

# **The Island that Should Be Isolated from Trade Routes: The Paradox of Free Ports**

Authors:

**Tibor MANDJÁK** (corresponding author)

EM-Normandie (Normandy Business School) Le Havre and Corvinus University of Budapest

[tmandjak@em-normandie.fr](mailto:tmandjak@em-normandie.fr)

**Alexandre LAVISSIERE**

EM-Normandie (Normandy Business School) Le Havre and Institute for Port Education and Research (IPER)

[alavissiere@em-normandie.fr](mailto:alavissiere@em-normandie.fr)

## **Abstract**

The Republic of Mauritius is an island nation in the Indian Ocean. The country is composed of four islands that are far from main trade routes. It was colonized twice and did not have specific resources or even an indigenous population when the island was found in the sixteenth century. Despite characteristics that should have made Mauritius a difficult place from which to do business, the country is ranked twentieth on the “Doing Business” ranking of the World Bank (2012), and it is one of the few African countries ranked in the upper middle income group.

In the present paper, we expose some of the reasons for such a paradoxical situation. Thanks to a multi-origin population, in which the grand majority of individuals are multi-lingual, the business context has nourished close international trade relations.

The historical background of the country, therefore, explains this network of relationships created between people, as well as activities and resources that have, finally, facilitated business.

Free ports have been important for thousands of years and they participated in development of trade networks in epochs. Historically, they have been logistic infrastructures which have emphasized the buffer effect of stocks under a duty-free status. With the acceleration of globalization, the development of transportation and the continuous reduction of custom barriers, free ports de facto have become obsolete and should be disappearing. However, free ports are growing in numbers, in countries of location and in profitability.

Main stream economics-based free port literature gives only a partial explanation of this paradox. The Industrial network approach (Axelsson and Easton 1992), historical analysis

(Torvatn 2001) and deep resource study based on the 4R model (Håkansson et al. 2009) are applied to better understand and to explain this phenomenon.

A case study of a particular free zone, Mauritian Free Port, illustrates the explanation and helps to introduce a new concept: the entrepreneur port. The paper also contributes to a larger understanding of the resource activation process (Harrison and Håkansson 2006).

Key words: entrepreneur port, free port, resource activation, 4R model, Mauritius, business networks, network brokerage, supply chain, logistics

## 1. Introduction

Torvatn (2001) summarises the important role of the knowledge of the history of a resource constellation regarded as a technological system. “Thus, the nature of the development is to test combinations of resources based upon what actors are aware of concerning the existing structure (or to be more precise, based upon what parts of the resource constellation lies within the acting actors awareness boundaries. In this way, history is both necessary, and extremely helpful, in giving a development process direction, and thus also very important in deciding what the next attempt to combine will be. History thus gives us considerable insight into the mechanics of gradual innovation” (Torvatn 2001:18).

Free ports have been important for thousands of years, and they participated in the development of trade networks in several epochs. Phoenicians created the first free ports in the Mediterranean Sea (Thoman 1956) in order to create a network of platforms for their trade in the Inner Sea. Centuries later, the Hanseatic League created a similar network of duty-free zones in order to develop trade and strengthen business relations between member cities of the League (Cheaitou et al. 2014). Emmanuel Celler, Congressman from New York in the 1930s, stated, a free port is “*a neutral, stockaded area where a shipper can put down his load, catch his breath, and decide what to do next*” (Tiefenbrun 2012:1). In other words, the Free Port is a logistic infrastructure emphasizing the buffer effect of stocks under a duty-free status.

With the acceleration of globalization and the development of transportation and logistics sectors in the twentieth century, there is, nowadays, a consistent offer of services from logistic-oriented companies. Such companies provide services of storage next to the major transportation hubs of the world, similar to services provided by free ports. Therefore, the only specificity of free ports should be their custom extraterritoriality (Trampus 1999). Hence, with the reduction of custom barriers promoted by the World Trade Organization, this competitive advantage provided by the custom extraterritoriality should disappear *de facto* and make free ports obsolete (Trampus 2003).

However, free ports are growing in number, in countries of location and in profitability for decades as shown by Bost (2011) in his inventory of the free zones in the world. Here is a paradoxical observation: a growing phenomenon that should be decreasing in importance with the alteration of the environment that enabled it to emerge and develop. Such paradoxical observation leads us to explore the situation from two complementary perspectives; first of all, reexamine the definition of free zones from recent academic developments in the field of free zone research, in order to identify the hidden strengths of free ports that could correct the paradox, second of all, study the free port phenomenon from the light of theories considering the free port as part of a larger network of business in order to provide a wider understanding of the phenomenon that could explain its development despite the decline of its commonly accepted conditions of success.

Such an approach will then be illustrated and supported by the case study of a particular free zone complex located in the middle of the Indian Ocean, far from the main trade routes and

that is, despite its location, proving to be an inspiring example of business development: Mauritius Free Port.

