Strategic Management of Constanta Port

Ana Cornelia OLTEANU¹, Cristian DRĂGAN², Viorela Georgiana STINGA

¹ Lecturer PhD, Constanta Maritime University, Constanta, Romania, ana.olteanu@cmu-edu.eu
² Lecturer PhD, Constanta Maritime University, Constanta, Romania, cristian.dragan@cmu-edu.eu
³ Lecturer PhD, Constanta Maritime University, Constanta, Romania, viorela.stinga@cmu-edu.eu

Abstract: Strategic management ensures the identification of environmental opportunities and threats that a sector or an organization must face in order to gain a competitive advantage in the market. Transport is recognized as a key factor in the strategy of a long term development, economic growth and quality of life. In this sense, a transport system that offers a maximum economic and social impact must be developed in order to minimize the negative effects. Considering this aspects, we must highlight that important economic changes, trade growth, technological development or environmental issues have a major impact on the maritime industry in general and on port activities in particular. The favourable maritime opening of Romania, which through the port of Constanta is one of the main distribution centers for Central and Eastern Europe, ensures the necessary premises for an economic growth. The purpose of this paper is to identify the main strategic management decisions needed in the field of maritime transport in order to ensure increased performance. We will also try to demonstrate the strategic importance that the management of the port has (through updated strategic decisions and objectives) in terms of its competitiveness in foreign trade. An analysis will be performed on the port of Constanta based on which we will identify the main decisions and strategic objectives to ensure its development and increase its competitiveness at European and global level.

Keywords: strategic management; port management; maritime transport; port reform; cooperation strategies; port infrastructure; national transport system.

1. Introduction

Given the fact that there is a strong link between transport activity and economic and social development, with great impact on the environment, we can highlight the fact that transport is the primary condition when we talk about sustainable development, economic growth and quality of life, continuously monitoring its effects on the environment, health and quality of life. (Australian Transport Council, 2006). From ancient times, maritime trade has been an important part of the growth of world trade through the revenues brought by this sector of activity. (Chang & Khan, 2019).

The international transport system is based on a railway, road, air and naval infrastructure which covers various fields such as: inter-regional transport, land and coastal transport. Considering that, globally, in the last ten years transport activity has followed the trend of global economic progress, representing a factor with a significant influence on global economic cooperation. We highlighted the importance of maritime transport in the national economy, given the fact that it continuously provides supplies of raw materials to the productive industrial sector and finished products for the markets, thereby ensuring a continuous connection between production and consumption, ports being considered "windows" to the rest of the world (AlRukaibi et al., 2020), with a significant impact on national and global economies. (Bonette, 2020).

An adequate port reform can widen the varieties of the products traded and lower their prices. The development of world trade has led to an increased demand for flexible door-to-door transport, which allows a general cost reduction. In this sense, we must take into consideration developing port-oriented attributes such as: the use of electronic data identification systems, harmonization and connection of ports through customs and administrative procedures, liberalization and improvement of port-hinterland connections with significant impact on reducing costs (Raza et al., 2020).

The last decade has seen an increase in ship traffic, which involves significant cargo flows with a significant impact on port infrastructure. Considering that, decision makers must take into account the port capacity when they plan traffic management and port safety procedures (Olba et al., 2019). In international trade, maritime transport is a tool of major importance, ports representing an essential configuration of national transport infrastructure, linking trades and operating as an economic multiplier of well-being. The efficiency of the maritime industry consists in the fact that it represents a reliable and economical process for transporting
goods over long distances, depending on the internal transport arrangements and well-dimensioned infrastructure (Goolam Nabee & Walters, 2018).

As highlight by Roe (2013) when referring to the developments related to maritime transport and to maritime policy-making, postmodernism is a concept identified as central. Even if usually the concepts and theories of postmodernism are licked to aspects regarding philosophy, literature, culture, art and film, religion and ethics, there are cases when we can associate it with some technical concepts and with the knowledge economy, part of post-industrial economy. It is well known that in the transport sector, any postmodernism changes regarding the strategic management that we will address within our paper have an important role in improving the maritime sector.

Studying the literature review related to postmodernism there can be seen a lack of researches that directly connect it with the transport sector or other parts of this sector, like infrastructure or logistics. When referring to maritime transport we need to emphasize the presence of postmodernism in relation with mobility of people and things (that automatically attracts the culture mobility) and with the organizational level (that involves different parts connected to commercial aspects of the maritime sector) (Dragomir, 2019).

