COMMODITY REPORT

Crisis time for tin

By Gill Burke

The future of the world's longest running commodity agreement now looks precarious. The withdrawal of the International Tin Council from the market has sparked a debacle that threatens the LME as centre for world minerals trading. Yet the event had been long expected and could perhaps have been prevented. In this paper Gill Burke gives the background to the crisis in tin.

Gill Burke is Senior Lecturer, Faculty of social Sciences & Business Studies, Polytechnic of Central London. She is also Visiting Associate Professor, Institute of Advanced Studies, Universiti Malaya, Kuala Lumpur.

The turmoil in the tin markets following the announcement last October that the *International Tin Council* (ITC) was to cease support buying for it buffer stock, had not been entirely unexpected. Within the industry the possibility of market collapse had been like a time bomb that had begun ticking. The ticking became louder last June, after the London Metal Exchange (LME) suspended trading when speculative buying pushed the price of tin high. The rapidly smoothed over acrimony between the LME and the ITC moved matters from the headlines, but convinced many tin miners that the key question was no longer 'if' but 'when'.

There had been hopes that the day might be postponed. The period of talks and negotiations that had been scheduled for next year to preceed the initiation of a new International Tin Agreement in 1987 could have provided the context for an overall reduction in price. A gradual decline from the Kuala Lumpur price of 29 Malaysian ringgits (MYR) per kilo to perhaps 24 MYR a kilo, although painful to some producers, would have been less harmful than a rapid slide with all that implied. However, these hopes have been overtaken by events.

This has not been the first time that the ITC has ceased buffer stock trading. In 1958, following rapidly increased sales of tin by the USSR (most of it re-exports from China) the ITC announced that its cash reserves were exhausted and it could no longer support the floor price. Again, following exhaustion of the buffer stock in 1977, there were no further sales until the spring of 1981. That was largely a consequence of action by the USA, at the time a member of the ITC, to limit ceiling price range adjustments. This time however the problems facing the ITC seem deeper and more intractable. It remains to be seen whether they can be overcome.

The International Tin Council and the International Tin Agreements

The history of the world's longest running commodity agreement has been a chequered one. The problems of surplus and shortage, of conflicting member interest, and of production by non member countries have been with it since the beginning. The International Tin Council, set up in 1931, was initially a producers association. The aim was to protect members from the worst effects of market depression through output restriction. The apparent success of the Bandeong Pool, whereby the tin mining industries of the then Federated Malay States and the then Nederlands East Indies had survived the catastrophic price falls of the 1920s, provided a model. It was the governments of these two countries, together with Bolivia and Nigeria who were the signatories to the first International Tin Agreement (ITA). Under this quotas were placed on production of a standard tonnage based on output in 1929.

At the same time, however, non-member Thailand stepped up production from 7 527 long tons in 1928 to 12 447 long tons in 1931. Similarly Britain doubled its, very much smaller, output. As the world's third largest producer Thailand's membership was essential to the newly formed ITC. A higher quota than the other members was offered as a successfull inducement to join. The 2nd ITA took effect in 1934, but within two years had all but fallen apart. Output from non member countries had risen to 24 per cent of the world total. Once again advantageous quotas were offered by the ITC. In 1936 the then Belgian Congo, French Indo-China, Portugal and Britain joined.

Membership by producing countries was not sufficient of itself to keep the association together. There were wide variations of objectives particularly with regard to mining costs and output quotas between the members, in what was a very shaky alliance. Portugal and Britain did not sign the 3rd Agreement in 1937. Their loss, as small producers, was not crucial. It was excess production over quota from the major producers that was the main difficulty. Had not Bolivia failed to meet its quota from 1935, as a consequence of the Chaco War, it is doubtful if the ITC could have survived until the lifting of restrictions once demand for tin increased. In the event they were saved by the gearing up to war footing by the consumer economies.

The ITC today — restriction busting and new producers major problems

Excess production over quota and production by non-member countries still threaten the, greatly changed, ITC today. Export controls have been inposed on members since 1982 — an unprecedentedly long period. Excess production has resulted in smuggling particularly from within South East Asia. Steps have been taken within Malaysia and Thailand to limit this. Nonetheless, some 11 kt of tin concentrates are estimated to have been smuggled in 1985. Recently, the Chairman of Australia's Renison Ltd remarked that he would be quite happy with Australia's official ITC quota if he could also have an 'unofficial' quota of 11 kt.