## **2. Free port as an interface that reduces frictions**

Free ports are a type of free zone as explained by several authors (Bost 2011, Farole 2011) and, as defined by the Foreign Investment Advisory Service (FIAS) of the World Bank: “*Free trade zones, also known as commercial free zones and free commercial zones, are small, fenced-in, duty-free areas, offering warehousing, storage, and distribution facilities for trade, transshipment, and re-export operations, located in most ports of entry around the world. A leading example is the Colon Free Zone in Panama*” (World Bank 2007:10)

Following the increasing importance of free zones, this topic benefits from the interest of international institutions, and scholars from various backgrounds are studying the context of their development and their impacts. Economists from the World Export Processing Zone Association (WEPZA) have demonstrated the importance of such infrastructure in the development of trade and, in a wider perspective, in the development of host regions and host countries (Haywood 2000, Bolin 2002). Baissac (1996) explains that the impact of free zones has to be seen in a broader perspective than simply the cost benefit approach because free zones are often subject to political objectives of development and not only profitability. In the same perspective, economists that are often affiliated with institutions (Haywood 2000, Farole 2011, Kusago and Tzannatos 1998) are studying the context in which free zones have developed. These researchers studied several developing countries where free zones have been an important vector of development in the context of export promotion strategies, for example, Asian dragons. Other economists have shown several impacts of free zones (Miyagiwa 1986, Mandani 1999) and at times, have also explained the failure to achieve objectives because of governance problems like in Haïti (Barbier and Veron 1991). Some economists conclude that impact of zones should be seen in regards to initial objectives given by the ruling authority (Lorot and Schwob 1986).

In addition to the most common economic approach, there exist also geographical approaches to the phenomenon of free zones, studying free zones in regard to globalization context (Bost 2007) or local context (Yang 2009) in order to show the impact (Bost 2011) of such infrastructure on territory and geography of trade. The legal context has also been studied in order to show that there exists neither a universal approach of the phenomenon (Trampus 1999), nor specific regulations in certain custom blocks such as EU, which could be considered prejudicial for the development of trade (Fedi and Lavissière 2014). A few social studies have also contributed to the literature in studying the social context such as Susman and Schneider (2008) who observe the specific model of governance of employee-owned free zones.

This literature on free zones, however, mainly considers the zone as a black box and studies its inputs and outputs. The general approach is to consider the emerging zone in a context to promote in order to maximize the described impacts on economy, territory, legal framework, or social structure. In fact, the switch in the second half of the twentieth century from the denomination of “free port” to the term “free zone” is an illustration of the consideration of

the phenomenon as a zone. The term “zone” indicates that the consideration is taking place from the outside, with its borders and entries/exits or input/output; the term “port” makes reference to a business interface, with the study directed from an inside perspective (Lavissière 2014). A few studies focus on the inside of the black box, which is the business core of the zone. Aftalion (1901) describes the processes of the free port of Hamburg, and Tiefenbrun (2012) describes the advantages of American foreign trade zones for its operators. Actors are briefly described in their functions by Lafargue (2008), however their interactions are not detailed. Figure 1 presents the structure of free port literature.

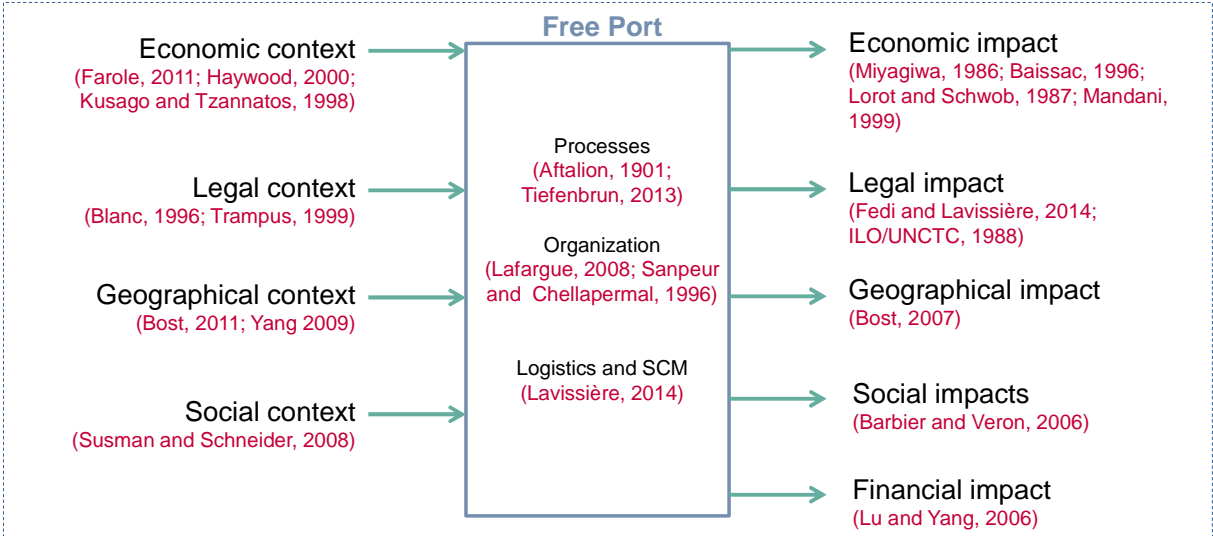


Figure 1 Authors’ construction

Recent works focusing on the core business of the free zones dedicated to logistics define the free port as *an international logistic interface which is free from border frictions designed to bring more value in the global supply chain of its operators* (Lavissière 2014).