One of the most complex work regarding the maritime postmodernism was written by Roe in 2013, an approach on maritime postmodernism in practice. The paper highlights important aspects concerning postmodernism and maritime architecture, postmodernism and organizations, logistics (just in time and lean supply chain management), postmodern maritime governance, green shipping or port infrastructure.

We can say that the concept of postmodernism is strongly related to transport planning, a key element in strategic management, either for a port or a transport hub.

Increasing the efficiency of a port, in terms of goods operated within in or regarding the intercultural relations established between shipping companies, maritime and inland operators, authorities, clients and individual in general, will lead to a positive impact on the country’s economic development.

2. General features of strategic management

Strategic management is a complex decision-making process. An organization can make three categories of decisions, namely: operational, tactical and strategic decisions (Beizadea & Popa, 2009). The most common are operational decisions, characterized by repetitiveness, having a short-term effect, aiming to maximize the profit of the operating activity (eg:
tracking stock, production volume, sales, pricing, etc.). Such decisions, due to the degree of uncertainty and relatively low risk can be delegated and decentralized. Less common than the previous ones are the tactical decisions that are more difficult to organize and predict, being harder to detect and correct deficiencies between the proposed targets and the actual achievements (e.g., delivery deadlines, quality improvement, etc.). The most important tools of the managerial act are represented by the strategic decisions, which represent on the long-term the fundamental objectives of the organization, objectives such as: diversification, growth, etc. adopted in conditions of high risk and uncertainty, regarding the object of activity of the company and the market it operates. With the help of decisional models, strategic decisions can be made, in a unique manner, representing the path followed by the organization (McNichols, 1997; Popa, 2004).

Strategic management is the harmonization of the organization’s external and internal environment. Its purpose is to identify environmental opportunities and threats, establishing a strategy in order to face internal and external events. The organization must adopt an anticipatory (proactive) behavior towards environmental changes in order to gain a competitive advantage on the market. (de Fátima Teles & de Sousa, 2016). Therefore, prospecting has a fundamental role in the process of strategic management, consisting in creating different scenarios for the evolution of the organization (Nicolescu & Verboncu, 1999). In practice, the most used method is the scenario method which consists in creating hypotheses related to the future of the entity and its course, and the best known method is the Delphi method (Dimic et al., 2016), which involves independent formulation and selection of possible scenarios by experts. Transport is recognized as a key factor in the strategy of sustainable development, economic growth and quality of life given the correlation between it and social and economic development and the impact on the environment (Zohrevandi & Ghazanfari, 2013).
The basis of the sustainable development strategy is to monitor the negative impact of transport (e.g., pollution, accidents) with direct or indirect effects on the environment, health and quality of life (Finnish Transport Agency (2010)). The quality of life of a population depends on the quality and efficiency of the transport system, given that without this service it would be impossible to carry out economic activities because access to resources and markets would be restricted (Hertfordshire Constabulary, 2020).

Given the performance in the private sector, it is understandable that public sector institutions are increasingly interested in using strategic planning as a strategic management tool (University of Glasgow, 2016).
3. Strategic management of maritime transport activity

The Romanian Ministry of Transport (2014) through the Public Transport Policy aims to align the national transport system with the European one by: diversifying and improving the quality of services, developing the transport network to meet transport demand, increasing transport safety and traffic safety, positive environmental effects and reducing the impact of transport globally and locally. A modern international transport system must be based on an air, road, railway, naval infrastructure that covers different areas such as: coastal, land, and inter-regional transport. A significant contribution to the total cost of goods needed for exchange is provided by the cost of transport, so we can discuss in this context the fierce competition between the various means of transport and between dominant means of transport to different areas. Given the fierce competition between the countless means of transport, we cannot talk about development and technical progress if a major cooperation between the mentioned means of transport is not possible in order to provide end customers with fast, safe and high quality services. Increasing the efficiency of port infrastructure will lead to optimized port services, reduced costs and a positive impact on the country's economic development. Thus, the lack of investments in these sectors could have unfavorable effects on importers and exporters and, of course on the country's economic development and international trade. We can say that the port is the main engine of an economy (Bonette et al., 2020).

