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ANALYSIS OF SUPPLY CHAIN MANAGEMENT COMPANIES IN TURKEY

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Introduction

Since the beginning of the 1980s, Turkey has shown a significant transformation in its presence in economic and social fields. Since 2002, Turkey has made significant strides forward in terms of economic development and prosperity due to the lengthy period of instability that the country has experienced. Given Turkey's extensive industrial and trade ties with the European Union, it has also been affected by the world's most recent economic and financial crisis in 2008/2009. 2013 was another year marked by difficult commercial conditions, particularly in Europe. In spite of these difficulties, the economy of Turkey has established to be a long-term success on the international stage. Combined with the automotive and textile sectors, Turkey's industry and logistics industry is one of the country's most active industries. The strategic importance of the Eurasian Tunnel in Turkey is unquestionably a motivating factor in its construction. The Turkish government has developed aspiring internal logistics objectives (Turkey Logistics Master Plan 2023). As a result, both the public and private sectors are working hard to close any gaps that may be preventing the advancement of the Turkish industry as a whole. Therefore, it is necessary to increase the level of efficiency.

Finding out the size and scope of the logistics market on a national scale is a difficult task that requires international cooperation (Iskan, S., & Klaus, P. 2013).

Turkish companies have a poor level of openness in terms of revenues and business lines on the marketplaces for transportation, logistics, and supply chain services. However, the condition is progressively becoming better (Rashid, N. M., Ngalawa, F., & Cil, I. 2016). For the year 2011, Figure 1 shows the reported and forecasted revenues for Turkey's top logistics service providers, which are shown in euros.

This research excludes companies that are mainly focused on airport or passenger traffic such as Havas; sea bus operators such as Istanbul's IDO; and major internal traveler system operators such as Kâmil Koç, Pamukkale, Metro, and Özkaymak (Iskan, S., & Klaus, P. 2013). In addition, “private port operators such as Borusan Holding companies, ocean freight fleet operators such as Arkas Holding, and private cargo airline companies such as Pegasus Airlines, have not been thoroughly examined due to a lack of data and cargo sharing. In addition, some of the world's largest logistics service providers such as the DHL Group, DB Schenker Arkas, and Ulusoy Holding, have access to extremely sophisticated information systems and data.

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Table 1: The Top Logistics Service Providers in Turkey in 2011

Ranking	Company	Data quality	Cargo and logistics related revenues 2011 (in. m EUR)	Total company group employees	Main sources for revenue estimation
1	Turkish Airlines Cargo	+++	490	15,978	Fortune 500, website
2	Borusan-Balnak Lojistik	+++	463	4,000	Fortune 500, website
3	Barsan Global Lojistik	+	367	n.a.	assessment based on 2008 estimation
4	Ünsped Global Lojistik (UPS subcontractor)	+	312	2,500	assessment based on 2008 data, UPS website
5	Netlog Lojistik	+++	272	3,500	Fortune 500, website
6	Aras Kargo (25% Austrian Post)	++	250	5.400	press release of Austrian Post (30.7.2013)
7	Turkish State Railways	+++	239	35,642	Fortune 500, company information, website
8	Ekol Lojistik	+++	222	4,000	Fortune 500, website
9	OMSAN Lojistik	+++	215	1,250	Fortune 500, website
10	Horoz Lojistik	+++	212	1,000	Fortune 500, website
11	Fasdat Gıda	+	182		DVZ-Report 2011, Capital Turkish Vol. 8/2012
12	Mars Logistics	+++	129	1,000	Fortune 500, website
13	CEVA Turkey	+	114	5,500	assessment based on 2008 data, Logistics Partner website
14	Reysaş	++	101	n.a.	Fortune 500, website
15	Yurtiçi Cargo (Geopost/ DPD-Partner)	+	believed >> 100	11.000	website
	Ulusoy Lojistik Holding	+	believed >> 100	n.a.	diversified holding with signif-icant transport and logistics operations
	DHL Group Turkey	+	believed >> 100	n.a.	DHL website – biggest foreign based provider
	DB Schenker Arkas	+	believed > 100	n.a.	press releases (DVZ 28.8.2012), capitalisation of 84 m EUR
	Gefco Türkiye	+	91	n.a.	assessment based on 2008 estimation, Hürriyet online
	Alişan Lojistik	++	90	n.a.	Fortune 500

Source: (Iskan, S., & Klaus, P., 2013).