*This definition means that Free Port is an interface, often next or within a seaport, but also next to or within airport, river port or dry port, used to transship international logistics flows within a special economic status that is considered as outside of the custom area and therefore controlled, so that it can avoid physical but also fiscal, customs, administrative or cultural frictions generated by border crossing, in order to bring more value for the global supply chain of its operators, through, on the one hand, the improvement of quality induced by the nature of the Free Port and its impact on physical, financial and information flow management; and on the other hand, the reduction of financial, ecological and social constraints, which gives more room for improvement of logistic services.*

This definition puts the role of the free port in between the interactions of buyers and sellers. As such, it is defined as an interface. In fact, the term *port* is important because it highlights the function of the free port within a network of *im-ports*, *ex-ports*, *re-ex-ports*, and in between *trans-ports* (Fedi and Lavissière 2014). Moreover, this definition provides a social approach to the function of the infrastructure when it includes the reduction of social frictions

in the business relationship. This last point is illustrated by the example provided by Aftalion (1901) about the free port of Hamburg: the manufacturers of the free port of Hamburg were importing wine from France to transform it, adding stronger alcohol, in Hamburg, according to the taste of consumers and distributing it to the all of Northern Europe from warehouses in the free port. In the business relationship, there were not only geographical or customs barriers between France and Northern Europe, but also cultural barriers. The free port provides a link between these two networks that reduces business frictions, transcends cultural differences and enables trade.

### **3. Free port as an interface within an international trade network**

Network literature provides interesting insight to interpret this conception of the free port as an interface within an international trade network. Burt (2001) extensively describes the process of network bridging in the business relationship, through social capital. He states that “*social structure is a kind of capital that can create for certain individuals or groups a competitive advantage in pursuing their ends. Better connected people enjoy higher returns*” (Burt 2001:203) Starting from this point, that he considers a commonly accepted assertion, the author explains it is, in the search of the best opportunities to exchange goods, impossible that anyone know all of the information about buyers, sellers, available goods and prices. However, network mechanisms through the connection of individuals or organizations can influence information about the market.

Considering that information circulates better within groups than between them (Festinger et al. 1950), taking part of a network is an advantage, because information flows better. Such a network can be a department in a company, a company itself, a social group or, even more interesting, any cross-organizational group sharing the same social capital. Networks are composed of links between members of the network, however, all members do not have the same links inside the network and not everyone is directly linked to every other members. Moreover, some members of a network may have connections with members of other networks. Burt (2001) considers the ability to connect two networks as the competitive advantage of social capital. In addition, this ability increases in times with experience to recognize what he calls “holes” in networks. Holes are buffers that become competitive advantages to the “entrepreneur” who can fill them by building a bridge between two networks.

Then, the network brokerage approach details the competitive advantage as an advantage coming “*from information access and control. Networks that span structural holes provide broad and early access to, and entrepreneurial control over, information*” (Burt 2001:202). In business, this entrepreneurial behavior can lead to some investments in relationships, connected resources or linked activities. Network brokerage is, therefore, an action of business networks. A business network “consists of the tangible and intangible investments that comprise the connected relationships between more than two businesses” (Håkansson et al. 2009:236)

In this perspective, logistic infrastructure, in general, can be considered a connector between networks of suppliers and buyers. The example of the food industries in western Britany

developed by Jouenne (2012) illustrates this point. Producers of sea food and local agro-industries were unable to sell their products to the rest of France while there was a market for fresh high quality products in Paris. In fact, on one hand, it was too expensive for each of them to send their products. On the other hand, if they had used the same transport company, the process of product collection would have been too lengthy. In fact, time was the variable altering the major characteristics of the products: its freshness. The solution came from a third actor, being a consultant who knew the local network of actors as well as the French logistic networks. The solution was to implement a logistic platform that collected all these products by several means of transport before grouping all products to transport them fresh to their market in Paris. This project enabled the development of the sector. The external consultant is the entrepreneur in Burt's definition that connected the network of local producers with the network of retailers. The hole is bridged by a logistic infrastructure.

