PRODUCTIVITY, THE THREAT TO EMPLOYMENT

Improved productivity must play an essential part in Australia's economic recovery, but there can be no widespread co-operation from the union movement until union leaders are convinced that it presents no threat to existing employment.

It is wholly understandable that process, administrative and clerical workers see their jobs threatened by the introduction of capital-intensive labour-saving innovations. No amount of preaching about what is good for the country will convince them to sacrifice their own security for the public good.

It is not surprising if individuals remain unmoved by grand schemes and overall policies. The arguments generally used to promote improved productivity are too remote from the individual's workplace and the prospect of losing a job.

Mr. Hawke has repeatedly called for the advocates of improved productivity to address themselves to this problem. He acknowledges that solutions will require give and take on both sides of the industrial fence, but his is a voice in the wilderness which needs to be heard and answered.

In this, as in so many other areas, the desperate cry, "The Government must do something," is misplaced.

The lead must come from management. Removing the threat to job security lies very largely in the hands of each individual's employer.
A new style of management is emerging which faces the problem. There are companies, of which Simpson Pope is an example, who give an assured guarantee that the introduction of new labour-saving equipment will not result in anyone being retrenched.

Such a guarantee is anathema to many small employers and companies in financial difficulties. It is not suggested that its general acceptance would be a panacea for all ills nor that it could be universally applied, but managements throughout the country are becoming increasingly aware of the benefits which go with this new style of thinking. In the first place it involves communicating management decisions to the workforce in order to gain shop-floor acceptance. Negotiating the terms of the guarantee is an exercise in employee involvement.

With the whole question of industrial democracy undoubtedly shaping up as one of the major industrial debates of the next decade, such exercises provide useful experiences in establishing the basis for the embryonic concepts of partnership in industry.

A guarantee of employment for the duration of innovative action bridges the gap between "same output with less labour", which is the basic threat to employment, and "more output with the same labour", which is the next step in the drive for improved productivity, economic growth and higher levels of employment.

But one of the most important benefits to management lies in such guarantees of employment being one way of convincing union leaders that labour-saving innovations can be whole-heartedly supported.

If Mr. Hawke is genuine in suggesting that new management attitudes will result in long established union shibboleths being forgotten, then he should be taken seriously. Union reform is long overdue.

Lack of reform within the union movement is one of the major forces holding back Australia's fair advance, for there is now no more anti-social organization than a militant trade union.
RECOVERY THROUGH EXPORTS

No matter what price index is used to measure inflation, it would appear that our rate of inflation is declining while, at the same time, increases in wages and salaries have been retarded due to partial indexation. This should mean that the competitive position of our export industries is improving and that foreign investors are becoming more willing to despatch large amounts of their funds to our shores for the purpose of developing resources and other projects. However, our annual rate of inflation is still higher than that of U.S.A., Japan and West Germany; and despite the stirring of a new mood of optimism following the March quarter CPI of 1.3 per cent, current trends in our balance of payments would suggest that progress towards these ends is very slow.

Table 1 shows the extent to which our balance of payments — the difference in value between what we buy from overseas countries and what we sell to them — has deteriorated in the last few years.

The relevance of these figures to our economy is that they show a persistent and increasing deficit of around $2 billion per annum in Australia’s balance of payments (on current account). This deficit must be met either through capital inflow or by a run down in our international reserves. Capital inflow is hard to attract if there is uncertainty about the nation’s currency. A sustained decline in official reserves (as happened in Australia in 1976) points to a devaluation of the currency, a policy that often leads to higher inflation which lowers the nation’s standard of living and severely inhibits the inflow of productive capital.

Although it would appear that very recently a significant amount of capital inflow has neutralised the adverse effects of Australia’s deteriorating balance of payments, at least in the short term, it is important that the nation fully regain its competitive advantage by controlling costs of production and thus stimulating overseas demand for our exports. If this does not happen, uncertainty about our economic stability will spread overseas and will further inhibit a sustained revival of long term investment capital.

In order to maintain healthy international reserves the present Government has increased its overseas borrowings from $112 million in 1976-77 to $946 million in the first 8 months of 1977-78. It has committed itself to official borrowings from international markets in the order of $1,700 million (or more “if necessary”) to protect the current value of the Australian dollar.

One way in which Australia could secure the value of its currency by not devaluing, and thereby reduce its dependence on overseas borrowings which must be paid for eventually, is through an intensive drive to open up new export markets. Australian industries — primary, manufacturing and services — need to become far more export-oriented and sensitive to overseas requirements, particularly in the geographically advantageous developing regions of Asia and the Pacific.
TABLE 1

<table>
<thead>
<tr>
<th></th>
<th>1974-75</th>
<th>1975-76</th>
<th>1976-77</th>
<th>10 months ended April 1978</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ million</td>
<td>$ million</td>
<td>$ million</td>
<td>$ million</td>
</tr>
<tr>
<td>Exports</td>
<td>8,490</td>
<td>9,408</td>
<td>11,400</td>
<td>9,896</td>
</tr>
<tr>
<td>- Imports</td>
<td>7,652</td>
<td>7,924</td>
<td>10,341</td>
<td>9,207</td>
</tr>
<tr>
<td>= Balance of Trade</td>
<td>838</td>
<td>1,484</td>
<td>1,059</td>
<td>689</td>
</tr>
<tr>
<td>± Net Invisibles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(insurance, freight, income paid overseas, tourism)</td>
<td>- 1,792</td>
<td>- 2,572</td>
<td>- 3,016</td>
<td>- 2,608</td>
</tr>
<tr>
<td>= Current account balance</td>
<td>- 954</td>
<td>- 1,089</td>
<td>- 1,957</td>
<td>- 1,920</td>
</tr>
<tr>
<td>± Net capital inflow</td>
<td>+ 490</td>
<td>+ 68</td>
<td>+ 1,467</td>
<td>+ 1,404</td>
</tr>
<tr>
<td>= Changes in Australia's official reserves</td>
<td>- 464</td>
<td>- 1,020</td>
<td>- 491</td>
<td>- 516</td>
</tr>
</tbody>
</table>

**Exports : Additional markets needed**

In spite of a large increase in the export of minerals over the last decade (6 per cent of the total value of exports in 1962-63 and currently about 30 per cent), the proportion of our national product that is exported is still only 14 per cent, the same as it was in 1969. By contrast, the proportion of national product that is exported has increased significantly in all of the other major trading countries in the world.