Restriction busting comes both from non-member countries and from within the ITC itself. Now a forum both of producing and consuming nations, the consuming nation members are not bound by the export control system of the producers. So far output from ITC consuming members has been more insult that injury. The British mines, located in Cornwall, are high cost producers at the best of times. Cornish mines supply about 25 per cent of Britain's domestic tin needs, but output, of 5 kt in 1985, is tiny in world terms, less than 3 per cent. Canada poses a bigger long term threat as the new Rio Algom mine in Nova Scotia may prove to have considerable reserves of ore. The Canadian mine is only now coming on stream. Nonetheless, to producing members of the ITC who have bourne the penalties of export control in terms of mines closed, dredges laid up and workers unemployed — to say nothing of lost foreign exchange — the knowledge that Cornwall has doubled its output is galling.

New producers outside the ITC are an even greater problem. China has doubled its output to 6 kt in 1985 but the Chinese mines are in need of a lot of recapitalising if they are to maximise production. Technology transfer from mining companies and countries, especially from Australia, has been offered but are delayed for want of foreign exchange. Thus China, like Canada, is a potential more than actual problem. The real current problem is Brazil.

Although Brazil has been a tin producer for many years, its output before the 1980s was negligible, — less than 1 per cent of world output. Infrastructural improvements during the seventies made possible the development of additional deposits of high grade ore. In 1983 Brazil's output had risen to 8 kt. By 1984 it was 19.957 kt, and 22 kt are estimated for 1985. If Brazil continues to produce at the same rate, she will become the world's largest producer in a matter of years, overtaking Malaysia the long established world leader. More attractive quotas are clearly no longer on the agenda of possible steps available to the ITC, yet they must in some way meet the threat of Brazilian output to survive.

These unchanging problems within a changing world scenario point up the underlying weaknesses of any commodity agreement and might suggest that matters would not have greatly differed had the ITC remained a producers association. Similar problems led to the failure of the attempted copper agreement. OPEC is now also facing them. Since its reformation after the second world war, however, the ITC has developed into a more complex body. Although many of its structural problems date from its original inception, these had not so far proved fatal, not least because the ITC itself and its objectives have changed over time.

The new ITAs (1956—)

The ITC was reformed under the auspices of the United Nations. The new 1st International Tin Agreement came into effect in 1956. At this time the main objective was seen as managing possible "burdensome surplus". To this end the newly established Council was authorised to set a floor and ceiling price for tin, to impose export control when necessary and to establish a buffer stock. By the time of the 3rd ITA in 1966, the objective of surplus management had been overtaken by others. Growing dissatisfaction with GATT as a "rich countries club" and increasing United Nations membership by the developing countries meant that the United Nations Conference on Trade and Development provided the aegis for the ITA. The preamble to the 3rd Agreement stated ". . . commodity agreements, by helping to secure short term development of primary commodity markets can significantly assist economic growth in developing producer countries". Thus, the price regulating actions of the ITC were to provide a trade off between the price importing nations were willing to pay, and the price exporting nations needed for development with implicit emphasis in favour of the latter.

During the period of the 3rd and 4th Agreements the ITC became a more internationally representative body. Under the 1st Agreement the smaller producers such as Burma, Laos, Rwanda, Portugal or South Africa — and, of course, Brazil, — were not pressed to join. It was felt that the megatonnage from the South East Asian producers was sufficient to allow floor and ceiling price control. Under the UNCTAD principles, however, the ITC offered the smaller developing nations an opportunity for a voice. The nations of Bulgaria, Czechoslovakia, Hungary, Poland and Yugoslavia joined as importers/consumers; as also in 1970 did the USSR. Both UNCTAD and the IMF were granted observer status. The existence of the European Economic Community was recognised although members nations still voted as individuals.

The buffer stock

During this period, for the first time, some of the consumer members nations made voluntary contributions to the buffer stock fund. The Nederlands gave 671 000 GBP in 1972 and France 1 215 000 GBP in 1973 (Important those these were in principle they have to be set in the context of the cash value of the total producers voluntary contributions of 27 000 000 GBP). At the same time the growing instability of sterling — particularly after the Heath administration freed exchange rates in June 1972 — made the LME cash price a bad basis for setting floor and ceiling prices. From then on the ITC quoted its price range in terms of Malaysian ringgit as quoted on the Penang market. The switch to Penang also reflected the physical changes occuring in the world tin market with the decline and closure of European smelters and the corresponding rise in output from smelters in Bolivia, Indonesia and Thailand. Yet this change contained the seeds of future trouble. Currency fluctuations and increased distance meant that speculative forces trading on the LME became much more influential. These influences were to increase over the coming decade to become one of the factors precipitating the current survival crisis of the ITC.

