In the Name of Allah,

the Compassionate, the Merciful

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TIR Convention

And it's impacts on Transit and Transport Sector in Central Asia and Caucasus

(M.A. *Thesis*)

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Abstract

According to the new findings of the academic researches Transit Transport Sector is the main element of Trade facilitation and provides the most benefits, specially, for developing countries. The economical development of CACs, with regard to the land lock position, is mostly dependent to construction of the new TT corridors and completion of the existent routes. The implementation of the TIR Convention as the most efficient and reliable international road system in Central Asia and Caucasus is the best option for these countries to develop their Transit Transport Network and resolve the sectoral problems. To achieve this goal, an operational supply chain management system should be defined in the region. Therefore, the main elements of an efficient supply chain, which include time and cost effectiveness, designation and construction of logistic centers, providing the suitable legal basis and infrastructures, play the key role in the regional action plan toward a sustainable Transport network. This study argues that full implementation of the TIR Convention will accommodate the CACs with the international norms of Transportation. Chapter one provides an introduction for this research and defines the main problem of this region with regard to Transportation. Chapter two will provide an overview of theoretical framework and accordingly,chapter three will concentrate on conceptual framework. Chapter four describes the present situations of implementation of the international transit transport conventions in Central Asia and Caucasus and finally chapter five includes the summary of analysis and recommendations. This paper is going to find solutions for the landlock CACs to connect them with the rest of the world and design an operable action plan for construction and completion of the regional corridors. For achieving this goal, degignation of a regional customs union and the regional freight logistics centers has the vital role. In sum, this research will provide a regional framework for CACs for implementation of the TIR Convention and consequently, development of the Transit Transport Sector in this region.

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Chapter One: Introduction

1.1. Introduction

The Convention on International Transport of Goods Under Cover of TIR Carnets was made to simplify and harmonise the administrative formalities of international road transport. In 1949, shortly after the World War II, the first TIR Agreement was concluded between a small number of European countries and led to the elaboration of the TIR Convention (TIR stands for Transports Internationaux Routiers) under the auspices of the United Nations Economic Commission for Europe. This Convention minimises administrative and financial burdens and Customs duties and taxes and effectively protects the supplier and customer revenues through an international guarantee chain. TIR is the only universal transit system that allows the goods to transit from a country of origin to a country of destination in sealed load compartments with Customs control recognition along the supply chain. It has it's origins in two drafts of UNECE Conventions – on commercial vehicles and on goods transport by road – which entered into force on 16 June 1949, but were of a provisional nature and covered only a small number of European countries.

The TIR Convention was revised in 1975 to take into account new methods of transport with the sea containers, followed by the inland containers and swap-body to facilitate rail-road combined transport. Since its entry into force in 1978, the TIR Convention of 1975 has been updated over 20 times. The most recent relevant amendments came into force on 12 August 2006, regarding the electronic control system for TIR Carnets commonly known as SafeTIR.

1.2. Statement of Problem

This study is conducted to assess the probable implications of the TIR Convention on customs and transport sector in Central Asia and Caucasus; to enhance the ***Transit and Transport sector*** efficiency in respect to time, cost, legislation, infrastructure and logistics services. Taking into account the unproductivity of the TIR System in CACs, the thesis is intended to find the reasonable and probable cause for the limited participation of these states in TIR System. In this regard, it is crucial to design a Standard Model for Supply Chain, Transport and Customs to compare the present conditions of the region with desired situation and consequently provide an action plan for transition of the CACs to desirable conditions of TATs.

The time and cost deficiencies as the main impediments to border crossing activities in addition to significant imperfections of the national transport legislation in CACs, create serious obstacles for TATs, particularly transit traffic sector. Nevertheless, it seems that the poor infrastructure, discontinuities, lack of integration of modes and under-developed logistics services would be as the main barriers of the road transit facilitation procedure. Although the CACs have made considerable progress in establishing a legal and regulatory framework for the transport sector since independence, the presence of numerous obstacles pertaining to TATs in CACs, have constrained the growth of transport trade in this region.

