Regulation in Central America: Will Structural Adjustment Work for the Oil Industry?

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In an international context in which the effective management of hydrocarbon supplies is viewed as depending on liberalized energy markets and in which governments act as regulators rather than entrepreneurs, Central American countries are in the process of restructuring their energy sectors. This paper sets out the issues that should be considered in order to analyze the scope for and long-term consequences of structural reform in the oil industry of Central America.

Dans un contexte international dans lequel la gestion effective de l'approvisionnement en hydrocarbones est considérée dépendante de la libéralisation des marchés de l'énergie et dans laquelle les gouvernements agissent en tant que régulateurs plutôt qu'entrepreneurs, les pays de l'Amérique Centrale sont en train de restructurer leur secteur énergétique. Cette étude cherche à cerner les questions à prendre en considération afin d'analyser la portée de la réforme structurelle dans l'industrie pétrolière en Amérique Centrale et de ses conséquences à long terme.

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According to the current way of thinking, the most important factor in effectively managing hydrocarbon supplies and minimizing supply costs in the small importing countries of Africa and Latin America is a free, competitive and efficient market within an effective framework created by government action (see, for example, Mayorga-Alba, 1992 and 1993). It is also argued that the key element to guarantee the security of the energy sector, avoid monopoly formation, guide fuel consumption, protect consumers, preserve the environment and achieve the objectives of energy policy — particularly oil policy — is a government that sees its role as regulating the economy, rather than maintaining a welfare state. Apart from regional cooperation (CEPAL, 1993, p.30), structural reform would thus be considered a solution to overcome the crisis the oil industry is going through in Africa and Latin America.

This view does not, however, fully address all the relevant questions, especially those related to long-term issues. Will structural adjustment eliminate delays and respond to growth in demand? Will it improve the standard of living? Will present and future governments have the technical, organizational and political capacity to enforce the laws, rules and regulations to which both private and public firms will be subjected? Will the governments be able to resist — at an institutional and political level — the pressure of economically and politically powerful national or foreign groups that are firmly established in the energy sector and in other areas of the economy? It must be kept in mind that many of the previous nationalizations, as well as the creation of public oil companies, were motivated by the state's lack of capacity to control powerful transnational companies. Is the government's position at present much stronger than it used to be? Will its capacity to wield power in these areas improve or deteriorate in the future?

The purpose of this paper is to set out the issues that should be considered in order to analyze the scope for structural reform in the oil industry of Central America and its long-term consequences. The region considered consists of five countries that need to import all of their hydrocarbon requirements (Honduras, El Salvador, Nicaragua, Costa Rica and Panama) and a sixth country which is an oil and gas producer on a small scale (Guatemala).

In the present context, characterized by a generalized reduction in government intervention, we can conclude that the Central American countries must cope with three contradictory objectives: to promote economic development, to reinforce the security of the energy sector and to maintain control over this same sector. The boundaries of structural reform are defined by the interaction of these three objectives.

1. The Structural Transformation Process

Within the framework of the structural adjustment programs that national governments are implementing in order to re-establish macroeconomic and budgetary balance, the Central American oil industry is currently going through a profound transformation process (CEPAL, 1992b, p.45). It consists basically of:

- the liberalization of import, marketing and transport prices;
- the deregulation of activities previously reserved to the state, along with encouragement of competition; and
- the privatization of public enterprises in the energy sector.

Thus, structural adjustment consists in a substantial reduction of state intervention: first, by making the state let go of its role as entrepreneur in order to focus its attention on regulatory activities and indicative global planning; and second, by eliminating controls so as to allow market forces to determine prices, the kind and level of economic activity that occurs, and the numbers of economic agents involved.

The reform also entails an important political and ideological dimension. Some of the international development agencies, as well as the bilateral and multilateral aid organizations with great influence over the region, have made continuation of their technical and financial aid contingent on the strict application of structural adjustment in the energy sector, one of the last segments of the economy in which, due to its strategic nature, the state reserves certain exclusive rights.[1] For the industrialized countries the reform represents an opportunity to expand markets and influence regional policy; and for the international banks an opportunity to recover loans by means of converting debt titles into public enterprise assets.

