

THE RECOVERY OF THE OIL INDUSTRY: MYTHS AND FACTS

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Summary

This article examines the challenges of recovering Venezuela's oil industry, analyzing its economic feasibility and its role in diversifying the national economy. It reviews the stages of oil rent dependency, industry nationalization, and policies that have influenced its development in the 21st century.

Keywords: Oil industry, Venezuelan economy, rent dependency, nationalization, economic diversification.

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Summary

The reconstruction of Venezuela as a nation, after its deterioration during the XXI century, requires an effort in three fundamental areas. Firstly, that which has to do with political, social and cultural aspects, then those related to public services, and finally, those activities that generate financial income for the nation. Within the third of these categories, particular importance is given to the recovery of the oil industry. In relation to this activity it is necessary to consider two fundamental aspects: its feasibility, and the possibility of generating, under current circumstances, sufficient income to finance the diversification of the country's economy.

Introduction

The socialist experiment carried out in Venezuela since the year 2000, called the socialism of the XXI century, has resulted in a marked deterioration or destruction of many activities of primary importance for various aspects related to the development of the country. This, both in its economic, political and social aspects, as well as the cultural elements, the concept of citizenship and the capacity for self-determination of the citizens. As a consequence, there is logically a generalized criterion that the reconstruction of the country is necessary. That it is necessary to carry out all the necessary efforts to recover its development, in all the mentioned aspects.

However, not all activities that are believed to need to be recovered are of the same nature. Many are essentially different from each other, and for this reason, their impact on the community is also radically different. On the other hand, all of them will be competing for the resources available to carry out the entire process of rebuilding the nation. It is therefore neces-

sary to analyze the actions that must be taken in each case and establish the viability of each one, since while the recovery of some of them is absolutely essential, in the case of others, said recovery is subject to a series of conditions.

In this sense, three different areas are considered to be in need of reconstruction. On the one hand, there are those activities that have to do with the provision of public services for the population. Actions such as the generation, transmission and distribution of electricity and water, the availability of fuels, food production, garbage collection and disposal, communication services such as telephony, internet and similar services. The recovery of these activities is indispensable, regardless of their cost. Then there are those operations that constitute an important source of income for the country.

These activities generally consist of the exploitation of the accumulations of natural resources existing in the territory or subsoil of that country or of activities, such as agriculture, that generate products of economic value. In both cases, these products are tradable at the international level with the consequent generation, as we have said, of financial resources. The implementation of these activities is subject to a careful prior analysis. If the execution of any of these projects implies a cost that exceeds the expected income, no matter how important it may be, such action is absolutely counterproductive. The same thing happens if it is evident that the life of the project does not allow, at least, the recovery of the investment out.

Finally, there are those tasks that have to do with citizen awareness, social coexistence and the development of citizens' capacity to be responsible for their own individual development in an autonomous manner. These activities, also necessary, do not, however, compete, at least not in a major way, for the financial resources needed for the overall reconstruction of the country - the problem with these tasks is rather one of time. They constitute a long-term problem that will require, at least, the passage of a generation and whose solution is associated with the adequate structuring of the educational process, whose indispensable condition is the existence in practice of a political climate respectful of individual freedoms.

Development of oil rentierism in Venezuela

For about one hundred years, Venezuela has been a typical petro-state, meaning those countries whose economic situation depends mainly or exclusively on oil income. Especially since 1934, with the enactment of the so-called "Convenio Tinoco", Venezuela became a single oil producing country. Previously

At that time, the country also had agricultural production, especially cocoa and coffee, which represented an important element of diversification of the economy. However, in 1934, as a consequence of Venezuela's reaction to the measures taken by the United States government in response to the economic crisis of the 1930s in that country, there was a significant increase in the value of the bolivar in relation to the dollar. According to Urbaneja (2013):

In October 1933, the US government, in order to reactivate its own economy, devalued the dollar in terms of its value in gold. It did so , in October 1933 and in January 1934. The rest of the Latin American countries followed this currency in its fall (...) Venezuela did not do so (p. 46).

