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Edited speaking notes

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This paper will review briefly the world tin industry over the last decade, focus on the Australian tin industry over the last few years, and conclude by providing an outlook for the world industry. In doing so, it will address the question used for the title, "Tin: through turmoil, towards tranquility?"

Fundamental structural change has affected the world tin industry after the collapse of tin prices in October 1985, following suspension of price support by the International Tin Council (ITC). This change is also going on in Australia, which accounts for less than 5% of world tin supply, and even less in terms of world tin consumption. These changes in 1987 are noted in the BMR Preliminary Annual Summary on tin.

Suspension of ITC buffer stock trading resulted in the suspension of tin trading by the London Metal Exchange (LME),and soon after the Kuala Lumpur Tin Market (KLTM) suspended trading; publication of tin prices on these markets ceased. Although quotation of the KLTM price resumed early in 1986, turnover volumes were too low for the price to be regarded as a reliable international price indicator. Other published prices were similarly doubtful. With the suspension of LME tin trading, the tin industry's principal hedging market disappeared, preventing producers and consumers benefiting from a predictable price. A result of this was that smelters preferred to toll treat rather than buy concentrates and sell into an unknown market in the future. Of necessity then, producers and consumers began to deal directly with one another, reducing the amount of tin being visibly traded through established markets.

The turmoil created by this price collapse had its origins in the institutional structure which has dominated the tin industry since 1956. Following United Nations guidance, the International Tin Council (ITC) was created as an organisation of both tin producers and consumers.

Subsequent International Tin Agreements, made at 4 to 5 year intervals, have aimed at preventing excessive price fluctuations, ensuring adequate tin supplies and attempting to prevent or alleviate widespread unemployment in the tin industry, an industry which, in Australia and world wide, is characterised traditionally by having a substantial proportion of small scale producers.

To achieve these ends, the ITC, through the mechanisms of a buffer stock and a floor price support scheme, allowed the tin price to increase in real terms, until recently.

The quarterly average Australian tin price in current dollars increased from around $10500/tonne a decade ago in early 1978 to $19896/tonne in the 3rd quarter of 1985. After the October 1985 price collapse, quarterly average prices fell 48% to $10267 but have since risen to over $12000 during 1987. In constant dollar terms, however, Australian prices peaked for the decade in 1980, and remained relatively static until late 1985.

In the period 1978-1985 the only positive growth trend for the tin industry was an increase in Non-Communist world tin stocks. Tin consumption displayed overall decline until 1983. Consumption since then has gradually improved but showed little positive response to the post October 1985 price regime; over this period, tin consumption has proven to be relatively price inelastic, showing little increased consumption following the halving of its price.

Over the last decade and particularly from 1982 to 1985, the tin market was oversupplied, largely because countries which were not producer members of the ITC were able to take advantage of the supported price and expand production. These expanding producers were not subject to the restraints on production directed by the ITC from 1982 to 1986 which reduced ITC producer member exports by 40%. The effect of these expansions and the ITC reduction was that ITC producer members' share of Non-Communist world mine production fell from 86% in 1982 to 54% in 1985. Supply from non-ITC member countries, particularly Brazil and China and, to a lesser extent, the US, through its General Service Administration strategic stockpile, became more influential in the tin market as ITC market share decreased.

Over the last decade the Australian Tin Industry has accounted for 3 to 5% of Non-Communist world tin mine production and until mid 1986, Australia was self-sufficient in refined tin. In 1987 Australia produced 8600t tin in concentrate, part of which went into producing nearly 600t of refined tin. Domestic tin consumption is estimated to be around 2600 t in 1987. Since late 1985 high cost mines have closed down or reduced production and consequently, the major smelters reduced production of refined tin because of shortage of concentrates. Tin exploration, which was already diminishing, has decreased to virtually nothing, falling from around $30 million in 1980 for tin-tungsten exploration both on and off mine leases, to $2 million in 1986/7. Although Australia in 1987 had 185 000 t of economic demonstrated resources of tin, most of this is in one deposit. A decade ago economic demonstrated resources stood at 191 600 t of tin; again most of this was in one deposit, the same deposit. Metallurgically difficult ores are not included in this total.

Since the price collapse, several medium-sized mines have closed, including Ardlethan, Cleveland, Gibsonvale, and Great Northern; in 1985 production from these mines totalled 1950 t of tin in concentrate, 30% of Australia's total production. The numerous small mines in North Queensland ceased production or accepted combined Federal-State government offers of assistance to relocate out of the tin industry; this meant an annual loss of more than 1000 t of tin mine production.

In contrast, Australia's largest tin producer, Renison, expanded production to pre-ITC export control levels. All its production is exported for toll smelting. Australia's two smelters were still affected by a lack of suitable concentrate and output fell to a point, where, in late 1986, consumers started to import large tonnages of tin metal.