The free port, as a logistic infrastructure, provides this same type of service to international companies moving goods from one custom block to another, but the free port is a specific infrastructure, as explained above. The specificity of free ports comes from the custom buffer effect, as described by Celler (Tiefenbrun 2012); free port enables the company to catch its breath. However, this breath catching, as described by Tiefenbrun (2012), is mainly due to the custom extraterritoriality; the advantages listed are the *no custom formalities* advantage, the *improve of cash flow*, because of the delay of taxes, the *owner access to merchandise*, the *showroom space available*, the *accounting advantages*, because products are incorporated into the accounts only when sold, the *reduced insurance and duty costs*, the *assembly of domestic with foreign goods*, the *ideal manufacture of goods*, which represent the bi-nationality and possible made-in local certificate, the possible *processing and manipulation of goods*, the *packing, repacking, labeling* possibilities, the *ease to discard goods*, before paying taxes, the *wide variety of products handled*.

Listed this way, all of these advantages are closely linked to the duty free aspects of the free zone and provide functional advantages. However, some of them can also be seen as links between networks. The free port enables the connection between buyers and sellers. For instance, the showrooms or the access to merchandise enables the connection of actors before paying any taxes for entrance of a product, which may never enter the market. Such an advantage makes the free port an opportunity for these actors to do business. Some financial advantages, such as the assembly of domestic and foreign goods or the ideal manufacture of goods make trade possible between areas that may be under quota restrictions. With this approach, we can see that free ports are an entrepreneur institution because they make the connection between actors and create value while doing so. In this sense, the *free port is a specific types of ports, it is an entrepreneur port*.

Although we could consider the free port as an entrepreneur port in the sense of Burt, this characteristic comes from the advantages provided by the custom extraterritoriality advantages. Moreover, we have seen that this characteristic cannot explain the development of the free port, because custom borders are declining, and free zones, in the meantime, are increasing. Therefore, another characteristic explaining the development of free ports in network approaches must exist.

Industrial networks cannot be reduced to functions and infrastructures. Håkansson and Johanson (1992) consider the industrial network as a structure composed of three layers: activities, resources and actors. We can analyze free ports through this perspective.

Activities of free ports were described above, and they are mainly logistic activities with several degrees of involvement in supply chain management, from storage to marketing-oriented activities (Cheaitou et al. 2014). The historical example of the free port of Hamburg shows that logistic services benefit from a wider supply chain perspective including the transformation of the product to fit the tastes of the market.

Considering resources, the framework of analysis developed by Håkansson and Waluszewski (2002), the 4R model, divides the resources into two categories and each of these into two sub categories. There are physical resources, subdivided into products and facilities. There are also organizational resources, subdivided into business units and business relationships.

The free port uses physical facilities that are warehouses in order to process imported products and domestic products into transformation facilities. Both types of facilities are included in another type of facility which is the free zone. That connection in the facility network makes an efficient use of facility resources. The result of this connection is the custom extra-territoriality. Hence, the business unit that does the transformation processes products before custom taxes. That means products outside of the custom area and the products within the custom area meet in the free zone facility, which is another advantage leading to the list of advantages provided by Tiefenbrun (2012). There are also relationships between this business unit and the other links of the supply chain: buyers and sellers that are outside the free zone, at times inside the custom area, at times outside of it. In other examples, the buyers and sellers are both located outside of the area in the case of re-exportation after processing, like historically the French wine in Hamburg dedicated to Northern Europe.

If we consider the free port an entrepreneur facility, it is, through this analysis, because the warehouse and the transformation plant are located in a free zone. This means that we reallocated a 'normal' facility into a special zone. This is creating a link between two resources. *"Resources within and across organizations are combined, and it is in the combination of resources that value is located. The implication is that any one resource does not have value in itself. Instead, value comes from productive use when combined with other resources"* (Harrison and Håkansson 2006:232). This explains the value of the custom extraterritoriality, but not the success of free ports in the context of custom barrier reduction.

Actors (Håkansson and Snehota 1995) are the third layer of industrial network. This layer creates value thanks to personal connections of individuals involved in the business process. Business communities, inter-organizational institutions, chamber of commerce, alumni groups, golf practitioner, or any informal connections may influence business relationships. This aspect is more difficult to evaluate, yet, it is often the spark of business success (Granovetter 2005).

When FIAS (2008) defines free ports as *located in most ports of entry around the world*, it means that free ports are located in the main trade routes, such as Panama, Suez, Dubai,



Morocco, Singapore, etc. In these main trade routes, important ports are areas where many international networks meet in order to do business. Two questions, however, arise from this fact: First, what is specific to free ports in these hubs, in terms of business networks? Second, why would a place far from main trade routes become an important free port while it is outside of main trade networks?

To the first question, we can answer that a combination of the three layers make the competitive advantage of the free port to normal logistic areas, because the activity network installs logistics activity between industrial actors, which is especially true in the context of globalization of economies and diversification of sourcing areas; then the resource allocation in the network benefits from the custom extra-territoriality and at last, actors of international trade gather and connect their networks in such nodal places. No other infrastructure can put together, in such an optimal condition, the three layers of the industrial network.