The growing importance of transport linkages of the CACs and their key role in East-West corridor has identified this region as the intersection point of the transport corridors and the connector bridge of different regions, however, lack of a standard road transit mechanism, aroused many problems for TATs in this region. Identification of these problems in compare with the Standard Model of Supply Chain will be the starting point for providing the multi-dimentional road map of TATs in Central Asia and Caucasus.

1.3. Research Objectives/Purposes

Designing of an **Action Plan** for enhancing the TATs efficiency in CACs regarding the TIR Standard Model of Supply Chain, is identified as the main objective of this research. This Action Plan is designed for obtaining the mentioned bellow ***objectives*** :

- Full implementation of the TIR Convention as the **"building block"** of the proposed regional transit system to reinforce the cooperative measurements and regional integration of the CACs in TATs.
- Modernization and reforms in broad based customs in addition to establishment of an Integrated Border Management (IBM) system.

- Facilitation of transport based trade as well as Accommodation of different means of transport (Multimodal Transport) to integrate the CACs with international regulations and global markets.
- Reduction of frontier controls and Customs interference for reduction of delays, enhancing the Cost efficiency and tackle negative externalities.
- Provide Customs security/guarantee.

1.4. Key Question

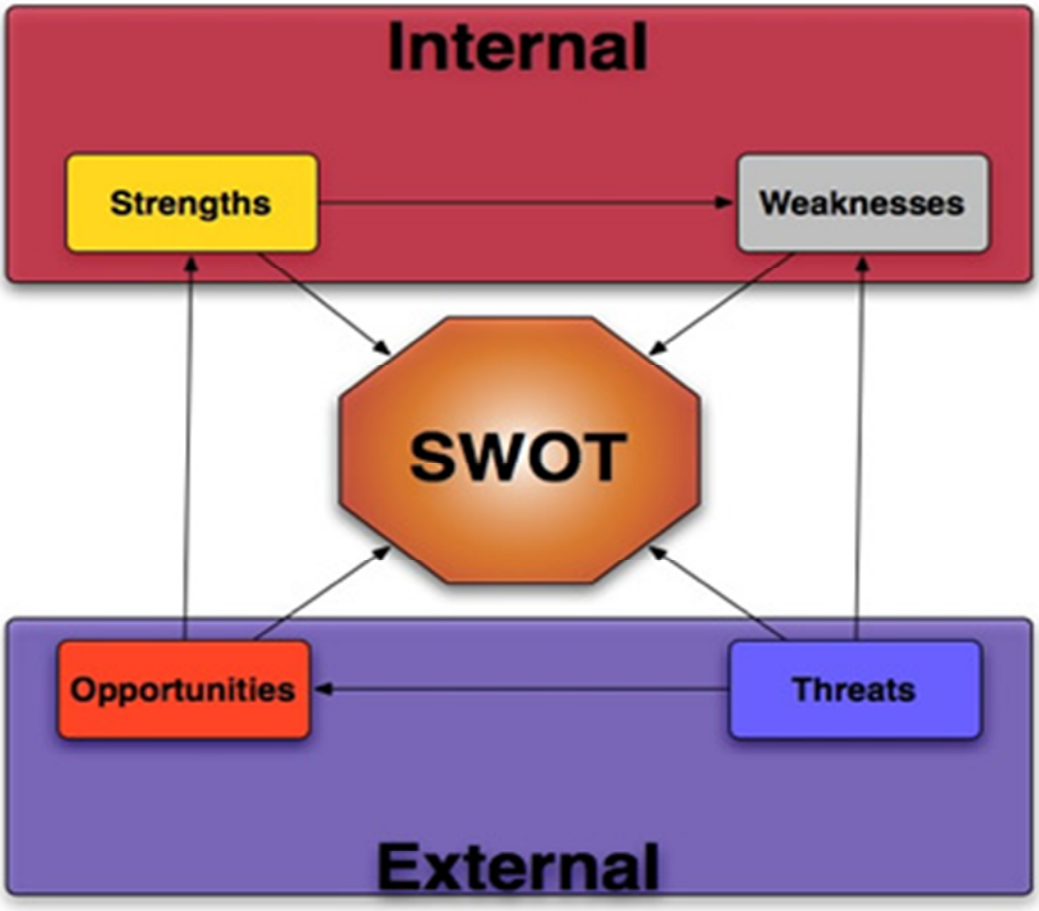
How the TIR Convention would help the CACs to remove TATs barriers in respect to time, cost, legislation, infrastructure and logistics services?