The process that led to this situation, is described by Guerra and Pineda (2004), cited by Fronjosa (2017, p. 219) when they state that:

In the context of the gold standard, on January 31, 1934, the government of the United States agreed to reduce the gold content of its currency to 0.88867 grams/US\$, which, compared to an unchanged gold content of the bolivar of 0.290323 grams/Bs., implied an exchange rate of 3.06 Bs./US\$. Thus, the bolivar was revalued by approximately 21.5% (...)In this environment the first official intervention in the exchange market arose through the so-called Tinoco Agreement of August 28, 1934, which attempted to stabilize the bolivar through an agreement with the oil companies (Mayobre, 1944) by fixing the exchange rate for the purchase of foreign currency from the oil companies at 3.90 Bs./US\$ while for sale the rate was 3.93 Bs./US\$, thus generating an exchange profit (p. 20).

However, again Urbaneja (2013) notes that within the situation created by the devaluation of the US dollar, it actually went to “an exchange rate close to 6 bolivars” p. 47), the same Urbaneja (2004) places it at 5.26 bolivars per dollar p. 45).

The contribution of the agricultural sector to the Venezuelan economy at that time was not at all remarkable. In this regard, Baptista (2011) mentions that: “It was in 1927 when the contribution of oil to the GDP was, for the first time, greater than that of Agriculture. Then, Agriculture contributed 215,253 and Oil 316,476 bolivars.” (p. 74). These circumstances gave rise to a heated controversy between the advocates of an increasing oil income and those who considered it necessary to maintain the diversification of the economy. In this sense, again Urbaneja (2004) reports that:

Not to devalue) was what Alberto Adriani, one of the best heads of the time, proposed. In this way, the country’s traditional exports, coffee and cocoa, would maintain an internationally competitive price. But the Venezuelan government decided, following Vicente Lecuna’s opinion, to maintain the new exchange rate which derived from the devaluation (sic.) (obviously they meant revaluation) of the bolivar.(p. 44).

The Tinoco agreement was finally signed on August 28, 1934 by Pedro Tinoco Smith, Minister of the Interior of the Gomecista dictatorship between 1931 and 1935.¹ Certainly, this

1 Pedro Tinoco Smith, in the twenties and early thirties, was an attorney of the Stanard Oil of Venezuela, a subsidiary of Standard of New Jersey. His son, Pedro Tinoco Jiménez, was Minister of Finance during the first government of Rafael Caldera.

revaluation of the bolivar allowed obtaining a greater amount of dollars converted into local currency for the payment of taxes, royalties and other expenses incurred in the country, including, after the approval of the Hydrocarbons Law of 1943, the income tax. However, for the rest of the exports, this meant a mortal blow. Venezuelan agricultural products, as the bolivar was revalued in relation to the dollar, became more expensive in the international market and lost competitiveness. Venezuela thus became a typical petro-state, an exclusively rentier state.

The evolution of rentier Venezuela

There are essentially three historical stages through which Venezuela has passed since it became a country exclusively dependent on oil revenues. The first of these stages was the period when the concessions were in force, the next was the period when the industry was in the hands of the State, and the last is the current one, which coincides roughly with the new century. In second of these stages, even when the industry was in the hands of the State, operations were kept in line with what has always been the essence of this business in any part of the world. Today, as part of the socialist experiment, industry has one of the main instruments for the triumph of the revolution.

In each of these stages, two conflicts inherent to the very structure of society at that time are manifested. During the concession period, the fundamental conflict was the maintenance of the balance of power between the interests of the transnational companies and the Venezuelan State. In the other two periods, with the disappearance of the concessionary companies, the conflict derived from the different internal visions of what the objectives of the oil industry are and the best way to achieve them appears in full force. This conflict, however, is present in all the stages, including the first one, although in this one it remained in a state of latency, since during it the government was seen as the legitimate representative of the country. It was the government, on behalf of the country, who was in opposition to the companies. Now, in the absence of this common adversary, the different visions of how the State should fulfill its responsibility to formulate and promote public policies governing the various aspects of society's life, on which there is no unanimous agreement, are becoming more important.