To the second question, we can answer based on the maturity model of the free ports (Lavissière 2014) The essential of the model is based on four major axes of maturity: confidence, market, organization, and distance. The axis of distance has to be understood in a broader acceptance (Ford 1980), it does not represent only geographical distance, but also a business distance composed of financial distance to move products and cultural distance between actors. In this sense, it seems interesting to look at a free port that is located outside of the main maritime trade routes, but has a strong social capital. Mauritius Free Port appears to be an appropriate case to study for these criteria. The free zone system has been studied by several scholars (Barbier and Veron 1991, Trampus 1999, Bost 2011, Farole 2011, etc.), and it is considered to be one of the successful examples of free ports in the world.

#### **4. The case of Mauritian Free Port, an entrepreneur port**

The Republic of Mauritius is an island nation in the Indian Ocean. The country is composed of four islands that are far from main trade routes. It was discovered by the Dutch and then colonized twice by the French and then by the British. The islands did not have specific resources or even an indigenous population when the island was found in the sixteenth century. In addition, every year, a cyclone season can destroy agricultural resources. Despite characteristics that should have made Mauritius a difficult place from which to do business, the country is ranked twentieth on the “Doing Business” ranking of the World Bank (2012), and it is one of the few African countries ranked in the upper middle income group.

When independence was promulgated in 1968, Mauritian economy was almost exclusively concentrated on sugar cane cultivation, up to 99% of the export, 25% of local employment and 37% of the GDP (Bost 2011). The 1970s were marked by a strong government commitment to diversify the economy and to provide more high-paying jobs to the population. The promotion of tourism and the creation of the Export Processing Zones did much to attain these goals. Between 1971 and 1977, about 64,000 jobs were created.

With the end of the Multi Fibre Arrangement coming in 2005, Mauritius was aware its competitive advantage (a legal one) was ending. Some companies invested in high tech to keep competing, such as laser cutting, or specialized in very highly qualified tasks such as

luxury hand-made products. Other companies had to move out from business in Mauritius. Many Hong Kong-based companies relocated.

In the meantime, Mauritian government implemented the free port with the Free Port Act of 1992 and then its revision in 1997 and 2001. The Free Port was first a basic logistic facility for transshipment and small transformation. Therefore, it provided basic logistic services. Then, with the separation of the roles of regulator and operator (known as developers in Mauritius), competition was introduced and different players developed different strategies, both on the level of services, but also in terms of market. For instance, one of the developers of the free port, specialized in cold rooms and fish product-related logistics, or another developer, built Congress Hall, and a third one offered offices and show rooms as a whole supply chain service.

The Mauritius Free Port was created in order to put the country at the center of the regional trading system. The aim of the free port was to provide the Eastern and Southern African region with a logistics hub to facilitate flows of goods, by centralizing them, to distribute them and to transition to an economy of services. In network analysis terms, there was a desire to connect business units of the region through links to a duty-free facility at the center of the network.

This free port is located behind the port terminal on 50 hectares of land area with direct access to the port facilities; the free port provides various kinds of infrastructures from container yards and processing infrastructures to cold warehouses and exhibition centers. Those infrastructures amount to 156, 700 square meters in six developer-areas. The free port employs directly around 1,000 people, plus the people working for operators who rent a warehousing space in order to operate it, plus the administrative people managing the free port. From what stakeholders estimate in 2007, there are around 4,500 people working in the free port, and it generates around 2.5% of the GDP of the 1.2 million inhabitants of the island<sup>1</sup>.

In terms of activities, there are several examples illustrating the points developed earlier. Concerning logistic activity, in the free port, they link, other industrial activities with four functions in the supply chain (Lafargue 2008). The first function is the grouping of goods in a single central place before exporting them into another custom area, for instance to the European Union. The second function is logistic proximity, when products are processed in order to be sent to a custom area that is geographically close, like the Southern African Development Community (SADC), so that products are waiting next to the border. The third function identified is the central warehousing, within a regional free-trade area in order to distribute markets of that zone, like the Indian Ocean Community, in which Mauritius is a member. Finally, the fourth function is value added creation within a 'local' regional free-trade area far from the home zone on the route of goods, which means products can be transformed in Mauritius while components come from Southeast Asia and Africa and final products will be shipped to Europe. These functions are logistic activities present in any

---

<sup>1</sup> Figures come from a study for the Board of Investment in 2009 that estimates the impact of the free port on the local economy.

logistic chain, however, the custom border component makes the free port a specific infrastructure in the international trade schemes. This is why, the geographical route is not necessarily the direct one for this type of chain. Exploratory interviews in Mauritius show that there are some fabrics coming from India or China that are stored and then processed in the Free Port, to become clothes, and get the Made-in-Mauritius Certificate. The consequence is that these products can enter the European Union with less custom taxes, thanks to the trade agreements between Mauritius and the Union.

