

## ARE SUGAR STOCKS UNDERVALUED?

By John R. Ellmers(1)

The share market continues to adopt a gingerly approach to sugar stocks. The conventional wisdom preached glibly by market commentators is that they are but "good for a quick trade". No doubt this view is a reflection of the volatility of the London daily price and we are continually reminded of the relationship by prattling chartists and other advisers of ancient learning who ponderously refer back to the happenings of a decade ago.

It is quite amazing to the Writer that so many investors and institutions accept these views whilst being more than happy to pay much higher p.e. multiples for other commodity stocks and highly cyclical industrial stocks (building suppliers, etc.). In most cases, these stocks also carry a further risk element because of their high gearing.

The sugar industry is an easy area for investment analysis. An abundance of informative literature is available regularly and profits of the listed companies can be fairly accurately estimated well in advance.

It is unlikely that Australia has any other industry as well organised, as efficient, or as ably managed and which, operating in a favourable political environment, has such potential for profitable growth.

This paper attempts to outline the advantages of the Queensland sugar industry, its promising future prospects and poses the question: Why should leading sugar stocks carry such low p.e. multiples relative to other stocks? For example, Pioneer Sugar which will probably report the tenth highest profit of any Australian public company is ranked 56 by market capitalisation. Bundaberg, whose profit will be in the top 25 is ranked 84th by capitalisation. Both are on p.e. multiples of about 3.

If this year's profits were a "oncer" it might be understandable, but the well publicised long term trade agreements together with the benefits of expanded production will ensure future profits of at least the same magnitude.

During the past decade the Australian sugar industry has undergone tremendous technological change in many areas of operations. Sugar production has expanded by 55% from 1.8 million tons to 2.7 million tons and many new markets have been gained. The temporary difficulties which were experienced following the substantial expansion in 1965 caused the industry to adopt a concerted effort to obtain economies of scale by becoming even more capital intensive. Hundreds of millions of dollars (much of it borrowed or granted from State and Federal Governments) were invested in the mechanisation of harvesting, expansion of bulk sugar terminals, the construction of irrigation projects, and on field research. The benefit of those investments is now apparent. The industry today is by far the most efficient in the world and can lay claim to the highest yields of sugar per hectare, the fastest milling rates, the highest extraction rates and the finest bulk shipping terminals in the world.

To give but two examples of what this means:-

- (a) Australia requires only seven tons of cane to produce one ton of sugar, whereas South Africa, which is probably the second most efficient producer, requires nine. If Australia had this higher ratio, an additional five million tons of cane would have to be harvested, transported to the mill, and crushed to obtain the current sugar output.

- (b) Before bulk shipping terminals were erected, it would take several gangs of dockers two weeks to load a 10,000 ton vessel. With bulk shipping, a 20,000 ton vessel can be loaded in 24 hours by a handful of men.

Sugar cane is an unique plant in many ways. It is Nature's most efficient means of harnessing solar energy. A pound of sugar can produce 1,794 calories (enough heat energy to raise the temperature of 1,794 grams of water 1 degree centigrade). Hence, it may not be an exaggeration to refer to sugar as "crystallised solar energy". It is because of its energy (as well as sweetness) that it has such a multitude of domestic and industrial uses and its by-produce, molasses (50% sugars), is sought after for the manufacture of power-alcohol, yeast, and as a stock food.

Basically, all that sugar cane requires for growth is a warm climate, fertiliser and adequate water. Given these conditions, it can grow on a wide range of soil types and tolerate high degrees of alkalinity and salinity. Being a grass, it is inherently hardy. Its most unique characteristic is its ability to regenerate after cutting, so replanting annually is unnecessary. It can be grown on the same soil for years. In Mauritius it has been grown for 300 years without deterioration to the soil or the crop.