The proposed new medium sized alluvial operations of Republic Resources Australia NL at Ardlethan and North Queensland Resources NL at Wolverton give some cause for optimism that the Australian Tin Industry will begin to grow again, despite the changed conditions and lower prices. Production from these two mines may expand domestic smelter output and reduce the need for consumers to import tin into Australia.

In the absence of the ITC as a controlling influence in the world tin industry, the role of the producer-only organisation, The Association of Tin Producing Countries (ATPC), has increased. Like the ITC, the ATPC is shaping the world tin industry by addressing the problem of tin stock surpluses and excess supply.

Tin export restraints were commenced in February 1987 by members of the Association of Tin Producing Countries (ATPC) and by the non-ATPC members, Brazil and China. The chances of success in limiting this supply are improved since this agreement on production limitations involves countries supplying over 80% of world tin mine production in 1987. These restraints have led to a rundown of excessive world tin stocks, which may allow a return to normal market forces when stocks reach acceptable levels of around 30000 t. These restraints were reviewed in late 1987 and have been reimposed for 1988 at a less severe level.

Although it is possible that supply and demand will approach balance by as early as the end of 1988 a changed market structure will emerge. Seven features which may arise from that change are:

1. With the high degree of producer to consumer trading and low visible market turnover volumes, published prices may still not provide valid signals of supply/demand relationships. This is a major problem since, even in producer to consumer trading, published prices are taken into account in establishing a negotiated price.

2. While producers are adjusting to sustained low prices, profit levels are low, increasing producers' vulnerablility to international currency fluctuations; these fluctuations add to the uncertainty of cost and revenue projections, particularly in the absence of traditional hedging mechanisms. In contrast, tin consumers are able to use foreign exchange markets to hedge any currency exposure they have for current or future tin purchase contracts -- contracts written very much in the consumer's favour.

3. Since October 1985, there has been no underpinning of the world tin price by the ITC floor price through the buffer stock manager; producers alone, now have a downside price risk to contend with.

4. Even though the Kuala Lumpur Commodity Exchange has operated since November 1987, hedging facilities for tin are limited, leaving both producers and consumers vulnerable to price volatility. Increases in contract tonnages, and effectively lower contract commission rates, may increase use of this market.

5. Some existing small scale producers receive debt servicing and other cost assistance making tin supply less price responsive because of this support for inefficient miners.

6. Production is still limited by ATPC restraints and undertakings to the ATPC by China and Brazil, but at least one world-scale tin producing company has indicated that it may increase production to retain market share.

7. Any large increases in production when stocks return to normal levels could again destablize markets.

Three features of the industry which have not changed however are:

1. There is still considerable surplus productive capacity in the tin industry - an industry closely identified with the emerging or less developed countries of South East Asia and South America.

2. despite the tin price being half its previous level for over 2 years, little sustained increase in consumption has occurred. Demand for tinplate and solder still dominate the tin consumption pattern, but the amount required per tin can or soldered joint is decreasing; however some growth in tin chemicals is occurring, but from a low initial level.

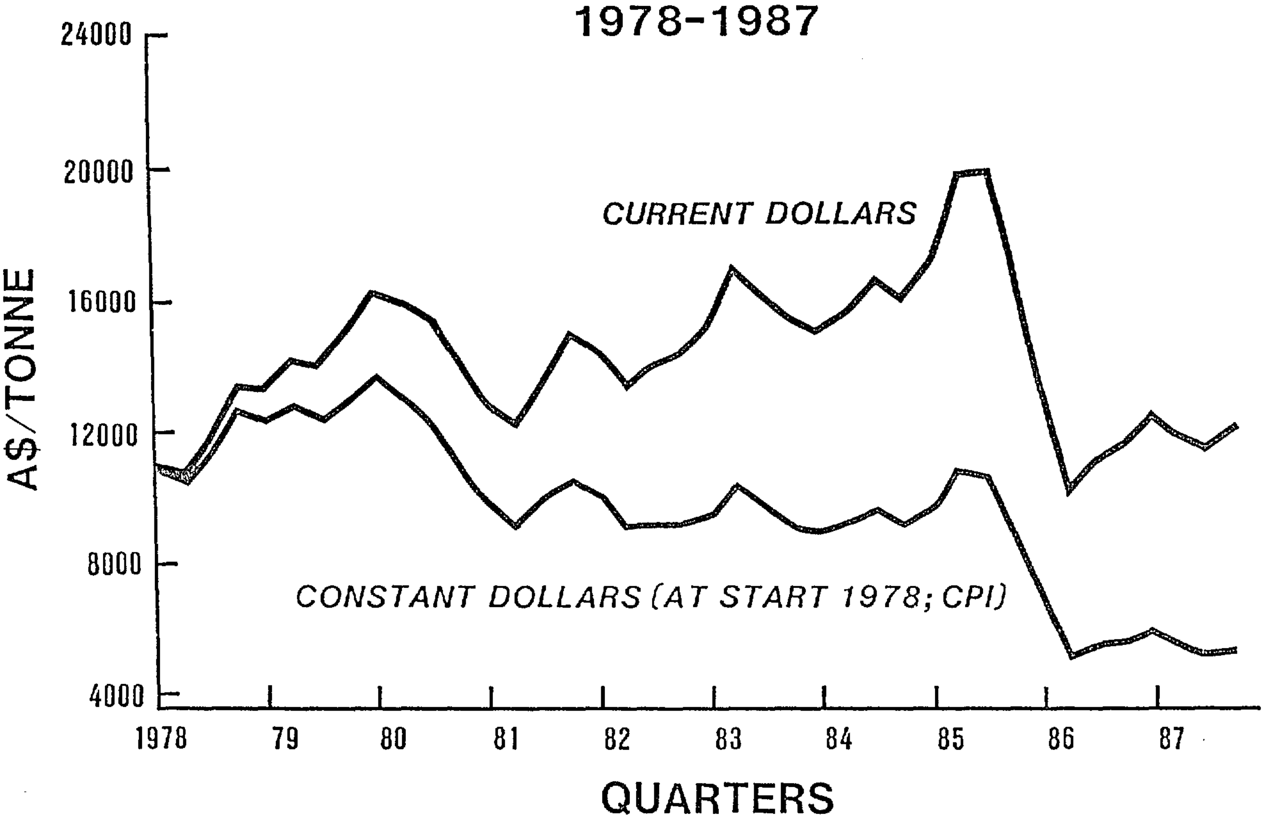
3. Despite a major reduction in world tin stock levels, the United States General Services Administration strategic stockpile still contains over 170 000 t of tin, although only about 10 000 t was authorised for disposal at the end of 1987.

