

THE IMPORTANCE OF TRANSPORT SYSTEM DEVELOPMENT IN CYPRUS

Maria Parlińska, Maryna Panchenko

Warsaw University of Life Sciences – SGGW

Abstract. The purpose of this study is to investigate and assess the economic conditions and policy priorities for Cyprus transport policy. The main aspects of transportation in Cyprus and the relative position of the region as compared to a benchmark (EU countries) are discussed. The main aim is to give a more detailed indication of the strengths and weaknesses of the transport system in the country and to address areas for future intervention. Where relevant this accompanied by recommendations with respect to the overall transport policy of the country.

Key words: transport policy, motorways, maritime transport, air transport

INTRODUCTION

The goal of the study is to describe the current transport situation and policy in Cyprus. After a brief introduction on the geographical and economic characteristics of the country, it is described the situation of transport in comparison to other European countries. The analysis of the current situation is summarized in a SWOT analyze on the main strengths and weaknesses, opportunities and threats. The assessment of the transport system is followed by an analysis of the key transport policy issues in Cyprus. All comparative numerical data was taken from European statistical web-site.

DISCUSSION

The economy of Cyprus is classified by the World Bank as a high-income economy and was included by the International Monetary Fund in its list of advanced economies in 2001 [World Bank 2011]. The reasonable question to ask is how a small open economy

Corresponding author: Maria Parlińska, Warsaw University of Life Sciences – SGGW, Faculty of Economic Sciences, Nowoursynowska 166, 02-787 Warszawa, Poland,
e-mail: maria_parlinska@sggw.pl

© Copyright by Warsaw University of Life Sciences Press, Warsaw 2015

– poor in natural resources – managed to grow so fast and rebound from the catastrophe brought about by the Turkish invasion of 1974. In fact, the growth can be explained by the proper utilization of the country's available resources and comparative advantages, such as the "sun and sea" concept, which supported the growth of tourism, and its geographic location, which enabled the island to establish itself as a regional financial center. On the other hand, colonialism also left a legacy of a relatively good infrastructure, a satisfactory institutional framework and skilled human resources, all of which constituted the necessary initial conditions for subsequent economic growth. The existence of initial conditions plays a decisive role in a country's growth process. However, none of these would have been possible without the rational use of human capital.

Before its independence in 1960, the Cyprus economy was primarily based on agriculture and export minerals. It is the most easterly agricultural land in Mediterranean – for citrus plantings along the sea, grapes and olives as well cereals on the flat expanses of the plain. Cyprus has achieved substantial growth. Despite the political problems and the continuing occupation of the northern part of the island (approximately 37% of the country's territory), some periods showed very high rates of development (e.g. 35% in 1976–1977) and its economy got quickly adapted to the new global circumstances [Central Bank of Cyprus 2012]. Despite the 1974 events, the economy of Cyprus flourishes and before crisis in 2013 it was considered as one of the strongest economies in Europe.

Transport, which is vital to both the economic and social well-being of a country, experienced a parallel growth over the last 20 years. Transport in Cyprus constitutes an infrastructure sector covering a wide spectrum of different activities such as road, air and sea transport and services allied to transport, mainly provided by travel agencies and shipping offices. The contribution of the transport sector to gross domestic product (GDP) in Cyprus fluctuates at around 9%. The sector plays a significant role in development, particularly in tourism and the export of goods and other services. Tourism is one of the main economic-branches in Cyprus (in 2012 revenues from tourism represented 15.5% of the GDP. About 2.4 million tourists visit Cyprus each year (www.cyprus.gov.cy).

The domestically operating passenger transport sector in Cyprus is characterized by a majority of small and medium sized companies. In 2003 there were 1,870 buses and coaches operating in domestic passenger transport, the majority of which were comparatively old vehicles. Use of public transport has decreased from 14 million bus passengers per annum in 1980 to 3.5 million in 2002. This steady decline in the use of public transport may be caused by the rapid increase in car ownership, coupled with the poor service offered by the bus companies and the poor condition of the buses. The share of buses and coaches in passenger transport in Cyprus was about 2% of passenger-kilometers (2002). In order to shift passenger traffic from private cars to public transport, the Ministry of Communications and Works gives now (cyprus.gov.com.cy) particular emphasis to encouraging the use of intercity and rural-buses, and taxi's by:

- upgrading and modernizing the bus and taxi fleet;
- encouragement of merging and expansion of the private bus companies;
- planning new bus stations at the outskirts of the urban areas;
- adoption of integrated ticketing.