The free port in Mauritius developed another interesting initiative that is illustrating the entrepreneur's vision of the free port. The island being in the middle of the Indian Ocean, it is close to the tuna fish migration roads. The tuna is mainly fished by French, Spanish and Japanese boats. Since it is under custom extraterritoriality, the free port developed a light processing cold room storage called the Sea Food Hub, where products are prepared and sometimes caned before being exported. It has also been used as a hub to send by air some fresh tuna to Japan, shortening the distribution circuit for fresh high quality products. The free port is here a real bridge between the activities of fishing and the industrial processing of seafood, and the markets could not be reached with such a quality level without this infrastructure. The bridging between the fishing industry network and the seafood retailing network creates the entrepreneur's value.

In the case of free ports, we see there are evolutions in time with the activities they provide, from high manpower logistics to high value added supply chain services (Barbier and Veron 1986) and this corresponds to the network changing mobilization developed by Lundgren (1992) because there is the activation of a new network and then resources (mainly warehouses) are reallocated to the new business.

In terms of physical resources, what is interesting in Mauritius is the evolution of its free zone system. In the 1970s, the industrial free zones that helped to develop industrial capacity of the country started. Then, there was a lack in terms of logistics, because there was no efficient, duty free, manner to connect buyers and sellers. This is one of the reasons why the free port was created, linking these two networks thanks to facilities. In the 2000s the government started to promote IT free zones, that are the next level of network connection, because they provide information processing that can be related to industry and supply chain management.

At the micro level, the product of the free port is logistic services, and these services are made possible by the facilities that are at the heart of the network. The conception of facilities helps the development of the free port because warehouses are modules that can be transformed into cold rooms, production units and bulk storage, or palletized stocks. This modularity enables the operators to move from one type of product, like textile, to another one, like frozen sea food. In other terms, such flexibility makes the change from one logistic network to another possible: the versatile of facilities logistic function enables the entrepreneur's capability to connect two business relationship networks or business units.

However, this is not specific to Mauritius or free ports. Rather it is a core success factor of logistics facilities. What is interesting is this flexibility was not at the heart of the free port in

the early years. It was brought from outside when the free port changed its governance and brought new actors.

When the free port was created in 1992, the Mauritius Freeport Authority (MFA) was in charge of the regulation of the zone for the Government and also of developing the zone for companies willing to use its facilities. After mitigated results, in 1997, the MFA, following the international best practices of logistics infrastructure governance, was divided into a regulating body, included into the Board Of Investment (BOI) which is under the Ministry of Finance authority, and an operating body. This operating body was also confronted with the competition of new comers called Developers.

Developers are logistic companies that are granted part of the free port area in order to build infrastructures and offer logistic services to operators who are freight forwarders or industrial companies. Operators can either rent the empty warehouse area or buy a full supply chain service from the developer, who will group clients and make economies of scales.

The increase in activity of the free port corresponds to the entry of new developers. What happened is that one of the developers was led by French experienced logistics entrepreneurs. They came with their standards to build the warehouses. Such standards enabled the free port to operate with European industrials. They were willing to have the same standards of operations all along their global supply chain; for instance, food tracking and HACCP standards of cold rooms. Moreover, these French businessmen came with their network of contact, including leading French logistic companies participating in the developer's capital. Such contacts facilitated the start of the business, because they made a whole logistic network of knowledge and business opportunities available. This is one of the reasons why the business developed with many French companies.

Going deeper in this analysis, we can also consider the fact that Mauritian people speak French as a second language. This is facilitating factor in the connection to French business, as part of a social capital. In the same way, Mauritius is a very multicultural country and has access to several such networks, including Commonwealth, Indian and Chinese heritages.

These connections are visible in flow analysis. Evolution of the destinations made by Lavissière (2014) on partner countries of the free port from 2002 to 2007, show there are several groups of partners. First of all, Indian Ocean partners are important (from 20% to 35% in the period) with Reunion, Madagascar and Seychelles. They are natural trade partners because of the geographical proximity. In a sense, South Africa is also a natural trade partner.

Then, France and, to some extent, other European countries have an important share of the business of re-exportation (from 25% to 37%). However, neither the geographical, nor the logistic distance can explain this fact. How would it be easier to import goods from South East Asia in order to re-export them to Europe? The answer to this question lies in the cultural proximity. Mauritius shares historical links with France and other European countries (UK, Netherlands, etc.) therefore, Mauritius takes part of the ACP countries that have specific trade agreements as seen before. Mauritius also shares languages with French and English speaking countries in Europe. This language capacity can ease business. Moreover, we can add that

there are also interpersonal relationships, since developers have strong personal links with European businessmen.

This observation is proven by the importance of India as well. Mauritius also shares another cultural proximity with India because many of its citizens are second or third generation migrants from India. The same observation can be made with Chinese influenced countries like China, Singapore and Taiwan, which are important partners of Mauritius.

