

## **Regulating Access to Essential Facilities**

**Allan Fels**

**I**t is now six years since Australia's State and Commonwealth Governments introduced the comprehensive reforms which jointly constituted the National Competition Policy. Those six years have left few sectors of the economy unaffected, and have fundamentally changed the nature and philosophy of competition regulation.

Traditional monopolies have been most affected by these changes. While other elements of the National Competition Policy reinforced existing structures in areas such as consumer protection and trade practices, market liberalisation in areas dominated by traditional monopolies was a new phenomenon. As in Europe and a number of other jurisdictions, removing legislative barriers to entry to those markets and regulating access to the essential facilities which delivered the services were the main mechanisms by which this was to be achieved.

Australia's energy, transport and telecommunications markets now operate very differently from the way they did six years ago. The extent and nature of those changes are different in each case. At the same time, the regulations that made them possible are under review by the Productivity Commission, which is currently conducting investigations into both the generic and telecommunications-specific access regimes. The Commission released its drafts in March 2001 and will report its findings to the Treasurer at around the time this article goes to press.

This paper outlines the access provisions which now operate in Australia, summarises our experience in implementing them over the last six years, and looks at some of the issues which have emerged as a result of this experience. In particular, issues relating to investment have been prominent in the public debate surrounding the Productivity Commission's inquiry.

### **The Rationale for Access Regulation**

Access by firms to essential facilities has been a fundamental element of the competition reform program. Where structural separation of traditional public monopolies was either not possible or not desirable, and where alternative production facilities are uneconomic to develop, access arrangements were the preferred means of achieving competition in the supply of the final product. Without access arrangements, the other elements of competition policy may not have been sufficient to ensure that the benefits of competition were achieved.

Access regimes recognise that owners of infrastructure facilities may have substantial market power and so be in a position to distort competition in that

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market and related markets. Where they are vertically integrated into competitive upstream or downstream markets, service providers may have incentives to restrict competitor access to the services of the facilities in those markets, or to offer terms and conditions of access which discriminate against them. Even when services are vertically separated, the service providers may be in a position to use market power to charge unnecessarily high prices at the expense of consumers and economic efficiency.

The circumstances in which effective competition may not emerge in a market, despite the existence of general competition regulation, are well-documented. They include:

- So-called ‘natural monopolies’, where a single operator can produce a product or service at lower unit cost than a number of competing operators. More broadly, significant market power issues may also arise where economies of scale and scope create barriers to entry and limit the number of firms that can operate viably in a market. In such cases, it would be uneconomic for a potential competitor to develop another facility to provide the service.
- Production processes characterised by ‘lumpy’ and sunk investments. An investment is lumpy if capacity can only be added economically in large increments. It is sunk if it cannot readily be converted to another use. The combination of these characteristics can deter entry and constitute a source of market power.
- ‘Essential’ or ‘bottleneck’ facilities, where the owner is vertically-integrated with potentially competitive activities in upstream or downstream markets. In such circumstances, the potential to charge monopoly prices may be combined with an incentive to inhibit competitors’ access to the facility, with clear anti-competitive effects.
- Network externalities, which increase the value of a network to its customers and operators as more customers are added. This may confer substantial competitive advantages on large operators and act as a barrier to entry.

Australia’s relatively small markets and dispersed population mean that natural monopoly characteristics are present in most physical distribution networks. While technological change is breaking them down in significant parts of some markets (such as telecommunications), in others (such as power distribution and transport networks) they are likely to persist indefinitely.

Where public monopolies were state-based, the introduction of competition generally required the provision of access to essential facilities by operators based in other states. Cross-jurisdictional access issues are complex. An important objective of the access regime was to ensure that, wherever possible, cross-jurisdictional issues were managed in a consistent and transparent manner.

Australia’s trade practices legislation contains general provisions concerning the abuse of market power (section 46) covering such practices as refusal to supply and predatory pricing (see Miller, 2001:262-82). The public policy debate

that preceded the introduction of the access regime focused on the extent to which those provisions provided a sufficient basis for regulating access to essential facilities. It was concluded that, for a number of reasons, s.46 could not adequately address the access problem.

