable", that is, ones that could realistically be eliminated. Doing so, the report said, would boost EU GDP by 0.7% per year, leading to an annual potential gain of $158 billion in 2008 dollars; And it would boost US GDP by 0.3%, or $53 billion per year.

Different regulations across countries in the same policy area raise costs for businesses and consumers, often without justification. Addressing these differences provides clear gains for efficiency, and benefits for all. Some of the more challenging regulatory issues, where there are strong policy disagreements between the USA and EU, may need to be taken off the table. Furthermore, it is unlikely there will be success with broader regulatory reform efforts. Domestic efforts to achieve such reforms have had some success, but a global regime for regulating domestic regulation would be difficult to achieve and might not be desirable. Negotiators should go after the low-hanging fruit, and be responsive to the needs of industry

[1] Department of Commerce, US-Mexico High Level Regulatory Cooperation Council, http://trade.gov/hlrcc/ (last visited Nov. 15, 2013).

and consumers by focusing their attention on issue areas where they can have the greatest impact[2].

Currently, issues related to regulatory trade barriers are addressed in a number of forums, including the World Trade Organization and the ongoing Trans-Pacific Partnership (TPP) negotiations. Nonetheless, because of the emphasis being placed on this issue in the TTIP, this may be the best forum to push the issue forward. If done right, the TTIP could serve as a starting point for broader engagement on reducing the costly burden of regulatory divergence on international trade[3]. It must be underlined that, the ideal route for the reduction of regulatory divergence would be through a multilateral effort involving various actors from both government agencies and the private sector.

I. MATERIALS AND METHODS

Methodologically inclusive account breaks the transatlantic cooperation regarding China. The article sets out in general terms the importance of regulatory trade barriers, focusing on US-EU trade. It attempts to make the issues more concrete, by discussing a number of real world examples of such barriers. It then talks about how international regulatory cooperation can address these issues in the abstract, before considering previous efforts undertaken in trade agreements. The article offers examples of successful regulatory cooperation efforts in the hope that it will shed light on possible approaches to addressing regulatory divergences. The article suggests that such an approach may be best for the TTIP, and could eventually be multilateralized. The negotiations on a Transatlantic Trade and Investment Partnership are observed by various countries also by China P. R. The general theoretical approach will be of broad interest to economists interested in international questions especially transatlantic cooperation regarding China as well as to political scientists. The main method applied in this research was a method of scientific study. It was used the comparative method, the documentation method and statistical methods. Additionally, it used also, the methods of deductive and inductive forecasting.

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[2] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).
[3] *Ibid*.

II. DISCUSSION

A. The Regulatory Trade Barriers in USA-EU Foreign Trade Policy

The idea of transatlantic regulatory cooperation has been around for many years. Previous attempts, on the whole, have been relatively ad hoc and piecemeal, focused more on fostering dialogue than actually solving regulatory discrepancies. The Trans-Atlantic Business Dialogue, established in 1995, brought together business interests on both sides of the Atlantic, in the hopes of developing strong public—private partnerships to allow products certified in one place to be accepted by the other. It was founded to deal with a major problem identified by its members, that is, competitiveness is hampered on both sides by excessive regulation and by differences between the EU and USA regulatory systems[4]. The organization, now the Trans-Atlantic Business Council, had some early success with mutual recognition agreements in areas such as telecommunications equipment, some medical devices, and other limited product areas[5]. However, the efforts seem to have lost momentum in recent years. Other efforts, such as the USA-EU High Level Regulatory Cooperation Forum, have also produced limited results of a substantive nature, though it has encouraged an ongoing dialogue of the issues.

At this stage, though, little information is available on what specific issues will be addressed or how liberalization in this area will be accomplished in the context of the TTIP. A brief explanation is included in the report of the US-EU High Level Working Group (HLWG), which was established in November 2011 by the US and EU political leaders to identify options for strengthening the US-EU trade and investment relationship—that provides a framework for the talks[6]. In addition to the agenda proposed by the HLWG, the negotiators have committed themselves to find new rules on issue of global concern such as protection of intellectual property and treatment of products and services provides by state-owned enterprises[7].

First, the report suggests expanding on the existing technical barriers to

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[4] M. EGAN, CONSTRUCTING A EUROPEAN MARKET 256 (New York: Oxford University Press, 2003).
[5] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).
[6] Final Report, High Level Working Group on Jobs and Growth (Feb. 11, 2013), http://www.ustr.gov/.
[7] Ries Ch., *The Strategic Significance of TTIP* in THE GEOPOLITICS OF TTIP REPOSITIONING THE TRANSATLANTIC RELATIONSHIP FOR CHANGING WORLD (D. S. Hamilton ed., Centre for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, John Hopkins University, Washington DC. 2014)

trade (TBT) [8] (Agreement on Technical..., 1994) and sanitary and phytosanitary measures (SPS) [9] (Agreement on the Application..., 1994) rules of the WTO, by creating "TBT-plus" and "SPS-plus" chapters[10]. Part of this would involve substantive obligations, and part would involve new procedures. Through the substantive obligations, the parties would be bringing issues of regulatory protectionism into the TTIP. Regulatory protectionism is an important concern [11], and putting constraints on protectionist domestic regulations is one of the core goals of international trade rules. It is not clear how existing WTO rules-either the TBT or SPS agreements, or even more general rules such as the GATT or the GATS-are insufficient in this area. These rules draw a delicate balance between imposing international disciplines on trade measures and respecting national autonomy[12].

It must be emphasized that during the period October 15, 2012 to May 15, 2013 WTO Members submitted 858 regular Technical Barriers to Trade (TBT) notifications; 80% of these notifications were submitted by developing country Members (including Commonwealth of Independent States (CIS) Members, with 34 notifications, and LDC Members, with 40 notifications). The largest number of notifications received during the reviewed period came from the Kingdom of Saudi Arabia (118 notifications). Other significant notifying Members were the United States (66), Israel (54), Kenya (46), China (43), and the European Union (40)[13].

With respect to the stated objectives indicated in the regular notifications submitted, the overwhelming majority (more than 80%) related either to the protection of human health or safely (564) or to the protection of the environment (134). Other relevant stated objectives included: Consumer information and labelling (52) and prevention of deceptive practices and consumer protection (36)[14].

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[8] Agreement on Technical Barriers to Trade, Apr. 15, 1994, WTO Agreement, Annex 1A, Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts, at 138.
[9] Agreement on the Application of Sanitary and Phytosanitary Measures, Apr. 15, 1994, WTO Agreement, Annex 1A, Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts, at 69.
[10] Final Report, op.cit.
[11] Watson K. W. and James S., *Regulatory Protectionism: A Hidden Threat to Free Trade*, POLICY ANALYSIS, Apr. 9, 2013, at 723. *Available at* http://www.cato.org/publications/policy-analysis/regulatory-protectionism-hidden-threat-free-trade (last visited Nov. 15, 2013).
[12] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).
[13] WT/TPR/OV/W/7, *Trade Policy Review Body*, REPORT TO THE TPRB FROM THE DIRECTOR-GENERAL ON TRADE—RELATED DEVELOPMENT (Mid-October 2012 to mid-May 2013). July 5, 2013 (13-3559), at 1/72.
[14] *Ibid*.

Specific trade concerns (STCs) with respect to TBT measures taken by Members can be raised at any of the three regular meetings of the TBT Committee each year; 21 new STCs were raised during the two Committee meetings that fell during the reviewed period (the November 2012 and March 2013 meetings) (Chart 1).

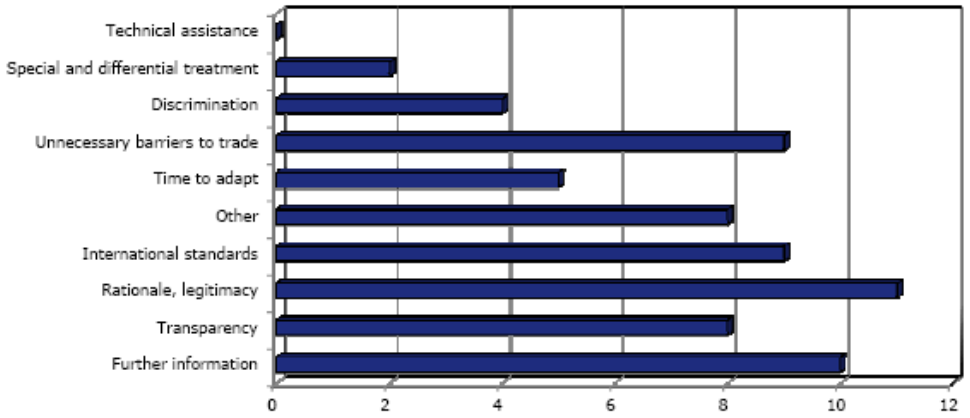
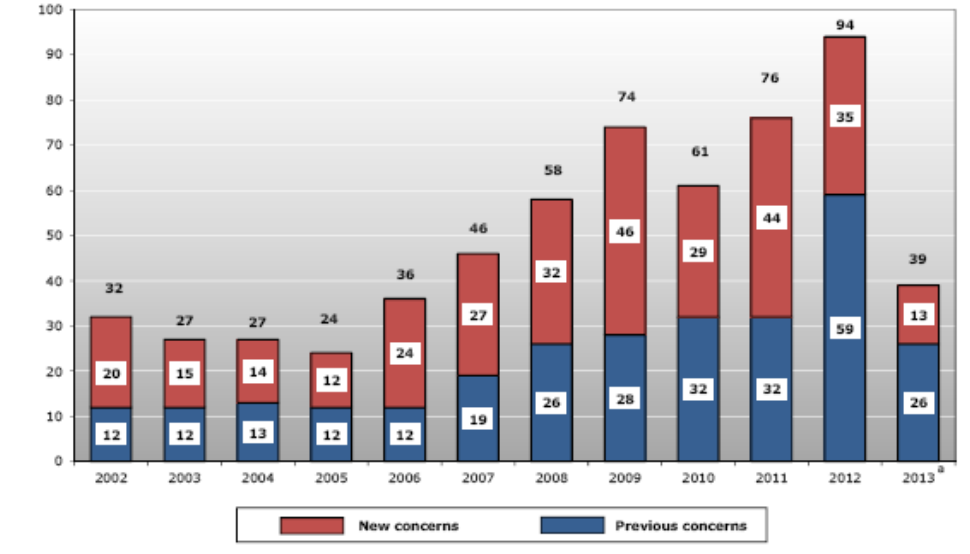


Chart 1 Issues Raised in New TBT Specific Concerns*.

From October 15, 2012 to May 15, 2013 (covering November 2012 and March 2013 TBT meetings). Source: WTO Secretariat., WT/TPR/OV/W/7 5 July 2013 (13-3559) Page: 1/72 Trade Policy Review Body, REPORT TO THE TPRB FROM THE DIRECTOR-GENERAL ON TRADE-RELATED DEVELOPMENTS *(Mid-October 2012 to mid-May 2013).*



a. Data for 2013 includes only those STCs raised at the TBT Committee meeting of the year (held in March 2013).

Chart 2 Number of TBT Specific Trade Concerns Raised Per Year.

Source: WTO Secretariat., WT/TPR/OV/W/7 5 July 2013 (13-3559) Page: 1/72 Trade Policy Review Body, REPORT TO THE TPRB FROM THE DIRECTOR-GENERAL ON TRADE-RELATED DEVELOPMENTS *(Mid-October 2012 to mid-May 2013).*

It is important underline that since 1995, and up to May 15, 2013, Members have raised 376 STCs in the TBT Committee. The number of STCs raised and discussed in the Committee has grown over the last five years (Chart 2). Although in 2012 Members raised fewer new STCs as compared to 2011, the total number of STCs discussed in the TBT Committee continue to mark an upward trend[15].

In the period from October 2012 through March 2013, 613 sanitary and phytosanitary measures (SPS) notifications (regular and emergency) were submitted to the WTO. Notifications from developing-country Members accounted for 66% of the total number. In the previous six-month period, the total number of notifications was higher and the proportion of measures notified by developing-country Members lower: From April through September 2012, a total of 696 notifications (regular and emergency) were submitted, of which 54% were by developing-country Members.

The number of notifications of emergency measures also dropped compared with the previous period (Chart 3). The share of emergency notifications submitted by developing-country Members was broadly similar to that of the previous period. From October 2012 through March 2013, 79% of the 39 notifications of emergency measures were submitted by developing-country Members. For the previous period (April-September 2012), 81% of the 58 emergency notifications were submitted by developing-country Members. This high proportion of emergency measures notified by developing-country Members might stem from the fact that they do not have extensive SPS regulatory systems as developed-country Members do, and consequently, when facing emergency challenges, they are more likely to have to introduce new regulations or change existing ones[16].

It is important underline that many Members are following the recommendation to notify SPS measures even when these are based on a relevant international standard, as this substantially increases transparency regarding SPS measures. Of the 409 regular notifications (excluding addenda) submitted from October 2012 to March 2013, 215 (53% of the total) indicated that an international standard, guideline or recommendation was applicable to the notified measure (Chart 4). Of these, 80% indicated that the proposed measure was in conformity with the existing international standard.

[15] *Ibid*.
[16] *Ibid*.

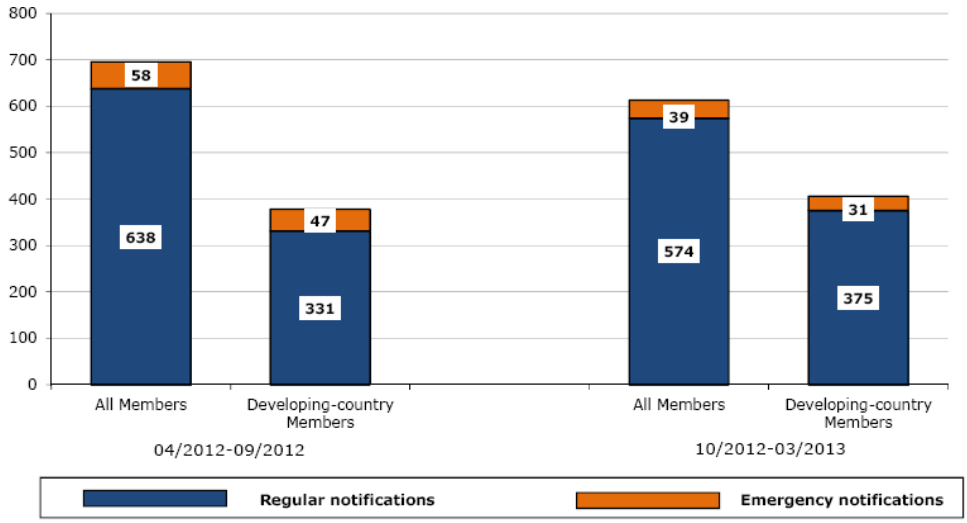


Chart 3 Number of SPS Notification.

Source: WTO Secretariat., WT/TPR/OV/W/7 5 July 2013 (13-3559) Page: 1/72 Trade Policy Review Body REPORT TO THE TPRB FROM THE DIRECTOR-GENERAL ON TRADE-RELATED DEVELOPMENTS *(Mid-October 2012 to mid-May 2013).*

International standards often provide useful guidance regarding measures to address disease outbreaks and other emergency situations. Indeed, 83% of the 30 emergency notifications (excluding addenda) submitted from October 2012 to March 2013 indicated that an international standard, guideline or recommendation was applicable to the notified measure (Chart 4). Of these, 96% indicated that the measure was in conformity with the existing international standard. Of the 574 regular notifications submitted from October 2012 to March 2013, the majority were related to food safety and the protection of humans from animal diseases or plant pests[17]. The objective of an SPS measure falls under one or more of the following categories: (1) Food safety, (2) animal health, (3) plant protection, (4) protect humans from animal/plant pest or disease, and (5) protect territory from other damages from pests. Members are required to identify the purpose of the measure in their notifications. It is not uncommon for more than one objective to be identified for a measure. The remaining notifications related to plant protection, animal health and to the protection of the Member's territory from other damage from pests. Several of the regular notifications identified more than one objective per measure.

