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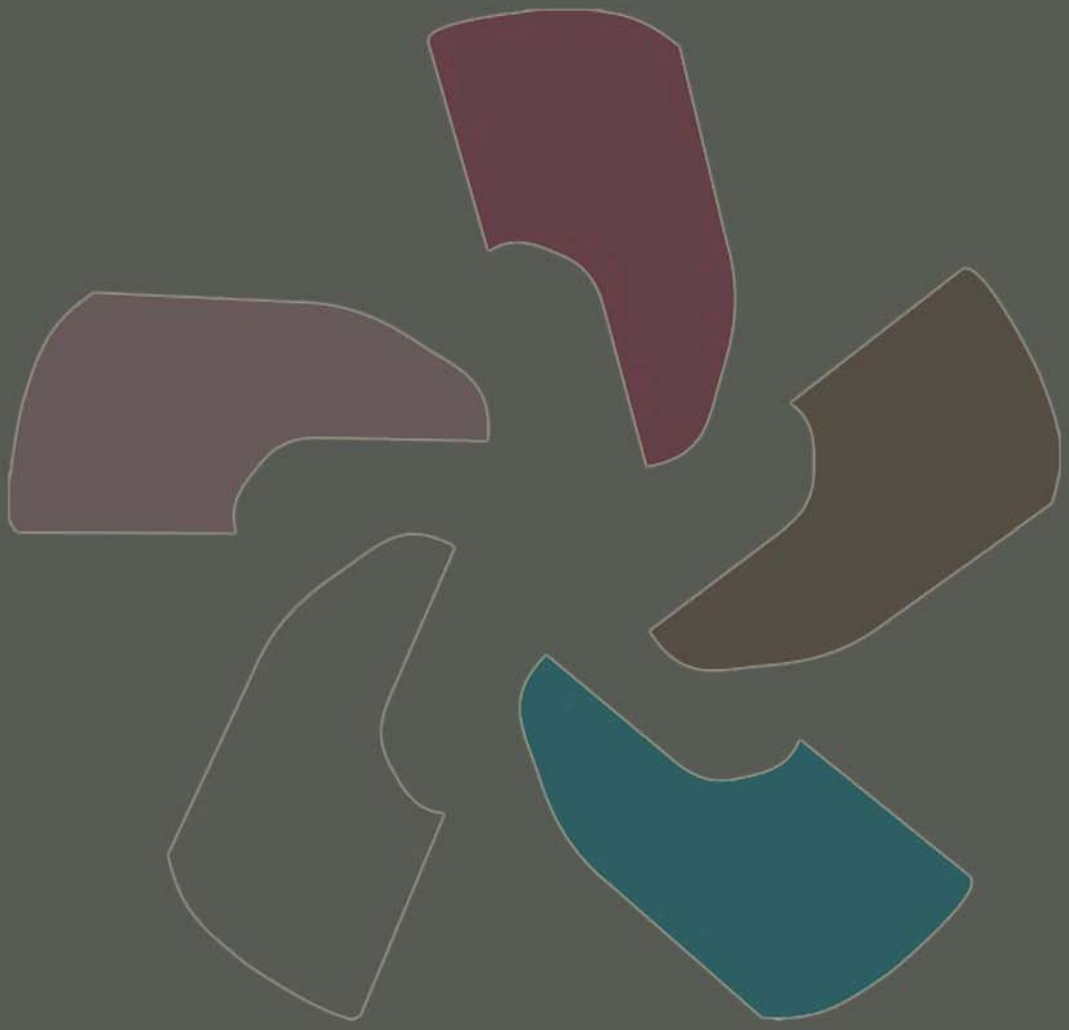

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IMPORTANT AND CRITICAL ISSUES OF COMPLYING PRESENTATION BASED UPON LETTER OF CREDIT (L/C) PAYMENT

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Abstract:

In this study, there is suggested proposals and determined about such a way must be followed in complying presentation in accordance with letter of credit payment and the faults of exporting companies specific to Turkey in this issue. Beneficiary needs to provide complying presentation after preparing the papers appropriately at first letter of credit terms, rules of UCP 600 and ISBP 745 for applicant bank and if available confirming bank's pay obligation could continue against beneficiary company in letter of credit payment. Since provided complying presentation ability requires a certain level of experience and expertness; it is observed about exporter companies in Turkey localized, receive export prices late and pay extra charges/commissions, could not benefit from pay obligation guarantee of applicant bank and if available confirming bank because of their generally discrepant document, facing contradiction in terms on this complying document preparing. Moreover, a various letter of credit condition which are disadvantages of exporters and could be caused financial losses are discussed and includes advices in this study. Based upon the findings, there is determined about most important reason of the companies could not provide complying presentation is preparing certain documents within letter of credit conditions incorrect, and it is shown how to prepare the subjected documents appropriately to letter of credit payment as considering their main and critical properties.

Keywords: Letter of Credit, Discrepancy, Complying presentation UCP600, ISBP745

1. Introduction

By the time discussing in terms of operational, could be seen that foreign trade occurs through 3 different processes like the transfer of good[1], documents[2] and money. Making payment is importer's responsibility while preparing the document and subjected item is exporter's (beneficiary) responsibility. Banks that are financially reputable establishments could have got involved into paying responsibility based on payment methods with importer. In this research's subjected letter of credit payment method, both importer and importer's bank and if available confirming bank takes on the payment responsibility. Furthermore, primary payment responsibility is firstly on confirming bank if available then importer's applicant bank. Under the condition that complying presentation is existed, confirming bank pays to beneficiary even applicant bank does not credit the account and recedes to applicant bank for subjected amount. Likewise, applicant bank credits firstly confirming bank's account or else nominated bank's, and this once, applicant bank recedes to applicant firm for subjected amount or uses the guarantee that received form applicant before accredit. Applicant bank and if available confirming bank are considered as committed[3] to afford the complying presentation to exporter who is in the position of beneficiary by the letter of credits becoming functional moment. It is determined for "honour" word in definitions part of article 2 of UCP 600[4], is not only limited with

[1] Good, item and load are used in the same meaning in this research.
[2] Document means the papers used in foreign trade.
[3] UCP 600 item 7,8 and 15
[4] ICC (International Chamber of Commerce) is an institution centered in Paris, determines rules to make the foreign trade easy worldwide via 16 different institutions exist within it's structure. English version of ICC's one example methods and application

making payment, but also involves the meaning of accept the remitted policy and take the responsibility of payment in timed and acceptance credits. For letter of credit payment, the applicant bank blocks a guarantee amount from importer at least as letter of credit amount before taking the payment responsibility. Confirming bank takes the payment responsibility referring to its correspondent bank relation with applicant bank and its agreement also. This means, confirming bank will not add confirmation for every letter of credit letter even their content is appropriate, could add confirmation only with the condition that existing a correspondent bank contract between them. While the letter of credit payment provides a kind of bank assurance to beneficiary about cost receipting, exporter firms need to show complying presentation for taking advantage of this guarantee. Complying presentation is defined in article 2 of UCP 600 as " it means a complying presentation for letter of credit conditions, practicable provisions of these rules and appropriate international standard banking application". The implied statement in "International standard banking application " sentence is, UCP 600 and ISBP 745[5] which is broadcasted as complement of UCP 600. Beneficiary firms which could guarantee the cost provided that a complying presentation, prefer this payment method in their especially large amount trading[6] . Despite this, they present discrepant document because of the reason that subjected payment method necessitates extensive know-how and experience as well. It is observed about discrepant document presentation is about 74% in Turkey-wide[7]. Iinitiative passes through to applicant firm after every presented document about paying the cost or not to, after this level, letter of credit transaction turns into cash against documents. This study's motivation has occurred at this level and there is offered solutions about critical letter of credit conditions which could cause to financial losses with incorrect document arrangements made by exporter firms in Turkey localized.

2. Various Letter of Credit Terms Which Could Cause Financial Losses for Beneficiary Firms with Letter of Credit and Solutions

2.1. Letter of credits and letter parts which could be critical for beneficiary firms

Letter of letter of credits could be written in every language but English is adopted as common language in practice. As indicated below as well, it is seen that the subjected letter is partitioned by digit places and thus, it is converted to monotype (uniform) prepared texts in worldwide.

Letter of credit's parts comprise of 20; 31C; 40 and E; 31 D; 50 ve59; 32 B and 39; 41 and 42 A, C, E, F, B; 44 A, E, F, B, C; 45 A; 46 A: 47 A; 71 B; 48; 49; 53; 78; 52 A; 57 and 72 number of digits. While every part is important about complying presentation, letter of credit's parts which are obtained from open-end survey questions are detailed below.

- 40 A Form of documentary credit: This digit is organized as irrevocable, revocable and transferable. Transferable form of a letter of credit is preferred in trades and transit trades which the beneficiary firm is not the producer of good but is only broker or supplier.
- 20 Letter of credit reference: A kind of tracking number which is consisted of number and/or character group by applicant bank during the letter of credit start-up[8].
- 31 D Date and place of expiry: The item makes conditional on the expire date, namely delivery date of letter of credit by beneficiary and latest delivery date for document to applicant or beneficiary bank[9].

(ICC broadcast no. 600) regarding letter of credits. ICC has totally 5 more publications, firstly UCP 500 concerning the issue before UCP 600, and their validness are still continuing. It is a rule to mention on letter of credit about which broadcast is taken as main.

[5] International Standard Banking Practice concerning to evaluate the presented documents under the letter of credits (ICC broadcast no.745).

[6] Based on the survey studies that is made with 10 commercial bank's letter of credit services in Turkey, there is discussed on the solution that letter of credit payment method is preferred as the trade's amount is increasing. Although, letter of credit transactions could be used for every kind of amount as well.

[7] It is obtained from survey study results which are made with 10 commercial bank's letter of credit services in Turkey.

[8] According to the information that are obtained from open-end survey questions, it is learned about beneficiary firms frequently write the subjected reference number wrongly or confuses with confirming bank's reference number

[9] According to the survey results, it is seen that this item could not be understood by beneficiary firms and presenting discrepant document and lately as well because of this reason.

- 44 C Latest date of shipment: This shows the date of good's shipment date[10].
- 45 A Description of Goods or Services: The part where has detailed info about the trade subjected good's price, way of delivery and amount.
- 46 A Required documents: This part is accepted as the most crucial part in terms of providing complying presentation. The document's content and number information is located in this part which beneficiary firm needs to prepare or make it prepared[11].
- 47 A Additional (special) conditions: This area has two main intended purposes. First is, writing the special or standard conditions usable for every letter of credit by applicant bank, second is writing special conditions aimed at the deal between beneficiary and applicant firm (Kütükçü, 2013:480).
- 71 B Charges and Commissions: The part that shows how to share the banking services for letter of credit transaction with transferring costs between exporter and importer.
- 49 Confirming Instructions: The part that shows the letter of credit's being as confirm, without confirm or may add confirm. Despite of this digit is stated as confirm, letter of credit will become obligatory without confirm if the confirming bank does not add its confirmation for any reason. In practice, confirming bank could not add confirmation to letter of credit because of main tree reasons. First is the sanction decision for these countries by United Nations (UN) and/or country risk. Second is, as stated before, not to be a correspondent bank agreement concerning approval with applicant bank. Third reason is, various conditions are existed in letter of credit conditions like charter party bill of lading etc. that could cause risks for confirming bank. Confirming bank could be generally in beneficiary's own country's bank as well as could be any bank in abroad also. In practice, sometimes, although rare, there is seen more than one banks add confirmation on one letter of credit transaction.

2.2. Various Letter of Credit Terms Which Could Cause Financial Losses for Beneficiary Firms

Undoubtedly the biggest financial loss will be not to provide complying presentation for beneficiary in letter of credit payment. The beneficiary will face with risks like not to collect any cost, collect missing or collect lately. Otherwise, letter of credit conditions which cause financial losses for beneficiary are below with reasons.

- 40 A: Type of letter of credit: Letter could be opened as revocable or irrevocable. Opening irrevocable is much important for beneficiary firms. Likewise, there could not made any changes in letter of credit conditions without confirming bank's approval if available, applicant bank and importer's (applicant firm) approval also in irrevocable letter of credits. Opening the letter as revocable allows to applicant firm can change letter of credit conditions without beneficiary's agreement, so this situation will be disadvantageous to beneficiary firm. Revocable letter of credits could be applied in practice few and far between, but yet beneficiary firms need to be careful at this point about letter of credit arrangement as irrevocable.
- 31 D Letters of Credit due date and place: Most important issue in this section is in the part of letter of credit's place. This issue could be disadvantageous to beneficiary firm and could cause discrepant document presentation also. Definition of letter of credit's place as applicant bank's country or any other bank in abroad means the document must be in that country in specified date. In survey studies, there is seen about firms localized in Turkey falls into discrepant because of late complying presentation and their unawareness about the fine detail between letter of credit's place is being in Turkey or in a country abroad. In a letter of credit which's place is discussed as abroad, beneficiary firm needs to deliver the document 3-4 days before the date is mentioned 31 D, the fact remains that, a letter of credit could be delivered at due date if it's 31 digit discussed the place as Turkey. 3-4 days period mentioned above for carrier and delivery time of document's transfer from beneficiary bank's to bank in abroad.
- 46 A Documents required: The riskiest statement in this part is to define as applicant firm who prepares or approves a document within needed documents. Moreover, becoming effective of a letter of credit could be made conditional on various terms and substitutive documents about provided the terms definitely. This

[10] According to the survey results, one of the most modified item after accredit.

[11] A position which is not needed to give place for required documents and properties only this part but also a frequently used situation by giving place in 47A at the same time

kind of required documents could be seen rarely and restricts the beneficiary's self-control on required documents, even risks the collection of cost.[12]

- 48 Period of Presentation: In this digit, there is stated that how long time after from loading the beneficiary must present to document to applicant bank. Article 14 c of UCP 600 limits this period as 21 days after shipment as well as this calendar could be shortened with a statement like "after 10 days after shipment" and could be prolonged also with a statement like 'stale document acceptable'. But, in every situation, the document presentation must be made before due date of letter of credit. On condition that respect to letter of credits date, 21 days after shipment or 'stale document acceptable' statement will provide advantage for beneficiary.
- 71 B Charges and Commissions: This is a part which could occur financial loss for beneficiary firms. According to the data that obtained from open-end survey questions, it is determined about this digit is arranged as "all banking charges and commissions outside of applicant bank are for beneficiary's account" and beneficiary firms are in mistake because of this arrangement's make equal sharing between purchaser and seller. However, the statement above creates the perception like both sides are undertaking the commissions and costs of only their own servicer banks; still the related statement causes reimbursing bank's cost and commissions are undertaken to beneficiary. To arrange this part as "all banking charges and commissions outside of beneficiary bank are for applicant's account" will occur an opposite situation of above and will provide advantages for beneficiary firms.

3. Preparing Document for Complying Presentation with Examples

As expressed before, preparing the good and documents are beneficiary firm's responsible. In the method of letter of credit payment, document preparing is conditioned to letter of credit terms differently from the other payment types like cash against documents, bank's obligation to pay, cash against goods, cash. Beneficiary firms, applicant bank and confirming bank if available, must prepare the document appropriately to both UCP 600 and ISBP 745 rules and present timely to nominated bank[13].

Beneficiary firms prepare the papers like invoice firstly, packaging list, weight list, policy, shipping info etc. by himself in practice while they have some papers prepared to private and public institutions as well like consignment and road transport documents firstly, analysis, inspection, health, plant, quality and other certificates with certificate of origin, ATR, EUR.1, EUROMED, insurance policy, etc. Required documents which are based on trade's flow, trades property and demand of importer firm are not limited with aboves, there are shown main terms. Undoubtedly, preparing the document within complying presentation responsibility is on beneficiary firm whether the document is prepared by himself or servicer institution (Özkan ve Özçelik, 2015: 73).

3.1. Main document types with samples which are prepared by beneficiary firms, frequent mistakes and solutions

In this part of study, there will be focused on two main documents which are in documents prepared by exporter himself; invoice and policy. Furthermore, frequent mistakes are determined by surveys and made solving suggestions also. Policies are a kind of bills receivable that prepared by beneficiary firms in foreign trade technic whether valuable paper. Exporter who is drawer of the document calls it as "Draft" of "Bill of Exchange" and must prepare it depends on form requirements like preparation date of document, place, payment amount, date and drawer[14]. Frequent mistakes in preparing document and solving suggestions are tabulated below:

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[12] Accredit and after occurring the notification to beneficiary, the beneficiary firm is free about to use the subjected letter of credit until it's date and not to be under any commitment. That's why, document presentation conditions are taken place by applicant firms in terms of receiving a certificate or a guarantee as to load by beneficiary firm. Undoubtedly, giving place to conditions like these in letter of credits makes practical effects. The applicant who worries about not to use letter of credit must have a kind of external guarantee letter, performance bond prepared to beneficiary.

[13] According to the survey datas, the nominated bank and advising bank are the same banks in Turkey mostly.

[14] The issue about how to prepare the policies is not existed in UCP 600 as well as the details of document is shown on item B ISBP 745.

Chart 1: Frequent mistakes during preparing policy by firms localized in Turkey and Correction Suggestions

L/C Terms	**Discrepancy in presented draft**	**Problem that will be caused and correction suggestion**
46A: Document Required: (Bill of exchange is not existed in required documents) 41D: Available with X Bank by acceptance 42 C: Drawee X Bank	Beneficiary firm does not present a draft because of non-existing situation of bill of exchange in required documents in field 46 A. 41D and 42 digits shows the obligation of draft presentation however 46 A digit has no require for draft presentation.	Document comes to discrepant position by the reason of not to present the draft. Beneficiary has to present the document appropriates to form requirements.
52 A: Issuing bank: X Bank 41 D: Available with X Bank by acceptance 42 C: Drawee X Bank 49 Confirmation Instruction: without	Showing the importer as drawee in presented draft by beneficiary firm.	In the payment by acceptance, draft acceptor must be importer, while the acceptor must be applicant bank in letter of credit payment. Drawed drafts on applicant firm are discrepant documents in letter of credit payment.
52 A: Issuing bank: X Bank 41 D: Available with Y Bank by acceptance 42 C: Drawee Y Bank 49 Confirmation Instruction : confirm	In presented policy, there is seen the drawee (means bill obligator) as applicant bank by beneficiary firm.	The document is with discrepant as is side column. Drawee is the applicant bank in unconfirmed letter of credits. In confirmed letter of credits, policy obligator must be arranged the part of draft in the name of confirming bank as drawee.

One of the other main documents is invoice which beneficiary prepared by in person. Invoices must be prepared unexceptional in all letter of credit types but policies must be prepared only in letter of credits which opened with the "by acceptance" condition. Technical explanations are arranged in article 18 of UCP 600 with ISBP 745 C. According to survey data's findings, exporter firms make mistakes mostly in showing the number's fractions wrongly. This subjected issue has its source in fraction showing system in Turkey and in abroad. In Turkey, dot (.) is used to make the reading easy in Turkey, while it corresponds to comma (,) in foreigner system.

Chart 2: Frequent mistakes during preparing invoice by firms localized in Turkey and Correction Suggestions

L/C Terms	Mistake in presented invoice	Problem that will be caused and correction suggestion
45 A: 90,000 kgs sunflower oil, unit price 2.004 usd/kg	90.000 kgs… unit price 2,004 usd/kg	The document has a risk to be subjected as discrepancy even letter of credit condition is provided by unit price with loaded good amounts. Dot and comma usage must be appropriate with letter of credit condition.

3.2. Main document types with samples which are prepared for beneficiary firms, by institutions, frequent mistakes and solutions

As a matter of course, beneficiary firms have the document of good's transportation, insured, oversighting, etc. organized to private and public institutions who undertakes the business. The critical issue in here is, beneficiary must give correct instructions to his servicer institutions for preparing the documents appropriately to letter of credit technic. In reference to survey datas, it is reached to the finding that beneficiary firms make mistakes mostly in arrangement of Bill of Lading which is sea way chattel paper, CMR which is road transport chattel paper and insurance policies. And the frequent mistakes in preparing these tree documents are determined by surveys and solutions are shown below.

Chart 3: Frequent mistakes during preparing Bill of Lading (B/L)[15], CMR[16] and Insurance Policy[17] by firms localized in Turkey and Correction Suggestions

L/C Terms	**Discrepancy in presented document**	**Problem that will be caused and Correction Suggestion**
46 A: Required documents + Full set bill of lading	Signatory party does not mentioned his title when signing the document.	Document is with discrepant at side column. Transporter and captain with their agencies can sign the B/L except charter party B/L[18] based on UCP 600 and ISBP 745. It must be absolutely determined the roles of signs on document.
46A: Required documents + Full set bill of lading	Signatory party of document does not give place carrier firm information despite of determining to sign it as the agency of carrier.	The document is with discrepant at side column. There must be absolutely mentioned for carrier firm information on B/L[19]. Mentioning the carrier firm information is important in terms of determining the responsible firm in case destroying the good during transport time.
46 A: + Full set[20] bill of lading consigned to xxx	Consignee digit of B/L: to the order of xxx. Letter of credit conditions need to be arranged the B/L as "to the name" with "consigned to" statement even though the document is arrangement "to the order".	As long as the consignments are arranged as "written to the rule" it could be possible to endorsed the document's behind. But it could not be possible to endorsed the documents behind which are written as "to the name".
46 A: + Full set bill of lading consigned to order and blank endorsed	Consignee section of consignment: not to being endorsed of behind part although written "to the order"	The document as is with discrepant as side column. The exporter who is in the position of loader of good has to show transferring his right on the good with blank endorsed. If not endorsed, importer firm have difficulties in terms of ownership proof when clearing the goods from customs.
46 A: + Full set bill of lading…	Presented B/L hasn't got any board notation record although the document in question is received B/L.	The document as is with discrepant at side column. B/Ls could be arranged with two different types with printed papers as received bill of lading and shipped bill of lading. There is no need an extra on board notation (shipping record) for B/Ls which

[15] It is organized in articles 19, 20, 21, 22 of UCP 600 about how to prepare only the multimodal transport documents that includes seaway and more detailed in ISBP 745 D, E, F and G items. Sea consignments are valuable papers (negotiable documents) because their good's ownership presentation.