Despite the fact that the ratio of exports to national product is smaller in Australia than in the majority of large trading nations (e.g., West Germany, 21 per cent, Canada, 20 per cent and U.K., 19 per cent), the value of exports to our national income and standard of living should not be underrated. We export in order to import, in order to improve and enrich our standard of living.

Presently we import one third of our energy requirements in oil; it is estimated that by the next decade we shall be importing two thirds of our oil requirements. This will cost approximately $2.5 billion in today's prices or the equivalent of one quarter of the total value of imports.

To finance these future energy requirements today would cost the equivalent of between one quarter and one fifth of the total value of one year's exports. Hence the development of export-oriented industries will not only help us to import luxury items but also to import that which is essential to maintaining our living standards.

**Export Dependency**

Most of us realise how dependent we are on natural resources to generate income from exports. (In 1975-76 rural and mineral processed and unprocessed
produce made up 77 per cent of the total value of exports. However, few people appreciate how dependent Australia's export growth is on a handful of countries and in particular on Japan. In 1976-77 exports to Japan amounted to nearly $4 billion or 34 per cent of the total value of exports compared with 21 per cent in 1966-67. (The second largest single market for our exports—the U.S.A. was worth just over $1 billion in 1976-77.) Japan currently purchases a major proportion of Australia's mineral production, large quantities of farm produce and a large share of Australia's exports of manufactured goods. Japan takes 83 per cent of coal exports and 79 per cent of iron ore. Using Deputy Prime Minister Anthony's words, "... the future of the Australian mining industry hinges on the health and growth of the Japanese economy."

The more dependent Australia becomes on exports such as raw materials (e.g., exports to Japanese steel makers constitute 20 per cent of total export income), or on one export market such as Japan, the more our balance of payments and ultimately the value of our currency is vulnerable to sporadic changes in demand for our raw materials in one or two countries. Unlike America, Australia is unable to influence directly the growth of its major trading partners, mainly because the volume of the international trade we generate is relatively small.

Hence we cannot do much about sometimes subdued markets for our exports. However, we can insure against potential problems with our balance of payments and possible devaluation, by expanding the market for our exports, widening the range of goods and services that can be exported and specialising in what the world wants and needs to buy from us.

Acknowledging Realities

In 1976-77 exports worth $1.4 billion, or 12 per cent of the total value of Australian exports, were sold to the developing market Asian economies (DMAE). Including Japan, the Asian region today takes almost half of Australia's exports and provides one third of all imports. The table below shows the rate at which Australia's exports to various markets has grown from the late 1960s to the middle of the 1970s.

**Average Annual Rate of Growth of Exports: 1968-69 to 1975-76**

<table>
<thead>
<tr>
<th>To</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>20.2</td>
</tr>
<tr>
<td>Developing Market Asian Economies</td>
<td>18.0</td>
</tr>
<tr>
<td>North America</td>
<td>8.3</td>
</tr>
<tr>
<td>E.E.C.</td>
<td>6.1</td>
</tr>
<tr>
<td>All Exports</td>
<td>16.2</td>
</tr>
</tbody>
</table>

Although North America and E.E.C. countries took 8 and 9 per cent respectively of the total value of Australia's exports in 1975-76, they are unlikely to be growth areas for new Australian exports at least in the foreseeable future.

Whether we like it or not, it would appear that Australia is very much a part of the economic development of the Asian region. In the last few years developing market Asian economies have significantly increased their exports of manufactured goods to Australia. In 1968-69, 2.8 per cent of all imports of manufactured products came from DMAE; by 1975-76 this proportion had jumped to 9 per cent. Countries such as South Korea, Malaysia, Singapore and Thailand are providing most of our imports in in-
dustries which include rural (26.2 per cent of all imports), textiles (17.7 per cent), clothing and footwear (49.2 per cent) and wood products and furniture (41.4 per cent).

To complement rather than impede the economic development of the region which is our geographic neighbour, Australian industries need to become more export-oriented and more in tune with the economic needs of DMAE. While Australia definitely needs a specialised, stronger and indeed export-conscious manufacturing sector (the ratio of exports to gross product in manufacturing is at present a low 38 per cent), it also requires all industry sectors to become more specialised, with a greater participation in foreign trade.

**Government Policy**

The Minister for Finance, Mr. Eric Robinson, emphasised the Government's concern about promoting competitive industries when he said in March of this year; "Essential to our economic programme is the growth of Australian industry, the development of our resources and a renewed emphasis on growth in exports. These hold the key to greater prosperity and the creation of employment opportunities." Attention must also be directed towards ensuring that Australian exports are competitive in design and delivery on world markets, and that they are not overpriced.

As a major trading nation in the Asian-Pacific region it is in Australia's own interests to assist — not impede — the economic growth of developing nations.