The role of the US

Although not a member, the United States had, from the 1950s, a marked influence on the ITC. The US position changed over time from hostility in the early 1950s to 'benevolent neutrality' by the time the 1st ITA came into effect in 1956. In between these two stances there was a period of enthusiasm when stable tin and rubber prices were seen as essential to the fight against communism currently taking place in the Malayan Emergency. With the ending of the Korean war, sales of tin from the US stockpile began to effect the market. Within the ITC it became recognised that stockpile sales could be used to prevent shortages. But the consequences for producer economies generated fierce debate. In addition, there was no appropriate mechanism to regulate such sales, not least since they then had to be first authorised by the President.

The USA did, however, joint the 5th ITA in 1976. By now the UN had adopted the resolution calling for a New International Economic Order and the sense of this was explicit in the new Agreement, ". . . to resolve problems relevant to tin by means of an international commodity agreement, and taking into account the role which the International Tin Agreement can play in the establishment of the NIEO". In the by now post OPEC oil shock world, the USA was keen to prevent any further spread of producer cartels. Indeed Secretary Kissinger proposed that advisory bodies, both consumers and producers, should be set up for 'every key commodity, to discuss market stability, growth and efficiency'.

Several ITC delegates, both consumers and producers, have commented wryly that the US was certainly far more trouble inside the ITC than out of it. Through its resistance to any ceiling price range adjustments and its determination that prices should in no way transfer resources from consuming to producing countries the US — backed by the USSR, Japan and West Germany — virtually immobilised ITC operations. It is true that during 1976 there had been some months when export controls had enhanced price through remaining in force after buffer stock operations had been suspended due to depletion, but this alone did not cause US intransigence. The opposition to action that might raise prices above their market levels led the USA to, in effect, artifically determine the highest such a level could be. By proposing that stockpile sales should be used to protect the ceiling and buffer stock sales to protect the floor the USA made it clear that within the ITC it was acting for national rather than international interests.

Such overtly political pricing, together with the tactic of calling for a vote on every decision spelt the end of the ITC as a body where consensus and co-operation predominated. Since votes were distributed in proportion to a country's consumption or production, and a two thirds majority was required for a motion to pass, this relegated the smaller nations to the sidelines. Nor would the USA agree to make voluntary contributions to the buffer stock, and opposed moves to make consumers contributions compulsory, whilst at the same time calling for a far larger buffer stock to protect the floor.

The role of the consuming nations

In 1979, after Belgium, Britain, Canada, Denmark, France, Japan, the Nederlands and Norway had all made voluntary contributions and after the *Buffer Stock Manager* (BSM), Pieter de Koning, had publically chided the consuming nations for their failure to make adequate contributions, the USA did make an offer. De Koning had stressed that the lack of purchasing since 1977 had resulted in export controls having to be imposed to protect the floor whilst the remaining buffer stock was not large enough to protect the ceiling. The USA offered 1.5 kt of tin from the stockpile. This was to be valued at the price it was sold for by the BSM, and the title was to remain with the USA until all the ingots were sold. Since producers contributions of metal were valued at floor price, and consuming nations gave cash this could not be called a generous offer. Nonetheless the ITC accepted. Only Bolivia, whose mining costs are the world's highest and whose tin exports account for over 30 per cent of foreign earnings, formally protested.

The reluctance of consumer nations, led by the USA, to raise the ceiling price; coupled with sales of 5.920 kt from the US stockpile in 1980, certainly helped set the stage for the 1981/82 attempt to control the market by a mystery buyer believed to be connected with Malaysia. Tin prices on the LME rose from 6 537 GBP in July 1981 to 8 455 GBP by the end of November. In February 1982, when a number of LME traders were having to deliver tin within a few days, the LME stepped in to limit the penalty for failing to deliver. The market plunged. Subsequently the ITC imposed export controls on producers which have been in force ever since.

Together these events contributed to the establishment of what the United States had sought to prevent — the formation of a producers association. World recession together with falling overall demand for tin means that the *Association of Tin Producing Countries* (ATPC) in no way resembles OPEC during the latter's salad days. Nonetheless it exists and might fill the vacuum should the ITC collapse.