[16] CRMs are organized in article 24 of UCP 600 with ISBP 745's J item. Document's most important property is being a non-negotiable document, as different from B/L's, Insurance Policies and Drafts.

[17] Insurance policies are valuable papers and organized in article 28 of UCP 600 28 with ISBP 745 K items. Make organized the insurance policy by beneficiary is about delivery type, and the insurance policy is prepared in the delivery types of CIP and CIF.

[18]That is to say, according to the UCP600 item 22, Charter Party B/L (no matter how it is arranged under any name) which has an indication or record about being tied to charter party, could only be signed by captain or via an agency whose name is called on behalf of captain, or ship owner either via an agency whose name is called on behalf of ship owners, or also lessor either via an agency whose name is called on behalf of charterer.

[19] There are 2 situations that not to giving place to carrier firm will not occur a discrepant. First is, letter of credit's allow for charter party b/l presentation. The second is, adding a statement like "freight forwarder transport document is acceptable" to letter of credit conditions

[20] "Full set" term means "team" that is used for both B/L and policies, and it shows also whole original ones of document must be presented. Copy documents are not included in Full Set. According to the rules of UCP, it must be understood through document about how many original copies occur the document (paper).

		are prepared as shipped bill of lading of its printed part. In addition to this, there is need an extra board notation (shipping record) for the consignments which's printed part shows the delivery of good to loading.
46 A: CMR consigned to…. And indicated freight prepaid	Marking the Non-Franco digit which means any payment is not made while delivery method is C and D group in presented CMR.	The document is as with discrepant. In delivery types like C and D which the freight cost is played by beneficiary, there must not show any statement about freight cost without paying in CMR.
46 A: + Full set bill of lading… + Full set insurance document….	Insurance policy date of issue is later than the loading date of goods which are in B/L.	Insurance policy needs to guarantee the goods from dangers during the travel, that's why the insurance policy date must be the same date or before with goods loading date which are in B/L

4. Conclusion

When viewing the ICC publications about letter of credit payment, the most important reason is determined as provided complying presentation by beneficiary for benefiting bank's payment guarantee that they are responsible for him. There is seen in survey studies that firms are localized in Turkey firstly could not be effective about complying presentation issue by the reason of lack of technical knowledge. Moreover, research findings show that the beneficiary firms do not take care of statements placed in letter of credit conditions. The reason of many incorrect document which are presented wrongly is not only lack of technical knowledge but also not to take care of statements placed in letter of credit conditions and thus, this could not be carried to presented documents. In some letter of credit payments, the documents which are unnecessarily and/or have the same functions existed in letter of credit conditions (for example, preparing both EUR.1 and certificate of origin which could proof the good's origin in required documents etc.).

In this research, there are touched upon to critical letter of credit conditions for beneficiary firms could collect the export costs in full and timely, moreover, brought explanations over examples based on the technical knowledge for frequent mistakes. In addition, letter of credit terms which could occur financial losses and risks for beneficiary firms are examined as well as the analysis of risks which are borned from country risk and sanction decisions, such solution suggestions could be thought are the matters of an another research.

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ANALYSIS OF TRADE RELATIONS OF BOSNIA AND HERZEGOVINA WITHIN CEFTA

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Abstract:

As a member of CEFTA, Bosnia and Herzegovina is trading with other countries in accordance with the principles of this organization since 2007. The subject of this paper is to analyse the trade relations of B&H within the CEFTA countries in the period from 2013 - 2015. As an analysis tool used is a modified Balassa RCA index for analysing the competitiveness of industry in B&H in comparison to other Member States. Analysing the top 10 export tariffs in comparison with other CEFTA countries, individual results showed that B&H is competitive in major export industries (in all cases over 50% of the top 10 export products is competitive), but, on the other hand, B&H has recorded constant aggregate deficit compared to other countries.

Keywords:

CEFTA, Bosnia and Herzegovina, Modified RCA Index, Trade Relations, Export

JEL Classification: F14, F15, F36

1. Introduction

After a long time, Bosnia and Herzegovina (hereinafter: B&H), in some way, is at a crossroads of its development. First of all, on the 1st June of 2015, the Agreement on Stabilization and Association with the European Union entered into force, and on 11th December of 2015 the first meeting of the Council for Stabilisation and Association between B&H and the European Union was held. Also, B&H adopted the Reform Agenda for B&H for the period from 2015 to 2018. After large oppositions, B&H has received a permit for exports of dairy products on the territory of the European Union.

Everything stated represent a shift of B&H, both on the economic front as well as in terms of joining the European Union; however, we set several important questions: What is the current situation with the export of Bosnian companies? Are B&H companies export competitive? Is B&H, from an economic point of view, ready to join the European Union?

In this context, we want to analyse the export competitiveness of B&H, especially in relation to the member countries of CEFTA. It is important to present the export competitiveness of B&H, and see in what situation is B&H compared to CEFTA countries, where free trade regime is applied. One of the reasons we chose CEFTA is that other countries are a lot closer to B&H, in economic values, compared to other European countries. Looking at gross domestic product per capita, we can notice that the differences are not excessive. According to the World Bank , the highest GDP per capita in 2015 was in Montenegro in the amount of $ 6,415. Next follows Serbia with $ 5,144, B&H with $ 4,198, Albania with $ 3,965 and UNMIK with $ 3,553. The lowest GDP per capita has Moldova with $ 1,843. It follows that all countries have roughly similar GDP per capita, where no country does not deviate to a large extent (except Moldova).

CEFTA (Central European Free Trade Agreement) was founded in 1992 by Hungary, Poland and former Czechoslovakia. After four years, Slovenia joined CEFTA (1996), and afterward Romania (1997), Bulgaria (1999), Croatia (2003) and Macedonia (2006) (Zejnic-Zeljkovic, 2011). After joining European Union Czech Republic,

Hungary, Poland, Slovakia and Slovenia withdrew from CEFTA joining the EU in January 2004. In 2006 rest of the countries in CEFTA, Romania, Bulgaria, Croatia and Macedonia, joined with B&H, Serbia, Albania, Montenegro and Moldavia negotiated changed and extended CEFTA named CEFTA 2006. CEFTA 2006 came into force in July 2007 (Bjelic et al, 2013).

The CEFTA 2006 is a comprehensive free trade agreement (FTA) between the SEE countries. The markets are allowing fully liberalised trade aiming at supporting trade and investment among its members. The Agreement augmented previous 32 bilateral FTAs between the SEE countries (Mojsovska-Blazevski & Petreski, 2010).

Since 2012, there are not many studies on this topic. As stated by Petreski (2013, p.32), there are three main reasons for this case: "(1) the agreement is relatively new, now dating back only four years; (2) the CEFTA-2006 countries have less research capacity relative to the original CEFTA countries; and (3) the perception and possibly the evidence based on descriptive data is that these countries are oriented more toward trade relationships with the European Union than toward trade relationships among themselves, due to their desire to join the European Union, as has been envisaged with the SAA process". Kurtovic et al. (2014) analyse the non-tariff barriers and their impact on trade flows within CEFTA 2006, and Mojsoska Blazevski and Petreski (2013) analyse Western Balkan's trade with the EU and CEFTA 2006: evidence from Macedonia. Other research articles we were not able to found.

Therefore, the aim of this analysis is to present the competitiveness of Bosnian industry compared to other member countries of CEFTA. With reference to the last 3 years, from 2013 - 2015, the total amount of B&H deficit in these trade relations is 2.352.445.000 BAM. The question is, if the country cannot be competitive in this environment how it can be in the territory of the European Union?

Our main hypothesis is: B&H has expressed comparative advantages in trade with other member countries of CEFTA?

In this context, we will use the modified Balassa RCA index, Sectorial-Bilateral Trade Intensity Ratios (SBTX) (Seymen, 2009) in order to gain insight about the bilateral competition between two countries.
This paper is structured as follows. In section 2 we present the literature review. In section 3 we will analyse Trade Relations in CEFTA in the period from 2013 - 2015, and in section 4 we will do an analysis of comparative advantage using the modified RCA index. In the last section we will conclude this paper and make recommendations for further work.

2. Literature Review

Since the emergence of the economy economists are trying to find an answer to the question why countries trade with each other and what determines the structure of this trade. One of the pioneers in this area, Adam Smith (1776), in his "Inquiry into the Nature and Causes of the Wealth of Nations" seeks to explain the principles and reasons for international trade.

The next theory was given by David Ricardo (1817) decades after Smith when he presented his law of comparative advantage. Commodity structure of international trade in the Ricardo model is determined by differences in the relative labour productivity of individual products, expressed in differences in labour costs per unit of product (Brkić, Balić, 2014). Comparative advantage in certain product will have a country whose ratio of unit production costs is lower than in other countries, which will result in a complete specialization. In Ricardo model country will produce and export products in which it has a comparative advantage, and import other products it needs.

The neoclassical theory of international trade accepted Ricardo's law in its original form. The original form of the law is based on the differences in the relative costs of products, resulting from the difference in the relative supply of factors of production countries or differences in the efficiency of these factors.

In the modern theory of international trade the law of comparative advantage is reformulated, and is based on the differences in relative prices, rather than differences in the relative costs. The differences in relative prices may occur due to differences on the supply side (cost terms), due to the difference in terms of demand or due to a combination of these two elements (Kenen, 1994:38.)

The main problem occurred and consisted in immeasurability of relative prices in the pre-trade position. The solving problem was the index of comparative advantage. The first index of comparative advantage was presented by Liesner (1958) and operationalized by Balassa, the concept of the so-called "Discovered" comparative advantage (revealed comparative advantages – RCA). Balassa was trying to determine whether a country has distinct comparative advantage, not pretending to set up their sources.

RCA index is presented as the ratio of the share of exports of specific products / industries that country in total world exports of that product / industry according to the share of total exports of the country concerned in the total world exports (Balassa & Noland, 1989):

$$RCA = (Xij/Xj)/(Xiw/Xw)$$

Where X stands for exports, i, j and w refer to industry (product category), country and world respectively. (Erkan & Sarıçoban, 2014).

The values of RCA can be equal to 1, greater than 1 or less than 1. In the first case (=1), no specialization or no disadvantage when the country's exports structure reflects the exact structure of global trade, in second (>1) the country has a comparative advantage in the concerned product and in the third one (<1) he country has a comparative disadvantage in the concerned product (Bojnec and Ferto, 2014).

To this day, the index of comparative advantage has seen many modifications, depending on the mode of observing countries, so it can be observed on global level (Vollrath, 1991), regional level or as a measurement of bilateral trade (Dimelis and Gatsios, 1995).

In order to closer explain trade relations between B&H and other countries of CEFTA in this paper will use bilateral RCA index which shows sectors of observed countries relatively export the most in bilateral trade agreements with its trading partner (Seymen, 2009).

The index is represented by the following formula:

Where:
Xijk - exports of country i to country j in the industry group k;
Xijt - total exports of country i to country j;
Xikt - total exports of country i in industry group k
Xit - total exports of the country.

The share of a country's exports in a certain industry group in total exports of that country is compared to the share of the country's exports of the relevant industry in its total exports. In the case that SBTX index is greater than 1, this leads to the conclusion that the country in question intensifies the trade of the relevant industry group within the bilateral trade with the trading partner (Seymen and Gumustekin, 2012).

3. Data and Methodology

For evaluating comparative advantages of an industry we will use SBTX index introduced by Seymen (2009). For the purposes of this study "sector" means a group of products in the two-digit level of aggregation by HS classification or "head" Customs Tariff . For the analysis of comparative advantage of B&H will analyse the 10 leading export

tariffs in comparison to other country members of CEFTA. All the data was collected from the website of Foreign Trade Chamber of B&H and calculated by author

4. Analysis of Trade Relations of B&H in CEFTA in the Period 2013 -2015

As noted previously, B&H became a member of CEFTA in 2007. After Romania and Bulgaria left CEFTA in 2007 and Croatia in 2013, remaining CEFTA members were the following countries: B&H, Serbia, Montenegro, Albania, Macedonia, Moldova, and Kosovo (at first as part of Serbia, later as UNMIK).

In total export of B&H in 2015, the export to CEFTA countries was around 15.5% of total exports, which declined compared to 2014. B&H mostly trades with EU countries, and according to data from the last year the volume was 69.5% of total exports, and followed by trade with CEFTA countries in the amount of 15.4% (Table 1).

Table 1. Total volume, export and import of B&H

	2014			2015		
	Volume	Import	Export	Volume	Import	Export
EU	68,2%	66,1%	71,9%	69,5%	68,5%	71,2%
CEFTA	**14,9%**	**14,3%**	**16,1%**	**15,4%**	**15,4%**	**15,5%**
EFTA	5,0%	6,8%	1,9%	3,8%	5,0%	1,8%
Other	11,8%	12,8%	10,1%	11,3%	11,1%	11,6%

Source: obtained by authors by using data from http://komorabih.ba/vanjskotrgovinska

In the context of the analysis of the trade relations with the CEFTA member countries, B&H has a constant negative overall balance (Table 2). If we take into account the aggregate balance for the past 3 years, we will see that B&H has a negative balance in the amount of over 2 billion. (Table 3).

Table 2. Trade relations of B&H with CEFTA countries in the period from 2013 - 2015 (in 000 BAM)

Country	Moldova	Albania	UNMIK	Macedonia	Montenegro	Serbia	
Import	1.665	6.404	8.729	152.466	48.202	1.799.815	2013
Export	3.001	47.980	160.729	102.278	290.263	814.472	
Volume	4.666	54.384	169.458	254.744	338.465	2.614.287	
Balance	**1.336**	**41.576**	**151.999**	**-50.187**	**242.062**	**-985.343**	
Import	1.716	7.152	7.913	147.424	80.263	2.007.101	2014
Export	3.062	50.722	124.157	103.310	310.762	849.846	
Volume	4.778	57.874	132.070	250.734	391.024	2.856.948	
Balance	**1.346**	**43.570**	**116.243**	**-44.113**	**230.499**	**-1.157.255**	
Import	1.821	11.978	14.681	148.460	62.091	2.133.816	2015
Export	2.900	47.001	150.913	125.157	286.586	816.113	
Volume	4.721	58.980	165.595	273.617	348.676	2.949.928	
Balance	**1.079**	**35.023**	**136.232**	**-23.303**	**224.495**	**-1.317.703**	

Source: obtained by authors by using data from http://komorabih.ba/vanjskotrgovinska-razmjena

According to Table 2 we can see that the largest volume of trade B&H has with Serbia, however, the balance is also consistently negative in the previous three years. Constant positive balance B&H has with Montenegro, UNMIK and Albania, Macedonia with negative or declining, while trade with Moldova is negligible. As shown in Table 3, the overall positive balance achieved with 3 countries in the end is cancelled in trade relations with Serbia. Table 3 shows the average value of coverage of import to export in the past 3 years.

Table 3. Trade relations of B&H with CEFTA countries in the period from 2013 - 2015 (in 000 BAM) - collective balance

	Total for the period from 2013 to 2015				
Country	Import	Export	Volume	Balance	Coverage
Serbia	5.940.732	2.480.431	8.421.163	-3.460.301	41,93%
Montenegro	190.556	887.611	1.078.167	697.055	483,67%
Macedonia	448.350	330.745	779.095	-117.605	73,83%
UNMIK	31.323	435.799	467.122	404.476	1479,37%
Albania	25.534	145.703	171.237	120.169	616,93%
Moldova	5.202	8.963	14.165	3.761	172,60%

Source: obtained by authors by using data from http://komorabih.ba/vanjskotrgovinska-razmjena

According to Table 3, B&H has a more than positive balance compared with Montenegro, Albania and Kosovo, and the coverage rate well above 100% on average in the previous three years. Export-import ratio in relations with Serbia and Macedonia is below 100%, and coverage in the average amount in the previous three years is 41.93% and 73.83%. Also, B&H has coverage of over 100% in the average amount of the last three years with Moldova.

However, when we look at the absolute value, the total positive balance in relations with the four countries where coverage is over 100% is 1.225.461.000 BAM, while only with Serbia; B&H has a negative balance in the last three years totalling 3.460.301.000 BAM. If we add the negative balance in relation to Macedonia, we come to the amount of -2.352.445.000 BAM in the last three years.

If we look according to sectors (according to the Customs Tariff of B&H), B&H has exported a total of 30 different tariffs in 2015, according to customs tariffs in CEFTA countries. The most exported products are under tariff no. 27 - Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes a percentage of 32,92%, then tariff no. 72 - Iron and steel in amount of 20,18%, tariff no. 44– Wood and wood products; charcoal with 7,75%. The values of all other tariffs are below 5%. (see Appendix 1)

As far as the total imports in 2015, B&H has imported products that fall under 37 different tariffs. In percentage values B&H has mostly imported products under tariff no. 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates in the amount of 25,38%, then under tariff no. 17- Sugars and sugar products in the amount of 24,75%, tariff no. 19 - Cereal based products, flour, starch or milk; confectionery (16,78%) and tariff no. 15 - Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes (11,30%). All other rates do not exceed the value over 3%. (see Appendix 2)

5. An Analysis of Comparative Advantage Using The Modified RCA Index

In the analysis of comparative advantages, we will use data from 10 leading exporting tariffs into countries of CEFTA for 2015. In this context, we will explain the analysis for each country.

5.1.Albania

As far as trade relations between B&H and Albania, we can see that B&H has achieved a surplus in trade with Albania in the last three years in the amount of 120.169.000 BAM.

The top ten export tariffs in Albania for 2015 are as follows: 72 – Iron and steel, 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 44 – Wood and wood products; charcoal, 24 – Tobacco and manufactured tobacco substitutes, 21 – Miscellaneous food products, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 66 – Umbrellas, sun umbrellas, walking sticks, whips and their parts, 48 – Paper and paperboard; articles of paper pulp, paper or paperboard, 19 – Cereal based products, flour, starch or milk; confectionery and 64 – Footwear, gaiters and the like; parts of such articles. The total of these 10 export tariffs represent 86% of total exports to Albania in 2015. Using SBTX index in Table 4 are presented the results in comparison with Albania.

Table 4. SBTX index for 10 leading tariffs in comparison with Albania in 2015

SBTX for 72 – Iron and steel	4,50
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	2,80
SBTX for 44 - Wood and wood products; charcoal	2,43
SBTX for 24 – Tobacco and manufactured tobacco substitutes	20,48
SBTX for 21 – Miscellaneous food products	12,02
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	5,24
SBTX for 66 – Umbrellas, sun umbrellas, walking sticks, whips and their parts	23,13
SBTX for 48 – Paper and paperboard; articles of paper pulp, paper or paperboard	1,06
SBTX for 19 – Cereal based products, flour, starch or milk; confectionery	3,20
SBTX for 64 – Footwear, gaiters and the like; parts of such articles	0,26

Source: author's calculation

According to Table 4 B&H has the index greater than 1 in 9 of the 10 products. The greatest competitive advantage has in export tariff no. 66 - Umbrellas, sun umbrellas, walking sticks, whips and their parts, then 24 – Tobacco and manufactured tobacco substitutes. Index is less than 1 per tariff no. 64– Footwear, gaiters and the like; parts of such articles, and minimal advantage in export tariff no. 48– Paper and paperboard; articles of paper pulp, paper or paperboard.

5.2. Serbia

The largest volume of trade B&H is in relations with Serbia, however, this relationship is in the last three years consistently negative with total over 3 billion.

The top ten export tariffs in Serbia for 2015 are as follows: 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 72 – Iron and steel, 44 – Wood and wood products; charcoal, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 76 – Aluminium and aluminium products, 48 – Paper and paperboard; articles of paper pulp, paper or paperboard, 39 – Plastic masses and plastic products, 30 – Pharmaceutical products, 08 – Edible fruit and nuts; peel of citrus fruits or melons, 73 – Products of iron and steel. These tariffs account for 70% of total exports to Serbia.

Table 5. SBTX index for 10 leading tariffs in comparison with Serbia in 2015

SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	4,15
SBTX for 72 – Iron and steel	2,27
SBTX for 44 – Wood and wood products; charcoal	0,96
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,54
SBTX for 73 – Products of iron and steel	0,60
SBTX for 48 – Paper and paperboard; articles of paper pulp, paper or paperboard	1,29
SBTX for 76 – Aluminium and aluminium products	0,50
SBTX for 30 – Pharmaceutical products	2,42
SBTX for 39 – Plastic masses and plastic products	0,98
SBTX for 08 – Edible fruit and nuts; peel of citrus fruits or melons	2,45

Source: author's calculation

According to Table 5 B&H has a comparative advantage in 5 of the 10 top exported products. The greatest comparative advantage is in exporting tariff no. 27– Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, (4,15) while the lowest comparative advantage in export of tariff no. 84– Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof (0,54).

5.3. Montenegro

B&H has a positive trade balance in comparison with Montenegro in the last 3 years, and B&H has achieved the second largest amount of volume (1.078.167.000 BAM).

The top ten export tariffs in Montenegro for 2015 are as follows: 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 28 – Inorganic chemicals; organic and inorganic compounds of precious metals, rare earth metals, radioactive elements and isotopes, 72 – Iron and steel, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 76 – Aluminium and aluminium products, 73 – Products of iron and steel, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 64 – Footwear, gaiters and the like; parts of such articles, 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles, 39 – Plastic masses and plastic products. These tariffs account for 68% of total exports to Montenegro.

Table 6. SBTX index for 10 leading tariffs in comparison with Montenegro in 2015

SBTX for 28 – Inorganic chemicals; organic and inorganic compounds of precious metals, rare earth metals, radioactive elements and isotopes	2,32
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	1,90
SBTX for 72 – Iron and steel	2,01
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	10,29
SBTX for 73 – Products of iron and steel	1,53
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,43
SBTX for 39 – Plastic masses and plastic products	0,89
SBTX for 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	0,56
SBTX for 76 – Aluminium and aluminium products	1,12
SBTX for 64 – Footwear, gaiters and the like; parts of such articles	0,40

Source: author's calculation

Compared with Montenegro in 6 of the 10 tariffs B&H has a competitive advantage, and the biggest in the tariff no. 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere (10,29). In other tariffs B&H has the advantage, but it is not expressed, it is little above 1. In 4 of 10 tariffs B&H does not have a competitive advantage, and the lowest index is for tariff no. 64 – Footwear, gaiters and the like; parts of such articles (0,40).