### **Australia's Access Regimes**

A number of industry and facility-specific access regimes had operated for some time before 1995, including in telecommunications and gas. However, the access regime established by the *Competition Policy Reform Act 1995* went well beyond these in providing for the first time an access-specific legislative base with comprehensive coverage. The general provisions were inserted into the Trade Practices Act as a new Part (IIIA) and the telecommunications-specific access regime was established by Part XIC.

Part IIIA attempts to balance the interests of service providers against the interests of service users. The access provisions apply to firms with natural monopoly characteristics that are sometimes vertically integrated and part of network industries. They extend to both privately and publicly owned firms. The regime is intended to be light-handed, and provides for commercial negotiation of access terms and conditions in the first instance. Where access disputes cannot be resolved by the parties themselves, the regime provides for arbitration by the ACCC. The regime includes provision for the enforcement of access determinations and prohibitions on hindering access to a service. Enforcement action is taken in the Federal Court.

The access provisions relate to a range of facilities of national importance. As a single facility may provide a number of services, only some of which may be relevant to the competition objectives, the legislation focuses on services rather than facilities.

Part IIIA provides three mechanisms by which a business, organisation or individual can gain third party access or have third party access available to it. There is a *potentially compulsory process* under which individual businesses or organisations can seek declaration of a service by the designated Minister. Once declared, a service is effectively regulated, and arbitration is available if the parties cannot agree on any aspect of access. Alternatively, access may be available as a result of a *voluntary process* whereby a service provider can offer the ACCC an undertaking that sets out the terms and conditions on which it will offer third party access, and which the ACCC may accept. Finally, there may be State and Territory government laws regulating access which can be deemed 'effective' in terms of their compliance with national policy criteria for access laws.

Any person can apply to the National Competition Council for a recommendation to the Minister that a service should be declared. In making a recommendation, the NCC must be satisfied that a service satisfies a number of criteria:

- a) That access (or increased access) to the service would promote competition in at least one market (whether or not in Australia), other than the market for the service;
- b) That it would be uneconomical for anyone to develop another facility to provide the service;
- c) That the facility is of national significance, having regard to the size of the facility or its importance to constitutional trade or commerce or to the national economy;
- d) That access to the service can be provided without undue risk to human health or safety;
- e) That access to the service is not already the subject of an effective access regime; and
- f) That access (or increased access) to the service would not be contrary to the public interest.

Part IIIA also sets out broad criteria which the Commission is required to take into account in determining terms and conditions of access (including pricing). These include:

- a) The legitimate business interests of the provider, and the provider's investment in the facility;
- b) The public interest, including the public interest in having competition in markets (whether or not in Australia);
- c) The interests of all persons who have rights to use the service,
- d) The direct costs of providing access to the service;
- e) The value to the provider of extensions whose cost is borne by someone else;
- f) The operational and technical requirements necessary for the safe and reliable operation of the facility; and
- g) The economically efficient operation of the facility.

The Commission may also take into account any other matters that it regards as relevant.

Since the enactment of Part IIIA, a number of sector-specific arrangements for access have also been developed. These regimes reflect the broad access regulation framework embodied in Part IIIA, but have been further refined to reflect the different technologies, market arrangements, ownership structures and historical regulatory experience of each sector.

### *Telecommunications*

A substantial number of reforms have been implemented in the telecommunications market over the last decade, including the introduction of open entry to the market in 1997 (see ACCC, 2001b). The access regime has been a critical component of those reforms.

A limited access regime was in place for telecommunications well before the implementation of Part IIIA. The current telecommunications access regime (Part XIC) was enacted following deregulation of entry into the telecommunications market in July 1997. Consequently, the telecommunications access regime differs in a number of respects from the Part IIIA provisions. It applies a somewhat different test for service declaration (promotion of the long-term interests of end-users, or LTIE test), empowers the Commission itself (rather than the NCC and the relevant Minister) to conduct declaration inquiries and make decisions, and — because telecommunications are a Commonwealth responsibility — does not require Federal-State co-regulation.

A number of key telecommunications services that were already being provided were ‘deemed’ to be regulated in 1997. These services included access to services provided by fixed networks, which can be used to provide long-distance, international and fixed-to-mobile calls, access to services provided on mobile networks, and access to high bandwidth transmission services. The Commission also extended the scope of telecommunications access regulation to broadcasting services over cable networks at that time.