The Government increased the share of public transport for its population from 2 to 10% in 2015 (cyprus.gov.com.cy).

The road network of Cyprus comprises about 12,118 km of roads of which 257 km motorways. About 2,178 km national and more than 8,973 km of paved and unpaved roads constitute the primary road network within Cyprus and link the towns and villages. Four lane motorways connect the capital Nicosia with the main coastal cities [Central Bank of Cyprus 2012]. During the decade 1990–2013 there has been increased in the total length of motorways in Cyprus from 120 to 257 km. The growth of motorways in Cyprus was the result of first 10 years (1990–2000) development, the next 10 years could be defined as “continuous sleeping”: no investments, no projects fully implemented, no workings successfully finalized. The conditions of the road remained the same with small improvements.

RESULTS

Economic history and regional development of Cyprus are unique and cannot be compared with other developed countries as the territory’s area, population and generally, usage of roads differ. Therefore, as an example of increasing length of motorways was taken the developing countries and one well-developed country with the smallest total area.

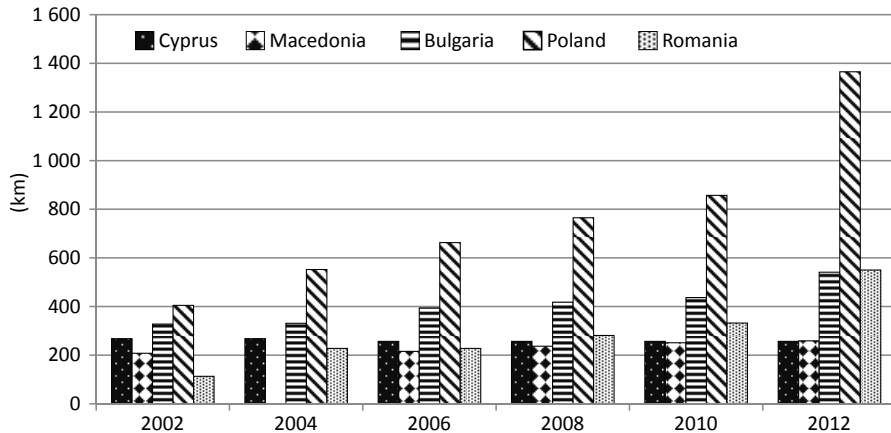


Fig. 1. Total length of motorways in selected years by country

Source: Eurostat, prepared by authors.

Poland is the largest country among the shown in Figure 1 (312,685 km²) therefore the length of motorways is shown as the highest. On another hand, Luxembourg is the smallest country (2,586 km²) with the lowest length of motorways. Comparison cannot be fair if only this data is considered. It is more reasonable to show the ratio of motorways as per total area of the country (Fig. 2).

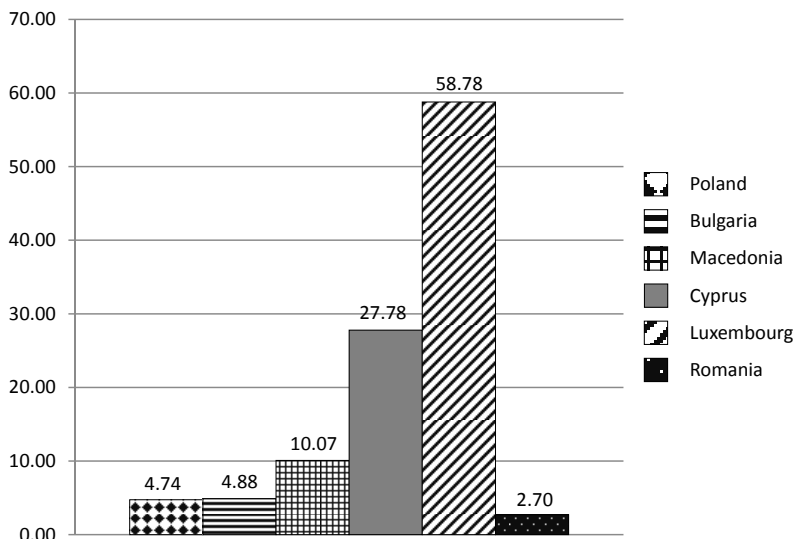


Fig. 2. Ratio of motorways as per total area of the country in selected countries

Source: Eurostat, prepared by authors.