5.4. UNMIK

With UNMIK or the Republic of Kosovo, B&H has a positive trade balance in the last three years; however, the amount is not too large, although higher than in relations with Albania and Moldova (467.122.000 BAM).

The top ten export tariffs in UNMIK for 2015 are as follows: 72 – Iron and steel, 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 44 – Wood and wood products; charcoal, 30 – Pharmaceutical products, 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles, 15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes, 24 – Tobacco and manufactured tobacco substitutes, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes and these tariffs account for 80% of total exports in UNMIK.

Table 7. SBTX index for 10 leading tariffs in comparison with UNMIK in 2015

SBTX for 72 – Iron and steel	7,16
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0,34
SBTX for 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	16,15
SBTX for 44 – Wood and wood products; charcoal	0,64
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	9,67
SBTX for 30 – Pharmaceutical products	3,45
SBTX for 15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes	2,16
SBTX for 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	0,77
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,46
SBTX for 24 – Tobacco and manufactured tobacco substitutes	10,08

Source: author's calculation

Compared to UNMIK, B&H has a competitive advantage in 6 of the 10 leading tariffs exported to this country in 2015. It should be noted that in most of these tariffs, B&H has a strong competitive advantage (in 4 of the 6 has an index greater than 7). The highest index B&H has in the tariff no. 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates. B&H has a competitive disadvantage in 4 of the 10 leading export tariffs in UNMIK in 2015, and the lowest index is for tariff no. 27– Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes (0,34).

5.5. Macedonia

In trade relations with Macedonia, B&H in the last 3 years has the third largest amount of trade (779.095.000 KM), however, the final sum is negative for B&H (-117.605.000 BAM).

The top ten export tariffs in Macedonia for 2015 are as follows: 72 – Iron and steel, 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere, 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates, 17 – Sugars and sugar products, 44 – Wood and wood products; charcoal, 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof, 18 – Cocoa and cocoa products, 48 – Paper and paperboard; articles of paper pulp, paper or paperboard, 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes, 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles and tariffs account for 68% of total exports in Macedonia.

Table 8. SBTX index for 10 leading tariffs in comparison with Macedonia in 2015

SBTX for 72 – Iron and steel	2,16
SBTX for 04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	16,70
SBTX for 16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	18,23
SBTX for 17 – Sugars and sugar products	19,13
SBTX for 44 – Wood and wood products; charcoal	1,16
SBTX for 84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	0,52
SBTX for 18 – Cocoa and cocoa products	12,47
SBTX for 48 – Paper and paperboard; articles of paper pulp, paper or paperboard	1,54
SBTX for 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	0,47
SBTX for 85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	0,65

Source: author's calculation

In trade relations with Macedonia, B&H has a competitive advantage in 7 of the 10 export tariffs, and in 4 of the 10 has an index of over 12. The largest is for the tariff no. 17 – Sugars and sugar products in amount of 19,13. As for the comparative disadvantages, B&H does not have a comparative advantage in 3 of the 10 export products, and the lowest index is for tariff no. 27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes (0,47).

5.6. Moldova

As far as trade between B&H and Moldova, it should be noted that the volume of trade is extremely small, i.e. 0.12% of the total volume of trade with the CEFTA. We consider that analysing comparative advantage with Moldova we could get results that will send the wrong conclusions, and all for the reason of very little amount of export or import with this country.

According to previously made analysis, state of comparative advantage of B & H in relation to the other member countries CEFTA is as follows: B&H has a comparative advantage in 9 out of 10 leading export tariffs in Albania, 5 out of 10 in Serbia, 6 out of 10 in Montenegro and UNMIK and 7 out of 10 in Macedonia. In this case, we can confirm the hypothesis that B&H is competitive compared to other member countries of CEFTA, because according to every country 50% of the tariffs (total 10) of B&H have an advantage over the analysed country.

6. Conclusion

In this paper we have tried to as concise and detailed introduce trading relationship of B&H and other member countries of CEFTA. As previously mentioned, B&H is a member of CEFTA since 2007, however, we have followed the trading relationship in the past 3 years (2013 -2015) because we believe that this analysis is extremely important for analysing relations with the countries economically similar to B&H. The main question was whether B&H competitive compared to other member countries of CEFTA. Final results are twofold: B&H, according to an analysis of the top 10 export products in other Member States for the most part has a majority competitive

advantage in these products; however, the aggregate balance of relations with CEFTA countries is negative and over 2 billion. It should be noted that this amount comes from the majority of relations with Serbia, with which in the past 3 years, B&H has a negative balance in the amount of over $ 3 billion, and with Macedonia, which is about 100 million. In relations to other countries B&H achieved a positive balance of trade relation; however, the sheer volume of trade is still quite small. Finally, with Moldova, trade volume is very small (0.12%) and there should be a lot of work on this issue.

We consider that this analysis can help policy-makers of the future to see the actual situation of exports of B&H, because if we cannot be competitive and achieve a positive balance in relation to CEFTA countries (realistically economically weaker in relation to the EU), what can we expect from the future joining the European Union. According to the author, B&H certainly should raise the ratio of trade with countries with which they have a majority competitive advantage, and try to stabilize the relationship with Serbia in the context of reducing the overall balance of trade.

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APPENDIX 1

Bosnia and Herzegovina total export in CEFTA countries in 2015, according to customs tariffs of B&H

Tariff	Total value (in BAM)	Percent (%)
04 – Milk and other dairy products; poultry eggs; birds' eggs; natural honey; edible products of animal origin, not specified or included elsewhere	162.289.980	5,18
08 – Edible fruit and nuts; peel of citrus fruits or melons	22.379.303	0,71
15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes	11.089.399	0,35
16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	68.653.577	2,19
17 – Sugars and sugar products	48.662.925	1,55
18 – Cocoa and cocoa products	7.877.506	0,25
19 – Cereal based products, flour, starch or milk; confectionery	4.675.498	0,15
21 – Miscellaneous food products	6.236.323	0,20
24 – Tobacco and manufactured tobacco substitutes	24.708.663	0,79
27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	1.030.567.862	32,92
28 – Inorganic chemicals; organic and inorganic compounds of precious metals, rare earth metals, radioactive elements and isotopes	109.636.474	3,50
29 – The organic chemical compounds	12	0,00
30 – Pharmaceutical products	89.973.447	2,87
38 – Miscellaneous chemical products	21	0,00
39 – Plastic masses and plastic products	91.233.087	2,91
44 – Wood and wood products; charcoal	242.553.756	7,75
48 – Paper and paperboard; articles of paper pulp, paper or paperboard	97.956.486	3,13
49 – Printed books, newspapers, pictures and other products of the printing industry, manuscripts, printed texts and maps	2.744	0,00

Tariff	Total value (in BAM)	Percent (%)
63 – Other made-up textile products; sets; used clothing and used textile products; rags	5.645	0,00
64 – Footwear, gaiters and the like; parts of such articles	8.826.673	0,28
66 – Umbrellas, sun umbrellas, walking sticks, whips and their parts	1.626.751	0,05
72 – Iron and steel	631.669.181	20,18
73 – Products of iron and steel	141.967.499	4,54
76 – Aluminium and aluminium products	102.993.446	3,29
84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	153.336.188	4,90
85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	37.538.717	1,20
87 – Vehicles, except rail vehicles and their parts and accessories	4.644	0,00
94 – Furniture; mattress; products of bedding and similar products (mattresses, pillows, and similar stuffed furnishings); Lamp and lighting fittings, not elsewhere specified or included elsewhere; illuminated signs, illuminated nameplates or the like; prefabricated buildings	16.003.179	0,51
96 – Various products	4.038.278	0,13
98 – Consignments	13.821.145	0,44

APPENDIX 2

Total import in Bosnia and Herzegovina from CEFTA countries in 2015, according to customs tariffs of B&H

Tariffs	Total value (in BAM)	Percent (%)
01 – Living animals	7.088.170	0,21
02 – Meat and edible offal	9.071.924	0,26
03 – Fish and crustaceans, molluscs and other aquatic invertebrates	551.025	0,02
07 – Edible vegetables and certain roots and tubers	1.470.646	0,04
08 – Edible fruit and nuts; peel of citrus fruits or melons	3.675.939	0,11
10 – Cereals	489.480	0,01
12 – Oil seeds and fruits; miscellaneous grains; seeds; industrial and medicinal plants; straw and fodder	334.744	0,01
15 – Fats and oils of animal or vegetable origin and their cleavage products; prepared edible fats; animal or vegetable waxes	387.199.699	11,30

Tariffs	Total value (in BAM)	Percent (%)
16 – Preparations of meat, fish, crustaceans, molluscs or other aquatic invertebrates	869.239.125	25,38
17 – Sugars and sugar products	847.793.776	24,75
18 – Cocoa and cocoa products	213.068.517	6,22
19 – Cereal based products, flour, starch or milk; confectionery	574.599.444	16,78
20 – Vegetable products, fruit, nuts or other parts of plants	46.812.576	1,37
22 – Beverages, spirits and vinegar	56.933.591	1,66
23 – Residues and waste from the food industries; prepared animal fodder	1.492.436	0,04
24 – Tobacco and manufactured tobacco substitutes	1.431.290	0,04
26 – Ores, slag and ash	1.296.621	0,04
27 – Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	52.891.855	1,54
30 – Pharmaceutical products	5.747.470	0,17
32 – Tanning or dyeing; tannins and their derivatives; dyes, pigments and other substances dyeing; paints and varnishes; putty and other mastics; printing, paint and ink	4.865.723	0,14
39 – Plastic masses and plastic products	10.878.450	0,32
40 – Rubber and rubber products	842.387	0,02
41 – Raw hides and skins with the hair or no hair (except fur) and leather	1.630.645	0,05
44 – Wood and wood products; charcoal	1.947.900	0,06
48 – Paper and paperboard; articles of paper pulp, paper or paperboard	174.612	0,01
52 – Cotton	151.888	0,00
62 – Apparel and clothing accessories, not knitted or crocheted	2.966.036	0,09
64 – Footwear, gaiters and the like; parts of such articles	75.583.156	2,21
70 – Glass and glassware	55.936.489	1,63
72 – Iron and steel	39.913.581	1,17
73 – Products of iron and steel	88.537.428	2,58
76 – Aluminium and aluminium products	49.625.030	1,45
79 – Zinc and articles thereof	5.702.162	0,17
84 – Nuclear reactors, boilers, machinery and mechanical appliances and devices; and parts thereof	4.608.893	0,13

Tariffs	Total value (in BAM)	Percent (%)
85 – Electrical machinery and equipment and parts thereof; apparatus for recording or reproducing apparatus; television apparatus for recording or reproducing pictures and sound, and parts and accessories of such articles	529.619	0,02
87 – Vehicles, except rail vehicles and their parts and accessories	19.517	0,00
94 – Furniture; mattress; products of bedding and similar products (mattresses, pillows, and similar stuffed furnishings); Lamp and lighting fittings, not elsewhere specified or included elsewhere; illuminated signs, illuminated nameplates or the like; prefabricated buildings	175	0,00

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OUT OF SCOPE EMPLOYEES IN TURKISH COLLECTIVE BARGAINING SYSTEM (*)

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Abstract:

Collective Bargaining is the process in which labor unions representing workers on the one hand and employers or employers' institutions on the other gather and come to the table in order to determine working rules and conditions of both parties and the process to conclude the collective agreement.

In Article 39 of 6356 numbered Law of Trade Unions and Collective Labor Agreement, issues about benefiting from a collective labor agreement are included. Out-of-scope employee concept in industrial relation application refers to people excluded from collective labor agreement regime even though they are able to be member of a labor union, and even they are, as a result of consensus of the parties of collective labor agreement, in other words those to whom collective labor agreement is not applied.

Exclusion of some workers such as directors, chiefs, engineers and even all office employees which are members or able to be a member of labor unions from the scope of the agreement is an encountered case in the application of collective labor agreements and this issue is regulated through scope articles included in collective labor agreements.

The circumstances of out of scope employees cause discussions.

Key Words:

Collective Bargaining, Personnel Out Of Scope, Labour Unions, Collective Labour Agreements

1. Development of Out of Scope Employee Conception in Turkish Law

Entrance of Collective Labor Agreement into the work life under the name of General Contract happened through 1926 dated Law of Obligations.

Law of Obligations regulated Collective Labor Agreement institution only in its two articles with liberal approach. According to Article 316 regarding conclusion of the agreement, employers or employer associations could conclude "general contracts" including the issues "concerning service" with labors or employer associations. Validity of the contract is stipulated to the condition of being written. Duration of the contract could be agreed by parties. However, if a consensus could not be reached upon this issue, the contract could be terminated anytime through a warning notified in a duration of six months after a year. As for Article 317, which regulates results of Collective Labor Agreement, it is stated that rules of Individual Labor Agreement conflicting with Collective Labor Agreement would be void and be replaced with the rules of collective labor agreement (Gülmez, 1983).

Collective Labor Agreement institution, which took place in Turkish work life a little bit earlier, could not developed further and find application area (Ekin, 1979).

Undoubtedly, there may be various economic, social and cultural reasons for that. However, one of the main reasons is the lack of unions to transmit individual level of Collective Labor Agreement bargains to a collective level. Likewise, Ottoman Strike Law was in force in 1926 and according to this, workers operating in workplaces serving to public were prohibited from establishing unions. Although there were not a definite prohibition regarding strikes; Law of Obligations could not lead to the birth of a common collective bargaining tradition because of lack of right

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to union, which is one of the elements that is meaningful only if they enjoy together, and regulation of collective bargaining issue, which is such a complicated issue, only in two articles, and hence rules were stuck in enactment texts (Işıklı, 1976). In this period, although Collective Labor Agreement had an existence in institutional respect, there was not any application of out of scope employee due to there was not any concluded Collective Labor Agreement, and hence to wait for the next period became necessary.

Article 46 of 1961 Constitution recognized right to trade unions, likewise Article 47 to right to collective agreement and strike, and 275 numbered Law of Collective Labor Agreement, Strike and Lock-out enacted in 1963 gave an institutional form to collective bargaining. In this institutional structure, autonomy of collective agreement was initially recognized through 1961 Constitution and became functional through 1963 dated laws and took its place in social life and legal structure.

With the beginning of collective bargaining application in our country in 1960s, it was seen that some provisions about to which workers these agreements shall be applied were included in Collective Labor Agreements and tasks and positions to be excluded from the scope started to be determined. In this sense, the year of 1963 can be accepted as the date on which application area of Collective Labor Agreements were narrowed with respect to individuals and out of scope employee applications were started (Can, 1995).

Since 1963, exclusion of a part of staff was requested by employer in Collective Labor Agreement discussions, and labor unions generally objected this request. However, in spite of these discussions, provisions regarding out of scope employees were included in the great amount of Collective Labor Agreements (İnce, 1985).

2. The Concept of Out of Scope Employee

Workers serving in production, management and supervision departments of enterprises, having membership of a trade union or not, generally having high level positions such as manager, assistant manager, chief, lead man, foreman etc. and excluded from benefiting Collective Labor Agreement through union membership or payment of solidarity contributions are called as out of scope employees in application.

Out of scope employees is a group of staff which cannot benefit from Collective Labor Agreement due to their position, task or titles even though they are members of a union (İnce, 1985).

Although it is accepted that out of scope employee application was kept narrowly with respect to position and a sufficient level was not fallen below with respect to wage and other social rights in the first years of shift to collective bargaining order (Şahlanan, 1992); it is a fact that number of workers excluded from the scope increased and a decline was observed with respect to wages and social rights in comparison with workers benefiting from Collective Labor Agreements in next years (Çelik, 1980).

2.1. Definition and Elements of Out of Scope Employees

2.1.1. Definition of Out of Scope Employees

Out of scope employee has been mentioned in collective bargaining law as a concept but any definition has not been made. Out of scope employee has only been approached in the sense of benefiting from Collective Labor Agreement and the problem has been dealt with in this scale (Reisoğlu, 1983).

On the other hand, there is not a legal provision about whether workers are going to be excluded from the scope or not. Whereas out of scope employee may be the member of signatory trade union in Collective Labor Agreement in principle, it may not be a member as well.

After this short explanation, out of scope employee can be defined as follows:
In a workplace or enterprise, exclusion of workers at a certain title or position regardless of they are members of signatory labor union of Collective Labor Agreement or not from the application sphere of Collective Labor

Agreement is called as exclusion from the scope; and workers to whom Collective Labor Agreement is not applied due to their position are called as out of scope employee (Reisoğlu, 1983; İnce, 1985)

Employer representatives to be deemed as employer can be determined as follows according to 6356 numbered Law of Trade Unions and Collective Labor Agreement with respect to collective bargaining law:
Those managing whole enterprise,
Those participating collective bargaining as an authorized representative although they do not have authority to manage whole enterprise.

Employer representatives other than those indicated above can become members of trade unions and benefit from Collective Labor Agreements regardless of their title. This suggestion caused much-discussed out of scope employee problem (İnce, 1985).

Although principle is inclusion of all workers who are serving in the workplace and members of the trade union in the sense of personal scope of collective labor agreement (Esener, 1978); in practice, exclusion of some workers such as directors, chiefs, engineers and even all office employees which are members or able to be a member of labor unions from the scope of the agreement is an encountered case in the application of collective labor agreements hence they are left to sphere of service contract (Çelik, 1980).

Therefore, collective labor agreement and adherence principle becomes invalid for a certain amount of members affiliated with that agreement (out of scope employees) as an exception and through the agreement of parties but valid for other (in-scope) members which constitutes a great majority. Parties narrow the scope in this manner.
A similar case is called as "Abstract" or "Potential" adherence in German Law (Çelik, 1980).

Although adherence maintains through collective labor agreement, this adherence is suspended through agreement power. In practice, it can be observed that in-scope and out of scope employees are discriminated in private sector.
For various reasons, employers in private enterprises request some employees serving at important administrative levels to be excluded from personal scope of collective labor agreements. Indeed, due to these workers serve under a service contract they also have the title of employee. However, most of the time, these are advisors, engineers, and individuals serving in personnel and accounting departments.

According to employers, such kind of individuals should fall out of personal scope of collective labor agreement because of secrets of enterprise that they learn while they do their works. Therefore, an out of scope employee group emerges in practice as a result of discussions and bargains carried out between parties and employer can assign their working conditions and wages outside of collective labor agreement. Out of scope works are written in the agreement.

Hence a kind of "staff", that falls out of the scope, emerges. That staff is not included in the scope of collective agreement whomever is assigned to this position. Then, those working at this out of scope position either do not become members of signatory unions or resign from membership if they are or they maintain their membership but they cannot benefit from collective agreement due to falling out of scope. In practice, trade unions contend, negotiate and bargain to include their workers who do not consent with being out of scope into the scope (Esener, 1978).

Moreover, an application to give similar rights to out of scope employees after conclusion of collective agreement is commonly observed. Such an application has arisen due to unwelcomed perception of administrative staff as close to employer and employer representative and their distance to participate unions.

In addition to that, it is known that this group, which is composed of white collars, does not lean toward unionization. However, after increasing labor force costs in recent years, retreats from giving the same level of rights to out of scope employees following collective bargaining have started. Therefore, it can be said that wage

differences between in scope and out of scope employees (especially for lower level administrative employees) increased (Koray, 1992).

2.1.2. Elements of Out of Scope Employees

Elements of out of scope employees can be listed as follows (İnce, 1985).

1. Out of scope employees are individuals who are able to become members of a union in principle.
2. The case of being out of scope arises from position, task or title of these individuals.
3. Exclusion of an employee from the scope should be indicated in Collective Labor Agreement.
4. This employee is out of Collective Labor Agreement regime and such kind of people cannot be applied Collective Labor Agreement in principle. Such kind of people is dependent upon a service contract or provisions of workplace internal regulation.

2.2. Legal Discussions on Out of Scope Employees

The circumstances of out of scope employees cause discussions (Esener, 1978).

Upon disputes that emerged about this issue, Supreme Court has decided that individuals excluded from the scope of Collective Labor Agreement cannot benefit from the collective agreement even though they are members of the union.[1]

Due to any further legal regulation has not been placed, court decisions concluded in previous practices and various scientific views maintain their importance (Çelik, 2015).

2.2.1. Legally Affirmative View on Out of Scope Employee Application

Devrim ULUCAN suggests following ideas in examination of decision of Supreme Court 9th Civil Chamber with 6.5.1974 date, 1973/24604 docket and 1974/8465 number (Ulucan, İHU, TSGLK. 6. No.1):

I. Article 47 of Constitution (A. 53 in 1982 Constitution) entitled collective labor agreements to workers as an individual right by putting forward the provision of "in their relation with their employers, workers are entitled to bargain collectively and to strike with a view to protecting or improving their economic and social status".
Option to exclude such worker who seems owner of right of collective labor agreement in the first view through a provision stipulated in the agreement by the parties can be interpreted as removal of right of collective labor agreement entitled by the Constitution to workers.

However, legal source of autonomy and power of collective labor agreement entitled to the parties of collective labor agreement is the Constitution as well.

A new kind of contract, which has an importance and special qualities so as to be protected at the level of Constitution, has been generated through right of collective labor agreement entitled to workers. The most distinct feature of this kind of contracts is "its collective character" and its superiority and priority in comparison with other individual contracts.

This superiority and priority arise from the fact that normative part of collective labor agreement is an autonomous legal source with objective quality and has the characteristics of a law in the material manner.