To conclude however on an optimistic note, Non-Communist world tin consumption is projected to increase in 1988, as is mine production, while tin stocks are expected to fall further, possibly to a point where their level will enable normal market forces to be more responsive to supply.

Is the industry heading towards tranquility? The tin market is emerging from the turmoil of the last two years, but into a new market environment. Supply/demand relationships will be more influential and individual producers and consumers will have to be alert to changing circumstances. The rate at which decreased tin prices is translated into increased tin consumption will have a bearing on the outlook for 1988, provided that producers continue to use restraint to decrease world metal stocks.

The need for a period of supply and price tranquility is evident in the delay of consumer response to a new tin price regime. Potentially new and returning tin consumers will take their lead for long term decisions from their perception of the medium to long term market outlook as the tin market approaches balance in late 1988 or 1989. The hope for the tin industry in all time frames is in increasing consumption, not in limiting supply.

AUSTRALIAN TIN PRICE
1978-1987



SOURCE: I.P.SHARP

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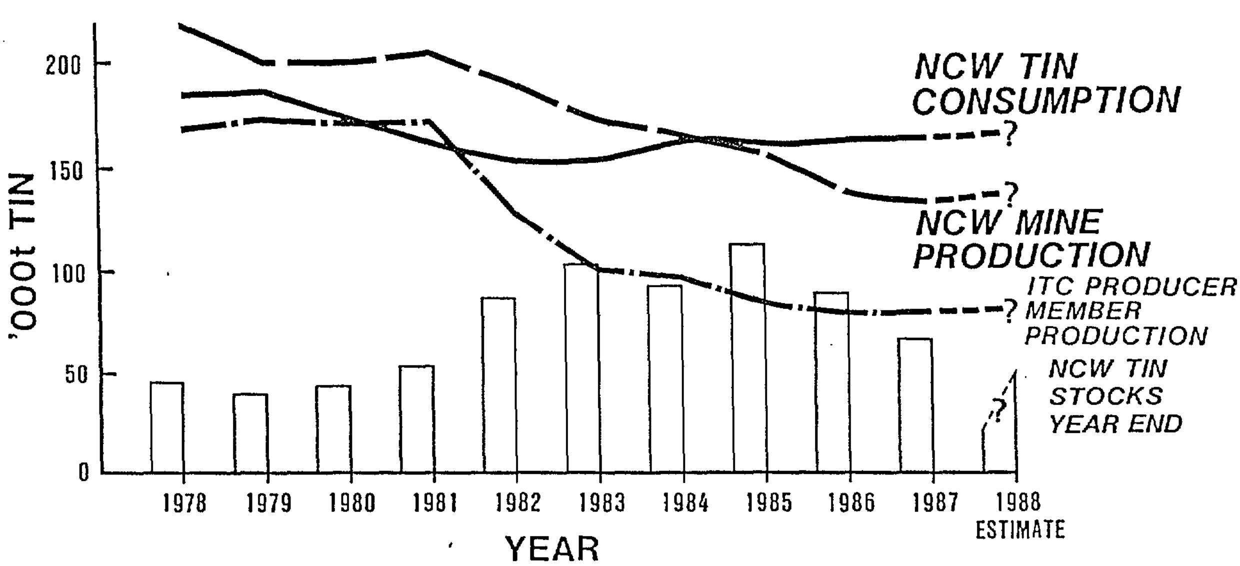
TIN
1978-1987



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