Such ratio helps to investigate the positions of the country in road development. One of the smallest countries showed the highest ratio (58.78 km) of motorway length as per total area. As the result, Luxembourg has an effective road policy and more than 50% of its territory is covered by motorways. Cyprus has highways about on 30% of its territory. Such indicator is quite high for an island, taking into consideration that Cyprus received a relatively small amount of financial support for the development of roads than others members of the European Union, for example Italy. Italy built all its motorways due to investments by European Union funds. In fact, even the less developed region in Italy as Sicily has a highest length of motorways (Fig. 3).

Despite the limited extension that should virtually facilitate the access to terminal transports, the condition of the secondary roads network is not fully satisfactory and Cyprus can be classified as a problematic region in terms of connectivity. In road transportations, there is a lack of a satisfactory level of services in agricultural areas. Domestic goods are transported by road transport, since there is no railway or inland waterway infrastructure. The domestic road freight transport is about 43 million of tones, mostly crude and manufactured minerals. In international transport of goods about 15 millions of tones were transported by Cypriot vehicles. The main goods imported, exported and transported by road are fruits, vegetables and foodstuff.

The key feature of road transportation is the declining trend and the low level of services of public passenger transport in Cyprus, mainly due to the wide use of private transport means. Moreover, in major towns a large traffic congestion is observed, as well as high levels of pollution during rush hours. The lack of appropriate spaces, in combination with the high cost of land in urban centers, set serious limitations in improving or expanding the urban road networks.

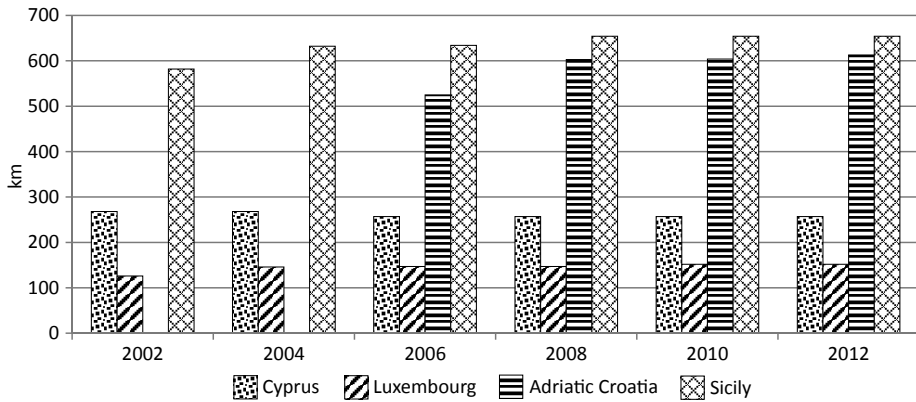


Fig. 3. Motorways network in regions in selected years

Source: Eurostat, prepared by authors.

Road safety is ranked among the highest priorities of the Government. The Ministry of Communications and Works has recently launched a 6-year Strategic Action Plan for Road Safety. The Cyprus Strategic Action Plan addresses to all three major road accident factors, i.e.: the human factor, the vehicles and the road environment (Fig. 4).