Government policy is clear: "The Government endorses the view expressed in the Green Paper that it is desirable to give encouragement to new investment that will be efficient, internationally competitive and export orientated, particularly where it is based on Australian talents, skills or resources, and where the degree of processing or transformation is the maximum consistent with international competitiveness."1

Even if the present Government does not choose to provide long-term guidelines for future industrial development, based upon the recommendations from the White Paper on Manufacturing, the realities of changing patterns of world trade will necessitate some serious thinking on the part of all Australian industries about the direction of Australia's industrial development in the next few decades. It is clear that the Government is aware of the situation and may be expected to continue to place a high priority on the need to encourage exports in framing the August Budget.

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GO NORTH, YOUNG MAN

Nearly thirty years ago, Richard Gardiner Casey (as Lord Casey was then) invited Bill Beattie, who was a Senior Research Officer with CSIRO, to address the members of both Houses of Federal Parliament — a unique privilege in itself — on the subject of developing the Kimberleys. Lord Casey saw a parallel with the development of California. Just as America's west coast now gives a second trading face to the United States, so, too, will the Kimberleys complement Australia's activities in the south east.

In the immediate post-war period, Lord Casey's was a vision of the distant future. The time was not ripe then, but it is now. Two factors have dictated the timing: The rise of Asia and the Middle East as potential trading partners for Australia, and the extreme vulnerability of a rich unpopulated region wide open to drug runners, illegal migrants and other uncontrolled activities with consequent concern to the Defence Chiefs. The desirability of this area in the eyes of countries who lack energy and raw materials of their own should not be underrated.

A study of the Kimberley region is now under way. It foreshadows an economic development which dwarfs anything ever previously undertaken in Australia. In concept it is massive compared with the Snowy Mountains Scheme or the development of the North West Shelf, the latter of which comes within the scope of the study.

As a first step in the Kimberley Development Study, an inventory is being drawn up of the wealth and resources of the area. State and Federal Authorities are involved and private enterprise is being consulted. The study will also attempt to lay down rational guidelines for development.

Energy

Large quantities of gas and oil are about to be exploited on the North West Shelf, but at this stage it would appear that LPG, oil and petrochemicals may provide the main sources of income. Construction of pipelines is becoming enormously expensive and export may be vital to profitability.

Detailed studies have been made by a consortium of consulting engineers and by the Public Works Department of Western Australia on the exploitation of tidal power at Secure Bay and Walcott Inlet. It is estimated that from this source alone sufficient energy could be obtained to provide the whole of Western Australia with its current needs. The tides rise 30 feet or more and the narrow entrances and geological conditions are ideal for the purpose.

The Energy Commission has plans in concert with the Americans and others and research is proceeding well in developing solar energy. Signalling on the new main railway line to Alice Springs will all be solar powered and the immediate aim otherwise is towards domestic heating and cooling. The Kimberleys area generally has over 3,000 hours of sunshine annually.

There is potential for the use of nuclear energy in the area. It would appear from the latest opinion polls in Australia that objections to nuclear energy are now on the decline; the latest research at Windscale, in Britain, into the mixing of waste with the enriched material indicates that any remaining waste problems are being overcome.
Wind power is to be taken seriously. A new concept of helical blades outmodes fan blades and gives considerably more power.

The projected Diamond Gorge dam on the Fitzroy catchment will rely on water from the high rainfall areas of the North Kimberleys and can provide considerable hydro-electric power. The terrain and the topography seem most suitable. Average annual rainfall varies from 30 to over 40 inches.

Generally speaking, the various power sources will be complementary and will perform different functions. As both USA and Japan are suggesting that processing should take place where minerals and raw materials exist side by side with energy sources, this is likely to provide a major impetus to the development of the region.

Irrigation

Seventy per cent of Australia's total water capacity lies in the tropical north. The CSIRO State Committee and the Department of Agriculture are currently considering the prospects of using the water from Lake Argyle, and later Diamond Gorge, on adjacent desert soils of which a minimum of eight million acres are probably suitable.

This will be a significant departure from the approach adopted so far with the Ord River Scheme and emulates the Imperial and San Joaquin Valleys in California. Products would be largely horticultural to respond to the HRI (hotels, restaurants and institutions) markets in Asia and the Middle East where U.S.A. now has very valuable contracts. These are rapidly expanding markets, and with America's productive sources declining due to overuse of limited irrigation water, the prospects look good for Australia to take advantage of the rising expectations in these countries.

Traditional products could also be farmed as markets warrant. Flexibility in production is possible and always vital. Nitrogen fertilizer will probably come from Shelf gas — with export potential — and phosphates from Duchess by barge, for composite fertilizers will be needed as in most advanced countries. Potash is available from Lake McLeod, further south.

Minerals

The occurrence of minerals covers a wide area and will be mapped and listed, together with exploration and exploitation rights. There is considerable exploration in the area by local and foreign companies and the exploitation of a wide range of minerals from diamonds and copper to bauxite and the rarer metals is believed to be nearing the commercial phase.

Fisheries

Ultimately the exploitation of the rich fisheries field off the Kimberleys will probably be done by consortia, but at this stage it is significant that the Russians appear to wish to carry out a feasibility study. The Government should consider very seriously Japan's and South Korea's possible reaction to Russian participation; it may be more politic for CSIRO to undertake the feasibility study with American or Japanese technological help. Several hundred trawlers, mainly Japanese, Taiwanese and Korean, now work off this coast.

Cultured pearls are grown at four sources in the area.

Tourism

There is scope for tourism in the national parks with their aboriginal culture and unique flora and fauna. The scenery is magnificent. The opportunity for the employment of aborigines as
guides and officials could provide one means of integrating the aboriginal people into the mainstream of Australian life with less trauma than is occurring in other parts of Australia.

