Strategic Adjustment and Stabilisation in a Hydrocarbon Exporter: The Case of Algeria

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We do not wish to dominate, We only wish to build our own Small place in the sun, our own Algeria.

- President Houari Boumediene

Similarities and Contrasts

In the early 1980s Algeria undertook a thorough review of many aspects of its economic strategy and has made significant structural adjustments to resource allocations, priorities and policies. It has also engaged in a stabilisation programme marked by austerity in response to sharp declines in export earnings and fiscal revenues resulting from a sudden, sharp terms of trade deterioration. So far this is a pattern which by now characterises a majority of African states.

However, there are four major differences. First, Algeria's strategic review and adjustment process was not motivated by the crisis — the review came well before it. And the adjustments — while perhaps speeded up and pushed further in response to it — also began earlier. Second, Algeria is a hydrocarbon (crude oil and natural gas) exporter. These products have dominated both export earnings and government revenues for over a decade. Over 1970-85 output was rising and together with the 1973-74 and 1980 price rises provided a favourable climate for pursuing a high investment, high import strategy - if also one which tended to disguise inefficiences and mistakes in some aspects of strategy formulation, administration and implementation. Third, the adjustments and stabilisation measures were taken on Algeria's own initiative and were neither imposed by nor funded by the IMF and World Bank. Fourth, with the exception of the absence of an open devaluation, most of the elements of the Bank and Fund packages, including market liberalisation and expansion on the part of the private sector as well as (very harsh) demand management, have been present.

Oil and Algeria

Oil and gas revenues have dominated the economic history of independent Algeria. From \$1,000 mn in 1968 exports rose to \$6,106 mn in 1977, \$11,158 mn in 1983 and \$13,034 mn in 1985 before falling to

\$8,800 mn in 1986. By the early 1980s oil and gas accounted for 99 per cent of export earnings as against 57 per cent in 1965, three years after independence.

The first years of Algeria's independence centred in large part on a determined and ultimately successful struggle to recapture the hydrocarbon sector which had been set apart as a French economic enclave under the Evian agreements at independence. That done, Algeria had the foreign exchange and the fiscal base to implement a very ambitious development strategy—as well as the economic image needed to borrow externally to augment its own resources.

Algeria's strategy — initially formulated by G. D. de Bernis — was transformation from a peripheral primary commodity exporter to a core industrial economy with an integrated basic industrial sector exporting manufactures and importing raw materials and food. Production of steel, tools, vehicles, energy, machinery and mineral raw materials was seen as central to the strategy and to creating a self-sustaining growth dynamic.

Secondary — and especially consumer goods — industries were to follow the consolidation of the heavy industrial sector, with urban infrastructure and housing at a third stage. Massive fixed capital formation was perceived to be the engine of growth, with consumption seen as more deferable in a fairly standard F'eldman-Mahalonobis-Turnpike Model format. Employment generation was not a priority, despite widespread urban unemployment and a large, very low productivity, small peasant sub-sector.

This strategy pre-dated major oil revenues, but their impact was not to cause basic revisions (apart from the absence of any serious attempt to export manufactures). Rather, it was used to facilitate its rapid implementation.

The State, the Economy, and the Private Sector

Algeria at independence inherited a very weak national bourgeoisie and was initially hit by the departure of the *colon bourgeoisie*. Further, the state and party were committed to socialism and to a strategy which focused on medium term structural transformation, not short term investable surplus maximisation, either in industry or in agriculture.

Therefore, the state was necessarily committed to

playing a central role in the economy. The early capturing and subsequent rapid rise in oil revenues facilitated the state's playing that role — at least so far as finance was concerned. But it also hid the inefficiencies resulting from a rigid, highly centralised, rule book bureaucracy and a very weak technology base.