Globally, in the last decade, transport activity has evolved in the same trend as global economic progress, representing an indicator with a major influence on global economic cooperation. The essential contribution of maritime transport is to continuously support the link between consumption and production. Taking into account the maritime opening of Romania, an optimal connection between production and consumption should be ensured by using the port infrastructure to its maximum capacity. The choice of the ports is made depending on the location, the possibilities of satisfying consumers' needs, attractive prices, connections with the rest of the ports, adequate infrastructure, combined with experience, creativity, professional training (Goolam Nabee & Walters, 2018).

Thus, through an adequate port reform (Beizadea & Popa, 2009) it is possible to optimize the competitiveness of external trade (by reducing transport costs and port services), transfer of new investments to the private sector, efficiency of services and port operations, decrease of port costs and the rate of ships that ultimately lead to an increase in the range of commercialized products and at lowering their costs. In order to carry out a
feasible port reform, a decision that targets the following is needed: the way of concretizing the public interest, subsidizing the port sector, the methodology of involving the private sector in port activity, adjusting the legal framework, work process, implementation responsibility, preparation of transactions.

The degree the private sector involvement in the port activity depends on market weaknesses, on its compatibility with other public-private partnerships that come from other economic areas. It also depends on the interests of future investors and on the results of competition with other ports in the area. Thus, the involvement of the private sector in port activity should aim achieving public interest targets. Increased international competition means achieving a cost-effective transport system, so the port is a key element of foreign trade. The perpetuation of competition in the maritime field can be achieved through innovation, which should start from identifying the motivations of port administrations, port operators, carriers and all entities involved in this field of activity, so that consumers could enjoy improved services at competitive costs. This can be achieved either by reducing tariffs due to a lower fuel consumption, unit costs –improved use of assets, or by differentiating competitor’s services offer by increasing the services offered or the coverage network (Acciaro & Sys, 2020).

The integration of seaports into the global supply chain can be ensured through an information technology system, which is incorporated into shipping companies. Thus, the challenge of the future consists in carrying out the port administration reforms through strategic alliances that will allow them to offer superior services and increase the port performances. The strategic alliances made between the terminal operators would create the port infrastructure necessary to carry out the activity in order to increase the market share and to contribute to the economic growth and well-being (Sirajuddin et al., 2019).

The main needs that create the competitive environment of the port are presented further on, so the competition between the existing market participants directly influences the degree of development of the respective port. The level of competition depends in particular on: access to internal markets (geographical location, political factors, inadequate infrastructure, etc.), the potential of regional markets to meet aggregate demand (may lead to the use of destructive prices), encouraging port competition (depending on traffic, geographical features of the port, port decongestion capacity), the transhipment market (high competition), the risks of port competition (directly dependent on competition in the distribution markets), the limitation of port competition (setting the maximum number of suppliers),
the degree of coverage of financial losses due to competition market share of each port operator), the monopoly or control of services and operations (directly influences the level of port competitiveness), the financing by the central power of operations within ports (destabilizes competition between operators port). Another important factor is the appearance of new candidates on the market, which depends on the following factors: the conditions of operating contracts (they restrict the emergence of new service providers), natural limitations (lack of land for facilities for which solutions have been found adjacent), the investments needed to build port facilities (construction of access roads, quays, constructions, dredging operations, etc.), distribution networks (especially in the container market), the strengths offered by existing operators and customer loyalty (fast, transparent customs operations, easy adaptation to customer needs, experienced staff, adequate operating rates, good location, etc.), expenses related to moving operating ports (depending on the nature of the goods operated). Of major importance are possible global port substitutes that depend on: substitutable products in foreign markets (changes in consumer needs can improve/worsen the economic activity of the product market), the share of port costs in the price of the finished product (influences consumer behavior towards the product), choice alternative resources operated in other ports (depending on port facilities), costs incurred in replacing supply markets (directly influences the bargaining power of ports). Also with a significant impact is the bargaining power of consumers of port services that depends on the following factors: changing business climate (strategic alliances, mergers, partnerships, agreements between users can have a significant impact on negotiations with port authorities in a area), assessment of the value of goods transited (transformation of goods into finished products involves major contributions to the local market - jobs, taxes paid, etc., but for such business and port authorities must make concessions), the possibility of changing the area of operation (power user negotiation depends on the possibility of changing the operating location) collaboration between market participants (important user of port facilities in a port can influence the local economy of the port), port facilities made by operators (make it almost impossible to change the location of the economic activity carried out by it), the significance of the port activity for the local economy (it directly influences the behavior of the port managers). Last but not least, we mention the negotiation capacity of port service providers that depends on experience (experienced human resources, material resources necessary to carry out the activity, providing specialized services, etc.), vulnerabilities and shortcomings of port activity in an area (stopping the activity of certain
employees, or services may influence the port activity of the area), the characteristics of port operation contracts (may influence the degree of investments made in that area, or may grant an exclusive right to operate, etc.) investments in port facilities (may benefit from the concession of services), the links between the customer and the port service providers (influences the decisions related to concessions, port operations, rights over port assets, etc.).