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The combined revenues of the 15 largest providers of logistics services service to over EUR 3, 5 billion, with the 'Top 20' accounting for approximately EUR 4 billion. According to estimates, this equates to 27 per cent of Turkey's estimated overall outsourced logistics business volume of EUR 13 billion. In Europe, as in other world providers, larger suppliers are growing faster than the huge number of smaller suppliers.

Turkish logistics service providers are among the most active in expanding international shipping, as the country's position in the world economy continues to improve. One such company is Ekol, which bills itself as "the fastest-growing transportation company in Europe" ("Facts - Ekol Logistics", 2021). Not only has Ekol more than doubled its sales to more than EUR 284.4 million in 2012, but the company has also added around 4,000 employees. The year 2013 was Ekol's year. Apartment. Domestic contract logistics and integrated supply chain services, in particular, are expected to become increasingly important in the coming years. In contrast, the expansion of transportation services has been the most significant contributor to the growth of the logistics service provider industries to date.

The establishment of interconnected domestic networks with complete geographical analysis is still required for the Turkish transportation industry. The activities of foreign logistics suppliers, in particular, are generally focused in industrial bunches in Istanbul, Bursa, and Izmir, as well as in isolated instances in the Greater Ankara region, such as DHL's operations.

Literature review

In today's world, rapid change and increasing uncertainty seen in all fields of commercial, economic, political, social, and natural can leave businesses face to face with unexpected threats and opportunities. In addition, increasing economic integration and competition among countries with the effect of globalization increase the risks of encountering a crisis for businesses. In order to eliminate threats and evaluate possible opportunities, businesses need to be prepared for these changes, uncertainties and risks (Uyan, 2016). At this point, the concept of risk management emerges as an important concept in terms of supply chain management of logistics enterprises, which form the basis of international trade. In any economy, a well-built and well-organized transport and logistics industry serve as the backbone. Since it is anticipated that marketplaces in Asia, Central Asia (CIS), and the Middle East will become more interconnected with European and global trade networks in the next years, the number of transit transits through Turkey will grow. All of Turkey's long-term economic goals are geared toward the year 2023, which will mark the 100th anniversary of the establishment of the Modern Republic of Turkey. According to the Turkish government, the country's export volume will reach roughly USD 500 billion in 2013, more than doubling the country's revenue in 2012. The development and significant modernization of transportation and logistics infrastructure will aid in achieving this goal and will be a critical component. Approximately 20 billion euros have been invested between 2003 and

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2009 to modernize the transportation and communications sectors. Two major logistics plans are being implemented due to the approval of a new transportation strategy in 2003. Additionally, a strategic shift from rail to road has been implemented in the modal transportation mix and investments in domestic infrastructure. Projects to improve connections between backland containers, inland railway terminals, and development projects, in particular, are high on the priority list ("Republic of Turkey - Ministry of Trade", 2021) Government Planning Organization 2013 Turkey's development as a leading industrial power will be aided by low labour costs, a younger, growing, and continually trained workforce, and, last but not least, high manufacturing quality throughout the world, according to the Turkish industrial strategy paper 2011-2014 (Iskan, S., & Klaus, P. 2013). A country's growth in the transport and logistics sector will be aided by its unique geostrategic location, especially its closeness to Europe (Central Europe), Asia, North Africa, and the Middle East.

Due to the country's fast economic growth and the lack of globally recognized statistical data, this is especially difficult for Turkey to navigate. For example, the Transport and Logistics Industry Report 2010 by Deloitte and the Turkish Investment Support and Advancement Agency and the Turkish Logistics Analysis Sector 2011 have all been published on the Turkish market in the field of logistics across a range of disciplines. When data and observations on the Turkish logistics sector were published in journals in the transportation industry, such as the German Transport Newspaper, the Ost-West Contact Magazine (OWC), Intermodal and others, Aysberg Media was credited source (Nuhoğlu, S. 2015). However, according to the authors, there has been no systematic recorded attempt to analyze and track Turkish logistics systems' "national costs". As a result, there has been no effort to find Turkish market income potentials for transport, logistics, and supply chain services. Language barriers, the patchiness of information available to the public, and a lack of consensus on the right market definition and methodology contribute to this problem. A four-stage process is presented to close this gap and provide a realistic assessment of the home-selling environment.

