'Where will the capital come from?' — for economic development is a popular rhetorical question posed by commentators on the Australian capital markets. The limitations of popular conventional wisdoms in this regard were neatly summarised by Mr. R.H. Carnegie in his address to The Securities Institute of Australia in Sydney on October 14th, 1977\(^{(1)}\). In his second paragraph he said:

"Five basic generalisations are a good starting point for today's talk:

- You can't consume if you don't produce,
- You can't produce if you don't invest,
- You can't invest if you don't save or borrow,
- You can't save without foregoing consumption now,
- You can't usually borrow without paying servicing costs and repaying capital.

These basic truths are fundamental."

A crucial point of generalisations is that they need not be true all the time. It is the exceptions to the above 'basic truths' which provide the answer to the question — 'Where will the capital come from?'

The answer depends upon creating new types of financial institutions which exploit the exceptions. From the third and fourth points we are forced to conclude without exception that any investment financed by savings without borrowing is dependent upon 'foregoing consumption now'. While this may largely be true for the present situation in Australia and most of the other market economies of the world, it need not always be true. At one time or another it has not been true for England, Japan, U.S.A. and Germany. These 'locomotive economies'\(^{(2)}\) have all evolved, more by accident than design, the ability to finance investment not from historical savings or 'foregone consumption' but from future savings\(^{(3)}\) created by the new investment itself. It is by this means that national economic development can be made internally self-financing. Socialist countries generally finance their economic growth internally without the need for foreign credits. No market economy except perhaps Japan\(^{(4)}\) has developed this facility by design. Socialism thus provides the only sure way for Third World countries to enjoy rapid economic development without putting their countries into debt.

Debt traps for poor countries create credit traps for the rich. As more and more poor countries get ensnared in the debt trap with the same main creditor countries the financial creditability of the current major creditor countries\(^{(5)}\) gets further and further undermined. Indeed, C. Gordon Tether, who was for many years the leading financial commentator of the Financial Times, London, sees the risk of a major disaster in the international capital markets from the excessive foreign borrowings by the Third World countries\(^{(6)}\).

The creation of financial institutions by design rather than by accident which will allow developing economies to internally finance economic growth without resorting to Socialism is thus one of the major concerns of the Western World. It is not of course in the best interests of the U.S.A., Japan and Germany for the rest of the Western World to gain financial independence from them. This is particularly true of their commercial banks who obtain their greatest profits from foreign business. The initiative for creating institutional arrangements to permit accelerated economic development to be financed internally must rest with countries like Australia. As we shall see, Australia is well placed to provide world leadership in this regard.

The World Bank is only beginning to learn of the techniques for market economies to internally finance their own economic development. The Bank was an inbuilt resistance against promoting these techniques as it would make its present functions redundant. However, it would provide the Bank with a much more politically desirable and technically effective function of providing the knowledge to client governments...
of how to build the internal institutional arrangements which would allow national development to become internally self-financing without resorting to Socialism. The Bank is now searching for a situation which would be the most suitable for developing by design rather than by accident self-financing institutional arrangements within a National economy. Louis Kelso\(^7\) of the U.S.A. pioneered the idea of creating such arrangements by design as described in his writings\(^8\). The development and application of his concept for Australian Capital markets are described in my November 1976 Sydney University Research Monograph — \textit{The Disadvantages of Australian Firms in Capital Creation}\(^9\), and in \textit{A Blueprint for Economic Growth}\(^10\).

The objective of these proposals is to provide institutional arrangements which would convert newly created bank credits into industrial equities which are represented by claims over newly created ‘viable’ capital goods. Viable or self financing real capital goods will be defined as procreative assets. A new term is required because economists do not distinguish between capital goods which pay for themselves and so create new wealth (surplus values) and development and those capital goods which do not pay for themselves and so absorb Labour values.

Without financial intermediaries which can channel increases in the money supply to finance procreative assets and so productivity rather than consumer demand and inflationary pressures, policy options in economic management become severely restricted. Indeed, it becomes practically impossible to reduce inflation while at the same time promoting economic growth. The concept of procreative assets thus provides a crucial intellectual and practical tool for both managing inflation and building institutions to allow economic development to become self-financing.

Provided real capital formation becomes viable or self-financing, finance is only required to bridge the payback period. Such bridging finance is ideally provided by the banking system. However, the banking system is quite unsuited by its high ratio of liabilities to net worth to accept the risk of the investment not paying for itself and so liquidating the bridging finance facility. Quite a different type of financial institution is required to accept the risks of equity financing. Institutions which have little or no borrowings like any insurance underwriter such as Lloyds of London. Indeed the Lloyds arrangements provided a model for the venture capital risk sharing arrangement described in my Research Monograph. They provide a way of converting bank debts (contractual obligations) into equity (non-contractual obligations to repay the principal value invested). In summary, new types of specialist financial intermediaries are required to convert enterprise credits into equity.