From competition’s point of view, according to UNCTAD (2009), the most remarkable ports are those in Asia, and at the opposite pole are those in Africa, given the inadequate infrastructure and the high number of ports relatively small in size (Goolam Nabee & Walters, 2018).

From innovation’s point of view, the greatest advances have been registered in the automation of operational processes in container terminals (depending on the consistency and volume of the flow), technological innovations in handling equipment and ships. Thus, the speed and adaptability from the point of view of the port can lead to a considerable decrease of the costs involved (Wang & Mileski, 2018).

As main obstacles that should be overcome by innovation in the maritime field we can mention the deficiencies that appear in terms of collaboration and knowledge transfer, the conservatism of the administrators of the companies involved, the size of the entities that can hardly access certain subsidies and implicitly insufficient funds in certain sectors of activity. In recent years, the maritime sector has shown considerable interest in innovation through the use of automation, digitization, sustainable shipping, software, big data, modeling and simulation, research on unconventional fuels, propulsion alternatives and operational strategies to increase fuel efficiency or cost reduction. Significant changes have also taken place in the port sector by improving the use of infrastructure, the coordination of transport modes, the efficiency of cargo handling operations with significantly improved impact on the environment (Acciaro & Sys, 2020).

Wang et al. (2019) demonstrated that the choice of an overall business strategy depends on the strategic positioning of the port market. If the port is considered to be an international gate, it must adopt the global cost management strategy. On the other hand, if it is a transhipment port it will require a strategy of general differentiation, which is dependent on: reliability, speed (high for a small market uncertainty) and flexibility (high for a high market uncertainty).

Thus, in practice, depending on the characteristics of the ports and the police practiced, numerous models for the development of these strategic alliances are known. The World Bank (2007) highlighted 4 port management systems:
1) **Service Port or operational** port (private sector is not involved in loading / unloading operations, does not present market orientations, public-private partnerships are non-existent and bureaucracy is high; eg Ukraine, Israel);

2) **Tool port** (by lease, the private sector can carry out loading / unloading operations; characterized by a centralized plan and a limitation of public funding and public-private partnerships; eg South Africa);

3) **Landlord port** (the concession grants the right to the private sector to carry out port activity, pursues local and community development but presents narrow perspectives of regional development being characterized by bureaucracy and rigidity; eg: France, Italy, Belgium, Germany, Netherlands);

4) **Private Service Port** (port infrastructure and superstructure is provided by the private sector, presenting a high flexibility, being market-oriented, but does not pursue regional and community development; for example: Australia, New Zealand, etc.).

Thus, the characteristics of the port have a beneficial impact on strategic alliances, which in turn influence the progress of maritime accessibility, port infrastructure, with a beneficial impact on port performance, integrated information technology system and terminal handling tariffs (Sirajuddin et al., 2019).

In order to strategically develop maritime activity in general and port activity in particular, port reforms can be used. The port reform represents the transformation of the institutional structure of the port commercial activity and the intervention of the private sector in operations and investments, realizing connections between the public and private sector that pursue the following reasons:

- **general** (increasing the quality of services provided, changing the attitude towards consumers, increasing port efficiency, reducing costs and implicitly prices, increasing competition between ports);
- **administrative** (reduction of bureaucracy, removal of monopoly and depoliticization of the port administration);
- **financial** (stimulation of foreign capital, reduction of commercial risks and expenses);
- **labor** force (increase in the private sector, restructuring and removal of restrictions).
An optimal port reform (Beizadea & Popa, 2009) requires the central authority to establish precise objectives that consist of either partial privatization (restricting the role of the public sector) or full privatization.