Prior publications by the authors Klaus, P., Kille, C., and Schwemmer, M. (2011) and Distel, S. (2005) provide the foundation for the principal estimating approach and market definition..Figure 11 depicts the cost elements that are included in the concept of logistics. It is compatible with the concept presented in the State of Logistics reports published by the United States (CSCMP et al., 2013). Among the most important data in this estimate are the national estimates of GDP published by Turkey's Statistical Institute ("Türkiye İstatistik Kurumu (TÜİK)", 2021). Furthermore, the estimate claims that the Turkish Minister of Industry and Trade recorded an official proportion of Turkey's GDP in the logistics industry, supported by the data ("GDP growth (annual %) - Turkey | Data", 2021)Davis (2004) used a Cost distribution of supply chain companies in turkeydata benchmarking approach created by Klaus, P., Kille, C., and Schwemmer, M. (2011) to break out transportation, logistics, and

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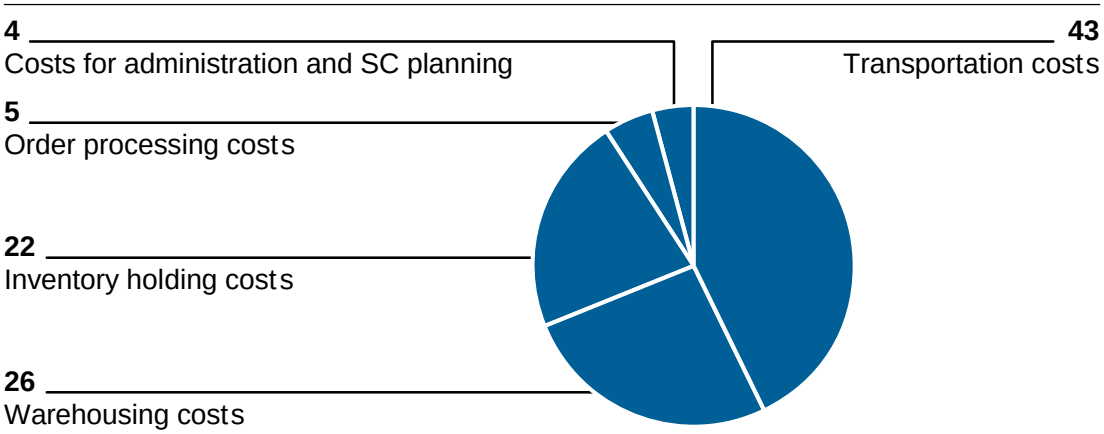
supply chain management expenses in his analysis (2012, p. 12). The OANDA closing rates for foreign currency conversions from Turkish Lira to Euro and from U.S. Dollar to Euro will be established by the end of December 2011 and 2012, respectively.



Source: (Türkiye İstatistik Kurumu (TÜİK), 2021).

The involvement of major Turkish families, business including companies such as Koç, Oyak, Sabanci and Ülker, Douş, Enka, Zorlu, Borusan, Anadolu, Tekfen, Ulusoy and Arkas, is, according to the transportation Ministry of Turkey, a vital service to the logistics suppliers industry. This requires the concentration of logistic service providers and the existence of a vast network of contacts between the transport company and logistics service providers in the economy. In 2010, Turkish holdings made the top ten consolidated sales of around 14% of Turkish GDP or about EUR 72 billion (Iskan, S., & Klaus, P. 2013). Koç Holding is the most lucrative Turkish business, based on their annual report, with sales of about EUR 27 billion and Oyak (EUR 11 billion), Sabanci (EUR 9,7 billion), Ülker (EUR 9,7 billion) and Sabanci (EUR 9,7 billion) (7.8 billion EUR). These Turks are not only strongly involved in the automotive industry (via companies such as Ford Otosan, Fiat Tofaş, Renault Corn and Temsa) but also have significant participation in Turkish Logistics companies, such as Oyak Anker, Yapkredi/UniCredit (TEK), Arkas and Ulusoy Insurance. They, too, have major stakes.

The most well-connected logistic service providers in Turkey are DB Schenker Arkas, CEVA Turkey, OMSAN Lojistik, Netlog Lojistik, Yurtiçi Cargo and Ulusoy Lojisttik. Take, for example, the Arkas Group, which includes over 40 Turkish-owned businesses. Arkas is the leading private port operator (airport) in Turkey. Apart from its official activities as a Volvo or Ford cargo importer, its biggest sea freight fleet is under the Turkish flag. The joint venture between Koç Holding and the TNT Group, which ran until 2004 and which was the impetus for the creation of CEVA Turkey in 2000, was another remarkable example. In

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addition, several businesses, namely Yurtiçi Cargo and Netlog Group, received financing from OMSAN Lojistik, the Turkish Military Pension Fund Oyak and Arkanli Holding and Ulker.