Deep sea fishing along the deeply indented coastline is another attractive prospect for the tourist industry.

The development of the area will inevitably involve the re-routing of some air transport via this area to Asia and beyond.

Population

The authorities are giving much thought to the desirability of supplementing Australian migration with a genuine Asian immigration policy. Taiwanese and Filipinos, for example, would be quite capable of assisting in the farming of the irrigation lands. They also have considerable skills in those manufacturing processes demanding detailed attention and concentration.

The problems involved in establishing a new, permanent and contented population are immense. The provision of amenities such as housing, education, and an expanding job situation for the young would require action on a grand scale. Preparatory guidelines for establishing a permanent population are already being worked out with all the social implications of stability and human fulfilment.

Climatic studies have shown that, given amenities, living would be far more pleasant than in many highly developed tropical centres in the world. That it is a difficult climate is a myth.

* * * * *

Lord Casey was not unique in his vision of the future. Others, including Sir Charles Court, Premier of Western Australia, have long held similar views.

There will be many young Australians among the growing band of unemployed and disillusioned youth who will see the opportunities and accept the exciting challenge through the 1980s of going North.

But on present indications we could make life unnecessarily difficult for ourselves. As Herman Khan is reputed to have said in jest on a previous visit to these shores: “Australians can’t go wrong, but I’ll bet you do.”

As Australians we have a penchant for tearing ourselves apart. We could not ask for a better opportunity than the development of the North to ease the tensions of industrial and political conflict. This is a project for all Australians, and union leaders, in particular, need to be fully involved from the outset.

The solution to another major problem rests solely in the hands of government. This was brought home by Rod Carnegie in his Chairman’s Address to CRA shareholders in May. He referred to uncertainties created by governments in a number of areas including the effects on the search for diamonds in the Kimberleys, a search which up until the end of last year has already cost $4.8 million.

In commenting on the Address, The Australian was moved to say in an editorial on the following day:

“But if the rules are unclear, or they are administered capriciously, or they are changed in mid-stream at a government’s whim to play favourites or to express prejudices, then our exploration and development programs will soon be in tatters.”

This Institute urges Federal and State governments to heed these warnings and give Australians the leadership we deserve.

1. Now Sir Roderick Carnegie.
SIR ROBERT MENZIES

No one would dispute that Sir Robert Menzies was the greatest Australian political figure of his time; many would say that he was also the greatest Australian. His seventeen consecutive years as Prime Minister set a Bradman-like record which is unlikely to be surpassed.

He may have appreciated the metaphor. He had a veneration of great cricketers and footballers and liked to associate with them. This provides a clue to the inner nature of the man. Notwithstanding his extraordinary achievements, and the rare honours heaped upon him in high places abroad, Sir Robert remained as essentially an unpretentious, likeable middle class Australian and he was probably happiest in the company of people of similar background and interests.

Sir Robert’s career had its roots in pre-eminent personal talent. He had a mind of exceptional luminosity, acuity and swiftness with which few people could compete. As a speaker he was unexcelled with a mastery of word and phrase and polished diction that one associates more with English than Australian statesmen. All this, combined with a devastating wit and power of repartee, and an impressive stature and appearance gave him a parliamentary dominance probably unrivalled in Australian political history.

* * *

The formation of the Liberal Party occurred about the same time as that of the Institute of Public Affairs. Both were a response — one political, one business — to the pressures of the times and the changing needs and values of the Australian democracy. Sir Robert, in search of a new philosophy and policy for the party he was in process of constructing with masterly skill, seemed to find a part of what he wanted in economic ideas which had been developed in the I.P.A. and just published in a document called “Looking Forward”.

At the Canberra Convention in October, 1944, convened by Sir Robert to lay the foundations for the new anti-socialist party, he heaped praise on the Institute’s efforts for free enterprise and urged the delegates to familiarise themselves with the
Institute's programme for post-war Australia. The infant I.P.A., naturally enough, was over-joyed to have support from such an eminent quarter, knowing that it would do much to ensure the acceptability of the organisation in business, political, media and other circles for some years ahead.

In the years that followed, Sir Robert maintained a close interest in the I.P.A., and, in spite of the fact that we did not always agree with the policies his party was pursuing, would occasionally write a note of generous praise and encouragement.

* * *

Sir Robert Menzies had his share of good fortune. He was helped to power by Mr. Chifley's fatal misjudgement of the temper of the Australian people in his attempt to nationalise the private trading banks. Moreover, the split in the Labor Party on the Communist issue, and the formation of the D.L.P., undoubtedly contributed to keeping the Liberal Party in office in the years that followed. During Sir Robert's long period as Prime Minister, the economy went steadily, indeed rapidly, ahead, almost under its own steam. Year-by-year growth, year-by-year rises in living standards and continuous full employment came to be taken for granted. There were problems, certainly, but generally they fell short of being critical.

Sir Robert presided over it all with style, good sense and powerful personal charisma. In the end he became to Australians a kind of father figure — wise, solid, dependable, reassuring, essentially decent. He became a symbol of stability and of wholesome values in a world that was becoming progressively and disturbingly more unstable.

The years from 1949 to 1966 are frequently referred to as "The Menzies Era", and that is how future historians will probably regard them. Not too many other figures in Australian affairs — probably none — have stamped their personality and style on a period in our history sufficiently to merit a similar designation. That is a measure of the man's size and an indication of the stature Sir Robert Menzies assumed in the minds of his fellow-countrymen.
PRODUCTIVITY, PAY AND WEALTH CREATION

by R. R. Gilchrist

Mr Gilchrist is Director of the Australian Institute of Management — Victoria, and has published many articles on management. He is considered to be a leading authority on productivity measurement and he is currently a member of the National Productivity Measurement Panel of the Productivity Promotion Council of Australia.