The concessionary period

The conflict inherent in the structure of a society in which entities foreign to a country have been authorized by the government of that country to exploit a natural resource of commercial value has a universal character. Tugwell (1975), in this sense, affirms that:

Over time, the operating companies are vulnerable to demands for changes in the distribution of profits between them and the State. In a sense they have become captive to the agreements; they have already taken their own risks and invested capital in the projects. Gradually, the terms of negotiation tend to migra-

te in favor of the government and it is increasingly likely that the government will request - and the companies will have to accept - a greater of the profits. (p. 14)

The concession regime in Venezuela represented a clear example of the gradual increase of State control over the oil industry mentioned by Tugwell, both from the financial point of view, as well as an ever greater direct government interference in operations. , as early as 1930, Minister Gumersindo Torres established the Hydrocarbon Technical Service and its respective field offices, in charge of supervising the volumes produced in each field. Previously, for royalty payment purposes, and after 1943 also for income tax purposes, the companies reported the volumes they had produced and the price at which they had sold those volumes. Having control of the volumes produced was a first step in assuring real knowledge of the companies' profits, but the prices at which the production had been sold still had to be verified. Allow us to anticipate in the present account, mentioning that the final step for total knowledge of this equation, volumes produced and sales prices, took place on August 26, 1971 with the decree of President Rafael Caldera that established the "Unilateral Fixation of the Reference Values for Income Tax Purposes". The unilateral fixing of these reference values avoided the effects of the argument frequently used by the companies of the need they had had to apply discounts to certain customers in relation to international prices.

This growing and gradual increase in the government's control of the industry was manifested through several actions carried out over time. On the one hand, several amendments were made to the Income Tax Law in 1944, 1946, 1948, 1955, 1958, 1961 and 1966. All these laws, in turn, were subject to partial amendments. In one of them, on December 19, 1958, President Edgar Sanabria modified the equal distribution of the income tax between the government and the companies, the already widely known "fifty-fifty" agreement. President Sanabria's modification established that the distribution of the income tax should be 33% for the companies and 67% for the Nation.

A variety of other actions in this regard included the decree of Juan Pablo Pérez Alfonzo, Minister of Mines and Hydrocarbons in the government of Rómulo Betancourt, which established the principle of "no more concessions". Likewise, there was an increasing interference of the government in the operations of the concessionaires. Thus, on April 19, 1960, CVP was created as the national operating company and in January 1961 it was granted five blocks in the south of the lake, the possibility was established for the company to negotiate service contracts and since November 1964 it has been granted an ever greater participation in the inter-regional market. At the international level, on September 14, 1960, OPEC was created in Baghdad to negotiate the quotation prices established by the transnational companies. In 1973, a result of the Yom Kippur War, OPEC took full control of the market.

At a certain point, the most important actions became more directly related to state participation in operations. The amount of information required from the companies and the operational regulations were increasing. Examples of this are the obligation to unify jointly exploited fields in 1959. Likewise, in July 1971, the "Law of Assets Subject to Reversion" and the "Law

that Reserves the Natural Gas Industry to the State” were approved. In August of the same year, the aforementioned unilateral fixing of reference prices for income tax purposes and in December Presidential Decree 832. This decree established that the government could dictate certain operations to be out by the concessionaires. In 1973 the “Internal Market Law” was enacted and the following year the data bank of the Ministry of Mines and Hydrocarbons was established with the objective of consolidating all the operational information of the companies. At the same time, the process of Venezuelanization of the industry’s personnel has been progressing, which at the time of nationalization had reached 96.5 % of the payroll, including the Boards of Directors.

Nationalization of the industry

Worldwide experience also shows that the process of decantation of power described above necessarily leads to some form of nationalization of the respective industry. In Venezuela this took place with the so-called nationalization process, decreed on August 29, 1975 when President Carlos Andres Perez enacted the “Organic Law that Reserves to the State the Industry and Commerce of Hydrocarbons”, which would become effective as of January 1, 1976. It must be acknowledged that the fear that many felt, we felt, at that time that this process represented the politicization of the industry, proved to be unfounded. Both President Perez and his successors maintained the operational independence of the industry in spite of the criticisms of many political sectors of the extreme left, opponents of all those governments. In this way, the second conflict inherent to the very structure of the society we have mentioned above, that of the role to be played by PDVSA, the parent company of the industry, came to the surface.