Total value added (PIB) in current prices rose from Algerian Dinars 11.313 mn in 1969 to AD 52.917 mn in 1978. The real growth rate was about 5.4 per cent annually. The private sector share rose absolutely from AD 5.928 mn to AD 28.008 mn, but as a proportion of PIB fell from 52 to 47 per cent. Moreover, structurally the key hydrocarbon, major industrial, financial and external trade sectors were wholly state owned. The private sector comprised domestic commerce, the bulk of light manufacturing and of agriculture, a substantial share of road transport and of construction and most consumer services. It was therefore dependent on the public sector for sources of goods and basic service inputs (e.g. power, water) and on public spending (including public sector employee incomes for the bulk of its market). Perhaps surprisingly, as it was viewed with some suspicion in the context of a rather austere transition to socialism and was structurally weak, its urban components were in fact subsidised by the public sector and generated high rates of profit though most of this investable surplus was either consumed or (illicitly) exported.

Problematic and Strategic Adjustments

Despite a very high ratio of GFCF to PIB, the institution of sophisticated, coordinated planning structures and purchase of hundreds of high technology plants, real PIB growth in the 1970s was only 5.4 per cent a year. Safely above population and better than most developing countries yes, but disappointing in terms of Algeria's ambitions and the resources deployed, or in comparison with the NICs.

Plants were largely turnkey. Sequences in supposedly coordinated groups — e.g. vehicle manufacture — went hopelessly awry. Delays and failure to start up properly increased. Technology transfer beyond operation was — despite contractual provisions — rare. Maintenance increasingly became a disaster area. Social pressures were built up by the delays in providing (or allowing the private sector to provide) urban infrastructure and housing.

The end of the 1970s brought three factors into juxtaposition: a world economy decline into recession, growing criticism of the Algerian model and the death of President Boumediene. A major strategy review and dialogue — with at least some public input — was carried on and five major strategic changes adopted:

1. the priority to establish integrated heavy industries

- at all costs was dropped;
- priority was given to completing hundreds of partially executed projects over starting new ones:
- 3. the policy of major use of external borrowing to raise investment levels was reversed;
- the social sectors especially housing and urban infrastructure — as well as agriculture were given high priority;
- a more positive view was taken of the private sector and some (uneven) openings to encourage it were made.

These decisions — which were made long before the fall in hydrocarbon exports' revenue — amounted to reducing overheating, avoiding a massive normal year external debt build-up and decompression in favour of consumption and housing. They were in fact to serve Algeria well in 1986. Unlike Nigeria and Mexico it did not face its crisis grossly over-borrowed, with a massively overextended investment programme or with a blatantly over-heated economy, but entered it with an agricultural sector whose output was responding positively to prior policy shifts. This was especially so as the 1980 oil price increases and the 1980-85 US dollar — the oil price currency appreciation meant that until 1986 hydrocarbon export and fiscal revenues continued to rise in real terms.

1986 — The Hydrocarbon Vapour Lock

In 1986 the commodity terms of trade crisis swept over Algeria. In 1985 oil export prices averaged \$29 per barrel, while at their 1986 low they were under \$12. Exports fell 36 per cent from \$13,800 mn to \$8,800 — a loss of \$5,000 mn at that level and probably \$6,000 mn when loss of expected gas export volumes is included. In parallel, the USA \$'s value fell very sharply in comparison to other key currencies.

Algeria had anticipated, planned and budgeted for a decline — but for one of about 10 per cent i.e. to perhaps \$26 bbl. Furthermore, external debt —largely the heritage of pre-1980 decisions and a 1982 reversal of strategy to resume borrowing — had crept up to \$20,000 mn with a debt service (including repayment) of \$4,700 mn by the end of 1985. At 35 per cent of 1985 exports gross and perhaps half as much after formal or de facto rollover, this was manageable. But at over 55 per cent of 1986 exports with new loans (even those on which negotiations had been well advanced) drying up, and rollovers harder to obtain the burden looked quite different.

Algeria therefore turned to draconic import cuts — from \$12,000 mn in 1985 to \$7,800 mn or 35 per cent in 1986. The cuts were not across the board. Inputs, raw materials, semi-finished products and basic foods had priority — amenity consumption goods imports were

cut to the bone. Further, the public sector enterprises had priority over the private — over 100 of which in manufacturing alone suspended production or closed down.

