OPEC's Learning Process

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The new world oil market is distinguished by the level of uncertainty that surrounds trends in the price of crude oil. Although its influence has been diminished, OPEC remains a key player in this market and it is of interest to try to understand its current behaviour. From a retrospective analysis of its actions over the last two decades one can perceive the lessons that the Organization appears to have drawn from its experience. Based on this understanding, and taking account of the present reality, one can infer that OPEC must choose between two strategic paths. From its current stance, it appears inclined to abandon its effort to be the exclusive regulator of the international oil market.

L'une des principales caractéristiques du nouveau marché pétrolier mondial est la forte incertitude qui pèse sur l'évolution future des prix du pétrole brut. Bien que son influence soit moindre, l'OPEP reste encore un acteur décisif. Comment expliquer alors son comportement actuel? Une analyse rétrospective de son action au cours de ces 20 dernières années nous permet de dégager les leçons, explicites et implicites, que l'Organisation semble avoir tirées de son expérience. Sur cette base, et compte tenu du nouveau rapport de forces, l'OPEP se trouve face à deux options stratégiques possibles. Sa pratique actuelle semble plutôt s'orienter vers un abandon de son projet de régulateur exclusif du marché international.

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Since the first price adjustments of 1973, the Organization of Petroleum Exporting Countries (OPEC) has gone through several contrasting situations. The question of its future role in world oil markets is currently being examined. Some view OPEC as having the potential for a regulatory function, while others consider that its internal contradictions, along with structural evolution in oil markets, diminish its capacity to influence the price of oil. OPEC is neither a firm, nor, as some economists claim, a cartel, for it brings together sovereign states whose conception of "optimization" does not depend only on economic parameters, even if these parameters constitute the base of common interests. Indeed it is their common vulnerability to market fluctuations and, since 1973, their collective determination to influence the market that obliges the members of OPEC to engage in common action, the effectiveness of which varies according to the constraints of the particular context of the action and the evolution of the internal balance of power.

Beyond the declared objectives, is there a certain logic in the attitude of OPEC? Does an ex-post evaluation of the results of the behaviour of its members enable the reconstitution of a "procedural" rationality based on the lessons drawn from its experiences of the last 20 years?

OPEC and the Regulation of the Market

Since its creation, the *raison d'être* of OPEC and the principal motivation of its member countries have been the preservation or amelioration of export revenues. In the short or in the long term, this objective implies acting on the prices and/or quantities of oil sold. In effect, OPEC has tried to use both these instruments, either successively or together. One can more or less distinguish three phases, each characterized by the predominance of one of these forms of intervention (see Figure 1).

From 1973 to 1980: Increasing Revenues through Prices

World demand was relatively high and the production capacities of OPEC were very much sought after. In order to increase its revenues, OPEC organized itself to influence prices. In the new context created by the recuperation of their oil resources, OPEC countries decided from the end of 1973 onwards to fix posted prices themselves, and, somewhat later, to establish effective selling prices for their crude oil unilaterally. In spite of some problems (notably the question of price differentials between different qualities of crude oil), favourable market conditions allowed them to increase their revenues substantially, either through the rise in prices or by "government take" (royalties, taxes, etc.). The rapid rise of prices, combined with a high level of production (more than 30 million barrels per day (MMbbl/d)) led to a spectacular rise of revenues. This approach, which was efficient for some years, ended up by provoking or accelerating structural changes at the level of the world oil industry.

From 1980 to 1986: Protection of Revenues through Production

The price effect of the first phase began to result in a progressive lowering of the demand addressed to OPEC. From 1982 onwards, OPEC lost the capacity to fix its own selling prices. Sales adjusted downwards according to the new equilibrium between supply and demand. In order to protect the level of its oil revenues, OPEC tried to support the "official price" by a downward adjustment of its production. In spite of establishing a production ceiling 50% lower than the level attained in 1980, and a system of quotas for its members, OPEC could not stop the fall in the price of a barrel of oil and thus of its revenues. This phase ended by the abandonment of its method of fixing the official selling price. OPEC had underestimated, or ignored, an elementary rule of the economics of oil: though in the short term the price elasticity of demand is low, it is very high in the middle and long term (Chalabi, 1989).