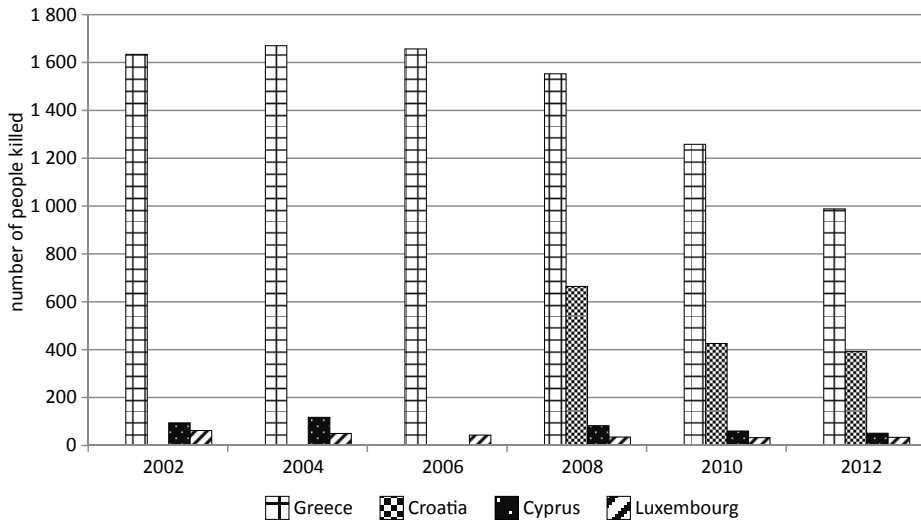


Fig. 4. Road accidents in selected years by countries

Source: Eurostat, prepared by authors.

The seaports (and airports) are important for the economy of Cyprus. Due to its excellent strategic location, it is very important for the country to maintain and improve its maritime links with the rest of the world. Cyprus has six commercial seaports with

Limassol and Larnaca as multipurpose ports and the major gateways for Cyprus to international shipping. Cyprus has also port facilities with the industrial port of Vasiliko and the oil terminals in Larnaka, Dhekelia and Moni (Fig. 5).

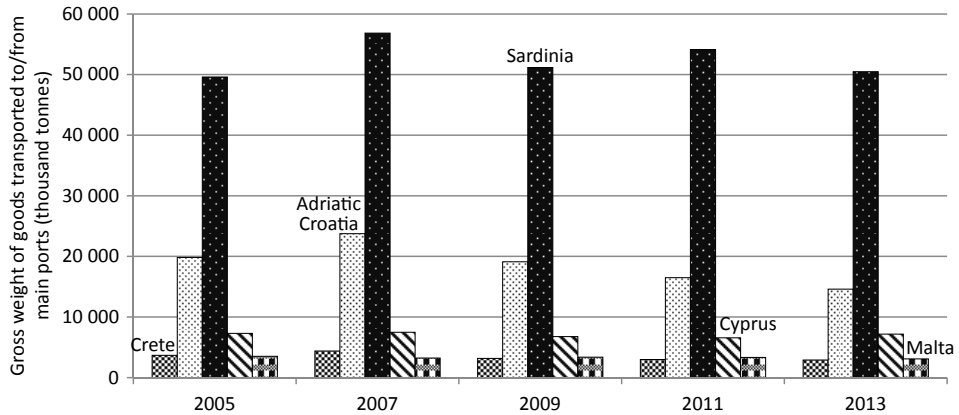


Fig. 5. Maritime transport of freight in regions of selected countries in selected years

Source: Eurostat, prepared by authors.

The Cyprus Ports Authority (CPA) is a semi-governmental organization and is the operator and regulator of the ports in Cyprus and owner of the multipurpose ports of Limassol and Larnaca. From being conventional handlers of the country's seaborne trade and passenger traffic exclusively, Cypriot ports became important cargo transshipment and cruise liner hubs. Limassol is one of the container ports in the Mediterranean Sea. Cyprus has one of the biggest merchant fleets within the EU. Most of the merchant ships flying under Cypriot flag (1,180) belonged to foreign owners (1,149) in 2004. Cyprus ports handle imported and exported cargo to and from the island, the transshipment of container traffic and passenger traffic, either as a port of call within a Mediterranean cruise or as a specialist "mini-cruise" for tourists visiting Cyprus. Concerning harbor infrastructures, the key ports are Lemesos and Larnaka, which play an important role in trade and especially in transit services. In recent years a significant effort has been made, mainly from the Cyprus Ports Authority, to upgrade and expand the harbor infrastructures, especially in the port of Lemesos. The main objective of the Cyprus Government is the development of Limassol port as a safe and efficient place for transporting goods (containers) and passengers within the framework of inter-European transport networks and the development of Larnaca port mainly for passengers. Port upgrading or transformation (in the case of Larnaca) is financed from private funds. Also the promotion of Cyprus as a base for international shipping activities is a main objective in shipping policy. Cyprus is well located to perform competitively against other regional ports as a container hub in the Eastern Mediterranean [CSIL 2005]. However, two obstacles require removal before Cyprus can consider competing in the container hub market: the Turkish embargo on vessels visiting Turkish ports with cargos from Cyprus; the labor practices in Cyprus ports, which prevent the promotion of transparent and predictable cargo handling costs, particularly affecting container vessels [Kotowska 2014].