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[1] Supreme Court .9.C.C. 6.5.1974 d. d. 1973/2460, 1974/8465 no decision and Devrim Ulucan's examination, İHU 1975 TSGLK, 6 (No.1); 12.1.1976 d. d.1975/31395, 1976/1000 no decision of the same chamber, Journal of Supreme Court Decisions, April 1976, pp.490-49 l.; 16.2.1976 d.d. 1976/1704, 1976/5689 no decision and Münir Ekonomi's examination, İHU 1976; TSGLK, 37 (No.2); Supreme Court .9.C.C. 20.5.1985 d.d. 1985/2546, 1985/5437 no.II decision, Journal of Employers, July 1985, pp.17-19.; Supreme Court Assembly of Civil Chambers 25.4.1986 dated decision, Journal of Textile Employers, February 1987, p.22.

The intended result through entitling right of collective labor agreement is to provide a legal opportunity to the workers organizing in pursuant to the principle of self-help; to enable them to make agreements about their working conditions in their relation with their employers "to protecting or improving their economic and social status"; to transform presumed formal equality between labor and employer concluding individual contract into a real equality; and hence to break employer's superiority to a large extent.

As it is known, the fact on which the main principle of Labor Law is based is dependency of the worker to the employer. In order to remove actual superior position of employer and make the worker equal to it, recognition of freedom of association and establishment of protective organizations of workers are necessary. The Constitution has bestowed this facility to both workers and employers. While these organizations are regulating working conditions as the parties having equal rights, they set up autonomous legal rules. Normative part of a collective labor agreement, which is concluded under the principle of autonomy, must be compulsory with respect to minimum requirements and it must directly have the quality objective law to be able to make workers equal with employer as indicated above.

Regulation of third parties' legal relationships by the parties of a collective labor agreement, who are private law bodies, through establishing objective and general laws and their privilege to link individual contracts of the third parties to direct and compulsory rules and their "collective labor agreement power", "authority to establish rules" (like Legislative Organ of the State) take its legal validity from the Constitution. Due to the source of collective labor agreement power is the Constitution, lawmaker cannot make changes so as to touch the essence of this right and cannot completely remove this right.

Utilization of collective labor agreement power indicated in the Constitution has been restricted with an aim in the collective agreement autonomy. The aim to drive the parties having the collective agreement power is "to protecting or improving their economic and social status". The most influential way in achieving this aim with respect to self-help principle is organization of workers and to carry out collective labor agreements through these organizations.
The Constitution has recognized the freedom to establish trade unions and set up many provisions for the purpose of protection of workers. After the assignment of utilization of collective labor agreement right to the labor organizations due to it is necessary for the realization of this right and protection of workers, rights of the actual right owner workers would not be taken away; on the contrary, opportunity for effective utilization of the right would be provided. In this sense, regulation of the collective labor agreement through an additional specific law and determination of parties of collective labor agreement is not in conflict with the Constitution. Similarly, normative quality of collective labor agreement has been concretized through the law.

II. 275 numbered Law of Collective Labor Agreement, Strike and Lock-out (a.1) determined the parties and the subject of collective labor agreements through the provision of "labor agreement in the sense of this law is a contract concluded between labor organizations and employer organizations or employers so as to conclude service contract and regulate the issues regarding its content and termination".[2]

According to this provision, labor organization "representing majority of workers operating in a business line or one or more workplaces" has collective labor agreement power and is able to become collective labor agreement party so as to represent workers as indicated in Article 7.

[2] Parties and subject of a Collective Labor Agreement is included in 6356 numbered Law of Trade Unions and Collective Labor Agreement as follows: "Collective labor agreement refers to the agreement concluded between a workers' trade union and an employers' trade union, or an employer who is not a member of any union, in order to regulate the matters with regard to the conclusion, content and termination of the employment contracts."

The party of collective labor agreement power for employers is the organizations which are indicated in article 7 of the same law as well. However, a single employer may also be the party of a collective agreement under certain circumstances with respect to employers.[3]

In addition to the matters regulating mutual rights and obligations of the parties, application and supervision of the agreement and procedures to be applied for settlement of disputes; "regulation of the matters regarding conclusion, content and termination of service contract" is included in the scope of collective labor agreement power. Apart from these provisions indicating normative quality of collective labor agreement, the same law regulated normative quality of the collective labor agreement in details. According to Article 3 of the Law, "unless otherwise specified in the collective labor agreement, service contracts cannot be in conflict with the collective labor agreement. Provisions of the service contract conflicting with collective labor agreement would be replaced with the provisions of collective labor agreement. Issues not regulated in the service contract are regulated on the basis of collective labor agreement's provisions."[4]

Therefore, quality of normative part of a collective labor agreement, which is entitled in the Constitution, and its details are determined in Law of Collective Labor Agreement, Strike and Lock-out in a clearer manner.
III. Although collective labor agreement right is a basic right of workers, labor organizations, employer organizations and employers in some cases have the right to use this right.

However, it cannot be said that workers have no influence on the usage of this right, single workers underwhelm in the community and are absolutely determined by the organization. Utilization of the right is assigned to labor organization on behalf of right owner workers in pursuant to collective quality of the right and the intended aim to be achieved, which is "to protecting or improving their economic and social status".[5]

These labor unions must be in compliance with the conditions indicated in the Constitution in order to legally use their representation authorities; in other words, they must be established freely, be independent, operate in compliance with democratic principles and participant and resignation from membership must be free. A labour organization having these qualities naturally uses its collective agreement power in favor of workers. The worker who is member of the organization is considered that she/he has accepted collective labor power of the organization due to adopting membership with independent will. Moreover, the worker has the chance to exit from collective agreement power of the organization through resigning from the organization.

IV. Members of the organizations which are the parties of a collective labor agreement are affiliated with the collective labor agreement and are included in application sphere (scope) of the collective labor agreement in principle.

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3 6356 numbered Law of Trade Unions and Collective Labor Agreement defines labor and employer organizations having collective labor agreement power and being able to a party of a collective agreement as follows in Article 41 with the title of Competence: "1. The workers' trade union representing at least three percent of the workers engaged in a given branch of activity and more than half of the workers employed in the workplace and forty percent of the workers in the enterprise to be covered by the collective labor agreement shall be authorized to conclude a collective labor agreement covering the workplace or enterprise in question.
2. In the case of enterprise collective labor agreements, the workplaces shall be considered as a whole in the calculation of the forty percent majority.
3. If several trade unions have members of forty percent or more in the enterprise, the trade union having the largest number of members shall be authorized to conclude a collective labor agreement.
4. An employers' trade union shall have the power to conclude a collective labor agreement covering the workplace or workplaces owned by the employers belonging to the union. An employer who is not a member shall have the power to conclude a collective labor agreement covering the workplace or workplaces owned by him.

4 The same provisions are included in Article 36 of 6356 numbered Law of Trade Unions and Collective Labor Agreement.

5 Constitutional Court decision, 2.5.1969, D.1963/337, 1967/31 no, Lebib Yalkın Publisher, AA/ I. Item No. 15.

Due to the Law is about the members of both parties affiliated through and included in the scope of the collective agreement, it recognized direct and compulsory effect to normative provisions of the agreement. However, it is possible that a collective labor agreement may be valid for only a certain part of those affiliated through this agreement in general. For instances, exclusion of a part of workers from the scope of agreement in a workplace.

Workers affiliated with collective labor agreement should not be confused with those to whom provisions of the collective labor agreement are not applied, in other words out of scope employees. Authority to determine workers affiliated with collective labor agreement has not been given to the parties but these are determined by the law. However, the issue of who are going to be included or not into the scope of a collective labor agreement is in the scope of parties' competence and is an element of collective agreement power.

In practice, exclusion of some workers such as directors, chiefs, engineers and even all office employees which are affiliated with service contract and able to be a member of labor unions from the scope of the agreement is an encountered case in many collective labor agreements.
In compliance with the meaning of the concept, if we understand affiliation to a collective labor agreement from the term of affiliation, collective labor agreement in question must be concluded and entered into force for the birth of affiliation.

Individuals falling into the scope (application sphere) of the same collective labor agreement provisions are those who are affiliated to the collective labor agreement. Provisions of the collective labor agreement are not valid for those who are not affiliated. As an ordinary result of that, the case of affiliation to the collective agreement terminates through the termination of collective labor agreement in question. This can be called as "actual" or "concrete" affiliation to a collective labor agreement.

However, on the other hand, there may be some other (out of scope) workers or employers to whom provisions of the collective labor agreement are not applied although they are affiliated with collective labor agreement. In that case a "potential" or "abstract" affiliation is the matter, in spite of abstract affiliation worker or employer is out of the scope of collective labor agreement.

In conclusion, in pursuant to collective agreement power that parties have, provisions of the collective labor agreement are not applied to individuals that are marked as excluded from the scope of collective labor agreement even though they are members of the union that is a party of the collective labor agreement and hence affiliated with the collective labor agreement. Such individuals stay affiliated with legal provisions like those who are not member of the union.

Münir EKONOMİ gives following ideas in the examination of Supreme Court 9th Civil Chamber decision with 16.2.1976 date, Docket 1976/1704, 1976/5689 number (Ekonomi, İHU. TSGLK 37. No2).

Collective labor agreements, which have the quality of a private law contract, are primarily based on free agreements of the parties and composed through mutual and coherent declarations of intention.

After the shift to Collective Labor Agreement order in our country, in addition to provisions regarding collective agreements are going to be applied to which workers, it is observed that some provisions regarding that some workers, especially those taking role in the management of the work and workplace, employer representatives (manager, chief, foreman, lead man etc.) or those performing certain tasks (engineers, a part of office staff) are going to be excluded from the scope of the agreement are added into the provisions in collective labor agreements in practice. The issue of exclusion from the scope, which is decided by the parties after negotiations, was initially objected by trade unions, avail of agreements by union members was discussed and even it was claimed that exclusion from the scope is in conflict with Article 53 of the Constitution (A. 53 of 1982 Constitution). On the others hand, exclusion from the scope has not become a great problem in practice and provisions on this issue have

been included in most of concluded collective labor agreements. It should also be noted that, trade unions sometimes suggested exclusion of senior officials of employer representatives from the scope.

II. According to the view accepted by Supreme Court and dominant in the doctrine, parties of a collective labor agreement can decide upon exclusion of some workers from the scope of the agreement while determining application sphere of the agreement with respect to people and regulate it in the agreement.
Similar to the fact that lawmaker can make a restriction in the laws and exclude some people from the application area of the law for certain reasons; agreement parties, which establish autonomous rules of law through normative provisions of Collective Labor Agreement having the quality of a law in material respect, can exclude a part of workers from the scope of the agreement by acting in the same direction. They can freely decide which workers are going to be included and which ones to be excluded. Unless there exist some arbitrary discrimination among equals in the exclusion from the scope, there does not exist any conflict with principle of equality and law with respect to the laws that collective labor agreement determines.

According to Mustafa ÇENBERCİ, (Çenberci, 1979); "In out of scope employee application, there is a necessity and maybe even an obligation for both trade unions, i.e. labor organizations, and employers. By considering this point, there does not seem any conflict with the principle of constitutional equality."

Devrim ULUCAN reaches the conclusion of "If there is discrimination between workers from completely different statues and office staff is excluded from the scope, and then there is not any conflict with equal treatment principle. To deal with the issue only on the basis of principle of equality may be faulty. Exclusion of some individuals from the scope through collective labor agreement may be beneficial for them as well. In other words, individuals who are going to get wages more than that determined by collective labor agreement are generally excluded from the scope of the collective labor agreement. Moreover, while trade unions are excluding someone from the scope, they are under supervision with respect to internal democracy in any case. They cannot easily exclude from the scope, they exclude some individuals by considering that they have opportunity to take higher wages due to they are skilled labors. It should be considered as an authority entitled to the union with respect to its policy." in his approach to examine the issue with respect to equal treatment principle (Ulucan, 1979).

According to Seza REİSOGLU (Reisoğlu, 1986); "Collective labor agreement is a private law contract composed in the consequence of free will of the parties. Normative quality of majority of the provisions of the agreement does not matter with respect to consider the agreement as a private law contract. Just as the other private law contracts, parties are free to assign the scope of the agreement and to exclude some workers from the scope. Exclusion of workers operating at listed tasks from the scope is indeed a natural result of the bargaining between parties. Exclusion from the scope may be based on many different reasons. For instances, employer may insist on exclusion of some workers performing some certain tasks in order to provide more superior rights than collective agreement".
In Clause 2 of Article 14 of 274 numbered Trade Unions Law, the provision of "Professional associations established in accordance with this law have to comply with parity among their members" is included, and hence, whether some workers who are member of the union shall be excluded from the scope or not was discussed. Supreme Court clearly accepted that members of the signatory union can be excluded from the scope as well in the last period. According to supreme court, individuals excluded from the scope of collective labor agreement are subjected to provisions of law but not provisions of collective labor agreement in severance pay calculation (9.C.C. 6.5.1974, 24604/8465, Employer, October, 1974, p.21; 9.C.C. 16.2. 1976).

Supreme Court maintained the same view in a decision (9.C.C. 30.5.1985, 2546/5437) regarding exclusion of part-time employees from the collective agreement in the new period. Affiliation with collective labor agreement is determined by the law. Accordingly, each worker who is member of the signatory union is affiliated with the Collective Labor Agreement. However, who are going to be included in the scope of Collective Labor Agreement or not and who shall be excluded can be decided by the parties of the agreement. Even, provisions of the agreement are not applied these workers although they are legally affiliated with the agreement due to they are members of the signatory union.

On the other hand, if some members of the union reach the conclusion that they are not protected, they can resign from the membership while they can also make effort to change the management of the union. Moreover, 2821 numbered Trade Unions Law have concluded a new regulation in this sense and have not included a provision stipulating equality among members in article 32 for the activities of trade unions so as to include conclusion of a collective labor agreement. The Law accepted the clause of "unions and confederations have to comply with the equality among their members in enabling their activities" for the article 33 regulating social activities of unions and confederations.

While parties of the collective agreement accept out of scope articles, they can apply this procedure for only certain positions, and they cannot determine out of scope employees by listing their names. Normative provisions of this agreement which is binding for the workers are only suitable for the assignment of general provisions.
Some positions can be excluded from the scope and all workers operating at this position cannot benefit from the collective labor agreement regardless of they are the members of signatory union or not. Benefiting of out of scope employees from the agreement by paying solidarity contribution is not possible as well.

Supreme Court also agrees with the idea (9.C.C. 20.5.1985, 2547/5436). In an event devolved to the Supreme Court, "it was decided that less material benefit than provided for a certain part of positions and working conditions, union-member workers, through Collective Labor Agreement or less benefit than total amount corresponding these conditions cannot be entitled. Complainant trade union sued employer due to it does not cut solidarity contribution from that staff benefiting from the agreement.

Employer request the dismissal of the suit due to it does not have to cut solidarity contribution in pursuant to article 9 of 2822 numbered law and article 61 of 2821 numbered law. According to Supreme Court, the base determined by the Collective Labor Agreement for out of scope employees is a limit measure. Other rights are not mentioned and prices of those are determined in individual relationship. Due to these employees get their rights through individual agreements rather than Collective Labor Law relations, and hence cut of solidarity contributions from these workers is not compulsory, responsibility of the employer is not a matter.

Similarly, benefiting of out of scope union-member employees from the agreement by paying solidarity contribution and benefiting from the union cannot be accepted as well. Acceptance of benefiting of out of scope employees from the agreement by paying solidarity contribution means the rejection of such authority of the parties. On the other hand, parties cannot exclude only workers who are not members of the union. In that case, the provision of benefiting from the collective labor agreement by paying solidarity contribution without approval of the signatory union will be eliminated."
Münir EKONOMİ also defends compliance of out of scope employees with the law through the idea of "An autonomous sphere has been left to agreement parties to regulate working conditions through concluding a collective labor agreement right in the Conclusion. We call it as the collective labor agreement autonomy. While parties agree and determine working conditions within the borders of this autonomy, they establish objective legal rules, these rules that constitute normative part of the agreement bind third parties and has the quality of law in the material meaning. Within the current system, parties have the competence to exclude from the scope on the basis of collective labor agreement and power." (Ekonomi, 1979).

Erol AKI also agrees with the idea of that in the case of they are excluded from the scope upon the acceptance of labor organizations after the proposal of employer party to exclude from the scope of the collective labor agreement, individuals serving at high level management position (like manager and chief) as well as qualified technical staff (like engineer, foreman) cannot benefit from the collective labor agreement even though they are members of the union (Akı, 1975).

In the preamble of a decision (9. C.C. 20.05.1985, 1985/5437) of Supreme Court 9th Civil Chamber summarized as "Who are going to be included in the scope of Collective Labor Agreement or not and who shall be excluded can be

decided by the parties of the agreement. Even, provisions of the agreement are not applied these workers although they are legally affiliated with the agreement due to they are members of the signatory union.
Payment of different wages, premiums or payments of benefit by employer to the workers because of either objective or subjective qualities, position, importance of the task, working conditions is not in conflict with equal treatment principle", following ideas are included.

"In Article 53 of the Constitution, right of concluding collective labor agreement between workers and employers to regulate mutual economic and social conditions and working conditions; in article 54, right to strike of workers in the case of dispute while discussing on this agreement; and in Article 51, right to establish trade unions of workers and employers in order to protect and develop economic and social rights and benefits in labor relations are regulated.
Formation, utilization and protection of these rights and freedoms, which are determined in the Constitution in general terms, within the borders of general rules of the Constitution, scope, contents, conclusion of a collective labor agreement and conditions to benefit from them have been regulated in 6356 numbered Law of Trade Unions and Collective Labor Agreement in more concrete and detailed provisions.

Provisions in Article 25 of 6356 numbered law with the title of guarantee of freedom of trade union include a part of provisions taking its source from the Constitution and ensuring positive – negative trade union freedom.
Relevant proscriptive and protective rules in mentioned Article 25 of 6356 numbered law are included in clauses 3 and 4. Here, after determination of that employer cannot make any discrimination on account of his membership or non-membership in a trade union or membership in different trade unions during the labor relation as a general rule; it is emphasized that provisions of collective labor agreement on wages, premiums, bonuses and money regarding payments of benefits shall be kept secret.

However, some points should be emphasized in order to make clarifications in compliance with their essence. Affiliation with a collective labor agreement and assignment of the scope of the collective labor agreement should not be confused. Affiliation with collective labor agreement has been determined by the law. Accordingly, each worker who is member of the signatory trade union is affiliated with the collective labor agreement. On the other hand, who are going to be included in the scope of collective labor agreement or not and who shall be excluded can be decided by the parties of the agreement. Even, provisions of the agreement are not applied these workers although they are legally affiliated with the agreement due to they are members of the signatory union.

Another important point is that principle of "equal treatment" by employer is not absolutely perceived. It should be accepted that payment of different wages, premiums or payments of benefit by employer to the workers because of either objective or subjective qualities, position, importance of the task, working conditions is not in conflict with equal treatment principle.
Moreover, differences in the application should not aim to prevent or restrict freedom of trade union that the Constitution and the Law intends to protect. Prevention of the abuse of the right is also essential."
Again, according to the idea included in another decision of Supreme Court 9th Civil Chamber (20.05.1985, 1985/5436); "Out of scope employees get their rights through individual agreements and not Collective Labor Law relations."
Another Supreme Court decision summary on this issue includes following statements (9.C.C. 12.01.1976, 1975/31395).

"Before determination of whether defendants are included in the scope of the collective labor agreement on the basis of their positions and tasks, to decide upon their avail of collective labor agreement increase is not correct."
In a decision of Supreme Court Assembly of Civil Chambers (Y.H.G.K. 25.4.1986, E985/9-835, K.986/449), following ideas are included: "Although membership in a trade union constitutes affiliation principle to benefit from Collective Labor Agreement, exclusion from the scope through the provision in the agreement is the exception of benefiting and out of scope member cannot request the rights arising from the agreement."

Devrim ULUCAN refers to this decision of Supreme Court Assembly of Civil Chambers and defends the idea of "Although it is claimed that exclusion from the scope is in compliance with principle of equality, exclusion from the

scope of a part of employees due to their special positions and quality of the task they perform is generally accepted in compliance with the law." (Ulucan, 1988).

2.2.2. Legally Negatory View on Out of Scope Employee Application

In application of many collective labor agreements, it is observed that workers serving at certain positions are kept out of scope of the collective labor agreement. Whether they are the members of the union concluding the collective labor agreement does not matter.

According to Kemal OĞUZMAN; "It cannot be said that such kind of provision to exclude from the scope, which is claimed to be accepted with the presumption of that employer is going to provide rights better than those provided in the collective labor agreement to out of scope employees due to they are close to the employer thanks to the task they serve, is always beneficial for the workers in question.

These workers, who is accepted that they cannot benefit from the concluded collective labor agreement even though they are members of the union, neither can conclude a new collective labor agreement nor benefit from the concluded labor agreement by paying solidarity contribution. Therefore, the workers in question cannot benefit from the right to collective labor agreement under the guarantee of the Constitution and this arises out of their will" (Oğuzman, -).

After pointing out that most of the workers excluded from the scope is not the member of trade unions, OĞUZMAN indicates that "such kind of an out-of-scope provision abolish the opportunity of these workers to become members of the unions". As likely as not, the aim is that; to drive them not to be members of the unions but to cut the Constitution off at the same time. Constitution recognizes collective labor agreement to the workers and workers can benefit from this right only through unions under the system placed after the decision of Constitutional Court.

When a worker is excluded from the scope, and exempted from the right of concluding collective labor agreement by the union, how can she/he benefit from the right of collective labor agreement? How can she/he utilize the rights such as benefiting from the collective agreement during a collective labor agreement duration, benefit from the right of collective labor agreement which are under the guarantee of the Constitution? Then, all these rights become hindered.