From 1986 to 1990: Combination of the Two Instruments during a Surplus

The fall in the demand for OPEC oil was proportionally greater than the reduction in world demand. The role of residual supplier, which was favourable to OPEC in a period of rising world demand, had negative consequences in a period of excess supply. Not only did OPEC fail to support the level of prices it had wanted, its exports were reduced by half. To counter the competition (oil from outside OPEC and energy substitutes), OPEC accommodated itself to relatively low prices in order to progressively regain its market share and increase its revenues. It was a phase characterized by a more flexible use of prices and production quantities: OPEC fixed an indicative "reference price," a production ceiling, and quotas, but without a mechanism to enforce discipline. The result was a moderate and regular recovery of its sales (1 MMbbl/d on an annual average), but at the same time a quasi-stagnation — at a low level — of its revenues because of the low level of prices during this phase. Excess supply amplified the competition at the world level and enticed the members of OPEC not to respect their quotas. The trend was towards the lowering of prices.

The Agreement of July 1990: an Ephemeral Attempt at Forecasting Revenues

The principal elements of this agreement were a minimum reference price of US$21/bbl, a market share of 22.5 MMbbl/d (with minimum quotas for everyone), and a system of sharing additional demand according to the real production capacities of each country. Even though the agreement was imposed in a political context of

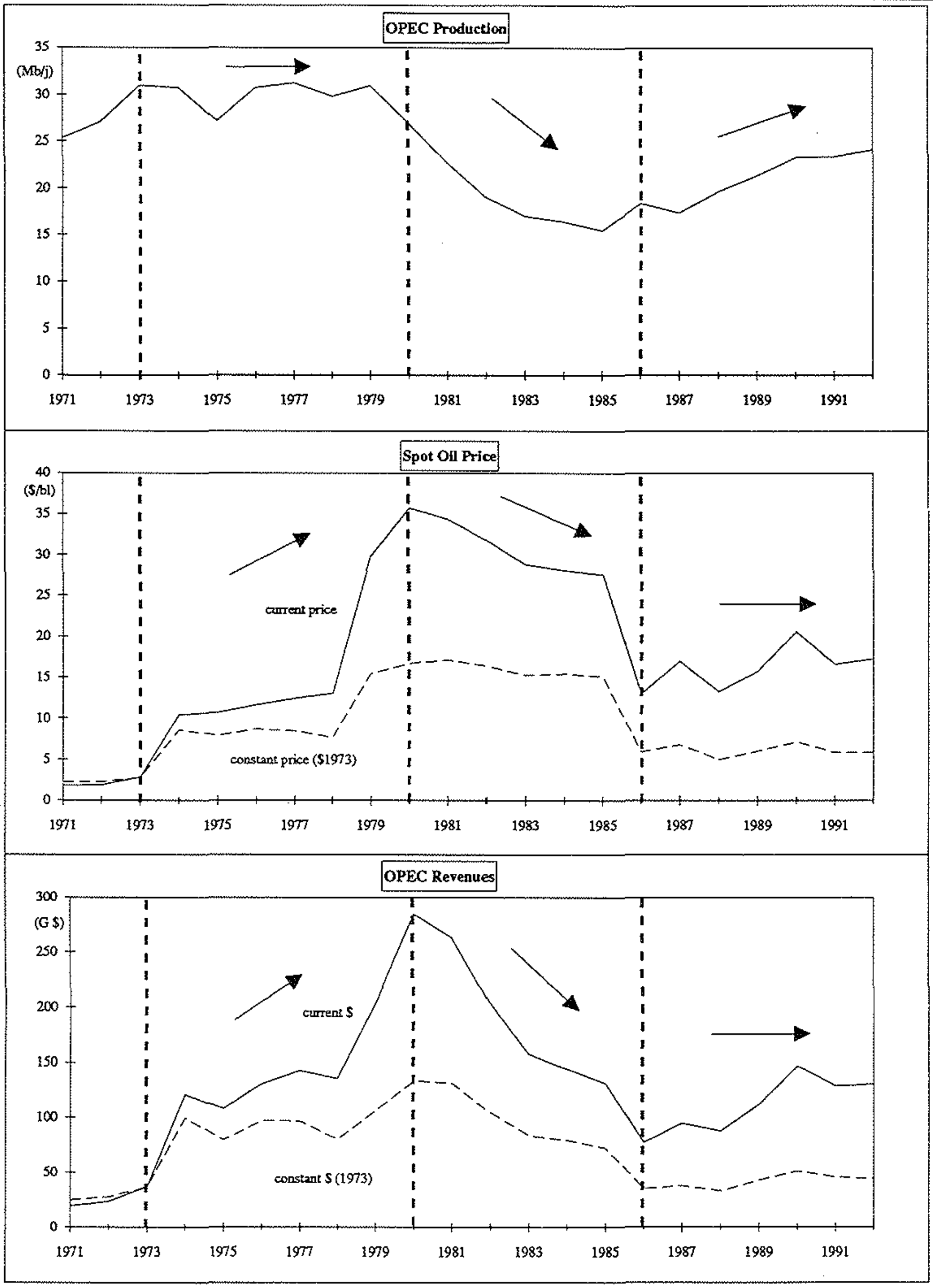

Figure 1: Price, Production and OPEC Revenues

considerable tension just before the invasion of Kuwait by Iraq, it still represented a common willingness to again give OPEC the role of regulating the market. It could have constituted a synthesis or compromise between the different interests within the organization in order to assure a minimum predictability and stability of revenues.