Being an island country, passenger transport by sea is highly important for Cyprus. Passenger transportation by sea accommodates domestic mini cruise lines for tourists visiting Cyprus, as well as international Mediterranean passenger cruise between countries. Limassol is one of Europe's important cruise ports. The total arrivals and departures of passengers at the ports of Cyprus amounted to 509,000 passengers in 2004; a decrease of almost 50% compared to 2000. The port of Limassol handles about 455,000 passengers and the port of Larnaca about 54,000 passengers [Central Bank of Cyprus 2004].

Cyprus is actively participating in the priority project "Motorway of the Sea of South East Europe", connecting the Adriatic Sea to the Ionian Sea and the Eastern Mediterranean. It's the policy of the government to put its emphasis more on road network maintenance and less on new infrastructure projects. The motorway connections to the main seaports and air ports will be improved. The Ministry of Communications and Works is planning a study for design and implementation of intelligent transport system (ITS), to consider possibilities of electronic charging and real time traffic information. In view of the political pressure for a re-unification of the island and free movement of goods and people on the island, the government is considering to link the existing motorways in the northern and southern parts of the island.

For further development of Cyprus the East–West connections should be strengthened, so that the ports can be part of the Mediterranean network. The ports are the gateways for Cyprus to the world and connections should be made. Cyprus has taken part in Trans-European Networks Study of the European Union and has submitted its proposals for port development programs. Other infrastructure projects that are incorporated in the TEN-T network are: Larnaca and Paphos airports, Limassol and Larnaca ports, Limassol-Nicosia motorway, Limassol-Paphos motorway, Limassol-Larnaca motorway and Larnaca-Nicosia motorway [ECORYS 2006].

The growth of air transport in Cyprus is vitally important for the economy of Cyprus, because of its role in the tourism sector. The government plans to expand the terminal capacities of the two airports of Larnaca and Paphos to control the growth in air transport. The Government is in the process of implementing a new air traffic management system that should contribute to the efficiency of the airport system. In the field of air transport a growth in activity has been observed, a fact that is directly connected with the increases in tourist traffic. The main problems in the infrastructures of these two airports are the insufficient building facilities and the quality of services in the existing facilities. Cyprus has a wide network of air routes connecting Cyprus with Europe, Africa and Asia. It has become a major international transit station, with excellent connections within the entire region. The main international airports in Cyprus are Larnaca and Paphos. Cyprus is one of the most important member states in terms of total passenger air transport. In 2004 a total number of 6.4 million passengers passed the international airports of Cyprus.

The Ministry of Communications and Works gives particular emphasis to encouraging the use of intercity- and rural-buses and taxis, by upgrading and modernizing of bus and taxi fleet and improving connections of the intercity and urban bus routes. These and many other measures should improve the quality of service in passenger transport and encourage a modal shift from cars to public transport.

CONCLUSIONS

Transport is a key element to the socioeconomic development of Cyprus. The main transport policy of the government for the next few years is the upgrading of the main transport infrastructure (airports, ports and roads) so that it will be effectively linked with the Trans-European Networks and the free flow of passenger and goods is safeguarded. Cyprus also started a regional program in 2004, with policy priorities in infrastructure measures for SMEs in the manufacturing and tourism sector (60%), around 20% in transport. In the meantime, transport has been identified as a major contributor to environmental pollution. Road transport, air traffic and the movement of hazardous goods pose great dangers to the environment.

In 2004 the Ministry of Communications and Works adopted some measures for the encouragement of the sustainable use of energy in the transport sector. Some of these measures were: a reduction of the excise duty for small and middle class volume engine vehicles, abolished excise duty and registration fees on electric cars as well dual propulsion cars (hybrids) were subject to half the registration and circulation fee etc.

Summarizing the aforesaid, the current situation of transport in Cyprus is not good enough for well-developed country. It needs a lot of governmental investments from sides as well as an implementation of European projects. The main points can be highlighted with SWOT analyze method.

The main issues in relation to weaknesses of transport system in Cyprus are:

- expansion of cities without a plan has resulted to limited space for road network and pedestrians;
- expansion of cities with low density obliges use of private cars;
- limited funds of local authorities;
- low share of public transport;
- ageing fleet of buses;
- many authorities responsible for road network and public transport;
- no land connection to EU;
- embargo from Turkey.