Another chicken that was to come home to roost in 1985 was consequent upon the 1982 price plunge. The BSM at once began to buy and to call up members contributions, but he also obtained permission to borrow, using tin stock as collateral, to strengthen his purchasing power. Subsequent currency fluctuations, and their effect on the difference between purchase price in Malaysia and selling price on the LME, after initially working in the ITC's favour, eventually brought rising debt service problems. This year the BSM stood to loose an estimated 20 M GBP on sales of Malaysia's 40 kt output. In addition, the move by European countries to depress the value of the USD brought price changes on the LME that clobbered the BSM already having to earn 700 GBP extra on every tonne to service the debt. It was this last straw, or as one ITC delegate put it 'a big stick' which broke the ITC camel's back, exhausted its credit and led to the suspension of support price buying.

The 6th ITA

Despite these upheavals the 6th ITA came into effect in July 1982, minus the United States and Bolivia. The US ostensibly gave the failure to achieve agreement over a larger buffer stock as the reason for leaving. More likely was the Regan administrations basic antipathy to cartel type organization. The move had been presaged in January when Secretary of State designate Haig admitted that he was not a 'fundamental enthusiast' for international commodity agreements. Bolivia also found the buffer stock and export control provisions unacceptable, indeed it had almost not joined the 5th ITA because the floor was lower than its mining costs. Bolivia did however join the ATPC.

The 6th ITA has been a time of gloom for both consumers and producers. The world recession has cut demand for metals generally. The supply overhang took a long while to shift. The BSM was the only purchaser in the Malaysia market, now shifted to the Kuala Lumpur Metal Exchange (KLME), where prices remained on the floor for over a year. As sterling fell so the LME floor equivalent rose, but the ITC lacked sufficient resources to bring the market price up to this. Meanwhile the KLME maintained a substantial premium over London. To achieve parity the ITC announced in March this year that the BSM could trade below the floor price of 29.15 MYR. This brought some nervous selling in London and the market fell there to a low of just under 9 300 GBP. Nonetheless, by April the ITC apparently felt matters were under control. This control collapsed last June when speculation pushed the London price up to 10 300 GBP/t for immediate delivery tin, and the LME stepped in.

The actions of the LME, breaking the principles of non-interference in the market and subsequently allowing a default penalty of only 90 GBP/t, were seen by many as highly partisan. Those who gambled against the ITC by overselling had been bailed out. The ITC forced to sell on a falling market to maintain liquidity and to service its debts, was penalised. Had the ITC and the tin price collapsed those who had sold short would have made handsome profits. Bailing them out, it was argued, might tempt them to try again. In October 1985 they apparently did just that.

Thus, over time events had changed the nature of the Tin Agreements and had changed the relationships between tin producing and consuming nations. Yet such events were themselves in part a reflection of wider changes in the international economy. In a recent Raw Materials Report (Vol 3 No 3) Philippe Chalmin suggested that previously metals had been the 'dancers' in an stable international economy. If that was the case then certainly as the international economy became less and less stable so, by the late 1970s, had the metals dance become a frenzied gyration and the role of the ITC as price stabilizer became less and less tenable. The North/South divide between consumers and producers increased in emphasis; the LME became increasingly clearly identified with consumer nation

SIXTH INTERNATIONAL TIN AGREEMENT

Tables show consumer votes based on mean of primary tin consumption 1982–84, and producer votes based on aggregate of 2nd quarter 1981 to 1st quarter 1982 mine production.

Consumers†	Percentage	Initial Votes	Additional Votes	Total Votes
(EEC)	(51.06)	(45)	(470)	(515)
W Germany	18.27	5	168	173
France	10.11	5	93	98
United Kingdom	7.95	5	73	78
Netherlands	6.29	5	58	63
Italy	5.63	5	52	57
BLEU	2.32	5	21	26
Greece	0.43	5	4	9
Denmark	0.04	5	1	6
Eire	0.02	5	–	5
Japan	39.67	5	365	370
Canada	4.75	5	44	49
India	2.83	5	26	31
Switzerland	0.85	5	8	13
Norway	0.50	5	4	9
Sweden	0.19	5	2	7
Finland	0.15	5	1	6
	100.00	80	920	1,000

Producers*	Percentage	Initial Votes	Additional Votes	Total Votes
Malaysia	40.83	5	396	401
Indonesia	24.98	5	242	247
Thailand	21.74	5	211	216
Australia	9.16	5	89	94
Nigeria	1.73	5	17	22
Zaire	1.56	5	15	20
	100.00	30	970	1,000

†As from July 1, 1985 *As from July 1, 1982

Buffer Stock

Were the 6th International Tin Agreement to be implemented fully, the Buffer Stock would have a nominal purchasing power of 50,000 tonnes – 30,000 tonnes financed by compulsory direct contributions from all member countries and 20,000 tonnes financed through borrowing from commercial sources. However, while the 6th Agreement stays in force only provisionally, this ceiling is lower. The present buying capacity is 39,666 tonnes – 19,666 tonnes from contributions and 20,000 tonnes through borrowing.