It must be emphasized that of the 39 emergency measures notified in the same period, the majority related to animal health, followed by measures

[17] *Ibid.*

related to plant protection, the protection of humans from animal diseases or plant pests, food safety, and protection of the Member's territory from other damage from pests. Similarly, the majority of emergency notifications during this period identified more than one objective per measure (Chart 5).

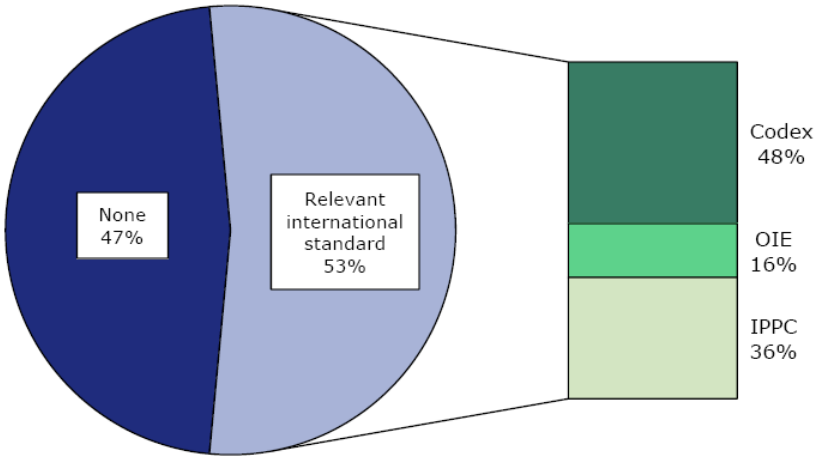


Chart 4 Regular SPS Notification and International Standards.
Source: WTO Secretariat., WT/TPR/OV/W/7 5 July 2013 (13-3559) Page: 1/72 Trade Policy Review Body REPORT TO THE TPRB FROM THE DIRECTOR-GENERAL ON TRADE-RELATED DEVELOPMENTS *(Mid-October 2012 to mid-May 2013).*

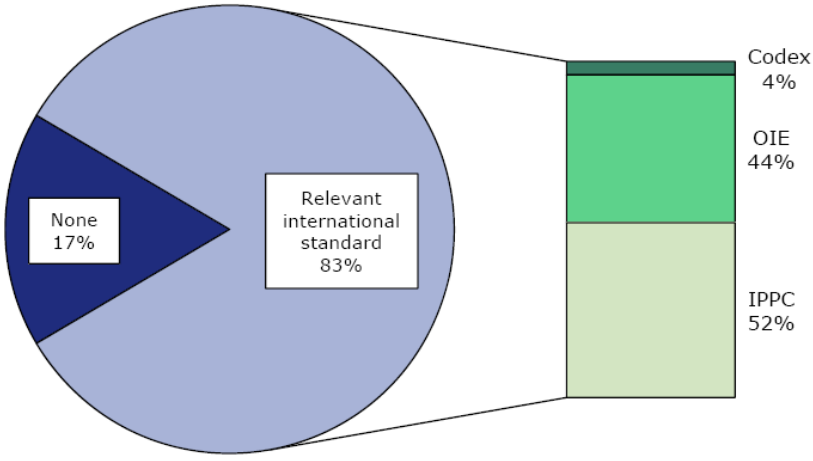


Chart 5 Emergency SPS Notification and International Standards.
Source: WTO Secretariat., WT/TPR/OV/W/7 5 July 2013 (13-3559) Page: 1/72 Trade Policy Review Body REPORT TO THE TPRB FROM THE DIRECTOR-GENERAL ON TRADE-RELATED DEVELOPMENTS *(Mid-October 2012 to mid-May 2013).*

While there is no formal provision for "counter notification", concerns regarding the failure to notify an SPS measure, or regarding a notified measure can be raised as a specific trade concern (STCs) at any of the three regular meetings of the SPS Committee each year. In the two Committee meetings of October 2012 and March 2013, 14 new trade concerns were raised. Four of these STCs related to food safety, six to animal health, three to plant health, and one to other concerns.

The goal of trade agreements should be putting limits on protectionist policies, without impeding governments from fulfilling their responsibilities. There is an extensive jurisprudence at the WTO that applies and elaborates the rules with this balance in mind. Upsetting the current balance could be problematic. Sensitive issues such as the EU's treatment of genetically modified foods and hormone treated meat are difficult and have not been fully resolved at the WTO[18], and suggestions that new TTIP rules will help should be looked at with some skepticism.

In the negotiations for a TPP, there has been an effort to expand the US regulatory model to other trading partners. Whether regulatory effectiveness can be achieved anywhere is unclear; Even domestic reforms along these lines are quite difficult. But trying to reconcile differences between two mature regulatory models like the USA and EU will be a particular challenge. Both sides have spent decades developing their regulatory processes, and convergence will not be easy.

Finally, the report talks about regulatory differences[19]. Regulatory differences (or "divergence") exist when government agencies in different countries have varying regulatory requirements or processes in the same policy area. Such differences result in higher costs for businesses in a number of ways. First, companies have to comply with multiple certification and testing requirements or approval processes in order to get a product approved for sale, which takes time and money. And second, the different regulations may result in the costly need for additional production processes in order for the product to meet the different standards of each market[20].

It must be emphasized that regulatory divergence across countries can arise for a number of reasons. For one thing, policy objectives may vary. If countries are trying to achieve different goals, their regulations are unlikely to correspond. But even where policy objectives are similar, regulating

[18] Proposed Agenda, WT/ DSB/W/513, (Sep. 23, 2013).
[19] Final Report, op.cit.
[20] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).

through an isolated process, in which national agencies make decisions without thinking about what their foreign counterparts are doing, can lead to differences in regulation[21].

The impact will vary depending on the nature of the divergence. It may be that, due to different regulatory requirements, two markets end up somewhat isolated, with products made in each essentially restricted to the domestic market. Alternatively, one market might have regulations that are more flexible, and thus products are excluded only from the market with stricter regulations[22]. It must be important underline that there is a separate approval process in each market, which means that while products can be sold in both markets, there is an added cost from going through multiple regulatory reviews.

B. The Nature and the Promoters of the Transatlantic Trade and Investment Partnership

Examining the nature of the US-EU trading relationship, it is not hard to see why regulatory issues are of such high importance. A large portion of USA trade with the EU is intra-industry and intra-firm, which means the TTIP is likely to bring about changes within existing value chains rather than relocation of whole industries[23]. The major barriers to trade and investment, then, go beyond tariffs, and also include bureaucratic red-tape caused by incompatible rules and regulations that impede and slow down the free movement of goods and services[24].

It is very important to understand the nature of the projected gains. The magnitude and the range of the total impact of the TTIP on GDP were taken from Felbermayr et al. (2013a) who give estimates for the United States, the 27 countries of the European Union, and 98 countries of the rest of the world[25]. With their macro general equilibrium model, Felbermayr et al. (2013a) consider two scenarios[26]. A "low impact" scenario calculates only the direct effect of reducing trade costs by eliminating existing tariffs in all

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[21] *Ibid*.
[22] *Ibid*.
[23] The Transatlantic Trade and Investment Partnership, *Why Does it Matter?*, OECD, (Feb. 13, 2013), http://www.oecd.org/trade/TTIP.pdf (last visited Nov. 15, 2013).
[24] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).
[25] G. Felbermayr, B. Heid, S. Lehwald, *Transatlantic Trade and Investment Partnership (TTIP) Who Benefits from a Free Trade Deal? Part 1: Macroeconomic Effects*, *available at* http://issuu.com/bertelsmannfoundation/ docs/ttip-ged study (June 17, 2013).
[26] *Ibid*.

sectors. The "high impact" scenario adds the removal of non-tariff barriers and projects the impact of the increase in trade activity on investments and economic growth[27].

The promoters of the Transatlantic Trade and Investment Partnership have tried to sell the agreement to the public on both sides of the Atlantic as a way to boost growth and create jobs. At a time when both the US and European economies are still suffering from the effects of the recession, anything that boosts growth sounds appealing. However, a closer look at the projections indicates that the promised growth is not likely to amount to much. Furthermore, there will likely be negative aspects to any deal that could far outweigh any gains.

For the purpose of the present study Felbermayr et al. (2013b) projections of the cumulative change in GDP with the low or high scenario were converted into annual growth rates over a decade, the time needed for almost full impact[28]. It was further assumed that the effect of the TTIP on GDP would begin in 2015 and end in 2025, but the simulations continued until 2030 to absorb any residual dynamic effect[29].

The Centre for Economic Policy Research in the United Kingdom uses also a standard economic model to project the fully realized impact of the TTIP in 2027. In what it considers the most likely scenario for a final deal, its model projects that the TTIP would increase the GDPs of the EU and the US by 0.5 and 0.4 percentage points respectively. While more growth is generally better than less growth, the projected gains for the EU come to less than 0.04 percentage points annually. For the United States, the projected gains are 0.03 percentage points a year. Thus, the growth increases will be far too small to notice in the annual GDP data[30].

Moreover, this growth does not imply additional job growth, as the Centre made clear in its summary. The TTIP is assumed to increase the efficiency with which a particular supply of labor is used; It does not

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[27] Buongiorno J., Rougieux P., Barkaoui A., Zhu S., Harou P., *Potential Impact of a Transatlantic Trade and Investment Partnership on the Global Forest Sector*, 20 JOURNAL OF FOREST ECONOMICS 252—266 (2014) (Department of Forest Economics, Swedish University of Agricultural Sciences, Umeå. Published by Elsevier GmbH).

[28] G. Felbermayr, M. Larch, L. Flach, E. Yalcin, S. Benz, *Dimensionen und Auswirkungen eines Freihandelsabkommens zwischen der EU und den USA*. Studie im Auftrag des Bundesministeriums für Wirtschaft und Technologie, München, *available at* http://www.cesifo-group.de/portal/page/portal/DocBase_Service/studien/ifo_AH_2013_TAFTA_Endbericht.pdf.

[29] Buongiorno J., Rougieux P., Barkaoui A., Zhu S., Harou P., *Potential Impact of a Transatlantic Trade and Investment Partnership on the Global Forest Sector*, 20 JOURNAL OF FOREST ECONOMICS 252—266 (2014).

[30] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).

increase the demand for labor. In fact, the summary explicitly notes the agreement could lead to job losses in the short run, as lower cost imports displace some workers.

Furthermore, the projections only consider ways in which the agreement may speed growth by reducing barriers. There are also likely to be provisions that slow growth by increasing barriers, most notably in the area of patent protection, especially for prescription drugs.

If the deal strengthens patent or related protections for drugs, then it will lead to higher drug prices. This will drain money out of the economy and lead to more inefficiency in the same way that higher tariffs on imports lead to higher prices and inefficiency. The difference is that tariffs are rarely more than twenty or thirty percent in advanced economies, where as patent protection can raise the price of drugs by several thousand percent above their free market price[31].

There are other elements of the TTIP that should raise concerns on both sides of the Atlantic. Since formal trade barriers between the EU and US are already low, the negotiations are mostly focused on non-trade issues. This will involve areas of regulation that are currently under the control of national or subnational governments. For example, the TTIP could include provisions on how genetically modified foods are regulated. TTIP provisions could make restrictions on the sale or planting of GMO crops an unfair trade practice. They could also limit the ability of governments to impose labeling requirements.

The TTIP could also include provisions on fracking, the process of drilling for deep pools of natural gas or oil. Federal legislation in the United States has exempted companies engaged in fracking from complying with decades—old environmental restrictions that were designed to ensure the safety of drinking water. As a result, there have been numerous complaints that fracking operations have resulted in the contamination of drinking water near fracking sites. However, these allegations are difficult to assess, because the oil and gas companies are not required to disclose the chemicals they used in the fracking process.

There are many other areas where regulations that would not be approved by national or subnational governments may effectively be imposed through the TTIP. This is in fact one of the main motivations of the TTIP: It provides a channel around the democratic process in both the EU and the US. Regulatory changes that may not be possible due to domestic political considerations may be imposed through a trade agreement which

[31] *Ibid*.

will be presented to elected legislatures on both sides of the Atlantic as an all or nothing proposition.

This is perhaps the clearest in the case of investor-state dispute settlement (ISDS). This is a process that the United States has established as part of numerous trade deals over the last three decades. It involves the creation of special panels, outside the control of the government in question, to decide issues related to disputes with foreign investors. For example, if a US company felt that a regulation imposed by the Mexican government was unfairly imposing costs on it, the company could take its complaint to a special panel established for this purpose rather than going through Mexico's legal system.

This might make sense in certain situations and may even be mutually beneficial in countries that lack a well-functioning legal system. Foreign companies may be reluctant to invest in a developing country if they are concerned that they would not be able to get adequate redress through that country's legal system. By setting up an alternative mechanism, potential foreign investors can be more confident that laws will be fairly applied. Independent panels that are beyond the government's control give investors more protection than a promise from the government. Even if the government is sincere in such a promise, a new government may not feel bound by a prior government's commitment.

Thus, ISDS may in fact make sense for developing countries as a way to promote foreign investment. However, it is much more difficult to see the merits of this argument for the TTIP, in which all of the countries involved have long-established legal traditions and many decades of experience with independent judiciaries. It is difficult to believe that courts in Denmark, Germany or the United States could not be trusted to treat foreign investors fairly.

On the other hand, it is reasonable for citizens of the EU and the US to question whether the new legal system being set up under the TTIP can be counted on to respect the rights and interests of anyone other than foreign investors. This does not mean that the ISDS will necessarily have a pro-investor bias, but if there is no obvious anti-investor bias in the current legal system, then why is it necessary to establish a new dispute settlement mechanism?

In short, the TTIP is much more than a free trade agreement designed to reduce tariffs and quotas. It would create a structure of regulation and a new legal system that would remove authority in a wide variety of areas from democratically elected bodies and the existing legal structure. TTIP can be both a symbolic and practical assertion of Western renewal, vigor

and commitment, not only to each other but to high rules-based standards and core principles of international order. It can be assertive, yet need not be aggressive. It challenges fashionable notions about a "weekend West"[32].

TTIP's goal is to eliminate all impediments in bilateral trade in goods and investments according to the principle of origin. For the trade in services, the aim is to obtain improved market access and to address the operation of any designated monopolies and state-owned enterprises[33].

Since the projected economic gains from this deal are relatively modest, there is no reason that anyone should feel an irrepressible need to grab at whatever final deal comes out of the negotiations. It would be best if any moves towards superseding the established systems be done with careful consideration and not the rushed, all-or-nothing approach-envisioned by the governments negotiating the TTIP. If the TTIP timeline does not allow for thorough debate, it can always come back to the issue of reducing trade barriers later.

C. Interrelationship between Regulatory Standards and International Cooperation in the TTIP

In theory, problems of regulatory divergence can be solved without international cooperation. Just like with free trade in general, governments could liberalize unilaterally. In the context of regulations, governments could simply declare that products complying with foreign regulations in the same area will be deemed acceptable for import. US regulators could accept EU headlights; And EU regulators could accept US GM foods. However, in practice, domestic political resistance, sometimes for protectionist purposes, often means that solutions to these problems will require international cooperation. Government regulators from different countries need to sit down and hash out the issues[34].

How should international cooperation work in practice? There are two common methods—both of which are referred to in the HLWG

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[32] D. S. Hamilton, *TTIP's Geostrategic Implications* in THE GEOPOLITICS OF TTIP REPOSITIONING THE TRANSATLANTIC RELATIONSHIP FOR CHANGING WORLD (Centre for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, John Hopkins University, Washington DC. 2014).

[33] Straubhaar T., *TTIP's Don't Lose Momentum!* in THE GEOPOLITICS OF TTIP REPOSITIONING THE TRANSATLANTIC RELATIONSHIP FOR CHANGING WORLD (D.S. Hamilton ed., Centre for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, John Hopkins University, Washington DC. 2014).

