JPRS L/9710

4 May 1981

West Europe Report

(FOUO 24/81)

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

JPRS L/9710

4 May 1981

WEST EUROPE REPORT

(FOUO 24/81)

CONTENTS

TERRORISM ITALY

REVELATIONS BY 'REPENTANT TERRORIST' LIBARDI

Milan EUROPEO in Italian 9 Mar 81 pp 24-25

[Article by Marcella Andreoli: "That Other Lotta Continua Current"]

> [Text] How did Italy's armed bands come into existence? How did political dissent come to resort to machine guns? The following confession sheds some light on the mystery.

Of the numerous mysteries that shroud the whole story of terrorism, there is one that stumps everyone: the mystery of its genesis. How did the armed revolt begin? How was it that political dissent took recourse to lethal weapons? Founded in 1976, Prima Linea, guilty of assassinating Judge Alessandrini and Judge Galli, is under close scrutiny while a team of judges from various cities are dissecting it like surgeons over an operating table. Of all Italy's terrorist clans, Prima Linea has filled our jails with the greatest number of outlaws, including Marco Donat Cattin, recently captured in France and extradited to Italy in handcuffs. Prima Linea, too, has yielded the greatest number of penitents, including Massimo Libardi, theorist for the gang until he quit shortly before those two ghastly murders. His confessions reveal how Prima Linea began.

Massimo Libardi, 28, of Trento, formerly hotel worker in Levico, now in prison, begins his story with Lotta Continua and the early 1970s. His basic chapter, a startling document, calls attention to a magazine LINEA DI CONDOTTA, which appeared only once, in July 1975, published by a group affiliated with Autonomia; some of its members, Franco Piperno, Oreste Scalzone, Paolo Virno and Libero Maesano, later joined the periodical METROPOLI, currently under accusation. LINEA DI CONDOTTA created a good deal of dismay when it published two documents by Lotta Continua dissenters, which "formalized" a schism already under way within Lotta Continua that opened the way to the foundation of Prima Linea.

Massimo Libardi was himself a dissident. Leaving Trento to study philosophy in Milan, he joined LC in 1972, charged with making contacts with students of the university's architectural department and persuading them to switch over to LC. His dissidence already began the following year when he instigated a debate between the left and right currents. The leftists "sustained the need to give all possible support to the PCI towards favoring its rise to power, after which LC would do its utmost to radicalize the struggle in behalf of labor's demands... thus to create a split between class and state." The rightists described this goal as a "Chilean revolutionary hypothesis," and affirmed, "although with some confusion, the need to initiate a process of arming the masses."

In the autumn of 1974 the "definitive rupture" occurred: the theories of the Lotta Continua left were published in the single issue of LINEA DI CONDOTTA under the headline "The Problems Come to the Surface." What had happened? Some of Lotta Continua's big shots had set up a new unit, unnamed until Prima Linea was founded, but referred to in the meantime as the "current." The big shots were Roberto Rosso, chief of the nuclei in Milan, Genoa, Bergamo and Naples; Piero Del Giudice, in Sesto San Giovanni; Chicco Galmozzi, Sergio Segio (indicated for the assassination of Judge Alessandrini), and Massimo Libardi, with Marco Donat Cattin in Turin. Dissident Libardi's account jibes with that of another more notorious repentant, Roberto Sandalo, also ex-Lotta Continua who moved on to Prima Linea. Says Sandalo, "Prima Linea originated with the tough elements of Lotta Continua." He, too, names Galmozzi, Del Giudice, and Roberto Rosso who, he states, participated in Lotta Continua's "service order" and therefore "was familiar with Lotta Continua's paramilitary project, to which it had been dedicated since its origin." He continues, "I must explain that in 1972 and the ensuing years, these plans involved mainly an antifascist crusade (against various MSI exponents and offices) and holdups, carried out especially by the Milan and Rome branches, to finance the publication LOTTA CONTINUA. From those years on Lotta Continua collected stores of arms and explosives."

The LC dissidents formulated an ambitious program. Libardi recounts that they formed an armed group to set up, through pistol practice, a "federation" of armed groups. These were the years when the leftist extraparliamentary fringes were showing the first evidences of their P38 vocation, and the Libardi group's proposed "federation" was intended to give them homogeneity and guidance. This it did in grand style, separated into various sectors, according to a model which has become classical: "information, to collect political and military facts on selected targets"; "logistics, to find arms and money"; and "the political, to maintain contacts with other organized groups, especially Workers' Power." It had four branches, in Milan, Turin, Florence and Rome. "In Rome the military chief was Valerio Morucci," who attempted to gain control over the Red Brigades in behalf of Autonomia when Aldo Moro was held captive.

"As for our own objectives," Libardi explained, "in the main we ruled out homicide," but then the group murdered two persons; Milanese MSI party member, Enrico Pedenovi, a crime perpetrated on the pretext that the fight on fascism conformed to the LC's "firm tradition that fascists must be assaulted physically and eventually killed," and the assassination of the Turinese Brigadier Antonio Ciotta, victim of "an autonomous initiative by the Turin branch," who sought to "intensify the militaristic aspect of the struggle." Other exploits including wounding victims in the leg, holdups, kidnapings, and murder attempts.

But the group focused mainly on factories. Libardi: "Del Giudice, who was fanatically on the side of the workers, thought it was essential to organize armed nuclei in the factories by militarizing the workers. This was the whole organization's official line, enacted through this sequence: workers' struggle, intensification of the struggle, the creation of a workers' order service in the factory, and their militarization. This sequence was actually followed at the

Magneti Marelli plant in Milan up to the order service, but the last stage was never realized and no arms were distributed among the workers." At any rate, the group achieved a "political result" when, on a suggestion from Autonomia, it decided to take part in a street demonstration. "Counting our people, we saw that with our 300 members, together with those of Autonomia, there were 2,000 persons on hand." This was in 1976, in Milan.

The hope of constituting a force encompassing the different groups, however, failed. The crisis came to a head "because of the total lack of political debate." This crisis gave birth to Prima Linea, to which all the LC dissidents transferred when it was founded on 16 November 1976 in a villa in Salo, on Lake Como. Missing, however, was Piero Del Giudice, who was left out because of his "personalism" (he later founded the Communist Revolutionary Committees with Oreste Scalzone). Massimo Libardi would remain in the background because he was arrested for the first time 1 year later. In prison, he had second thoughts about armed revolt so pervasive that, once released, he gave an interview to LOTTA CONTINUA, urging "explicitly all comrades to abandon their armed warfare and to emerge from the blind alley in which we found ourselves." The interview, however, was never published, and Libardi circulated it in the "movement" in mimeographed form, only to learn that Prima Linea deemed it extremely dangerous. Marco Donat Cattin later told him that "my position as a comrade urging desertion was much more dangerous than that of a spy, that is, of a traitor who no longer claims the respect of his comrades."

9653
CSO: 3104/221

HISTORICAL GROUNDS FOR ARMENIAN TERROR EXAMINED

Paris PARIS MATCH in French 20 Mar 81 pp 78, 79

[Article by Georges Menant: "Armenians' Sudden Revenge."]

[Text] In retaliation they are committing murders in the streets of Paris 66 years after the Turkish massacres.

To the sound of bombs and bullets France is now discovering its Armenians, after its Bretons, its Corsicans and its speakers of Provencal. First of all, they were forgotten, because the Armenians had for a long time forgotten about themsleves. They were tailors, shoemakers, doctors, lawyers, grocers. They lived in Marseille and spoke with Marius' accent; in Lyons they became regular Lyonnais; in Paris and its suburbs they spoke the old-fashioned slang of Paris. Often they Gallicized their family name, like Charles Aznavour (ian), and most of them married French women. Numbering 300,000 they were absorbed, melted, dissolved into the French environment like incense in the evening air. In a word, they were one of the finest examples of the success of that "French miracle", hospitality, perpetuated throughout the centuries, and strengthened in hard times.

And then last Wednesday, in broad daylight, in the heart of Paris, on the boulevard Beaumarchais, three Turkish diplomats who were leaving an annex of their Embassy were caught in the cross-fire of automatic weapons. Two died; one miraculously escaped. The killers, scarcely glimpsed, escaped without mishap. In a telephone call a few hours later the "Armenian Secret Liberation Army" claimed responsibility. As in October 1975 when they shot down the Turkish ambassador to Paris; in December 1979 it was the director of the Turkish Tourist Office; and in September 1980 it was the press counselor of the Embassy; finally, in 1980 they attacked and just missed the economic counselor. And what is the reason for this slaughter? Only yesterday the terrorists evoked it, on the eve of the arrival of the Turkish Foreign Minister in France, last 9 and 10 February: "The French government should know that soon we shall strike, in reprisal for this visit and for having forgotten about the Armenian problem."

Armenian problem? That too, we had forgotten. We had forgotten the most tragic, the most cruel, the most horrible of all the problems making up the old and inexhaustible "Eastern question." Genocide: it took the Second World War and the Jewish holocaust to create the word. Although first in name, the genocide of the Jewish people was not however the first of its kind. The first goes back to 1915, to that proclamation of Talaat Pacha, the then minister of interior, drafted in a tone the Nazis themselves would never dare use: "The government has decided to exterminate completely the Armenians living in Turkey. We must put an end to their existence, without consideration for women, children or the infirm, without heeding pangs of conscience, no matter how tragic the extermination may be." And the communique added, in its official harshness: "Those who oppose this order cannot remain in the government."

People didn't need to be told twice. Against the Armenian people, thousand-year inhabitants of Anatolia, Christians from the earliest times, heirs of a glorious history and refined civilization, Turkish barbarism was unleashed, with its brutal soldiery and population, as had not been done since the time of the invasions. They burned and pillaged; they killed and tortured--for pleasure or to show an example--they defenestrated, decapitated, disembowelled and flayed. As for the survivors, "They pushed them ahead, women and children, striking them with fists and sticks," related a missionary. Where to? To the burning Mesopotamian desert, where camps awaited them. Camps where cattle itself could not survive. Thes were camps where, according to the revelations of an American diplomat, "They brought doctors to examine the attractive girls and select only the best of them." In camps which the German consuls--Turkey was then at war on the side of Germany--in their reports described with a word which one war later would acquire the notoriety we are all aware of: "Konzentrationslager" [Concentration camps]... What were these poor people accused of? For having always been friends of the Russians, for being Christians like them, and traditional enemies of the Ottoman Empire. The proof of it is that Armenian emigres made up a volunteer legion fighting on the Allied side. Deportation of the Armenian people was thus a "security" matter. But after the war when the lay and modernist dictatorship of Kemal Ataturk was established on the ruins of the Ottoman empire the young revolutionaries of the new Turkey simply completed the former pashas' extermination of the Armenians: this time in the name of "purifying" nationalism. After 10 years of uninterrupted massacres Turkish Armenians ended up numbering 640,000 in the 1927 census, while before the war there were more than two million of them! Hilter was right. "In 50 years who will remember the massacre of the Armenians?" he asked. Not even 50 years were needed to forget them. The more so since there was no Nuremburg for that infamy. Neither moral nor material "reparations" for this martyred people. Not the slightest memorial at these Eastern Dachaus and Auschwitzes. On the contrary, a grateful Turkey erected a mausoleum to the memory of Talaat Pacha, who ordered the massacre. Erased from the map, the very name of Armenia would be eliminated thereafter from diplomatic language. Mention the "affair" in the presence of a Turkish representative and he will leave, slamming the door. The Armenian colony of Marseille raises a monument to the memory of its martyrs, and the Turkish ambassador to Paris leaves France forthwith. A United Nations commission "for the protection of minorities" dares to mention Armenia, and the Turkish delegate raises heaven and hell for withdrawal of such allusion--and succeeds.

Why this silence? For a very simple reason, old as the nations, called reason of state. Stronghold and advanced base for the West, loyal and resolute member of NATO, but poor and divided by internecine struggles, Turkey must be handled carefully at all costs. And forgetfulness is not a very high price for states... But what a choice prey Turkey, crucial but fragile partner of the West, represents for communism! Thus, when the first attacks broke out against Turkish institutions and citizens abroad, many saw it only as a new manifestation of anti-western terrorism: the action of a few individuals who may or may not be Armenian but who at all events were certainly foreign to Armenian emigre circles. But this soon proved to be an illusion. First, in France, where parades and demonstrations of support increased. Last year 3,000 persons assembled on the Champs-Elysees to commemorate 24 April 1915, the beginning of the great massacre, and the police were forced to charge in order to protect the windows of the Turkish Tourist Office. The same in Lyon. And in Marseille a crowd swarmed into the Canebiere demanding the release of a prisoner, Max Kilndjian, suspected of having participated in teh attempt on the life of the Turkish ambassador in Berne. Is this Kilndjian an international terrorist? Not at all. He is the proprietor of a cafe and tobacco shop, an unadulterated product of the Marseille melting-pot, who would not be cut out of place in a Pagnol comedy. And here, suddenly, 60 years of silence, 60 years of apparent oblivion, are effaced. And France thought it was sheltering an Armenian France only suddently to discover it is a French Armenia, and that it has an Armenian "problem" on its hands. And then everyone asks how it happened.

Isn't that so, Achrag? Achrag is 24 years old, has his law degree and two generations of emigres behind him. There still is something oriental in the fineness of his features or the slant of his eyebrows. But his mind is perfectly attuned to the discourse taught in the courses on Roman law. "To understand the Armenian problem," he said, "You must distinguish three periods corresponding to three generations. The first, our grandparents', I call it the survival generation. My grandfather had escaped death by hiding in a ditch covered with branches. My grandmother had been sold as a slave to some Syrians after having been picked up at an ophanage. Boats of emigrants, "Exodus" before it was ever written, brought them to France where they met. France, bled white by the war of 1914, needed workers to make its factories run. My grandfather and grandmother, so filled with wonder at having survived, never asked anything from life other than work and peace. Their son, my father, opened a shoe repair shop, which thanks to his work and determination was to end up as a shoe store. His, the second generation, was the generation of integration.