1.5. Main Hypothesis

Full implementation of the TIR Convention through a perfect designed **Standard Model of the Supply Chain** will help the CACs to remove TATs barriers for making transit times shorter and more predictable for international road shipments to and from the CACs, increase the cost benefits, develop the TATs infrastructure, provide the related logistics services and provide the regulatory framework for the CACs to expand the trade and diversify it in terms of both geographical distribution and commodity composition.

Vice versa, research needs to be structured in such a way that the evidence also bears on Alternative Rival Hypothesis and enables us to identify which of the competing explanations is most compelling empirically. Therefore, the **Null Hypothesis** could be identified as the inversion of the before mentioned hypothesis. It means that the TIR Convention would not help the CACs to improve their TATs and remove barriers.

1.6. SWOT Analysis



A scan of the internal and external environment is an important part of the strategic planning process. Environmental factors internal to the research objectives usually can be classified as strengths (**S**) or weaknesses (**W**), and the external factors can be classified as opportunities (**O**) or threats (**T**). Such an analysis of the strategic environment is referred to as a **SWOT Analysis**.The SWOT analysis provides information that is helpful in matching the the research objectives and capabilities to the competitive environment in which it operates. As such, it is instrumental in strategy formulation and selection.

1.6.1. Strengthes

Given the success of the TIR system, especially in EU, it could serve as a blueprint for improving the regional transit system in CACs. Broad based customs modernization and reforms in addition to the establishment of an Integrated Border Management (IBM) methodology in CACs leads to the improvement of the trade and transport network and removing the economic growth impediments in a way that benefits all the participating parties. Morever, Solving regional transport problems and elaboration of international investment plans through a realistic

and revolving action plan, facilitates transit and trade procedures as well as quality improvement of transport networks. Consequently, developing a comprehensive strategy for the TATs of the CACs predispose this region at transition point to establish an effective and affordable regional transit system. Easier customs transit by road through neighboring countries would help the CACs avoid the construction of new bypassing roads and enable them to allocate more resources for the rehabilitation and maintenance of existing transport networks and their closer integration with international transport networks.

1.6.2. Weaknesses

TIR Convention has long been a key instrument in facilitating international transit traffic elsewhere in the world. All of the CACs are signatories to this convention and apply it, but the fixed costs of the TIR system are too high (particularly for short-distance customs transit) for most transport operators from the CACs. Moreover, the benefits of the TIR system are not always realized in the CACs due to the border infrastructure deficiencies, noncompliance by customs, and corruption. Consequently, there has been little harmonization of transport legislation and customs regulations among them. This largely explains why transport costs are high and transit times are long and unpredictable for international shipments to and from this region.

The CACs have been trying to establish regional transit systems that could be used for intra-regional customs transit by road and would be less costly than the TIR and the national road transit systems. To this end, they have signed numerous transit agreements with each other as well as with neighboring countries. These agreements have ,however, had a very limited effect on customs transit in the CACs for a variety of reasons. Some of them have not entered into force, while those that have entered into force have not been implemented or have not reduced the costs of customs transit due to unproductive design. Consequently, the need remains for the CACs and their neighbors to develop an effective and relatively inexpensive regional transit system. Morever, the TIR system regulations would have to be modified to reduce its fixed costs. Since negotiating multiparty agreements is relatively difficult, multilateral technical negotiations could initially be set up, as an intermediate step towards the regional transit system under the cover of the TIR system.

The CACs inherited fairly extensive and highly integrated transport networks from the FSU, which were built with little regard for their administrative borders and mostly oriented towards the Russian Federation. At the same time, their transport links with non-FSU neighboring countries—such as Afghanistan, China, India, Iran, Pakistan, and Turkey—were poorly developed, with a few direct routes,most of which were in very poor conditions.Since the break-up of the FSU, the CACs have sought to improve their transport links with non-FSU countries, often with the support of multilateral and bilateral development agencies. However, the lack of financial resources and poor coordination of national transport infrastructure projects

have been slowing down progress in integrating CACs transport networks into international transport networks. In other words,the transport sector plays a relatively marginal role in CACs, accounting for 3–8% of GDP and 2–5% of total employment.