The agreement collapsed totally with the Gulf War and its being put into cold storage since the crisis is symptomatic of a questioning of this approach. The situation remains characterized by excess supply, the non-OPEC producers continue to act as free-riders, and the major OPEC producers are suspicious of competition from outside and hesitate to take on the exclusive responsibility of regulating the market. The result is that the international market finds itself faced with the same uncertainties as those of the phase 1986-90.

Thus, since 1973, OPEC has experimented with different modes of intervention in relation to the control of prices and production. The choice of instruments seems to have been conditioned by two types of preoccupations. The first was related to the problem of the internal balance of power when faced with pricing decisions, and the second was determined by the international context (in particular the demand for oil addressed to OPEC countries).

Divergence and Convergence around Pricing Issues

That OPEC is not a homogenous entity is an established fact. However, political, ideological and other factors differentiating the member nations, in spite of their importance, have never blocked the functioning of the Organization. It has thus been able to survive direct military conflicts between influential founding members. In fact, since the beginning of the 1970s, the major disagreements have been over prices and quotas. Globally, two tendencies coexist: that of countries with a "long-term horizon" who want to increase their oil revenues while at the same time assuring themselves of a market share in the long run, and that of countries with smaller reserves (and/or greater financial needs and constraints) who prefer a maximal valuation of each barrel exported.

This opposition, at different degrees of intensity, has marked the entire lifespan of the OPEC. It is, however, appropriate to qualify the categorization because the positioning of the different countries has varied. Thus, before openly adopting a strategy of regaining its market share, Kuwait had in the 1970s defended the argument of increasing revenues through higher prices and voluntary reductions in its output. Until 1981, Saudi Arabia's policy was consistent with the perspective of a moderate but regular increase in prices. The Saudis did not systematically oppose price rises and their reticence was more in regard to the amplitude and rapidity of the increases. On the other hand, arguing about the risk of long-run competition from other energy sources, Iraq opposed rapid rises in prices. It was only a few weeks before the invasion of Kuwait and because of financial needs that Iraq suddenly demanded the price of $30/bbl. The United Arab Emirates (UAE) and Venezuela, in spite of their large oil reserves, never formally supported a strategy based on low prices.

From 1973 to 1981 the strategy of OPEC was not only openly declared, it was also characterized by a relative consensus. It aimed at a progressive rise in prices (though allowing divergences about the trend), thus assuring a certain predictability to those involved in the oil market.

At the end of the 1970s and the beginning of the 80s, a series of factors — high demand for OPEC production, the Iranian Revolution and the Iran-Iraq war — provoked tensions on the supply side. The very high level of prices that resulted brought about an increase in disagreement within OPEC. The question of the price level became the principal obstacle to the development of a common strategy. It is on this aspect that the Committee on Long-Term Strategy, installed in 1978, got blocked. It was dissolved a few years later without having been able to find a compromise on the price objective. When the committee had begun its work, the oil price was still "fixed" by OPEC and, even if the impending fall in prices was expected, no one had anticipated its amplitude.

The structural disorders and upheavals in the market after 1973 had at least two consequences:

first a substantial fall in the demand for oil addressed to OPEC, and more particularly to Saudi Arabia (who played the role of swing producer without having formally decided to do so), followed by a more important role for free markets in short-term price formation. This situation considerably reduced OPEC's margin for manoeuvre, revived competition with the other exporting countries and pushed the members of OPEC towards internal competition. In order to preserve its market share, each country would try to use prices that were more attractive than official prices. From the technique of discounts, through the manipulation of differentials, to the formulae for net-back prices,[1] the movement towards a lowering of prices would stop only when it had reached a level judged to be politically dangerous.[2] This experience led some countries to revise their approach. Just before the "price war," OPEC abandoned the notion of official prices and adopted that of "reference prices" ($18/bbl in 1986). Implicitly, it admitted its incapacity to "administer" the international market for crude oil and solicited the contribution of the other producers more directly by no longer firmly supporting the $18 reference price (1986–1990). It was not a question of an officially declared position, but this could be the interpretation given the behaviour of certain influential members of OPEC who did not respect the production quotas and who, since, seem to have had as their principal objective the maximization of their long-run revenues by focusing essentially on their market share.