However, the attitude of the governments of Presidents Pérez, Herrera, Lusinchi and Caldera made it possible for the technical, managerial and executive teams to maintain the normal operating rhythm of the industry and even reach a series of truly relevant achievements.

, with exploration activities, an activity that had been abandoned by the concessionaires due to its long-term implications, in only ten years, it was possible to go from 13,810 million barrels of proven reserves in 1973 to 55,521 million barrels in 1986. This amount reached 77,685 in the year 2000.

Likewise, despite the fact that real production was limited by the quota assigned to Venezuela within OPEC, production potential was increased. Likewise, the optimization of refining operations was achieved. In this regard, for example, PDVSA was able to unify the Paraguaná refining complex by consolidating the Amuay refinery (Creole) with the Punta Cardón refinery (Shell).

Two achievements of particular importance during this period were the opening and internationalization processes. In the first of these, various projects were undertaken to exploit and develop high-risk deposits with high investment requirements, with the participation of foreign capital. The companies that participated in these projects did so as simple contractors, without

any right to participate in the ownership of the assets. These contractors were paid with a fraction of the production they were able to develop. In the case of internationalization, PDVSA acquired facilities in countries with a high level of consumption. With this, Venezuela ceased to be a typical producer country, whose business ends with the sale of crude to third parties. It now added to its value-added chain the processing, distribution and sale to end consumers, which is where all the profits of the business are made, in important world markets. Similarly, and as part of a horizontal integration strategy usual in the industry, this process was carried out in several developed countries: Ruhr Oel in Germany, 50 % of Nynäs Petroleum, which operates in Finland, Belgium and the United Kingdom, and Citgo Petroleum Corporation in the United States. In this way, PDVSA strengthened the weakest link in its value added chain, in the same way that transnational companies do in theirs by developing production sources in several countries at the same time.

All the achievements of the nationalized industry, especially the two we have just mentioned, openness and internationalization, were at that time strongly attacked by certain political groups of the more orthodox left. Many of these groups, although at that time they never had the opportunity to put their policies into practice in relation to industry, are those that have been part of the public administration since the year 2000. Thus, as we have already mentioned, the other conflict inherent to the structure of the company had surfaced, the one related to the management and operating philosophy of the nationalized industry, , as we have also said, had been kept in a state of latency due to the greater topicality of the one related to the presence of the concessionary companies. At present, as we shall see immediately, it seems that this new conflict also seems to be subject to a migration in the balance of power between its different protagonists.

After the year 2000: now pdvsa belongs to the people

In the elections of December 6, 1998, Lieutenant Colonel Hugo Chávez Frías was elected President of the Republic and took office on February 2, 1999. From that moment on, a radical change in Venezuela's oil policy took place which, in turn, would have repercussions in the operational aspects of the same. In the new inherent conflict, at least in relation to the oil industry, there also seems to be a migration in the balance of power that tends to favor the increasing use of this industry for political purposes. In this case, specifically to reinforce the political power of President Chávez as leader of a socialist revolution inspired by the so-called XXI century socialism.

Under this perspective, it was indispensable, in the first , to eliminate PDVSA's operational autonomy and to have personnel politically identified with the objectives of the revolution. To this end, the President developed as a strategy to generate a crisis that would significantly affect the personnel of the industry. Having been the one who generated such crisis in the years 2002 - 2003, was later acknowledged by Chávez himself in his weekly television program². This