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Every advance in living standards throughout the history of civilisation has been the result of an increase in labour productivity. A major factor determining real wages in an economy is labour productivity. If a nation wishes to increase its wealth creation, then it must look to increasing labour productivity as a matter of urgency.

If productivity is so important, how is it defined? What does the word mean? Fundamentally, productivity is a relationship between output and input. Productivity is a measurement of how well the resources utilised by an enterprise are being combined to produce an output. An appropriate definition is thus:

"Productivity is the output obtained by an enterprise per unit of resource input."

In its widest sense, productivity refers to all the resources used in a business. A total productivity measure would thus provide a composite of all these resources, which would then be related to output. In practice, there is little to be gained from searching for a total productivity measure. Hence, it is customary for "partial productivity" measures to be...
developed, where output is related to only one class of input. The two most generally accepted partial productivity measures are labour productivity and capital productivity.

**Why Measure Productivity?**

The ultimate justification for establishing measures of productivity within a firm is the usefulness of such measures as a means for improving production efficiency. Unless they provide a realistic basis for setting objectives and monitoring performance, then productivity measures are valueless to the practising manager. The relevance of productivity must thus be examined in the overall context of business direction, control and profitability.

There is no denying that profitability is the final indicator of business performance, viewed over the long-term. As Alfred P. Sloan, the great architect of General Motors, remarked, “It is not profit itself, but the relationship of profit to the capital invested in the business which is the real test”.

If we accept that most businesses have, or should have, profit objectives, it follows that they must also have a control system that enables performance towards these objectives to be monitored. Yet this is not easy. What a firm is really trying to do is not only to measure its absolute profits at a moment of time (which it needs for cash flow purposes) but also its profit potential for the future. Measuring historical profits does not necessarily provide a meaningful measure of the ability of a business to generate profits in the future. For example, profits can be enhanced over a given period through deferring routine plant maintenance, slashing advertising and product development expenditure, or cutting back on apprentice training and management development. Such actions would certainly boost short-term profits, but could hardly be claimed to improve profit potential.

The profit potential of every business is largely determined by its competence in three key areas. These are the areas of Productivity, Marketing and Innovation. Hence, measuring performance in each of these areas, and controlling through observing trends and changes in trend, is a pre-requisite of effective management.

**Practical Measures of Productivity**

Productivity is a relationship between output and input. There is rarely any problem in identifying meaningful measures of resource input. The problem arises when we attempt to measure a firm’s output.

For a single product firm, it is sufficient to measure output in units. For a firm producing bicycles the unit could well be bicycles. For a cement company, the unit could be tonnes of cement. For electricity generation, the unit could be kilowatt hours. But what about a multi-product company? Or a single product company where the amount of workmanship applied to the product changes dramatically, possibly due to a change in policy from “make and assemble” to “buy in and assemble”?

To answer these questions it may be helpful to go back to first principles, to go back to the rationale for a firm’s existence.

A firm exists to create an income for itself, and hopefully to ensure that this income will be greater than its expenditure, so that it will make a profit. Profit, of course, means that the firm is a bigger business at the end of the trading period than it was at the start. Conversely, loss means that it is a smaller business, and the final result of a continual loss is no business at all.
In order to create an income, the firm must first produce an output. It does this by combining labour and capital. Through the process of exchange, the output is converted to an income. This income, the net income available after payment has been made to all external suppliers of materials, components and services, is then allocated either to paying the employees or to servicing the capital invested in the business, paying rates and taxes, and providing funds for the future of the business.

The net income of a firm (which is obtained by deducting the cost of external purchases of materials and services from the value of sales) is called the “Added Value”. Added Value is a measure both of net income and net output. It is also a measure of the wealth created by the firm, and of its contribution to the Gross Domestic Product of the Nation.

A firm, then, is a wealth-creating organisation. The wealth created is not measurable in terms of its value of sales, but rather in terms of its Added Value. If we add up the Added Value of all the enterprises in the economy, then we obtain a measure of the wealth created in the economy as a whole. The standard of living of the population is, of course, a function of this wealth.

From the viewpoint of the firm, the desired end result is the creation of wealth. What really matters is not so much the number of pieces of components that the operators produce per hour, but the wealth, the Added Value, produced per hour. Producing things is the means to the end. The end itself is the creation of Added Value. Similarly working capital, buildings and machinery are necessary to create Added Value. It follows therefore that the real measure of output is Added Value. The efficiency of a firm can thus be significantly expressed in terms of its ability to design, produce and market a given amount of Added Value at a minimum real cost. Practically, since the concept of minimum cost is abstract and unmeasurable, the efficiency of a firm is a function firstly of its absolute level of productivity, and secondly of its ability constantly to improve its productivity at a faster rate than its competitors.

For manufacturing industry, Added Value is now recognised to be the most appropriate measure of output. Note that care must be taken, under inflationary conditions, to adjust the actual Added Value to compensate for inflation, when using it as an output measure.

Added Value has its most dynamic and practical application in manufacturing industries. Assessing the output of service industries is not easy, nor is it easy to measure the output of, say, a hospital or a government department. Nevertheless, the productivity concept applies to all activities, irrespective of whether people are involved in agriculture, manufacturing, hospitals, schools, or government service. Whatever has to be done, the objective should be to do it as efficiently as possible.

Pay and Labour Productivity

Most people are aware of the relationship between prices, incomes and productivity. International studies of nineteen industrial “market” economies have demonstrated that:

— Average retail prices tend to increase at a rate roughly equal to the difference between the rates of money wage increase and of average productivity growth.