1/ Different means were used during this period in order to circumvent official decisions on the selling price of petrol. The following terms are helpful:

- Discounts — negotiated price reductions relative to OPEC's price.
- Differentials — price differences due to the quality or the cost of freight relative to OPEC's reference crude oil (Arabian Light 34° API, FOB Ras Tanura).
- Net Back — a method of fixing an FOB price (for example) by calculating the value of a given barrel of crude as a weighted average of the prices of the different products made from refining the barrel and deducting the cost of refining and transport.

2/ See the discussion in this issue by Antoine Ayoub (1994).

On the other hand, the countries with "short-term horizons" have come to recognize the limits of their power when there is excess supply on the market. They have progressively realized, without admitting it explicitly, that there are limits beyond which high prices eventually bring about demand adjustments that are unbearable for those of their OPEC partners who have long-run horizons. Hence they orient themselves primarily towards protection against the dangers of a fall in prices and in favour of some guarantee in regard to the predictability of revenues. This can be illustrated by their insistence on adding the term "minimum" to the reference price of $18/bbl at the beginning of 1990, and their declared satisfaction when a com-promise was attained around $21/bbl in July 1990.

The notion of "minimum" will have no practical significance since the prices will continue to fluctuate between $15 and $18/bbl. OPEC has not succeeded in maintaining the price of $18/bbl fixed in 1986. This failure can however be interpreted as a refusal of the producers with long horizons to defend a declared level of prices that makes them lose their market share.

OPEC Faced with Uncertainties

The new economic and geopolitical context, along with structural changes in the world oil industry, have opened a new phase for the oil sector. It is not easy to identify the consequences of these transformations, given the contradictory responses provided by the community of experts to some fundamental questions. (A sketch of the issues is set out in Figure 2.) In general, there is considerable uncertainty about the future of the oil market, notably about the evolution of key variables such as total demand, production capacities, and the international prices of crude oil. The extent of the margins of error in available forecasts is reflected in the large variety of results found in studies and models of long-term supply and demand. Risk associated with activities in the oil sector, already quite high, has therefore been amplified by this perspective of uncertainty, which one can view as radical. In order to survive or improve their positions, the different players need to integrate this expanded uncertainty into their manage-

Supply and Demand: What impact on prices and investments?

- World economic growth?
- Rising imports of the United States?
- Production/consumption of the CIS?
- Future demand of developing countries?
- Share of OPEC oil?

Markets: Regulation or total competition?

- Reorganization of large regional markets: opening up or protectionism?
- "Free" (spot and futures) markets: what relation between short-term/long-term prices?

Technology and Environment: What impact on costs?

- Technological innovations: what rhythm of application?
- Barrel plus "White": continue making refineries more complex?
- Barrel plus "Green": what degree of environmental constraints?

Strategies of Companies: What adaptations?

- Return to basic specialization, integration, concentration?
- Exploration: intensive or extensive?
- Financial autonomy: what role for the financial, banking, and stock market system?
- Cooperation with the National Companies of the Producer Nations: What forms?

Figure 2: A New Phase for Oil: Questions and a Lot of Uncertainties

ment of the long term.

In spite of all these uncertainties, one stance seems to be more widely accepted: in order to satisfy even a moderately rising demand, OPEC production needs to increase. Several forecasts calculate the need for this additional production capacity to be in the range of 10-11 MMbbl/d with a horizon of 2005.[3] The member countries, notably those of the Gulf region, appear to be preparing themselves for such a perspective; taking account of several programs that have been announced, one estimates total additional capacity (including natural gas liquids) for OPEC of about 10 to 12 MMbbl/d by the beginning of the next decade.

Two factors can however disturb this growth: problems of finance and the degree of external competition.

The Financing of Additional Production Capacities

When the price of oil surpasses a certain threshold for a significant time, OPEC registers a more than proportional fall in demand. On the other hand, very low prices, in addition to their negative impact on revenues, bring about reactions (such as tax increases) from principal importers who fear an increased dependence on oil. Between these ceiling prices and what are virtually floor prices (Giraud, 1992), the latter being difficult to evaluate, there exists a large range of possibilities. For example, a durable disruption of flows from an important source can result in a brutal rise in prices. On the other hand, massive and simultaneous investments in all the producing countries create a chronic excess capacity which revives excessive competition and can bring about a fall in prices that disrupts the profitability of investments. For the oil operators, the perception of the future was qualitatively different before and after 1986. After the oil counter-shock of that year, uncertainties about the evolution of oil prices were much greater. If we focus on the fundamentals, two scenarios can be opposed to each other. The predominant one forecasts an excess capacity in production for the next 10 years and therefore a very moderate evolution of prices, or even a fall in real terms (Skinner, 1992). This scenario assumes that only geopolitical disruptions can provoke another oil shock. The second scenario assumes that a prolonged stability of prices at current levels can bring about a revival in the demand for oil and a slowing down of investments, which eventually leads to an upward adjustment of prices (Criqui, 1991, and Tchuruk, 1993).