2 <https://youtube.com/watch?v=DhKxPNmewA0>

strategy consisted in making a series of decisions that deeply affected the corporate culture, mainly the appointment people without the appropriate experience and knowledge to managerial positions, thus violating the traditional meritocratic system of the industry. In fact, such a climate was created that led the personnel to paralyze operations since December 2002, as part of a general strike called by Fedecamaras and the CTV, but which lasted until February 2003. This allowed President Chavez to proceed with the dismissal of around 20,000 employees belonging to the technical and managerial cadres of the industry and to replace them with personnel selected on the basis of political loyalty rather than technical considerations. In order to leave no doubt regarding this new orientation, the President of the company, Rafael Ramírez in an address to the personnel, recorded by one of the attendees³ said that:

That is what I want to talk about here, that the new PDVSA is red, red from top to bottom. This is not the time, comrades, this is not the time for us to behave like one more oil manager, or worse, like an oil manager who reminds us of the old PDVSA [...] We are not going to allow anyone, within the company, to stop or freeze the expressions of our people, of our workers in support of President Chávez. This is a line that we want to be clear [...] and we are going to do everything necessary to support our President and whoever is not clear with this decision, it is necessary that he/she give up his/her position to a Bolivarian.⁴

Particularly important was the definition of the government's new policies for the oil industry. These were basically three: in the first place, it was considered necessary to give the industry a greater social content, then it was necessary to liberate our oil and, finally, the diversification of markets. The first of these policies, giving greater social content to the oil industry, meant not that PDVSA should supply the necessary funds so that the public bodies in charge could satisfy the fundamental needs of society -health, education, housing...- but that PDVSA should carry out these functions directly. This implied making the definition of the company's mission much more complex and complicated by adding to it a series of activities very different from those that typically correspond to an oil company. On the other hand, this led to an increase in the number of employees and complicated the definition positions, and most importantly, it duplicated the functions of those other public agencies responsible for those functions. These actions, together with the low technical capacity of the new personnel hired as a result of the aforementioned crisis, are responsible for the severe deterioration of the industry during this period. The resulting lack of maintenance has damaged the operating capacity of many facilities, mainly refineries. As a consequence, it is no longer possible to meet the domestic market demand for fuels, which must then be imported at international prices and resold domestically at heavily subsidized prices. Likewise, crude oil production, which at the end of 2001 was still at 3 million 342 thousand barrels per day, plummeted dramatically to reach 732 thousand barrels per day in April 2019. A loss of 2 million 610 thousand barrels per day in eighteen years.

3 <https://www.youtube.com/watch?v=dmXpbT7Fhiw>

4 At 4 minutes and 45 seconds into the recording of the previous appointment.

The implications of the objective that defined “liberating our oil” are extremely important, especially with regard to the real control over the industry’s resources and the possibility of obtaining the maximum possible profit from the sale of our production, both of crude oil and by-products. In the first case, the opening contracts were replaced by the creation of joint ventures, mainly in the Orinoco Oil Belt, and the result of this decision is definitely contradictory to the one that was taken during the period of the nationalized industry. The result of this decision is definitely contradictory and perverse. A contractor, as is the case of the companies involved in the opening, once the work for which it was hired is completed and the agreed stipend is received, it ceases to have any type of relationship with the contracting entity. In the case of a joint venture, the foreign partner is the owner, in a proportion corresponding to its share of the company’s shareholding, of all the company’s assets and the right to exploit the reserves without any type of concession.

Regarding internationalization, there has been a gradual dismantling of the actions taken in relation . Already in 2010, during a visit of President Chávez to Moscow, he sold the Ruhr Oel to the Russian company Rosneft, which as we have already said, represented an important participation in the German market.

Subsequently, several shipping terminals in the Caribbean and part of Citgo’s facilities in the United States were sold. Many of these actions are aimed at turning Venezuela back into a typical crude oil exporting country and are motivated by a fiscal bias, which leads to see tax revenues as the only possibility of profits for the country. This ignores the much greater profits that PDVSA can obtain as the sole shareholder of companies with access to final consumers in the large centers of consumption.