The means by which the U.S.A. economy evolved financial institutions for converting bank finance into real capital formation is described by Harold G. Moulton in his Brookings Institution publication No. 59 on \textit{The Formation of Capital}. In summary it was dependent upon a coincidence of three features: the development of: (a) a stock market; (b) investment banks and (c) commercial bank financing of investment banks. Real capital formation was financed by new share issues to investment banks who borrowed the required finance from the commercial banks against the collateral of the shares in question and other current and past issues. In this way the investment banks were able to average equity risks both across the economy by holding different shares and through time by allowing new share issues to mature and to be sold off at a greater profit when the perceived risks were reduced by operating results.

The arrangements proposed by Kelso and myself would in essence introduce institutions which could complement or provide alternative means for averaging over time and across the economy the risks and benefits of enterprise in creating new wealth. Arrangements dependent upon market forces rather than the political authority of a centrally planned economy.

Some initial moves for building the institutional arrangements described in the Monograph have already been made in Australia. In March 1977 the South Australian Government amended its Industry Development Act to permit the Government to guarantee loans to salary and wage earners to purchase an equity interest in their enterprise. More profound institutional innovations have been adopted by the Small Business Development Council of N.S.W. for amending the Small Business Loans Guarantee Act of March 1977. These amendments were first presented
to the Government in April 1977 and are based on the private sector risk sharing arrangements which I developed for the United Nations in the Yemen Arab Republic. These arrangements would among other things allow the Small Business Loans Guarantee Act to be used to establish Small Business Investment Corporations (SBIC’s) to create a market in guaranteed loans to small businesses and the facility for a separate market in accepting the risks of the guarantee.

By separating markets for liquidity from markets for risks and their insurance premiums, specialised non bank credit insurers could evolve to share and distribute business credit risks without liquidity. With selective monetary policies as described later, the private sector credit insurers could soon remove the need for government guarantees. The development of institutional arrangements for distributing the risks and rewards of new real capital formation, especially among those who can make a personal contribution in reducing the risks, is a fundamental requirement for internally financed national economic development.

Economic development which increases the material wealth of a country must be self-financing. This should be a self-evident tautology at a macro level. At a micro level of specific projects there may be considerable uncertainty that the cost of marshalling real resources of labour and material for real capital formation will be recovered from the sale of the resulting goods and services produced. Failures can be subsidised in the public sector or in socialist economies without the need for market mechanisms and often without the need to recognise failures.

The most crucial concern of private sector decision makers is the recovery of all their investment costs. Until an investment recovers all its costs and so becomes self-financing it cannot provide a cash profit. The investment cash profit will be referred to as the “surplus value”(11) to distinguish it from the ever-changing accounting concepts of profit(12) which allow profits to be reported before any surplus value emerges. Because accounting concepts of profit cannot be defined either in law or in practice they do not provide a sound basis for rigorous economic analysis. It is for this reason that investment decision making analysis by either the sophisticated trans-

national corporation or small businessman is based on cashflows rather than accounting returns.

The first concern of the practical investment decision maker is the time period required to recover all his investment costs. The longer the payback period then the greater is the risk that he might lose money rather than capture surplus values. Indeed, if the payback period is excessive he will not invest no matter how great the cash profits might be. Even if the investment decision maker is not risking his own cash he is still risking perhaps what is more important to a professional manager which is his job and his reputation if he loses money. To quote John M. Blatt:(13)

“The payback time period has been criticised by economists because it ignores profits which accrue during the subsequent life of the project. We now see that this criticism is unjust: the practical men are right, as usual. In a riskless world future profits are certain. But in the real world, the imposition of a payback time period is a necessary protection for the survival of the planning manager.”

In the real world, it is the expectation of greater consumption, not less, that gives the investment decision makers the confidence to convert their secure interest bearing cash savings at the bank into new plant, machinery, stock, debtors, and all the other less tangible expenses associated with the productive uncertainties of real capital formation. If new investment is limited to ‘foregone consumption’ then not only will the rate of new investment be limited, but also the incentive to make new investments. An intrinsically unstable situation is created to precipitate and exaggerate boom and bust business cycles.

At the turn of this century around 60 per cent of commercial bank loans in the U.S.A. were being used to finance real capital formation. Australia does not even collect statistics in this regard. An estimate made with the assistance of the Research Department of the Reserve Bank for my Research Monograph in 1976 indicated that the ratio is only around 20 per cent. Australia of course does not have investment banks or other risk sharing arrangements (as proposed by the N.S.W. Small Business Development Council) to prudently increase this ratio. As a result, Australia is forced to import
risk capital for rapid development.