Structural transformation essentially has four objectives:

1) To respond to the crisis in the regional oil industry resulting from a decrease in investment during the 1980s in the improvement and expansion of refining, storage, transport and distribution infrastructure (CEPAL, 1992a, p.45). At present these countries have obsolete and inefficient refineries not fitted to the current demand for oil products; storage capacity is insufficient, which increases both import costs and the risk of supply interruption, since imports come through small and frequent shipments; transport is outdated, which increases loss levels as well as human and environmental risk; and distribution stations have deteriorated and their service is

1/ For example, the International Development Bank (IDB) required Honduras to eliminate subsidies to kerosene in exchange for $35 million (US) for an agricultural modernization project. (*La Prensa*, 1993).

inadequate.

2) To rectify distortions relative to consumer preferences resulting from the establishment in the past of exemptions, subsidies and prices determined by political and fiscal criteria.

3) To ensure adequate hydrocarbon supplies now and in the future and minimize supply costs. The oil sector accounts for a very important share in the balance of trade: between 1988 and 1993 the Central American oil account on average accounted for 9.4% of the export value of goods and services. And for some countries, such as Nicaragua and Guatemala, it accounted for as much as 31.9% and 15.5%, respectively.

4) To deal with the increase in the oil sector's share in the balance of trade foreseen for the coming years. The oil sector accounts for approximately 35% of the energy balance of the Central American region; if biomass is excluded, however, the oil share increases to 76% (OLADE, 1993). That is, oil is the most important component of commercial energy. A structural change in the energy balance is very unlikely due to technical and financial reasons, as well as to the availability of local resources. Therefore, purchases on international markets will be on the increase, as will be their impact on the economy.

Two different factors encourage this increase: economic recovery, which brings about an increase in oil consumption to generate electricity due to the lack of financing for hydroelectric projects; and the deregulation of the electricity sector. Thermal projects, which require lower investment levels and permit fast returns to capital, will be favoured by private investors in electricity generation. These factors explain why it is considered that the only way to reduce the oil share in the balance of trade in the short-term is by reducing import costs and increasing supply efficiency. From this perspective, import liberalization could prove to be favourable. Various studies have demonstrated that in Central America costs would be reduced if all refined products were purchased at the international market instead of being produced locally (OLADE/ CEPAL, 1992, p.55).

Structural adjustment certainly has positive attributes, but are the minimum factors required to guarantee the success of this reform actually present?

2. The Central American Economies

The particularities of Central America hinder the restructuring process and inevitably condition its results. The economic and political stability of this region is quite fragile and precarious. The Central American countries have weak states, resulting from internal and even external strife, they are mostly in the process of consolidating democracy and, in many cases, have only recently replaced military regimes. In regard to recent economic developments, they are coming out of a protracted economic crisis and are overcoming a decrease in foreign investment which led to a general decline in the standard of living and impoverished large sectors of the population. They greatly depend on foreign financial resources, capital goods, technology and know-how and have a low export capacity, confined, in most cases, to agricultural mono-exportation.

The region's oil industry is characterized by a small market, few economic agents and elements of oligopoly. With a few exceptions, three or four transnational companies import, store, distribute, transport and sell fuels and lubricants. Public companies and local enterprises do not have very significant participation; the former import and market clean products, and the latter transport and sell fuels at the retail level and market liquid gas.

Since the consumption level is low — from 5000 bbl/d in Nicaragua to 13,500 bbl/d in Panama — each country has only one refinery under the control of a transnational company, except Costa Rica whose refinery is state-owned.

Finally, in each country there is an office of the Ministry of Economy, Trade or Industry in charge of supervising activities, products and services, but it tends to lack authority and the appropriate regulatory mechanisms to effect these tasks efficiently and effectively.

3. Conditions for Successful Restructuring

Theoretically, four main requirements should be fulfilled for the restructuring process to achieve the expected results: to create competitive conditions, to establish an appropriate legal and regulatory framework, to create an effective regulatory agency, and to involve citizens in the process.

Conditions for Competition

This implies destroying, or at least weakening, the constraints on entry to industries, which requires the dismantling of oligopolistic conditions, encouraging the admission of new economic agents and protecting the interests of small investors in order to give them the opportunity to survive, strengthen and compete.