It was the generation that was to leave work in the factory and make a place for itself in the field of business, in the professions, in the arts. It was the generation of the Aznavours, the Troyats, the Carzous. Intelligent, talented, energetic, standing by each other to a remarkable degree, Armenians worked furiously to succeed. Sundays, they would gather around for a plate of rice flavored with grape leaves and drink Raki, pale, this shimmering "eagle's milk" that excites the imagination and rekindles memories. They went to the Armenian church and listened to phonograph records of traditional music, memories for the six-finger-holed flute and the three-stringed guitar, melodies that told how beautiful were the fruit and how clear the rivers in the shade of Mount Ararat, and how great was the glory of the Armenian Empire in the time of King Tigrane. But Sunday was also the time to recall that Armenians fought at the side of the Crusaders against the Infidel--Armenia was the first Christian state, a quarter century before Rome--that their knights married Frankish princesses and that an

Armenian king named Lusignan rests in the Saint-Denis Cathedral. Mysterious and remote affinities: perhaps they explain why there never was any anti-Armenian race prejudice in France. During the last war, when Armenians were often in the first ranks of the Resistance--showing the inborn courage of an ancient war-like people and also the natural reflex of a persecuted people--they won their place in France.

And the third generation is Achrag's: "The generation of renewal," he says. Of revolt. Why be surprised? Unlike the preceeding generations, Achrag and those of his age were born into a milieu free from fear and poverty. They have everything and everything seems natural. But they are lacking just what is lacking all around them and without which youth cannot be youth: a faith and a struggle. They have found it in "Armenian-ness." But what use is all the efforts of the preceeding generations to "become French" if it was only to have all their children cast in the same mould and in the end participate in the great uniformization of the world? that is what Achrag and his friends say to each other. What is the purpose of these meetings, these contributions, these clubs, this record music, if it is simply to cultivate a longing for an ever more remote folklore? And why leave it to States, to the powers, to international organizations, since they never did anything to see to it that justice be rendered for the suffering of Armenia? Sons no longer listen to their fathers, but rather to their grandfathers, those who lived through the slaughter. Exalted by the passage of time, their stories become legends, their sufferings assume epic proportions. For Achrag and his comrades, the decisive years were the 70's. The post-1968 years, when "high-school committees" took over the barricades, the time of third-worldism and "peoples liberation struggles." The time, too, when the Palestinians, driven out of Jordan by King Hussein's Bedouins, entered Lebanon in force. In the Lebanon where a large Armenian colony had lived for 60 years and maintained its identity intact. And it was not long in becoming indoctrinated by the Palestinians who were supplied both ideologically and materially by the communists: in truth, have not both Palestinians and Armenians endured the same fate, suffered the same injustice? And through the fault of the same ones--since does not the same enemy, eternal "imperialism", lurk behind both Israel and Turkey? You see the connection...

The war in Lebanon was to speed matters up. Armenian refugees arrived in France and many of them were militant activists. Some had even seen action on the side of the Palestinians. That gave them an aura which helped their entry into the seething milieu of young French Armenians. With the new immigrants two errorist organizations took root in France: "The Secret Army of Armenian Liberation" of openly Marxist orientatio, and the "Commandos of Genocide Judges" claiming to be nationalist above all. But both claim to have the same aims: force Turkey to acknowledge its crimes toward the Armenians and give them reparations. How? By giving back to Turkish Armenia its lands and its independence so that finally the Armenian fatherland may reappear.

An obvious lack of realism: how could Turkey, even under the direst of pressures, agree to cut away from itself a part of its own territory? And how could the Russians agree to allow Soviet Armenia to reunite with Turkish Armenia? Since there is a Russian Armenia, a "Soviet Socialist Republic of Armenia," which it must be said our own "Armenian-ness" zealots rarely mention. However, it is far from being a paradise, and the Armenians of the diaspora are aware of this. They know that demonstrations against the central government take place periodically, like the one that brought 100,000 persons into the streets of Erivan in 1965, and tanks had to be sent against them. They know that dissidents are hunted down, imprisoned and sometimes shot, like those two Armenians who placed bombs in the Moscow subway in 1978. And they are aware of the regrets of those who went back there during theyears 46 and 47, victims of propaganda that at the time was strengthened by the prestige of the victorious Russian armies.

Achrag knows all that. No matter: "Let them say what they want about Soviet Armenia, one thing in its favor is that at least it exists. With its people, its cities, its factories, its schools. And even if you can argue about the extent of its independence, one thing is sure and that is that the Armenians there have never been massacred."

Once again, communist propaganda is effective. It matters little if Armenian terrorism is in fact only an extension of Palestinian terrorism--and particularly of its extremist wing, the F.P.L.P. [Popular Front for the Liberation of Palestine] of Georges Habache, who was the first to present the "Secret Army of Armenian Liberation" during a press conference in Lebanon last year, during which Armenian guerillas in hood and kalashnikov announced their intention of "organizing military operations against the Turkish authorities until the regime falls and Armenian aspirations are achieved." (Read on this subject--and on many others--"The Network of Terror", the excellent book by the journalist Claire Sterling, whose translation has just come out at Lattes, a documentation teeming with facts showing the obvious control of Moscow over international terrorism.) The results are known: twleve Turkish diplomats serving abroad dead already, without mentioning the dozens of bombs which have blown up embassies, airline company offices and Turkish tourist offices.

The truth is that it is a matter of weakening the free world by all methods, striking it everywhere possible, preferably in the underbelly--and what better way to weaken it than by destabilizing Turkey, vital bastion of the West, and what better time to select than now, when the economic and political situation makes this country more vulnerable than ever?

Yesterday, everywhere throughout the world the Armenians were saying: "Oh, if only the Turks had a Willy Brandt, a leader who would acknowledge once and for all the crimes of the past, as the German chancellor did when he went and kneeled at Auschwitz." But the Turkish Willy Brandt, even if he ever could have existed, would be dead because the Armenians would have killed him. And, with this, the old Armenians who were saying that remain silent.

As for the young ones, what is there to be said to them that they can understand? The greatest tragedy for men is not to go to war, but to go to the wrong one. But they only find that out afterward.

9772
CSO: 4900/23

SWEDEN, NORWAY SIGN ENERGY COOPERATION PACT

Stockholm VECKANS AFFARER in Swedish 12 Mar 81 pp 42-44

/Article by Ake Landquist: "The New Export Commodity: Nuclear Power to Norway"/

> /Text/ This week -- almost exactly 1 year after the popular referendum -- the government will submit its second energy proposal regarding, among other things, how to use the surplus electricity from nuclear power (for heating, among other things). For there will be a surplus of energy -- corresponding to almost an entire nuclear power plant as early as 1982/83. At the end of March the government is expected to sign an agreement for the export of electric power to Norway. These are some views of Energy-Sweden, of which VECKANS AFFARER here presents a few examples.

One year after the popular referendum on nuclear power Sweden is in the process of building up a surplus of electric power. Some of this surplus will be exported to Norway. The remainder will be used to replace imported oil.

The export of electricity to Norway is part of a pact which includes three components:

1) Electricity to Norway

2) Oil to Sweden

3) Industrial cooperation in the framework of the Swedish-Norwegian fund.

It was at the prime minister meeting in Copenhagen in November that Thorbjorn Falldin took the initiative for this transaction. Norwegian Prime Minister Odvar Nordli became interested. This was a way of breaking the deadlock in the cooperation on energy and industry that never led to any results.

The intent was for an agreement to have been signed at the end of February. But the agreement was delayed due to the change of prime ministers in Norway. Now Gro Harlem Brundtland is the new prime minister after Odvar Nodli: "We expect the agreement to be signed at the end of March," says the information chief of the Norwegian Energy Department.

The volume of electric power which Sweden will export to Norway amounts to 2-3 TWh. This is the equivalent of half the annual production at one of the larger nuclear power plants. It is intended that Sweden will export 2-3 TWh a year for 10-15 years. If a kilowatt price of about 15 ore is estimated (which is considered low), the deal involves about 500 million crowns per year, that is to say between 5 and 7.5 billion for the entire period.

The result of the referendum means that Sweden has received a new export product -- electricity from the nuclear power plants.

At present there is no surplus of electricity. Low figures are reported from the water reservoirs. Nuclear power saves Sweden from having to import electricity except periodically, for example in today's situation precisely from Norway.

But on Monday 26 January the second reactor at Forsmark came on line, Sweden's eighth reactor. Just as Forsmark 1 it produces 900 MW. Together these twin reactors produce 11 TWh annually. That is more than 10 percent of the total production of electric power.

"Furthermore, 1980 was a record year for Swedish nuclear power, which generated 27.1 percent (25.4 TWh) of the electricity. During 1981 one out of every three kilowatt hours is expected to come from our nuclear power plants," it says in an announcement from the Waterfall Agency.

Electric power from Forsmark costs about 13 ore per kWh. Of that, fuel costs account for 4.3 ore. Electric power from oil costs 15 ore/kWh in production heat and 30 ore in oil condenser power plants.

During 1981 Forsmark 2 is expected to yield about 4 TWh. That amount is already expected to produce a certain surplus and room for export. For 1982 Forsmark 2 will provide 6.5 TWh additional power. At that time reactor number 9, Ringhals 3, will also reach peak capacity. That means an additional 6 TWh, approximately.

After that, the last reactors in the Swedish 12-reactor program will follow this timetable:

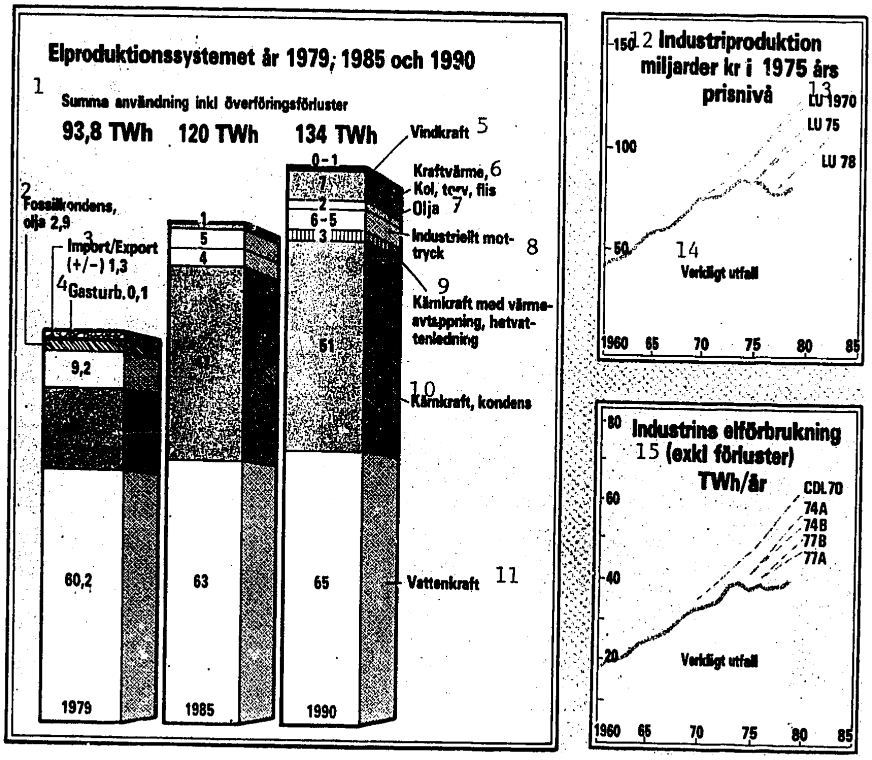
1984 - Ringhals 4
1985 - Forsmark 3
1986 - Oskarshamn 3

Each one delivers at least 6 TWh. At peak capacity the 12 reactors will generate 54 TWh (if the hot water tunnel from Forsmark to Stockholm is built this will be reduced by 3 TWh -- used for heating the water -- to 51 TWh).

Hydroelectric power and nuclear power dominate the Swedish system of electricity production up to 1990. According to the energy proposal production in 1985 will be 120 TWh (hydroelectric power 63, nuclear power 47) and in 1990 134 TWh (hydroelectric power 65 TWh, nuclear power 54 TWh or 51 TWh, alternatively).

The great uncertainty factor is the extent of demand and consumption. The prognoses for the 1970's were tremendously off -- the increase in demand for electric power

The System of Electric Power Production in 1979, 1985 and 1990



Key:
1. Total use including transmission losses
2. Fossil condensates, oil 2.9
3. Import/export (+/-) 1.3
4. Gas turbine 0.1
5. Wind power
6. Thermal power, coal, peat, wood chips
7. Oil
8. Industrial energy exchange
9. Nuclear power with the tapping of heat, hot water pipeline
10. Nuclear power, condenser
11. Hydroelectric power
12. Industrial production; billion crowns at 1975 prices
13. LU [long-term study] 1970
14. Actual turnout
15. Consumption of electricity by industry (excluding losses); TWh/year

The energy minister is not of the opinion that concentration on electric heat will obstruct the development of alternate sources of energy, such as wood chips, peat and solar heat. "The efforts to find new sources of energy which I have detailed here must be regarded as very ambitious. Consequently, I believe that there is reason for both electric heat and the new sources of energy," Carl Axel Petri maintains in the new energy proposal.

After a so-called consideration period up to the popular referendum and then after the actual referendum, nuclear power is to be used for, among other things, export and replacement of imported oil. The consideration period meant that four reactors were delayed, Ringhals 3 and Forsmark 1, which were completed, and Ringhals 4 and Forsmark 2, which were under construction.