In my opinion, exclusion from the scope in this frame as the main point, which is also interpreted as completely excluding from the collective agreement, becomes in conflict with the Constitution.
The case changes if and only if it is interpreted as they can benefit from the Collective Agreement, but regardless of the fact that benefit or not, their opportunity to get some extra rights from the employer thanks to their position and the task they perform are reserved. Then, it can be discussed that whether it is valid or not for some other cases."
OĞUZMAN also rejects the ideas of that exclusion from the scope takes its source from Collective Agreement Autonomy and Power and suggest that "There are some forefront ones in the system of Supreme Court with respect to exclusion from the scope and they are workers who are not members of a union. They are completely out of scope. However, if you pay attention being excluded from the scope or not is a fact left to the will of the worker in all given examples. On the other hand, when the union and employer gather and decides exclusion of some workers from the scope, then workers are excluded from the scope involuntarily. Accordingly, I agree with the fact that someone can keep itself out of the scope of a collective agreement with its own will or establishment of provisions to enable it by the law and it would not be in conflict with the Constitution. Then on the contrary, if a provision of law is established that a particular category of workers cannot benefit from collective agreement after a law, they are always out of scope without their will; I wonder whether it is in conflict with the Constitution. In my opinion such kind of a law is in conflict with the Constitution. In short, we have no doubt about that it is an extremely wrong attitude. Now I mean its quality for being normative provision and law does not eliminate its conflict with the Constitution. As such kind of a provision of a law becomes in conflict with the Constitution, so I keep the opinion of that exclusion of workers from the scope through normative provisions of a collective agreement may become in

conflict with the Constitution in the sense of that eliminates right of collective agreement recognized by the Constitution to the workers without their will." (Oğuzman, 1988).

According to Can TUNCAY; "If the person who is excluded from the scope does not approve that, so this cannot be claimed against this person (Tuncay, 1988).
Because, benefiting from the collective labor agreement is primarily a rule for members of the union. In principle, possessing collective agreement competence of workers in their relations with the employer is a Constitutional right. To exclude that becomes invalid. When can it become valid? Only if the worker is persuaded to be excluded from the scope. However, then we cannot mention equality here. Here, equality principle cannot be based on. Where does equality prevail? More precisely, we should perceive from the equality that the rule is that equal treatments to the equals, different treatment to the different ones. In other words, relative equality is the matter not absolute equality. A part of individuals, who are excluded from the scope, are the individuals close to the employer, in other words they have a different situation from the others. Therefore, different treatment for those is a matter of course.
Hence, to claim equality here as a reason, I mean to base the invalidity of exclusion from the scope on the principle of equal treatment is not much correct (Tuncay, 1982).

Here, the reason should be lack of approval. As for approval, it may be that the fact of some individuals are going to be excluded from the scope a collective agreement has been decided in the statue of the trade union. Then, the member shall be deemed to approve that while being a member of the union. Therefore, exclusion from the scope become valid or exclusion from the scope afterwards may be accepted by the worker openly or tacitly.
Regulations other than that constitute a conflict with a Constitutional right even it is indirect."

Nuri ÇELİK says; "Since beginning yeas of Collective Labor Agreement order, employers suggested exclusion of individuals that they assume closer to employers and whose mental work is superior to physical work from the scope and trade unions accepted exclusion of such people as long as these people are not their members. In the case of those excluded from the scope want to benefit from the collective labor agreement, it is observed that they are not availed of the agreement by the employer even though they are members of the union. Upon the disputes about this issue, Supreme Court concluded that individuals excluded from the scope of collective labor agreement cannot benefit from the collective agreement even though they are members of the union" (Çelik, 1988) about the issue and suggests following ideas:
No regulation has been made on validity of agreement provision excluding the worker requesting to benefit from the Collective Labor Agreement from the scope in 6356 numbered Law of Trade Unions and Collective Labor Agreement. However, such kind of a regulation should be deemed void because it would be in conflict with the basis to ensure equality in activities of the union among members (a.26/3) and article 53 of the Constitution which entitles all workers to benefit from the collective labor agreement. However, Supreme Court accepted that union members excluded from the scope of collective labor agreement cannot benefit from the agreement. View of that the issue of who are going to be included in the scope of collective labor agreement has been left to appreciation and authority of the parties and, as a result of collective labor autonomy recognized to the parties, those excluded from the scope cannot from the agreement like the workers who are not the union members even though they are members of the union and will only be affiliated to provision of the law have been suggested by the proponents of Supreme Court's idea.

The content and limits of autonomy entitled to collective agreement parties are indicated in the Constitution and laws. Due to application of principle of equality in Trade Unions Law is necessary on the issue that is not solved in the Law of Collective Labor Agreement, Strike and Lock-out, it should be concluded that exclusion of union members from the scope in in conflict with this article and the principle of that all workers under the same conditions can benefit from the collective labor agreement rights as stipulated in the constitution. Otherwise, some workers would not be able to benefit from the rights provided by the agreement through the consensus of collective labor agreement parties. Due to right to conclude a separate collective labor agreement has not been recognized in our collective agreement system for those excluded from the scope, these workers are debarred from the Constitutional rights through the exclusion from the scope (Çelik, 2015). Moreover, trade unions are made

autonomous in such a wider aspect to debar their members, who are actual right owners, from the right of collective agreement and a contradictory situation emerges.

Indeed, prevention of benefiting from the activity of some members by the union that concludes the collective agreement and provide this activity to its members would be contradictory to the legal regulation stipulating provision of equality in services among members by the union. In the doctrine, it is suggested that if there is discrimination between out of scope employees, there may be something in conflict with equal treatment principle, but if there is a discrimination between those from different statues and some certain statues are excluded from the scope, then there may not be conflict with equal treatment principle. However, it should be noted that whereas it is possible to classify members in certain groups through non-arbitrary criteria for trade unions and avail them of the activities in various manners, it cannot be understood that to completely debar some workers from any activities without any rightful reason and in spite of their wishes.

Collective agreement service is only one of the activities of trade unions among those listed in the law, trade unions have to comply with equality among members in availing of these activities.
Trade unions treat differently through this application and transgress equality rıles and exclude some workers from the scope" (Çelik, 1988).

As for Turhan ESENER, he asks the question of "There is also another point that I could not decide on my own: I wonder whether a trade union can say to a worker I do not accept you to the union although it is applied for membership?" and gives the answer of "if a trade union is able to say to the worker I am sorry brother but I do not like your face and I do not accept you to the union, then it can exclude the worker from the scope in the same manner" (Esener, 1988).

According to Turhan ESENER, generation of a system accepting that a worker excluded from the scope would also be deemed to resign from the signatory union will be beneficial. Because membership of a worker in the signatory union and not being able to benefit from the collective labor agreement at the same time is not in compliance with the collective agreement system (Esener, 1978).

Nuri ÇELİK suggest that; "Being inspired from German Law, due to the view of workers excluded from the scope cannot benefit from the collective agreement just as those who are not members of the trade union and become only affiliated with the provisions of the law as a result of that the issue of who are going to be included or excluded from the scope of collective agreement and is left to the authority of the parties and collective agreement authority recognized the parties, in other words authority to establish rules having the quality of law provisions is not in compliance with the basis and collective agreement types of our country, it does not have enlightening character for us (Çelik, 1976). Most probably in Germany, exclusion of a part of workers from the scope is not the matter for those working at the same statues and in addition to separation into worker and servant (Angestellte) of employees (Arbeitnehmer) of a workplace in compliance with the legal principles there, only workers or only servants are included in a separate collective agreement and others are excluded from that agreement but included into the scope of other agreements, and even another agreement is concluded for apprentices (Lehrlinge). Even in German Law, other restrictions can be determined in addition to the groups indicated above, for instances it can be decided that an agreement is only valid for male workers of the workplace.

On the other hand, in any cases, it should be added that, there, employees who are not included into the scope of an agreement can be included in another one and various agreements having different contents and levels can be concluded with respect to both working conditions (only wages and all working conditions) and application sphere in the sense of place (neighborhood, region, district, country). While the concept of worker to be included in the agreement is single in Turkey, types and application of the agreements are similarly quite different from Germen Law. An exact comparison between these two countries is not possible in this aspect for the reasons mentioned.
Due to another collective labor agreement right is not recognized to the out of scope employees (Çelik, 2015), in that case, some workers become prevented from the rights provided by the agreement although they become members of

the union in order to protect and improve their economic and social rights and benefits as stipulated in the Constitution (a.51 and 53) and hence become debarred from their Constitutional rights" (Çelik, 1976) in his another critique from a different aspect.

As it can be seen, legal discussions on out of scope employees include various analysis so as to verify the determination of Jakob BURCKHARDT that "*To each eye, world of ideas and mentality present a different picture*" and completely different results can be reached (Burckhardt 1943).

3. Conclusion

Points about benefiting from collective labor agreements have been regulated in Article 39 of 6356 numbered Law of Trade Unions and Collective Labor Agreements. However, exclusion of some workers such as directors, chiefs, engineers and even all office employees which are members or able to be a member of labor unions from the scope of the agreement is an encountered case in the application of and this issue is regulated through scope articles included in collective labor agreements.

The circumstances of out of scope employees cause discussions. On the one hand of this debate on the application; the view of that the issue of who are going to be included in the scope of a collective labor agreement has been left to appreciation and authority of the parties and as a result of collective agreement autonomy entitled to the parties cannot benefit from the agreement even though they are members of the union just like those not members of the union and they can only be affiliated with legal provisions is suggested. As the opponent view, it is suggested that due to the fact that 6356 numbered Law of Trade Unions and Collective Labor Agreement is in conflict with the principle to provide equality among the members by the union in its activities (a.26/3) and the Article 53 of the Constitution that entitles all workers to benefit from the collective labor agreement, application of out of scope employees is not justifiable and such kind of settlements should be considered void. According to those supporting this idea, the content and limits of the autonomy recognized to the parties of a collective agreement have been determined by the Constitution and laws. Otherwise, a part of workers would not be able to benefit from the rights provided by the agreement through the consensus of the parties of regarding collective labor agreement. Due to any rights to conclude another collective labor agreement has not been recognized for those excluded from the scope in our collective agreement system, such workers become debarred from their Constitutional rights by being excluded from the scope.
Labor and employer unions criticize or defend the application of out of scope employees for their own reasons.

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ANALYTIC HIERARCHY PROCESS WHILE CHOOSING AUTHENTICATION WITH RADIO FREQUENCY IDENTIFICATION (RFID) SYSTEMS

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Abstract:

Nowadays, it cannot be thought that companies carry out their activities stand away from technology. Especially, with Fourth Industrial Revolution 4.0 (Industry 4.0) smart technologies has started to play big role in factories. One of the innovation of industry 4.0 is RFI technology, today used by various industries in multiple areas, and there are widespread researches about this subject thus aims that to improve these technologies one step further. Besides that, management of technology becomes more crucial from many points of view of companies. Inaccurate technology investment usually might cause loss for companies. In this context, in order to choose best RFID option with defined criteria, at a company in automotive sector where technological development is followed and implemented, hierarchical model is established and from based on this model analytical hierarchy process used and an application is carried out.

Keywords:

Energy, Energy Supply, Logistics

1. Introduction

Usage of the Radio Frequency Identification Systems goes back to the years of 1940s; it is used to identifying live or ordinary objects with or without movement using radio frequencies. (Üstündağ, 2007, p.74) First active long range electromagnetic carriers were used on planes at the 2nd World War, for identifying allied and enemy planes (Landt, 2005, p.9). 1950's can be determined as the year of discovery for RFID techniques. After reaching 1960s, many researchers and inventors worked on model systems and improved them. Sensor and control points "Electronic Article Surveillance" were released into the market to prevent certain commercial systems from being stolen.

In the year of 1970s, RFID applications are used for the purpose of identification more than inspection. RFID labels including integrated circuits are used for object tracking, object monitoring, identifying farm animals and monitoring them during the process of manufacturing (Üstündağ, 2008, p.9). Los Alamos Scientific Laboratory had become one of the leading centres with improving these RFID systems at the same years and developed a new tracking system to tracing nuclear materials.

From the years of 1990s, RFID's use on commercial fields became more common. At the years of 2000s, American Ministry of Defence and large retail companies that operates all around the world (Wall-Mart, Metro, Tesco…), with sanction decisions for their suppliers, affected improvement of the RFID market at a significant level (Üstündağ, 2008). As we reach the years of 2010s, RFID application fields are wider; they are now used at many fields such as material management, supply chain management, manufacturing, product life cycle management, health and sports.

Now seen as the technology of our day(with the 4th industry revolution), RFID Technologies gained more importance and with increasing interest at the business world, academic studies have become more common.

Özmen and Birgün, in a study they conducted, taking the current state Air Forces Command implementation system following technological developments closely into consideration, while choosing a RFID system, created a model for the purpose of choosing the most suitable RFID and a new application using Analytic Hierarchy Process (AHP) while taking investment criteria and supplier criteria into consideration (Özmen and Birgün, 2011, p.81).

In a study conducted by Chow, Choy, Lee and Lau, for storage operations, resource management situation focused RFID design was considered on a preferential basis, a new RFID focused resource manage system was presented that might help choosing the right appropriate resource usage package and at the same time give bonuses on time and on a financial approach (Harry and King, 2006, p.561).

Sounderperdian, Boppana and Chalasani, to the model that they created; taking application, label reading, communication network and other infrastructure costs into consideration, under the costs-benefits relationship, analysed RFID applications in the retail sector (Sounderpandian, 2007, p.107).

Erkan and Can in their studies, mentioned the benefit obtained by using barcodes and RFID, using Analytic Hierarchy Process and Fuzzy AHP methods they chose the most appropriate system amongst the RFID systems for data storing and gathering system. Criteria that effected the decisions are determined to be: costs, functionality, sustainability and performance (Erkan and Can, 2014, p.87).

Cebeci and Kılınç, in their studies, using AHP method, conducted a study that focused on a choosing an RFID system for a company that operates in the glass industry. In their studies, while there are many RFID applications, this decision was seen to be very critical due to technological investment adaptation and high cost risks and because of this, they chose the most appropriate RFID system by using multiple criteria decision making approach.

Studies in literature about choosing RFID show that, RFID technology have superior qualities compared to other identification systems. The feature that makes this technology more important is, it having the capacity to perceive. As the last years improving technology RFID, with increasing demand caused a rise in the amount of antenna and system supplier and at the same time helped reduce investment costs. On the other hand, companies planning to make RFID come to life faced different alternatives. In this context, choosing the right system for users have become important and benefiting from an analytic system while doing so became a necessity. Used in a wide field and as a method for choosing the best alternative from choosing Analytic Hierarchy Method supplier to RFID systems.

In this study, existing RFID systems are examined and criteria's that are prioritized while choosing the system are spotted, previously in a company that operates within the automotive sector, on a pilot region specified from before, an Analytic Hierarchy Process Model was created that would help choosing the most suitable RFID system and create a sample application. Based upon the created pairwise comparison matrixes, the main criteria the pairwise comparison matrixes were assessed by experts of RFID subjects and the importance levels in comparison to each other were established. Purpose of this study is to obtain a more realistic data in logistics and manufacturing planning departments and actualize this using the best RFID system choice.

2.RFID Technology

RFID, with the simplest explanation, is a system that delivers information about the object using radio frequencies. Information that is affixed on the object is saved with an electronic label and when required, information is transferred to a reader. (Fesçioğlu, Choi and Sheen, 2014, p.1369)

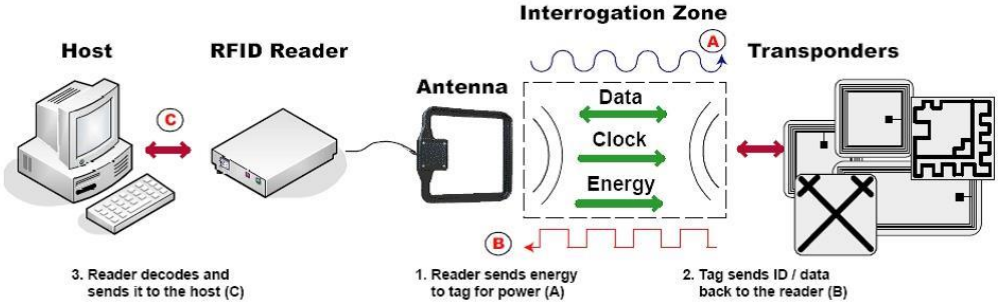


Figure 1. RFID system [11]

As a revolutionary information transfer system, RFID technology provides that every object is identified as being tagged with only one label automatically, be tracked and monitored. Data and energy transfer occurs without any contact between the label and the reader. For the information to be transmitted between RFID label and the reader, both system components create separate different radio waves. All labels at the same radio frequency clearance, receives the signals sent by the reader with the help of the antenna, solves the signal received in the form of code with the help of the reader labelling antenna and transfers that as data to the computer.

Components that create a RFID system aremade of 6 basic components as given below (Erkan and Can, 2014, p.89):

- Tag, label
- Reader
- Antenna
- Integrator
- Controller
- Special Software

One of the most important components of this technology, labels, are essentially divided into two groups depending on the power source being used as active and passive. In addition to this, half-passive labels that carry certain properties of both labels are also used. Feature of the active RFID label; is the fact that it has its own power source and feeds of that power source. Besides that, having long reading range and a large memory capacity with a large size is also within the properties of active RFID labels. As for the properties of passive RFID labels; feeding from the radio waves sent to the label, does the process accordingly. It's range compared to active RFID is shorter and its memory and size is also smaller.

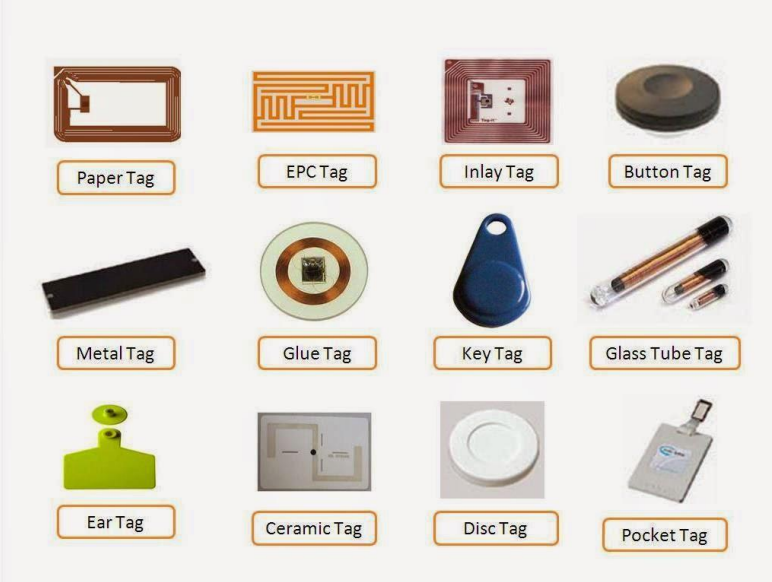


Figure 2. RFID Labels (A. Zircanavo, "zircanavo-abyss.blogspot.d," [Online]. Available: http://zircanavo-abyss.blogspot.de/2015_05_01_archive.html.)

Readers, receives the signals sent by the labels and turns signals received as codes into data by the reader. It can either be stationary or hand-held in types and its components are the same.

Antenna is the device that spreads the radio signals produced by the reader. It can be mounted to be used in different ways at the storage entrances, on-site carriers, on the route determined on-site with a portal structure. For the antenna to work properly, most important factors are the reading antenna and the label antenna having the same polarization. Otherwise it causes signal loss and reduces the reading range. (Üstündağ, 2008, p.29)

RFID Software is a component that helps turn the data exchange between the label and the reader into meaningful information, keeping this data and print it out.

Benefits that come with using RFID technologies are, for real timed information to reach employees, reaching close to actual stock number values and connected to this, having the right amount and time for the orders.

On a business that manufactures with traction system, by providing visibility and real time data, overproduction for the subcomponents is another one of the benefits that are expected with using RFID. By doing so, costs, quality and delivery triangle can occur as expected.

3. Analytic Hiearchy Process

Analytic Hierarchy process is one of the important techniques used on making decisions with multiple criteria, developed by Thomas Saaty L. SAATY at the year of 1997 (Erkan and Can, 2014, p.87-93). Problems in complex state are turned into simple, useful and understandable state by turning them into hierarchic structures with AHP method. For AHP management to take qualitative and quantitative characters into consideration, is one of the main preferential reasons for them to be used in multiple criteria decision making problems.

AHP is based on three principles; examining complex problems that is not constitutive, reasoning of problems while in comparison with each other and synthesizing priorities derived from provisions (Saaty, 2001, p.13).

In AHP method, identifying the problem is the first step. Following the identification of the problem, using AHP method, every level can be turned into a hierarchic structure consisting of certain criteria. Paired comparisons are what make AHP's building blocks. In order to obtain paired comparisons, relative and absolute measurements are used. While doing paired comparisons, paired comparison scaled suggested by Saaty is used. It is shown at Table1.

Importance Level	Definition	Description
1	Equally important	Both sentences carry the same importance.
3	Reasonably important	One in two sentences carries reasonable importance compared to other.
5	Strongly important	One in two sentences carries strong importance compared to other.
7	Very strongly important	One in two sentences carries very strong importance compared to other.
9	Extremely important	One in two sentences carries extreme importance compared to other.
2,4,6,8	Mid values	When there is hesitation between two sentences and preference values are so close to each other, these mid-values are used.

Table 1. Paired Comparison Scale used in AHP (Saaty, 2001)

Importance level, as shown at the table, is from 1 to 9. At the bottom of the table are the values of 2,4,6,8 mid-values. For example, if the decision maker hesitates between 5 and 7, it can use 6 from the table.

These criteria are then divided into sub criteria. To the bottom step, evaluated options are entered. By doing so, for a hierarchic structure to be formed and necessary criteria to be established, system as a whole, its components and their relations between each other should be monitored carefully.

After creating the model, next process is, determining the relative weight of the factors at the same hierarchy level. Same process is done by paired comparisons for the criteria at the sub level.

At the next step of AHP, comparison matrixes are created. Comparisons are done in accordance with choosing which criteria are superior compared to the other.

Relative weight of the criteria is obtained by taking eigenvector of the comparison matrix and normalizing it. (Madlberger, 2009, p.4)

While decision makers are doing paired comparisons between the criteria, in order to measure if they are consistent or not, Consistency Ratio (C.R) must also be calculated. In this calculation, assuming n is the amount of criteria; depending on that amount random index numbers are used. If the value at the end of the calculations reaches below 0.10, comparison matrix is deemed to be consistent. Otherwise comparison matrix should be corrected again (Rao, Chandran, 2009, p.2).