— Average real wages tend to rise at a pace equal to that of average productivity growth.

The above conclusions are of relevance to a question which has occasioned considerable argument among labour econo-
mists, namely whether workers gain or lose through inflation. The answer appears to be neither. In fact, if one considers the effects of progressive taxation, it is clear that people lose when inflation is rampant.

For the Australian economy, what is the relation between pay and labour productivity? Do workers of similar skill in different industries receive similar rates of pay? Or do high labour productivity industries pay higher rates because they are creating more wealth per employee, and are thus better able to share this wealth in the form of higher wages and salaries?

In 1975-76 Australian manufacturing industry employed 1.2 million people, the average pay per employee being $7,900. However, there was a marked variation in rates of pay between different industry sectors. Statistics show that there is a direct relationship between labour productivity and pay. The higher the productivity, the higher the pay.

A major determinant of labour productivity is the amount of capital investment per employee. High capital investment results in high labour productivity, and this in turn contributes to high rates of pay. However, capital investment is not the only determinant of productivity. The motivation of employees is also a very significant factor. Productivity is a state of mind. If people want to improve as, for example, the Japanese — it is amazing what improvements will result. If not, then productivity will stagnate, and competitive ability will slowly but surely erode.

Why Do People Resist Productivity Improvement?

There can be no denying the fact that a nation's standard of living depends on its wealth creation. The distribution of that wealth is a political matter, but its creation is economic, and dependent on efficiency. It is a familiar proposition that efficient management will not guarantee the achievement of social objectives. Nevertheless, although the objectives of various organisations — firms, trade unions, government, the church — may and do vary, it is still the duty of management to achieve these objectives as efficiently as possible. Through improved efficiency we may generate more wealth, and thereby increase real wages; or we may generate the same wealth in fewer hours, thereby creating more leisure. But there can be no valid reason deliberately to operate inefficiently.

Why is it, in spite of the benefits to be gained from higher labour productivity that employees resist productivity drives? That they frequently refuse to operate new equipment or labour-saving devices? There are three main reasons:

1. Lack of understanding about productivity, and how it affects real wages.
2. The fear that higher labour productivity will increase levels of unemployment.
3. The belief that all the benefits of higher labour productivity go entirely to the shareholders, and there is nothing in it for the employees.

As regards the first of these reasons, the solution can only lie in education and training. Management must be prepared to initiate a dialogue with the employees — for example, on the meaning and implications of productivity, of its effect on living standards and of its relationship with real wages.

The second reason is highly pertinent in a period of high unemployment. Many employees would argue that it is folly to improve productivity, and to work themselves out of a job. Far better, they say, to spin out the work, and make sure that there is enough to go around.
This is a very difficult argument to refute persuasively. To do so requires a sound knowledge of how industrial economies have developed, of competitive advantage, and of the implications for future employment of lagging productivity growth.

Finally, as regards the third reason, there is clear evidence that people find it difficult to relate the effects of higher productivity in terms of benefits to themselves. "What's in it for me?" is a common question. To answer that higher productivity results in higher real wages is an argument that often falls on deaf ears. It produces the retort that, higher productivity or no higher productivity, the employers will be forced to grant higher wages, whether they like it or not. The fact that these are "money" wages and not "real" wages is, of course, conveniently overlooked!

How then do we answer that question "What's in it for me?". One approach, which has had some success, is to adopt the concept of "wealth-sharing". As we have seen, higher productivity results in more wealth produced per employee. This increased wealth is created by the more efficient utilisation of capital and labour. Thus it would seem fair and just that any increase should be returned as reward to capital and labour. This leads to the concept of a productivity related bonus scheme, where the benefits of higher labour productivity are shared with the employees in an agreed proportion.

That productivity bonuses can be effective in gaining employee co-operation and providing a sense of involvement is indisputable. It must also be admitted that such bonuses are often resisted by the trade unions, who see them as a bribe to the employees and a threat to working class solidarity. In France, for example, profit sharing has been legally enforced since 1967, for all firms employing more than 100 people. Companies reserve money for this purpose either from profits or from a special investment fund related to capital. However, the leading unions in France, the C.G.T. and the C.F.D.T., condemn the scheme on the grounds that it promotes collaboration with the class enemy, and weakens the powers of the unions.

In spite of the objections to productivity-based bonus schemes, they do offer a means of obtaining employee co-operation. According to a British survey in 1976, nearly 85% of employees considered that industry would be more productive if they had a stake in the profits.

In conclusion, no programme for productivity improvement is likely to be successful if it is not preceded by a careful and structured education programme. Only through a general understanding of productivity and of its implications will it be possible to obtain the commitment of people to improvement. The key, as in so many aspects of industrial performance, lies in changing behaviour, in providing an environment where people want to improve productivity, instead of resisting programmes that are thrust upon them.
ZERO POPULATION GROWTH VERSUS THE FREE SOCIETY
by Edmund A. Opitz

The editor acknowledges the correspondence provoked by the publication of "Population Intervention" by Robert S. McNamara in the October, 1977, issue of the "IPA Review". In the interests of public debate we are pleased to present an alternative view on the subject of Zero Population Growth by Edmund A. Opitz of the Foundation for Economic Education.

*     *     *

One of the great entertainers of our time is Victor Borge. It is somewhat ironic that Borge achieved his fame as a comedian, although he was also a concert pianist. In one of his comedy routines, Victor Borge told stories of his uncle, who was a very bright man. Borge's uncle was so smart that he invented a cure . . . for which there was no known disease!

Every time some population expert mounts his podium to address the world and says to us: "There are too many of you out there," I think of Victor Borge's uncle. The population expert views with alarm a "problem" which is largely non-existent — where it actually does exist it is less acute than other problems — and his proffered solution, Zero Population Growth, would cure nothing.