A number of additional telecommunications services were subsequently regulated by the Commission, following a public inquiry in each case. The Commission has recently deregulated some inter-capital transmission services and is now considering whether to deregulate the resale of local calls in central business districts. In both these services, there is evidence that competition has increased over time, so that declaration may no longer be considered to promote the long-term interests of end-users.

### *Airports*

Like telecommunications, airports are a Commonwealth responsibility and also have a different declaration process than that set out in Part IIIA (see ACCC, 2000:89-96). Services that are necessary for civil aviation operations at an airport and are provided by facilities that cannot be economically duplicated are covered by the access regime. This includes services covered by the price cap as well as freight handling, road access and possibly domestic passenger terminals. Terms and conditions of access to declared services are negotiated between facilities owners and access seekers, with arbitration by the ACCC if negotiations fail.

In addition, and following privatisation of all the major airports except Sydney, the Commission administers a price cap regime for aeronautical services. The services include the provision of certain aircraft movement areas (such as runways and aprons) and passenger processing facilities (such as aerobridges and departure lounges). The price cap allows charges to increase at the general rate of

inflation minus a component for productivity improvements (commonly referred to as CPI minus X). Within the overall cap, airport operators have significant flexibility to structure their charges. Scope is also provided for airport operators to increase prices to fund necessary new investment without affecting their price cap compliance, following assessment by the ACCC.

### *Electricity*

The National Electricity Market (NEM), which commenced operation in 1998, operates as a compulsory pool and is governed by the National Electricity Code (NEC). This code was developed jointly by industry, government and regulators in the participating States and Territories, and includes an access regime. The regime is based on the principle of non-discriminatory access for upstream generators and downstream retailers, with NEC provisions specifying connection and augmentation procedures and the methodology for network revenues and prices. The ACCC approved the NEC's access arrangements in the form of an industry code. In accordance with this approval, providers of network services submit an undertaking showing that they will comply with the access provisions.

Under the NEC, the ACCC is the regulator of transmission access and revenues (see ACCC, 2000:66,75-77). The state regulators have jurisdiction over distribution and retail pricing. Some elements of technical regulation (including safety) also reside with state regulators.

### *Gas*

Broad reforms have been introduced into the natural gas market since 1994 (see ACCC, 2000:63, 66-67, 77-84). The success of these reforms to date has been limited by the failure to achieve competition in gas production. However, access arrangements were set in place early in the process and provide a framework for access to transmission and distribution facilities.

As in electricity, the access arrangements for gas are defined in an industry code jointly developed by the industry, gas users, government and regulators. The Council of Australian Governments (COAG) committed to the National Third Party Access Code for Natural Gas Pipeline Systems (the Gas Code) in 1997. Gas pipeline access regimes for each state and territory are currently being assessed by the NCC to determine whether they are to be certified as effective access regimes under Part IIIA. The COAG agreement also listed a number of gas pipelines that were deemed to be covered under the Gas Code.

The ACCC is the nominated regulator of third party access to gas transmission pipelines in all states and territories except Western Australia (WA), where the state-based regulator has responsibility for both transmission and distribution. In this capacity, the ACCC is responsible for:

- evaluating access arrangements for transmission pipelines (including, among other things, assessing the scope of the services being offered, determining reference tariffs and assessing compliance with ring-fencing requirements);

- assessing revisions to access arrangements;
- monitoring and enforcement;
- resolving disputes over access to spare capacity or capacity which could be developed;
- approving any contracts between a pipeliner and a related company; and
- approving competitive tendering processes.

### *Rail*

Rail access arrangements are also influenced by a 1997 agreement between the Commonwealth and State governments (see ACCC, 2000:96-99). This agreement provided for the formation of the Australian Rail Track Corporation, whose primary objective was to promote the use of the national rail network by providing a single point of access for rail service providers whose operations cross state jurisdictions. Until then, operators wishing to provide services on the interstate network were required to negotiate access with multiple access providers.

Progress in implementing the reforms has, however, been slow and a national regime has yet to be established. Following a number of inquiries into the sector, the Commonwealth Government has indicated that new regulatory arrangements will be considered if effective access arrangements are not in place later this year.

### **Benefits of Reform**

Australia's experience in regulating access to essential facilities has been brief. Even the longest established of the industry-specific arrangements is only four years old. While it is clearly too early to make definitive pronouncements on outcomes, it is possible to indicate some of the changes that have already occurred.