Last step for AHP is multiplication of the importance weight of the criteria and alternatives importance weight and having a priority level for each alternative. Sum of these values are equal to 1. Highest valued alternative is the best alternative for the decision problem.

4. Choosing RFID Systems with AHP Method

In this study, forjust in time manufacturing brought by the traction system in our company that operates as a supplier in the automotive sector, as real timed data and transparency carry a great importance, using RFID systems in the field of manufacturing is decided and a decision support model based on Analytic Hierarchy Process to choose the best RFID system for the specified field is presented.

After deciding to use AHP method, at the first step, hierarchic model related to the problem was established, firstly aim of the study, then alternatives to it, main criteria and sub criteria are determined.

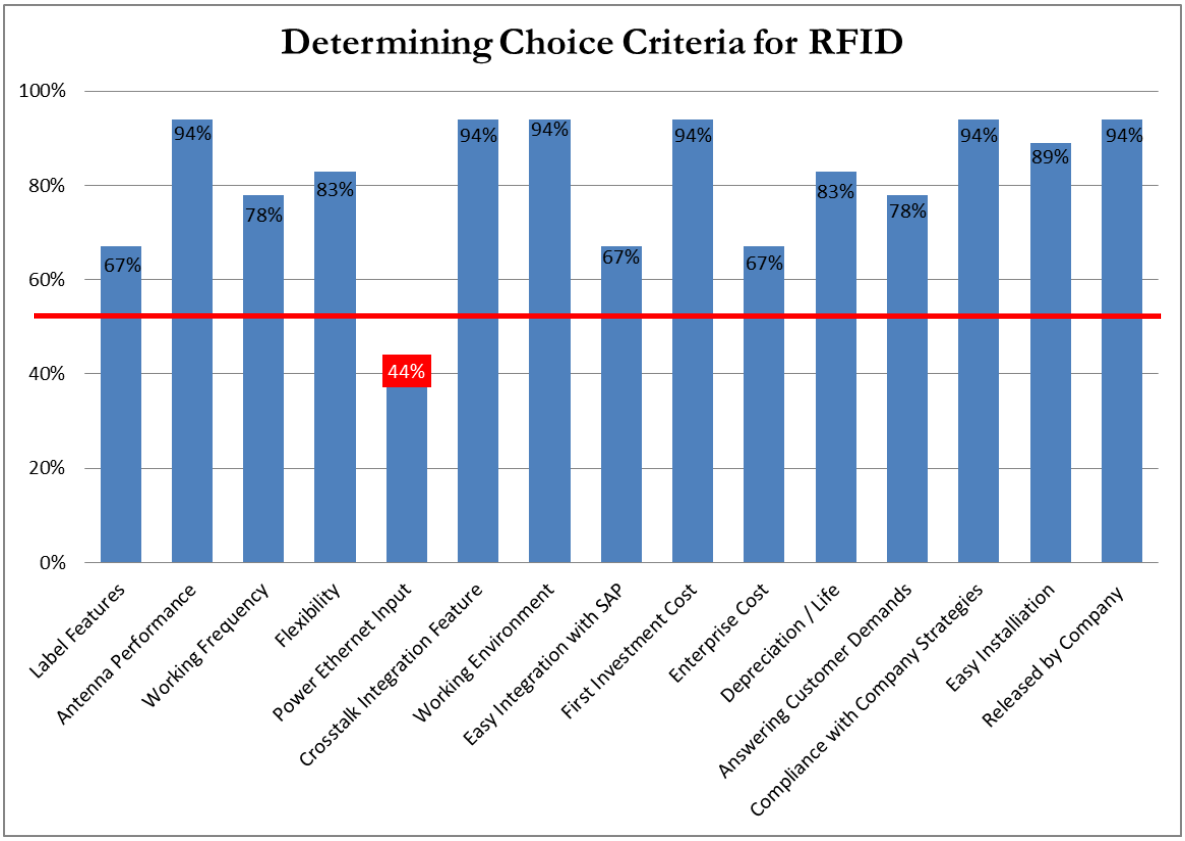
Purpose of this study is to obtain a more realistic data in logistics and manufacturing planning departments and actualize this using the best RFID system choice.

After determining the target, RFID system alternatives are determined with the steps following main and sub criteria. RFID system alternatives are determined to be as X,Y,Z systems, main criteria are determined to be; RFID System properties, Investment Criteria and Business Criteria and the following sub criteria is mentioned at the following step.

- **RFID System Properties:**
  - **Label Features (LF):** One of the essential reasons for failure in RFID applications is choosing the wrong label or not using the right label in the right manner.
  - **Antenna Performance (AP):** Importance for the reader and label antenna having the same polarization is significantly high. Otherwise, antenna having different polarizations will cause signal loss and a reduction with the reading range.
  - **Working Frequency (WF):** Working frequency factor that effects data transfer speed, reading range, single or multiple reading is one of the most important factors. In accordance with the frequency types, there are possibilities to use it in different fields.
  - **Flexibility (FLEX):** Taking improvements in the future into consideration, system that needs to be established parallel to upcoming demand should be open to innovation.
  - **Crosstalk Integration Feature (CRS):** is a software that is used for purposes that are important in internet with tracking and monitoring visualization Crosstalk, IoT (Internet of Things) and it carries an importance to evaluate the data received from RFID devices.
  - **Working Environment (WE):** Temperature, steam, humidity, used chemicals might cause labels to lose their features.
  - **Easy integration with SAP (SAP):** Simple Integration of the RFID devices used by the company with ERP (Enterprise Resource Planning) is also another criteria that evaluators give importance to.
- **Investment Criteria**
  - **First Investment Cost (FIC):** Total costs of the first investment and if consultancy service is taken, it is added to the cost of investments.
  - **Enterprise Costs (EC)**: During the adaptation period after the system is installed, all costs that might occur and adding monthly network service costs provided by the central information processing unit to it.
  - **Depreciation/Life (AMOR**): Businesses use their purchased fixed assets that they use for more than a year in normal circumstances. For this reason, fixed assets should be written as costs for its whole economic life.
- **Operating System:**
  - **Answering Customer Demands (ACD):** Properties of the RFID device determined by the manufacturer needs to be able to answer the customer demand.

- **Compliance with Company Strategies/New Solutions (CCS)**: The device needs to be suitable for the changes in the direction of the strategies of the company and new improvements.
- **Easy Installation (EI)**: Installed RFID system should also be understood easily by the users (user-friendly).
- **Released by the Company (FC):** For some companies to use this device within the company, central units should give freedom to use for its usage. Devices determined for evaluation has freedom of use given by the company.

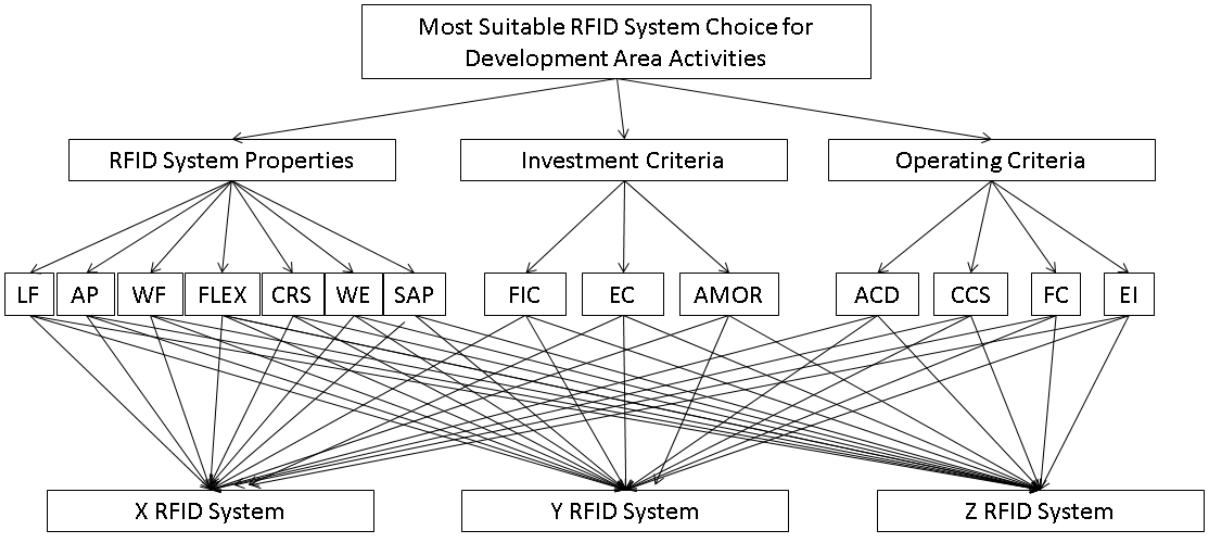
In the subject of RFID, important criteria about choosing RFID was determined with competent individuals and doing a survey evaluation on the criteria at the next step, it was evaluated with prioritized important criteria once more and it was deducted that, as seen in Graph 1, using devices with "Power Ethernet Input" does not create much added-value compared to other criteria and it was removed from the criteria of choice.



Graph 1. DeterminingChoiceCriteriafor RFID

Main and sub criteria that will be studied on took its shape as shown at Figure2. Established paired comparisons, again by competent people on the subject of RFID systems, was evaluated with the priority scale support as pushed forward by Saaty.

In order to calculate the priorities, provision values at the paired comparison matrix were exported to Microsoft Excel file and results were tried to be obtained.



5.Application

Based upon the created pairwise comparison matrixes, the main criteria the pairwise comparison matrixes were assessed by experts of RFID subjects and the importance levels in comparison to each other were established. Completely independent assessment from each other during the creation of pairwise comparison matrixes were requested, formulating each pairwise matrix created by decision makers in Microsoft Excel and presenting the results in the table.

Table2. Randomness Indicators

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RI	0	0	0,58	0,90	1,12	1,24	1,32	1,41	1,45	1,49	1,51	1,54	1,56	1,57	1,59

Reference: Karagiannidis et al., 2010:225; Wang et al., 2010:1024

Table3. Pairwise comparison matrix according RFID System Properties criteria

RFID System Properties	X	Y	Z
X	1	0,2	0,5
Y	5	1	3
Z	2	0,333333333	1
Column Totals	8	1,533333333	4,5

RFID System Properties	X	Y	Z	Importance Level
X	0,13	0,13	0,11	0,12
Y	0,63	0,65	0,67	0,65
Z	0,25	0,22	0,22	0,23
Total	1,00	1,00	1,00	1,00

3	Weighted Total Vector Readings	Lamda	Lamda Max	Consistency Index	Consistency Ratio	
X	0,3667	3,0013	3,0037	0,0018	0,0032	Consistent
Y	1,9485	3,0071				
Z	0,6902	3,0026				

Three alternative companies established within the hierarchy according to the importance level scale recommended by Saaty at second step.

In the comparison conducted according to RFID System Properties criterion, the assessment was done based on the designated sub-criteria such as tag properties, antenna performance, operation frequency, flexibility… etc, and the Table3 according to those are given above.

Table4. Pairwise Comparison Matrix according to Investment Criteria

Investment Criteria			
	X	Y	Z
X	1,00	0,33	2,00
Y	3,00	1,00	3,00
Z	0,50	0,33	1,00
Column Totals	4,50	1,67	6,00

	X	Y	Z	Importance Level
X	0,22	0,20	0,33	0,25
Y	0,67	0,60	0,50	0,59
Z	0,11	0,20	0,17	0,16
Total	1,00	1,00	1,00	1,00

3	Weighted Total Vector Readings	Lamda	Lamda Max	Consistency Index	Consistency Ratio	
X	0,7667	3,0441	3,0539	0,0270	0,0465	Consistent
Y	1,8222	3,0943				
Z	0,4815	3,0233				

In the comparison done on investment criterion, the assessment was conducted taking sub-criteria such as investment cost, operation cost and depreciation factors into account, then presented in Table 4 above.

Table5. Pairwise Comparison Matrix according to Operation Criteria

Operating Criteria			
	X	Y	Z
X	1,00	2,00	1,00
Y	0,50	1,00	1,00
Z	1,00	1,00	1,00
Column Totals	2,50	4,00	3,00

	X	Y	Z	Importance Level
X	0,40	0,50	0,33	0,41
Y	0,20	0,25	0,33	0,26
Z	0,40	0,25	0,33	0,33
Total	1,00	1,00	1,00	1,00

3	Weighted Total Vector Readings	Lamda	Lamda Max	Consistency Index	Consistency Ratio	
X	1,2611	3,0676	3,0537	0,0268	0,0463	Consistent
Y	0,7944	3,0426				
Z	1,0000	3,0508				

In the comparison done on operation criterion, the assessment was conducted taking established sub-criteria such as catering to client needs, company strategies, ease of installation and liberty from the company into account, then presented above at Table5.

According to the obtained results, the preferred devices are; Y RFID device according to RFID System Properties, Y RFID device according to Investment Criteria and X RFID device according to Operation criteria. The consistency ratios of the created matrixes were calculated simultaneously and all readings were observed below 0,10.

The fourth step in AHP is assessment of established criteria for RFID device selection and calculation of the priority values for each criterion. The matrix for this comparison is given below at Table 5 with the systematic constructed at Microsoft Excel like the previous matrixes.

Table 6. Pairwise comparison matrix according to the main criteria

Criterias	RSP	IC	OC
RFID System Properties	1	0,333333333	0,5
Investment Criteria	3	1	3
Operating Criteria	2	0,333333333	1
Column Totals	6	1,666666667	4,5

Criterias	RSP	IC	OC	Importance Level
RFID System Properties	0,166666667	0,2	0,111111111	16%
Investment Criteria	0,5	0,6	0,666666667	59%
Operating Criteria	0,333333333	0,2	0,222222222	25%
Column Totals	1	1	1	100%

3	Weighted Total Vector Readings	Lambda	Lambda Max	Consistency Index	Consistency Ratio	
RFID System Properties	0,4815	3,0233	3,0539	0,0270	0,0465	Consistent
Investment Criteria	1,8222	3,0943				
Operating Criteria	0,7667	3,0441				

According to the obtained values, the primarily prioritized criterion is investment criterion with %59, Operation Criterion with %25 and RFID System Properties with %16.

The final step of AHP is to multiply the obtained criterion priorities with the priorities of device properties established by experts and calculating the priority of each device. Calculations for the three identified devices were conducted and obtained 0,2713 for X device, 0,5157 for Y device and 0,2129 for Z device.

Table 7. Main criterion values and multiplication table of device readings

Candidate Devices	X	Y	Z		
RFID System P.	0,122	0,648	0,230	X	0,159
Investment C.	0,252	0,589	0,159	X	0,589
Operating C.	0,411	0,261	0,328	X	0,252
	0,271310461	0,515742977	0,212946562		

6.Conclusion and Evaluation

The utilization of RFID systems at production sites of the companies allows the production flow to become more transparent, in turn showing very close readings of actual physical quantities to the raw material and semi-finishing amount. However by using RFID, physical inventory and reduced inventory on the system can prevent extra costs that can occur with emergency orders.

This study recommended the AHP model to solve the RFID device selection problem; the sub-criteria under the main criteria are established by experts and assessed via a subjective approach. In studies on RFID technologies, it may be advisable to develop the hierarchical structure proposed in this study and based on the specified RFID implementation project phases, so that verbal indicators can be measured as numerically as possible.

How to apply AHP to RFID device selection problem and how to include a multitude of application criteria to the selection problem are shown in this paper. The values of the three determined devices were found as; 0,2713 for X device, 0,5157 for Y device and 0,2129 for Z device. As it can be inferred from these values, the device priority and importance values are very important in system selection. In this context, it is doubly important to focus on the device with the highest calculated importance level.

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EVALUATION OF HORIZON'2020 and EFFECTS ON PUBLIC TRANSPORT

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Abstract:
European Union Frame Programs is a research program with one of highest budget in the world. It operates for the purpose of the improving research and technology, to promote university-industry cooperation, creating mutual and powerful sources, providing human resources and to support international cooperation. It provides support with a specially established fund. In Turkey, European Union Programs coordination is done over TUBITAK. TUBITAK, aside from undertaking the job of being a coordinator for constituting international consortiums, it also promotes participation with various support and rewards. In this article, encouraging participation to European Union projects in order to move R&D activities in Turkey to a universal level, general overview will be provided to this process in order to be able to benefit from this effectively. In the direction of this general overview, world trends will be examined under Horizon 2020 headings while discussing the subject of transportation. Especially on the subjects of energy efficiency, smart cities, integrated transportation, effects of projects that are applied or aimed in the world on transportation will be examined. Near future of the transportation sector will be discussed and different models that can be adapted to Istanbul will be evaluated. Transportation potential that will be examined under these headings supported by Horizon 2020 is a pre-promotion to creating consortiums countrywide.

Keywords:
European Union Projects, Horizon 2020, Support Programs, Consortium, Public Transport, Energy Efficiency on Transport, Smart Cities and Transportation, Integrated Public Transport, Projects with Potential on Transportation, Horizon 2020 and Transportation

1. Introduction
The concept where technological and social innovations force the World trend: Universalization. Based on this concept, sustainability and propagation of the projects gain importance and concepts of international collaborations, technological transfers, adaptation and integration come to the forefront. For the regional development agencies to be functional and for them to actualize the objectives expected of them, existence of the variables listed below is absolutely necessary (Kayasü et al, 2003:9):

- Enough population size
- Culture and Infrastructure for Entrepreneurship
- Existence or constitution of qualified workforce
- Determining regional development strategies
- Existence of convenient sectors for development

In a region hosting these factors, strategic ventures of the regional development agencies are gathered in five main groups (Hughes 1998:620).

- Providing financial assistance or support
- Uncovering new investment fields
- Doing consultancy for SME (Small and Medium Sized Enterprises)
- Determining development objectives for the region in the long term.
- Contributing to developments in social fields

As emphasized by these studies, purpose of regional support programs is, from transportation to technology, from infrastructure to human resources, pioneering in terms of innovation transfer in various fields.

Studies to establish international collaborations also bring the need for coordination with it. European Union Frame Programs, while carrying out this coordination mission, provides financial support for these innovative applications to come to life. For Turkey to play a part in these projects, while also helping to open up the horizon for establishing technology, this trend can be caught as technological improvements applied on projects in Europe are adapted to our country.

Industry organizations, SME's, SME Unions, Universities, Research Institutes, Research Centres, Public Organizations, Civil Society Organizations, International Organizations, individual researchers can all participate to the study within the scope of Horizon'2020.

Having close up relations and developing mutual projects with universities in the region and other educational establishments is also within the objectives of regional development agencies. As a result of the collaborating with the universities for the purpose of actualizing the regional development, doing analysis that will provide not only directing economic, social, technologic structure of the regions, but also revealing stronger and weaker sides of the region and giving the possibility to scrutinize the threats is going to be of utmost importance (Goddard and Chatterton 1999:685-699).

In this context, various support organizations have started within the universities. In Istanbul Commerce University, May 2004, it was established to contribute in informing public and improving Turkey-European Union relations with an interdisciplinary approach by means of developing research and application projects on the subjects of law, politics, economics and social at the process of Turkey's full membership to European Union. By establishing many university-public, university-private sector-SME collaborations, technical and R&D capacities of the universities are evaluated within the scope of the project.

2. Evaluation of 6th and 7th Frame Programs and Transferred Classes

Total budget of the 6th Frame Program within the years of 2002-2006 that took 5 years was prepared as 17,5 billion Euro. 7th Frame Program which lasted 7 years had a prepared total budged of 53,2 billion Euro. For the project planned to be between the years 2014-2020 with the duration of 7 years, reserved budget is announced to be 71 Billion Euro.

Turkey, after the acquired learning process during the 6th FP, drew a rising graphic at 7th FP with the applied correct strategies on the basis of participated projects. However, due to some structural issues, Turkey was under the potential that it could show during the program. These types of structural issues can be divided into two groups which are namely; Issues about the functioning of 7th FP and problems related to Internal functioning of Turkey as a whole. Examples for issues related to the program could be rooted structuring and Turkey having difficulties being included in this program, too much competition with two few projects, not giving space for Turkey or its associated countries on certain calls etc. For problems related to internal functioning of Turkey as a whole, lack of experience and awareness, weak collaboration culture, Insufficient R&D for the private sector could be shown as examples.

In these programs; not being able to complete certain R&D activities that are being conducted in university and research centres, project output taking too long to enter into the market, innovation not being reflected on activities as expected, business expenditure ratios added to direct expenses and gift ratios being different for work packages and many gift programs, tight financial reporting and accounting inspection mechanism, lack of resources for SME's and problems within warranty-risk capital has been seen. In addition to this, lack of coordination between Europe Innovation and Technology Institute (EIT) and Competitiveness and Innovation program (CIP) related to R&D and innovation activities at 7th FP applied separately also caused resources to not to be used efficiently (Bağrıaçık, A., 2014).

According to these evaluations, for projects that will be supported at Horizon'2020, projects with its material outputs with wide range of fields to use have gained importance. Sustainability of the technologies developed after the projects, is considered to be one of the most important evaluation criteria amongst the prepared projects.

3. Title, Subtitles for Horizon'2020 and Reserved Budgets

3.1. Societal Challenges

Total budget of the program: 30 billion €s.

- Healthy, active aging and welfare
- Food security, sustainable agriculture and bio economy
- Safe, clean and efficient energy
- Smart, clean and integrated transportation
- Increasing climate change and resource efficiency
- Inclusionary, innovative and safe societies

3.2. Industrial Leadership

Total budget of the program: 17 billion €s.

- Leadership amongst Simplifying and Industrial Technologies field
- Accessing Venture Capital
- New Research Program for SME

3.3. Excellent Science

Total Budget of the Program: 24,4 billion €s.