As threats to Cypriot transport system, the following factors can be mentioned:

- continuous urban sprawling limits available;
- space for the development of transport;
- infrastructures;
- increasing cost for battling accidents and traffic;
- congestion;
- big cost for upgrading public transportation and obtaining increased share in modal split;
- difficulty to change the mentality of the public;
- towards public transport use and road safety;
- development of competing hubs in the region.

Even with lots of weaknesses the Cyprus economy remains vital. The Cyprus economy achieved enviable progress in the 50 years since the country's independence. The traditional agricultural economy of the early 1960s was gradually transformed into an

economy characterized by a high standard of living and a strong transport system with following breakdowns:

- interurban road network mostly completed;
- area traffic management systems are implemented for traffic controlled junctions;
- small distances between cities;
- low costs of projects compared to other countries;
- geographical location appropriate for development of transport hub;
- well organized public administration.

The successful economic performance of Cyprus can be reached with the following opportunities:

- opportunity for funding of transport infrastructure;
- projects from EC funds;
- sensitivity of government and inhabitants to environmental issues and energy saving;
- implementation of intelligent transport system (ITS) to fight congestion and accidents;
- saving funds with appropriate training and reduction of accidents;
- priority for airports and ports.

Implementation of traffic safety actions is also of high priority and the government has presented a strategic plan for road safety in Cyprus. The plan focuses on the road environment, drivers' behavior, cars and incident management. Viable public transport networks should be a priority including networks for cycles and pedestrians in cities. Therefore the improvement of the urban infrastructure and measures to improve the quality of urban transport and services are necessary.

REFERENCES

- Central Bank of Cyprus (2003). Annual Report 2002, Nicosia.
- Central Bank of Cyprus (2004). Annual Report 2003, Nicosia.
- Central Bank of Cyprus (2005). Annual Report 2004, Nicosia.
- Central Bank of Cyprus (2012). The Cyprus Economy. Historical reviews. Prospects. Challenges. Nicosia.
- CSIL – Centre for Industrial Studies – Milan (2005). Policy guidelines for regions falling under the new regional competitiveness and employment objective for the 2007–2013 period. Vol. II. Country Report. Cyprus.
- ECORYS Nederland BV (2006). Study on Strategic Evaluation on Transport Investment Priorities under Structural and Cohesion funds for the Programming Period 2007–2013. Rotterdam.
- Eurogroup signs off on bailout agreement reached by Cyprus and troika (on-line daily journal). Ekathimerini from 25.03.2013. Available at www.ekathimerini.com.
- European Commission (2005). Trans-European Transport Networks. TEN-T Priority Axes and Projects 2005. Luxembourg: Office for Official Publications of the European Communities.
- European Commission's report SWD (2015). 32 final. Commission Staff Working Document Country Report Cyprus 2015. Brussels.

- European Union (2004). Decision No 884/2004/EC of the European Parliament and of the Council of 29 April 2004 amending Decision No 1692/EC on Community guidelines for the development of the trans-European transport network. Official Journal of the European Union L 201 (Corrigendum to L 167).
- Kotowska, Z. (2014). The Competitiveness of Feeder Shipping Compared to Road Transport Journal of Maritime Research, XI, III, 21–26.
- World Bank (2011). Country and Lending Groups. Retrieved from data.worldbank.org/about/country-and-lending-groups (accessed 02.08.2011).

ZNACZENIE ROZWOJU SYSTEMU TRANSPORTOWEGO NA CYPRZE

Streszczenie. Celem niniejszego opracowania jest zbadanie oraz ocena warunków ekonomicznych i priorytetów politycznych polityki transportowej Cypru. Omawiane są główne aspekty transportu na Cyprze i pozycja regionu w porównaniu do innych krajów UE. Wskazano silne i słabe strony systemu transportowego w kraju i wyszczególniono zasady dla przyszłych interwencji. Podano zalecenia w odniesieniu do ogólnej polityki transportowej kraju.

Słowa kluczowe: polityka transportowa, autostrady, transport morski, transport lotniczy

Accepted for print: 23.11.2015

For citation: Parlińska M., Panchenko M. (2015). The importance of transport system development in Cyprus. *Acta Sci. Pol., Oeconomia*, 14 (4), 93–102.