The benefits of reform can be indicated by the extent to which retail prices have fallen, service quality has improved, consumer choice has increased and new entry or increased competition has emerged. Indicators of the transparency of regulatory processes and the degree of regulatory accountability might also be considered. Of course, these benefits are associated with the reform process as a whole, not just the access regime.

### *Prices*

The telecommunications market has seen rapid falls in most categories of retail charges (see ACCC, 2001a). The price falls were earliest and greatest for services first opened to competition (national long distance and international charges), but are now spreading to local services, mobiles and data and Internet services. Access charges for originating and terminating services on the fixed network have fallen by around half since the introduction of the telecommunications access regime. The consumer benefits from retail price falls alone in telecommunications have been estimated by the Australian Communications Authority at between

\$300 million and \$400 million per year (see Collins, McCutcheon and Osiowy, 2000).

In the electricity market, prices have declined greatly since electricity reform commenced (see Port Jackson Partners, 2000 and ACCC, 2000:69-71). Those States which have implemented the reforms have experienced large price reductions. Both New South Wales (NSW) and Victoria have experienced price reductions of around 50 per cent at the wholesale level, while Queensland has shown smaller, but still substantial, falls. However, South Australia has yet to record any price reduction as a result of reforms. Recently, some upward movement in wholesale electricity prices has been observed, reflecting the gradual take up of excess capacity and, in some instances, more commercially oriented bidding strategies by generators.

These price falls have also represented improvements relative to the rest of the world. Australia's average electricity prices have fallen in absolute terms, while those elsewhere tend to have risen. Australia's electricity prices remain low compared to other industrialised nations.

Gas prices have shown less change than electricity prices during the post-reform period, largely because of the slower progress of the reform process in gas than in electricity. Where gas prices have fallen (for example, in WA), other factors influencing the degree of competition in the upstream market are likely to have been important. In WA, these included competition among a number of gas fields owned by different joint ventures to supply the market, and the disaggregation by the WA government of the single dominant supply contract with the North West Shelf Joint Venture.

The CPI minus X price cap imposed on regulated airports is providing significant benefits for users. The price cap has delivered reductions in landing charges in real terms at all the regulated leased airports. The reductions are expected to be as high as 22 per cent over the five years of the price cap.

The extent of the price falls reflects the achievement of production efficiencies as a result of increased competition and, in some cases, the transfer of above-normal profits from infrastructure owners to their wholesale and retail customers.

#### *Non-price service attributes*

Changes in price must also be seen in the light of various quality changes associated with the reforms, and relevant indicators vary across the industries. For example, in telecommunications the Australian Communications Authority publishes an annual *Telecommunications Performance Report* and quarterly *Performance Monitoring Bulletins*, providing very detailed and comprehensive information on non-price service attributes. In other industries the risk of short-term price and supply fluctuations has also been reduced as competition has introduced alternative sources of supply. For example, the National Electricity Market allows for vesting contracts and an active bilateral market permitting retailers to hedge load obligations. Such arrangements are likely to avoid the



emergence of problems such as those recently experienced in California, where retailers buying their electricity in the wholesale market at variable rates, but selling at capped rates, found that tight supply and the recent rise in fuel prices had combined to force wholesale prices above retail prices.

#### *Consumer choice*

Most telecommunications customers now have the choice of several providers for a number of telecommunications services. Multi-utility operators are emerging in several telecommunications and energy markets, and are planning to offer bundled service packages to consumers in attractive pricing deals.

Retail contestability has been achieved for medium to large industrial and commercial electricity customers in the National Electricity Market, and full retail contestability is scheduled for the end of 2002. Retail contestability for gas customers is expected to be implemented in NSW and Victoria later this year.

#### *Other pro-competitive developments*

In some industries, the introduction of access regulation has coincided with structural reforms. Structural reforms, particularly vertical separation, reduce the inherent disincentives for denial of access and improve the ability of the market itself to generate good outcomes with limited direct involvement from the regulator.

Structural separation of electricity generation, transmission and distribution functions has occurred in all states and territories in the National Electricity Market, although in some states facilities remain in government ownership. Government-owned gas transmission and distribution activities have also been separated in all states, while legislation requires ring-fencing of activities in privately-owned firms in all states. Rail track access and freight activities have also been structurally separated in all states.