[34] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).

report[35] —which have been used to deal with regulatory divergence: Harmonization and mutual recognition[36].

Harmonization implies the alignment of regulations to a single best practice. Usually a voluntary agreement, harmonization can be based on a reference to international standards from a standard-setting body, or simply involve coordination among nations. Countries basically agree to converge on a single standard or regulation. This is usually the most difficult way to achieve regulatory cooperation, in part because countries are reluctant to adjust their standards, and also because the harmonization of standards requires complete consensus[37].

Mutual recognition can be achieved through mutual recognition agreements or the acknowledgement of regulatory equivalence. Mutual recognition agreements approve testing and certification processes of other countries as acceptable for allowing sale in their own country. This method is especially useful in eliminating duplicative testing and certification processes. Recently, this approach was employed in a mutual recognition agreement between the USA and Israel in relation to telecommunications equipment: Israeli regulatory authorities will accept tests that recognized USA laboratories perform to determine the conformity of telecommunications equipment with Israeli technical requirements, rather than requiring additional testing by Israeli laboratories in order for American products to be sold in Israel[38].

Efforts to deal with regulatory barriers at the GATT/WTO eventually resulted in the TBT Agreement, which reinforces traditional GATT rules on non discrimination, and also goes a bit further to deal with the trade effects of burdensome regulation. Current efforts in the TBT Committee involve work on good regulatory practices, including developing a list of voluntary principles and mechanisms that represent best practices in developing and applying regulations[39].

Cooperation could occur organically, of course, outside the context of an international agreement. Regulators from different countries could

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[35] Final Report, op.cit.

[36] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).

[37] *Ibid*.

[38] *New United States-Israel Telecommunications Agreement Eases Way for US Exports*, USTR PRESS RELEASE, Oct. 15, 2012, *available at* http://www.ustr.gov/about-us/press-office/press-releases/2012/ october/ us-israel-telecomm-mou-eases-way-for-exports (last visited Nov. 15, 2013).

[39] WTO News Item, *Members Continue to Discuss "Good Practices" for Technical Regulations* (June 17-20, 2013), http://www.wto.org/english/news_e/news13_e/tbt_17jun13_e.html (last visited Nov. 15, 2013).

simply sit down with each other and coordinate their diverging regulations. But this does not happen often in practice and has not occurred between the USA and the European Union, and there is little reason to think it will at any time soon. As a result, a formal mechanism to push this process along would be of great value[40]. The private sector needs a better way to point out the problems it is experiencing, and regulators must be given an opportunity to cooperate with their counterparts in other countries. The question then becomes: What should this mechanism look like? One approach that has been put forward would focus on requiring domestic regulators to look at what their colleagues abroad are doing[41].

This approach emphasizes the role of regulators themselves and their decision—making process. While there might be some value to this, it also has the potential to be more burdensome than helpful. If every regulation that has an impact on trade—i.e. just about all regulations—requires consideration of how the other side regulates the same issue, the role of the bureaucracy in dealing with these issues could actually increase, and as a result this approach may actually raise more problems than it solves.

Instead of turning first to the regulators, a better approach to regulatory cooperation would be to focus attention on the views of the private sector, which faces the responsibility of meeting multiple government requirements, and which is in the best position to identify the costs and inefficiencies of regulatory divergences in trade. If business and consumer groups are not even concerned about a particular area of regulation, burdening the regulators with extra work is unnecessary. Thus, one of the main goals of the regulatory cooperation process should be to facilitate the involvement of producers, distributors and consumers in a process which provides for direct contact with the relevant government agencies. This further assists in identifying the priority sectors that need the most immediate attention and would yield the greatest economic benefit if divergences are narrowed[42].

Private sector involvement could come at two stages. First, during the initial rule—making process for new regulations, there could be requests for input on potential conflicts with other countries' regulations. This would be

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[40] *Trade Cross-cutting disciplines and Institutional provisions* (2013). The European Commission Makes Reference to Just Such a Formal Body. *Available at* http://trade.ec.europa.eu/doclib/docs/2013/july/tradoc_151622.pdf (last visited Nov. 15, 2013).

[41] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).

[42] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).

helpful in preventing new regulations from diverging right to begin with. Second, with regards to existing regulations, it is essential to have private sector input on how divergent rules hamper trade so that a discussion can even begin. Since regulatory convergence will be a long-term process, there needs to be a permanent forum where the private sector—businesses, consumers and other groups—can raise concerns with both existing and potential divergence[43].

While the TTIP offers a good starting point, regulatory cooperation should eventually be done on a multilateral basis. The need for this is amplified by the growing trend of 21st Century trade agreements that include issues outside the traditional scope of trade negotiations. Outgoing WTO Director-General Pascal Lamy has articulated this problem clearly, suggesting that "while bilateral tariff reductions can ultimately be multilateralized, a plethora of bilateral trade agreements will produce a multitude of regulatory standards with which businesses will struggle to comply"[44]. This simply means that if regulatory cooperation is included in multiple trade agreements with different participants, the risk of creating more layers of contradiction and confusion greatly increases. For instance, how different will a regulatory cooperation chapter of the TPP be from the TTIP? Would it not be better to open up the discussion of regulatory burdens on trade to a wider grouping of countries, to maximize the area in which inefficiencies can be eliminated?[45]

Without getting into too much detail here, multilateral regulatory cooperation could be undertaken through an international forum of some sort. It need not be based on an enforceable treaty. A more flexible structure, based on the idea of agreed cooperation, may be preferable. The goal is not to push countries to take on difficult and sensitive legal obligations; Rather, it is to seek out regulatory issues where countries can voluntarily work together[46].

Multilateralizing regulatory cooperation may be impossible at this moment, but there is still a great deal of value to be had from US-EU cooperation. Since the USA and EU make up almost half of world GDP and

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[43] *Ibid*.
[44] P. Lamy, *Putting Geopolitics Back at the Trade Table* (Jan. 29, 2013). Speech at the IISS-Oberoi Discussion Forum in Delhi, http://www.wto.org/english/news_e/sppl_e/sppl264_e.html (last visited Nov. 15, 2013).
[45] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).
[46] *Ibid*.

30% of total goods and services trade[47], any agreement both sides can come to on regulatory issues could help set the tone and trajectory of future regulatory cooperation efforts involving other parties. The greater the number of countries involved in eliminating costly and duplicative regulatory processes, the greater the potential gains for consumers and producers alike. The TTIP negotiations can play an important role in leading the way on regulatory cooperation efforts, and their success or failure will determine how this issue is addressed in the future[48]. It is important to underline that in this new situation for the cooperation between EU and USA significant position has also China a big foreign partner for USA and EU.

All studies foresee a small impact of removing trade barriers alone, and a larger impact of eliminating non-tariff barriers. Some disagree on the potential impact on third countries. While the OECD (2005) suggests that reducing barriers to trade between the EU and US will have mostly positive spill over effects on third party countries such as Canada, Mexico, Turkey, Japan and China. Felbermayr et al. (2013a) estimate that third party countries will lose market share in the US and the EU due to the increased trade between the two regions, and that this will have a negative effect on their economies. Additionally Felbermayr et al. (2013a) foresee a decrease in trade within EU countries, for example a 23% decrease in trade between France and Germany[49].

Most national and international studies on the macroeconomic impact of transatlantic trade agreements are based on general equilibrium approaches, such as the Global Trade Analysis Project (GTAP) model[50]. It

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[47] Final Report, op.cit.

[48] Lester S. and Barbee I., *The Challenge of Cooperation: Regulatory Trade Barriers in the Transatlantic Trade and Investment Partnership,* 16(4) JOURNAL OF INTERNATIONAL ECONOMIC LAW 847—867 (2013).

[49] Buongiorno J., Rougieux P., Barkaoui A, Zhu S., Harou P., *Potential Impact of a Transatlantic Trade and Investment Partnership on the Global Forest Sector*, 20 JOURNAL OF FOREST ECONOMICS 252—266 (2014)

[50] K. G. Berden, J. Francois, M. Thelle, P. Wymenga, S. Tamminen, *Non-tariff Measures in EU-US Trade and Investment—an Economic Analysis*. ECORYS Nederland BV, Rotterdam (2009); Francois J. , Manchin M., Norberg H., Pindyuk O., Tomberger P., *Reducing Transatlantic Barriers to Trade and Investment—an Economic Assessment*. Center for Economic Policy Research, London (2013), *available at* http://trade.ec.europa.eu/doclib/docs/2013/march/ tradoc150737.pdf; OECD, *The Benefits of Liberalising Product Markets and Reducing Barriers to International Trade and Investment: The Case of the United States and the European Union*. OECD Economics Department Working Paper No. 432 (2005), Available at http://search.oecd.org/officialdocuments/displaydocumentpdf/?doclanguage=en&cote=ECO/WKP%282005%2919.

can combine the GTAP database with trade gravity models[51] into a general equilibrium model to project macroeconomic impacts of the TTIP in the US, the EU, and third countries like China.

It is interesting to explore the effect of proliferating deep regional agreements on coherence in international trade governance[52]. The WTO suggested that new international trade rules are being negotiated and decided outside the WTO where power differences are greater and where the principles of non-discrimination and reciprocity are absent. It also argued that TTIP are here to stay. Governments will need to ensure that regional agreements and the multilateral trading system are complementary and that multilateral disciplines minimize any negative effects from PTAs[53]. While the available literature suggests that deep integration rules are often non-discriminatory—for instance, provisions in the services or competition policy areas are often extended to non-members—certain provisions in regional agreements can contain discriminatory aspects that clash with the multilateral trading system. It has been shown that PTAs which make it more difficult to apply contingency measures to PTA partners may divert protectionist measures towards non-members[54].

Deep provisions can also have a number of adverse systemic effects. For example, the important effects of regional regulatory harmonization can make it more difficult to multilateral rules. PTAs may not include third-party most-favored nation (MFN) clauses, thus effectively discriminating against other countries. Developed country exporters may view bilateral and regional rather than multilateral agreements as faster and easier routes for achieving their objectives, further weakening the principle of non-discrimination.

With regard to services supply chains, some argue that their growth creates an additional need to re-examine and modernize current rules for services trade, as these rules were designed for a world where services were exported as final products from national firms, not a world where multiple firms supply stages of services production from multiple locations. Recent research on how differences in firms have an impact on trade policies

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[51] P. Egger, M. Pfaffermayr, *Structural Estimation of Gravity Models with Path-Dependent Market Entry*. CEPR Discussion Paper No. DP8458 (2011), available at http://www.ssrn.com/abstract=1889961.

[52] JACKSON R. J., GLOBAL POLITICS IN THE 21ST CENTURY (Cambridge University Press, New York, 2013).

[53] KRIST W., GLOBALIZATION AND AMERICA'S TRADE AGREEMENTS (John Hopkins University Press, Baltimore, 2013).

[54] Prusa T. J. & R. Teh, *Protection Reduction and Diversion: PTAs and the Incidence of Antidumping Disputes*, NBER Working Papers 16276, National Bureau of Economic Research, Inc. (2010).

reveals a related concern. Ciuriak et al. (2011) point out at another difference between deep integration at the regional and at the multilateral level [55] . While heterogeneous firms trade models suggest that more importance should be granted to extensive than to intensive margin responses to trade opening, there is evidence suggesting that PTA have positive effects at the intensive margin and negative effects at the extensive margin, whereas the opposite is true of opening in the multilateral context.

D. TTIP Impact for China

TTIP is lazily portrayed as an effort to confront and isolated China. Yet is less about containing China than about the terms and principles guiding China's integration and participation in the global economy. China's burgeoning trade with both the United States and Europe attests to US and EU interests in engaging China, not isolating it[56]. TTIP, TPP and related initiatives are important instruments to help frame Beijing's choices—by underscoring China's own interests in an open, stable international system as well as the types of norms and standards necessary for such a system to be sustained. China itself has changed its position and signalled a willingness to join plurilateral talks on services. Its motivations remain unclear, but there is no denying that TTIP and related initiatives are injecting new movement and energy into efforts to open market and strengthen global rules[57].

US and EU officials had a common conversation with the Chinese about the need to keep trade open while raising standards, especially with regard to health and safety. The result was a trilateral US-EU-China review process of consumer product safety, including biennial "summits" among relevant officials, which has had some modest success in gaining Chinese commitments to cooperate in applying product safety controls along supply and distribution chains; Promoting company management systems that incorporate safety into product design; Exchanging information regularly on major safety issues; Reinforcing consumer product traceability; Implementing the concept of seamless surveillance; And exploring jointly the possible convergence of consumer product safety requirements. Expansion of such cooperation in additional areas and with additional countries based on alignment of US and EU understandings regarding high

[55] Ciuriak D., B. Lapham, R. Wolfe, T. Collins-Williams and J. M. Curtis. *Firms in International Trade: Towards a New Trade Policy* (November 2011).
[56] Hamilton, D. S., op.cit.
[57] *Ibid*.

levels of protection, promises to keep standards high while keeping markets open[58].

It must be underline that the access of P.R. China to the World Trade Organisation (November 2001) was the moment in which new trade rules became obligatory in this country. The WTO—through its agreements on safeguards and antidumping, offers some recourse for states to rein in the forces of free trade. However, many experts suggest that there are legal ambiguities in WTO regime that have limited invocation of safeguard measures[59]. These concerns have been fueled because there is increasing Chinese competition in week industries and because it is harder to request supplying countries to take grey measures such as VERA in agriculture and textiles. In the next five years after the access to the WTO China eliminated all kinds of quotas and other non-tariff barriers that slow down the inflow of foreign goods. Customs duties which were lowered were gradually reduced to an average of 9%.

China is now the biggest exporter and receiver of foreign investments. This country is the world's number one exporter after taking the top spot from Germany in 2009. About 20% of China's exports go to the United States[60]. The US is China's largest trading partner[61] . In 2010, US exports of goods to China jumped 32%, to US $92 billion. China was the second-largest recipient of Foreign Direct Investment (FDI) in 2009[62]. China attracted $105.7 billion in foreign direct investment in 2010—the first time FDI in China crossed $100 billion[63] (Chart 6, Chart 7).

China's weak currency—which is good for Chinese exports—also makes the yuan (RMB) become one of the most undervalued currencies in the so-called "Big Mac index", a measure of purchasing-power parity (Chart 8). While a Big Mac averages US$3.71 in the US it can buy one in China for only 14.5 yuan (US$2.18) in Beijing and Shenzhen on average[64].

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[58] *Ibid*.
[59] Kawase, T., *Safeguard Under the WTO Regime Realities and Problems*. RESEARCH & REVIEW, (2004b). *Available at* http://www.rieti.go.jp (Accessed January 8).
[60] The World Bank, 2011.
[61] LaFleur 2010, *China: Asia in Focus*, http://www.china-mike.com/facts-about-china/economy-investment-business-statistics/ (last visit Nov. 10, 2013).
[62] United Nations, 2010.
[63] *China FDI Rises Strongly in January, Outlook Bright*, REUTERS, Feb. 17, 2011.
[64] *Bun Fight,* 2010.