1.6.3. Opportunities

UNECE as one of the most efficient Economic Commissions of the United Nations, deals with several International conventions like Inland Transport Committee (ITC) which is the main transport-related organ of the UNECE. It includes 43 countries in which all of the CACs are the members. TIR Convention is the most important Convention for goods border crossing which works under the auspices of the UNECE. Although, it covers 68 countries in which 43 members are the members of the UNECE and others are out of it.

The geopolitical position of the CACs necessitates a regional cooperation with Iran, Afghanistan and Pakistan for reducing time, tariff, custom duties and other extra TATs costs. Therefore, it would be an urgent and emergent case for CACs to inaugurate a close cooperation with these neighbouring countries in the framework of the ECO region. So ,even if, the role of procedure of the UNECE does not apply to Iran, Afghanistan and Pakistan and it's impacts on development of transit facilitations in the CACs; if the CACs participate actively in the TIR Convention framework in ECO region, they may get better results and achievements in goods border crossing. Therefore, in this research we are going to investigate about the main paramateres for implementing the TIR Convention in CACs, like time,cost and custom procedures. Therefore, the full implementation of the TIR Convention on their territories through a regional cooperation mechanism will be indispensable for the CACs,especially in long distance customs transit by road that involves crossing multiple borders.

1.6.4. Threats

It is crucial to make the CACs transit structure compatible to the TIR system in order to serve as a “building block” rather than become “stumbling block” for the proposed regional transit system. The CACs have acceded to a number of basic international transport agreements and conventions, but many others are yet to be signed. Therefore, the UNESCAP had identified seven international transport agreements and conventions recommending all member countries to sign. Of these, only one has been signed by all of the five CACs (TIR Convention). Even those international agreements and conventions that the CACs have acceded to are often not respected in practice and overridden by domestic regulations and unofficial practices.

Cross-border and transit traffic are mostly governed by multilateral and bilateral transport agreements that CACs have signed with each other and with neighboring countries. Although these agreements are generally better implemented than international agreements and conventions, they have resulted in a very complex regional regulatory framework for the transport sector and with a few exceptions, have not been particularly effective in facilitating

cross-border activities and transit traffic in the region. Furthermore, there has been little harmonization of transport legislation and regulations among the CACs.

Yet, it is crucial for the participation of these countries in international trade and their integration into the global economy. Moreover, the degree and nature of participation in international trade depends not only on its own transport sector but also rely upon the degree of compatibility and integration of its transport system with neighbors, including the other CACs. This is because most of the CACs are landlocked and heavily dependent on transporting goods by land through neighboring countries in trade with noncontiguous countries. Deficiencies of the transport sector in one of the CACs are often compounded by deficiencies of the transport sector in another CACs. This largely explains why transport costs are high and transit times are long and unpredictable for international shipments to and from the CACs.

1.7. Scope and Limitations

The dearth of research papers and considerable backgrounds is a significant shortage for conducting of this study. Although, there has been some interests in literature for filling this theoretical gap, the lack of a comprehensive designment concerning the transport strategy in Central Asia and Caucasus has highlighted the need for this thesis.

On the other hand, lack of the adequate and reliable statistical informations for designing a comparative study is another important shortcoming for this dissertation. The unfamiliarity of some of the high ranking officials of the CACs with the potential benefits of membership in TIR Convention, had decreased their tendency for cooperating in this subject.