According to the law about the consideration period the power companies are entitled to damages for this delay. The damages are estimated to be between 1.3 and 1.9 billion crowns.

Nuclear power is to be eliminated by the year 2010, according to a presently valid parliamentary decision. Economic preparations for the subsequent dismantling and handling of the radioactive waste are outlined in the energy proposal. The costs are to be borne by the power industry, which is passing them on to the electric rates. In order to cover the costs completely the power companies need to set aside 1.4 ore per kilowatt hours. Previous allocations have been considerably lower, 0.8 ore in 1979 and 0.9 ore in 1980. In 1982 the allocations are expected to be as high as 1.2 ore/kWh, which means about 400 million crowns.

The responsibility for handling the radioactive waste will be given to a future company owned by the power companies. This company will be supervised by a national authority. The company and the authority will be formed this summer.

Central Nuclear Fuel Storage Facility for 1 Billion

The money paid in will be held in trust funds. The power companies will be able to borrow money from these funds, which as time goes by will include several billion crowns. "Such loans should be made in proportion to the amount of surcharges paid in. The reactor owners should have to put up security for loans from the paid-in surcharge funds," it says in the energy proposal. It should be possible to grant loans for, among other things, investments in energy conversion facilities, facilities for electric power distribution and investments for greater safety in the nuclear power plants.

In the spring of 1980 the government decided to have a central storage facility for spent nuclear fuel built in Oskarshamn in conjunction with the nuclear power plant there. That will be an investment of around 1 billion crowns. The central storage will be administered by Swedish Nuclear Fuel Supply Co (SKBF), owned by the power companies.

"The central storage facility projected in order to receive about 3,000 tons of uranium fuel, will be used in order to store spent nuclear fuel while awaiting reprocessing or, if that will not take place, while waiting for final storage," writes Carl Axel Petri in the energy proposal.

turned out to be less than half of what had been anticipated. The reason is simply that the electricity prognoses were based on the long-term studies of the economic development, all of which proved extremely wrong.

Surplus of Electric Power Replaces Oil

But there will still be a surplus of electric power. According to a calculation made by the Waterfall Agency, the "surplus" -- the Waterfall Agency does not call it a surplus -- will be about 5 TWh as early as 1982/83. That is the equivalent of almost an entire nuclear power plant. In 1985 the surplus is estimated to be around 13 TWh, that is to say more than two reactors. In 1990 the electric power surplus is estimated to be 10-16 TWh.

If the export to Norway of 2-3 TWh is subtracted, the margin for substituting imported oil will be 2-3 TWh in 1982/83 and will then grow to a maximum of 13-14 TWh in 1990. (1 Mton oil = 11 TWh.) This is a part of the efforts to reduce oil consumption by 9 Mton (about one-third) during the 1980's. At today's prices this is a decrease in the oil import bill by more than 10 billion crowns, which represents about half of the deficit in the balance of payments.

Energy Minister Carl Axel Petri says about the electric power consumption policy in the energy proposal: "Parliament has decided that nuclear power is to be eliminated at a rate which is possible in view of the need for electric power for maintaining employment and the standard of living. The supply of energy should be good during the 1980's. This means that during the 1980's electric power can be used to save oil in the most efficient way possible. This ought to take place so that there will be no bottlenecks during future high demand for electric power and so that it does not make introduction of other forms of energy difficult."

During the 1980's the surplus of electricity from nuclear power will be used to heat buildings and save oil. The guidelines are established in the second energy proposal made public on 10 March. There will be no prohibition on direct-acting electric heat, but instead certain limitations. For new, small homes it will in principle apply only to those homes which fall 40 percent short of the requirements of the building code, which ought to be rare. As for multiple family dwellings, the government will again issue regulations in 1985. In places of work or vacation homes there are no restrictions for direct-acting electricity.

The long-term electric power supply will, according to the energy proposal, primarily be aimed at meeting the need for electricity in industry, in the transportation sector and in homes and other premises. If needed, the electric power which will be used during the 1980's for heating homes (that is to say oil replacement) could be converted to other forms of energy, above all thermal power plants and energy exchange plants fueled by solid fuels.

The central storage facility is expected to begin operation at the beginning of 1985. In addition to uranium fuel from the 12 Swedish nuclear power plants, space will be sold to foreign nuclear power plants. At present negotiations are under way with the TVO /expansion unknown/ power company in the Finnish industry for a storage contract. The contract covers the production of 10 years, which corresponds to 400 tons of uranium fuel, that is to say more than 10 percent of the capacity of the storage facility.

As for the final storage of the radioactive waste from the nuclear power plants, Carl Axel Petri says: "I want to emphasize that handling and storage of the radioactive residue products is a process which extends over periods of time which are considerably longer than the planning periods normal in other industrial activity. Carrying out a nuclear power program which includes 12 reactors can be expected to mean, with the technology anticipated at present, that not until the year 2060 will all the radioactive residue have been taken care of and placed in final storage."

How this final storage is to take place is not apparent from the energy proposal. Carl Axel Petri states that a foundation for such a position is still lacking.

"After the closing of the final storage facility some sort of responsibility for and supervision of the storage ought to be required for a considerable period of time," the energy minister writes.

One out of Two Wants to Scrap Nuclear Power Prematurely

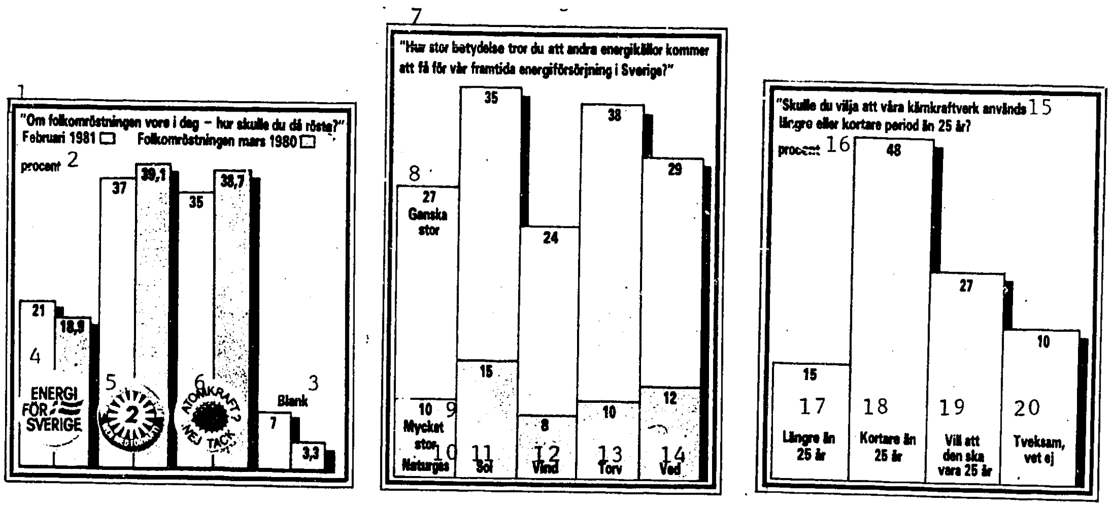
Every other Swede wants the "nuclear power parenthesis" to be shorter than 25 years.

This was shown by a study made by SIFO /Swedish Institute for Public Opinion Polls/ and VECKANS AFFARER 1 year after the referendum on nuclear power. If the referendum were held today the result would largely be the same as last year (see the diagram). But 48 percent of all those asked still wish that nuclear power should be used for a shorter period than 25 years, which has been indicated as the life of the nuclear power plants.

Most positive (87 percent) to a limitation are of course those who today would vote for alternative 3. The supporters of alternative 1 are the least interested (19 percent) in a reduction, while the advocates of alternative 2 are largely (32 percent) in favor of a shorter period of utilization.

Of all those questioned only 15 percent wish for nuclear power to be used for more than 25 years. Among those who support alternative 3 there is naturally not a single person who has such a desire. Of those who today would vote for alternative 1 41 percent could imagine nuclear power over a longer period than 25 years, while only 18 percent of those who support alternative 2 approve of an extended period of utilization.

Despite the harsh economic situation and the growing energy prices, the Swedes put the environment before the price. As much as 60 percent of the 780 persons in SIFO's poll are of the opinion that it is more important that a source of energy is environmentally safe than that it is cheap. And on this point the general public



Key:
1. "If the popular referendum were held today -- how would you vote?" February 1981; The popular referendum March 1980
2. Percent
3. Blank
4. Energy for Sweden
5. /illegible/ Nuclear Power -- But Sensibly
6. Nuclear Power -- No Thanks
7. "How much importance do you think other sources of energy will have in our future energy supply in Sweden?"
8. Rather much
9. Very much
10. Natural gas
11. Solar
12. Wind
13. Peat
14. Wood
15. "Would you like our nuclear power plants to be used for a longer or shorter period than 25 years?"
16. Percent
17. Longer than 25 years
18. Shorter than 25 years
19. Want it to last 25 years
20. Doubtful, don't know

today sees coal as a greater threat to the environment than both nuclear power and oil. Twelve percent even believe that nuclear power is the best form of energy with regard to the environment. The incomparably best source of energy -- from the viewpoint of both environment and cost -- is otherwise hydroelectric power: 81 percent believe it to be environmentally safe and 65 percent think it is the cheapest. Nuclear power appears as a somewhat more economic form of energy than before (ranked as the cheapest form of energy by 18 percent). The "competitive power" of oil, on the other hand, has declined since last year and is now judged as the most expensive form of energy by 65 percent.

As regards the future energy supply, the general public does not nourish any great hopes for alternative sources of energy. The public mostly hopes for utilization of solar power -- half of all those questioned believe that the sun will acquire great importance for our future energy supply. Other than that, however, the uncertaintly is great: More than half believe that gas, wind, peat and wood will be of little importance.

11949
CSO: 3109

ENERGY ECONOMICS ITALY

ANALYSIS OF NATION'S ENERGY TRADE BALANCE

Rome ENERGIA in Italian Mar 81 pp 16-25

[Article by Alberto Clo, of the Institute of Business Economics, University of Modena: "Market Behavior and the Oil Balance in Italy"]

[Text] 1. Introduction

The continual rise in the real prices of oil in the international markets (a rise which no one seems to want or to be able to resist any longer) now constitutes the determining principle of the world economic situation and outlooks.

The intensity of this conditioning increases, obviously, with the degree of economies' dependence on imported oil, and will tend, with time, to become even greater in those countries, such as Italy, that prove incapable of or prevented from working out adequate strategies of response. The increase--per the 1980 average--of little less than 65 percent in the unit importation values (in lire) for petroleum and its derivatives, and on the other hand, the relatively weak contraction of domestic demand--whether it is because of the still-sustained level of economic activity or because of the paradoxical failure of the control measures adopted by the government in the past winter season--have produced in Italy a further widening, by more than 7 trillion lire, of the deficit account with overseas sources as regards energy; this deficit has thus reached the level of about 18.5 trillion lire. If we excluded this category from the overall Italian trade balance, the resultant balance would be substantially in equilibrium, while as regards bulk exports, the contraction of about 7 percent registered for the year would be practically cancelled out.

In the span of a decade, the ratio of energy sources to total imports has approximately doubled, reaching a level of close to 30 percent now, while the proportion of energy exports has remained substantially stable at around 6 percent.

In order to have a more meaningful idea of what this has signified for our economy, it is useful to note that while the country's entire energy deficit a decade ago could be paid for with barely a quarter of the foreign sales of our mechanical and transport-equipment industry, that entire amount was necessary last year, despite the fact that it increased more than fivefold in the same period.

Things can only get worse in the near future, and a deficit close to 25 trillion lire can be forecast for 1981. On the supply side, prices could in fact rise by more than the 10 percent decided on by OPEC at the end of 1980 on account of the persistence of the conflict between Iran and Iraq, which has removed from international available supplies a quantity of 4 million barrels per day, not compensated for by production increases by the other oil countries (OPEC and non-OPEC).

On the other hand, on the domestic-demand side, there could be a relative increase in the quantities, because of the foreseeable entry into operation of new and old petrochemical installations, the reduced possibilities of further replacement of coal-fired electric-power plants, and the continuing uncertainty and slowness that mark the public administration's activity in adoption of adequate measures for containment of consumption.

The energy deficit has reached such a degree of acceleration that it greatly alters or cancels out every positive compensatory effort accomplished in the rest of our economy. Hence the general interest that should be devoted to identification of actions capable of attenuating the effects and, partially, of removing the causes that underlie our very heavy dependence on foreign energy supplies.

Considerable results in this last-mentioned direction could be achieved, in our judgment, by the adoption of a purpose-directed supply policy, through implementation of appropriate measures of an administrative and legislative character, aimed at more careful optimization of imports in line with the specific necessities of our domestic market and at elimination of certain dysfunctions in market behavior that have the result of aggravating our already compromised currency situation.

The purpose of this article is to analyze the levels and structures of the oil-trade flows to and from Italy, with an attempt to bring into focus certain variables which, though less well-known, nevertheless influence their evolution considerably.

2. Italy's Role in the International Petroleum Market

Before going into detailed analysis, it appears necessary to refer, albeit briefly, to the very particular role that our country has been taking on in the international petroleum market since WWII, for a set of reasons (of a political, economic and geographic character) that we shall not analyze here. We can sum up this role in terms of three different configurations that we list below along with the quantities of crude involved, relative to 1979:

--domestic consumption market: 96.5 million tons
--sector of foreign-order refining: 24.9 million tons
--"transit" area: 52.2 million tons

The total is a quantity of slightly less than 180 million tons, equal to about 10 percent of all world oil movements and a little less than 30 percent of European oil movements.