As Sirajuddin et al. (2019) points out in his paper, the port management model depends on its characteristics and management policies. For the development of port business there are different alternative cooperation strategies, such as: Build-Lease-Operate (BLO), Build-Operate-Share-Transfer (BOST), Rehabilitate-Operate-Transfer (ROT) and Build-Rehabilitate-Operate-Transfer (BROT). Practice has shown that the most common are operating licenses and BOT cooperation.

The Research conducted in this area has highlighted the significant impact of the private sector in optimizing port efficiency and productivity. At port level, most of the time pilotage, towing, mooring or dredging services are privatized; there are very few public services. Subordinate to the state are activities that are specific to the port authority, those of traffic control and auxiliary navigation systems, those on waste management (which can be privatized with a strict control of the Port Authority) or patrol and emergency services, even management services.

Strategic management at port level must ensure that the needs of consumers are met. In order to meet that, there can be developed strategies that include strategic objectives and investment measures, plans proposed by private organizations and operators that work in the maritime transport market or wish to enter the market.

4. Strategic management of Constanta Port

For the Romanian economy, the maritime infrastructure is very important, considering the high volume of transported goods, the efficiency of the ports having a significant impact on the commercial and economic policy in the port industry. Thus, it is necessary to initiate efficient reforms based on the identification of instruments that influence the strategic development processes of seaports, followed by the improvement of the administration system of state entities, updating regulations, optimizing the competition of port activity and the role of maritime transport. The efficiency of the seaport involves the analysis of the result obtained using the resources available to obtain it, so economic analyzes can be performed (based on profits) or technical analyzes (based on port flexibility - environmental conditions and technological development and based on technical equipment) (Boiko et al., 2019).

The port of Constanta is a public-private seaport owned by the Romanian state that ensures its operation and regulation through the actions
of C.N. Maritime Ports Administration S.A. Constanta (as a port administration) and the Romanian Naval Authority (state authority in the field of navigation safety) subordinated to the Ministry of Transport and Infrastructure. The ships and goods services in the port of Constanta are performed by private organizations, and the coordination of ship traffic is performed by the Commission for the Coordination of the Movement of Sea and River Ships in the Seaports of Constanta, Mangalia and Midia.

The port of Constanta is one of the most important distribution centers for Central and Eastern Europe considering the advantages offered: direct access to the countries in the area, Ferry Boat and Ro-Ro terminals, multifunctional port with modern facilities and depths that ensure the mooring of large ships, container distribution center, adequate connections with the rest of the transport modalities, adequate surfaces that ensure future developments, has the status of a free zone and thus facilitates foreign trade and transit of goods. The port of Constanta ensures customers a wide variety of services provided by port operators such as: towing, piloting, agency, bunkering, mooring, docking, supply, assistance, rescue and refueling of ships or construction of ships and floating structures: Constanta Shipyard.

Regarding the goods operated in the port of Constanta, we can emphasize their diversity. There are specialized terminals that ensure goods loading, unloading or storage. They are equipped with specialized equipment, operating high capacities in the shortest and most productive time. The figure below shows a general view regarding the traffic registered in the port of Constanta in the last 5 years.

![Figure 2. Traffic registered (million tons)](image)

Source: own calculations based on Port of Constanta data (2018)

According to the latest data published by APMC regarding the types of goods that transited the port of Constanta, we can also notice from figure 2 a tendency of increase in the last 5 years.
The same trend can be noticed in the figure 3 in which the situation related to maritime, river and cabotage traffic for the same analyzed period is presented.

The figure 4 shows the traffic situation registered in the port of Constanta for the last 5 years, from which one can easily notice an increasing trend in terms of export/import and a decrease in transit traffic.

Various projects are currently performed in the port of Constanta aims to modernize the infrastructure by increasing the alignment of the existing berth, placing equipment, utilities on newly created platforms, improving maritime access, modernizing the fleet of technical ships for waste collection from ships, ensures support for environmentally friendly, safe transport systems, balancing the accessibility of rural-urban areas, innovative solutions for the use of mobility, accessibility measures that ensure increased functional-social cohesion between the port and city, sustainably with economic growth; modernize the port infrastructure (deepening the canals, basins), increase the safety of navigation; carrying out infrastructure works for the development of specialized terminals; the extension of the road access for the rationalization of the traffic; modernization of the energy system, the sewerage, water supply system; the development of the specialized berth in a deep area to increase the
competitiveness, handling capacity of cereals; doubling the railway access roads in order to increase the (un)loading operations that will ensure the supply of the container rail traffic.