The depth and selectivity of the cuts were possible because of centralised planning and the public sector monopoly of import/export trade. The balancing or residual item in imports was always consumer amenities and durables, e.g. cheese, radios, TVs, videos, automobiles. When the trade balance was boosted by high revenues these were allowed in, but not otherwise. Production in Algeria and investment in new capacity to produce had the priority claims on import capacity.

The export falls affected government revenues equally sharply. Direct hydrocarbon revenue fell AD 19,000 mn and total revenue by AD 32,500 mn (mostly on indirect tax losses on imports and domestic production choked off by export losses) comparing 1986 estimated actuals with initial estimates. Of this, 72 per cent was clawed back by expenditure reductions to AD 104,500 mn from AD 128,000 mn initially budgeted.

A thorough-going review of investment projects and plans was made with five major results:

- 1. certain low productivity, large scale prestige projects, e.g. the 'Hamma' administrative city (\$500 mn), were cancelled, and others, e.g. the Algiers metro, put on ice;
- 2. projects with no short run completion/production possibility were also put on ice or cancelled;
- all other projects were rescheduled and recosted (to eliminate unnecessary elements) but continued;
- 4. priority was given to those projects with low import
- 5. the continuing (from the de Bernis strategy and the strategic reform) priority given to investment over consumption continued in practice; it was openly reaffirmed by the government as a basic characteristic of Algeria's economic policy.

The austerity policy was set out quite openly and efforts made to give it a wide base, e.g. parliament was involved in approving all the budgetary cuts (including subsidy reductions and tax increases). The state-controlled media both explained the nature of the crisis and stressed the need for hard work and mass self-sacrifice to win through to the other side of the export fall. Public discussion outside official channels was, however, distinctly unwelcome, apart from professional or technical suggestions on implementation.

A combined safety valve and opening for the private sector was created in respect to imports and use of foreign currencies. Private imports were authorised for needed amenity goods — especially cars and spares

— so long as no foreign exchange was required (and in parallel, external travel allowances were cut to AD 1,000 — about £135 at the official exchange rate — once in four years). As well as channelling use of remittances this was seen as a fiscal protection measure; 20 per cent of revenue was derived from high indirect taxes on these imports, 60 per cent of which were cars.

The measures had two major — probably unanticipated — results. The parallel market price of foreign exchange rose sharply (to about 20 AD to the USA \$ versus the slightly over 6 to 1 official rate). Consumers sought to stock up for precautionary and traders for speculative reasons. The resultant pressure on prices was not resisted by the state, e.g. that of coffee rose almost 200 per cent. Indeed, the rapid general price rise was apparently used as an occasion to reduce subsidies and raise prices on bread, milk and other basics, whose prices had previously been held static by the state as part of its low wage/cheap basic goods policy.

The most dramatic switch was in foreign investment policy. Indeed, it was so radical that one key measure — to allow foreign firms majority stakes in joint ventures — was (most atypically) defeated in parliament. However, several far-reaching measures were adopted, e.g. increasing joint venture partners' role in management and planning and removing many sectoral limitations on joint venture activities. In the hydrocarbon sector a new prospecting, exploration and transport code was notably more attractive in form to partners and the previous insistence on long term contracts for oil and gas sales was dropped and spot selling reintroduced.

Agricultural Adjustment and Crisis Management

The pre-adjustment strategic model had given agriculture low priority, e.g. under 10 per cent of the First Plan's investment allocations over 1969-73 and only marginally more in the latter years of the 1970s.

As a result 1981-83 agricultural output stood at 83 per cent of its 1974-76 base — already barely above or even below pre-independence levels. Food imports had risen to over a third of oil export revenues.

However, the 1980-84 plan reversed the past low prioritisation. By 1984 output began to rise rapidly and the 1985-86 plan gave even higher priority and specifically targeted agricultural exports.

Investment — especially in infrastructure and mechanisation — was raised, but priority was not given to state farms. The private sector (including the peasant and co-op sub-sectors) was perceived to be crucial to rapid output gains and raising and/or freeing prices as a necessary element in securing greater effort, investment and output from it.

