

Galati, a Strategic Point between Europe, Middle East and Asia with the Help of Danube

Sergiu-Lucian Sorcaru¹

Abstract: In this study, it is our intention to highlight the importance of the Danube as European axis and as economic value. Since ancient times, the Danube is recognized as important river and strategic branch. Danube is a major policy concern in Europe, as it passes through ten different countries, the European Union valuing this aspect and the possibility of extending from the middle to the east. Our intention is to emphasize that the Danube is not just a natural border but also an important economic source in the space of Romania. In Galati, the largest port on the Danube, the river-sea traffic but also an important part of the industry of the city is supported by the river. The results highlight the economic opportunities offered by the Danube. The economic advantages represented by the Port of Galati using river routes, both at continental and global level, with new opportunities for rebranding the Galati Port. The added value to the scientific interpretation of economic resources of the Danube is represented by the extensive coverage of economic activities carried out on the river and on its banks and to identify the offered opportunities. The originality comes from researching the economic strategies used by the ArcelorMittal Galati steel company, which uses the location and the advantages of the Danube.

Keywords: ArcelorMittal; the European Union; the river transport; Galati port; development

1. Introduction

The Danube is the second longest river in Europe after Volga, but the longest in the European Union, being the only European river that flows from west to east. On its path it passes through 10 countries (Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria, Moldova and Ukraine) and four European capitals (Vienna, Bratislava, Budapest and Belgrade) with tributaries of other 7 countries.

Danube is a lynchpin of Europe, called by others the backbone of Europe via the Rhine-Main-Danube Canal it is established the link between the North Sea and the

¹ PhD in progress, “Alexandru Ioan Cuza” University of Iasi, Faculty of Economics and Business Administration, Specialization: Economics and International Affairs, Romania, Address: 20 Carol I Blvd., Iasi, Romania, Tel.: +40232 20 1070, Corresponding author: sorcarusergiu@univdanubius.ro.

Black Sea, the shortest waterway. This connection is possible since 1992, the Rhine-Main-Danube Canal also called the Europe's Canal. (Sobaru, Nastase, & Avadanei, 1998) The channel is part of the maritime route between Rotterdam and Constanta, which is shortest navigable connection between the North Sea and the Black Sea, on the rivers Rhine, Main, Main-Danube Canal, the Danube and the Danube-Black Sea Canal.

There have always been several plans to link the three rivers, around 793 Charlemagne ordered the construction of a canal linking the river Schwäbisch Cut and Altmühl called Karlsgraben ("Chanel-Charles"). Then between 1846 and 1836, it was built Ludwigskanala ("Channel-Ludwig") between Kelheim and Bamberg and it broke down during the Second World War.

In ancient times the Danube had multiple names Istros / Istru / Hister / Danastru. The Trace name of the Danube (Istros), also used by Greek ancient sources by Herodotus nicknamed also the "Father of History", who recorded in his writings valuable information about the lands crossed by the Danube "Hister (the Danube) flows from the land of Celts near the city Pyrene and it flows cutting Europe through its middle. Hister ends up flowing into the sea in Pontos, after having passed through all of Europe, where is Istria, a Milesian colony. Hister is known to many, as it flows through inhabited lands. Hister, which is the greatest of all rivers we know, always flowing at the same rate, during summer and winter. It's the first river in Scythia, coming from the West: it gets to be the biggest river as it receives the waters of several other rivers", says the Greek scholar, two and a half millennia ago. (**Sources on the history of Romania, vol.I, 1964)

In mythology the Danube name comes from the Roman god "Danubius" or the River God, the meaning can be derived from the Slavic indigenous tribes who called it "The Great Water".

In the history of Napoleon Bonaparte the Danube was called "Le Roi des fleuves de l'Europe" (the King of European Rivers) and the Romanian historian Nicolae Iorga called it "the richest in gifts".

At the proposal of Danubian countries and under the auspices of the International Commission for Danube River Protection in Vienna which was held on June 29th 2004 for the first the International Day of the Danube.