![Figure 5. Source of investments in the port of Constanta](image)

Source: own calculations based on Port of Constanta data (2018)

The main financing (10 million EUR) from which APMC benefited are budgetary allocations, followed by the attracted European Funds as well as by its own resources, according to figure 5, amounts that were used for infrastructure, superstructure, purchase of equipment, as shown in figure 6.

![Figure 6. Destination of investments](image)

Source: own calculations based on Port of Constanta data (2018)

In the future, the port of Constanta, aims to implement projects with great strategic importance, which concern: development of the artificial island-generate new operating areas, construction of a road bridge-connect the artificial port island by road, construction of the LNG terminal to reduce dependence on energy supply, natural gas in Russia, transit problems, construction of a wind farm for the benefits of renewable energy technologies, creation of new anchorages for barges, tugs, pushers, construction of the LNG refueling station to cover the fuel requirement.

An important strategic role is played by the favorable position of the port and the multimodal/intermodal connections within the port. In terms of connections, the Port of Constanta hinterland provides support for goods
that are made, consumed, shipped, including in the Central and Eastern European region.

The port's transport networks provide essential links for the multimodal transport of goods through the transport corridors that ensure connectivity with European networks. Strategically, the railway connections of all port terminals, the opportunities offered by the Danube River, the presence of Pan-European Corridors, the location of Mihail Kogalniceanu International Airport, the important length of the pipeline network are elements that make Constanta Port an important multimodal and intermodal transport hub.

![Figure 7. Traffic of ships by type](source)

Source: own calculations based on Port of Constanta data (2018)

Considering the analysis that was made in the last years of the ships types, there is a tendency of decreasing the traffic of cargo ships and a relatively constant evolution of the other types of ships that have transited the port of Constanta.

![Figure 8. The structure of revenues](source)

Source: own calculations based on Port of Constanta data (2018)

According to the latest financial data published by APMC, as can be seen from the figure 8, it can be easily observed that the main revenues (77 million EUR) obtained are those related to ship services, rental income,
followed by the revenue related to the utilities offered. At present times, the ports have to face an increased port activity and ships dimensions. They have to realize strategic planning that will materialize in partnerships that can generate competitive advantages. The competitiveness of ports is currently dependent on the network in which they operate (Haezendonck & Langenus, 2019).

Considering all, we can say that Romanian ports also seek to modernize traditional port operations to ensure superior efficiency, providing specialized services for economic, transport activities and setting competitive prices that lead to an increased number of customers, an objective that can be achieved by attracting private suppliers who will invest in creating high-performance port facilities and by reducing bureaucracy.

5. Conclusions

Given the recent changes in technology, consumer needs and the globalization of international economies, a question is being asked. Can the transport sector meet these challenges? We must see how we build and manage the transport system in order to minimize negative effects and maximize social and economic impact.

Traditional port operations are being modernized by increasing the number of customers and setting competitive prices, which can be achieved by attracting private suppliers who will invest in creating high-performance port facilities and by reducing bureaucracy. Thus, Romanian ports must be competitive at European, global level and provide specialized services for economic and transport activities. It is needed an infrastructure for road, air, rail, sea, river transport, that should ensure the connection with the consumption and supply markets. In the port of Constanta, the services for ships, goods are operated mainly by the private sector in competitive conditions, respecting the principles of the free market. According to studies, maximizing port performance can only be achieved through adequate privatization, using the efficiency and experience of the private sector, reducing state involvement in public sector’s budget management and removing trade barriers.

Important economic changes, trade growth, technological development or environmental issues have a major impact on the maritime industry in general and on port activities in particular. That is why the decisions and objectives set through strategic management have a key role in increasing performance and competitiveness.
References

https://doi.org/10.1080/03088839.2020.1737335


Australian Transport Council (2006). *National Guidelines for transport system management in Australia - Strategic Transport Planning and development Australia.*  

http://docplayer.net/49614159-Managementul-strategic-al-porturilor.html

https://doi.org/10.30525/2256-0742/2019-5-5-32-38

http://dx.doi.org/10.14807/ijmp.v11i2.966

https://doi.org/10.1108/MABR-01-2019-0004

http://doi.org/10.1016/j.trpro.2017.03.069


https://doi.org/10.18662/po/61