Sugar cane has significant advantages over sugar beet and a sugar cane industry such as Australia's will always be able to produce sugar at a fraction of the cost of the beet sugar producers. The advantages over sugar beet are:-

- (a) Cane produces over four tons of sugar per acre compared with two tons for beet.
- (b) Cane requires half the quantity of fertilizer per unit of sugar.
- (c) Cane is easier to harvest as it is above ground, beet has to be dug out.
- (d) Cane can be grown on the same land for years, whereas beet has to be rotated annually. This means that the cane sugar mill is close to its source of raw material and transport costs are low compared with beet.
- (e) The harvesting and crushing period for cane extends for 7 months compared with only 3 for beet. Hence, capital equipment is more efficiently utilised.
- (f) Cane is a much hardier plant than beet which is susceptible to all sorts of climatic variations and diseases. Except under the most severe conditions of drought, sugar can always be obtained from cane so that a complete crop failure is unlikely to occur.
- (g) Cane provides its own fuel (bagasse) for the manufacture of sugar whereas beet mills require other fuel. Five tons of bagasse is equivalent to 1 ton of crude oil. This alone means a fuel saving of \$50 million to the Australian mills.

Although the requirements to produce sugar in the tropics are basically simple - land, fertilizer, water and capital - these are extremely scarce resources in many parts of the world. Queensland has the land in several areas for expansion, extensive irrigation projects, adequate fertilizer capacity, and efficient mills which would have a total replacement cost of over a billion dollars.

In addition the Queensland industry has the organisation which provides incentives for the cane growers to grow and harvest cane from their assigned area and for the mills to handle the logistics of transporting and crushing over 20 million tons of cane each season.

This highly effective organisational system, evolved over generations, which enables labour and capital of growers and to be so mutually efficiently utilised, is a valuable intangible asset of the Australian industry. Whereas other cane producing countries require over 200 manhours to produce a ton of sugar, this can probably be done for less than 20 manhours in Queensland.

Leading sugar stocks have been reporting excellent profit results for years, have virtually nil borrowings, are asset rich, and are extremely profitable. Should they be rated at a level which makes them the pariahs of the market? Let us examine the variable components - supply, demand and price.

### Supply

A comparison of the sugar produced by the mills now owned by Pioneer, Australian Estates and Bundaberg with mill peaks on a Company basis, show that over the past five years production has exceeded mill peaks each year. In some of these years, difficult weather conditions were experienced including Cyclone Althea in 1971 and one of the wettest crushing seasons on record in 1973.

Pioneer and Australian Estates have, in fact, exceeded their Company peaks every year for the past 18 years. Bundaberg production over recent years has become much less volatile following the completion of Phase 1 of the Bundaberg Irrigation Scheme.

### Demand

World sugar consumption has risen from 53 million tons in 1961 to 72 million tons in 1970. It is now 81 million tons and it can be expected to reach 100 million tons by 1980 or 1982, which will require an increase in annual world production of 20 million tons in the next seven to nine years.

With world consumption rising at about 2 million tons annually an annual investment of \$2,000 million in new production facilities is needed just to stand still.

Australia is one of the few sugar producing countries that can expand production at moderate cost. All sorts of constraints exist in other countries.

### Price

Following the completion of several long term contracts which have been ratified on a Government to Government basis, the price of sugar could fall to zero and Australia would still have higher sugar earnings than in 1973/74.

However, such a possibility is out of the question. The price of sugar is expected to remain significantly higher than in the early 1970 years. Reasons for this are the much higher fuel oil prices which is a large cost component in the beet sugar industry; the world-wide shortage of fertilizers, and the high prices that will have to be paid to encourage new fertilizer plant expansion; the increasing value of alternative crops (e.g. wheat) which can be grown on beet producing land; the high cost of capital required to acquire land and construct new mills; and the serious depletion of world sugar stocks.

The world is entering the sixth successive year in which consumption will exceed production and world stocks are estimated to be 18% of consumption compared with 29% in 1970. To get stocks back to the level that existed in the late 1960's, some 8 million tons of sugar would have to be produced overnight - an impossibility.