Finally, market diversification is, in principle, an entirely valid objective for any company or for any country exporting any type of product or natural resource. What must be taken into account, however, are the conditions under which such diversification is out. Thus, for example, Venezuela must deliver 330,000 barrels per day to China as payment in kind for the approximately 70 billion dollars in loans granted by the Asian country. In first place, Venezuela does not receive any income for the delivery of this crude, it only amortizes its debt. Secondly, the equivalent value of the crude oil destined for this debt payment is not publicly known. An important question in this regard is who pays the difference in freight between China and Venezuela’s natural markets? By the way, and as a comment, it should be noted that Venezuela’s current production represents a serious threat to China’s collection of this debt.

On the other hand, although it is not easy to obtain information in this regard, Venezuela also delivers to Cuba some 80,000 barrels per day payable with the services of doctors, sports trainers and various types of public officials. Again, the equivalent value of these services in relation to oil prices on international markets is not known. Finally, an additional 120 thousand barrels go to the countries that are part of the Petrocaribe agreement. This crude oil is payable on a long-term , with a debt subject to an extremely low interest rate, and even so, many of these countries are in arrears, and some of them have even had to have their debts forgiven.

The long-awaited rescue of the oil industry

So far this century, many activities have deteriorated in the country. In the case of the oil industry, the state of deterioration to which it has reached, means that it can certainly be said that Venezuela is no longer a petro-state. But not for the reasons why this usually happens, not because the diversification of the economy means that the country is no longer dependent exclusively on oil income, but simply because the country has lost the ability to generate sufficient income to meet its economic needs. This, especially since 2014, with the end of the bubble that kept oil prices above eighty dollars, and for a good part of that period above one hundred dollars. For that reason, one of the most firmly rooted ideas when talking about bringing the country back to what it was until the beginning of this, it is inevitable that it is the need to rebuild the oil industry.

However, the generalized intensity with which this need to bring industry back to the splendor it had in past times is asserted, must be adequately weighed in terms of present and foreseeable future circumstances. In the first place, it is necessary to recall what was said in the introduction to this paper in relation to the types of activities that are considered necessary to rebuild the country. Of the two that have to do fundamentally with economic aspects, the provision of public services, which we mentioned are indispensable, and those that have to do with the generation of income for the country, which, in addition to being subordinated to the former, must be subjected to an adequate evaluation of the cost-benefit ratio.

During the third of the historical stages of rentier Venezuela, from 2000 onwards, many public services have deteriorated. In recent weeks, it has become evident the great limitation that the country has today in the area of electricity generation, transmission and distribution, as well as in the water supply. The problem of fuel shortages has not yet become dramatically evident, but the lack of capacity to fully satisfy domestic demand with our refineries and the scarcity of foreign currency to import them represent a severe threat in the short term. The implications of a crisis in the availability of fuels in areas such as public transportation and merchandise, agricultural inputs and products, for the manufacturing industry and commerce, make it even more evident that a solution to this problem cannot be postponed. It is foreseeable that all these solutions will require significant financial resources.

The oil industry is one of the activities that generate income, and although it is true that it was the only one the country had in this sense, it continues to be subordinated, in terms of the use of available funds, to the reactivation of public services. Thus, the first question is to see if the country's current limited financial resources, due precisely to the significant reduction crude oil exports, will allow it to have a surplus for the investments necessary to recover the oil industry after having normalized the operation of public services. Such recovery of the industry, on the other hand, will require a significant amount of financial resources over a considerable period of time. Of course, there is always the possibility of resorting to external financing through credits or schemes similar to the opening: to count on foreign contractors to carry out such recovery, with a retribution, which should be negotiated, in the form of a percentage of the production generated.

However, both the use of own resources, to the extent that they are sufficiently available, and external financing through loans or companies willing to carry out operations directly, are subject to additional commentary. As we have said before, the recovery of the industry

The oil industry, as a revenue generating activity for the country, should be subject to a evaluation. So , most of the emphatic affirmations regarding the absolute necessity of recovering such industry seem to have a basically emotional rather than rational basis. On the one , there are the people who, based on their experience, have the legitimate aspiration of reaching important positions in the recovered industry.

On the other hand, those who, although no longer eligible for positions within the industry, are moved by the longing to see Venezuela once again have a world-class oil industry.