With the study of the actors, we observe that developers have European financial and social capital, and the operators of the free port are managed by local Mauritians, who often speak French, English and either an Indian language or Chinese. The free port appears, therefore, as a link in between production plants in Asia and markets in Europe or Africa, thanks to the combination of the three layers of business networks: the logistic activity necessary for this type of global supply chain, the customs extraterritoriality of the facilities and the social capital inherent to the actors. These three layers, moreover, are mixed and influence each other in a synergetic way, because actors' relationships influence the design of the facilities for instance.

Returning to a more general perspective of the free port, we can imagine that the competitive advantage of the free port of Hamburg in the late nineteenth century came from the same type of combination when German businessmen were connecting their network of French wine producers to their network of Scandinavian customers.

## **5. Conclusion**

In this paper we have attempted to explain the paradox of free ports. As main stream free port literature has mainly a black box approach and studies free ports' inputs and outputs, this literature only gives a partial answer. So the IMP approach has been applied as the network and historical approaches may provide better understanding of free ports. Free ports have been analyzed from a larger network perspective and the case of Mauritian Free Port has been studied.

To explain the free port paradox we aimed to answer two questions. In a general way, what are the specificities of free ports? In particular, why would a place far from main trade routes become an important free port? Industrial network theory (Axelsson and Easton 1992), the 4R model (Håkansson and Waluszewski 2002, Håkansson et al. 2009) and network brokerage (Burt 2001) were applied for better understanding of the first question and the analyses of the Mauritius Free Port case helped to answer to the second question.

Custom extraterritoriality is certainly one of the main characteristics of free ports. It is, however, far from the only one. Free ports give no-custom-formality advantages (the improvement of cash flow, accounting advantages), lower insurance and duty costs, specific manufacturing possibilities (the assembly of domestic with foreign goods, the ideal manufacturing of goods) and the possible made-in local certificate (the possible processing

and manipulation of goods, the packing, repacking, labeling possibilities). Perhaps the most important is the customs extra-territoriality and administrative process easiness.

In a more general way, the free port makes resource availability and easy access to many actors (local, regional, international) possible. Free ports link together industrial free zones and logistic free zones and also integrate IT free zones by facilitating and making easier both the connections and the administrative processes. These zones correspond well to the network changing mobilization (Lundgren 1992) because there is the activation of a new network and then resources (mainly warehouses) are reallocated to the new business. *It is the complexity of the business network that free ports offer as a multiple interface for international trade based value creation!*

The example of Mauritius Free Port helps to give some particular elements of the answer for the second question. Beyond the general issues the changing of governance, cultural proximity and the specific resource activation process seem to be the key elements. After changing the governance with the arrival of new actors, the multiplicity and diversity of actors embedded in the free port became decisive (for example the French businessmen). The use the exploitation and the valorization of the island's cultural diversity made several types of cultural proximity (French, Indian, and Chinese) possible. Tuna exploitation provides an example of the specific resource activation as the free port developed a light processing cold room storage (Sea Food Hub) where products are prepared and sometimes canned before being exported or where the fish are shipped by airplane. The bridging between the fishing industry network and the seafood retailing network creates entrepreneur's value.

In the case of Mauritius, the free port is a link between production plants in Asia and markets in Europe or Africa. It is possible because of the combination of the three layers of business networks: the logistic activity necessary for this type of global supply chain, the customs extraterritoriality of the facilities and the social capital inherent to the actors. Moreover, these three layers are mixed and influence each other in a synergetic way, because actors' relationships influence the design of the facilities, for instance.

The interesting novelty of this paper is the introduction of the *entrepreneur port* concept associated with free ports. One of the further research questions could be whether the two concepts are congruent or not. Should all free ports be considered as entrepreneur ports? Are there other types of entrepreneur ports than the free ports?