Input subsidies, low interest loans, allocations of tractors and commercial vehicles were made without discrimination against the private sector. Input supply was increased and effectively opened to the private sector. Especially in 1986 substantial increases in controlled prices were made, e.g. 10 per cent cereals, 13 per cent dry vegetables (potatoes, beans, onions, etc.), up to 80 per cent on milk.

These changes tended to redistribute income to the rural areas — including to peasants. At the same time rural electrification was continued, provision of new villages with housing and utilities (piped water, electricity, gas, telephones) was speeded up and afforestation and anti-desertification/reclamation programmes given real priority for the first time. In addition to their expected impact on food production, these shifts in allocations were designed to reduce rural exodus and growing pressure on urban infrastructure, housing and employment.

The response was rapid and substantial. 1985 cereals production rose to a record 30.5 mn quintals (3 mn tonnes) and even in 1986 when weather was less good at 26.3 mn, in contrast to an annual average of 19 mn over 1946-86. In 1986 overall agricultural production grew 11.8 per cent, despite the fall in grain. Potatoes (targeted for exports, reversing the past import pattern) rose 17 per cent, vegetables 85 per cent, industrial input crops (e.g. cotton) 54 per cent and poultry/eggs about 30 per cent.

If the 1970s and early 1980s were characterised by booming hydrocarbon exports and massive domestic agricultural shortages, 1986 was marked by precipitous declines in the former and substantial rises in the latter. Euphoria, however, would not yet be justified. Output in absolute terms is modestly above the 1974-76 base but remains well below it at the *per capita* level. Grain imports still account for over half domestic use. Productivity — e.g. quintals per hectare average for grain — is still low by international (or even developing country) standards. But a downward trend has been reversed, and strategic adjustment appears to be winning output payoffs after a relatively short time lag.

Price Policy: Evolution and Continuity

Price policy in Algeria has gone through three phases. In the first it was to keep all prices low to protect mass buying power even if this required imports at levels and prices detrimental to local production. The second phase (beginning well before the strategic adjustment but continued under it) cut back the range of price protected items (and consumer goods imports) to consumer basics and public services. However, the low salaries/wages policy remained unchanged, so

that as inflation rose to 20 per cent a year in the 1970s real purchasing power of wage earners (especially in the public sector) was steadily eroded.

The main beneficiaries of the shift were the private manufacturing and distributive sectors. Their rapid growth in value added in the 1970s turned on a combination of low prices for fuel, water, electricity and intermediate goods inputs purchased from the public sector which, combined with very slowly rising wages, held their costs down while their prices were relatively free to rise.

However, by 1980 and especially by 1986, the system no longer functioned efficiently. Uncoordinated price setting had led to marked inconsistencies, and shortages plus inflation, speculative purchases and parallel markets. The first moves toward reform came as part of agricultural re-privatisation in the early 1980s and were generalised in 1986.

This third stage pricing policy is not a free market one. The intended role of prices in adjustment is a secondary one. De-bureaucratisation and more selectivity are its hallmarks, not abandonment of price management as a basic policy instrument. However, over 1986-87 prices have been used to further attainment of certain goals, e.g. agricultural output and bringing home external earnings (e.g. in private car imports).

The caution in using them more widely relates directly to a desire to limit inflation, in turn flowing from a policy of holding nominal wages and salaries nearly constant, e.g. there has been no general minimum and scale wage increase in over a decade. Gradual price rises (and gradual erosion of real labour incomes) is seen as an economically efficient and politically tenable way of preserving the priority of investment. Rapid inflation is not, thus the combination of selective, managed price increases with a continuing overall control structure.

Over 1973-83 the average official growth in the cost of living was 12.8 per cent; in 1985-86 it was higher, but will still probably be recorded at under 20 per cent. However, especially since 1980 and most particularly for 1986, this is an underestimate of the true rate of inflation as experienced by consumers. The index is based on official prices. As more and more transactions are on parallel markets and as shortages increase, the divergence of the recorded from the actual widens — with a sharp rise in complaints by consumers. The government is aware of the problem, indeed — at least over 1986-87 — has tolerated or encouraged 'free market' pricing of some nominally controlled products. The barrier to restoring transparency by price freeing or raising is that the resultant open rise in the cost of living would trigger worker demands for substantial wage increases.