All direct contributions from member countries were called up at the start of the 6th ITA. In addition to these resources, the Buffer Stock Manager still controls 24,157 tonnes of tin from the 5th ITA in liquidation.

Total Buffer Stock holdings (at end of quarter) have evolved as below:

	1973	1974	1975	1976	1977–80
Q1	10,475	142	2,893	19,631	–
Q2	10,069	142	11,830	2,882	–
Q3	4,740	122	11,942	1,898	–
Q4	1,001	142	20,071	806	–

	1981	1982	1983	1984	1985
Q1	–	23,525	54,375	55,760	56,409
Q2	3,865	49,385	53,895	58,635	62,136
Q3	3,765	54,345	57,430	55,810	**
Q4	2,490	52,680	55,095	61,822	**

**On October 24, when dealings were suspended, the BSM held 52,540 tonnes.

Source:
Tin International, January 1986.

interests. Yet the collapse, when it came, sparked off an unprecentdented debacle not only for the ITC, but for other metals, other commodity agreements and also for the LME.

The strategy of the BSM

The reason given by the BSM for his withdrawal from the market was simple. The point had been reached when cash and credit had run out. Since he had been warning that this was a possibility for some time, it may be that initially his action was an attempt to jolt members into quickly paying up sums that had been promised, but which had failed to arrive. The ATPC for example had promised 60 M GBP towards buffer stock funds at its conference in September. Subsequently ITC producing members had agreed to make 'substantial and effective' contributions. Neither had done so. This failure sprang from a reluctance to contribute until the consumer members did also, a reluctance which hardened rapidly once the full crisis broke. Obviously the producing members had already been thinking long and hard about the efficacy of further funding. They had, after all, already paid heavily not only in funding the buffer stock but also in the wide ranging costs of an unprecedentedly long period of export control. The apparent unwillingness of the consumer nations to acknowledge this hardship strengthened the position of the 'hawks' within the producers who argued that further payment was simply throwing money away.

It is clear now that prompt payment would not in any way have solved matters. But it would have bought time. Whether that time would have been enough is problematic. The fundamental problems of the ITC, of quota busting, of non member producers and most of all of relationships between member nations, had all reached a point where a complete reappraisal was clearly necessary. Such a reappraisal might have taken place in the context of negotiations for the 7th Agreement. It is now highly doubtful if it can take place at all. Since pre-negotiation talks were scheduled to begin July 1986 it was unlikely a few months extra trading would have made much difference. Nonetheless a few extra months might possibly have slightly lessened the extent of the losses when the crash inevitably came. As it was, the BSM, having to still support buy, from September stepped up his trading in the futures market. Any futures market is to some extent a paper chase where contracts eventually cancel each other out, unless of course there is an interruption. Unhappily for those LME brokers who eagerly took on commitments for the ITC an interruption did occur and the pile of paper turned into debts of millions of pounds. These debts imperriled some fourteen LME brokers, not including MMC Metals, a trading subsidiary of Malaysia Mining Corporation, which promptly and sensibly went into liquidation. As suspension dragged on with no new moves from the ITC it rapidly became clear that the very future of the LME was at stake.

The crisis in the LME and the TNCs

The problems facing the LME were threefold. The first arose from the collapse of confidence in metals trading generally following tin suspension, coupled with the likelihood that failure by any one broking firm would take others down with it. Traders are always closely interlinked due to the complex web of contracts inevitable in hedging and futures dealings. By early November Jaques Lion, Chairman of the LME Board, was saying that it would be 'helpful' if the parent companies of ring dealing firms would state that they were standing by their subsidiaries. He also drew the attention of the Bank of England to the LMEs contribution to the City's invisible exports. Both these gambits got little response although some parent companies, notably S and W Berisford and Phibro Salomon Inc, did state their support for their ring dealers. The Phibro Salomon Inc dealers, Anglo Chemical Metals, had, however, ceased handling ITC business some eighteen months before convinced that a crash was immanent.