1.8. Key Terms

TIR Convention, Central Asian and Caucasian states(CACs), TIR Standard Model(TSM), Transit and Transport sector(TATs), Customs Management and Supply Chain

Chapter Two: Theoritical Framework

2.1. The Importance of Transportation

Transport is so essential in both developing and developed countries that it is often taken for granted. Macroeconomic facts about transport are indeed impressive. The value added by transport and storage accounts for 3 to 8 percent of the GDP of countries in Asia and the Pacific, according to ESCAP secretariat estimates. Employment in transport, storage and communications ranges between 2.5 and 11.5 percent of total paid employment.Demand for freight and passenger transport, particularly by road, has typically grown 1.5 to 2 times faster than GDP in most developing and transition countries. Public investment in transport typically accounts for 2.0 to 2.5 percent of GDP and may rise as high as 4 percent or more in countries modernizing or building new transport infrastructure. Logistics costs are typically more than 20 percent of sales, of which transport costs alone can be as much as 13 percent.Landlocked countries face logistics costs that are, on average, 50 percent higher than those of countries with access to the sea. Consequently,many Governments have assigned transport an important role as a key to economic development and integration into the world economy.

International transport by trucks was subject originally to a number of constraints, such as quota restrictions, national restrictions against operators from other EU countries and prohibition of cabotage. EU policy has aimed at opening this market to competition, freeing it gradually from its various constraints.As the process of market opening progressed,issues of potential distortions and unfairness of competition were tackled. This resulted in social regulations, particularly to reinforce safety standards. To eliminate distortion in competition due to differences of costs across countries a harmonised approach to road transport taxes and charges has been developed.The increasing adoption of electronic toll collection systems for Heavy Goods Vehicles(HGVs), which is seen today in various Member States, calls for interoperability of the technology used as well as for cross-border organization of the payment procedures. This also has been tackled in recent EU policy developments.Foreign registered vehicles are a large share of freight traffic in certain countries. Enforcementof the violations committed by these vehicles is difficult because of the lack of a mechanism for sharing vehicle data across national borders and the lack of a legal framework for cross-border enforcement of penalties. This constitutes a problem because impunity may result in drivers' poor or unsafe behavior.

Like many economic activities that are intensive in infrastructures, the transport sector is an important component of the economy impacting on development and the welfare of populations. When transport systems are efficient, they provide economic and social opportunities and benefits that result in positive multipliers effects such as better accessibility to

markets, employment and additional investments. When transport systems are deficient in terms of capacity or reliability, they can have an economic cost such as reduced or missed opportunities. Transport also carries an important social and environmental load, which cannot be neglected. Thus, from a general standpoint the economic impacts of transportation can be direct and indirect:

- **Direct impacts** related to accessibility change where transport enables larger markets and enables to save time and costs.
- **Indirect impacts** related to the economic multiplier effects where the price of commodities, goods or services drop and/or their variety increases.

The impacts of transportation are not always intended, and can have unforeseen or unintended consequences such as congestion. Mobility is one of the most fundamental and important characteristics of economic activity as it satisfies the basic need of going from one location to the other, a need shared by passengers, freight and information. All economies and regions do not share the same level of mobility as most are in a different stage in their mobility transition. Economies that possess greater mobility are often those with better opportunities to develop than those suffering from scarce mobility. Reduced mobility impedes development while greater mobility is a catalyst for development. Mobility is thus a reliable indicator of development.

Providing this mobility is an industry that offers services to its customers, employs people and pays wages, invests capital and generates income. The economic importance of the transportation industry can thus be assessed from a macroeconomic and microeconomic perspective:

- **At the macroeconomic level** (the importance of transportation for a whole economy), transportation and the mobility it confers are linked to a level of output, employment and income within a national economy. In many developed countries, transportation accounts between 6% and 12% of the GDP.
- **At the microeconomic level** (the importance of transportation for specific parts of the economy) transportation is linked to producer, consumer and production costs. The importance of specific transport activities and infrastructure can thus be assessed for each sector of the economy. Transportation accounts on average between 10% and 15% of household expenditures while it accounts around 4% of the costs of each unit of output in manufacturing, but this figure varies greatly according to sub sectors.

Transportation links together the factors of production in a complex web of relationships between producers and consumers. The outcome is commonly a more efficient division of production by an exploitation of geographical comparative advantages, as well as the means to develop economies of scale and scope. The productivity of space, capital and labor is thus enhanced with the efficiency of distribution and personal mobility. It is acknowledged that economic growth is increasingly linked with transport developments, namely infrastructures but also managerial expertise is crucial for logistics. The following impacts can be assessed:

- Networks. Setting of routes enabling new or existing interactions between economic entities.