## References

- Aftalion, Albert (1901) : *Les Ports francs en Allemagne et les projets de création de ports francs en France*, Rapport présenté et lu à la Société d'économie politique nationale le 9 janvier 1901.
- Axelsson, Björn – Easton, Geoffrey (1992) (eds.): *Industrial networks, A new view of reality*. London and New York, Routledge
- Baissac, Claude (1996): *A critique of cost-benefit analysis in the evaluation of export processing zones*. Presented at the WEPZA Round Table on EPZs, Vienna, April 15, 1996
- Barbier, Jean-Pierre – Veron, Jean-Bernard (1991) : *Les zones franches industrielles d'exportation: Haïti, Maurice, Sénégal, Tunisie*. Karthala Editions
- Bost, François. et al., (2010) : *Atlas mondial des zones franches*, La Documentation Française
- Bost, François (2007) : Les zones franches, interfaces de la mondialisation. *Annales de Géographie*. Numéro spécial Zones franches, n° 658, december 2007, pp 563-585
- Burt, Ronald S. (2001): The social capital of structural holes. In Gullién, Mauro F. – Collins, Randall – England, Paula – Meyer, Marshall (2001): *New directions in economic sociology*, New York, Russell Sage Foundation
- Cheaitou, A., - Fedi, L. - Lavissière, A. (2014): The modern concept of free ports in light of the 21st century: a definition attempt toward a supply chain added value. In: IMRL, *10<sup>th</sup> International Meeting on Logistics Research*, Kedge Business School, 20 - 21 June
- Farole, Thomas (2011): *Special economic zones in Africa : comparing performance and learning from global experiences* Washington D.C., The World Bank Group
- Fedi, Laurent - Lavissière, Alexandre (2014) : Les régimes d'exploitation des ports francs au début du 21<sup>ème</sup> siècle : modernité d'une installation portuaire ancestrale. in *Droit maritime français*, forthcoming 2014.
- Festinger, Leon - Back, Kurt W. - Schachter, Stanley (1950): *Social pressures in informal groups: A study of human factors in housing* (No. 3). California, Stanford University Press.
- FIAS (2008): *SEZs: Performance, Lessons Learned and Implications for Zone Development*, Washington D.C., The World Bank Group
- Ford, David (1980): The development of buyer-seller relationships in industrial markets. *European Journal of Marketing*, Volume 14, Issue 5/6, pages 339-356
- Granovetter, Mark (2005): The impact of social structure on economic outcomes. *Journal Of Economic Perspectives*, Volume 19, Issue 1, pp. 33-50
- Harrison, Debbie - Håkansson, Håkan (2006): Activation in resource networks: a comparative study of ports. In: *Journal of Business & Industrial Marketing*, Volume 21 Issue: 4, pp.231 – 238
- Haywood, Robert (2000): *Free zones in the modern world*, CFATF Meeting, Aruba, October 18, No. 5 Ver. 1
- Håkansson, Håkan – Johanson, Jan (1992): A model of industrial networks. In Axelsson, Björn – Easton, Geoffrey (1992) (eds.): *Industrial networks, A new view of reality*. London and New York, Routledge, pages 28-36
- Håkansson, Håkan – Snehota Ivan (1995) (eds.): *Developing relationships in business networks*, London, Routledge
- Håkansson, Håkan – Ford, David – Gadde, Lars-Erik – Snehota, Ivan – Waluszewski, Alexandra (2009): *Business in networks*. Chichester, John Wiley & Sons

- Håkansson, Håkan – Waluszewski, Alexandra (2002): *Managing technological development. IKEA, the environment and technology*. London, Routledge
- Jouenne, T. (2012) : *GIE Chargeurs Pointe de Bretagne Mutualisation du transport*, Conference Rois de la Supply Chain, Paris, 17th January 2012
- Kusago, Takayoshi – Tzannatos, Zafiris (1998): *Export processing zones: A review in need of update*. Washington D.C., The World Bank Group
- Lafargue, Y. (2008) : *Les zones franches industrielles et logistiques dans la Supply Chain mondiale*, 18eme journée CPIM de France, Paris
- Lavissière, Alexandre (2014): *Free Ports of the 21st Century, a logistic approach of the phenomenon*. Thèse de doctorat: Sciences de gestion. Marseille : Universa, Kedge Business School
- Lorot, P. – Schwob, T. (1987) : *Les zones franches dans le monde*. Paris : La Documentation française
- Lundgren, A. (1992): *Coordination and mobilisation processes in industrial networks*. Axelsson, Björn – Easton, Geoffrey (1992) (eds.): *Industrial networks, A new view of reality*. London and New York, Routledge, pp.144-165
- Madani, Dorsati (1999): *A review of role and impact of EPZ*. Washington D.C., The World Bank Group
- Miyagiwa, Kaz F. (1986): *A reconsideration of the welfare economics of a free-trade zone*. *Journal of International Economics*, Volume 21, Issues 3–4, November 1986, Pages 337–350
- Susman, Paul – Schneider, Geoffrey (2008): *Institutional challenges in the development of the World's first worker-owned free trade zone*. *Journal of Economic Issues*, Vol. XLII N°2, pp.489-498
- Tiefenbrun, Susan (2012): *Tax free trade zones of the World and in the United States*, Edward Elgar Publishing
- Thoman, Richard S. (1956): *Free ports and foreign-trade-zones*. Cambridge, Maryland, Cornell Maritime Press,
- Torvatn, Tim (2001): *The importance of history – Technological development of existing technological systems*. 17<sup>th</sup> IMP Conference, Oslo, Norway, pp.1-20
- Trampus, Francesca (2003): *Challenges threats and new opportunities for the World's free zones*, *Trasporti- diritto, economia, politica*, Volume 2003, n°89, p.65
- Trampus, Francesca (1999): *Free ports of the world*, Trieste, E.U.T.
- World Bank Group. (2012): *Doing business in a more transparent world*. World Bank
- Yang, Yi-Chih (2009): *Assessment Criteria for Port Hinterland Development of Free Trade Zone in Taiwan based on Fuzzy AHP approach*, IFSPA 2009, Hong Kong Polytechnic University.