The second problem arose from the growth of secondary markets and direct contracting as tin miners and smelters came to grips with the cash flow problems arising from suspended tin trading, and industrial users began to run short. In Malaysia, where a physical market continued to exist in Penang, the two smelters, Malaysia Smelters (a subsidiary of Malaysia Mining Corporation) and Datuk Keramat, began to accept tin concentrates. They offered advance payments of 30 per cent of the 29.15 MYR per kilo pre-suspension price. In Thailand, a price of 21 MYR was posted in December as a benchmark for royalty calculations. Also the Thai smelter THAISARCO (part-owned by Royal Dutch Shell and Billiton) pressed for a permanent market, whilst inviting buyers to make daily bids for small quantities of metal.

Many industrial users although running out of stocks, were holding back from large purchases hoping for a resumption of trading and a sharp price fall. Nonetheless, Japan, whose stocks were near exhausted by December began to spot purchase in Penang and to enter into negotiations for direct sales with the larger SE Asian mining companies. Meanwhile a 'grey market' also became active in West Germany in which Metallgesellschaft in Frankfurt and Arnold Otto Meyer in Hamburg (who trades on behalf of the Indonesian state company, P T Timah) played an active part. The third problem was that neither the consumer members of the ITC nor the producers seemed in any hurry to come to an agreement over debts in a way that would allow the LME to re-open.

For this unpelasant situation the LME itself was largely to blame. Its apparent partiality towards consumers interests massively increased the BSMs earlier difficulties whilst, at the same time, traders ran up commitments of tens of millions of pounds on the ITCs behalf. Throughout November and into December the LME remained closed. By November, however, Britain, anxious about the possible collapse of the LME, which earns about 200 M GBP annually in foreigh exchange as well as providing hundreds of well paid jobs, became an enthusiast for ITC consuming members paying their share of the debts. An enthusiasm that was not shared by other EEC nations notably West Germany. The October statement by LME Board Chairman Jaques Lion that "it goes without saying that orderly control of tin trading can only be conducted through the LME" had an increasingly hollow ring. There have been various estimates of the ITCs debts, some as high as 900 M GBP although the probable final loss members will have to face is likely to be about 360 M GBP. If all ITC members paid an equal share spread over two or three years the burden would not be unduly onerous. For consuming countries this amount would be negligible, even the poorer producers such as Zaire might manage 6—8 M GBP. Thus it is clearly was not fear of burdensome debt that caused discussion stalemate, and the hard line taken by West Germany, the richest European nation; rather, it would appear that many ITC members were calculating that a free market in tin was now very much in their interests. Any talk of commodity agreements as vehicles for development, for North/South co-operation, or even intra South co-operation had long since stopped.

A free market in tin, with the price at or below 4 000 GBP/t, would have several consequences. Firstly there would be an immediate rationalization of the world tin mining industry. This would be extremely painful. Those countries with relatively low mining costs would survive, but with greatly slimmed down industries. Both Thailand and Malaysia have estimated that over 90 per cent of their mines would close. Indonesia, which has a far more concentrated industry has been retrenching since 1982. Those countries with higher costs, particularly the hard rock mines of Bolivia and Cornwall would certainly close without some special help. The importance of tin in the Bolivian economy, where it accounts for 30 per cent export revenue might prompt the government to seek outside aid. The Cornish mines reputedly unable to produce under 7 000 GBP/t would be unlikely to be helped by the current government despite already high levels of unemployment in the region. However, most of the mines are now controlled by Rio Tinto-Zinc, who might keep them working to ensure throughput for the Capper Pass smelter. In Nigeria and Zaire matters would be in the balance, in Australia there would be a shake out of the smaller Queensland mines and probably only Renison would survive. In all these countries there would be more or less severe political implications.

Secondly, in the short term there would continue to be a considerable supply overhang, which, coupled with the continuing recession would keep prices low. The USA might add to this surplus should Congress approve the Regan proposal for a far smaller strategic minerals stockpile. The General Services Administration had halted stockpile sales awaiting Congress decision some time before the ITC crisis, but in the end the USA may have a lot of tin to dispose of. It is also possible that in such a situation of low price, industry shrinkage and definable surplus, someone somewhere might attempt to corner the market. More likely would be attempts by some producers to form an official or unofficial pool possibly along 1920s Bandeong lines.

In the long run of course prices would rise. Then, time lags would effect a shrunken industry's repose to shortages. The ATPC might become a Tinpec indeed. It may well be the consumers who will regret the passing of the ITC. ■