- Performance. Improvements in cost and time attributes for existing passenger and freight movements.

- Reliability. Improvement in the time performance, notably in terms of punctuality, as well as reduced loss or damage.

- Market size. Access to a wider market base where economies of scale in production, distribution and consumption can be improved.

- Productivity. Increases in productivity from the access to a larger and more diverse base of inputs (raw materials, parts, energy or labor) and broader markets for diverse outputs (intermediate and finished goods).

2.2. Transportation and Economic Development

Transportation developments that have taken place since the beginning of the industrial revolution have been linked to growing economic opportunities. At each stage of human societal development, a particular transport mode has been developed or adapted. However, it has been observed that throughout history that no single transport has been solely responsible for economic growth. Instead, modes have been linked with the function and the geography in which growth was taking place. The first trade routes established a rudimentary system of distribution and transactions that would eventually be expanded by long distance maritime shipping networks and the setting of the firsts multinational corporations. Major flows of international migration that occurred since the 18th century were linked with the expansion of international and continental transport systems that radically shaped emerging economies such as in North America and Australia. Transport has played a catalytic role in these migrations, transforming the economic and social geography of many nations. Concomitantly, transportation has been a tool of territorial control and exploitation, particularly during the colonial era where resource-based transport systems supported the extraction of commodities in the developing world and forwarded them to the industrializing nations of the time. More recently, port development, particularly container ports, has been of strategic interest as a tool of integration to the global economy as the case of China illustrates.

While some regions benefit from the development of transport systems, others are often marginalized by a set of conditions in which inadequate transportation play a role. Transport by itself is not a sufficient condition for development, however the lack of transport infrastructures can been seen as a constraining factor on development. In developing countries, the lack of transportation infrastructures and regulatory impediments are jointly impacting economic development by conferring higher transport costs, but also delays rendering supply chain management unreliable. Investment in transport infrastructures is thus seen as a tool of regional development, particularly in developing countries and for the road sector. The standard assumption is that transportation investments tend to be more

wealth producing as opposed to wealth consuming investments such as services. Still, several transportation investments can be wealth consuming if they merely provide convenience, such as parking and sidewalks, or service a market size well below any possible economic return, with for instance projects labeled "bridges to nowhere". In such a context, transport investment projects can be counterproductive by draining the resources of an economy instead creating wealth and additional opportunities.

There is also a tendency for transport investments to have declining marginal returns. While initial infrastructure investments tend to have a high return since they provide an entirely new range of mobility options, the more the system is developed the more likely additional investment would result in lower returns. At some point, the marginal returns can be close to zero or even negative, implying a shift of transport investments from wealth producing to wealth consuming. A common fallacy is assuming that additional transport investments will have a similar multiplying effect than the initial investments had, which can lead to capital misallocation. This means quite understandably that the economic impacts of transport investments tend to be significant when infrastructures were previously inexistent or deficient and marginal when an extensive network is already present. Therefore, each development project must be considered independently.

2.3. Types of Transport Impacts

The relationship between transportation and economic development is difficult to formally establish and has been debated for many years. Its complexity lies in the variety of possible impacts:

- Timing of the development varies as the impacts of transportation can either precede, occur during or take place after economic development. The lag, concomitant and lead impacts make it difficult to separate the specific contributions of transport to development. Each case study appears to be specific to a set of timing circumstances that are difficult to replicate elsewhere.
- Types of impacts vary considerably. The spectrum of impacts range from the positive through the permissive to the negative. In some cases transportation impacts can promote, in others they may hinder economic development in a region. In many cases, few, if any, direct linkages could be clearly established.

Cycles of economic development provide a revealing conceptual perspective about how transport systems evolve in time and space as they include the timing and the nature of the transport impact on economic development. When economic growth is credit driven, it can lead to significant misallocations of capital, including in the transportation sector. The outcome is a surplus capacity in infrastructures and modes creating deflationary pressures that undermines profitability. In periods of recession that commonly follow periods of expansion, transportation activities may experiment a setback, namely in terms of lower demand and a scarcity of capital investment.