Although the oil market is now recognized as a textbook case of a "seller's market," it should be considered nonetheless that such a large quantity should have given our country a considerable contractual strength vis-a-vis both those producer countries that need to export oil and those consumer countries of Northern Europe (richer in energy than we) for whom our country constitutes a further condition of relative economy of their energy supplies. Italy's lack--contrary to what happens in other countries with energy situations similar to ours (France, Spain, Brazil, Japan, etc.)--of any overall supply strategy nevertheless has not made it possible to seize the market opportunities that might have worked in our favor. The quantities of crude that "transit" from our ports to the northern countries, although extraneous to our direct oil supplies (and indeed they are not shown in the foreign-trade balance) could themselves have represented a point of strength which other countries in the same situation (such as Tunisia, Sudan or Turkey) have shown and continue to show that they know how to exploit in a more intelligent manner than what it has been possible to observe here in Italy.

Within the framework of the international petroleum industry, our country has, in substance, acquired a double interest: in the first place, it is one of the major oil-consumption markets, with limited risks of competition from domestic energy sources; and secondly, from the logistical point of view, it constitutes a fundamental "service area" for the Northern Europe markets that are not self-sufficient as regards refining capacity--on account of specific economic and environmental decisions--and that have a domestic-demand structure for petroleum products that is highly differentiated as regards the product yield from processing of crude, because of the sizable presence of nonpetroleum domestic energy sources. Our refining industry, which was almost completely destroyed in the last war, subsequently grew by about 100 times, going over 210 million tons (more than twice the level of domestic demand): a dimension which most people seemed to become aware of only after the fact. It is certainly not an exaggeration to say that what is still, from the international statistics, the world's third-ranking refining industry is the most obvious sign of the serious errors and the heavy contradictions of Italian petroleum policy that has not only made possible but also largely encouraged its disordered growth. In the face of the radical change in international economic conditions, that sole abundant "resource" that we had at our disposal is slowly deteriorating, to the point of becoming a cause not only of severe economic inefficiencies but also of the continual instability and disorder in the flows of supplies to the domestic market. This is true especially for the so-called "service" refineries referred to above, almost all of which are located on the islands and which so far have been used mainly for "foreign-customer" processing, but have also aimed partly at the domestic market, only at those times when the prices offer the best remuneration, and in any case, with an obvious distribution-cost penalty because of the installations' locations, which are far-removed from the zones of consumption.

This catch-as-catch-can character of supplies--which has been brought out with the aggravation of the international tensions--has also been accentuated by the specific policies adopted in Italy by the Italian and foreign oil companies.

Although the quantities of crude for the domestic market always prove larger than those processed for overseas customers, the optimization of the policies on importation, processing and marketing of crude and/or refined products has always been done by the individual oil companies in function of their activities as a whole, and therefore in function of the profits to be made both domestically and externally. In an atmosphere of rapid and continual changes, such optimization can prove to be not always congruent with the specific national needs, especially from 1973 on, whereas our principal objective should be minimization of the net costs of importation of crude.

3. Public Support and Freedom of Action for the Companies

Our country's role in the international market and the companies' policies had had a means of expression mainly by virtue of the full support granted to the sector by the governmental authorities, but without the government's manifesting any dirigisme at all or any programming-oriented preoccupation.

Furthermore, this approach was not at all far-removed from that applied to the other sectors of Italian industry. This unconditional bestowal of financial means on the companies, together with benevolent disinterest in their behavior, was explained by the government authorities--and substantially accepted by the others--in terms of "collective end-purposes" (end-purposes extraneous to the energy questions) which, in their judgment, could have been achieved in such a manner: industrial development of the Mezzogiorno, support of local employment, increasing exports, and so on.

It is these end-purposes which, at 30 years' remove, and notwithstanding the complete failure of that approach, we find again, symmetrically repeated, in support of the present policy of "methanization" of the South and of the large public appropriations planned for it. According to a large proportion of the authorities on southern Italy, "'methanization' will be able to have an incisive and sufficiently broad impact on southern economic and social structures, deploying its propulsive potential on the local reserves and capacities for development,"[1] and can thus constitute the nth historical opportunity "for the development and localization of diffuse and decentralized activities on the territory," both industrial and tertiary activities--which would not have happened because of the lack of methane (!). Even if we do not wish to deny the scope of the innovative phenomena that could result from "methanization" of the South, we consider it necessary to be more cautious about viewing it as a sure factor of economic and social propulsion in those areas, since we have not so far had the opportunity to verify any precise correlation between industrial development and the presence of methane, as is clearly demonstrated by several industrially backward zones of the lower Po Valley.

The numerous and articulated legislative instruments--the first among them being law 1741 of 1933--that could have given a way of laying down a serious policy of orientation and control on the petroleum industry remained unapplied, and a widening gap between the choices procalimed and the choices effectively implemented opened with time and the dirigistic character of the law of 1933 gradually faded away. From 1951 on, administrative actions began to prescind from market quotas; in 1954, import licenses were eliminated, while in the following year, the rule-making for the assignment of fuel-sales points was delegated to the Prefects (thus giving rise to the world's most Pharaonic and disordered distribution network), and finally, in 1962 the Ministry of Industry abdicated its maintenance of discipline over the placing of petroleum products on the consumer market.

The collapse, in 1973, of the favorable international conditions that had accompanied the growth of the petroleum industry in Italy, in the conditions that we have described above, entailed for the country further aggravations and inefficiencies that we shall examine below, as regards that part of them affecting commercial interchange.

4. Overall Results of the Energy Trade Balance in Italy

As was said above, the 1980 Italian energy trade-balance deficit should reach 18.5 trillion lire, up 63 percent over the preceding year.

This result is 9/10 due to the worsening of the oil deficit, which has risen from approximately 9.5 trillion lire in 1979 to more than 16.2 trillion. This greater net outlay of about 6.3 trillion is the consequence mainly of the 63.7-percent increase in the import prices of crude and its derivatives, only one-fifth compensated for by the reduction--not a negligible one (down 12.7 percent)--of the quantities imported. In the second place, the result was contributed to by the very strong contraction, from the beginning of the year, of the quantities of petroleum products exported (down 41 percent)--though this was largely compensated for by an increase in the prices for them, albeit an increase lower than that on the crude-purchasing side.

We present in the following table a summary estimate of the principal flows in the energy trade balance, as they emerge from the ISTAT [Central Statistics Institute] announcements relative to the last 2-year period. For a more complete picture, we refer the reader to the foreign-trade tables of the Statistical Section.

Table 1 - Italian Energy Trade Balance
(billions of lire)

			% Variations 1980/1979		
	1979	1980*	Values	Prices	Quantities
Total Energy Sources					
Exports (FOB)	4,047	3,631	-10.3	+52.3	-41.1
Imports (CIF)	15,377	22,093	+43.6	+58.6	- 9.5
Balance	-11,333	-18,462			
Petroleum and Derivatives					
Exports (FOB)	3,882	3,447	-11.2	+51.5	-41.4
Imports (CIF)	13,763	19,672	+42.9	+63.7	-12.7
Balance	- 9,881	-16,225			
Natural Gas					
Imports (CIF)	- 648	- 1,165	+79.8	+76.5	+ 1.9
Charcoal and Derivatives					
Exports (FOB)	165	184	+11.5	+ 9.2	+ 2.1
Imports (CIF)	966	1,256	+30.0	+12.8	+15.2
Balance	- 801	-1,072			

* Estimates

Two-thirds of the drop in the volumes imported is due to the decreased export activity, while only one-third is due to the lower domestic demand (down 3 percent).

Whereas in 1979 the nearly doubled volume of exports made it possible to pay for about 30 percent of imports, that percentage dropped to 17 percent in 1980.

The drop in exports and, on the other hand, the exceptional increase (+73 percent) in imports of derivatives produced--for the first time in Italian petroleum history --a negative balance of 7 million tons in the exchange of products with foreign entities. This is the most obvious sign of the deterioration of our refining system, to which we called attention in a previous article.[2]

The increase in imports of derivative products (up 9 million tons) has occurred simultaneously with the reduction (down 25 million tons) in imports of crude oil, thus signalling a radical transformation, in favor of the former, of the qualitative structure of our supplies.

We point out that our country is the only one to have been involved in such a transformation; the other countries prefer to consolidate their supply contracts in terms of crude. In the preceding issue of this journal, we expressed our concern about the damage which, in perspective, such a policy could have produced on the stability and burdensomeness of the country's oil supplies.[3]

The unexpected outbreak of the Iran-Iraq conflict at the end of last September[4] and the consequent further jump in the Rotterdam petroleum-product spot prices and the buying prices for crude in new contracts surely entailed for the country a cost higher than the modest profits made possible by the depression of the products market in the second and third quarters of 1980.

If, however, we wish to go into further detail on the articulation of the trade flows, even before the situational variables that condition its dynamic, it is necessary first to refer to data other than those reported by ISTAT.

5. Limits of the ISTAT Statistics

These statistics reflect the exchange values declared on the Customs declarations that accompany goods entering and leaving the Customs territory. Nevertheless, such data do not reflect the entire and real cost borne by our economy for energy supplies from abroad and the real articulation of the flows in quantity. This is because of three kinds of reasons:

--absence of specificity about certain energy sources;
--inclusion of "foreign ownership" goods and exclusion of "nationalized" goods;
--difference between payments declared on the Customs declarations and actual payments for "nationalized" foreign goods.

5.1 Absence of Specificity Regarding Energy Sources

The ISTAT statistics do not specify, in value and quantity, all the categories that make up the country's energy exchanges. Electrical energy, in particular, remains excluded. For reasons of "circumspection," requested by ENEL [National Electric Power Agency], it is indeed reported by ISTAT, but it is placed among "miscellaneous manufactured products" in such a way as to prevent exact identification of it. Even though ENEL's "circumspection" is protected by the rules on the subject, it nonetheless seems surprising in view of the fact that the data not publishable by ISTAT appear regularly in the foreign-trade statistics published by the OECD (series A and B).

Up to a very few years ago, the exclusion of this category from the trade balance did not substantially alter it very much, because of both the low volume of the exchanges and the low transfer prices. But from 1978 on, the situation seems considerably changed. ENEL's recourse to importation of electrical energy has become constantly greater, while at the same time, exportation has been dropping. In 1979, imports[5] totaled about 7.6 billion kWh, for an increase of a little less than 50 percent over the preceding year. Exports, on the other hand, decreased by about 27 percent to 2.2 billion kWh. These divergent tendencies continued during 1980: in the first 8 months alone, the balance of exchanges proved negative by a little less than 5 billion kWh, for an increase of about 70 percent over the corresponding period in the preceding year.[6] On an annual basis, this means electric-power availability equivalent to the production by a little less than two power plants of the Caorso type, with 4-percent coverage of the total demand on the national network. The hypothesis, put forward by certain persons years ago, of building abroad the power plants that are not built in Italy would seem, from these data, to be a reality already. The burden borne for electrical-energy supplies from abroad is not brought out either by ISTAT or by ENEL itself. Indeed, ENEL's balance-sheet does include all of the energy invoiced by and to other firms. The only element that can be derived from it is that the energy effectively invoiced turns out, for both importation and exportation, to be lower than what is physically exchanged.[7]

According to an approximate estimation by us, the cost borne for net incoming supplies in 1980 could total 250-300 billion lire, thereby raising the Italian energy deficit to 18.7-18.75 trillion lire.

5.2 Inclusion of 'Foreign Ownership' Goods

This second category of reasons challenges, in our judgment, the meaningfulness of the ISTAT statistics with regard more to the absolute values of importation and exportation than to the relative balance. Therefore it is not a matter--as in the preceding case and in the one that we shall examine farther on--of a problem of incorrect estimation of the energy "deficit," but rather one of overestimation of the flows which determine it and which, in reality, enter and exit from the Italian economy. This has the result of causing statistical distortions in important economic indicators such as: indexes of the mean unit values in importation and in exportation; propensity to import; export market share; etc. This category of prblems concerns the petroleum sector only (though it is of dominant importance) and results from the fact that in the "special" trade which is the subject of the ISTAT statistics--on the basis of the international statistical convention of 1928--are included also the so-called "foreign-purchaser goods in transit,"[8] or in other words, goods being processed "for third parties," so as to distinguish them from in-transit imports "for one's own account."

Both cases involve goods imported for the purpose of undergoing specific processing treatment and intended, upon completion of them, for reexportation outside the Customs territory.[9]

Two elements characterize "third-party account" goods. The first is that they remain, for all purposes, under foreign ownership and do not come under any foreign-exchange regulations. This is different from the case of goods in transit "for one's own account," which for foreign-exchange purposes are considered by the standard of definitive importations.

Another important element is the effective availability of the product, which remains, for the foreign purchaser, in the "third-party account," and for the resident importer, in the "own account."

A clarification on the functional dynamic and the real nature of this particular "segment" of the Italian oil market proves to be of considerable interest for two principal reasons:

(a) the considerable importance taken on by these movements in overall Italian oil exchange: in 1979, they were a little less than one-fourth of all the quantities of crude and products. The highly erratic course of such movements is indeed the principal cause of the oscillations observed in recent years in the Italian petroleum trade balance (in terms of quantities), domestic demand having remained substantially stable at around 100 million tons.