- European Research Council
- New and Improving Technologies
- Marie Curie Activities
- Research Infrastructure

4. HORIZON'2020 – TUBITAK Coordination

TUBITAK, while providing the necessary orientation and coordination for the participation to EU projects, undertakes the factor of increasing performance on this subject as a mission. According to this mission, it encourages organizations to participate in consortiums and project preparations with various supports. In this context, it created support and reward programs. These are:

- Travel support: Expenses similar to participation and travelling fees, participation to the meeting fee for an individual invited for a meeting by the coordinator to science days that are organized within the scope of Horizon'2020 are covered by TUBITAK financially.
- Project Pre-Evaluation Support: For draft projects before being presented to the European Commission, evaluation or examination of the project by an expert or a consultancy company and similar work is financed by TUBITAK.
- Support for being a Coordinator: Travelling Support for the purpose of Establishing a Consortium, Organizational Support for the purpose of Establishing a Consortium, Education Support for Project Writing-Presentation, Project Writing Services Support or Project Pre-Evaluation Services Support is included (TUBITAK, 2014).
- Supraliminal Award: Award given by TUBITAK for projects which are, after being evaluated by expert independent referees, any project called in private and determined to have more points than supraliminal points.
- Merit pay is a reward given to certain projects after specific evaluations if the project owner applies direct or indirectly.

Aside from these, TUBITAK, when the calls start, is assigning personnel for calling headlines and establishing consortiums about those headlines and is also doing some studies on carrying offers for Consortium to related authorities in Turkey.

5. Effects of Public Transport on HORIZON'2020

Public transport authorities can be included in many topics indirectly and carry out supportive activities. However, within the scope of the program, under the heading of Societal Challenges, subject of public transport is pointed out directly. Smart, clean, integrated transport program reserved its 6,339 million €s budget for public transport projects. Public transport authorities such as IETT, EGO, ESHOT etc. can create consortiums for the innovative and visionary projects they wish to bring to life, can search for partners for the projects that they have drawn the lines for or by participating in the consortiums that they established, they can do studies make their project come to life. Another reasonable topic for the public transport authorities to be included is the headline of secure, clean and efficient energy. In this topic, 5,931 million €s budget is reserved. As is known, one of the most important subjects that the public transport is interested in the latest years is the subject of carbon emission. Under this heading, many subjects similar to reducing carbon emission, giving public transportation support to establish carbon free zone, usage of electric cars etc. are foreseen to be included in the projects.

6. Smart, Clean and Integrated Transportation in Terms of Public Transport and Evaluation of Effective Energy Programs and World Transportation Trends

Amongst the subjects that the public transport authorities undertake as their missions, meeting the needs of passengers come first. Especially in metropolis cities, public transport authorities aim to meet the increasing demand showing positive acceleration with the increase in population and limited sources.

In the last century, as the roads were improving and highway transportation becoming more common, important certain problems were also transferred to our current century. Situations such as increasing traffic density, congestion, delays, travelling time caused an increase with the accidents.

In order to decrease these negative effects of transportation systems or at least to control it, the idea was revealed as, systems established to control it should at least be more efficient, safe, secure, active and economically designed and maintained. Concept of Smart Transportation Systems (STS) came to life as a result of an effort like this (Yardım and Akyıldız, 2004).

Half of the total annual oil consumption throughout the world and one of three of the total energy consumption is done on public transport sector 8 (OECD, 2012). This unreasonable result, for a sustainable life cycle, proves the importance of smart systems and efficiency in the transportation sector.

For smart transportation systems to be regulated with today's technology, most important factor is advanced transportation management systems. When these systems are applied, instantaneous solutions to instantaneous problems can be brought forward. Advanced transportation management systems, aside from being informed instantaneously about traffic congestion and unexpected events, also gives possibility to regulate features such as speed limits, traffic lights, electronic traffic signposts, lane separation from a central location or automatically. Furthermore, these systems can ensure control and toll collection processes from remote or automatically at the part of the road which is accessible with a fee. In some situations, in order to maintain the traffic flow, pricings to toll roads can also be done dependent on time aside from the vehicle type (Black and others, 2006).

Another one of the headings discussed within the scope of Horizon'2020 is, coordinating an entire city by a smart and integrated system with Smart Cities. With these systems, all activities within the master plan for the city can be coordinated. Subject of transportation holds an important ground for smart cities. For example, estimative organizations such as special activity, event, walking, concert etc. are entered into the system. For these situations that might affect the traffic flow, new routings are established as planned before. For non-assessable natural causes, accidents etc. which cannot be estimated beforehand, case analysis are being developed. In such situations,

alternative routes, lines and courses having a flexible movement capability can only be made possible with smart transportation systems.

On the subject of constructing smart city systems, one of the most important subjects that all authorities are on is doing all this within the master plan. Of coursed managing an entire city with a single smart city application is not possible. Sustainability and flexibility of the installed systems should not be removable with the systems that came after it, it should be able to feed the new systems that are currently available and this is only possible if it is done within a master plan.

For this approach, in smart city applications, shows the importance of pilot application work. For smart buildings, all smart applications similar to delivering public services from e-systems, planning transportation systems beforehand and delivering them to passengers from mobile systems, including all cases that are estimated or not estimated beforehand into the system, integrated bicycle roads, giving bicycle services from mobile applications, using NFC systems, especially pilot application should be chosen for small regions to gain the necessary experience.

Moreover, within the scope of Horizon'2020, new type of approach that the authorities are oriented at is, instead of doing master plans for wide masses, its sustainability analysed with a master plan on terms of point of view should be in project offers with the application being tested for smaller regions.

At the outset of mechanisms that trigger efficient and clean energy, Kyoko Protocol which became valid at 16 February 2015 is the first. After finishing the term also named as first term at the year of 2012, it was elongated for 8 years between the dates 1st of January 2013 – 31st of December 2020. Kyoko protocol is a protocol, for the purpose of regulating purpose and principles to be applied and improved; it came to discussion for signature at the 3rd meeting of "Parties Conference" which is held annually by Climate Change Frame Contract prepared by the European Union. It could be shown as the most comprehensive agreement in terms of fighting climate change. Its main purpose; is to stop threatening effect born of humans with greenhouse gas accumulation to a threatening level on the climate systems. Essential responsibility of the countries signing this protocol is, within the measurements of scope of the values determined with the protocol, is to reduce greenhouse gas emissions.

The most important value given to countries by Kyoto protocol: "awareness". This sustainable life concept led by Kyoto continues on countries increasing its effects. In this protocol where European Union countries also had various commitments to, it was seen that secure, clean and effective energy program will contribute under the headings within the scope of Horizon'2020. Horizon'2020, aside from supporting environmental projects with different topics related to fighting against climate change, reserved a 5,931million €s of funds just for secure, clean and efficient energy program.

When energy efficiency is mentioned within the context of transportation, first factors that come to mind are clean fuel and common use of vehicles that do not consume fuel oil, raising vehicle standards, informing consumers and orienting them to vehicles with lower emission is some of the factors within.

In the transportation sector, %99 of the consumed energy is provided by fuel sources and %25 of the greenhouse gas comes from transportation. In our country, if it is considered that about %90- 93 of the goods and passenger transport is done on highways, subject of greenhouse gas oscillation gains a serious meaningful importance.

On the subjects of using efficient and clean use of energy in transportation, various studies are being run. With the Metrobus project done by IETT, 625,000 ton carbon dioxide oscillation has been prevented. Furthermore, using vehicles with electricity and CPG and energy deficiency can also be obtained.

On projects where carbon emissions were inspected within the safe, clean and efficient energy program of Horizon'2020, within the plan of aimed values to be determined to be decreased, on projects where distribution of roles between authorities are being conducted, public transport sectors can replace them.

Lowering carbon emission values to an individual can only be possible with mass transportation authorities are accepted into the system. On travels which are done with individual cards, amount of carbon in emission can be determined. In order to support reduction of individual carbon emission reduction, it is pre-projected to use various awarding mechanics and create a new trend like. Subjects similar to "Choosing the passenger of the month, granted free rights to ride" are subjects that are discussed around the globe and can be shown as encouragement to people to join this act of individual reduction. By GSM operators being included into the system or following individual carbon emissions from mobile applications should form other important parts of the ending.

IETT as one of the public transport authorities has some projects related to smart transportations systems and energy. Main terms amongst these are:

Driving Simulator Systems: Driving simulations exclusively is recreation of all characteristics of a real vehicle and the environmental factors which it is in relations with the vehicle within the virtual media. Driving Simulators are facilities designed to give people the real drivers to drive a vehicle on an experimental stand. Essential reasons for using the simulator are to reducing the amount of time spent on R&D and education and expenses.

On Board Internet Service: Serving vehicles are aimed to provide free wireless service to all passengers while it's moving. Project is being funded by Istanbul Development Agency with a supportive gift.

On Board Charging Service: As an obligatory need for the daily life, this aimed to provide the possible need for energy for mobile phones during the trip. With this application, all devices similar to mobile phones and tablets can be charged in the bus continuing the trip and save on their time. Project is being funded by Istanbul Development Agency with a supportive gift.

Announcing System for Disabled: For visually-impaired individuals, by giving life to certain required regulations in public transport, with the purpose of increasing these individuals participation to social life and to give a more comfortable and accessible public transportation service, a system that announces the bus approaching the station, line number, its destination orally has been put on the vehicles. Project is being funded by Istanbul Development Agency with a supportive gift.

Touch Screen at Stations: It was aimed for the passengers to use this informative touch screens interactively and get a higher quality service.

CNG Motor Change: Buses that were chosen after feasibility studies, by doing their CNG changes, they both save on fuel and prevent harmful gases from being released into the environment with exhaust emission.

Echo Driving Systems: After giving echo driving educations, with driver personnel who are more aware things, less fuel is consumed and less carbon is emitted into the atmosphere providing higher driving quality.

Aside from these, authorities other funded projects that come to the fore are about the subject of transportation which may be funded are, estimation algorithms within the scope of Horizon'2020, push to talk systems and studies done related to them.

7. Expected Results

IT technologies attract the attention as an important opportunity in the aspect of increasing energy efficiency in the transportation sector. Due to IT technologies, for carbon dioxide emissions caused due to transportation at the year of 2020, %11(2,2 Gt) decrease is estimated globally (GeSI, 2008).

For this decreasing that is estimated for the year of 2020, various movements have started. Horizon'2020 is supported with clean and active energy programs along with smart, clean and integrated transportation that

contributes to the increasing of pre-envisioned efficiency. If we collect the priority fields of the program in a table like a summary, it can be shown on the figure below.

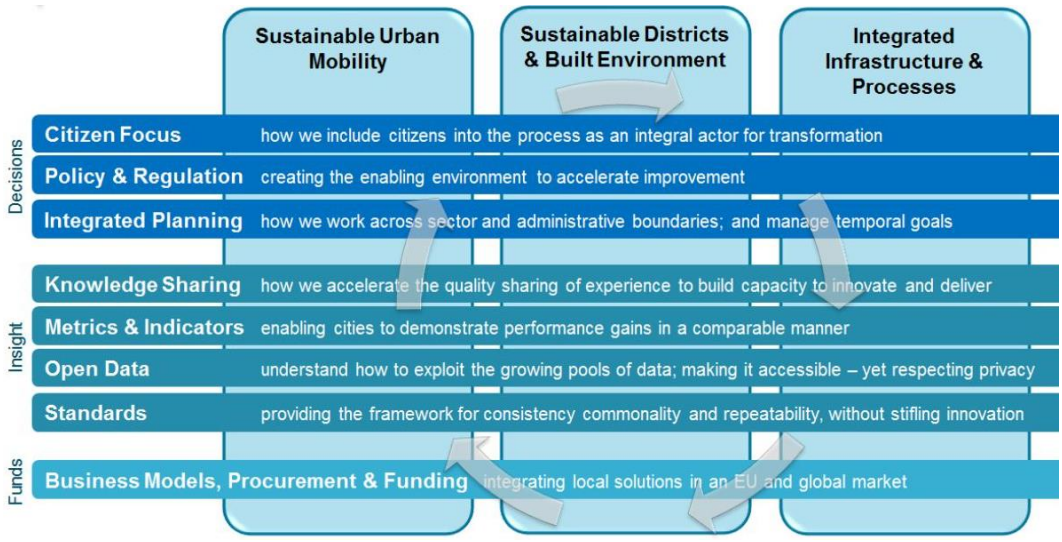

Figure 1. Priority areas (European Innovation Partnership on Smart Cities and Communities – Strategic Implementation Plan, 2013)

Starting with smart, clean and integrated transportation heading that point to public transport, for public transport authorities to join consortiums and for their secure, clean and effective energy programs Turkey is seen as a very important country for Europe. Especially for services provided at Istanbul, having more users compared to other European countries in ratio, cosmopolite structure, features such as being able to hold all cases, can be interpreted as an advantage for Turkish authorities to be part of this projects.

The most important factor for all the projects that will be done is collaboration with universities. Systems envisioned as university sources and public or private sector applications are all gathered together, are seen as an ideal roof instalment for a project. In this context, for the universities, as seen at the example with Istanbul Commerce University, the need to raise awareness in terms of making EU and EU projects more common amongst their units is revealed.

For Turkey, benefiting at a maximum level from HORIZON'2020 and being involved in global technology development projects, for TUBITAK in particular, are seen as important developments for all authorities.

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FREE MOVEMENT OF NATURAL PERSONS: NORTH-SOUTH CONFLICTS OF ECONOMIC INTERESTS

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Abstract:

The establishment of the General Agreement on Trade in Service (GATS) is one of the major achievements of the Uruguay Round of trade negotiations. All the trades in services fall within the GATS through four modes of delivery under Article I:2 of GATS. Among the modes, the liberalization of mode 4: Movement of Natural Persons which relates the removal of restrictions on workers travelling abroad temporarily, upon which developing countries have comparative advantage, remains one of the least negotiated issues of the WTO, while the other 3 modes upon which the developed countries have dominance have been liberalized substantially. This study elucidates some logical arguments that mode 4 is the victim of the North-South conflict of economic interests. Besides, this study furnishes arguments how liberalization of mode 4 can be economically beneficial for both North and South. The structural weakness in Articles, Schedules and Annexes of GATS entailing mode 4 needs to be restructured so that developing countries are able to participate meaningfully in the world trade in services and see their economic interests are protected equitably with the developed countries so that the economic interests of both developed and developing countries in trade in services can become mutually supportive.

Keywords:

GATS, Natural Persons, North-South, Liberalization, Economic Interests.

1. Introduction

In recognition of the ever-increasing importance of trade in services for the growth and development of the world economy, the establishment of the General Agreement on Trade in Services (GATS) is one of the major achievements of the Uruguay Round of the trade negotiations. Since 1980, world trade in service has been growing faster and has recently become most dynamic segment of international trade (WTO, 2013).In 1999, the value of cross-border services amounted to US$1350 billion (GATS, 2003) The export of commercial services has become highly significant for both developing and developed countries as it contributes 50% and 70% of their respective GDP (Mukherjee, 1999).

However, the industrialized countries now dominate most commercially tradable services, which accounts for around 70% of the total tradable services of the world (UNCTAD, 2002). Although trade in services plays significant role in global trade, it has until recently received only a little attention from the global trading community (Islam, 2004). Indeed, the continuous growth of trade in services demands for orderly governance through a mutually agreed legal framework (Islam, 2006).According to the Preamble of GATS, the global trading partners have mutually agreed upon to strive for achieving progressively higher levels of liberalization of trade in services, aimed at promoting the interests of all participants and facilitating the increasing participation of developing countries in trade in services through strengthening their domestic services capacity (GATS: Annex 1B). Besides, in the agreement particular importance was given on the serious difficulty of the least developed countries in terms of their special economic situation, trade and financial needs.

In principle, all service sectors and all measures affecting such trade falls within GATS by the following four modes of delivery under Article I.2: mode 1- cross-border supply of services, mode 2- consumption abroad, mode 3- commercial presence and mode 4- trade by means of temporary presence of natural persons (Mukherjee, 1999). Among them, the liberalization of Mode 4: Movement of Natural Persons which relates the removal of restrictions on workers travelling abroad temporarily on fixed term work contracts, upon which developing countries have comparative advantage remains one of the least negotiated issues in the discussions of WTO (Bhatagar, 2002).

However, the other 3 modes of services upon which developed countries have dominance have been substantially liberalized (Bhatagar, 2002).

In fact, Mode 4 is the victim of the North-South conflict of economic interests. This essay will try to demonstrate some logical arguments in support of why the Mode 4 is a victim of North-South conflict of economic interests. Then this will provide arguments how the liberalization of Mode 4 can be economically beneficial for both North and South. Finally, this essay will put forward some recommendations for the WTO to reform the GATS for the liberalization of Mode 4.

2. Methodology

This research will implement the analytical doctrinal methodological approach. The doctrinal approach examines primary legal documents in order to draw a logical conclusion regarding the state of the law (Hutchinson and Duncan, 2012). It involves the complex step of reading, analyzing and linking new information to the known body of law (Hutchinson and Duncan, 2012). This research will examine the present status and constraints of liberalization of mode 4: movement of natural persons to determine whether the interests of developing countries are protected equitably along with the developed countries in trade in services. To pursue the present status and constraints of the liberation of mode 4 this study will also conduct the review of the following documents:

2.1. Primary Documents

The key relevant GATS Article that this study will review are as follows: GATS Article IV which deals with the increasing participation of developing countries, Article VI which deals with domestic regulation, Article XIX which deals with the negotiations of specific commitments, Article XX, which deals with the schedules of specific commitments , Article XVI, which deals with market access, Article II which deals with the Most-favoured-Nation Treatment.

2.2. Secondary Materials

This study will review and evaluate different relevant secondary materials. Primacy will be accorded to materials published in peer reviewed journal articles. Besides, WTO And World Bank reports will be reviewed

3. Negligence of Mode 4 and the Priority of Economic Interests of Developed countries in GATS Negotiations

One important Annex for the developing countries among the eight integral Annexes appended to the GATS is the Annex on Movement of Natural Persons Supplying Services, which establishes that members may negotiate specific commitments applying to the temporary category of all natural persons (Mukherjee, 1999). However, the liberalization of the Movement of Natural Person under mode 4 of trade in service remains one of the least negotiated issues of trade policy among the 144 members of the World Trade Organization (WTO) (Bhatagar, 2002). The issue of liberalizing the movement of labour under mode 4 of delivery of services, upon which the developing countries have comparative advantage, remains mostly unresolved in the GATS negotiations. However, only commitments for the entry of mainly higher category of personnel have been undertaken, thus absolutely overlooking the natural advantage of developing countries in movement of low-skilled and un-skilled personnel (Mukherjee, 1999). The other 3 modes of services upon which the developed countries have absolute dominance, have been liberalized substantially. Multiple Annexes and subsequent ministerial decisions on commitments in the sectors of financial services (Article XI) and telecommunication (Article XVI), upon which developed countries have greater economic interests, depict a clear preference of the GATS negotiations for measures promoting the unrestricted movement of capital impacting their services and service suppliers with sheer negligence to the issue of movement of natural persons (Rafiq, 2004).

4. Partial liberalization of Movement of Personnel and the fate of developing countries

All services come under the purview of GATS except services supplied in the exercise of government authority, which are provided neither on a commercial basis nor in competition with other service providers (GATS, 1994).

This exception seems to be a great relaxation for the developing countries to serve essential public interests. However, in practice, during 1980s onwards World Bank compelled many developing countries to privatize and deregulate many of their enterprises and services of vital public sectors, such as: healthcare, road communication, telecommunication, ports, power plants and water plants as a conditionality of getting loans (Islam, 2004). This lending policy of World Bank, dominated by the US and other developed countries led to the opening of new opportunities for various professional service providers, such as: lawyers, accountants, financial advisers, doctors and engineers to offer their specialized services around the globe.

Developed countries are in a better position than the developing countries in terms of investible resources for human development and advanced technology to produce better professional service provider. In fact, developed countries with their resources, skilled workforce and latest technology can provide all services in every sector all over the world and thus, can easily encroach the capacity of developing countries and LDCs to deliver and regulate most their own services (Islam, 2004).On the contrary, most developing countries and LDCs have comparative advantage in exporting labor-intensive services of semi-skilled and un-skilled workers (Islam, 2004).Although GATS has recognized labour as a factor integral to trade in services in the Annex on Movement of Natural Persons, the mobility of labour under paragraph 2 of the Annex has been carefully kept beyond the purview of GATS (Islam, 2004).

The commitments in GATS mostly guarantee the entry of higher-level personnel in the professional, managerial, skilled and technical categories. The partial liberalizing approach in the provisions of GATS ultimately facilitates the developed countries and MNCs overwhelmingly in exploiting the most advantage of liberalizing the category of higher-ranking personnel. Thus, 'GATS commitments virtually sealed the fate of developing countries' comparative advantage in exporting labour in service.'(Islam, 2004).

5. Contradictions among different relevant provisions of GATS and the North-South Conflict

Not only para 2 but also para 4 of the Annex on Movement of Natural Persons, which denotes the discretionary power of the members in applying measures to regulate the entry of natural persons into their territory in the name of protecting integrity, visa procedures and discipline is the clear deviation from the commitments guaranteed to the developing countries and LDCs in the other provisions of GATS (GATS, Annex 1B). It militates against Preamble and the Article IV of GATS, which accentuate the commitments of providing necessary support to the developing counties and LDCs in strengthening their domestic service capacity, efficiency and competitiveness as well as liberalization of market access in favour of them to the sectors of their export interest (GATS, 1994).

In case of cross border movement, the semi-skilled and unskilled labourers of South face restrictions from the North on the pretext of sovereignty and immigration law, while the workforce of the skilled and professional services enjoy the flexibility of entry requirements (Islam, 2004).The flexibility of entry for the skilled and professional services, implies that these categories are less threatening to the sovereignty issue of North, while imposing restrictions on the entry of unskilled labourforce of South in the name of sovereignty issue is a clear sign of double standard attitudes of the North. It is, indeed, perplexing how the North can draw a conclusion that some categories of services are more threatening than other categories only on the basis of their skills. In fact, under the disguised and vague entry requirements, the North is restricting the unskilled and semi-skilled labourforces from entering into their territories.