The problem, as visualized by proponents of ZPG, is too many people.

We are menaced by "the population bomb", "the population threat," "the fertility explosion," a plague of people. The human race has always had to contend against the Four Horsemen of the Apocalypse: Conquest, War, Famine, and Death. To which we now add a fifth horseman, People. "The gravest issue the world faces over the decades ahead . . . short of thermonuclear war itself . . . is . . . population growth." The words I have just quoted are those of Robert S. McNamara,
President of the World Bank, from an address delivered at the Massachusetts Institute of Technology, April 28, 1977.

"Indeed, in many ways," Mr. McNamara continues, "rampant population growth is an even more dangerous and subtle threat to the world than thermonuclear war, for it is intrinsically less subject to rational safeguards, and less amenable to organized control.

"The population growth of the planet is not in the exclusive control of a few governments, but rather in the hands of literally hundreds of millions of individual parents who will ultimately determine the outcome."

Mr. McNamara has harsh words for "societies that procrastinate while dangerous population pressures mount." No government, obviously "can afford to let population pressures grow so dangerously large that social frustrations finally erupt into irrational violence and civil disintegration," and so governments must intervene to "improve access to modern means of fertility controls." In practice, this means that governments must provide "a broad selection of the current contraceptives ... as well as sterilization, and — where society desires it — abortion."

Mr. McNamara is not an extremist; compared to other ZPGers, his statement of the issues is calm and his advocacy of further governmental interventions and controls is the typical "liberal" panacea; the "liberal" confronts something he doesn't like and his stereotyped response is: "There ought to be a law."

There have been studies of population trends ever since Thomas Robert Malthus penned his celebrated Essay in 1798. Malthus feared that population would always impinge on subsistence, no matter how great the increase in the production of foodstuffs, population would increase at a faster rate, and mankind therefore faced perpetual misery. Malthus looked through the wrong end of the telescope and so his prophecy makes a certain amount of sense as history. Look backward over the centuries when this planet housed a mere few hundred million people, and it is true that most people went hungry most of the time, only to perish during the periodically recurring famines.
What is Overpopulation?

If you define overpopulation as more people on the planet than a given area can sustain, then the world until modern times has nearly always suffered from overpopulation! Before the Europeans came to this continent (North America) this land mass was inhabited by less than a million Indians. Food was nearly always in short supply and starvation was a constant threat. There was an imbalance between food supply and the number of mouths requiring to be fed; such an imbalance is the only meaningful definition of overpopulation. Pre-Columbian America was overpopulated.

But then some important developments occurred in western nations as political liberty flowered in the eighteenth century. Serfs and slaves became free men with a right to enjoy the fruits of their labor — so they produced more. It was a period marked by science, inventions, and technology — with progressive increases in agricultural and industrial production as a consequence. Wages doubled, redoubled and doubled again. The entrepreneur — the man able to combine capital, labor and resources to best satisfy consumers — was accorded status and prestige. Work acquired a new dignity, thrift was praised, increasing prosperity and material well being was enjoyed by the multitude.

The immense productivity of the American people during the past two centuries has resulted in a situation where famine is no longer a threat in this land, and where 215 million people live well on the same acreage that once barely sustained a million. We feed the world with our surplus, proving Malthus a lousy prophet!

Demographic Hysteria

Scholars have been studying population trends for the better part of two centuries; students who specialized in the subject began calling themselves “demographers” about a hundred years ago. But this scholarly discipline, demography, began to go hysterical about a generation ago, largely because of the so-called baby boom which came along in the aftermath of World War II. That boom lasted just long enough to cause a spate of prognostications about a planet in the year 2000
with standing room only. The baby boom burst, birth rates began to decline; and so the alarmists had to change their tune: the birth rate is not declining fast enough!

Mr. McNamara in the speech cited earlier, tells us that a "significant decline in fertility . . . has occurred in 77 of the 88 countries for which estimates are available." The worldwide fertility rate has fallen off nearly 13 per cent over the past two decades. But a 13 per cent decline in the birth rate is not enough to satisfy Mr. McNamara, who declares that "Unless governments through appropriate policy action, can accelerate the reduction in fertility, the global population may not stabilize below 11 billion. That would be a world none of us would want to live in." Eleven billion people is just over twice the number of people now inhabiting the globe. How does Mr. McNamara know that none of us would want to live in such a world?

Mr. Colin Clark, for one, would not mind living with 11 billion people, nor indeed, with many more. Colin Clark is a celebrated economist and one of the world's leading statisticians. "Fortune" magazine, in its December 1960 issue, published an article by Colin Clark entitled "Do Population and Freedom Grow Together?" His thesis was that economic progress and political freedom are often stimulated by population growth. Estimating the number of people this planet can sustain — if we use our intelligence — he made this startling statement:

"Today the best agriculturalists in Europe — the Dutch — produce a very good and varied diet on the equivalent of two thirds of an acre of land per person. If all the land suitable for agriculture throughout the world were cultivated in this manner, assuming at the same time that the whole world eats as well as the most prosperous countries do now, provision could be made for 28 billion people, or ten times the world's 1960 population. If we take Japanese instead of Dutch standards of cultivation and of diet — after all, the Japanese are quite a healthy people — the world could provide for three or four times as many again."

**The Intelligence Factor**

The critical factor for a nation is not the number of
people it contains, nor even its population density: the critical
factor is the amount of intelligence the people bring to bear
on their institutions, especially in the way they organize agri-
culture and industry. Take the unhappy country of India, for
example; poverty is everywhere and misery weighs down the
spirit. Why is India in such a parlous condition? Is it her
"teeming masses"?