It is interesting to note that "third-party account" processing increased strongly during the 1970's, starting in particular from the first big crisis of 1973, despite the very considerable contraction (100 million tons) of the demand for crude and products that occurred on the European market at that time. This is exactly the opposite of what should have been expected, given the nature of the processing done on behalf of foreign operators. A partial explanation of this (apparent) paradox lies precisely in:

(b) the tendency to assign an increasingly large proportion of the products derived from "third party" processing directly to the Italian market. Instead of being re-exported, the products become "nationalized": that is, cleared through Customs, for all practical purposes, and put on the domestic consumer market.[10]

Table 2 - Italian Petroleum Exchanges (millions of tons)

	1965	1970	1973	1974	1975	1976	1977	1978	1979
Imports of Crude (A)	68	114	128	119	93	100	104	108	110
Definitive and "own account"	65	107	109	94	81	87	91	92	91
"Third-Party Account"	3	7	19	25	12	13	13	16	19
Imports of Products (B)	2	3	6	6	10	11	12	13	12
Exports of Products (C)	18	29	30	23	15	15	19	23	23
Net Supplies (A+B−C)	52	88	104	102	88	96	97	98	99
Domestic Demand*	52	88	102	99	96	99	96	99	100

*Obtained by totaling: domestic consumption, bunkerage and consumption and losses in processing.
Source: Ministry of Industry

This growing interest in our market on the part of foreign purchasers--in addition to being surprising, in view of the fact it is normally described by the operators as not very profitable--raised problems of two kinds: the first, of a statistical type, follows from the failure to compute in the trade balance the payments effectively made by residents for purchase of these goods; the second one, relating to oil policy, concerns the real nature of the foreign orders and the effects which the expansion of such an importation system produces on the condition and situation of the national oil market.

Table 3 - Balance-Sheet for 'Third-Party Account' Processing (1) (millions of tons)

	1965	1970	1973	1974	1975	1976	1977	1978	1979
Imports (2)	3	7	19	25	13	13	13	16	21
Exports	2	5	12	16	7	8	8	10	12
Nationalizations (3)	1	2	6	8	6	5	3	6	9
(% of imports)	(33)	(28)	(32)	(33)	(46)	(38)	(25)	(38)	(43)

(1) Only in 1979 did the Ministry of Industry explain this Balance-Sheet. For the other years, our estimates are given. The figures are rounded off.
(2) Crude and products.
(3) The total of exports and nationalizations sometimes does not coincide with imports because of variations of stocks and bunkerages.

In 1979, more than 40 percent of the goods temporarily imported on "third-party accounts" was put onto the domestic market, covering about 10 percent of domestic-market demand.

What it was more important to stress here, though, is the fact that inclusion of the "third-party" in-transit imports in total Italian oil trade, even if correct from the point of view of the international statistical criteria, nonetheless falsifies, by overestimating it, the real magnitude of oil imports and exports to and from our country. As was said above, what is actually involved is "foreign-ownership" merchandise for which no payment occurs (unless it is subsequently "nationalized"), and no collection of charges (except compensation for processing, which sometimes--though to a very small extent--may also consist in a part of the products obtained).

Since the declared value of the "third-party account" goods on the Customs declarations does not follow any market contraction, it proves, in our judgment, to be of doubtful economic significance, especially in periods, such as the recent ones, in which the prices of crude prove to be constantly evolving and present wide margins of differentiation, even for the same qualities and sources.

5.3 'Declared' Values and 'Effective' Values of the Nationalizations

The products "nationalized" from goods in "third-party account" do not logically constitute the subject of statistical reporting in the ISTAT trade balance, since the raw material from which they originated have already been accounted for in it. For Customs purposes, therefore, the "nationalized" products appear on the basis of the value declared for the goods initially imported on an in-transit basis.

The effective payment made that corresponds to the "nationalized" products should nevertheless prove greater than the value declared for Customs purposes. With regard to this important point, we have been able to make only limited verifications, but logically, this conclusion should hold true for the general run of "nationalized" products. It would follow from this that, in 1979, for example, about 9.0 million tons of petroleum products purchased by our country were recorded in the trade balance at a value lower than the real one.

Two factors should be the principal ones in producing this difference: the cost of processing the crude, and especially, the "market factor," this latter being understood to mean the earnings that the foreign orderer (the owner of the goods) could alternatively have received if he had placed the products on a foreign market instead of on the Italian market. This factor should be of particular importance if we take into account (Table 3) the fact that the "nationalizations" reached their highest levels in the years of greater tension on the international prices (1973-1974 and 1979).

6. ISTAT and 'Effective' Trade Balance

Because of the important references we have so far made to the oil trade balance, as reported by ISTAT, and in view of the necessity of having correct methods for presenting in summary form the principal flows of this market, we consider it useful to construct an oil trade balance--which we shall designate as the effective one--that excludes, vis-a-vis the ISTAT balance, the "third-party account" element and instead includes the "nationalized" element at the effective value. We shall construct this balance-sheet first in terms of quantity and then in terms of value.

Since ISTAT does not present either the "third-party account" processing or the nationalizations,"[11] we must use data from another source (Ministry of Industry)--data which, however, are not always congruent with the overall ISTAT data, on account of some considerable differences.[12]

Table 4 - Oil Trade Balance in Terms of Quantity for 1979: Balance as Reported by ISTAT, and 'Effective' Balance (in millions of tons)

	ISTAT	"Effective"(1)
Importations of crude	109.2	91.0
Importations of refined products and semiprocessed oil	12.2	10.7
"Nationalizations" of products		8.7
Total Supplies	121.4	110.4
Exports	24.9	14.4(2)
Net supplies	96.5	96.0

(1) Data from Ministry of Industry. Contrary to the data of the ISTAT column, they exclude "third-party account" exchanges.
(2) For homogeneity with the ISTAT exports, foreign bunkerages have been included. In Table 2, that quantity was included in "domestic demand."

It can be seen at once from the table above that the differences between the two balance-sheet approaches relate not so much to the magnitude of "net supplies" from abroad as in the absolute total of the flows entering and leaving the country, which amount, repectively, to 110.4 million and 14.4 million tons in the effective balance sheet and to 121.4 million (+10 percent) and 24.9 million (+73 percent) in the one reported by ISTAT.

A second set of considerations has to do with the breakdown as between crude oil and refined products for our market's real supply flows. It would emerge from the effective balance-sheet that the proportion of refined products in "net supplies" came to more than 20 percent in 1979--a percentage which in 1980 should be increased by another 10 points, confirming a dangerous and burdensome exposure to the more unstable refined-products markets.

Reconstruction in value terms of the trade balance-sheet by the approach we have defined as the "effective" one presents quite a few difficulties, since the value of movements under "third-party accounts" is not explicitly indicated either by ISTAT or by the Ministry of Industry. In total, according to an estimation by us,[13] they should have come to 1.8 trillion lire for importation of crude and refined products and to 1.1 trillion for the reexports. The difference between these two figures represents the payment declared for the "nationalized" products. Considering also the cost of processing and the one which we defined above as the "market factor," we can estimate an additional cost of 567 billion for the latter[14], for a total of 1.267 trillion.

The following observations emerge from comparison of the two oil balance-sheet approaches in terms of value:

(a) a worsening of the Italian oil deficit by 567 billion lire (about +6 percent), which drops to about 525 billion if we consider, on the income side, the foreign-exchange compensation remaining from "third-party account" processing. This deterioration of, on the one hand, a cost of supplies that is 533 billion lower, and on the other hand, exports 1.1 trillion lower.

(b) an increase of about 3.5 percent in the unit value of imports of crude, and an increase of about 5.5 percent in total supplies;

(c) an increase of about 14 percent in the unit value of exports.

If we were to exclude the "third-party account" movements from the ISTAT trade balance, there would be a reduction of all Italian imports by 1.5 percent or of exports by 1.8 percent.

In evaluating these differentials between the ISTAT and "effective" trade balances, we should keep it in mind that they follow from estimates that are certainly suject to error. What we were concerned to indicate was, on the one hand, the different articulation of the real flows that make up the oil balance-sheet--as regards the data normally referred to--and the statistical distortions, especially in the unit values, that occur when the "third-party account" movements are taken into account. It is not by chance that the Interministerial Price Committee (CIP) has never fixed the selling prices of refined products in relation to the unit costs reported by ISTAT, but rather on the basis of the declarations presented by the oil firms in relation only to definitive and "own account" imports. For 1979, the firms indicated a unit cost of 115,105 lire per ton of crude (see Table 21 in Statistical Section)--a figure very close to the one estimated by us (115,600).

7. Hypotheses on the Behavior of the Operators

The fact of having clarified, from the statistical point of view, the articulation of the oil exchanges that most directly affect the domestic market certainly does not settle for good the problem of interpretation of the market behavior that underlies them. In this last part of our article, we shall try in particular to grasp the reasons that explain the great variability of the in-transit movements and the growing trend toward "nationalizations."

The lack of literature on this subject and the reluctance of the operators to talk about their own affairs force us to reason on the basis of working hypotheses.

What seems to us most congruent with the available data and with the market situations experienced in recent years is the hypothesis that the importing firms (or only some of them), in the face of increasingly recurrent tensions in the international market--tensions that work in favor of the raising of price quotations (beyond the dynamic of the raw material)--prefer to declare a part of their crude-oil availability in the form of in-transit processing contracts for the account of foreign operators, instead of importing it on a definitive basis. In essence, only a part of third-party processing appears actually to be such.

The advantages of such behavior would appear to be principally:

(a) guaranteeing maximum freedom of maneuver in the effective placement of the refined products on the various markets, so as to obtain the maximum net profit. Temporary importation is the optimum approach from this point of view, since it enjoys a kind of exempt status vis-a-vis the administrative controls which the law imposes (or would impose) on goods imported on a definitive basis, and also as regards public opinion, which would not take well to a domestic scarcity of refined products if there were sustained export activity as happened in the winter of 1978-1979. The 1933 oil law cited above (and subsequent rule-makings) exempts those "mineral oils intended for processing in Italy so as to obtain from them petroleum-derivative products to be exported" from the obligation of licensing, and thus from the restrictions that licensing imposes.

The full liberty guaranteed to temporary imports will enable the firms to optimize their profits by placing the products on the European markets where the prices prove higher, and in particular, to operate in the so-called "spot" market of Rotterdam (but it would be more correct to say the spot market of Genoa, Sardinia, Sicily, etc), which in certain periods, such as 1979, have guaranteed profit per ton of processed crude up to twice the cost of purchase and processing of the raw material. From this point of view, we think it is correct to state that the temporary importation permitted in our country is one of the most important, if not the principal, reserve for the spot market, to which everyone now attributes responsibility for the aggravation of the rise in the prices of crude in 1978-1979[15];

(b) the second advantage is the fact of not having to meet the requirements to maintain reserve stocks related to the quantities of crude processed;

(c) in any case, the ability to nationalize a part--which could be a sizable part--of the available refined products at prices higher than the implicit costs of the raw material (declared value), when the domestic market proves suitable or in order to maintain a sufficient flow of supplies to the automotive-vehicle refined-products distribution network, for which products the defense of the market prices remains an objective of primary importance. The importations from the more expensive spot market, which many operators have said they have been forced to have recourse to because of scarcity of crude, were very often nothing other than "nationalizations" of in-transit goods coming from our coastal refineries.

The operators' preference for temporary importation, in accordance with the behavior pattern just described, is confirmed principally, in our judgment, by the fact that both the "third-party account" contracts and the subsequent "nationalizations" have reached their maximum levels precisely in the peak years for the international spot prices. Rather, there seems to be no correlation with the levels of international or domestic demand. If the interpretive hypothesis that we have formulated above were to prove true, it would follow that for at least a part of the "third-party account" imports, the foreign orderer and the domestic commissioned agent are effectively the same--in other words, that the processing contracts are requested by foreign companies that are connected with or controlled by the domestic operators themselves. This could easily be made possible by the national oil firms' habitual practice of working through their own foreign intermediaries, while the nature of the controls exercised over temporary imports should certainly not be such as to prevent the effective sameness of the foreign orderer and the domestic commissioned agent. The conditions for the granting of temporary-importation status--according to Article 176 of the Consolidation Act setting the legislative provisions in Customs matters--place far greater emphasis on the aspects relating to modalities and times of importation, processing and subsequent reexportation than on the nature of the contracting parties. If our hypothesis is correct, we we have to do with an exportation phenomenon involving a considerable amount of money.

Table 5 - Oil Trade Balance in Terms of Value for 1979: Balance as Reported by ISTAT, and 'Effective' Balance

	ISTAT		Effective	
	Billions of lire	Lire per ton	Billions of lire	Lire per ton
Importation of crude	12,202	111,700	10,523	115,600
Importation of refined products	1,561	128,000	1,440	134,600
Nationalizations			1,267	145,600
Total supplies	13,763	113,370	13,230	119,800
Exportation	3,882	156,000	2,782	193,200
Net Supplies	9,881		10,448	

8. Conclusions and Some Proposals for Interventional Action

(1) The conclusion of greatest interest that it seems to us should be drawn from the analysis made up to this point is that the "old" role assigned to our country in the oil market has resulted, in the presence of an international situation profoundly different from the original one, in elements of instability and cost burdens in the country's supplies. The business-operation interests and behavior of the individual operators, or only a part of them, often prove to be not easily compatible with the national interests. This has been amply experienced in the recent past, when more than one operator has prferred to speculate to the maximum abroad, wiping out the normal supplies to the domestic market. That it should then be the state, or the entities controlled by it, that have to make up the losses or take on the debts of those operators who then decide definitively to abandon our market seems an absurd policy indeed, but one that is entirely in line with the philosophy of unconditional public support that became established in the postwar period.

(2) The structure of the supply system--other things being equal--has an influence on the country's overall oil deficit. Thus, for example, if we had imported crude in 1979 instead of the approximately 20 million tons of refined products, we would have saved about 500 billion lire. This is a hypothetical exercise, but it is certain that if overall imports were optimized in line with priority national requirements, on the condition of the lowest purchase price, considerable savings would result. Firms "short" of certain products would thus not be forced to import them at the more expensive spot-market prices, while at the same time other firms with surpluses of the same products export them at prices often much lower than the spot-market prices.