Moreover, as developing countries do not have sufficient skilled and professional workforce to export to the developed countries and on the contrary, they have to import skilled workforce from developed countries, mostly demanded by the widespread MNCs, positioned in the vital sectors of developing countries as a result indiscriminate privatization and deregulation of their service sectors prescribed by the World Bank and other international lending institutions dominated by developed countries. The skilled workforce of developed countries can also enjoy the liberalized Mode 3: Commercial Presence, in their entry into developing countries demanded by the MNCs and many international organizations. The process ultimately economically benefits the North and their skilled professionals at the expense of the ordinary workers of the South (Islam, 2004).This conflicting and irrational

treatment of the North with the unskilled labourforce of developing countries and LDCs undermines the rights of the South to non-discrimination in the global labour market.

6. How Liberalizing Mode 4 can be Mutually Supportive for North and South?

At present, Mode 4: Movement of Natural Persons only accounts for less than 2 percent of the total value of trade in services (World Bank, 2004). A recent study estimates that a mere 3 percent increase in developed countries' intake of temporary workers from developing countries could increase world income by over $150 billion per annum and the gains from such liberalization would be shared by both developed and developing countries (Whalmsley and Winter, 2001). Moreover, Winters (2003a), in his study demonstrates that in 2001, developing countries earned $70 billion dollar as foreign remittance, which is around 40% more than all development assistance and significantly more than net debt flows to developing countries.If mode 4 is liberalized it will also relieve them to a greater extent from being heavily dependent on World Bank and other international lending institution with stringent conditionalities and interests payment for financing their vital infrastructure development and mitigating balance of payment crisis.

'Developed countries face a declining ratio of workers to retirees and an increasing scarcity of lower-skilled labor.' (World Bank, 2004). Demographers have shown that many developing countries are facing acute shortage of workers due to the gradual increase of ageing population, for instance: a large number of people in Japan are greying so quickly that the country will need to import over 600000 workers annually until 2050 to keep its population stable (Bhatagar, 2002).In an inter-dependent globalized world on the basis of Recardian principle of comparative economic advantage, the surplus workforce of developing countries tend to move to the developed countries to replenish the vacuum of labour shortage in different sectors of developed countries, not at the expense of wages and employment of the local workforce, but to move the wheels of the overall economies of the developed countries forward with the fulfillment of workforce in all sectors. If this movement of natural persons can be made unrestricted, it can ultimately boost the total prosperity of the world, benefitting both developed and developing countries. Surplus workers typically move from the areas of low productivity (developing countries) to areas of higher productivity (developed countries) leading to a rise in world output. The originating developing countries are also immensely benefited from the effects of temporary labour movements: firstly workers gain valuable experience and skill and secondly, inflow of huge remittance (Bhatagar, 2002).

7. Recommendation for the liberalization of Mode 4

The structural weakness in Articles, Schedules and Annexes of GATS should be reformulated to ensure proper functioning of multilateral trade liberalization in which developing countries and LDCs are able to participate meaningfully to see their interests are reflected equitably as promised in GATS. Some recommendations with a view to reformulating GATS and making it more functional, rational and binding are as follows:

The obligations set on the developed countries through GATS Article IV to undertake necessary measures for creating a level playing field for the developing countries and LDCs remain elusive (Mukherjee, 1999).In this Article, it is stated that the industrialized countries of WTO shall facilitate developing countries to strengthen their services capacity, efficiency and competitiveness (GATS, Annex 1B).The other provisions included in this article are the liberalization of market access in sectors and modes of supply of export interest to the developing countries.

As there is no implementation mechanism to enable the developing countries for better participation in trade in service, the aim of this Article has virtually been ignored in practice (Islam, 2006). There should be more binding provisions in this Article requiring developed countries of making specific commitments of providing adequate resources and technical supports in conformity with the provisions of Article IV of GATS to the developing countries to enhance the skills and efficiency of their human resources so that they can compete at global level. At the same time, there should be more specific and binding provisions in Article IV requiring developed countries to liberalize their market access to the supply of labour force from developing countries.

Article XIX of GATS requires members to enter into successive rounds of negotiation within stipulated time with a view to achieving a progressively higher level of liberalization and promoting the interests of all participants on a mutually advantageous basis and this Article also entails the commitments of providing flexibility for individual developing countries to liberalize their service sectors in line with their development situation (GATS, 1994).The Doha Ministerial Declaration requires members to submit initial request and offers for specific commitments within stipulated time frame(Islam, 2004).If developing countries and particularly LDCs are pressured without giving enough time and flexibility for higher level of liberalization, they may be forced to make unfavourable commitments without making appropriate cost-benefit analysis, detrimental to their national interests.

However, there should be obligatory provisions in Article XX of GATS: Schedules of Specific Commitments requiring the developed countries of making specific commitments for liberalizing their service sectors for mode 4: Movement of Natural Persons, especially for the movement of semi-skilled and un-skilled workforce from developing countries and LDCs. If no standards and specific provisions are available entailing accountability and precise obligations of the members, depending on their level of development and capacity in GATS, developed countries are not duty bound to give priority to LDCs' export of unskilled and semiskilled persons nor can LDCs claim market access of its services, including mode 4: Movement of Natural Persons to the developed countries as a matter of right (Islam, 2004).

Article VI of GATS deals with the domestic regulations of the members, which brings disciplines in the qualification and licensing requirements, procedures and technical standards with a view to ensuring that they do not constitute unnecessary barriers to trade in services (Islam, 2004). However, ultimately the level of protection depends on the desire of the members despite the prevalence of necessity test. This apparent inadequacy of domestic regulations of GATS, in turn, can legitimize external barriers to trade (Islam, 2004). The requirement of qualification and necessity tests should be universally harmonized under the supervision of International Labour Organization and should not be unnecessarily complicated to restrict the movement of laborforce of developing countries.

According to GATS Article XX, members are required to create specific obligations in those service sectors that are expressly specified in the commitment schedules of the members (GATS, 1994). The nature and extent of specific commitments depends absolutely on the choice of the members (Islam, 2004).There is flexibility for each member to determine the level of obligation of the GATS provisions on a sector-by-sector basis through negotiations. Even members can choose not to make any commitments in a particular sector and can structure their commitments in a manner enabling them to discriminate between foreign and domestic service providers and limit the degree of market access. The generalization and flexibility of obligation of implementing commitment schedules on a sector-by-sector basis further facilitate the developed countries to totally or mostly overlook the mode 4 of services and specially limit the natural movement of un-skilled workforce from developing countries and LDCs to the developed countries. In the provisions of XX of GATS, there should be more stringent and specific obligations on the developed countries requiring them to include specific commitments of liberalizing mode 4: Movement of Natural Persons in their schedules of the specific commitments.

Market Access (Article XVI) obliges a member to treat services and service suppliers of other members to stick to the terms and conditions agreed and specified in its schedules of commitments (Islam, 2006) 'Market access commitments do not affect the right to regulate services and do not oblige members to permit the entry of unlimited numbers' (Islam, 2006). The MNCs have the necessary means to enter foreign markets to take over key service industries by forcing developing countries to provide irreversible access to their market(Islam, 2006). There should be specific provision entailing some obligations on the developed countries to facilitate greater market access of the labourforce of the developing countries.

Most Favoured Nation (MFN) is a principle of non-discrimination, which requires each member to accord immediately and unconditionally to services and service suppliers of any other member no less favourable than it accords to like services and service suppliers of any other country (GATS, Article II). However, the unconditional nature of MFN obligation is tempered by number of exceptions (GATS Article II), which permit differential and

discriminatory treatments listed in the Annex of Article II of GATS and the exception cannot last longer than 10 years in principle (Islam, 2006).The scope and duration of MFN exemptions should be clearly articulated so that the specific and genuine requirements of the developing countries and LDCs can be addressed. The10 years of exemptions especially in terms of natural movement of persons should be based on the genuine economic needs and the level of development of the members and should not be indiscriminately offered to the developed and advanced developing countries at the same level as offered to the lower developing countries and LDCs.

The time limit of MFN exemptions warrants further extension, considering the genuine economic and trading plight of the lower developing and LDCs keeping in conformity with the Preamble and Article IV of GATS with a view to providing special and differential treatment to them. The provisions of the flat use of the notion of 'developing countries', which include countries of diverse economies from oil producing Saudi Arabia, newly industrialized China to the poorest ones, such as: Kiribati and Bangladesh is not really a useful category of granting exemptions/concessions (Islam, 2005). Government of immigration receiving countries may have political and economic motivations to avoid making a migration-MFN commitment, as many of them have done in trade in goods (Broude, 2010).

Most importantly the spirit of the Annex on Movement of Natural Persons Supplying Services Under the Agreement is lacking force and commitment (GATS, Annex 1B). The Paragraph 4 which stipulates, 'the agreement shall not prevent a Member from applying measures to regulate the entry of natural persons, into, or their temporary stay in its territory…' weakens the spirit of mode 4: Movement of Natural persons and is lacking enforceability. Thus, it seems it is formulated to give supports to the protectionist countries against the mode 4. What circumstances will constitute the logic of applying measures to regulate the entry of natural persons should be clearly explained. In fact, any measure that unnecessarily and intentionally restricts the free movement of natural persons from developing to developed countries will ultimately hamper the expansion of the total volume of trade in service and the ultimate victims of which will be the poor people of lower developing and LDCs. So, there should be obligatory provisions to truly liberalize the movement of natural persons.

8. Conclusion

The structural weakness in Articles, Schedules and Annexes of GATS entailing Mode 4: Movement of Natural Persons needs to be restructured so that the developing countries and LDCs are able to participate meaningfully to see their interests are reflected equitably. Most commitments to improve their capacity and address the development needs, specially the liberalization of mode 4: Movement of Natural Persons remain unfulfilled due to its resorting to the 'best endeavor approach as opposed to mandatory approach in the relevant provisions which warrant to be further restructured. In fact, WTO will have to translate its its soft and glossy rhetoric into hard rules of international trade (Islam, 2006)

If mode 4: 'Movement of Natural Persons' is not liberalized, the un-skilled and semi-skilled workforce of developing countries on which they have comparative advantage will be deprived of realizing benefits from trade in services. The service sectors of developing countries will be over-saturated with the supply of many additional workforces. The wages will decline and workers and the countries will be burdened with many disguise and unemployed youths and their productivity will be wasted. Thus, the total prosperity of the world will decline. Then the question of equity and human rights arise with the liberalization of mode 4. In fact, any restriction to the liberalization of labour will make international human rights and multilateral trade regime mutually conflicting (Bravo, 2009).

In an inter-dependent globalized world, the mindset of the members of WTO should change from competition to cooperation and from unilateralism to pragmatic multilateralism with a view to promoting the economic growth of all trading partners with special focus on the development of developing and the least developed countries as a matter of equity. Both developed and developing countries can mutually be benefitted to a great extent through liberalizing mode 4: Movement of Natural Persons, especially, paving the way for easy and unrestricted access of the semi-skilled and un-skilled workers of developing countries to the relevant service sectors of developed countries.

GATS will have to go a long way to make the economic interests of both developed and developing countries in trade in services mutually beneficial and supportive through restructuring its provisions towards more functional and rational with emphasis on equity as well as binding on member States.

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THE IMPACT OF THE AIRLINE FREIGHT TRANSPORTATION ON GDP IN TURKEY

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Abstract:

The demand of passenger and freight transportation has been increasing tremendously each day due to the globalization process. Therefore, the acceleration in the transportation demand has a natural impact on the distances that the freights have been carried through in overall. In this prospect, international logistics provides an economic utility from the sustainability viewpoint in the global competition arena. World-wide supply and distribution channels have become so sophisticated, resulting in having vitality in the field therefore boosting its share in the Gross Domestic Product (GDP). High impact of liberalization in the air transportation markets has been affecting the market of Turkey as well as USA and EU. Moreover, it is one of the industries that have survived from the global financial crises which is also critical from the competition based strategies.

In this study, the relation between the GDP and the air freight traffic of Turkey has been analyzed by using an econometric model. As a result, it has been found that there is a statistically significant relationship between those parameters

Keywords:
Air transportation, Logistics, GDP, Economic Utility, Regression Analysis, Airline Freight

1. Introduction

Economic activities shape the investments, the trade and the transportation through the channels of logistics which are an inevitable result of accelerated globalization and natural effects of the developments in many countries. Increase in the demand of the freight transportation advances every passing day as a result the globalization.

Logistic channels for cargo and passengers have been developed in the last century as a result of the developments in technology but especially after II. World War, it was a new period. After the aviation affected the mobility of the passengers and cargo as aircrafts were no more war instruments but already several pragmatic jumps had been achieved during the war. With the higher mobility advantage of this new aviation are has been shaped since Chicago Convention which has been shaping aviation in the international level but it was also a key start point how to coordinate the complex processes the world-wide countries.

Hence the economies of the countries developed not only in the domestic markets but also international integration of those economies has connected to each other through logistic channels and mainly the transportation had a key role with the effect of the liberalization coming within the globalization period.

2. A Brief Overview on the Air Transportation Industry in Turkey

Prior to 1980, only state-owned companies were allowed to do the business in the Civil Aviation Industry in Turkey. Turkey's flag carrier, Turkish Airlines, was the unique and only airline in the country which created domination in the domestic market. All airports were owned previously by the government, and were operated by state-owned companies. In 1983, Civil Aviation Law, No.2920 was the flashpoint moment of new developments in the Turkish

Aviation Industry. This was not a movement created instinctively, but rather a result of the liberalization domino effect coming from the USA and EU countries. (Gerede, 2010: s.81)

The Federal Aviation Act of 1958 in USA was aiming to improve the market forces in the country where it could provide a range of variety that could create liberalization in the market and result of a higher aspect of the quality with competitive prices within the air services therefore in the continued era EU was also integrating its skies between the member countries and it was a reflection of the liberalization that had started by USA. Not in a coon's age but in 20 years US Deregulation Act of 1978 was removing the power of the government in USA. (Button, 2012: s.17) Just between 1979 and 1982, USA signed 23 bilateral agreements with several countries as a result of open skies policy which was like a turnpike exit to free highways in the world-wide area and it was one of the peak points that globalization evokes its giant steps for many other countries. Undoubtedly 1980 was not an instinctive turn point for Turkey but it was a consideration for the astounding outgrowth of the globalization.

Naturally Turkey has also focused on its domestic markets and even first privatization in the country was USAŞ in 1987 which had been owned by the government and partially sold to a multinational company, Gate Gourmet. It was not a coincidence to make the first step in the aviation area but it was a coming liberalization effect through world-wide aviation industry. During 80's Turkey started regulatory reforms in the aviation arena, developed its domestic markets with several air service agreements and associated services through inter-regional open aviation areas.

2000's is also another progressive period for Turkish Aviation Industry after the developments in the base of the aviation in Turkey. Turkish Airlines were no longer owned by government and it was open to public in the stock exchange market. It started to increase its fleet faster after 2001 and meanwhile Onur Air, Atlas Jet, Pegasus Airlines and other private airline companies was established and started to operate their aircrafts in the liberated domestic and international market.

Air cargo with its premium service capability is a result of the factors that it is providing in logistics such as a strong flexible alternative, speed and security belief. Accordingly with the advancements in the aviation industry in Turkey and with this nature of air cargo, after 2003 it has generated an increase in the freight carried though air as it could be seen from Figure 1. (İstatistiklerle Ulaştirma Denizcilik ve Haberleşme, 2003-2014: s.41)

Figure 1: Airfreight Traffic in Turkey (million ton) 2003- 2014

Source: DHMI

Air freight is not only the products that are being carried by aircrafts but also passengers are the air freights that are being moved from one destination to another. As a result of the correlation of the passengers and the cargo which is carried under-deck of the aircraft, there is a capacity relation between seat capacity and cargo capacity in aviation logistics. Seating and freight capacity of the airlines in Turkey has also shows this natural relation and besides it proofs the increasing trend after 2003 as in the Figure 2. (İstatistiklerle Ulaştirma Denizcilik ve Haberleşme, 2003-2014: s.43)

Figure 2: Seating & Freight Capacity of the Airline Companies in Turkey 2003-2014

Source: SHGM

3. Literature Review

The Airline Freight Transportation is one of the important transportation modes that provide the integration of the marketplaces removes the barriers between the economies and shortens the distances in a most efficient way from the time perspective. Economic activities shape investments, trade and transportation through the channels of logistics which is also an inevitable result of accelerated globalization and naturally effects the developments in the countries.

In the literature, there have been a few studies indicating the causal analysis between the air transport and economic growth for developing countries which is the potential reason for the growth in the air transport demand. There have been many studies issued by many researchers over the last decade.

Gerard de Jong and et all. (2005), they analyzed the Uncertainty in traffic estimates analyzed with Dutch national model system (LMS) and the national model for (NRM) Noord Brabant by using time series method. They found a various methods rather than input uncertainty.

Mariya A. Ishutkina and R. John Hansman (2009), they analyzed the individual country level to indicate the development model differences between air transportation passengers and GDP for 139 countries. The result of the study reveals that the individual country level is important for determining the effect of air transport for each economy.

Yu-Hern Chang and Yu-Wei Chang, (2009), in their study; the relationship between the expansion of air transport and economic growth has been explored in Taiwan over the period 1974-2006. The results of the empirical analysis show that there is a long-run equilibrium between Taiwan's expansion of air transport and economic growth and a bi-directional relationship between them.

Marazzo et al. (2010) studied the relationship between air passenger demand and economic growth in Brazil and found that GDP and air passenger growth are co-integrated. They have indicated that there is a positive intense effect on air passenger growth due to have a significant alteration of GDP.

Elton Fernandes & Ricardo Rodrigues Pacheco (2010), in Brazil, the relationship between economic growth and domestic air passenger transport has been examined by using empirical analysis over the period 1966- 2006. The result of the study shows that the economic growth has a unidirectional causality relationship with the demand for domestic air transport in Brazil.

The study of G. S. Çekerol and Nalçakan M. (2011) analyzed the demand related to the railway transportation mode within the logistic sector in Turkey. Their study was determined that the variable having the least effect on demand in the study is the gross domestic product per capita and there is a positive relationship between the demand and GDP.

Gerard de Jong and et all. (2013) their study ensured that the European literature was audited on freight transport models developed at the national or international level since 2004. This study describes the progress achieved in the incorporation of "logistics" in the regional, national and international transport model.

Elien Van De Vijver and et al. (2014), they investigated the frequency and reciprocal linkages between the deployment of transport infrastructure and spatial economic development in Asia-Pacific by using empirical analysis for the period 1980–2010 and they examined the causality scenarios among different countries.

Douglas Baker and et al. (2015), their study determined the catalytic effects of regional air transport on regional economic growth and they examined the short-term and long-term relation between regional aviation and economic growth in Australia for the period of 1985-86 to 2010-2011. The analysis concluded that the airports affected regional economic growth and that the economy directly affected regional air transport.

Megersa Abate (2016) study empirically analyzed the economic effects of liberalization in air transport by using two variables such as wage and service quality, which measure the frequency of departure. The result of the study suggests when compared to fully liberalized, there is a relatively larger increase in departure frequency in routes with partial liberalization. The impact of liberalization is significant for the development of service quality and there is no significant effect on fare reduction.

M., Hakim and R. Merkert (2016) examined the causal relationship between air transport and economic growth in the South Asia. The result of their study establishes the existence of a long-run unidirectional causality relationship that extends from GDP to air passenger traffic, as well as air transport volumes. Contrary to the current literature, they have not found a long-run and bi-directional causality that confirms the importance of spatial dimensions.

J. Westin and et all. (2016), they analyzed the uncertainty and economies of scale of the Swedish domestic freight transport system. The results show that by shifting the logistics model predominantly to freight transport, new logistics solutions for larger demand can be found.

4. Methodology and Empirical Findings

This study aims to analyze the relation between economic growth and air freight traffic in Turkey. The ordinary least squares (OLS) technique was used to estimate the parameters of the model. Data used in the analysis has obtained from Turkish Statistical Institute for the period 1980-2014. There were 35 observations for the selected period in Turkey. Particularly, the analysis is used to explain (1) how cargo flow of air transport, goods and services flows affect economic growth in Turkey and (2) how the air transport flows can affect the factors and demand conditions of Turkey.

Table 1. Results of the Ordinary Least Squares (OLS)

Dependent variable :LGDP	
Constant	0,0007***
	0,118342
LYT	0,0116**
	0,2857
n	35
F Statistics	7,191248
D-W Stat	1,98
R^2	18,83%

Notes: (***), (**) and (*) denote the significance level of 1 per cent, 5 per cent and 10 per cent, respectively.

In this model; GDP is a dependent variable - where it indicates the economic growth of Turkey. Air Freight demand is the independent variable which indicates millions of tones carried.

The result of the analysis shows that there is an autocorrelation between GDP and Air Freight demand. A number of alternatives have been developed which can capture autocorrelation in the moment conditions by Generalized Method of Moments (GMM). Variables are stationary at the 2nd difference.
There is no heteroscedasticity hence it was determined by Wald Test for the model. In the most recent studied model, deviations from the assumptions have been controlled in the classical regression analysis and no deviation has been found. It has been discovered that the %18 of the increase in GDP was sourced because of the increase in the GDP. The model that has been used in the analysis is statistically significant.
As air freight demand increase has a positive effect on the increase in the GDP, %1 increase in air freight has been resulting in a %0.76 increase in GDP as shown in Table 1.

5. Conclusion

In the historical background, developments of the air transportation have a significant role in the social and economic development as a result of the development in the mobility of the freights. In this study, the effect of air freight demand on the GDP has been analyzed. The increase in the air freight demand is explaining a slight part of the increase in the GDP and it is a positive relationship in the same direction. GDP is the total money value of all products and services produced in the country. Not only the air freight but also the transportation of the passengers has a positive effect on the GDP.

Air transport creates economic growth by facilitating tourism and trade, provides job opportunities, improves living standards and alleviates poverty and increase incomes from taxes. Efforts to develop demand forecasts by making the right planning to allow healthy development of the air transportation sector, which survived from the global financial crisis, are important for making concrete investment decisions. Thus, it contributes to sustainable economic development.

These studies could be extended through several perspectives such as including EU countries and USA. Some other explanatory variables (Macro indicators) could be added. Further research could be analyzed by using (in and by the - cross sectional/times series time) panel data..

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