There is another reason to be concerned about the low ratio of bank credit available in Australia for financing real capital formation. This concerns the 80 per cent of bank credit which is made available for non self-financing activities — activities which could well exacerbate inflation. As a result, the expansion of the money supply in Australia is most likely to further inflation, while it could reverse inflation if the banking system channelled credit expansion more selectively into new viable productive real capital formation which created surplus values from increased productivity.

Selected policies are particularly vital for Australia where the supply of money is monopolised by the Federal Government. Australians have neither a choice of foreign or domestic currencies as a means of controlling inflation as proposed by 1974 Nobel Prize economist Professor Hayek(14) and which did exist in Australia before Federation. Without the use of selective policies the Reserve Bank is misusing its monopoly powers and privileges. But without the concept of procreative assets and/or the presence of specialised intermediaries to identify their creation, it is ill-equipped to provide constructive selective monetary policy initiatives.

The creation of procreative assets will require, in any event, an expansion in the money supply to keep the ratio of money to the new value of goods and services which they produce in balance. But as all procreative assets are by definition self-financing they will pay back any credits created to finance their formation so as to contract the money supply as new equity holdings are established. It is in this way that procreative assets harden the currency to reverse inflation(15). It is also the reason why there should be no monetary restriction on financing new real capital formation provided the private non-banking sector has guaranteed that any credit creation for this purpose will be cancelled through its repayment and that such guarantees are supported in full by collateral outside the banking system. The reason for specifying that the collateral be outside the banking system is to ensure that historical savings are liquidated to cancel out the inflationary potential of creating credit to finance new real capital formation when the new investment itself does not turn out to produce the self liquida-
advancement of Science (ANZAAS) in Melbourne, August 1977. An analysis of the operating dynamics of maintaining equilibrium ratios for and between individuals of — employment to leisure; income to investment; consumption to savings — will be found in my paper Managing Society for Productivity presented to the International Productivity Conference in Sydney, September 1977. Space does not permit these to be considered here.

All these writings make the point that the concepts and thought patterns adopted by economists are inadequate to fully analyse the opportunities and limitations for making National economic development self-financing without resorting to socialism. Rigorous analysis is not possible without rigorous definitions of basic concepts like capital and profit, rate of profit and higher order anachronisms such as the marginal rate of profit. Without unambiguous concepts it is difficult for economists to either agree among themselves or provide unequivocal advice.

To provide unequivocal definitions, the methodology (paradigm) of economists based on the ever-shifting accounting definitions of profit need to be replaced by a methodology based on cashflows and surplus values which can be both defined precisely and identified in practice.

If accountants are wrong how can economists be right? In the real world, big or small businessmen use cashflow analysis for strategic investment decisions. It should be noted that this can become the same as profit analysis in certain circumstances such as for non-wasting assets. The differences are described in my article How should we measure capital returns? JASSA May/June 1975, p.8(16).

Without cashflow analysis the special class of productive real capital which become self-financing and are defined as procreative assets cannot be either defined or identified. Unless procreative assets can be identified it is not possible to precisely define or increase; the productivity of labour: surplus values; and economic growth. Without knowledge of how to precisely and so selectively increase productivity it is difficult to identify policy measures to reverse inflation instead of reversing productivity which creates inflation. Without selective policies, many policy initiatives with the present system are likely to create conflicting results which would both reverse and increase inflation. The conventional wisdoms of the Keynesian’s and the Monetorist’s can be both right or wrong together. The result is that businessmen and Western economies remain losers together.

The popular confusion between financial capital and real capital formation with businessmen compounds the problem in providing answers to practical men as to ‘where will the capital come from?’. In terms of financial capital there may be no problem for self-financing assets provided the economy possesses suitable financial intermediaries as described above. However, the practice of creating and managing such financial intermediaries by design is yet to be developed. Australia has both the need and financial infrastructure to develop such institutions as described in the writings of Kelso and myself within a year or so.

Foreign borrowings are very much a second best solution. It simply uses the ability of the ‘locomotive economies’ to print money to make money at Australia’s expense. The export of credits to Australia is likely to be far more inflationary than if they were created internally within the economy and specifically tied to self-financing real capital formation. Until the foreign loans are repaid, internal economic growth is being reduced by the need to finance interest payments and any devaluation losses. The interest burden itself providing an added pressure for devaluation and inflationary forces. If Australia built the institutional arrangements to make its own development internally self-financing it could increase its invisible foreign earnings by becoming a financier to the less developed economies. Alternatively, it could help the Third World to become financially and so politically independent of the dominant Western economies without resorting to Socialism by following its own example.

NOTES AND REFERENCES

(1) R. H. Carnegie — Where will the capital come from? — JASSA, No. 4, December 1977, p.3.