Danube springs below the peak Kandel, Black Forest mountains in Germany, through the union of two brooks Brigach and Breg and it flows through the Chilia, Sulina and St. George in the Black Sea situated near the forest Caraorman which in

Turkish means still the Black Forest. At the point of the source of the river it was built a statue depicting two women, a mother and daughter, the Mother symbolizing Europe and the daughter the Danube. During its travels around 2860 km, it goes through ten countries, four cities and 96 capitals, with one hydrographic basin of 80,000,000 inhabitants. Of its length more than one-third is on the territory of Romania, about 1075 km. According to its size is the second largest in Europe and the twenty-sixth in the world.¹

The Danube can be called an Axis of Life for Europe as it covers a broad spectrum of cultures, languages and historical basis, making it the most important international river. Danube is recognized by the European Commission as “a future central axis for the European Union” and that “the most important non-oceanic body of water in Europe.”²

Danube has played an essential role in regulating and political evolution of Central and Southeast Europe. Its shores, lined with castles and fortresses, formed the boundary between the vast empires, and its waters served as a vital commercial highway between nations.

Since antiquity, the Danube resisted as an important but also strategic river artery. Thus, Herodotus speaks of the expeditions of King Darius of Persia, north of the Danube, and Arrian tells about the Alexander Machedon’s attempts to secure the Danube’s mouths. Danube has a very special position due to its size, but also its course from west to east, unusual in Europe, forming an important axis of navigation, due to crossing ten different countries. Along the river we encounter different cultural and political interests. Depending of the landscape: the alpine region, from which the river springs is a Germanic region, the Pannonian region unites Austria with Hungary that have dominated Slovakia and Croatia, and in the inferior area the Carpathian-Balkan region offers natural border to the north of Romania and south Bulgaria, encountering on the way to shedding Ukraine and the Republic Moldova.

All the countries in which the Danube River goes through use it for freight transport, generating hydropower, supplying the industrial and residential water, irrigation and fishing. The longest river in the European Union region provides 53 ports of its banks. One of the most important economic aspects that the Danube offers is the navigation, naval transport, the water transport being by far one of the

¹ <http://www.danubeparks.org/>.

² http://www.danubeparks.org/?lang=ro_ro&story=9.

best methods of transport of goods due to the price. Rhine-Main-Danube Canal in 1992 offered the shortest navigable link between the North Sea and the Black Sea. Between Romania and Serbia we meet the highest hydropower plants called Iron Gates I, and downstream we have Iron Gates II both hydropower plants are operated in partnership by both countries.

Fishing on the Danube, which was one of the most important food sources in the Middle Ages fell dramatically in the modern times, however we still meet fishermen along the Danube and in some points of the river we even encounter a significant industry, as is the Danube Delta, where there is the practice of commercial, sport, scientific and family fishing.

The Danube offers many tourist attractions on its course. The Danube in Austria, is the historical center of Salzburg, Schönbrunn Palace, Cultural Landscape Wachau and Vienna's historic center, locations which we find in UNESCO patrimony, along with historic center Cesky Krumlov, the historical center of Prague in the Czech Republic. In Germany, the Regensburg old city and in Budapest (Hungary Buda district and the banks of the Danube) and in Romania, at the mouth of the river into the Black Sea forms the Danube Delta Biosphere Reservation. We can say that the Danube is an exceptional patrimony of humanity providing exceptional natural and cultural objectives.¹

2. The Economic Importance of the Danube in Romania

Danube is one of the major components of the landscape along the Carpathians and the Black Sea. Danube enters into Romania through the small fishing village of Bazias drawing the natural border between Romania and Serbia within a distance of 235.5 kilometers, then tracing the southern border of Romania with Bulgaria over a distance of 469.5 kilometers in the Bulgarian town of Silistra and in the Romanian city Calarasi, there it follows a route north to divide the Romanian Dobrogea Plateau, it splits into two arms to Patlageanca Chile which has 60% of the flow and Tulcea 40% of the flow. North of Tulcea, Tulcea branch splits in two other arms of Sulina and St. George crossing the newest Romanian soil the Danube Delta until it flows into the Black Sea. The Danube River is the last portion borders with Moldova and Ukraine.

¹ <https://en.unesco.org/>.