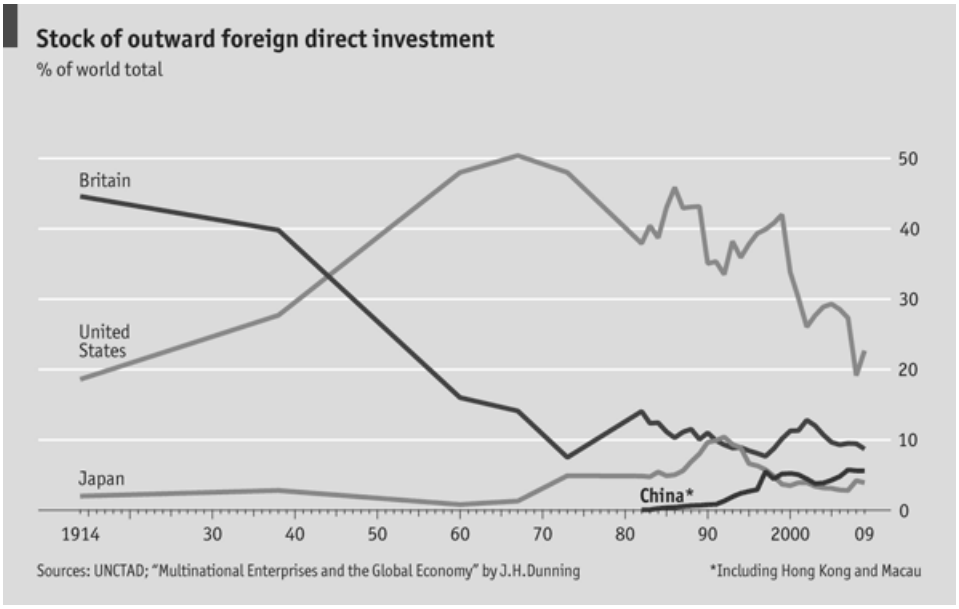

Chart 6 Stock of Outward Foreign Direct Investment (% of World Total).
Incuding Hong Kong and Macau.
Source: UNCTAD, Nov.10, 2013.

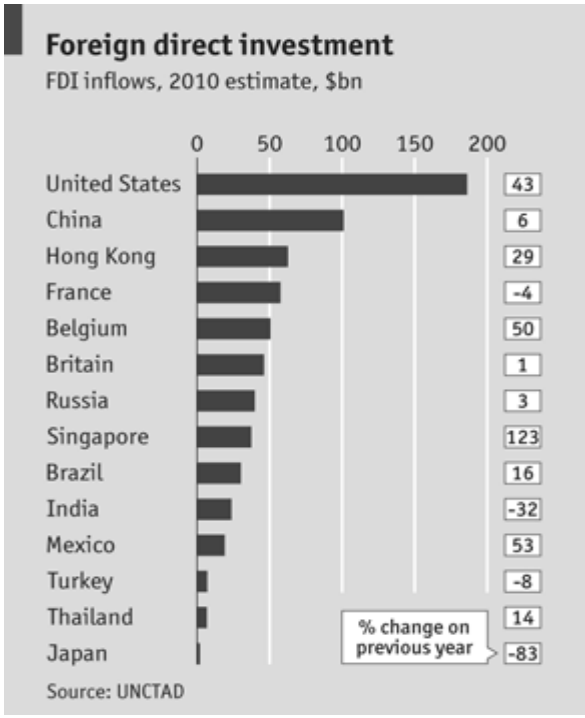

Chart 7 Foreign Direct Investment (FDI Inflows, 2010 Estimate, $ bn).
Source: UNCTAD, Nov.10. 2013.

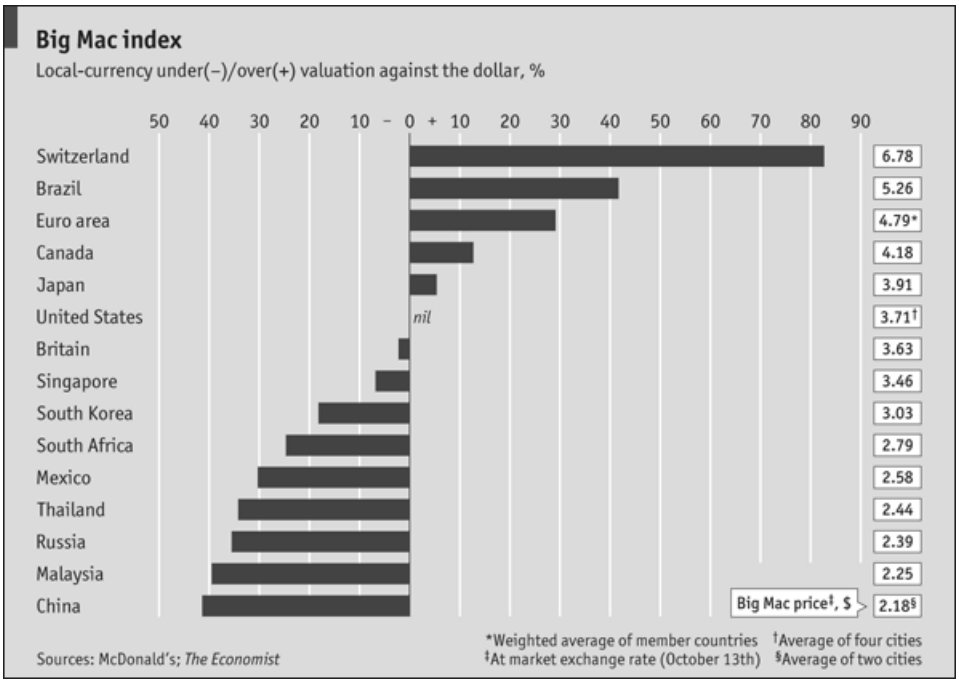

Chart 8 Big Mac Index (Local-Currency Under (-)/Over(+) Valuation Against the Dollar, %).

Source, McDonald's; *The Economist*, http://www.china-mike.com/facts-about-china/economy-investment-business-statistics/ Nov.10, 2013.

China is poised to make its money a global currency, which "could strengthen China's influence in overseas financial markets and begin to erode the dollar's dominance." China has over US$1 trillion in foreign exchange reserves (exceeding Japan), and continue to grow around $200 billion each year[65]. China's foreign-exchange reserves hit record highs on Q4 2010 to reach US $2.85 trillion. The $199 billion gain was the largest quarterly increase since Bloomberg data began in 1996[66]. China owns over 25% of US Treasury Bonds and is the largest creditor in the world[67].

China is also the USA's largest creditor, holding more than $900 billion worth of US. This value indicated Treasury bonds of the USA in October 2010. The second and third creditors are Japan and the UK.

China's emerging market stocks are predicted to quintuple in the next two decades—reaching a market value of around $80 trillion by 2030. The

[65] The World Bank 2011.
[66] *China's Currency Reserves Rise to Record, Domestic Lending Exceeds Target*, BLOOMBERG, Jan. 11, 2011.
[67] Rediff Business Online, http://www.china-mike.com/facts-about-china/economy-investment-business-statistics/ (last visit Nov. 10, 2013).

Shanghai Stock Exchange was the fifth largest stock market in the world in December 2010 (market capitalization of US $2.7 trillion). Eight of the ten largest stocks on the Shanghai Stock Exchange are state-controlled enterprises.

Currently, China is the largest destination for foreign investment[68]. Due to China's access to WTO, her share in the world trade will increase from 3% to 7% (in 1986 it was only 0.7%). The results of the transition provide compelling evidence of the efficiency of market incentives. Other factors that have contributed to China's ascendancy to a world economic power include privatizing much of its industry, joining the World Trade Organization, formation of the Chinese Stock Exchange, passage of the Company Law (1993) and a multitude of corporate governance principles to protect shareholders and provide a framework of shifting from state to private ownership of capital[69].

Further trade liberalization and improved framework policies would increase trade and promote growth. It must be emphasized that openness to trade is associated with higher incomes and growth and there are the need for new approaches to trade cooperation in light of the forces that are currently re-shaping international business. The key of trade developments within the broader socio-economic context is especially the rise of global supply chains, the general shift of trade power away from the West towards Asia and from US and EU towards China. A major factor was the even more remarkable transformation of China, as market reforms opened up its economy to foreign trade and investment, and unleashed an unprecedented growth dynamic that has continued, with only minor slowdowns in the new circumstances for the development of the global economy and the global trade.

In this context it is interesting to see that estimates by R. J. Tammen at al. (2000) anticipate that China will overtake the United States in mid-century[70]. It is estimated also that by the year 2020 China will take the first position among the world powers (Table 1). Thus American dominance should endure until mid-century. Afterwards, Asian and China's demands for modification to the international system will likely increase, and unless resolved, will be increasingly likely to be imposed by force.

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[68] Reuvid J., *Business Insights—China*, KOGAN PAGE, (London and Philadelphia 2008).
[69] A. N. Doherty, F. V. Lu, *China: Spectacular Growth and Inequality*, 4(3) JOURNAL OF BUSINESS AND ECONOMICS 195—201 (2013).
[70] R. J. TAMMEN, J. KUGLER, D. LEMKE, A. STAM, M. ABDOLLAHIAN, C. AL-SHARABATI, B. EFIRD, AND A. F. K. ORGANSKI, POWER TRANSITION (New York: Chatham House, 2000).

Table 1 The Global Balance of Economic Powers in 2010 Versus 2020.

Rank	Country - 2010	GDP (U$ million)	Country - 2020	GDP (U$ million)
1	USA	14,802,081	China	28,124,970
2	China	9,711,244	USA	22,644,910
3	Japan	4,267,492	India	10,225,943
4	India	3,912,911	Japan	6,196,979
5	Germany	2,861,117	Russia	4,326,987
6	Russia	2,221,755	Germany	3,981,033
7	United Kingdom	2,183,277	Brazil	3,868,813
8	France	2,154,399	United Kingdom	3,360,442
9	Brazil	2,138,888	France	3,214,921
10	Italy	1,767,120	Mexico	2,838,722

Euromonitor International from IMF, International Financial Statistics and World Economic Outlook/UN/national statistics

Source: Facts about China: ECONOMY & GDP 2011-2012, http://www.china-mike.com/facts-about-china/economy-investment-business-statistics/.

The integration of China into the world trade system may have increase aggregate welfare in the rest of the world by 0.4% but factor incomes in individual sectors may fall or rise by more than 5%[71]. Dealing with relative wage pressures and needs for structural adjustment due to rising trade integration will thus be important. The benefits from trade liberalization are transmitted through several channels like shifting production from low to high locations, relocation of factors of production towards sectors and firms with high productivity and rising incomes due to an increase in market size that supports more specialization, faster technology diffusion and stronger incentives to invest in "non-rival" assets[72].

China's growth is good for the world economy and for the European Union and USA and also for TTIP project with significant terms of trade gains being experienced in its trading partners, reduction in poverty and increases in living standards. Chinese economic growth has been good at first for Chinese with massive reductions in poverty and rising living standards. Moreover, China is now a very large regional power and the preceding discussion has provided evidence that it has a very large growth effect on its neighboring trade partners. If China continues its path of stable growth there is every reason to export continued and expanded benefits for its trade partners also like EU and USA. It must be emphasized that the Chinese model is not about to overtake the world but its success indicates that multiple versions of modernity will be vying with each other in their

[71] Braconier H., Nicoletti G., Westmore B., *Policy Challenges for the Next 50 Years*, OECD Economic Policy Paper, No. 9 (Authorised for publication by Jean-Luc Schneidr, Deputy Director, Policy Studies Branch, Economic Department OECD, Better Policies for Better Lives, July 2014.)
[72] *Ibid*.

marketplace of ideas[73].

China may continue to specialise in electronics and increasingly in services, while manufacturing may continue in the framework of the relations with the OECD and also with the European Union countries and USA. With or without further trade agreements because of TTIP, services will be more traded and trade policies will have to adjust to changes in the organisation of global value change[74]. It must be emphasized that the EU and USA in the framework of TTIP have a strong record of international cooperation and of providing development support and assistance to many parts of the world. This includes promotion of human rights in all external actions.

III. RESULTS AND FINDINGS

Transatlantic reforms could set a powerful precedent for initiatives like the TTIP in other regions and in the World Trade Organization. Contrary to concerns that another broad-based bilateral accord would further dampen prospects for an international trade agreement, it believes that a TTIP, properly constructed, could help break the deadlock in the WTO's Doha Round negotiations. In particular, TTIP provisions could become a template for the stalled global trade talks in several difficult areas, from agriculture to cross-border rules on services, investment and regulations. A comprehensive TTIP has important implications for both bilateral trade and the world trading system. If successful, it could strengthen transatlantic economic relations while also spurring trade reforms that both sides could jointly put forward to reinvigorate flagging multilateral trade negotiations.

Ideally, the best way to address problems arising from regulatory divergence would be on a multilateral basis. In advance of that eventual goal, however, a US-EU regulatory cooperation process could lay the foundation for a broader effort in the future. If the USA and the EU can resolve some of the easier issues—like mundane problems such as different regulations for automobile headlights-perhaps that can serve as a building block for a broader multilateral effort also for China. Success in this area will be difficult, but the gains are potentially large, and thus an attempt to solve this

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[73] Kupchan Ch. A., *Parsing TTIP's Geopolitical Implications* in *THE GEOPOLITICS OF TTIP REPOSITIONING THE TRANSATLANTIC RELATIONSHIP FOR CHANGING WORLD* (D.S. Hamilton, ed., Centre for Transatlantic Relations, Paul H. Nitze School of Advanced International Studies, John Hopkins University, Washington DC. 2014).

[74] Braconier H., Nicoletti G., Westmore B., *Policy Challenges for the Next 50 Years*, OECD Economic Policy Paper, No. 9 (Authorised for publication by Jean-Luc Schneidr, Deputy Director, Policy Studies Branch, Economic Department OECD, Better Policies for Better Lives, July 2014.)

long-standing problem is worth the effort.

The negotiations for the Trans-Pacific Partnership agreement and the Transatlantic Trade and Investment Partnership could provide the basis for developing new WTO Plus system. Negotiations for the TPP and the TTIP could be vehicles for establishing a WTO Plus system. These agreements establish effective rules regarding neo mercantilist practices and eschew special interest provisions. Such a WTO Plus system would both open markets for countries willing to accept strengthened trade rules and put pressure on non participating countries to further open their markets and adopt similar rules in a future multilateral trade round in the framework of the WTO.

It must be emphasized that in the new WTO, the diverse membership must find common ground on new areas of negotiation. The process of these negotiations must begin with domestic adjustment and development trade policies, and continue by harnessing all the available incentives, from TTIP to aid-for-trade, and by new forms of cooperation between developed, developing, and emerging countries like China. The economic incentives for multilateral trade liberalization remain strong, and the new international economy of more broadly shared economic power represents a major victory for its success in the framework of the WTO multilateral tarde system, but the power in the WTO has symbolic character.

With or without further trade agreements like TTIP, services will be more traded and trade policies will have to adjust to changes in the organisation of global value change. The question raised is whether the West also USA and EU will see China's rise as an opportunity for cooperation or for conflict. Economic growth is generally more preferable in China to military and extensive expansion. With new investments, a country can transform its position through industrial expansion at home and sustain it through international trade. China is especially sensitive to the advantages of intensive growth and will not wish to disrupt essential economic arrangements that have been crucial to her success.

The former two effects include mostly static from international trade in goods, services and factors of production, while the latter entails dynamic growth effects. Significant static and dynamic efficiency gains, especially for China, could be reaped through further multilateral trade liberalization while global welfare gains from regional agreements like TTIP are much more limited due to trade diversion. Trade diversion leads to discrimination against third countries. As a result, there might arise a feeling of unfair treatment culminating in anti-liberalism tendencies or even an aversion to the Western economic order. While fostering multilateral trade liberalisation

has proved difficult in the recent past and regional arrangements have been frequent, the former should remain priority due these larger benefits and despite the practical challenges of seeing through such reforms in a multipolar world. These results are based on the partial multilateral trade liberalization scenario based on multilateral cuts in tariffs (50%) and transaction cost (25%) relative to baseline.

It must be emphasized that United States and EU deepen their ties to each other, must keep their eyes on the prize and work with emerging powers, democracies and non-democracies alike, to fashion a new rule based system for the twenty-first century. The challenge ahead is helping to extend that accomplishment to the rest of the world. TTIP initiative comes at the right time. Now benefits of doing business with the emerging markets have declined and transaction costs have increased. The financial crisis has led to high unemployment rates and high public debts on both sides of the Atlantic. New impulses for growth are needed to improve prospects for employment, growth and welfare.