Such contradictory forecasts tend to make oil operators hesitant and reticent in regard to investments in exploration and development.[4] Given

3/ See, for example, the forecasts of the Energy Modelling Forum (1991), Al-Fathi (1993), and the Center for Global Energy Studies (1991).

4/ The Secretary General of OPEC, Dr. Subroto, evaluates the investment required to increase production capacities in member countries by 10 MMbbl/d at $160 billion (Subroto, 1993).

this situation, the producers (including the major companies) possessing oil reserves with low production costs or having sufficient diversification are better positioned to tackle these uncertainties and have a comparative advantage for capturing future additional demand.

The forecasts are even more uncertain when one integrates into the analysis the retroactive relation between prices and the future demand for oil. OPEC staff estimate that in 2005, the demand addressed to it will be 35.9 MMbbl/d at a price of $18 (1990$), 31.5 MMbbl/d at a price of $21/bbl and 22.5 MM bbl/d at $30/bbl (Miramedi and Ismail, 1992).

Thus, the lower the prices, the greater will be OPEC's demand (Center for Global Energy Studies, 1991). However, this logic, based on OPEC's comparative advantage, can result in a dilemma: increasing its market share implies low prices, but the low prices might not generate cash flows that are sufficient for financing the necessary investments. In addition, uncertainties about the level of future demand creates risks of eventual excess capacity, which can be a source of even further falls in prices. Only a very small group of member countries can eventually solve this problem, the great majority having opted for soliciting a larger cooperation with international companies whose expected contribution would be not only technology but also a part of the capital necessary for financing of development programs. However, the financial autonomy of these companies is relatively reduced (Prins, 1992) and the banks that support them need to take account of these uncertainties in decisions relating to oil investments.

OPEC and External Competition

The second preoccupation has its source in the experience of the 1980s. OPEC identifies three types of threats to its exports: non-OPEC oil, the development of substitute sources of energy and general policies aimed at reducing the dependence on oil.

NON-OPEC OIL

When it tries to regulate the market (by way of quotas or reference prices), OPEC takes account of prices that are attractive to its potential competitors. If competitors invest in new capacity, it becomes unlikely that they will cease production (because of sunk costs) or even slow it down (because of low marginal costs of continued activity). Thus, once a non-OPEC producer is installed, a market share is lost because it will resist withdrawal even if prices fall below the total cost of production, the only requirement being that it can cover its variable costs. On the other hand, a policy of low prices can dissuade future oil projects with high anticipated costs. As a simple reaction for survival, perhaps "involuntary" at the beginning, this policy of low prices has slowed down the development of non-OPEC oil since 1986. OPEC's share, which had fallen to 29% by 1985, grew to 40% in 1992 (Figure 3). Everything indicates that OPEC is still trying to increase its proportion of the market as much as possible, in an attempt to bring it closer to the distribution of world oil reserves.[5]

ALTERNATIVE ENERGY SOURCES

In the medium term a revival of nuclear energy in the OECD countries does not seem very likely.[6] Therefore, for the moment the main substitutes for oil remain coal and natural gas. Even if the consumption of coal evolves with a certain autonomy, it remains constrained by its unsuitability on the environmental plane. Its development is thus assured only if its price differential with crude oil is a sufficient incentive. This fact has led some to say that the price of coal ultimately plays a role of policeman with respect to that of oil. In order not to lose their market share to coal, the sellers of oil have to monitor this indicator that pulls their prices downwards. As for natural gas, it is admitted that the development of world trade in this energy source is strongly influenced by trends in the price of oil. With prices lower than $18/bbl, the realization of most international

5/ In 1992 more than 77% of the world's accessible reserves were situated in OPEC countries, with 65% in the Gulf countries.

6/ See the discussion below by Michel Damian (1994) in this issue.