The Danube's course can be sub divided into four sectors: Bazias-Iron Gates sector also called the Danube Gorge, as the Danube has cut the Serbia's Mountains and Banat's Mountains forming the longest gorge in Europe, sailing through the gorge was hampered by the presence of rapids and rocks in the riverbed river representing a danger to ships; currently they have gone through the construction of the dam and reservoir. On the dam is built a road linking Romania to Serbia. The area is a tourist target by the image of Decebal (the last king of Dacia) carved into stone, 55m tall, representing the largest stone carving in Europe, located in the neighborhood of Orsova City. This region is called Cazanele Dunarii/Danube's Boilers, the mountain shelters also two caves and Gura Ponicevei and Veterani. Danube Boilers and massives Great Ciucarul High / Small Ciucarul part of the Iron Gates National Park.

The Iron Gates-Calarasi is the Danube's sector located in the southern Romanian Plain. Due to the wide meadow below and landscape, the Danube has a considerable width, which makes depths to be smaller, providing only a draft of 2 m, improperly for ships; there are also islands (such as Ostrovul Mare). In this region there were built two hydroelectric Iron Gates I and Iron Gates II, this area is called the Danube Meadow, in the communist era it has been drained and dammed to the use of agriculture. The most important cities in this area are Drobeta Turnu Severin being created during ancient Rome and became the first urban center in the region and third in the province of Dacia, Giurgiu where there is the bridge over the Danube, Giurgiu-Russe, which connects Romania and Bulgaria on the Earth's surface, Calafat with Calafat –Vidin brodge, Calarasi known food industry, steel and paper industry.

The Calarasi-Braila sector is called the "ponds" sector and it stands out by opening the Danube into two arms that later come together. The Calarasi-Braila sector has the largest width between 15 and 30 km; on this sector of the Danube we meet Braila's Balta Mica and Balta Ialomita. Balta Mica of Braila is a natural park and it is a protected area by the national interest. In the sector of the Danube there is also the Big Island of Braila or Balta Braila, now it is occupied 94% of agricultural land. From the economic point of view, this area is known for fertile fields, and bridges, a railway and road between Fetesti and Cernavoda and another between Giurgeni and Vadu Oii. It was built at Cernavoda the only Nuclear plant in Romania that provides up to 18% of energy consumption of the country and from here it starts the Danube-Black Sea Canal. The channel has a total length of 95.6 km and is part of the Rhine-Main-Danube. The canal was inaugurated on 26 May

1984. Nicolae Ceausescu used this route ships to shorten the road by 400 km. (Benea, 2009)

Between Braila and Sulina we meet the maritime sector of the Danube, it so-named as it has a depth of up to 12 meters. At Patlagenica the Danube splits, creating Chilia's arms (which forms the border with Ukraine) and Tulcea which then bifurcates into the arms of Sulina located in the Delta and it is used for maritime traffic and St. George. In this sector of the Danube it was created Danube Delta, which provides wildlife with over 360 species of birds and 45 species of freshwater fish. The site Danube Delta entered the UNESCO World Heritage in 1991 and it is classified as a Biosphere Reserve in Romania nationwide. We meet on the sector of the Danube the ports of Braila and Galati cities. The port of Braila, one of the largest river ports in Romania, shipbuilding industry is the key activity of the port, which is accessible to small and medium sized vessels. River port of Galati is the largest port on the Danube River and sea. Shipbuilding industry is the most important activity of the port. Galati port is used by the company Mittal Steel, the largest Romanian steelmaker, for transporting raw materials and products.¹

Also in this area we mention Tulcea, an industrial city, modern port for passenger ships, as well as those carrying industrial products, especially raw materials. Tulcea is located such as to be accessible both by sea and by ships on the Danube, having a great commercial advantage.

The Position of Galati Free Zone is an area in which goods are considered to be located outside the customs territory of the European Union, thus facilitating its use as an important storage, warehousing, manufacturing, processing, training and transit point between European markets and the Middle and also a point that can serve millions of consumers.²

3. ArcelorMittal – the Motor in the Galati Industry

ArcelorMittal largest steel producer in the world was born in May 2006 from the merger of Mittal Steel Company N.V and metallurgical French company Arcelor. ArcelorMittal S.A. based in Luxembourg and is ranked 108 in the Fortune Global 500, in 2015, is one of the largest corporations in the world.³

¹ <http://portgalati.com>.