The Prices of Foreign Exchange: Hidden, Partial Devaluation

Nowhere is this ambiguity more evident than in the case of the prices of foreign currency (exchange rates). Officially the dinar has not been devalued and remains at about 4.67 to the USA \$. Reality is rather more complex with a special rate of about 6.5 and a parallel one of about 20.

Over 1986-87 Algeria restored the right to hold foreign currency to citizens. It further inaugurated a *de facto* 40 per cent premium on remittances (around one million Algerians work abroad) and set up bank accounts denominated in foreign currency (with interest credited in foreign currency at international rates) for citizens in national banks. Deposits must be in foreign currency. Combined with virtually open general licensing of imports which do not require banking system provision of foreign exchange, and removal of the requirement that non-hydrocarbon exporters convert their proceeds into dinars, these steps amount to a radical loosening (liberalisation) of the external trade and payments regime.

One intention is to bring remittances back into the banking system. Another is to provide incentives for exports, clearly necessary if non-hydrocarbons and, in particular, agricultural products and manufactures from plants well in excess of national demand (e.g. 3.5 mn tonnes steel capacity, 1.4 mn tonnes domestic sales, albeit poor maintenance means true capacity is far below rated) were to play a renewed role in raising export receipts.

In respect to tourism there have not been parallel changes because high local AD costs have to be met by conversion at the official rate (and because the public enterprises dominating tourism are not very innovative or quick on their feet). As a result Algeria, with a long, attractive Mediterranean coastline, has only 400,000 tourists a year as contrasted with millions in Tunisia and Morocco.

That what has in fact happened is a disguised, partial devaluation (99 per cent of exports and officially licensed imports are not affected) is confirmed by parallel currency market moves. Since mid-1986 prices have risen more than 20 per cent, e.g. from AD 2.5 to over AD 3 per French franc (versus nominal official 0.77).

The State, Market Forces, Bureaucracy and Austerity

Since 1980 and especially during the crisis, the state has become more aware of and more responsive to the realities of market forces. This does not represent a resilement from a commitment to planning but an acceptance that recognising and tolerating or adapting/managing market forces is more prudent than seeking to ignore or to contradict them.

Continued commitment to planning and to a dominant public enterprise sector both ensure the continuation of a large official and managerial bureaucracy and place a premium on increasing its efficiency, productivity and probity. President Chadli has taken a lead in denouncing rigid bureaucracy, managerial incompetence, output non-performance and monopolistic or other exploitative practices in the public sectors. Lack of competitiveness has been specifically criticised with reference to both the manufacturing and agricultural sectors.

In principle sanctions — including bankruptcy — on poor performance have been instituted. In practice these cannot function properly so long as substantial parts of price fixing remain arbitrary. The law of value is simply not applied, e.g. bus tickets are priced at 3 to 5 per cent of communal taxi fares. Whether 'competitive' and 'efficient' or not, public bus companies are, thereby, condemned to large losses.

Further, in some cases — e.g. bakeries, garment manufacture — public enterprises are retained in basically private consumer goods sectors to provide competition in a rather different sense. They are seen as a means to limit increases in prices by the (already profitable) private enterprises.

Privatisation in the sense of selling off public sector assets is not on the agenda in Algeria. However, an increased role for the private sector — as noted above — certainly is. In this, as in other areas, the policy evolution to date is incomplete and partially self-contradictory.

The private sector has greater freedom of manoeuvre in consumer goods manufacturing, commerce (now including international trade) and road transport. Moreover, it has it in a context of liberalisation of price setting and foreign currency control, while still enjoying a large measure of *de facto* subsidy provided by low public sector intermediate input (both services and goods) prices. It is intended that it raise its levels of profits — as it certainly is doing.