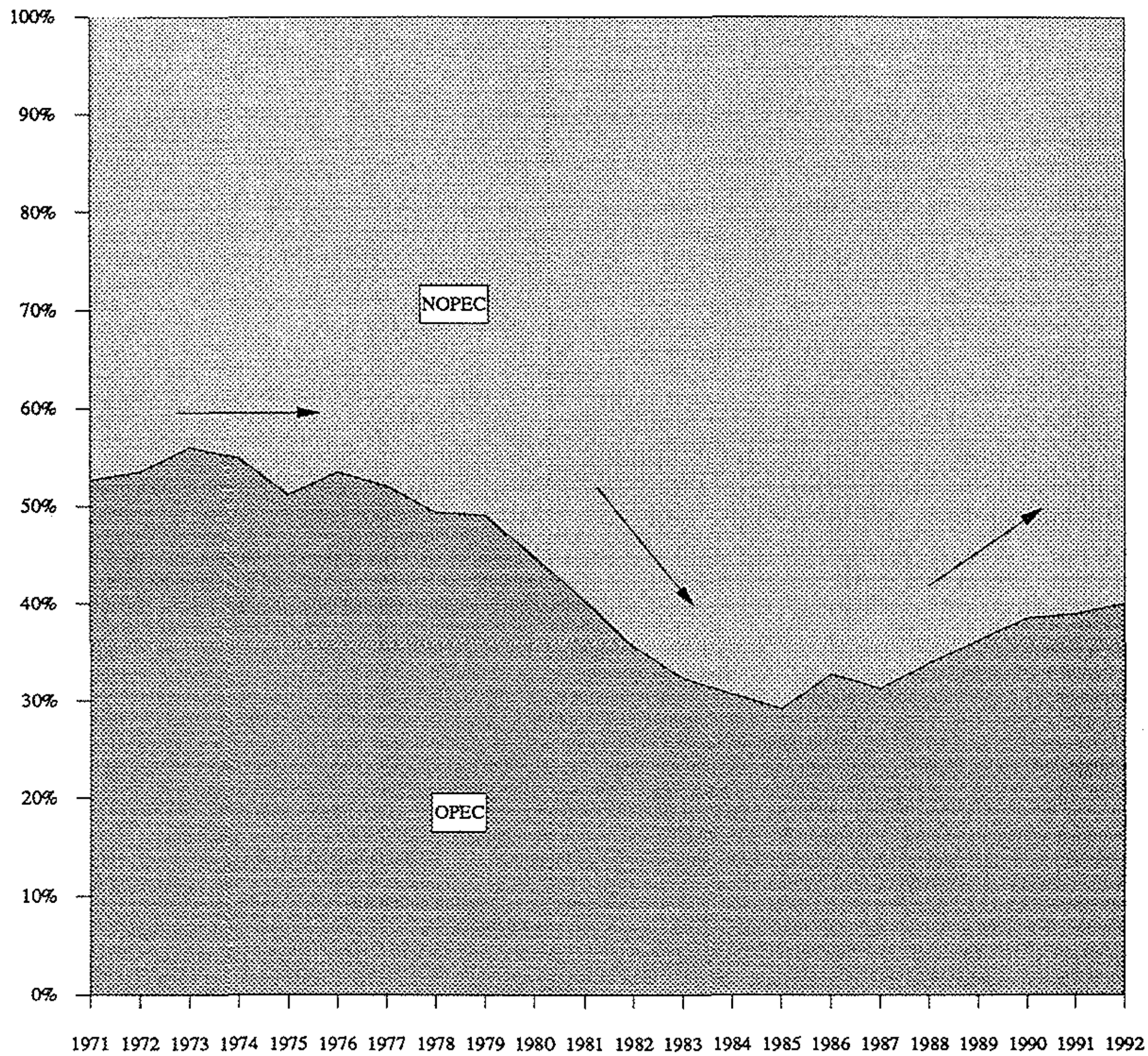

Figure 3: OPEC's Market Share

gas projects are likely to be delayed.

ENERGY CONSERVATION POLICIES

Even while admitting the legitimacy of energy management policies which reduce the consumption of oil, OPEC fears their effects. Rightly or wrongly, it infers the development of a certain "petrophobia" (Nazer, 1993) in the major importing countries (particularly in regard to oil from the Gulf). After having lost sizeable market shares to electricity production, petroleum as a motor fuel is threatened in the long term in the transport sector (for example by projects for electrical cars). The producing countries are also worried about the long-term effects of heavy additional taxes on petroleum products and are increasingly expressing their opposition to the idea of taxes on CO_2 emissions (Boussena and Criqui, 1993).

In order to counter the effects of these measures on the demand for oil, and in order to consolidate or increase its share of the market, OPEC could be tempted by a strategy of downward price adjustments or, at least, of doing nothing to remove the uncertainty on prices so as to dissuade potential competition and neutralize discriminatory actions vis-à-vis its oil.