Finally, Turkish transportation and logistics companies and their foreign counterparts are linked and affiliated. For example, Sustrans is a member of the German System Alliance in transportation services less than loaded. Yurtiçi Cargo, FedEx, Coneks, UPS, Ünsped Global Lojistik, Geopost and DPD are only a few international service providers connected to the company's package department domestic distribution networks.

The activities of international logistics service providers such as Rhenus (Germany), Dachser (Germany), Geis (Germany), Militzer (Germany) and Munich have similar patterns (Germany). The Turkish enterprises are founded on collaborations with local Turkish companies: Rhenus, Dachser (Germany), Geis (Germany), Militzer (Germany) and Munich (Germany). Dachser had previously accessed the Turkish Ran Lojistik network, Militzer and Münch had purchased a Turkish ATC firm in 2012, and Japan's Hitachi Logistics has just acquired a 51% interest in the Mars logistics enterprise (Lojistik Hatti 2013). Geis also works with the Horoz Lojistik Network to supply the Turkish market with completed cars and for the German logistics services service, Meyer & Meyer, specializing in logistics solutions between Germany and Turkey. The cooperation of Willi Betz and Borusan/Gefco enables this. According to the firm, in addition to importing completed cars from Bulgaria into Borusan / Gefco, Willi Betz uses Turkey in Kocaeli to act as a cargo hub for all Turkish and Central Asian goods. Besides, PSA Peugeot Citron's former Gefco Company offers complete vehicle transportation in Turkey. It is anticipated that the market opened for the first time in 2003 would produce about EUR 90 million revenues.

In recent years, many international logistics service providers have set up Turkish companies themselves. CEVA Turkey works in the field of land transportation, offering contract logistics services to Koç-related firms, including Ford Otosan, Fiat Tofaş and Migros, due to its many years of close ties with Koç Holding. In Turkey, for example, DHL Freight is increasing its footprint as a land bridge to supply the markets of the Near East and the Near East, Central Asia, and the CIS (Siegmund 2009). The automobile industry employs approximately 15 car wholesalers based in Turkey's Marmara and Boursa clusters, supplying and compounding automobiles. The most often used transportation services for Agaçl, Gefco/Borusan, Willi Betz, Gürsoy, Alice, Merkur, OMSAN, Reysaş, and Hödlmayr are those provided by professionals such as Matrix, Mobi Taş, and Vega, as well as for other companies. For example, Gefco has a dedicated truck fleet to deliver finished autos and works with Turkish subcontractors such as ANT, Tirsan Lojistik (TLS), and Matrix to complete the supply chain. According to some estimates, because they have economic relations with Turkish mass production, OMSAN and Mertur may be among the market

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leaders in that particular area of Turkey. Merkur provides services to companies such as Douş Otomotiv, which is the general importer of completed automobiles and replacement components for the Volkswagen Group in Turkey.

Conclusion

Turkey occupies a strategic geography as a bridge between Asia and Europe, and as a departure gate in the Near and Middle East. According to recent pipeline developments, such as the Nabucco-West and Baku-Tbilisi-Ceyhan pipelines, as well as the country's proximity to the Middle East border and the CIS/Caspian Region in the east, which, incidentally, has the world's richest primary energy resources, Turkey will most likely become a vital energy transmission hub. Turkey, which is currently the 17th largest economy globally and ranks seventh in Europe, has set a goal of being a member of the world's top ten economies by 2023. As a result, the country is attempting to capitalize on opportunities in the Middle East, Mediterranean, and Central Asian markets in North Africa. The importance of Turkish logistical systems and infrastructure (in terms of its linkages to key commercial logistics in Europe, the Middle East, Northern Africa, the Far East, and America) can only grow in the long run, both domestically and internationally.

Domestic and international logistics service providers have significant opportunities to grow their businesses both within and outside of Turkey - growth in business volumes and expansion in professionalism, breadth, and quality of services. However, the ability of Turkish policy to support appropriate improvement in the infrastructure of transportation and logistics facilities and their success in overcoming political, ethnic, and religious disputes will determine the rates of development and the timeframes within which this potential can be realized. In addition, economic stability in Turkey and the gradual elimination of foreign trade imbalances will aid in the management of problems that extend beyond the economy and will result in more balanced growth between flourishing regions (such as Istanbul and Bursa) and the rural eastern parts of the country, as well as greater equality of opportunity.

This research on service, logistics, and supply chain services businesses and activities in Turkey may assist in recognizing and seizing the opportunity that lies ahead.

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