(3) The complete discretion permitted to the operators as regards the modalities of importation has the result of thwarting any attempt that one might (hypothetically) wish to make to program the sector. The possibility given to the firms to increase temporary importations--and simultaneously reduce definitive importations--represents too attractive a temptation (to maximize the advantages of a presence in our country while minimizing commitment to our market) for the firms not to yield to it in an ever broader manner.

(4) The basis of reference for calculation of the costs of supply can no longer be represented, as has normally been done, solely by the costs of crude, since it represent only a part--albeit a predominant one--of total available supplies.

It does not fall within this article's purpose to formulate proposals to solve the problems raised here. Nonetheless it seems important to us to point out the lines of interventional action which the competent administration could take to achieve positive results.

In the first place, it seems necessary, in our judgment, to reinstate--after years of undelcared liberalism in market behavior--solid governmental management of the oil economy. This should come about mainly through reapplication of the legislation promulgated in 1933 (when the country's energy problems were quite similar to those of today) and abandoned at the beginning of the 1950's, as regards import-authorization policy in particular.

Finally, as regards the "third-party account" importation system, it should be regulated in a manner appropriate to today's situations--which we have analyzed above--thus achieving an important threefold result:

--sterilizing a large part (the part that originates in our country) of the refined-products market;

--eliminating a cause of instability of domestic supplies and of upward price pressure;

--preventing (if our reasoning is correct) considerable exportation of foreign exchange.

FOOTNOTES

1. IASM [expansion unknown], "Prospects and Conditions for the Process of 'Methanization' of the Mezzogiorno, with Particular Reference to Sicily," Rome, July 1980.

2. A. Clo, "The Italian Energy Situation: Problems Old and New," ENERGIA, No 1, 1980.

3. Idem, pp 52-53.

4. For a clarification of the problems raised by the Iran-Iraq conflict, see A. Clo, "Iran-Iraq War after 40 Days," IL SOLE 24 ORE, 2 November 1980.

5. Data taken from "Report of the Board of Directors of the College of Auditors and Balance-Sheet at 31 December 1979," ENEL, Rome, 1980.

6. ENEL, "Statistical Reports on Electrical Energy," August 1980.

7. For 1979, imported-energy invoicing totaled about 3.4 billion kWh as against a total of 7.6 billion kWh imported. Exports of about 0.6 billion kWh were invoiced, as against a total of 2.2 billion kWh exported.

8. For greater detail on the articulation of the subject of the ISTAT foreign-trade reports, see "General Notices" in the publication "Annual Statistics on Foreign Trade."

9. From the Customs point of view, the matter is governed by the "Consolidation Act of Legislative Provisions in the Matter of Customs," Presidential Decree of

23 January, No 43, at Section VI, Article 175 ff. Temporary importations are subject to authorization issued in certain cases (Article 177) by the chief of the Customs district where the processing of the goods must begin, or in other cases (Article 178), by the Ministry of Finance, by agreement with the Ministry of Foreign Trade and upon consideration of the opinion of the Advisory Committee set up (Article 221) in the Ministry of Foreign Trade. Goods in transit are imported without payment of border duties (tolls, border surtax; or any other impost in favor of the state) on condition that the owner commit himself --in the prescirbed manner--to reexportation of them within a fixed time limit. An appropriate document is issued for such importations, and a guarantee must be put up for duties eventually owed and for interest.

10. Before the expiration of the temporary-importation term, the owner may request that the goods imported be put onto the Italian consumer market (Article 190, Consolidation Act). "The customs duties that would have been payable on the temporarily imported goods on the date on which the declaration of temporary importation was accepted by Customs" will be paid on such goods (Article 191).

11. ISTAT, in fact, distinguishes only temporary imports--both on "own account" and on "third-party account"--from definitive imports.

12. The Ministry of Industry's data are published in the BOLLETTINO PETROLIFERO. Between 1973 and 1979, ISTAT and the Ministry of Industry give the following figures (in millions of tons) for total crude imported:

	1973	1974	1975	1976	1977	1978	1979
ISTAT (A)	126	117	94	99	100	108	109
Ministry of Industry (B)	128	118	93	100	104	108	110
(A) as percentage of (B)	0.98	0.99	1.01	0.99	0.96	1.0	0.99

13. The value of "third-party account" importations has been calculated by subtracting from the total expenditure furnished by ISTAT the valuation which the Ministry of Industry gives for definitive and "own account" importations only. To the figure thus obtained has been added an estimate of the cost of "third-party account" importation of semiprocessed products. Estimation of the value of exports was made by adding to the value of the imports of crude a hypothetical processing cost of 3,500 lire per ton of crude.

14. Obtained by subtracting from the total value of imports (13.763 trillion lire) the value of the definitive and "own account" importations of crude (10.523 trillion lire), the value of the refined products (1.440 trillion lire), and the declared value of the nationalizations (800 billion lire).

15. For a detailed analysis of the functional mechanisms of the spot market in 1978-1979, see A. Clo, "The World Oil Situation and Its Effects on Oil-Price Policy in Italy," in ENERGIA MATERIE PRIME, Nos 7-8, 1979, pp 29-36.

11267
CSO: 3104/217

ECONOMIC ITALY

MAKNO OPINION POLL ON INFLATION

Poll Results Discussed

Milan IL MONDO in Italian 27 Mar 81 pp 12-15

[Article by Bruna Bellonzi: "Transformed by the Monster"]

[Text] "One can succeed in living with it, but it leads directly to the people's descent into barbarity." The solemn words of Paolo Baffi, honorary governor of the Bank of Italy, but above all the nation's critical conscience, should reecho in the lazy ears of many economists and politicians. Recently they have shown more frequently with words and deeds that they are almost resigned to the inescapability of inflation. Two years have passed since Baffi made his lucid synthesis of the dangers inflation carries with it. They were 24 months during which the price index has risen constantly to a record of plus 22 percent at the end of 1980. Together with the decreased tension of those who should most directly fight against "the most ferocious evil that afflicts Western societies" (to once more use Baffi's words) there seems also to have been a loss of attention and concern by the people. In brief, one has the impression that what Baffi feared is taking place: The adaptation to living with inflation; to feel it, but to submit to it without reacting, each trying to unload it on someone else, in a race toward egoism that leads to that barbarism. And this attitude seems to be widespread precisely while on the horizon, despite forecasts by government economists, the outlines of concrete dangers of a further recrudescence of the phenomenon appear. In fact, the growing price pressure has triggered wage demands to recover lost purchasing power. Price setters (industrialists and businessmen) who certainly do not want to lose the profit margins they have gained, react in the same way.

It was in this climate that IL MONDO retained Makno to conduct the first survey on what Italians think about inflation, on how they relate to it, on how they have changed their habits. The survey (conducted with a sample of 2,000 persons) was done in two phases: The first survey was run 1 year ago, the second in February. For the first time there is, therefore, also the possibility of verifying how opinions and behavior of public opinion is evolving in regard to this phenomenon. And the overall survey shows that Italians' technical perception of inflation is at a good level. But here is a detailed study of the results.

Causes and Responsibilities

Naturally, the government is the first to be accused (see Graph 2, those responsible for inflation). Forty-four percent of those interviewed say that the government is responsible for inflation, and this derives from its function as an organ that sets economic policy. In fact, the direct causes of inflation most recognized are government spending, too much money in circulation, and devaluation of the lira. The government headed by Arnaldo Forlani, however, seems to come out better concerning this problem than that of Francesco Cossiga. One year ago, the responsibility of the executive (or the coresponsibility, because interviewees could give two answers) was indicated by 54 percent of those questioned. The constant propensity of governments for indebtedness is, however, stigmatized now more than in the past, so much so that the weight of the public deficit as a cause of inflation increases by as much as five points.

In any case, the new survey was conducted after several months of discussion of wage increases for government workers, judges, teachers and physicians in general practice. The importance attributed to oil producers seems to have dropped slightly, from 36 percent to 34 percent, while the importance of industrialists, bankers, businessmen continues to be considerable. Almost one-third of those interviewed believe that excessive profits for some groups are among the principal causes of inflation. However, opinion assigns various responsibilities to different business groups. Somewhat less blame is directed toward industry (the autumn difficulties, such as the sensational Fiat episode, certainly have left a mark) compared with 1980, and also for bankers, while slightly more blame is attributed to businessmen.

There was a drop in responsibility of trade unions (from 23 to 20 percent) which nevertheless was considered by respondents to be higher than those of the individual categories of businessmen. However (Graph 1) only 7.7 percent of respondents pointed to wage increases against 13 percent in the previous survey, and the much-maligned sliding wage scale rose only one point in responsibility.

A certain opinion change is registered also in assessing the effect of domestic and international factors on inflation. One year ago international factors were considered, overall, to have had a great influence. But petroleum prices, multinational policies and threats of war in the Middle East declined and, in the new survey, a net increase in domestic factors emerged.

If the mechanism is fueled by domestic forces, in which the responsibility of certain social groups, aside from the political class, is so clearly indicated, it is logical that opinion would identify the same groups as those who profit most from inflation (see Graph 3). Businessmen and industrialists, even though ranked lower than in the previous survey, are believed to benefit most, and they are exceeded only by professionals who were named by 44 percent of respondents. The latter figure is rising sharply. Evidently, respondents were personally affected by higher fees not only charged by doctors, lawyers, businessmen, and notaries, but also by mechanics and hairdressers. In addition respondents did not remain deaf to the hammering of denunciations by Minister Franco Reviglio against tax evaders and to the results of declarations and income verification recently made public. Executives and public officials gained little advantage from inflation, skilled workers very little, white collar workers even less. The latter are ranked last.

The Effects

More money is circulating, but the people feel poorer. Half those interviewed say they recently cut back on some consumption, and more than half (52.5 percent) claim their wealth was decreased by inflation.

Those most affected are Italians in the south and the islands. They claim to an identical degree (57 percent [Tr. note: Table A shows 57.5 percent]) that they reduced daily expenditures and that their wealth decreased (see table A). Positions are better articulated regarding wealth in the center-north area. The richer northwest area estimates that its wealth decreased considerably (61 percent) but current expenditures were not diminished, due, it is believed, to resort to available income reserves. Feelings in the northeast about wealth conform with the national average. Respondents in central Italy show a marked propensity for austerity. Their wealth seems to have been well-protected against the wave of inflation (only 37 out of 100 complain of a decrease in wealth) but they also have taken decisive steps to restrict consumption).

As regards consumption (see table C) the primary sacrifice was made for leisure time expenditures. Vacations, movies and theater, dining out, once more have become a luxury for many, and in fact a large number of those questioned said they gave these things up because of inflation. Expenditures for vacations seem to have been cut the most, and, in the past year declined an additional five points: Those who said they had to give them up rose from 35 to 40 percent.

But who gave up most luxury expenditures? Primarily those above the age of 50 (the weight of pensioners evident here), next youths between 15 and 19 (pay envelopes getting lighter) and those living in the center-south area. Northerners, for whom vacations are a widespread and long-established form of consumption, have given up less.

Inflation seems to have influenced durable consumer goods less: The new washing machine, television set, refrigerator or dishwasher, as well as personal property and other furniture have been less affected by restrictions. The same may be said for the automobile which--compared with vacations or the movies--is situated halfway in the classification of declared reduction of consumption. It must be said however that the survey could not register the postponement of decisions to buy, and more restricted use of certain goods. It can be assumed for example that many Italians would continue to use the old automobile, perhaps trying to consume less gasoline.

An interesting disparity between the two sexes emerges from their respective expenditures and consumption (see table B). Women feel less poor than men. They see decreases in savings or decreases in family wealth as less alarming, while restrictions on certain expenditures is felt with greater intensity. Female respondents said twice as often as male respondents that they sacrificed household expenditures and reduced food expenditures (respectively 22.6 percent against

13.8 percent; and 4.3 percent against 3.2 percent). Under the latter heading [food] the phenomenon is simply explained: Women make daily expenditures in the great majority of cases and therefore their perception of the phenomenon is more intense and immediate. Finally, it is a cause for preoccupation that even for food consumption, the highest reduction (5 percent) was recorded in the south, where consumption already is clearly below average.

Remedies

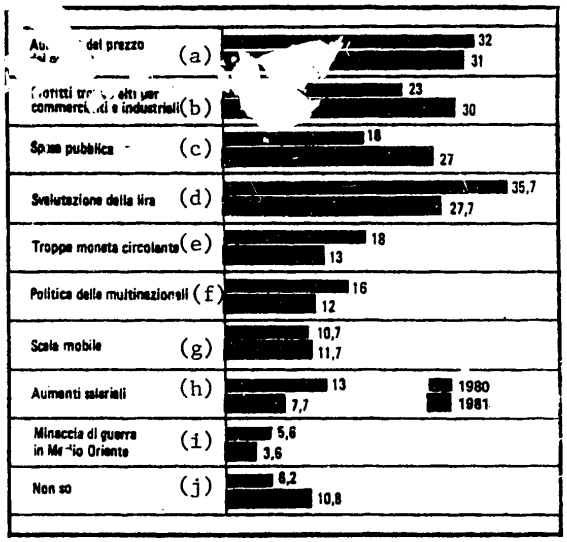
The most striking result of the survey in regard to attempts to counteract price increases is the general disorientation concerning means and the possibilities of fighting inflation. To the question, "If you were a government minister what would you do to stop inflation?" 26 interviewees out of 100 replied "I don't know" (last year only 19 percent had no point of view). When invited to choose between price controls and ceilings on salaries, most opted for simultaneous controls on both.