TTIP could spur growth, translate into millions of new jobs in the United States and Europe, and improve both earnings and competitiveness for many companies, particularly small and medium-sized enterprises on both sides of Atlantic. However the benefits would not be only to the United States and the EU. They would spread out worldwide. TTIP is open and encourages third countries to join. As a result, the TTIP would become the core of a new global trading system where the rule setters are once again the most advanced economies. In the long run, all countries could benefit from more prosperity in the transatlantic area. That is why TTIP should become a success, not a failure.

CONCLUSION

The need for firms to organize their supply chains across different countries has led to a demand for regional agreements like TTIP that cover more than preferential tariffs. The harmonization of standards and rules on investment, intellectual property and services has become a standard part of new trade agreements. The differences among firms involved in trade are also important for the future development. The picture that arises from the trade is that even if many firms are indirectly involved in trade-related activities, only relatively few are exporting or importing and these firms tend to be larger and more productive than others. Such firms also have a role in technology advancement and the diffusion of know how through supply chains.

Current trends in world economy and global politics provide evidence that emerging markets like China have now arrived to the world economy at last, bringing with it new patterns of uneven development, inequality and injustice. Its newly confident elites, now fully engaged in global circuits of trade, investment and finance, and in global governance too, appear to have left behind their previous role. It is clear that the emerging economies like China, has suffered less and recovered more quickly. In addition, it now seems that the patterns of political do not impact in the sense of immediate crisis measures but of long-term very big shifts may be equally significant and unexpected.

The trade policy plays a key role in the maintenance of both economic and political liberalization. The prominence of rent seeking in a country can have far-reaching implication for its economic development. Especially in transitional countries, rent seeking takes scarce resource out of productive areas in the economy, using them to promote and perpetuate further rents. United States and the EU are each other's most important trade partners. Both regions have similar cost and production structures, similar levels in economic development, deep political relations and strong cultural similarities. Therefore the reduction of trade frictions could help to reallocate more efficiency production factors especially capital firms and their production sites and to make use of comparative advantages, economies of scale and joint research activities to develop new technologies. However it should be stressed that free trade in itself is not responsible for economic growth, but more significant are the determining macroeconomic stability and increasing investment.

If TTIP succeeds, the partners would intend to follow with effort to conform all these agreements in trade coverage and rules of origin, in particular to reduce distortions and generalize the benefits. A TTIP, complementing NATO and the other longstanding political and alliance links between USA and EU, will be the foundation for strengthened "Atlantic Basin" that can confidently turn to the Pacific, the Middle East or other challenges in the decades ahead. That will be the strategic significance of TTIP. It is important to underline that no two group of nations have closer ongoing collaboration on security, intelligence and political matters that the NATO partners of Europe and North America. The United States and Europe are able to take decisive steps forward at a time when solidarity between them is greatly needed to revitalize their own economies, to reinforce their cooperation and to play a collective leadership role in promoting their values on the global world.

E-WORK AND PREVENTION OF NEW OCCUPATIONAL RISKS IN SPAIN

Lourdes Mella Méndez[*]

This study analyzes the new "distance work" in Spain, regulated by the labor reform of 2012, especially in light of the new labor risks that may arise. The duty of the employer to ensure the safety and health of workers continues to apply in its fullness, but the worker obligation of cooperating is reinforced, as they would provide services from the place they choose to work from, usually their home. Among the new occupational risks, associated with the working tool of a technological nature, we point out those of a psychosocial nature such as technostress and techno-addition. To prevent and eliminate these new risks, both parties assume new labor contract obligations, including information and specific training in the field.

INTRODUCTION

In Spain, distance work was regulated in the labor reform in 2012, specifically by Law No. 3 of July 6, 2012, on urgent measures to reform the labor market. This reform amended the old Article 13 of the Workers' Statute (WS), formerly called "contract work at home", to host the regulation of a new way to work remotely outside of the traditional workplace.

According to the current Article 13.1 WS, this work "will be considered distance work when the provision of labor activity takes place for the most part in the worker's home or any other place freely chosen by

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the employee alternative to the employer's premises". The Spanish legislator defines this new way of work as characterized by the absence of one of the main features of traditional work: The presence of the worker in the workplace. Certainly no one doubts that this is the key element of traditional work and that this is a culture that is now surpassed by the immense possibilities that distance work offers through new information and communication technologies. In other words, the legislator chooses to intentionally regulate the nature of distance work. Thus, the current regulation serves as a general framework, or minimum, both for traditional home work (only in place until 2012) and for the new telework, carried out with new information and communication technology.

Overall, it is positive that the legislator amended Article 13 WS, as it can help with the introduction of these new ways of distance working, which has been underdeveloped in Spain so far. However, the content of the provision is brief and important aspects of this new way of working are not regulated in relation to technology used, the privacy of the teleworker, the power an employer has over the employee in this situation or the issues related to representation of the collective interests of these workers.

A positive outcome of the legislation is that one of the few aspects regulated by the legislator in article 13 WS is related to the necessary protection of the teleworker against new labour risks. According to paragraph fourth of the aforementioned provision, these workers "are entitled to adequate protection with regards to safety and health as well as protection arising from the provisions of Law No. 31 of November 8, 1995, for prevention of labor risks" (hereinafter LPLR). Therefore, it is clear that the manner and place of work do not affect the general obligation of employers to protect their workers. However, there is no clarity on the details required in relation to this.

Thus, it can be useful to follow the provisions of the eighth clause of the European Framework Agreement on Telework (EFAT) of July 16, 2002, which even without solving all problems—provides more detailed regulation, especially as to the general obligations of the parties and access to the workplace when this coincides with the worker's home, something always delicate.

Moreover, the collective agreements and the specific rules of the Autonomous Communities concerned with the promotion of telework often also contain some indication of the need to pay attention to workplace risks.

I. THE EMPLOYER AS MAIN RESPONSIBLE IN THE PREVENTION OF OCCUPATIONAL RISKS IN TELEWORK

The duty of the employer to take steps to ensure workers' health, protection from work related risks, including new ones emanating from distance work, finds its foundation in European legislation. Thus, it is necessary to highlight the well-known Directive 89/391/EEC of June 12, 1989, on the introduction of measures to encourage improvements in the safety and health of workers at work (Framework Directive). Indeed, although it does not directly refer to such risks, its broad terms allow for us to extrapolate that the employer must take distance work into consideration, because their duty of security refers to "*all aspects* related to work"[1].

The same provision is reiterated in Spanish Law on prevention of occupational risks (LPLR), which transposes the Directive into Spanish Law, by providing that the employer, in compliance with the duty of protection, "must ensure the safety and health of workers at his service in *all* aspects related to work"[2]. Furthermore, the concept of "occupational risk" is broadly defined, so it is identified with "the possibility that a worker might suffer a particular harm derived from work"[3].

The framework agreements negotiated by the European social partners have increasingly been concerned about the risks arising from new technologies and, in general those of a psychosocial nature. So, it is arguable that the EFAT 2002 already requires employers to extend protection of workers against all types of risk, because, even without explicit reference to specific ones, it states that "the employer is responsible for the protection of health and the professional safety of the teleworker in accordance with Directive 89/391, as well as the specific directives, national legislation and relevant collective agreements". All these rules are based on the principle of total protection for workers against all types of occupational risks (clause 8). More specifically on the matter is the European Framework Agreement on work-related stress, on October 8, 2004, which, although not expressly referring to technological stress derived from the use of new communication technologies, is in agreement in terms of the business obligation to prevent and, if necessary, to solve the problem of work stress, whatever its cause is.

More recently, the Directive 2010/32/EU of the Council of May 10, 2010, implementing the Framework Agreement on prevention of injuries

[1] Art. 5.1 Framework Directive.
[2] Art. 14.2 LPLR.
[3] Art. 4.2ª LPLR.

caused by sharp objects in hospitals and the healthcare sector, concluded by HOSPEEM (European Association Entrepreneurs of hospital and healthcare sector) and EPSU (European Federation of Public Services) insists on the necessity of protecting workers against all psychological risks. In Spain, this directive has been transposed by the Order ESS/1451/2013 of 29 July, laying down rules for the prevention of injuries caused by sharp instruments in the health and hospital sector, which also includes, almost on equal terms, the need to assess the risks taking into account all psychosocial factors[4].

In a similar vein, we can point out the new European Strategy for Health and Safety at Work 2014-2020, which highlights the need to improve the prevention of work-related diseases to address new labor risks. In this sense, although the welfare and advancement generated by the introduction of new technologies at work is recognized, it is noted that the effective prevention of occupational diseases requires anticipating the potential negative effects that those technologies have on workers' health. More specifically, it is noted that the changes in work organization that new information technologies have enabled, open up enormous possibilities for flexible work, which is manifested in a multitude of new ways of working and types of workers.

In another vein, worker health also depends on the respect for the legal time off from work that an employee has. The employer must scrupulously comply with working times and needed to avoid new psychosocial risks posed by excessive use of new technologies and protect the health of the workforce. The relationship between the appropriate legal compliance and the health of workers finds expression in the Spanish Constitution[5], which requires public authorities to ensure the necessary rest of employees by limiting the working day.

From this perspective, Directive 2003/88/EC of the European Parliament and of the Council of November 4, 2003 is of interest, as it relates to certain aspects of the organization of working time and it establishes "the minimum *safety and health* requirements for the organization of *working time*"[6]. In order to ensure the health of workers, including those working outside of the traditional workplace, it is essential to respect the rights under the Directive in relation to the minimum daily, weekly and annual rest periods and, correspondingly, the limitations of time in the maximum working week. Of course, those rights are improved in the Workers' Statute in Spain, so the daily minimum rest period of eleven

[4] Art. 5.3.
[5] Art. 40.2.
[6] Art. 1.

consecutive hours per 24-hour period[7] is reinforced by an additional hour. So "between the end of one work day and the beginning of the next day there will be at least twelve hours"[8].

As regards to weekly rest, the Directive requires that, for each seven-day period, the worker is entitled to a minimum uninterrupted rest of 24 hours, to be added to the eleven hours of daily rest referred to in article 3, so a minimum of 35 consecutive hours (unless objective, technical or work organization conditions justify a shorter period of rest, which should be at least 24 hours) is guaranteed[9]. Along this line, the WS guarantees that Spanish workers have a minimum and uninterrupted weekly rest of a day and a half, representing a total of 36 hours (given the improvement of an hour in the minimum daily rest)[10].

Taking these regulations into account, which establish minimum and interrupted daily and weekly rest periods, it is clear that the worker is entitled to refuse to continue working during evenings and weekends, as such work tasks would invade their mandatory rest time. The European legislator requires that the obliged rest period for a worker is "appropriate" and identifies this feature with periods characterized by regular and continuous duration in its enjoyment. Thus, disconnection from work must consist of regular and "sufficiently long and continuous periods of rest to avoid fatigue due to irregular working patterns, or the workers causing injuries, either to themselves, fellow workers or to others, and resulting in damage to their health in a short or long term"[11]. In this regard, the annual rest period meets this requirement of a long duration, by being fixed to a minimum interval of four weeks[12] or thirty calendar days[13]. Of course, the interruption -for example, through continuous messages to the mobile phone-, in order to consult or solve ordinary problems does not seem to be such case.

Along with the mandatory rest periods already mentioned, legislation on working time from the EU also tries to guarantee the safety and health of workers through the establishment of a maximum working week or, rather, of its average duration, as it is anticipated that it does not exceed of 48 hours, including overtime, "for every seven-day period"[14]. If the employee works

[7] Art. 3 Directive.
[8] Art. 34.3 WS.
[9] Art. 5.
[10] Art. 37.1.
[11] Art. 2.9 Directive.
[12] Art. 7.1 Directive.
[13] Art. 38.1 WS.
[14] Art. 6.b) Directive.

for more than this time, excess hours may be compensated for through calculating the equivalent rest period over the next four months[15]. Something similar happens in the Spanish legal system, although a distinction between the maximum duration of the ordinary working week and the extraordinary one is added, reaching the maximum of the first 40 hours in an annual average[16] and the second in 80 hours a year[17].

II. WORKERS' STANCE: GREATER FREEDOM TO WORK AND GREATER RESPONSIBILITY TO FACE NEW LABOR RISKS

The Workers' Statute refers to the worker as a creditor subject of protection in the prevention of occupational risks ("teleworkers have the right" to protection)[18]. Logically, it determines that, *a contrario sensu,* the employer is the debtor of protection, responsible for ensuring an employee's health and safety. This is certainly the case when work is provided in the traditional workplace, which is justified in the distribution of basic powers in the employment contract. The employer assumes the powers of leading and controlling work activity, and receives the benefit of the work carried out on their premises with their tools.

However, this does not prevent the worker from responsibility and a certain incidental and secondary obligation in the matter, because they must still be aware in accordance to their abilities of their own safety and the safety of others in the workplace. This is done through strict compliance with the preventive measures adopted by the employer and any others that he can implement, especially in unexpected or emergency situations[19]. Consequently, it can be said that ordinarily the worker holds rights and duties in prevention from harm in the workplace.

This general scheme of distribution of responsibility of the parties in the prevention of occupational risks is repeated in the case of teleworking, although here a peculiarity occurs: The strengthening of the responsibility of the worker. Without a doubt, when the worker has the power of choosing the place where he or she wants to work outside of the company, especially if it is located in their family home, it is clear that their dual position leans toward one end, increasing the responsibility, that is, the duty or obligation in the matter onto the worker. In other words, the obligation of the worker is more and is equated to the employer; The worker becomes a "necessary"

[15] Art. 16.b) *ibid*.
[16] Art. 34.1 WS.
[17] Art. 35WS.
[18] Art. 13.4.
[19] Arts. 5.b) WE and 29.1 LPLR.

partner in the daily management of the many aspects that prevention requires on a day to day basis.

In this sense the EFAT states that the worker, after being informed of the company's prevention policy, has the burden of applying it "correctly"[20]. A good example of such necessary collaboration takes place when the worker is notified by the company about the need to enter their home to assess the labor risks that may exist in the space dedicated to work. If the notification meets all reasonable requirements (i.e., by writing, with notice and an indication of the subject responsible for paying the visit, who will be qualified technical personnel), it seems that the worker must "collaborate" allowing the entry of that mentioned personnel to the workplace located at his home, even if this involves a certain invasion to his privacy.

In case the worker does not want this collaboration, a "self-check" of occupational risks might take place. In this situation, the worker must perform—as we will see, prior training and instruction—the evaluation of those risks and the checking of the adoption of the appropriate security measures, in accordance with the specific documentation that he has to follow with special care. Without any doubt, this second option guarantees a higher extension of workers' fundamental rights to the privacy of their home[21] and personal and family privacy, but it is also riskier, as the key stages of risk prevention (evaluation and implementation of protective measures) are left practically in the hands of the individual concerned.

In Spain, the provisions of the Autonomous Communities that are regulating teleworking present a clear preference for the second option: Self-check of the work space by the worker. So it is remarkable that some regional text [22] states that "employees must complete the self-check questionnaire on prevention of occupational risks for teleworking, provided by the competent safety and health service of public employees of the Administration" of the Autonomous Community[23].

Whatever the collaboration option chosen is, it is easy to see that any of these requires the teleworker have a higher level of care, commitment and diligence in the degree of compliance with regulations and preventive company policy, especially if there is no continuous interactive communication between the parties or the employer cannot electronically control the adequacy of the distance workplace nor the compliance with the

[20] Art. 8, second paragraph.
[21] Art. 18 Spanish Constitution.
[22] Article 2.3 Decree 9/2011 of 17 March, on the day of non-contact work is regulated by telework in the Administration of the Community of Castile and Leon.
[23] Article 10.5 of the same Decree above cited.

preventive measures provided. In this sense, a collective agreement reflecting the special commitment assumed by the worker in health and safety by providing that they "undertake to comply with and enforce" (in respect to people who inhabit the home) "all safety and hygiene standards that legally or collectively are applicable at any time" and the worker assumes the responsibility of all changes that may be needed in the workplace" from which he provides services, in order for their work space to comply with health and safety requirements[24].

However, despite the greater involvement of the teleworker, the employer continues to assume his responsibility in prevention, without any cuts or reduction of the protective intensity.