In this regard, it is necessary to consider, in the first place, the efforts being made worldwide to develop new sources of energy to replace the highly polluting fossil fuels, coal and today mainly petroleum derivatives. It is difficult to determine the remaining lifetime of these fuels, but this fact is a threat to any effort to develop, or recover, new sources of these fuels. This, on the other hand, will occur gradually, and many people involved in the problem think that in fifty years the use of these fuels will at least be substantially reduced.

On the other hand, as we have already mentioned, the recovery of the industry will require substantial amounts of funds and a considerable period of time. It is a matter of recovering most of the production of light and medium crude oil from Lake Mara-Caibo and the eastern basin. Although several people have put forward estimated figures for both money and time, we must be clear that, again, it is difficult to determine the exact amount of these investments and the time needed to implement the recovery. For this, it is necessary to know a series of technical and operational aspects, for example the costs of drilling and repairing wells, the number of wells that should be repaired, the type of repair work that each well requires, the cost of recovering the total operability of the different refineries,... In this sense however, and without pretending to fall into the same simplification of making another estimate, it does not seem unreasonable to think of investments in the order of magnitude of one billion (one million million million) dollars in a period of no less than five years.

The question that arises from the above two paragraphs is: will Venezuela have enough time to recover the necessary investments to bring the oil industry back to the desired levels, before its production no longer has important international markets? The answer to this question is the most fundamental question to be answered in a cost-benefit analysis. This answer is valid if the country uses its own funds, but it is also the answer that any foreign investor will ask before providing Venezuela with funds or making the necessary investments to become directly involved in such a project.

A final consideration

As a complementary idea to all that has been said above, what is really important at this time is to see what future options are desirable, what needs each one must satisfy, and to determine the viability and possibility of developing each one of them. For this, it is necessary to overcome many prejudices and assume an absolutely realistic attitude. Venezuela can still generate, for some time and with a minimum of financial effort, a certain amount of oil revenues. For this purpose, it is necessary to concentrate activities in those areas that are currently in production, mainly the Orinoco Oil Belt, which today constitutes the most important part of the national production. This production can be placed in countries where there is still an important amount of electricity generation by thermal methods. The Metropolitan University is currently carrying out a research project to identify these possible markets. It is expected that as a result, this information can eventually be provided to PDVSA in order to ensure access to these markets while they are still in force. Guaranteeing markets for our crude oil could be carried out through commitments of the company with refiners in those countries or with the acquisition of some of these refineries, in the same way as it was done with the internationalization.

With regard to this possibility, it is of paramount importance that the political environment accepts that the income derived from these sales should not be directed again towards feeding a rentier structure, but should be used for the diversification of the economy through the use of these funds to finance, through loans on favorable terms for new entrepreneurs, projects framed within areas previously defined as priorities. A scheme similar to that of the social market economy implemented by Germany with Marshall Plan funds at the end of World War II. With this scheme, which later proved to be successful in other countries as well, Germany, having been the defeated power in the war, in about five years had become the protagonist of the “German miracle”.

Bibliography

- BAPTISTA, Asdrúbal (2011). *1830-2008. Bases cuantitativas de la economía venezolana*. Caracas, Venezuela: Fundación Artesano Group.
- FRONJOSA, Ernesto (2017). *Rise and fall of a petro-state. La historia de la industria petrolera en Venezuela*. Caracas, Venezuela: Universidad Metropolitana.
- SOLER, Luis (2017). *Current situation and prospects of the national oil industry*. Caracas, Venezuela: FORUM "The Venezuela we all want". Asamblea Nacional.
- TUGWELL, Franklin (1975). *The Politics of Oil in Venezuela*. Stanford, CA, USA: Stanford University Press.
- URBANEJA, Diego Bautista (2004). *Venezuelan politics from 1899 to 1958*. Caracas, Venezuela: Fundación Centro Gumilla.
- URBANEJA, Diego Bautista (2013). *The rent and the claim. Essay on oil and political economy in Venezuela*. Caracas, Venezuela: Editorial Alfa.
- Universidad Católica Andrés Bello.