² <http://zlgalati.ro>.

³ <http://fortune.com>.

ArcelorMittal is the largest steel and mining company integrated of the world, present in over 60 countries, and it provides more than 210,000 jobs. ArcelorMittal is the leader in key global markets, including automotive, construction, household appliances and packaging, with advanced systems of research and development, technological systems and quantifiable reserves of raw materials and top distribution networks. The Company has production units in 19 countries on four continents, on all the key steel markets, from emerging to the mature ones. It is the market leader in steel production, with a production capacity of about 114 million tons of steel in 2015.¹

ArcelorMittal is the largest steel producer in North America and South Africa, significant steel producer in CIS region (Commonwealth of Independent States), and a growing presence in Asia, including in China and India. ArcelorMittal is also the largest producer of steel in the EU, with significant operations in France, Germany, Belgium, Spain, Luxembourg, Poland, Czech Republic and Romania. In mining industry, ArcelorMittal has 14 operating units, and is one of the largest producers of iron in the world. The company produced in 2015 73.7 million tons of iron, 6.29 million tons of coking coal and pulverized coal. ArcelorMittal currently conducts mining activities in Algeria, Brazil, Bosnia, Canada, Kazakhstan, Liberia, Mexico, Ukraine and the United States.²

3.1. Arcelormittal Galati - Galati Steel Company

With strategic location in proximity of the three corner border between Moldova, Romania and Ukraine and the biggest port on the Danube River, the Galati city is one of the largest economic centers in Romania. The city's economy revolves around the ArcelorMittal steel mill and Port Ore, Damen Shipyards and River Port.

Gheorghiu Dej desired to begin the construction in 1960 Galati steel mill that at the inauguration date being 1966 and remaining still the largest company in steel from Romania. In 1991 after the fall of communism it become a corporation on shares under the name of Sidex Galati this being taken at 10 years in 2001 by the company Mittal Steel, and in 2006 named after the merger of Mittal Steel Company and ArcelorMittal by Arcelor. Galati is recognized as a steel town and currently, after a study in 2011 it was showing that more than 65% percent of Galati was working in factories combined or associated. The company has six

¹ <http://corporate.arcelormittal.com/>

² <http://galati.arcelormittal.com>

facilities in Romania, including Galati, Tulcea - lime quarry, Iasi, Roman, Hunedoara and Romportmet - Danube port operator.

As for its location ArcelorMittal is in northwestern neighborhood of Siret. It occupies an area of 1,595 hectares, of which built area is 709 ha. Metalworking is considered the main branch of the industrial economy of a country, given its role as a catalyst for other industrial activities and services (equipment, consumer goods industries).

The basic philosophy of the company is ArcelorMittal steel production through safe and sustainable methods. People are the greatest asset of ArcelorMittal Galati. Through performance, education, attitude and experience day after day, our people build sustainable corporate value. To be closer to the people, on 9 June, celebrating 50 years of uninterrupted existing ArcelorMittal will open its doors to the public.

Through its core values of sustainability, quality of leadership, ArcelorMittal commits to operating in a responsible manner, respecting the health, safety and wellbeing of its employees, contractors and the communities in which it operates. It also undertakes to take steps for sustainable manner in terms of environment and scarce resources. ArcelorMittal is aware of the responsibility they have in terms of combating global climate change, the company is among the first in the industry to make efforts to discover innovative technologies, researching and developing technologies and solutions for steelmaking which contribute to combat global warming. ArcelorMittal investes in 2015, 227 million dollars in research and development of steel production, using the expertise of researchers to develop cleaner processes and products more environmentally friendly.¹

4. How do we Manage to use the Advantages of the Danube

Following dissertation on the Evaluation of the efficiency of HR services done at ArcelorMittal we managed to have an overview on the importance of the AcelorMittal Galati plant, both for the city and the Danube. As a majority shareholder of Romportmet, the in most modern sea-river port on the Danube in Romania, the package was taken in 2005.