Past Experience and Future Options

On the basis of this experience, the dominant conception within OPEC seems to be based on certain interim conclusions:

- Reconquering market share implies using prices in an instrumental fashion.
- The exclusive use of an instrument (price or production) can bring about undesired effects (a substantial fall in demand or revenues).
- It is impossible to administer the market by fixing prices that are not linked to trends in the principal economic variables.
- A totally free market would adjust prices to levels that are too low.
- The difficulty of an internal consensus on the price objective does not exclude common pragmatic action.
- There exist "threats" to the shares of OPEC oil.
- Being a "residual" supplier is not suitable and it is necessary to involve other producers in the stabilization of the market.
- There are risks in declaring a reference price that induces governments in importing countries to regulate the market and that can serve as an operational indicator for potential competition.

This series of lessons, sometimes contradictory, explains the hesitant behaviour of OPEC in recent years. Globally, it has pinpointed what it should avoid doing, but this diagnosis is not sufficient to enable it to develop a real strategy. A strategy assumes the existence of a coherence which might in this case be expressed through two possible options, set out schematically in their extreme forms in Figure 4. One case is driven by uncertainty about the future, the other by predictability.

A Strategy of Uncertainty: The first option, reflecting a balance of forces that favours the large producers, fixes on an objective of maximizing revenues by increasing quantities sold. It assumes a continuous rise in the world demand for oil and a growth in market share. OPEC would have a policy of low prices, but, in contrast to the period 1973-81, it would no longer fix an indicator that would create a doubt about price levels in the middle and long term. The risk of a fall in prices would dissuade a considerable part of OPEC's competition. No longer having to declare desired prices, and therefore not having the obligation of supporting them, it would abandon its declared role of regulator, though without totally shutting out the possibility of some discreet action on production levels in order to support certain (undeclared) price levels. Such an attitude, which could be qualified as "predatory," involves an attempt to use uncertainty as an instrument, just as a dominant producer in an oligopolistic market might do. It has the advantage of not demanding formal coordination with other decision makers in the market.

A Strategy of Predictability: The second option, more consensual, consists of pursuing an objective of being able to forecast a certain level of revenues and its gradual progression. The essential preoccupation would be to avoid the shocks that could bring about a brutal fall in prices or market shares. OPEC would then try to act simultaneously to protect a certain price range, previously declared, and a minimum and regular increase of its production. In order to guarantee that the future is "readable" — in order, that is, to considerably reduce uncertainty — the market needs a formal and credible regulator. With OPEC having concluded that it could not by itself assure such a role, the strategy implies the participation of other major players in the world market.

Conclusion

The evolution of certain variables that impose limits on prices, as well as the way in which players in the world oil market organize themselves (in relation to the two polar strategies described above) will determine the future trajectory of crude oil prices. The current situation can lead to radically different paths, the recognition of which can condition the strategies of different operators in the industry (Figure 5). The uncertainty that hangs over these different possible trajectories currently constitutes one of the princi-

	"UNCERTAINTY"	"PREDICTABILITY"
OBJECTIVE	Maximizing long run revenues	Progressivity of revenues
INSTRUMENTS	Competitive non-declared prices Total competition Regulation not demanded	Reference prices declared Responsibility for regulating production International cooperation
CONTEXT	"Free" world markets	"Organized" world markets
DESIRED EFFECT	External competition contained Struggle against the long term "obsolescence" of oil Strong growth of OPEC's market share	No brutal fluctuations of prices Predictable revenues Investments maintained Cohesion of OPEC
RISKS	Prices too low Considerable fluctuation of short term revenues Counter-strategy of importers (e.g., taxes) No guarantee of investments Internal competition of OPEC	Difficulty of determining equilibrium prices Organization of external competition Uncertainty of OPEC's market share OPEC as residual supplier