There are various obstacles in the way of achieving these objectives in Central America:

- Historically there has hardly been any competition in fuel markets; oligopolies have been greatly protected, even by governments.
- The markets are small and the entry of a large number of economic agents is not economically feasible.
- The transnational companies are reluctant to allow competitors access to the market.
- Capital markets are incipient and few of the local capitalists are able to effect the large investments this industry requires, particularly in storage capacity, which is at present insufficient to allow other entrepreneurs to import fuels and compete in the market.

Appropriate Legal and Regulatory Frameworks

The establishment and enforcement of laws and regulations is essential to the overall efficient operation of the public and private agents in the industry. A firm, transparent and fair regulatory system must: avoid the formation of monopolies and guarantee free competition; help to assure that the quality, quantity and availability of products and services are adequately maintained; protect consumers' interests; and imbue trust among investors.

To create and establish a legal and regulatory framework is no problem. What is important is to be able to guarantee its observance and proper enforcement, which is no easy task. Traditionally, the Latin American governments, as those of most underdeveloped countries, find it extremely difficult to guarantee the observance of law, mostly since they do not have specific agencies to see that it is done. Apparently, the mere existence of a judicial agency does not suffice. Furthermore, low wages earned by government officials encourage bribery and corruption.

A Powerful Regulatory Agency

This implies the establishment of a regulatory authority with the autonomy to make decisions and take action, actual technical capacity, independence in relation to public and private enterprises, an autonomous budget, and the fortitude to resist political pressure.

There are real obstacles in the way of this objective. Up to now, there has been no regulatory agency in Central America emerging from and responding to legislative power. Institutions have been created and have developed according to the region's political tradition, which consists of strong presidential regimes, sometimes of a military nature, that centralize political, economic and administrative decisions. Legislative power has been relegated or used to grant support to the executive power's decisions. The Latin American experience shows that the development of democracy certainly leads to a more active role for legislative power; under these circumstances, a regulatory agency derived from this power would be perfectly feasible.

Any structural reform process, especially if it is fast and radical, leads to a redistribution of political power which, in the case of weak underdeveloped countries of the sort discussed here, may erode the capacity of a regulatory agency and make it ineffectual or, worse, closely link it to the interests of the oil enterprises. The findings of 'agency theory' are relevant in this respect.

On the other hand, the Central American countries do not have the financial or human resources to develop actual regulatory competence in the short- or medium-term, since regulation needs to be applied to a wide spectrum of fields: to judicial, trade, energy, fiscal and technical spheres. A great diversity and complexity of tasks need to be effected: to create and update regulations, to supervise activities and trade relations, to continuously and permanently check fuel specifications, standards and security conditions, transport, storage and environmental protection, among other tasks.

Participation of Consumers

Based on worldwide experience, it would seem that the intervention of government is a necessary condition to control public or private oil companies, to enforce regulation and avoid abuse. In itself, however, it does not suffice. Active participation by citizens in committees and associations that promote protection for consumers, the environment and individual freedoms among other interests, is an indispensable condition for the achievement of restructuring. This participation, however, implies the free exercise of democracy, as well as a high level of social organization, which unfortunately is far from the reality of Central America.

To summarize, Central America does not meet the minimum conditions for the success of structural adjustment, especially as concerns the establishment of free competition, the creation of a powerful regulatory agency and active social participation. The reform will inevitably have limited success.

4. Energy Policy and Structural Adjustment Objectives

The Central American countries are effecting structural reforms in the energy sector either out of conviction for their need or forced by circumstances. How far are they willing to go? The depth of the adjustment process certainly depends on the political support the governments may receive as they pursue this process. The objectives of their economic, social and energy policies, however, define the boundaries of the reform. The energy sector has played, and still plays, an important role, but policy for it has to be placed in the context of the state's concern for overall economic policies and its struggle against poverty and underdevelopment.

It should be noted that reform of the sort discussed here challenges the energy development model which had prevailed until recently. In this model, enterprises are publicly owned to guarantee that energy policy achieves its short- and long-term objectives, the most important of which are supply security, minimum costs, energy saving and conservation, environmental protection, support for industrialization and improvement of the standard of living, particularly of the most underprivileged social classes.