But among those who mentioned only one approach, a clear majority favored price and not salary controls (20 percent against 3 percent). The relative majority of women (26 percent) considers that the most effective anti-inflation measure would be controls on only certain prices (administered prices: electric light, rent, telephone). Southern respondents favored this choice strongly (35.7 percent). Shifting from anti-inflation policies to what each single citizen could do to protect his savings, the survey revealed that the preferred shelter is, by a great margin over any other possible choice, the home (table D). Overall, 37.7 percent favor this kind of protection and the figure rises in the north to almost 50 percent. The figure attributed in the south to this sort of defense is considerably lower (less than 16 percent), probably because of the greater weight of the rural areas, which are less sensitive than urban areas to the considerable variation in the cost of housing following the total block on rental property.

The survey results show Italians put into second place investment in treasury bonds and other state issues, and in third place the purchase of gold coins, thus reversing the data of 1 year ago. However, there is a small difference between the two points of view. All other investment is considered very risky: In any case bank deposits are favored over the purchase of paintings and jewelry (which are accessible only to a small elite, whose value in any case changes only over long periods of time), and on purchase of stocks, while absolutely negligible percentages (under 1 percent) favor all other possible forms of investment (which however are favored overall by 21.5 percent of the respondents).

Finally there is an interesting response that fully discloses the state of disorientation of some opinion, and its fear that things will get worse: More than 11 percent of interviewees believe that a good protection against inflation would be to spend all earnings at once. In short, live for today because who knows what may happen tomorrow.

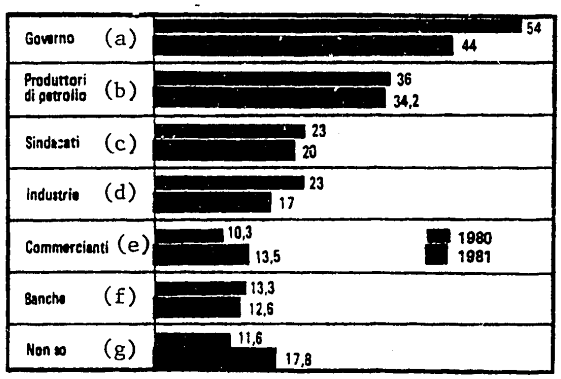
Despite all commonplaces, men head the list of proconsumers: Thirteen percent of men against 9 percent of women favor spending all income, thus openly accentuating a propensity shown a year ago. In 1980, Italian males interviewed by IL MONDO who had chosen unrestricted consumption as a weapon against inflation totaled somewhat less: 11 percent.



Graph 1. What Are the Causes of Inflation?

Key:

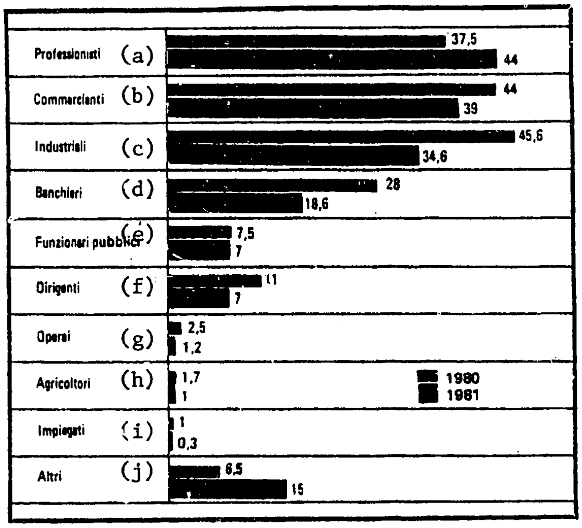
a. Higher Price of Petroleum
b. Excess Business and Industrial Profits
c. Public Expenditures
d. Devaluation of the Lira
e. Too Much Money in Circulation
f. Multinational Policies
g. Sliding Wage Scale
h. Wage Increases
i. Threat of War in the Middle East
j. Don't Know



Graph 2. Who Is Responsible for Inflation?

Key:

a. Government
b. Oil Producers
c. Trade Unions
d. Industry
e. Businessmen
f. Banks
g. Don't Know



Graph 3. Which Groups Profited?

Key:

a. Professionals
b. Businessmen
c. Industrialists
d. Bankers
e. Public Officials
f. Executives
g. Skilled Workers
h. Farmers
i. White Collar Workers
j. Other

Table A. Was Your Wealth Decreased by Inflation?

	M	F	18/19	20/24	25/34	35/49	+49	(d) Nord Ovest	(e) Nord Est	(f) Centro	(g) Sud/Isole	(h) T.C.
Si (a)	60,9	45.0	32,3	50,0	55,6	51,4	62,5	60,7	51,1	37,7	57,5	52,5
No (b)	28,7	30,7	35,5	32,1	28,1	32,4	22,5	23,7	25,3	44,5	29,2	29,7
Non so (c)	10,4	24,4	32,3	17,9	16,3	16,2	15,0	15,6	23,6	17,8	13,3	17,8

Key:

a. Yes
b. No
c. Don't Know
d. Northwest
e. Northeast
f. Center
g. South/Islands
h. Combined Total

Table B. Do You Feel You Are Richer or Poorer Than 6 or 7 Years Ago?

	M	F	15/19	20/24	25/34	35/49	> 50	(e) Nord Ovest	(f) Nord Est	(g) Centro	(h) Sud/ Isole	(i) T.C.
(a) più ricco	15.4	15.3	24 2	16 7	22.8	9.1	7 6	18.1	7.9	16 7	19.6	15.3
(b) più povero	44.4	35 6.	30.3	34.2	37 2	39.0	55.5	32.3	54.5	36.1	36.6	39.8
(c) lo stesso	35.7	40.4	30 3	43.0	31.7	46.5	34.5	41.8	32.0	41.0	36.6	38.1
(d) non so	4.5	8.8	15.2	6.1	8.3	5.3	2.5	7.8	5.6	6 3	7 1	6 8

Key:

a. Richer
b. Poorer
c. The Same
d. Don't Know
e. Northwest
f. Northeast
g. Center
h. South/Islands
i. Combined Total

Table C. What Form of Consumption Did You Give Up?

(a) *(fino a 2 risposte)*

	M	F	15/19	20/24	25/34	35/49	>50	(i) Nord Ovest	(j) Nord Est	(k) Centro	(l) Sud/ Isole	(m) T.C.
(b) tempo libero (vacanze)	41 8	39 9	30 0	56.5	30 2	42 1	44.2	29 9	36.7	57 8	48.8	40.7
(c) tempo libero (cinema, teatro)	41 8	43 8	53 3	45.2	43 4	35 1	46.5	33 6	50.0	43.4	42.5	42.7
(d) ristoranti	40.2	29 3	30 0	24 2	44 3	33 3	33.7	46 7	29.7	38 6	22.5	34.7
(e) auto	23.8	13.0	13.3	16 1	24 5	17 5	15.1	22.4	12.5	19.3	21 2	18.3
(f) beni per la casa	13 8	22.6	3 3	16.1	15.1	26.3	18.6	15.9	23.4	15.7	16.2	18.3
(g) alimentaz	3 2	4 3	0 0	1.6	1 9	4 4	8 1	3.7	4.7	1 2	5 0	3.8
(h) non so	5 3	8 7	6 7	8.1	6.6	7 9	5 8	9 3	3 1	3.6	13.7	7 0

Key:

a. (Up to Two Replies)
b. Leisure Activities (Vacations)
c. Leisure Activities (Movies, Theater)
d. Restaurants
e. Automobile
f. Household Goods
g. Food
h. Don't Know
i. Northwest
j. Northeast
k. Center
l. South/Islands
m. Combined Total

Table D. How Can Small Savers Protect Themselves From Inflation?

	(j) Nord-Ovest	(k) Nord-Est	(l) Centro	(m) Sud-Isole	(n) Totale
(a) Acquistando beni immobili	49.1	45,8	27,2	15,7	37,7
(b) Acquistando Bot o titoli di stato	10,9	13	15,6	6,1	11,7
(c) Acquistando monete d'oro	13	7,3	8,8	10,4	10,2
(d) Depositando i soldi in banca	0,4	0,6	6,8	5,2	2,7
(e) Acquistando azioni	3	1,1	0,7	0.9	1,6
(f) Acquistando gioielli	0	1,1	2,7	6,1	1,9
(g) Acquistando quadri	1.3	0	1,4	2,6	1,2
(h) Spendendo tutto il reddito	10,0	9,6	14,3	13,9	11,5
(i) Altro	13,3	21,5	14,5	39,1	21,5

Key:

a. Buying Real Estate
b. Buying Government Bonds or Government Securities
c. Buying Gold Coins
d. Putting Money in Banks
e. Buying Stocks
f. Buying Jewels
g. Buying Art Works
h. Spending All Income
i. Other
j. Northwest
k. Northeast
l. Center
m. South/Islands
n. Total

Economist Interviewed

Milan IL MONDO in Italian 27 Mar 81 p 14

[Interview with economist Antonio Pedone by Maurizio Valentini: "Pedone: But the Government Has Limited Liability"]

[Text] "There is no doubt on one point: The Italians have quickly learned to live with inflation." The statement was made by Antonio Pedone, an economist who is an expert in public finance and trusted adviser of Finance Minister Franco Reviglio. Pedone was asked by IL MONDO to comment on the results of the Makno survey.

Question: Professor, the 2,000 Italians Makno interviewed agree: Government officials, the sheiks and businessmen are mainly responsible for inflation. What is your opinion about that?

Answer: A complex phenomenon such as inflation can be explained only by many causes: It is always a mistake to place the blame on a single social class, or worse, to point the finger even at a professional group. In any case, the results are eloquent: For 1981 the price of energy supplies (essentially petroleum) is expected to increase on the average of 25 percent, therefore more than inflation, which is expected to increase at a rate of less than 20 percent. Then, it is also true that in the past 2 years the profit portion of the Net National Product (NNP) has increased even though this increase probably is due to recovery by businessmen of personal positions in previous years. In short, certainly part of the responsibility falls on the shoulders of industrialists and crude oil producers.

Question: Is the government blameless?

Answer: It is difficult to understand whether the government is accused of producing inflation or whether government officials are accused of not taking effective action against it. In the latter case, I would to a considerable extent underwrite the accusations by the public even though it seems to me worthwhile to emphasize that on the one hand there is a push for an anti-inflation policy and on the other hand there is no willingness to pay the necessarily high prices; each group is convinced that someone else should tighten his belt. If, instead, the government is accused of producing inflation, it is necessary to recognize the strict limits within which the executive can act. There are essentially three variables as reference points: Public debt, public expenditures, fiscal income. There is a desire to keep public expenditure unchanged, because I do not believe that any Italian wants to pay 13 million lire to enroll his children in a university as instead is true of Americans who want to go to the University of Chicago, or worse, to pay out of their own pockets the 150,000 lire per day for a hospital room as is the case in nations where public health assistance does not exist. But in this case the government has only two levers of political policy left: Keep the public deficit unchanged, and therefore create a source of inflation, or increase income.

Question: Then the only answer is higher taxes?

Answer: Absolutely not. In Italy the majority of taxpayers have paid taxes honestly; instead fiscal measures, and other instruments of economic policy must be used to redistribute national income.

Question: Redistribute how?

Answer: In periods of high economic growth, inflation is like a drug. Everyone is convinced that he can profit from the cost/price spiral. But when growth decreases, there is a real race to seize the biggest share of income produced. Obviously, the results are disastrous and inflation is further fueled. There is only one answer in this case: A social agreement that would guarantee acceptance of a certain model of distribution of income.

6034
CSO: 3104/220

ECONOMIC ITALY

BRIEFS

AID TO THIRD WORLD--Rome--1981 will mark a decisive shift in Italian aid to the developing countries. The Department for Cooperation of the Ministry of Foreign Affairs, established barely 2 years ago, plans to distribute funds (1,000 billion lire this year, more than twice the amount spent in 1980) according to political and managerial criteria, no longer on bureaucratic considerations. The objective of the department, which has now defined its policy for 1981, is to focus its aid on a limited number of countries (in the Mediterranean area, the Horn of Africa, southern Africa, Latin America, India, Pakistan, and the ASEAN countries) to make sure that its interventions will reap the maximum benefits in technical, economic, and political effectiveness. To the same purpose, bilateral aid has been upped this year, absorbing more than 360 billion lire. This will give Italy a chance to control the uses for which its aid money will be spent. Thus, in carrying out its various programs, Italy will be able to determine what opportunities are available for exporting Italian technology. Multilateral cooperation will channel to the developing countries some 615 billion lire, 240 billion through public projects, 74 billion (of which 7 billion are obligatory and 67 billion voluntary contributions) through United Nations agencies, and the rest (over 300 billion lire) through participating bank capital and international funds destined for development aid. [Text] [Milan IL SOLE-24 ORE in Italian 26 Feb 81 p 19] [COPYRIGHT: 1981 Editrice Il Sole-24 Ore s.r.l.] 9653

CSO: 3104/221

POLITICAL ITALY

LOCAL OFFICIALS OPPOSE U.S. BASE AT LA MADDALENA

Milan CORRIERE DELLA SERA in Italian 28 Mar 81 p 17

[Article by Alberto Pinna: "La Maddalena's Politicians: 'We Have the Impression of Living Over a Bomb'"]

[Text] La Maddalena--"It is not an act of defiance. We realize perfectly that our problems are a drop in the troubled waters in which Italy is sailing. But in Rome they continue to ignore us, to pretend that nothing is going on. What else could we do?

Attorney Gravino Canopoli, La Maddalena's Christian Democratic mayor, explains in these terms the unanimous decision of the municipal council to request the immediate withdrawal of the American nuclear submarine base. Since 1972--the year in which the American navy was stationed on the island of Santo Stefano--local politicians had never found themselves in complete agreement in judging as dangerous the presence of submarines and the support ship, the "Orion." Why now?

"The point is," the mayor explains, "that when, even potentially, the health of all citizens is concerned, there are no divisions or political barriers. At La Maddalena there are not pro-Easterners or pro-Soviets any more but only worried citizens."