But the sectors open to it either do not require much fixed capital (and with negative real interest rates and access to the banking system profits will be ploughed into working capital only to a limited extent) or are not expanding rapidly. Property (including commercial, hotel and middle/upper income housing) remains closed, as does much of construction. These are sectors in which shortages (resolved by 'key money' to bureaucrats or appeals to well placed persons) are severe, and the public sector cannot do the job on an adequate scale or at a cost competitive with the private sector. So long as they remain closed therefore, the goal of achieving a much higher private sector contribution to investment is likely to remain

unfulfilled. Instead the higher profits are increasingly channelled abroad, making full use of the external trade and foreign currency liberalisation measures.

1986 and Beyond

From the initial assessment of the crisis, Algeria perceived it as short run and to be followed within 12 to 18 months by a stabilisation of the export price of its oil around \$20 bbl — a projection which as of mid-1987 appeared to be roughly correct. As a result the crisis was not seen as an occasion for further strategic structural adjustment so much as for pursuing existing lines of shift further and faster.

In this context the policies adopted were in one sense rather serene — there was no sense of impending disaster but rather a sense of an occasion to rethink policies and attack inefficiencies in their operation. However, in another sense this serene attitude led to extreme severity of resource use — and especially personal consumption — compression only partly mitigated by the sharp increases in food production.

Because the crisis was expected to last only a year or a year and a half, priority was given to preserving the core of investment spending at the expense of personal and — to a lesser degree — public consumption. While managed with care, this compression was felt, especially by workers, and led to severe strains. Unemployment grew; prices rose and wages did not; trade unions were used to enforce cooperation, not to express worker views; productivity and efficiency

measures included disciplining and firing workers (rather more visibly than managers or officials, who blamed workers for their units' failings). In the eastern cities tensions rose to the level of rioting.

However, with the recovery of oil prices, there has been a notable relaxation of compression. This has — perhaps less deliberately — been accompanied by a slowing down of policy reviews and reform implementation. That slowing could lead to severe problems as the logic of the strategic adjustments and of the reforms to date requires that they be taken further, especially in those cases (such as the pricing system, the exchange rate and the role of the private sector) in which action to date creates major internal inconsistencies requiring resolution.

It may be useful in closing to re-emphasise two special characteristics of Algeria's adjustment and stabilisation:

- the strategic adjustment exercise was carried out long before the crisis, as were the initial steps towards its implementation. The crisis provided an occasion to press some of the measures faster and further, but did not lead to strategic shifts;
- 2. despite the similarity of a number of adjustment policies to the Bank's agenda and the near-classic-IMF design of the stabilisation package (with the exception of an open devaluation) both were entirely Algerian both in initiation and implementation. No Fund support has ever been sought, and Bank lending has been on a project basis.

Table 1

Macroeconomic Magnitudes 1967-86

Year	(I) GDP bn AD ^c	(II) fixed capital bn AD ^b	(III) II/I	(IV) exports mn USA \$	(V) Oil/Gas exports as % of total	(VI) imports mn USA \$	(VII) external debt ^a mn USA \$	(VIII) debt service mn USA \$
1967	40.3	9.2	0.228	700	na	630	na	na
1971	49.6	71.4	1.43	816	70 ^d	996	na	na
1975	69.1	169	2.44	4500	92	5451	5912	862.7
1980	85.8	na		13650	98	9596	17193	3881.5
1983	121.2	na		11158	na	10332	15912	4842
1984	139	638.6	4.59	12900	na	10100	15109	5187
1985	154	na		13034	na	11220	16326	5087
1986	160	na		8800	99	7800	na	na

Notes

- a long term debt and short term debt
- b cumulated investment
- c constant prices, 1978. AD = Algerian Dinar d 1970

Sources:

- A. Benachenhou, *Planification et Développment en Algérie 1962-1980*. SNED, Algiers, 1980.
- Handbook of International Trade and Development Statistics, United Nations, New York.
- World Bank report on Algerian economy, 1984, Washington DC.
- MPAT (Ministry of Planning, Algeria).
- Comptes économiques, Algiers, 1986.