There are indeed a lot of people in that subcontinent,
nearly 700 million of them; but the territory is vast. India's
population density is just about one-half of that of the Nether-
lands, and we never speak of the teeming masses of Holland.
England has fifty more people per square kilometer than India,
Japan has 117 more people per square kilometer than India.

India has the people and she has the resources, what she
lacks are the institutions that make for productivity and pros-
perity. Her people suffer terribly in consequence not because
there are so many of them, but because — for religious reasons
— they do not choose to establish the political and economic
conditions which make for material progress. That's why the
situation is so heartbreaking, the problem is not India's "teem-
ing masses."

I have stressed the alarmist and hysterical note typically
struck in the writings of the proponents of Zero Population
Growth, those who speak of people as a plague, a threat, an
impending disaster. These writers prophesy that people are
driven to breed senselessly and prolifically — unless government
controls are imposed to prevent the calamity.

I have cited a tiny bit of the evidence on the other side,
merely to cast some doubt on the ZPG thesis that there is a
demographic crisis which provides a new rationale for govern-
mental intrusion into affairs once regarded as most private
and personal — a couple's decision as to the size of their future
family. Mr. McNamara is horrified that this decision is in the
hands of "literally hundreds of millions of parents." He thinks
it should be turned over to the same people who operate the
Post Office!

Built-in Safeguards

A "Believe It Or Not" cartoon points out that if all the
progeny of a single pair of oysters were to live and go on reproducing for a year there'd be a mass of oysters three times the size of the earth. Or something like that. But as a matter of fact, nature does not behave that way. I offer you a passage from a 1968 book by Arthur Koestler, "The Ghost in the Machine":

"In recent years biologists have discovered that every animal species which they studied — from flower beetle through rabbits to baboons — is equipped with distinctive behaviour patterns which put a brake on excessive breeding, and keep the population-density in a given territory fairly constant even when food is plentiful. When the density exceeds a certain limit, crowding produces stress-symptoms which affect the hormonal balance; rabbits and deer begin to die off from "adrenal stress" without any sign of epidemic disease; the females of rats stop caring for their young, which perish, and abnormal sexual behaviour makes its appearance. Thus the ecological equilibrium, in a given area is maintained not only by the relative distribution but also by a kind of intraspecific feedback mechanism which adjusts the rate of breeding so as to keep the population at a stable level."

I realize that human beings are not geared into nature's rhythms by instinct, in the same manner as the other orders of creation. Our species is unique. With a portion of our being we transcend nature, we possess reason and free will. By the responsible exercise of our rational faculties and our power of choice, we have the ability to arrive at a decision after reflecting on the evidence. It is by taking thought that we humans make our accommodation to the demands of nature and the requirements of our society. This is what it means to be a free and responsible human being; to be inner directed and self-directed in the pursuit of our life goals is a mark of a free person.

The Road to Tyranny

This brings us to what I regard as the crux of the population controversy. The evidence does not sustain the doomsday thesis that the planet will soon have standing room only; but suppose it did. The dire prophecies of the proponents of ZPG
about “the population bomb” will never eventuate, but if we do believe these people and accept their remedy, we’ll be saddled with a monstrous and tyrannical government. Farewell to freedom, then, as the bureaucracy mushrooms, spawning a multitude of snoopers, spies and enforcers. Citizens would be tested, tagged, ticketed. There’d be dissent and the suppression of dissenters; there’d be rebellions to put down. Mr. McNamara tells us that we would not like living on a planet with 11 billion people, and I would tell Mr. McNamara that the government he would invoke would be “Brave New World” and “1984” combined — impossible to live with! It would crush the individual.

Many people are concerned today, and rightly concerned, with the Soviet dissidents. We believe that the rights of these individuals are being violated, that something in each of these persons, which does not belong to the State, is being appropriated by the State. What that something is in each person may be called by different names — a portion of divinity in him, his soul, his sacred prerogatives, his rights. Whatever you choose to call this inner being of persons, which belongs to them simply because they are persons, we believe it should be held inviolate. The Soviet philosophy views the matter differently, the Soviet citizen is a product of the Soviet State and therefore he belongs to the State. The State owns him. Some Jews who wished to emigrate to Israel had to buy themselves from the Soviet State, the purchase price being the estimated cost to the State of heir manufacture from child to citizen. The Soviet citizen lives to serve the State.

We take the opposite view that the State or the government exists to serve citizens in very limited ways. Governments are instituted to secure individuals in the rights which are theirs because the Creator endowed them. “The God who gave us life,” declared Jefferson, “gave us liberty at the same time.” The government of a free people must not itself invade the rights of any person, and the law provides penalties for anyone who transgresses the rights of another.

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Appointments to I.P.A. Council

Mr. Hugh M. Morgan

Mr. Hugh Morgan has been associated with Australia’s mining industry for 13 years and is presently Executive Director of Western Mining Corporation Limited. He also serves on a number of Committees including the Australian Mining Industry Council, the Australasian Institute of Mining and Metallurgy and the Ian Clunies Ross Memorial Foundation. Mr. Morgan is also a Trustee of the National Gallery of Victoria.

Mr. Robert S. McKay

Mr. Robert McKay is a young businessman whose experience has been principally in the publishing industry. He is an Executive Director of the Macmillan Company of Australia Pty. Ltd., and a Director of Mary Martin Bookshops Pty. Ltd. He is also a non-Executive Director of Baillieu Bowring Pty. Ltd. Mr. McKay joined the I.P.A. Executive and Editorial Committee in 1975 and is Chairman of the Publicity sub-Committee.

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