An unsuspected vote, therefore, which could not be linked to political maneuverings. The resolution to request the withdrawal of the American submarines received the concensus of Christian Democrats and Social Democrats, who are together in the municipal council, as well as of the opposing socialists and communists. And even of the single council member representing the MSI.

What are they looking for, at La Maddalena? "That the government keep its commitments, continues Canopoli, and carry out the CNEN [National Nuclear Energy Commission] program of radioactivity controls. At present, these controls are nonexistent or quite incomplete. And we do not feel secure."

Polemics on the efficiency of the radioactivity monitoring and analysis system has been going on for less than a year. CNEN had envisioned a net at three levels. The first two have been implemented, including the laboratory for the analyses. The net at the third level, involving the installation of monitors in various parts of the archipelago and a system for the transmission and simultaneous data analysis on radioactivity is, instead, incomplete. With the net at the third level, any release of toxic substances would be promptly reported and, in the case of serious pollution, a warning acoustical signal that could be heard by all those residing in the area of potential danger, would be transmitted. La Maddalena's municipal council bitterly accuses the government of having always neglected the safety of the population. The object of criticism is the Health Ministry, which allocated 400 million lire for the completion of the CNEN program, entrusting the Sassari provincial administration with its implementation. The allocation is not at all adequate.

"We would need," says La Maddalena's mayor, "an additional 350 million lire to complete the net at the third level and then another 100 million to ensure the continuity of the operation. Otherwise one runs the risk of having implemented the CNEN program for nothing or, worse, of having it half completed."

But what results do the people of La Maddalena expect from their request for withdrawal of the American base?

Something is going to happen, says Canopoli, and in the meantime the Health Ministry must refrain from keeping its doors closed to us. We have been patient for 9 years. And we would have waited longer if they had proven to us that ours are impossible and unjustified demands. But what is absurd is that to carry out our demands billions are not needed but only a few hundred million lire, a minute figure when compared to the purpose it serves: The safety of tens of thousands of people."

At La Maddalena the stand of the municipal council is shared by everybody. The results of analyses of the water surrounding the American base so far have been fully reassuring: Radioactivity is contained within normal levels. "But here, affirms one of the councilors who voted in favor of the complaint resolution, we are not comfortable, one has the impression of living over a bomb which may explode any time."

Pollution phenomena like the poisoning of fish, which was reported 15 days ago, are rightly or wrongly blamed on the presence of nuclear submarines. The municipal council paper is, therefore, only a first answer to people's worries. In June administrative elections will be held at La Maddalena and this could be, as many believe, the occasion for even more clamorous protest.

9758
CSO: 3104/222

POLITICAL ITALY

DOXA OPINION POLL ON ATTITUDE TOWARD PCI

Milan CORRIERE DELLA SERA in Italian 24 Mar 81 p 2

[Article by Vittorio Feltri: "Is the PCI Different From Eastern Communists? 54 Italians Out of 100 Say 'Yes'"]

[Text] "Eurocommunism," "The Italian way to socialism," "We are a party of struggle and revolutionary and conservative government," "We accept the Atlantic Pact:" Anyone somewhat aware of politics knows that these slogans are the synthesis of PCI's efforts to project an image different from that of the sister parties in the East. A renovated image, modern, reassuring, democratic in the Western sense.

But what are the practical results of these efforts? Do voters really believe in Berlinguer's "words" or are they convinced in their heart that PCI still has "moustaches" [reference to Stalin's moustache] as in Guareschi's novels? This is a topical question, especially after the CSPU's great rejection of Pajetta, who arrived in Moscow with the legitimate aspiration of giving a serious speech at the 26th Congress and was compelled to deliver it in a secondary building, due to a sudden change of protocol.

Once again, with perfect timing, Doxa previews the reactions of the man-in-the-street, thanks to a survey of 1,500 persons conducted by the research institute exactly 1 month before the sensational episode at the Kremlin. Thus, just at the moment in which our politicians are most curious about the people's thoughts on the PCI (is it different or similar to Eastern communist parties?), Doxa's figures, considered reliable by experts, are readily available.

First the highlights: 54 respondents out of 100 sustain that the PCI is different. Quoted casually the number is meaningless. But if we compare it to the results of previous surveys on the same subject, the variable mood of the Italians toward this party is clearly visible, thus proving that flux is not an empty word. In fact, in 1976, 40.5 out of 100 Italians were convinced that the PCI was different, 2 years later the number increased to 48.3 percent, and in 1979 it jumped to 56.5 percent. In 3 years, that is quite a vertiginous climb.

And now, for the first time after the triennial triumph which seemed inexhaustible, a downward tendency is beginning to show: 54 percent, precisely. A decline of 2.5 percent: A trifle from a mathematical standpoint, but an important symptom as far as the political scene is concerned, because it signals a shift of uncertain consequences. Which could be irrelevant but also "earth-shaking" for the left.

The same declining tendency appears in answers to the most direct question: "Is the PCI similar to the parties of other communist countries?" In 1976 the affirmative answers were 34.8 (out of 100, obviously,) in 1978 they declined to 29.5 percent, a year later they settled around 29.4 percent and now, the analyzed period 1980-1981, they come back to a high percentage, 31.8.

Less clear are the statistics, in the sense that their interpretation is more difficult, concerning the agnostics, those who answered "I don't know, I don't care at all:" 24.7 percent in 1976, 22.1 percent in 1978, 14 percent in 1979 and now 14.3 percent. In brief, between 1976 and 1979, the public's attitude toward the PCI was luckwarm, and it seemed that the ancient mistrust for Marx's beard was about to diminish. In 1978, those who thought that having the communists in the government was bad had declined all the way from 30 to 22 percent. It was the period of convention-type euphoria, "overturism," progressivism, and all possible and imaginable "isms" dragged by fashion into every social stratum.

Going over the survey's analytical data one finds out, however, that those who are the most uncertain as to whether or not to call the communists democrats are the noncommunists, namely those who see the PCI sometimes as an enemy, sometimes as a traveling companion, and sometimes as a mountain to be circumvented.

Sex, age, social and cultural origin also have weight in the reading of the statistics. As much among men as among women, trust in the PCI's dissimilarity decreases with age. The mistrust in relation to age occurs earlier among women. Among young persons, those who trust are twice the number of those who are skeptical.

Social class and level of education are parallel influences. Greatest mistrust is found among the so-called upper classes. (42 percent) and among those who have attended the university (37 percent). Poor people are, instead, the most optimistic about the communists' antitotalitarian qualities: Only 28 percent were dubious. A slightly higher percentage is found among women with less than elementary education: 30 percent.

The bourgeoisie, namely the middle class, holds the record of uncertainty: Few were able to answer. According to a geographical classification, the extent of mistrust is greater in Central Italy (36 percent) and lowest in the South (29 percent). This means that in the South the image of a different PCI is resisting change or that change has not yet occurred in the South.

Among registered communists, 86.2 percent say that the PCI is different, 7 percent that it is like other Warsaw Pact parties, and the rest is noncommital. Among registered Christian Democrats, only 32 percent consider the PCI democratic, and among those who cannot be politically classified, 71 out of 100 percent disagree.

The report has a particularly interesting appendix: Public opinion about the three major parties, PCI, DC and PSI. To the question of whether they merit more or less confidence than in the past, the respondents' orientation, compared to 1979, is decisively negative for all three parties. For the PSI, those with mistrust have increased in 2 years from 30 to 40 percent; for the DC from 44 to 56 percent; and for the PCI from 38 to 43.5 percent. These figures confirm the distressing statistics, prepared by Doxa, on the respect or rather the lack of respect held by Italians toward their government (already covered by the CORRIERE). It really seems that the citizens, while being a little confused between parties, state and government, are in agreement in judging the political world with increasing severity. Perhaps we are not too far from the rediscovery of the well-known maxim: "Politics are dirty." A painful disappointment above all for the generation of 1968 which believed in creative leadership. Now many are convinced that today's leaders are rubbish.

9758
CSO: 3104/222

GENERAL FRANCE

PREPARATIONS FOR OPERATIONAL NETWORK OF SPOT SATELLITES

Paris AIR ET COSMOS in French 7 Mar 81 p 47

[Article by Pierre Langereux: "Preparations Are Being Made For the Operational Network of Observation Satellite SPOT]

[Text] This year the first decisions must be made regarding the setting up of the operational network for observation satellite SPOT which will allow the commercial exploitation of data by French and foreign users. The launching of the trial satellite SPOT 1, planned for 1984, is, in fact, only the first stage for establishing this type of an operational system, which already seems to be a worthwhile endeavor.

Three sets of decisions must be made in order to set up this operational system which is expected to effect the launching of four to five operational satellites over a 10-year period.

Setting up the means for exploiting the SPOT 1 satellite data, in particular forming the SPOT-IMAGE company, must be decided this year.

Launching a second satellite, SPOT 2, 2 years after the first one, in 1986, must also be decided this year. The total cost of this operation is estimated to amount to about 350 million francs (satellite and launching). It could still be run by the CNES.

The mechanics of financing the construction and the launching of additional satellites, starting with SPOT 3, must be discussed mext year. This will mean, for example, to specify whether the system can already be self-supporting from income from the sale of data.

9465
CSO: 3100/632

GENERAL FRANCE

CNES PREPARING TO MARKET SPOT SATELLITE PHOTOS

Paris AIR ET COSMOS in French 7 Mar 81 p 47

[Article by Pierre Langereux: "SPOT-IMAGE Will Market Data From SPOT Satellite;" passages in slantlines published in boldface]

[Text] /The CNES [National Center For Space Studies] is preparing to form the company SPOT-IMAGE in order to market data from the future French observation satellite SPOT which will be launched in 1984 by an "Ariane" rocket/.

This new company will bring together the CNES, "motivated" manufacturers (such as MATRA, SEP [European Propellant Co.], Aerospatiale, etc), and public agencies concerned (such as IGN [National Geographic Institute], BRGM [Bureau of Geological and Mining Exploration], IFP [French Petroleum Institute], BDPA [Agricultural Production Development Bureau], etc.), also including foreign stockholders, in particular from Sweden. This company could be a limited company with a capital of at least 20 million francs.

/SPOT-IMAGE should be formed by the end of 1981 or in early 1982/ in order to set up an important network to market data for a widespread clientele. This network would have to cover France and foreign countries--in particular Europe and the United States--by setting up local agents, sales offices or subsidiaries from where it would be possible to consult, long distance, the SPOT general data catalogue which SPOT-IMAGE will have. There are plans to open a subsidiary in the United States, with at least three sales outlets.

Important Market In The United States

Market studies recently done in France by the CNES and the National Center for Foreign Trade, and in the United States by the Earthsat Corp., at the request of the CNES, in fact, show an important potential market for data from SPOT for Europe as well as for the United States.

/Approximately one-third of the market would be in the United States/ (where 50 potential users were contacted), /another third of the market would be in Europe/ (15 countries are involved), and the last third would be throughout the rest of the world. The users would be found in different economic sectors, as in agriculture (30 percent), cartography and thematic topography (30 percent), mining and oil prospecting (20 percent), and in the administration of waters and forestry (20 percent).

The SPOT-IMAGE company will gather all SPOT data and will have the complete catalogue of data gathered in France and in foreign countries. In France, all data will be received live or by transmission from the SRIS [Space Image Reception Station] from Aussaguel, and will be processed in advance by the CRIS [Space Image Rectification Center] center in Toulouse, which is to be set up by SEP. Outside France, the data from SPOT can be received by all technically compatible stations, that is at 8 GHz, like the receiving stations of the future American observation satellite "Landsat D". Foreign stations will be able to receive SPOT photos in return for payment of a tax for linking up to the system and a fee in proportion to the use of the satellite (number of photos received).

Selling 100,000 Scenes Per Year

According to studies of the market, a sale of about 100,000 SPOT scenes per year is anticipated, each scene consisting of three photos at 20m resolution, and one photo at 10m resolution taken by the two HRV [Hypersonic Research Vehicle] satellite (visible) cameras built by MATRA. In fact, this represents an average sale of twice 50,000 different scenes, which is far from saturating the SPOT satellite capacity. Actually, it is estimated that SPOT will be able to shoot about one million scenes per year of which only 10 percent can be used, meaning about 100,000 different scenes. The data will be supplied to all interested users at a rate that will cover operating costs and the cost of the SPOT system equipment.

The operating cost of the system--including that of the control center, the mission and reception centers, and the pre-data processing--has been estimated at 150 million francs per year, or 1.5 billion francs over a 10-year period, to /keep the system in service with four to five operational SPOT satellites successfully launched/ as presently planned by France.

Based on this, and including marketing expenses, the SPOT-IMAGE company could sell SPOT data for about /2,500 francs (or $500.00) a scene/. This amounts to about two and a hlaf times the present price of data from the American experimental "Landsat" satellite ($200.00 in the United States), yet which does not guarantee a long-term supply. In assuming an operational distribution of data from observation satellites, the United States, in fact, anticipates a three to fivefold rise in data price, which would be higher than the price of SPOT data.

Besides, the present higher price of SPOT data is not discouraging to the users concerned, whose profits will reach millions of dollars. Moreover, it is justified because of the superior "quality" of data at high resolution (10m) as compared to those from "Landsat" satellites (80m).

The CNES even estimates that high resolution SPOT data will be able to compete directly with aerial photographs taken at high altitude. Aerial readings, on the average, cost, in fact, about 10 francs per square kilometer in Europe and 15 francs per square kilometer in foreign countries, while SPOT photos would only cost 1 franc per square kilometer.

According to CNES, the sale of SPOT data would thus mean a potential market of about $40 million, or twenty times that of the "Landsat" data which at present reaches about $2 million per year.

9465
CSO: 3100/632

END