In the model that is emerging from the current reforms, the 'enterprise state' is being replaced by a 'regulator state,' and the objectives of energy policy are expected to be reached exclusively through regulatory mechanisms. The suitability of going from one extreme to the other, from a closed model to an open one, is under great debate,[2] since it is unlikely that regulation will achieve the objectives that the state-owned enterprises have not been able to achieve.

In any case, the orthodox adoption of the new model has important implications, such as having to give up using energy policy instruments, like price determination, for distribution purposes. The same is applicable to the advantages and achievements obtained

2/ For a discussion in the case of Latin American countries, see OLADE (1992) and CEPAL (1994).

through the old model, particularly those achieved by the national companies, which will not be available if state intervention is solely restricted to regulation. The remainder of this section is devoted to a closer look at problematic issues involved in adopting the new model.

Under the new paradigm, the price structure of the oil products sold at the national market must be deduced from the international price structure; this is one of the main objectives of the liberalization process. It is however unlikely that the state should completely adopt this free-market perspective; on the contrary, it will not stop intervening since it can hardly renounce its normative perspective with regard to price determination, which considers energy prices to be an instrumental variable in achieving energy policy objectives and, in certain cases, also economic and social objectives.[3]

When the market is unable to reach quality and quantity objectives by itself, state intervention becomes not only desirable, but also necessary, as is the case when home consumption of liquid gas and kerosene is favoured for social and environmental reasons. It is also the case when it is a question of struggling against the negative effects of massive and increasingly larger imports of hydrocarbons, which pose a threat to national independence, or "when the cost of dependence as far as the collectivity is concerned surpasses the cost of reinforced security" (Percebois, 1989, p. 299).

With privatization, the state lets go of a privileged instrument of oil policy: the national company which, in small oil importing countries, is particularly in charge of guaranteeing the security of the energy sector.[4] Strictly speaking this security implies, on the one hand, a safe, stable and inexpensive supply and, on the other, supplier diversification in order to avoid heavy dependence on any one of them. Privatizing the national enterprise, which participates in imports or which has a monopoly over this operation, leads the governments to leave this activity, in both the short-and long-term, in the hands of the market. Is this a desirable situation?

Undoubtedly, it can be recognized that the commercial objectives of private companies and the security of the energy sector are not incompatible. However, it must be kept in mind that one of the objectives in creating public companies in the oil sector was precisely to deal with the lack of capacity or the negligence of private firms in assuring supplies, or the fact that production costs were extremely high.

Likewise, it is uncertain whether privatized companies will continue to enjoy the advantages gained under the agreements signed with exporting countries, such as the case of the San José Agreement, thanks to which, from 1980, Mexico and Venezuela have guaranteed a stable supply of crude oil to the Central American and Caribbean countries under privileged conditions.[5] Although Venezuela has rejected the possibility of including refined products (*El Financiero*, 1993), there is a consensus on the need to readjust the agreement to present conditions; under these circumstances, the question of the ownership regime of the importing enterprises may well take on great importance.

As far as efficiency is concerned, privatization can lead to a paradoxical situation and to irrational commercial decisions, since not all public companies are inefficient, nor do they incur losses. Nicaragua is an important example (Instituto Nicaragüense de Energía, 1994, p. 25). Under international pressure, the government is being edged, on the one hand, to privatize Petronic, a public enterprise, which has been operating as a self-reliant company without subsidies and has managed to get the lowest supply costs in Central America; and, on the other hand, to

3/ On this theme, see Percebois (1989), p. 689.

4/ For a long time the Central American countries, as many other underdeveloped countries, have given up control over the first links of the oil chain due to a lack of technology, capital, know-how and human resources. On this theme see Rodríguez-Padilla (1991).

5/ For example, 20% of the share can be used as a medium-term loan to finance development projects.

maintain the subsidies to the refinery, an EXXON subsidiary, which has been operating under a cost-plus system for more than a decade, without which it would have been forced to close down due to the competition of imported oil products.