Figure 4: OPEC — Two Strategic Axes

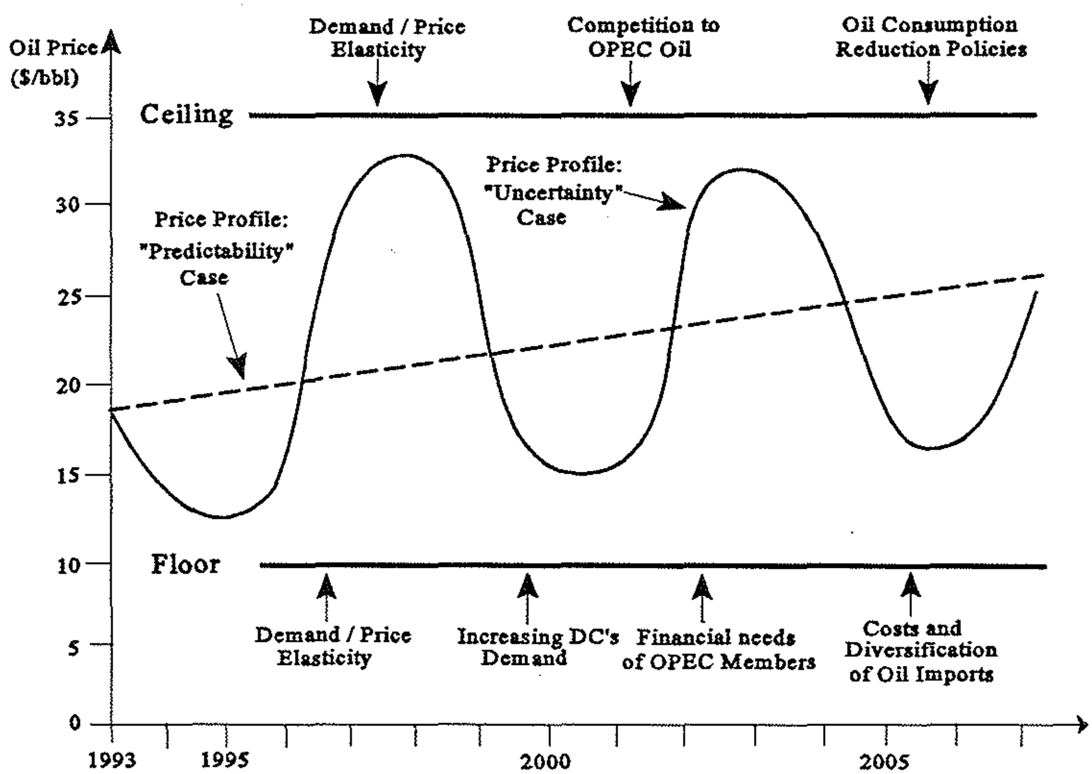

Figure 5: Future Price Profiles

pal barriers to the entry of potential investors in the oil industry.

Given OPEC's importance, which is relatively limited when the entire chain of the oil industry is considered, OPEC cannot by itself impose one of the two options identified here. In these conditions, one can reasonably suppose that the future "world oil order" will be the result of the behaviour of all of the principal players: OPEC, non-OPEC producers, international companies, major importing countries, etc.

Indeed, the "predictability" option, even if it is desirable, seems very unlikely. It involves two conditions which are difficult to satisfy in the current situation of excess supply: an internal agreement on a price objective and an explicit agreement with other producers.

As long as producers with a long-run horizon are not reassured about their market share, they will continue to prefer the "uncertainty" option. This option also has the apparent advantage of being more easy to handle because it is based on the principle of *laisser faire*. However, it has several inconveniences:

- The logic of market forces, and the optimal allocation of resources which follows from them, favours the exclusion of additional production capacities outside of OPEC. Such a perspective, which is unacceptable for the major importing countries, can push these countries into establishing artificial barriers, such as supplementary taxes or other protectionist measures. This reaction can reduce the expected effects of low prices.
- Uncertainties about future revenues and low prices can give rise to the "Ecuadorian syndrome"[7] and the risk of seeing other countries leaving the Organization. In such an eventuality, the existence of an intercontinental OPEC would be threatened, which is certainly not desirable for the Gulf countries.
- Prices that remain too low risk stimulating the demand for oil by more than the growth in production capacities, thus provoking a new cycle of shocks and counter-shocks.

7/ Ecuador, the thirteenth member of OPEC, after apparently carrying out a cost-benefit analysis of its membership, left the Organization in December, 1992.

For the time being, OPEC does not seem to be able to find an internal consensus around one of these strategic axes. This absence of clear decisions explains the incoherence of its actions and its weak performance. By formally maintaining a mechanism of quotas and reference prices, it suggests an *a priori* preference for "predictability." But the inadequacy of its decisions with respect to official objectives and the behaviour of its members allows one to suppose that the internal balance of forces leans more towards the "uncertainty" option. This intermediate position, which is a source of instability and inefficiency, is not sustainable for a long period.

In relation to a longer horizon, OPEC has to choose, with the explicit and implicit accord of its other partners in the oil industry, between a relatively regulated market or a situation of total competition. The persistence of the current attitude of the other major producers, who refuse to share the responsibility of stabilizing the market, pushes OPEC inexorably towards the "uncertainty" option, which producers with a long-run horizon find to be the least penalizing. In any case, there is a strong likelihood that in future OPEC will not accept the role of the unique regulator of the market and therefore of the residual supplier when supply exceeds demand.

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