The Galati Port is dependent on Arcelor Mittal Galati knowing that 90% of merchandise transiting is owned by the steel plant. "In case it will reach to a cease of activity in the metallurgical unit, the flow of goods will be a problem and the

¹ <http://corporate.arcelormittal.com>.

alternative solutions will be sought," explained Mihai Ochialbescu, the Director of Administration of the Maritime Danube Port (APDM).

Table 1. Data traffic on port C.N. A.P.D.M Galati S.A. (Galati Port, Tulcea Port, Port Braila)¹

Port Traffic	River Traffic		Maritime Traffic		Total	
	Thousands tones	No. Vessels	Thousands tones	No. Vessels	Thousands tones	No. Vessels
2003	10.803	5.995	1.625	681	12.428	6.679
2004	12.869	6.734	1.369	611	14.238	7.345
2005	13.686	7.116	1.129	564	14.811	7.680
2006	13.814	7.990	1.450	573	15.264	8.563
2007	12.468	7.844	1.912	666	14.380	8.510
2008	10.635	6.627	2.086	700	12.721	7.327
2009	5.543	3.729	2.241	624	7.784	4.353
2010	9.059	5.194	2.659	711	11.718	5.905
2011	8.122	5.071	2.426	717	10.548	5.788
2012	6.639	3.964	1.741	533	8.381	4.497
2013	6.115	3.902	1.817	570	8.032	4.472
2014	5.971	3.442	1.833	527	7.804	3.969

The maritime traffic and waterways of Galati County is organized through the Galati port complex and it offers many opportunities for the economy of the entire area. In structure, the share of maritime traffic is higher than that of river traffic in terms of number of ships, but lower by tonnage of transported goods.²

Regarding the statistical data in the table above we can see a negative difference between the periods 2003-2008 and 2009-2014 in the number of tones transported and the number of vessels, and between 2012-2014, a major drop thereof.

We believe that following proposals would help the port development in our city:

- The implementation of a new marketing strategy to improve the image of Galati port internationally and promoting the services and facilities offered.
- A major problem is the lack of electricity supply for ships ashore. Galati port must remedy this issue, ensuring power supply to shore.

¹ http://www.romanian-ports.ro/html/trafic_portuar.html.

² <http://www.invest-in-galati.ro/index.php?r=ro/porturi>.

- it is necessary to construct a new road detour of Galati city and unite it with the port.
- Exports from Austria, Hungary, Serbia and Bulgaria are currently via road and rail to Russia. Attracting transport via the Danube port of Galati in the price benefit offered to the detriment of duration.
- the Galati Port represents a strategic advantage being the only one in Southeast Europe that owns railway to standard gauge and broad. The eastern border of the European Union can be both terrestrial and maritime hub, this can attract Russian and former Soviet bloc countries that have only broad gauge.
- Turkey can provide a freight corridor to Port Galati because it insures liaisons with the Middle East and Asia.
- Port Galati can be a point on the route Europe - the Caspian Sea. Only between Germany and Iran there are annually transported about 500,000 tons of equipment, machinery, finished products.
- The Port Galati can be integrated on the passenger route Galati- Danube Delta.

5. Conclusion

The Danube, axis of Europe and international maritime corridor of the European Union, connects the North Sea and the Black Sea via the Rhine-Main-Danube, it offers to Europe an important economic resource. "First of all, the great importance of the Danube lies especially in its geographical position and the direction of its course; as crossing the whole of Europe, from sunset to sunrise, it is the natural way linking the industrial countries in Central and Western Europe countries to agricultural rich eastern and south-west Asia countries and even further from south and east Asia, the Danube is just a natural extension to central and western Europe, the ancient paths circulating goods between India and our continent." (Antipa, 1921)

The Danube can be used for expansion of tourism, not only for the industry transport, as along them we meet major monuments included in UNESCO patrimony.

Uniting Central with Eastern Europe, the Danube helps the prosperity of all the 10 countries through which it passes, using the river to transport goods, generating

hydropower plants, industrial and residential water supply, irrigation, fishing and tourism.

In Romania, the Danube offers important advantages also through the possibility to develop industries such as the Steel Company in Galati, which uses the Danube due to its location near the three borders of Romania, Moldova and Ukraine, and for the shipping benefit, Galati is the largest port city on the Danube.

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