The sale of national companies likewise reduces the possibility of regional integration, the objective of which is to reinforce the security of the energy sector through common action in negotiations with suppliers, banks and development agencies; the construction of a regional refinery; the purchase of crude oil and refined products; the hiring of transport and the expansion of the storage capacity (Rodriguez-Padilla, 1994).

A systematic analysis of energy industries reveals that the nature of the ownership regime and of regulation are different issues (Cuevas, 1993, p. 453). Before setting the problem forth in terms of confrontation or competition, of public or private property, it is more reasonable to search for complementarities.

Finally, actual import liberalization will produce the closure of local refineries and their transformation into storage stations, as happened to the refinery in Honduras in 1993. The following events can thus be foreseen: an increase in refined-product imports, a change in supply conditions — since the crude oil market is considerably different from the product market — and the emergence of unprecedented problems. The change of the geographic structure of supplies is an example of this situation. In fact, as a result of the increasing importation of clean products at a lower cost than manufactured products at the local refineries, supply participation by the United States in Central America increased from 37% in 1989 to 64% in 1992. This participation will increase even more with the total liberalization of imports foreseen for 1995. These new dynamics obviously imply that not only the security of the energy sector is at stake, but also national security, especially considering the interventionist tradition of the US in this region.

5. Is There a Contradiction Between the Theory and Practice of Structural Adjustment?

The conclusions drawn from theoretical analysis tend to be validated by the problems encountered in the structural reform process, the results achieved up to now and the perspectives that can be foreseen.

The liberalization of the oil market in Panama, effected at the beginning of 1994, does not seem to be attracting investors and, in practice, will protect the interests of the local refinery, a Texaco subsidiary, for 20 years. On the one hand, it authorizes the free import of clean products, but, on the other, it foresees a 20% 'protective tariff' over the CIF value of the imported products. This tariff will be reduced at an annual rate of 1% until it reaches a minimum of 5% (Panama, 1994). Such a pseudo-liberalization reflects the great imbalance of power in Panama, especially between the weakened government and the powerful American company.

In Guatemala, liberalization was not accompanied by the appropriate regulation, thus resulting in the creation of oligopolies and a very low competition level. In Nicaragua, price increases have produced transport worker strikes, street and road blockages and great social tension (El Financiero, 1994a). In El Salvador, it was decided to maintain preferential prices for diesel used in transport and for liquid gas for home consumption (República de El Salvador, 1994). In Costa Rica, thanks to a large-scale national consensus, the government decided to keep the local refinery.

In Honduras, the liberalization process has degenerated into an acute internal conflict, which has endangered the country's stability. In fact, the fuel distributors took advantage of the market liberalization to decree three price increases in less than two months, which led the government to freeze the liberalization process and thoroughly review the import-cost structure (*Negocios*, 1994). This unleashed a strong confrontation with the two importing firms, Texaco and

DIPPSA, which threatened to stop fuel imports at a time when the crisis in the electricity sector had reached its most critical moment due to a protracted drought spell.[6] If the international context had been that of 20 years ago, it is likely that the government of Honduras would not have hesitated to proceed to nationalize, due to the acuteness of the conflict and the risk of arriving at total economic paralysis owing to the lack of energy.

6. Conclusion

Structural reform is an unavoidable economic policy decision in the context of the new international free-market paradigm. It grants the Central American countries the opportunity to overcome the local oil industry crisis, to adequately respond to hydrocarbon demand, and to improve economic efficiency. The reform implies certain advantages in relation to the old energy development stance, but it also has important economic, political and social implications, which must be assessed carefully. Since the risks are great, the challenge for these countries is to fully achieve structural transformation. Unfortunately, the prospects do not seem encouraging. The Central American countries, without a regulatory tradition and with their own particularities, will find it hard to create agencies with the capacity to adequately regulate the oil industry in the short-term, particularly if the process is fast and radical. Finally, liberalization and privatization will not be able to contribute in an important way to solve the main problem faced by the Central American countries: the heavy dependence of their development process on a strategic product which increases economic vulnerability, owing to the weight of the oil share in the balance of trade and oil price fluctuations in the international market. A solution to the problem has not yet been found.

6/ The loss of up to 14 hours per day due to electric power rationing in Honduras has been estimated to have a value of $200 million in 1994 (*El Financiero*, 1994b).

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