The current sugar shortage is unlike any other period since the Second World War. Whereas in 1964 high sugar prices brought about a sudden increase in European beet production (from 22 million tons to 27 million tons), the current shortage has seen high prices exist for several years with virtually no production response by the beet growers (production has been steady at around 32 million tons). There is evidence to suggest that the 1975/76 beet crops could be several million tons higher. This, however, would only provide temporary relief and the long term problem of inadequate supplies would still remain.

The percentage of beet sugar to total world sugar produced has declined from 45% to below 40%. This trend is likely to continue over the next decade as the beet industries give ground to the highly efficient cane industries such as in Australia.

Because cane takes very much longer to come into production than beet, an effect of this trend may well be that movements in the world sugar price become less volatile.

Thus, the factors of supply, demand and price have been, and have every prospect of continuing to be, highly favourable to the sugar industry and they would appear to be less cyclical than those which exist in other industries.

In addition, the assets of the sugar companies are very understated. As mentioned earlier, the cost of a new 100,000 tonne mill, with the necessary infrastructure is estimated at around \$A100 million. The mill capacity and market capitalisation of the following stocks are:-

	<u>Mill Capacity</u>	<u>Market Capitalisation</u>
Pioneer	420,000 tons	\$65m
Bundaberg	250,000 tons	\$33m
Maryborough	60,000 tons	\$ 4m
Moreton	50,000 tons	\$ 3m

As well as the substantial undervaluation of their assets, several of the companies have an important intangible asset in that they own mills in locations which will enable expansion and thus considerable potential for profit growth.

The following figures show the high fixed cost which exists in sugar milling. (The figures are for a formerly drought prone co-operative mill in the Bundaberg region):-

	<u>Production</u>	<u>Cost of Production per Ton</u>
1965	11,400	\$83.77
1969	16,200	\$60.47
1971	85,500	\$24.25
1972	100,000	\$22.60

The figures indicate mills potential for profit growth through increased production. In this regard, Mr. Campbell of CSR at a recent International Sugar Colloquium held in London stated that existing mill areas in Australia could expand to produce about 5 million tonnes or perhaps even more by 1985.

It is the Writer's opinion that leading sugar stocks such as Pioneer Sugar and Bundaberg deserve a much higher p.e. multiple than 3.

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#### BOOK REVIEW

##### PORTFOLIO THEORY AND CAPITAL MARKETS

This is not a new book for it was published in 1970, but it has only recently come to the notice of JASSA.

In spite of its age, because it is still available and because it is highly relative to the interests of many of our members, their attention is directed to its availability.

Written by William F. Sharpe, Professor of Economics at Stanford University in the United States, it brings together some of the major contributions of the preceding two decades in the related areas of portfolio theory and the theory of capital markets.

Part I covers the procedures for selecting investments, describing the traditional approach to choice under certainty and developing portfolio theory with a set of rules for the selection of investments under conditions of risk.

Part II deals with models of capital markets based on the assumption that investors act in accordance with previously expounded principles. Such subjects as the capital market line, the security market line, the concept of volatility and the relationships among security characteristic lines are discussed.

Part III provides information for those considering the utilisation of the portfolio-selection procedures described earlier in the text; it provides relevant empirical data; describes procedures for performance measurement; and summarises the results of studies of mutual-fund performance. Within this part are also references to utility theory and its relationship to portfolio theory.

The book is substantially theoretical and not recommended for practitioners who find theoretical texts heavy-going. Although the author says "no mathematics beyond high school algebra is required, etc. ...", let this be a warning. This may be taken with "a grain of salt" by those who have left school mathematics a long way behind.

The book is supplemented by an impressive bibliography.

Although it is still in print, it is not readily available from the general bookshops and one may need to specifically order it from a good bookseller.

("Portfolio Theory and Capital Markets" by William F. Sharpe, McGraw-Hill Book Company, New York, 1970, pp.316, \$A14.25.)