III. NEW WAYS OF WORKING AND NEW RISKS FOR OCCUPATIONAL HEALTH AND SAFETY

The evaluation of occupational risks in telework and distance work should focus primarily on the specific location where the work activity is going to take place and on the labor instruments used. In addition, there are two other elements that clearly influence the production or the intensity of those risks, such as the system of communication between the company and the teleworker and the character or personality of the worker.

Physical risks are the most easily detectable, and the European legislator refers to them in first place when this issue is addressed in the EFAT 2002, although the current understanding of the labor risks must be broader and more inclusive. These risks can arise from the physical space (room) where work is carried out, and its analysis requires consideration of whether that space is separated from the rest of the house or not. Also of importance is the equipment used to perform the labor activity. If this is understood in a broad sense: Table, chair and technological work tool (computer, smart phone and so on). In Spain, in this area it is important to take into account the Royal Decree 488/1997 of 14 April, on minimum safety and health requirements for work with equipment including data display screens. That rule applies to workers who usually and as a significant part of their working time, use a computer with a data display screen[25]. Without any reference to the place of services, there is no doubt that this rule applies to face to face and remote workers.

While the Annex to that legal text is aware of the physical risks derived

[24] Article 38 III Collective Agreement "Orange Espagne, SAU" (Resolution Employment General Direction of August 5, 2014, BOE of 21 August).
[25] Art. 2.b).

from the workplace and, in order to avoid them, establishes objective requirements to prepare the so-called "working environment", the items below should be characterized, at least for the following aspects:

(1) A sufficient space to allow changes in posture and ordinary movements of the worker, thereby it aims to eliminate the risk of musculoskeletal disorders related to incorrect body postures maintained for a long time during working in a space that is too small.

(2) Adequate lighting, both general and special (work lamp), which ensures an appropriate level of clarity and brightness between the screen and the rest of the premises, in order to avoid the risk of serious eye problems.

(3) A particular location of the position so that the light sources do not cause glare on computer screens. In addition to this, other important aspects must be taken into account, such as those relating to proper ventilation, temperature, electrical installation, location of the various elements or (internal and external) noise pollution; All these aspects facilitate the proper development of the work activity and avoid the risk of suffering common diseases, such as headaches, colds or even accidents.

Another aspect of interest can also be the isolated nature of the working space, as a certain intimacy or privacy of it not only seems necessary to facilitate concentration and worker performance, but also to prevent indiscriminate access of outsiders, who could increase the likelihood of becoming an occupational risk.

Regarding work equipment, it is clear that, of the three constituent elements (table, chair and computer equipment), the most dangerous is the computer apparatus with which work is carried out, for the potential of both physical and psychological risks. With regards to the physical risks, these are related to the negative impact that this device can cause to different body parts (such as eyes, back, neck and hands and muscles in general) and can produce problems with vision or limbs. In this regard and in respect of the risks affecting the sense of sight, the above cited Royal Decree refers to the need for a quality data screen, stable and adaptable to the environmental conditions in inclination and orientation. Additionally, this quality can be critical to avoid a new labor risk that, although difficult to assess at the moment, is beginning to cause concern, and this is the possible impact of radiation of electromagnetic waves of technological instruments on workers' health[26].

Those responsible for safety and health should also take into account the psychosocial risks. These risks arise from the interaction between the

[26] J. Popma, *The Janus Face of the "New Ways of Work". Rise, Risks and Regulation of Nomadic Work* (Working Paper 2013.07. European Trade Union Institute), at 10 (Brussels, 2013).

particular personality of the worker and the conditions in performing their work, and they often reflect the professional competence and emotional relationship of the subject with new technologies, of necessary use in the case of teleworking. Well, two of the most important psychosocial risks are technostress and its opposite techno-addiction[27].

Regarding the specific case of new technological tools, *technostress* is generated when the worker receives, subjectively, a mismatch between the required high demands and the scarce personal resources available for the proper use of those at work[28]. The subject suffers from a lack of adaptation to these new tools related to his own training in handling them, his skills and personal tastes and, in general, with the concrete organization of work in the company. This subjective perception of the existence of a mismatch between high external demands (technological, business and organizational) and scarce labor, technical or personal resources for the use of computer technology produces a negative psychological state, of internal suffering, and at the same time an attitude of rejection of that technology. This specific type of stress, with a very specific cause, can lead to a situation of general work stress, of work burnout[29].

On the other hand, the worker may also fall into the occupational hazard of *techno-addition.* This addiction is a type of technological stress related with the uncontrollable compulsion to use new technology for long periods of time. In general, these ones tend to be people who are abreast of the latest technological advances and use them to make all possible tasks, including his/her work services, so they end up being dependent on them. Undoubtedly, the continuous labor connection can contribute to the aforementioned dependence, on the pretext of work motivation. As to its nature or identity, technological addiction can have a particular character, as limited as to the use of a single instrument (e.g., mobile) or to the consumption of a particular content or software (i.e., games).

Another similar occupational risk that can arise when the worker works at home or in another similar location, even without new technologies, is the *addiction to working alone.* Clearly, the fact that the worker transforms his domicile in a workplace or office, which he can access when he wants and starts to perform his work, can itself contribute -along with other personal or labor factors -to the development of a certain degree of work addiction. The

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[27] Cf. the recent major report Mettling (Transformation numérique et vie de travail) (Sep., 2015), http://www.franceculture.fr/2015-09-16-rapport-mettling-ce-que-le-numerique-change-au travail, at 52.

[28] G. Simmel, *Technostress,* Knowledge Unit. Fundació Humà, factor in Oct. 2015.

[29] Art. 3 European Framework Agreement on Work-Related Stress (Oct. 8, 2004).

psychosocial damage generated by ongoing work, which does not know any time limits easy to imagine, and therefore any argument about the importance of adequate times of rests and the urgent need to correct or prevent such kinds of compulsive behavior with the category of occupational risk is superfluous.

Finally, technological stress can also be accompanied by secondary effects. In the case of techno stress, the anxiety involves the psychological activation of high levels of stress and inner discomfort due to the use of technological tools, which generates a strong sense of professional and personal incompetence and the refusal to continue interacting with these tools. This leads to technophobia, which is defined by a personal attitude of reluctance to talk or use new technology, as the feeling that it generates in person is fear, hate and belligerence. With regard to fatigue, this appears shaped by strong feelings of mental and cognitive -and even physically- exhaustion, which prevents an employee from interacting with new technologies and developing their career.

In the case of techno-addiction, fatigue occurs after hours of continuous connection to an electronic device, contrary to what happens with anxiety, which can occur after a time of disconnection with a device even when not significant. This form of anxiety is called FOMO (*fear of missing out*), that is, fear or concern for missing something or the anxiety for not missing anything[30].

There is no doubt that these mental risks have the ability to seriously damage the physical and mental health, as well as the work and personal life of the worker, as all or some of them, can appear intermixed together.

IV. STRENGTHENING OF TRADITIONAL PROTECTIVE MEASURES AGAINST NEW RISKS

In order to avoid these important physical and psychosocial risks, that an experience of telework can put one at risk of, the employer should develop a plan of prevention of occupational hazards, where the preventive action is integrated into its overall management system, and in which the telework has a responsibility in relation to the evaluation of occupational risks and the adoption of appropriate protective measures. As already indicated, when it comes to the evaluation and even further practical application of protective measures, the worker concerned will play a more prominent role in telework than in an ordinary case of work in a business center. This does not reduce the duty of the employer, who maintains basic

[30] Cfr. Mettling report, *op. cit*., at 35.

obligations such as, for example, the need to inform and train the worker about the peculiarities of the new way of working remotely, the obligation to make to the employee concerned the specific measures of protection available, to update and modify, if necessary, and a prevention plan.

Two of the first measures for worker protection, which often go together, consist of providing information and training to the employee for them to deliver services in a safer way, especially when the employee works outside of the traditional workplace. According to the EFAT, the employer must inform employees on the "company policy about health and safety at work, in particular about the requirements for display screens"[31].

However, both the EFAT and the Spanish rules of prevention[32] suggest that the information given to the worker in this area should be as comprehensive and complete as possible; It is assumed that the more informed and more protected a worker is, the more safety is increased. Therefore, the information should cover general aspects, such as: 1) The prevention plan of the company (for special key issues such as a negotiating committee, reviews). 2) The individual bodies or the groups responsible for the management of the plan. 3) The protection of the workers interests (health and safety representatives, health and safety committee or specific commissions that can be created). 4) The physical and psychological potential risks[33] both of working outside the workplace (chosen by the teleworker) and at the place in the company, because we cannot forget that both are shared by the subject (partial telework). And, finally, 5) the protection assessments adopted by the employer and made available to workers, including the emergency ones and the control for health of those workers.

The worker must also receive thorough *specific training* in preventive matters[34]. Undoubtedly, information and training are two key aspects of preventive policy that go hand in hand, reinforcing each other, as they are complementary and interrelated facets. In fact, it must be taken into account that training has to be theoretical and practical. Training is always more demanding, because the aim is to train a worker thoroughly so that for preventing and eliminating occupational hazards by himself, which is

[31] Art. 8, second paragraph.
[32] Art. 18 LPLR.
[33] Cf., for example, the Agreement on Implementation of Telework in TELYCO of Dec. 16 2009. Annex II of the XI Collective Agreement TELYCO (Telefónica "Teleinformática and Communications SAU"), UGT (2008-2010), which develops its 24th clause (http://ugt-telyco.org/convenio-colectivo/) and Art. 61.7 of the II Collective Agreement "ONO Group (Cableuropa and Tenaria, SA)" (EGD Resolution of June 11,2013, BOE of July 1).
[34] Art. 19 LPLR.

important in the case of teleworking. As it is the case of the information, the training should be as complete and comprehensive as possible, taking into account the many variables in the workplace (i.e., type of chosen place, people living at home, kind of technological device and others). In this regard, it is arguable that, even without explicit reference to the preventive matter, the obligation to train the workers properly, imposed by the EFAT[35], and to provide "technical equipment" and "the characteristics of this form of work organization", also involves instructing in labor risks that may derive as from the one or the other[36].

In order to ensure quality, the ideal is that this training is given by experts, such as members of Prevention Service or similar bodies (in the Regional Administration, it is possible point out the Schools of Public Administration). Furthermore, it is also important to update the training, especially when there is a change of position, location or working tool, or simply accidents occur or adverse effects are detected with the health of the subject.

Moreover, in the field of telework, training is also a key issue on the business side, so both the employer and managers or colleagues in the workplace directly related to the teleworker should also receive specific training on the meaning and features of this new way of working. Although not expressly stated, it is clear that such training should also be aimed at highlighting the possible occupational hazards and the protective measures to be taken in each case[37]. Therefore, business training must be specific for each situation of telework and as wide as possible.

Starting with the most general, training should be directed to instruct the company in the planning and management of distance work, in which the new parameters of time and workplace can lead to new management techniques and measurement of the results by objectives. However, when it comes to setting up working model objectives the impact remote work may have on the health of the worker, which will depend on different elements: The real workload carried out by the subject, the productivity required and even the system of communication between the parties of the contract. Certainly, if the employee works by objectives and performs his work at his or he own leisure without a pre-set time, some health problems from overwork can arise, leading to the so-called "labor self-exploitation". In this

[35] Art. 10, second paragraph.
[36] Cfr. sixth paragraph, D) collective agreement on conditions for the provision of services in the BBVA bank in regime of teleworking, on July 27, 2011, http://www.ccoo-servicios.es/bbva/teletrabajobbva/.
[37] *Ex* Art. 10, second paragraph, EFAT.

sense, the EFAT requires that the workload and performance criteria applied to a teleworker are equivalent to those of comparable workers of the business center[38].

Certainly, one of the aspects in which that specific training in prevention is needed is in relation to psychosocial risks derived, especially, from the addiction to new technologies. In view of the already exposed range of potential risks that may arise from an excess of both work and the continued use of those technologies for carrying out the work (i.e., techno-addition, overworking, exhaustion or work stress), it is clear that the importance of respect working hours and rest time and the danger resultant from the lack of complete technological disconnection with the company. Sometimes uncontrolled use of the technological devices may be attributable to the worker who freely chooses to be technologically connected with the company.

Against this, on other occasions, it is the employer himself who, directly or indirectly, causes the permanent connection of that worker in order to get a better use of workforce and consequently business benefits. In this sense, the fact that the employer provides to the latter the aforementioned technological tools can generate, by itself, a sense of obligation on the recipient of them, as the worker may misunderstand his obligation to use the equipment. Therefore, it is necessary to reiterate here and now that the employer, as responsible for the safety and health of workers, must take appropriate protective measures to ensure a teleworker is free of psychosocial risks. This will require that the employer respects the working time limits and resting periods of the employee, trying to ensure the necessary disconnection of the worker at the end of their working day in order to protect their physical and mental health.

On the other hand, psychosocial risks may increase in distance work (even part-time) when this is done with technological disconnection of the company and, therefore, in a situation of complete isolation. So, the EFAT established the obligation of the company to avoid a worker's isolation, ensuring the possibility of regular contact with colleagues and access to information from the company[39]. Although the current model of distance work of the WS[40] is a part-time one, these risks do not disappear completely, especially with regard to the challenges of addiction or rejection to the new technologies.

[38] Art. 9, second paragraph.
[39] Article 9, third paragraph.
[40] Article 13.

Finally, another good measure of protection is the one that consists in the selection of the suitable teleworker by a multidisciplinary team made up of experts, for example, from human resources, risks prevention staff or psychologist. These experts can perform appropriate tests of personality and of adjustment to choose the best candidate for teleworking, selecting those subjects that can be better adapted to the situation and excluding those others for which there is strong evidence of the high probability of failure in this objective (e.g., people with a history of problems with concentration and lack of self-organization at work when they do not have direct control of an employer or a support team or addiction problems or technostress).

In any event, even with a doubt, if the desire and justification of workers in the specific case is firm, they can be given a second opportunity to work away from the business premises. The final idea is not to discriminate against anyone and open the possibility of working remotely to the largest possible number of subjects, as long as their work permits it.

CONCLUSIONS

1. The manner in which teleworking is legally regulated in Spain involves a new way of organizing work within companies, as it implies a new location for the worker, new working tools, a specific communication system between the remote worker, their colleagues and employer. In addition to this, a new way of exercising management and control of workers and, ultimately new forms of performance measurement through objectives. As a new way of organizing work activities and provide services, telework requires a change in mindset of the parties, whose relationship must be based on greater flexibility, reliability and professionalism.

2. The place to provide services from a distance tends to be the worker's home or another place freely chosen by him or her, without a legal preference for the former place. The provision of this place should be included in the specific telework arrangement and, therefore, it should be communicated to the employer for the purposes of assessing its suitability from the point of view of the prevention of occupational risks. As the worker has the responsibility to choose the location of work, any opposition from the employer has to be based on objective reasons.

3. The evaluation of occupational risks in teleworking should focus on two main sources: The specific location of the work activity and the technical equipment used to perform it. However, there are another two elements that also influence the manifestation or intensity of those risks, such as the system of communication between the company and the

teleworker (complete disconnection or not from workplace during working hours) and character or personality of the latter. These four elements, especially if poorly combined, can produce physical and psychological or psychosomatic risks for workers and even coworkers (those who the worker engages within a team or during the days that he goes to the center work) or individuals connected with the worker in their private life.

4. The employer holds the final responsibility for the safety and health of workers, and must take the appropriate protective measures to ensure distance work is free of physical (i.e., falls or muscle aches) and psychosocial (for example, technostress or techno-addition) risks. In this sense, and in order to avoid the second type of risks, he must be scrupulous, for example, respecting the limits of working time and rest, and trying to ensure the necessary disconnection of the worker at the end of his working day to protect the employee's physical and mental health.

5. With regard to working time, it is left to the teleworker to manage his/her working hours, unless a specific agreement is in place for something different. This means that if online and simultaneous connection between the employee and other workers exists, and the employer intends to ensure the teleworker works during specific hours the employee must expressly agree with this arrangement. The general rule is that the employee is self-directing in their work unless otherwise related to them, which can occur when the intensity of work changes, but must be agreed upon between the parties.

6. The specific representatives in the field of occupational risks are safety representatives and safety and health committees. These bodies should pay more attention to the risks of telework. Trade unions should promote new means of union action, aimed at greater inclusion of teleworkers.

7. Collective bargaining and, where appropriate, individual telework arrangements should regulate, in greater detail, the particularities of telework, for example, the aspects relating to the organization of working time and safety and health of workers. The enterprises' collective agreement is the ideal place to agree the most specific and appropriate solutions for each case of teleworking.

SEXUAL VIOLENCE AGAINST WOMEN IN DRC: UNDERSTANDING THE MOTIVATIONS OF A CRIME AGAINST HUMANITY

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The crimes perpetrated in DRC are supported by diverse evidence. However, no one has up to now sought to explain in a systematic way the motivations of those perpetrators for such violence against women. My paper offers five hypotheses. According to several sources, the acts of sexual violence in the armed conflicts in the DRC were motivated by racist and/or sexist impulses (Section 1); They were used either to submit an ethnic group, a national or ideological opponent (Section 2), or to exterminate or destroy a national or ethnic group deemed inferior (Section 3). They were also used either as a weapon of war to intimidate civilians population under attack (Section 4), or as a medical treatment against HIV/AIDS (Section 5). In this paper, the author tries to explain these motivations.

INTRODUCTION

Sexual violence is a common characteristic of the armed conflicts that have taken place in the Democratic Republic of the Congo (DRC). In DRC, sexual abuse of extreme gravity continues to be committed by armed groups, both state and non-state actors, by blue helmets and civilians in eastern

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Congo[1]. It is estimated that more than six million people have died, and that thousands of women have been raped during the course of this conflict. Rich and diverse evidences have now emerged to corroborate all these crimes. The general consensus is that this evidence is enough to warrant their qualification as crimes against humanity. Up to now, however, no one has sought to present, in a systematic manner, the perpetrators' motivations for such violence against women and crimes against humanity. In this paper, we contribute towards the filling of this gap by examining these motivations.

According to several sources[2], the acts of sexual violence in the armed conflicts in the DRC were motivated by racist and/or sexist impulses (Section 1); They were used either to submit an ethnic group, a national or ideological opponent (Section 2), or to exterminate or destroy a national or ethnic group deemed inferior (Section 3). They were also used either as a weapon of war to intimidate civilians population under attack (Section 4), or as a for medical treatment against HIV/AIDS (Section 5).

I. CRIMINAL ACTS MOTIVATED BY RACIST AND/OR SEXISTS IMPULSES

Together with Yakin Ertürk, we consider that "The scale and the brutality of sexual violence in DRC seem to have eroded all protective social mechanisms, unleashing brutal fantasies carried out on women's bodies. Civilians are increasingly among the perpetrators of rape, which indicates a normalization of the war-related violence. This intensifies existing inequalities and oppression of women in society. If the sexual violence associated with war is addressed in isolation, gender-based discrimination and violence endured by women in "peace" will be grossly neglected and the war on women reinforced. Women survivors of rape have suffered severe physical and psychological injuries, but lack sufficient care"[3]. Finally, Basing us on the previous arguments in particular the fact that 90 % the victims report that the perpetrators spoke Kinyarwanda[4], the fact that Banyarwanda considers the Congoleses as the Bichuchu or the BMW[5], the fact that the victims of rapes are mainly women members of the

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[1] Yakin Ertürk, Report A/HRC/7/6/Add. 4 of *the Special Rapporteur on Violence against Women, Its Causes and Consequences, Mission to the Democratic Republic of the Congo*, § 13, 19, 25, 30—33, 38, 47—54 (Feb. 28, 2008).

[2] Many authors, UN special Rapporteur, NGO and Testimonies of Victims and Rapists.

[3] Yakin Ertürk, Report A/HRC/7/6/Add.4, § 105—107.

[4] Same opinion, Kataliko Actions for Africa, Report Final for Project TFV/RDC/2007/R2/032 *Reconnaissance de l'état de victimes et appui à la réhabilitation psychologique desdites victimes in DRC*.

[5] Ambroise Katambu Bulambo, Repression of Revisionism in Congolese Law in Light of Swiss Law, Schulthess Verlag, Zurich 2013, at 158.

Congolese ethnic groups well identified and well situated geographically, we can reasonably conclude that the sexual violence acts are motivated by racist and/or sexists impulses.

According to Articles 2 para. 2, 4 and 9 of CESCR[6] or s. 11 Let. e of CEDAW[7], any discrimination or differential treatment of women because of their female identity or sex is prohibited. These provisions lay down the principle of the prohibition of discrimination against women in the field of social security. According to Swiss Federal Tribunal[8], a person faces discrimination when that person is treated differently because of his or her membership into a particular group which, historically or in the current social reality, has suffered from exclusion or depreciation. The principle of non-discrimination does not prohibit any distinction based on one of the objective criteria. There must be a special justification[9]. It must be clearly justified[10]. It is difficult to justify any sexual violence perpetrated against the Congolese woman, or any woman belonging to a given ethnic or religious group. Nevertheless, it can be shown that it is based on an unacceptable, prohibited differentiation (viz., the fact that the victim is female and/or belongs to a social group deemed inferior or a religion that must be destroyed) and is therefore a form of unjustified discrimination. Indeed, it can be affirmed that it is based on a differentiation prohibited (belongs to the female gender or to a lower people or to a religion to delete) unacceptable and are of this fact of unjustified discrimination. Prohibited discrimination is in fact a qualified inequality, i.e. a difference of a manifest or particularly shocking treatment, which may have a pejorative connotation. This is the case when women, who are very respected in their ethnic groups and families and regarded as pillars/mothers of the clan, or the ethnic group (as shown by monikers like Na-Balega, i.e., mother of Lega) are raped, sometimes in public, or in front of their children/spouses, or forcefully raped by their children, fathers or even father-in-laws. Here, the woman is depreciated, reduced to an object, to a non-being, to the status of an animal. Men are rarely raped in such conditions. Such a difference in treatment is particularly shocking and has a pejorative connotation.

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[6] International Covenant on Economic, Social and Cultural Rights International Covenant on Economic, Social and Cultural Rights, RS 0.103.1.
[7] Convention on the Elimination of All Forms of Discrimination against Women Convention on the Elimination of All Forms of Discrimination against Women, RS 0.108.
[8] ATF 137 V 334 S. 347, consid. 6.2.1.
[9] ATF 135 I 49 consid. 4.1.
[10] *Idem*.

II. A WEAPON OF WAR TO SUBMIT AN ETHNIC GROUP, A NATIONAL, OR IDEOLOGICAL OPPONENT

In the armed conflicts in the DRC, mass rapes of women are used to submit an ethnic group, a national or ideological opponent. When acting this way, the perpetrators commit a war crime while simultaneously violating several human rights. In debasing women's dignity through sexual coercion, those perpetrators also scare their opponents into submission. It is for this reason that military courts have qualified acts of sexual violence as war crimes. Indeed, it constitutes a serious violation of the laws and customs applicable in international armed conflict as provided by article 8 of the ICC Statute. The case below confirms our previous assertions: Ms Yakin Ertürk reports[11] some cases which confirm our previous assertions:

> In December 2006, a mob of 250 villagers in Karawa (630 km north east of Mbandaka) reportedly attacked a police station and lynched a man held at the station whom the villagers accused of witchcraft. In response, PNC assembled about 70 police officers from other duty stations (Businga, Bobadi and Inera) and pillaged Karawa and raped at least 30 women, including a pregnant woman and four minor girls.

III. A WEAPON OF WAR TO INTIMIDATE THE CIVILIAN POPULATION UNDER ATTACK

In the armed conflicts in the DRC, mass rapes of women are often committed in the context of a widespread or systematic attack against civilians in order to intimidate, or instill fear in, the populace. Because of this, rape is also considered as a crime against humanity (art. 7 Statutes ICC). This is the case of Kasika in 1998, where in the course of a generalized attack against civilians and three nuns of the Roman Catholic mission at Kasika (Province of Sud-Kivu) were raped before being murdered by the rebel troops of RCD/APR of Rwanda. Others cases reported by Ms Yakin Ertürk[12] confirm our opinion:

> In March 2006, a local mob in Lifumba Waka (515 km north east of Mbandaka) took the local PNC Commander hostage to protest against police abuses. Policemen from Basankusu police station reportedly responded with an indiscriminate reprisal against the entire civilian population. Thirty seven women were raped, including three minors and two pregnant women.
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> In August 2006, several tax collectors were violently attacked in Bolongo Loka (512 km north east of Mbandaka). Police from Botewa Police Station

[11] Yakin Ertürk, Report A/HRC/7/6/Add.4, §34—35 and 39.
[12] Yakin Ertürk, op. cit., §42—45.

reportedly organized indiscriminate reprisals against the civilian population and raped at least 60 women, including 1 pregnant woman.

IV. A WEAPON OF WAR TO EXTERMINATE OR DESTROY, IN WHOLE OR IN PART, A PROTECTED GROUP

When carried out to exterminate or destroy, in whole or in part, a national, ethnic, racial or religious group, rape constitutes a crime of genocide, as provided for by article 6 of the Rome Statute. Through sexual coercion, often accompanied by acts of inhumane, cruel and degrading treatment, there is serious harm to the physical or mental integrity of women, or members of a targeted group (art. II, let. b Convention against genocide and 6 ICC Statute). Worth emphasizing here is the fact that several perpetrators of sexual violence are either FDLR combatants or Rwandan Rasta, some of whom have reportedly been implicated in the genocide in Rwanda[13]. In fact, the acts of sexual violence perpetrated in the East of the DRC are reminiscent of those perpetrated by the interahamwe militia during the Rwanda genocide. Here, the FDLR combatants raped women belongs to a national group (Congolese regarded as bichuchu = shadow of a person)[14]. In doing so, these combatants attacked groups which are distinguished as such self-identification or groups recognized as such by others, including the authors of crimes (identification by a third party), and which those combatants seek to destroy the woman as mother of the family, the clan, and the ethnic group. The objective sought by the FDLR combatants is therefore the physical and psychological destruction of women. This has implications on the society as a whole. Women were gang raped, often in front of members of their family and community. In many cases, men were forced, under the threat of arms, to have sexual relations with female members of their own family (their own daughters, mothers, or sisters). It also happens that women received gun shots or were stabbed in the vagina after having been raped. At times, the perpetrators of these crimes required some women in captivity to eat excrement or the flesh of their murdered relatives. These criminal acts were also carried out by other armed groups[15]. In several cases, in fact, the rapists imposed sexual acts on women regarded as representatives of an ethnic or religious group, or distinctive national group, recognized as such by others, and the rape perpetrators. The following cases are illustrative.

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[13] Yakin Ertürk, Report A/HRC/7/6/Add.4, §2 and 21.
[14] Ambroise Katambu Bulambo, op. cit., at 158.
[15] Yakin Ertürk, op. cit., §2 and 17—25.

In her Report, Ms. Iulia Motoc reports that:

> Many of the victims (members of identified ethnic groups) treated at hospitals in the provinces of Kivu are between 10 and 14 years old and some 40 per cent of them are seropositive[16].

In her report, Ms Yakin Ertürk[17] asserts what follows:

> In some cases, the perpetrators deliberately seek to destroy the victim's genital and reproductive organs. The perpetrators rammed a stick into her vagina, damaging her genital organs". She estimates that "20 per cent of all rape victims in Sud-Kivu have suffered irreparable damage to their genital organs. Many rape victims also suffer vaginal fistula, i.e. the tearing of a hole (fistula) in the tissue between the vagina and the rectum or the vagina and the bladder. A woman suffering from fistula can no longer hold her urine or faeces. The smell is constant and humiliating to the woman. Left untreated, fistula can lead to chronic medical problems, including ulcerations, kidney disease, and nerve damage in the legs. Most fistulas could be treated with a surgical operation. The rapists often infect women with HIV and other sexually transmitted diseases. She estimates "that 22 per cent of rape victims in the province are HIV-positive. Few victims have access to post-exposure prophylaxis, which could significantly reduce the risk of infection, if taken within 24 to 72 hours of the rape.

We conclude that the rapists (HIV/AIDS positive) impose sexual relations as medical treatment against HIV/AIDS. Then all ethnic groups without drugs (ARTV) can be destroyed or exterminated. To the extent that it is used to transmit the HIV virus to women, rape is being used as a biological weapon.

V. SEXUAL CONSTRAINTS FOR MEDICAL TREATMENT AGAINST HIV/AIDS

The last motivation for these crimes involves search for cure against HIV/AIDS. According to a local belief, sex with a virgin provides cure against HIV/AIDS.

In her report, Ms Yakin Ertürk reports what follows:

> the victims are increasingly young girls. An analysis of the cases in 2007 shows that 13 per cent of the victims are girls younger than 18 years old and that 17 per cent of patients who were treated at the hospital in Bunia for rape related injuries were younger than 12 years[18].

In her Report, Ms. Iulia Motoc reports[19] that:

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[16] Iulia Motoc, Report E/CN.4/2003/43 of April 15, 2003 on the Situation of Human Rights in the Democratic Republic of the Congo, § 65.
[17] Yakin Ertürk, Report A/HRC/7/6/Add.4, §55—58.
[18] Yakin Ertürk, Report A/HRC/7/6/Add.4, § 16 and 18.
[19] Iulia Motoc, op. cit., § 65.

> Many of the victims treated at hospitals in province of Kivu are between 10 and 14 years old. Why the rapists persecute the children? The belief that HIV and AIDS can be cured by raping a virgin girl is one myth motivating the rapist[20].

CONCLUSION

At the end of this article, we conclude with others authors and testimonies[21] what follows:

These acts of sexual violence in the armed conflicts in the DRC were motivated by racist and/or sexist impulses; they were used either to submit an ethnic group, a national or ideological opponent, or to exterminate or destroy a national or ethnic group deemed inferior. They were also used either as a weapon of war to intimidate civilians population under attack, or as for medical treatment against HIV/AIDS. As the motivations of the rapists are known, it would now be easy to punish the known persons in charge.

But until now, nobody take the necessary steps to end the widespread impunity. The Women survivors of rape have suffered severe physical and psychological injuries, but lack sufficient care. Without strong international backing, nothing will be done[22]. In particularly, we recommend to the International Criminal Court to investigate war crimes or crimes against humanity—including sexual violence committed after July 1, 2002; Prosecute the responsible of these sexual violence and award compensation to victims and to take appropriate measures to protect witnesses and victims collaborating with the Court. At the same time, we recommend to the international community to support all projects of rehabilitations of victims in DRC. For example, our NGO Kataliko actions for Africa-KAF needs financial support to reinforce and enlarge this clinic to prevent and address sexual and gender-based violence by providing medical and psychosocial care to rural survivors. Without actions combined indeed, the satisfactory results will be difficult to reach[23].

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[20] Yakin Ertürk, op. cit., § 16.

[21] More than 300 Women Victims Interviewed by the Organizers of the NGO KAF in Province of Sud-Kivu (DRC).

[22] Yakin Ertürk, op.cit., §101, 106—111.

[23] Haut-Commissaire de l'ONU aux droits de l'homme, Rapport de mars 2011 du Panel à la Haut Commissaire aux Droits de l'Homme sur les moyens de recours et de réparation pour les victimes de violences sexuelles en RDC, Genève 2011, at 63—65/Pablo de Greiff, rapport A/68/345 du 23 août 2013 du Rapporteur spécial sur la promotion de la vérité, de la justice, de la réparation et des garanties de non-répétition, § 40—56, 62, 69, 75.

CLIMATE CHANGE AND THE PROTECTION OF HUMAN RIGHTS: THE ISSUE OF "CLIMATE REFUGEES"

Marta Picchi[*]

There have been many hot comments on the climate Agreement concluded in Paris in December 2015: In most cases, the opinions are favorable, but there are also some criticisms. It is important to maintain human rights at the core of climate action, but the Paris Agreement does not contain the provisions needed to tackle the human rights dimension of climate change and provide support for poorer countries whose capacities are strained by climate change impacts. Developed countries should seriously consider the issue of "climate refugees" and the scope thereof. In the last few years, several million people were forced to leave their homes because of floods, windstorms, earthquakes or other disasters caused by global warming. Nevertheless, the status of "climate refugee" is not yet recognized and leaves a legal loophole affecting victims that cannot benefit from such status.

INTRODUCTION

Climate change is a reality of world politics in the twenty-first century, because it will fundamentally affect the lives of millions of people who will be forced over the next decades to abandon their homes and villages to seek refuge in other areas. A part of climate migrants may seek refuge in their own countries, but others will have to cross borders.

In the richer countries, some local refugee crises may be prevented through adaptation measures such as reinforced coastal protection, changes

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in agricultural production and water management. On the contrary, the poorer countries are the most vulnerable to climate change effects and have the least capacity to adapt.

There have been many hot comments on the climate agreement concluded in Paris in December 2015: In most cases, the opinions are favorable, but there are also some criticisms. It is important to maintain human rights at the core of climate action, but the Paris Agreement does not contain the provisions needed to tackle the human rights dimension of climate change and provide support for poorer countries whose capacities are strained by climate change impacts.

This paper begins by examining the essential features of environmental migration, highlighting the many consequences of the regulatory gap for this phenomenon: This analysis will allow us to indicate, therefore, some possible response strategies.

I. CLIMATE CHANGE

Environmental degradation such as land degradation and pollution of water, air or soil are brought about by the misuse of resources, poor planning, poor infrastructure and poor governance and monitoring. Carelessness, mismanagement of resources, industrial accidents and pollution are on the increase worldwide. These factors are superimposed on global climate change (change in rainfall patterns, sea-level rise, increased frequency of heat waves, etc.).

Climate change and environmental disasters may constitute the major causes for migration in the future[1].

To limit the consequences of climate change, there are two modes of action to be implemented without delay: The reduction of emissions to prevent further warming and adaptation to climate change already under way to prevent the forced displacement of people[2].

II. "CLIMATE REFUGEES"

Environmental migrants[3] are extremely vulnerable because they are not

[1] Juliette Williams, *I Costi Umani Del Cambiamento Climatico*, 1 DIARIO EUROPEO, 58—66 (2012).
[2] Jon Barnett, *Adapting to Climate Change in Pacific Island Countries: The Problem of Uncertainty*, 29(6) WORLD DEVELOPMENT 977—993 (2001); Chris Methmann, Angela Oels, *From "Fearing" to "Empowering" Climate Refugees: Governing Climate-Induced Migration in the Name of Resilience*, 46(1) SECURITY DIALOGUE 51—68 (2015).
[3] Elizabeth Marino, *The Long History of Environmental Migration: Assessing Vulnerability Construction and Obstacles to Successful Relocation in Shishmaref, Alaska*, 22(2) GLOBAL ENVIRONMENTAL CHANGE 374—381 (2012).

protected by international law. The classic definition of refugees does not include them[4]. However, statistics show that, at present, the environmental refugees outnumber refugees for political, religious and war conflicts[5].

At the international level there is still no universally accepted definition of "environmental refugee"[6]. In 1970, this concept was introduced by Lester Brown of the Worldwatch Institute and, since 1985, it entered into common usage after report entitled *Environmental Refugees* prepared by Essam El-Hinnawi for the *United Nation Development Program*[7]. Since the Nineties, Norman Myers has studied this phenomenon, becoming one of the greatest scholars[8].

The notion of "environmental migrants" includes "climate refugees", even though its breadth makes it impossible to specify or quantify climate-related migration because a clear definition of "climate refugees" does not exist yet[9]. In literature, these terms are undefined and, only in 1997, "climate refugees" were taken into account by the United Nations High Commissioner for Refugees, although, just in the *State of the World's Refugee* of 1993, environmental degradation has been identified among the main causes of emigration, along with political instability, economic tensions and ethnic conflicts.

The first difficulty in providing a precise and agreed definition depends on the fact that environmental phenomena and environmental degradation can be a cause of migration to more hospitable areas, but these are not the only reason, there are often other factors to consider: Economic reasons, wars or political instability, fears of political or religious persecution.

The second difficulty is the fact that those who leave the places of residence often remain within the borders of the country of origin: Including them within "environmental refugees", the quantitative dimension of this category increases exponentially, in breaking away the figure of refugee present in international law which always presupposes the abandonment of

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[4] María José Fernández, *Refugees, Climate Change and International Law*, 49(May) FORCED MIGRATION REVIEW 42—43 (2015).

[5] François Gemenne, *One Good Reason to Speak of "Climate Refugees"*, 49(5) FORCED MIGRATION REVIEW 70—71 (2015); Etienne Piguet, *From "Primitive Migration" to "Climate Refugees": The Curious Fate of the Natural Environment in Migration Studies*, 103(1) ANNALS OF THE ASSOCIATION OF AMERICAN GEOGRAPHERS 148—162 (2013); Rafael Reuveny, *Climate Change-Induced Migration and Violent Conflict*, 26(6) POLITICAL GEOGRAPHY 656—673 (2007).

[6] Janaína Freiberger Benkendorf Peixer, *O reconhecimento do status de refugiado ambiental: um problema conceitual?*, 16(2) BOLETIM MERIDIANO 34—40 (2015).

[7] ESSAM EL-HINNAWI, ENVIRONMENTAL REFUGEES (Nairobi, UNEP, 1985).

[8] NORMAN MEYERS, JENNIFER KENT, ENVIRONMENTAL EXODUS. AN EMERGENT CRISIS IN THE GLOBAL ARENA (Washington DC, Climate Institute, 1995).

[9] Chris Methmann, *Visualizing Climate-Refugees: Race, Vulnerability, and Resilience in Global Liberal Politics*, 8(4) INTERNATIONAL POLITICAL SOCIOLOGY 416—435 (2014).

the state of residence and the search for asylum in another state.

However, in this essay the author used the concept of "climate refugees" to characterize people forced to abandon their place of origin because of an environmental stressor, regardless of whether or not they cross an international border.

III. POSSIBLE POLICY RESPONSES

Many scholars believe necessary to recognize internationally the *status* of environmental refugee and create a framework of protection especially in regulating migration policies that undervalue or not to consider the environmental pressures as a cause of emigration[10].

Generally, several options are considered in this debate at global level: First of all, the expansion of the *United Nations Convention relating to the Status of Refugees* of 1951.

Proposals to this effect have intensified since 2001, criticizing the rigidity of the refugee definition used by the *1951 Refugee Convention*: According the Article 1, refugee is a person who, due to

> … fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owning to such fear, is unwilling to avail himself for the protection of that country …

However, there are also positions against the introduction of the figure of the "climate refugee" as a figure in its own right or as an extension of the definition contained in the *1951 Refugee Convention* because a part of the literature considers that there may be negative effects[11]. In fact, the expansion of refugee *status*—introducing the desire to improve their living conditions among the reasons to be considered for granting asylum—would weaken the current conception of the right to asylum as a universally recognized human right because the discretion of governments to grant or deny asylum would be expanded. In addition, subject to the requirement of

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[10] Francesco Argese, *Threats from Sea-Level Rise to Small and Low-Lying Island States: Is International Law a Hope for "Environmental Refugees"?*, 65(3) LA COMUNITÀ INTERNAZIONALE, 435—454 (2010); MICHELLE FOSTER, INTERNATIONAL REFUGEE LAW AND SOCIO-ECONOMIC RIGHTS: REFUGE FROM DEPRIVATION (Cambridge, Cambridge University Press, 2007); Jean Lambert, *Migrazioni e cambiamento climatico: proposte politiche*, (1) DIARIO EUROPEO 48—57 (2012); Rafael Leal-Arcaz, *Climate migrants: Legal options*, 37 PROCEDIA—SOCIAL AND BEHAVIORAL SCIENCES 86—96 (2012).

[11] Frank Biermann, Ingrid Boas, *Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees*, 10(1) *Global Environmental Politics* 60—88 (2010); Karen Elizabeth McNamara, Chris Gibson, *"We Do Not Want to Leave Our Land": Pacific Ambassadors at the United Nations Resist the Category of "Climate Refugees"*, 40(3) GEOFORUM 475—483 (2009).

border crossing, those who move within the country of origin would be excluded from international protection.

Another option is the broadening the 1998 *Guiding Principles on Internal Displacement* to environmentally-induced movements. Nevertheless, the *Guiding Principles* only provide guidelines and have no legal force. In order to be legally binding, the *Guiding Principles* have to be domestically incorporated, but very few governments actually have done it, often through incomplete laws and policies[12].

The addition of a protocol to the *United Nations Framework Convention on Climate Change* is another debated option to address climate-induced migration and to cover the recognition, protection and resettlement of environmental migrants[13]. However, this option is hard to materialise, mainly because of the potential lack of political will: Most receiving countries want to restrict the refugee regime, rather than improve it.

A further possible option is using various forms of temporary protection as a protection instrument for accommodating persons displaced because of environmental factors: Just think to the *United States Immigration Act* of 1990. Nevertheless, this protection is temporary and seems not be adequate to deal large migratory flows.

There were also proposals to attribute a specific mandate to the United Nations Security Council, believing climate change as a major threat to peace and international security. However, a part of literature criticizes the introduction on the agenda of the Security Council of the issue of climate change and many developing countries are wary of this institution, fearing that a broader mandate could extend the influence of the Security Council on their internal policies. In addition, the Security Council would lack legitimacy, because its five permanent members, namely the major producers of greenhouse gases, have veto power. Finally, the Security Council's functions are to preserve international peace and security and to authorize the use of force if necessary: Climate change has a completely different nature and, therefore, it does not seem to justify a stronger role of the Security Council.

At the international level, two other main approaches are considered: Planned resettlement and reducing the vulnerability of affected populations through tailored development cooperation measures. Particularly, development cooperation can contribute to a reduction of migration through

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[12] Sara Ianovitz, *I 'rifugiati climatici': una questione aperta*, 5(1) DIRITTI UMANI E DIRITTO INTERNAZIONALE 141—148 (2011).
[13] *See* Biermann, Boas, *cit*.

adaptation measures. Other possible solutions are bilateral or regional agreements, e.g., to permit to the population of the small island states the resettlement in foreign countries, before being submerged by the sea[14]: In 2000, this option was followed by the Government of Tuvalu, which has concluded an agreement with New Zealand, given the geographical proximity, to accommodate citizens when the sea will have reached the point where the evacuation will become inevitable[15]. However, the few resettlement programs implemented to date have dealt mainly physical resettlement rather than the social and cultural integration of displaced people in host communities, although the biggest problem is how they can maintain their community identity even after the loss of the territories.

IV. THE PARIS CLIMATE AGREEMENT

The solutions described above are designed to act on already existing phenomena, but economic aid and emergency interventions in case of disaster are not sufficient to limit the causes of mass migration. It is necessary to prevent and take into consideration the political, technological and scientific solutions to limit the effects of climate change, bearing in mind that the rich countries are the major causes of these changes[16].

The *Paris Climate Agreement* of 2015 has historical significance because it was approved by almost all countries of the world which have recognized that global warming is a world-wide phenomenon that must be tackled. Furthermore, the *Paris Agreement* states the need for a rapid end of the period of the energy produced through fossil fuels to pass to the use of renewable sources.

The *Paris Agreement's* objectives are ambitious; However, the proposed means of achieving them are weak and lack credibility. The *Agreement* strategy for the implementation of emissions reductions is based primarily on the *Intended Nationally Determined Contributions*, but there are no sanctions for countries that do not respect their commitments. In addition, the *Paris Agreement* does not consider among its objectives the issue of "climate refugees".

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[14] Holly D. Lange, *Climate Refugees Require Relocation Assistance: Guaranteeing Adequate Land Assets Through Treaties Based on the National Adaptation Programmes of Action*, 19(3) PACIFIC RIM LAW & POLICY JOURNAL ASSOCIATION 613—640 (2010).

[15] Carol Farbotko, Heather Lazrus, *The First Climate Refugees? Contesting Global Narratives of Climate Change in Tuvalu*, 22(2) GLOBAL ENVIRONMENTAL CHANGE 382—390 (2012); Colette Mortreux, Jon Barnett, *Climate Change, Migration and Adaptation in Funafuti, Tuvalu*, 19(1) GLOBAL ENVIRONMENTAL CHANGE 105—112 (2009).

[16] Stefano Nespor, *I rifugiati ambientali*, (4) FEDERALISMI.IT 1—10 (2007).

European Parliament, in view of the Paris Conference, adopted a Recommendation[17] with which it stresses the necessity to implement global emission reduction pathways by 2050 and calls for a comprehensive review process every five years to ensure dynamism of the implemented mechanism and reinforce the level of ambition of reduction commitments[18]. Moreover, European Parliament calls for general reinvigoration of the European Union's climate policy and urges the Member States to consider complementary commitments that build on the agreed 2030 target, including action outside of the European Union[19]. Furthermore, European Parliament considers that the European Union and its Member States would have to agree on a roadmap for scaling up predictable, new and additional finance, in line with existing commitments[20].

Finally, European Parliament stresses the importance of maintaining human rights at the core of climate action and considers necessary to address the human rights dimension of climate change and provide support for poorer countries whose capacities are strained by climate change impacts. European Parliament insists on the full respect for the rights of local communities and indigenous peoples particularly vulnerable to the adverse effects of climate change[21].

The European Parliament notes with concern that "climate refugees" will need to rely on effective protection and support from the international community. Developed countries should seriously consider the issue of "climate refugees" and the scope thereof: 166 million people were forced to leave their homes because of floods, windstorms, earthquakes or other disasters caused by global warming between 2008 and 2013. Nevertheless, the *status* of "climate refugee" is not yet recognized and leaves a legal loophole affecting victims that cannot benefit from such *status*[22].

Through this recommendation, the European Parliament wants to insist[23] that the increased efforts to tackle global climate change should be undertaken jointly by developed and developing countries, in accordance with human rights and the problem of "climate refugees", since they are closely related.

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[17] European Parliament resolution of Oct. 14, 2015 on *Towards a New International Climate Agreement in Paris* (*2015/2112*(*INI*)).
[18] *See* §§ 9 and 12.
[19] *See* § 14.
[20] *See* § 55.
[21] *See* § 17.
[22] *See* § 71.
[23] European Parliament, *Climate Refugees.* Legal and Policy Responses to Environmentally Induced Migration—Study (Brussels 2011).

CONCLUSION

The lack of recognition of the *status* of "climate refugees" has many implications: They are not provided with adequate protection and their condition is not addressed effectively by the international community. Recognition is needed for planning of measures to limit the causes of mass migration through appropriate solutions which cannot be reduced to only *ex-post* interventions, such as economic aid or extemporaneous interventions of the international community.

Developing countries, in particular least developed countries and small island developing states, have contributed least to climate change, are the most vulnerable to its adverse effects and have the least capacity to adapt, because the poorer countries are not able to initiate sufficient adaptation programs, and climate-induced migration might be the only option.

For these reasons, developing countries need tangible assistance in their transition to sustainable, renewable and low-carbon forms of energy, guaranteeing therefore that their adaptation needs will be met in both the short and the long term. As a result, the major developed economies should harness their existing advanced infrastructure to promote, enhance and develop sustainable growth and commit to supporting developing countries in building their own capacity, so as to ensure that future economic growth in all parts of the world is achieved at no further cost to the environment and to prevent the increase of the phenomenon of so-called "climate refugees".

However, to prevent massive migration flows, it is necessary that the issue of "climate refugees" is tackled together with the problem of reducing the negative effects of climate change: The two issues cannot be separated.

From this point of view, the *Paris Climate Agreement* is not satisfactory.

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