The incumbent telecommunications operator, Telstra, has not been required to separate its carriage services from its other functions. Consequently, access arrangements are particularly important in that sector. The Productivity Commission's terms of reference do not extend to consideration of structural separation of Telstra, although it is considering accounting separation and has suggested a legislated pricing principle requiring non-discrimination between inside and outside access seekers (see Productivity Commission, 2001b:10.17).

In some markets, technological and service innovations have also coincided with the introduction of access regulation. This is particularly the case in telecommunications, where the development of high-bandwidth capabilities, wireless technologies and providers capable of offering telephone, television and data services in bundled packages are changing cost structures in a number of markets. In such cases, the forces for change have compounded, and outcomes cannot easily be attributed to any individual factor.

### *Processes*

Translating the legislative principles into operational access regimes has produced its own challenges. Some of the problems are inherent in the regulatory task. Others reflect the particular characteristics of the regulated markets.

In particular, regulators face difficult trade-offs between the simplicity and timeliness of decisions, and ‘getting the decision right’. Delays in reaching decisions increase uncertainty over regulatory outcomes which influence major market parameters. However, decisions concerning pricing, rates of return and other financial indicators generally require close scrutiny of detailed cost and other information, as well as a good understanding of the technical aspects of production, interconnection and distribution. Errors in such decisions may be costly to market participants and, if they are of sufficient magnitude, may even compromise the longer-term benefits of the reforms. Where limited regulatory intervention is required, this is unlikely to be a concern. Unfortunately, our experience in telecommunications, where access providers and access seekers have frequently been unable to reach commercial agreements concerning the terms and conditions of access, has meant that the Commission has been required to arbitrate a large number of access disputes and so has become the *de facto* price-setter for a number of major access services.

### **Regulation, Operational Efficiency and Investment**

Access regulation influences market structure, constrains market behaviour and, in many cases, establishes the terms and conditions on which business is done in a market. Regulation can alter the ability of firms to invest in an industry and the returns they can expect from doing so. Regulations concerning the price at which services must be traded are particularly relevant to the investment decisions of both access providers and access seekers, and can have a potentially significant impact on the level and mix of investment in affected industries.

In exercising its responsibilities, the Commission has been particularly concerned to ensure that its pricing determinations not only provide positive incentives to improve efficiency, but also appropriate disincentives for inefficiency and poor service quality. Prices based on firms’ actual costs do not necessarily deliver such incentives.

Incentive regulation, as applied by the Commission, works on two levels. First, it encourages operators to reduce their costs in any given regulatory period. If the provider realises cost savings in that period, it retains those savings. Second, where revenue caps operate to restrict revenue per unit of output, an operator who is able to increase volume above the forecast level is able to retain the benefit of that market growth. The overall effect is to encourage operators to maximise profits by making efficiency gains and growing the market. These gains can then be shared with consumers in the longer term.

With these issues in mind, the Commission has adopted a ‘building block’ approach to pricing determinations in a number of regulated industries. Under this

approach, forecasts are made of the cost of service over the regulatory period and total revenue is calculated as the sum of the return on capital, depreciation, and operating and maintenance expenditure. However, determining the individual elements of the 'building block' raises significant issues with respect to providing service providers with a fair and reasonable return, while at the same time promoting economic efficiency.

Taxation and the treatment of depreciation have been two particularly difficult questions. The Commission has consulted widely on its approaches to these matters. It has concluded that its approach to regulatory assessments should be tax-inclusive, and based on a post-tax framework which provides a nominal return to equity invested. The Commission believes that weighted average cost of capital (WACC) determinations are better understood by financial markets when expressed in post-tax, nominal terms than the pre-tax real terms.

The Commission has also proposed the use of a competitive depreciation profile, allowing a smoothing of revenue paths to avoid inter-generation pricing disparities and adjustments to reflect the impact of future potential stranding of assets. This approach is preferred to traditional linear depreciation schedules, as it links the long-term depreciation profile to a measure of the rate of technological change, minimises price distortions caused by inter-generation price shocks over time and minimises potential geographical price distortions linked to the age of assets serving neighbouring systems.

In telecommunications, the concept of efficient forward-looking costs has been applied. For services provided by the public switched telephone network, the Commission models 'total service long run incremental cost' for the purpose of determining terms and conditions of access to declared services in the public switched telephone network (PSTN). Again, critical elements of these costs, including efficient network configuration, depreciation and approaches to risk have raised difficult issues, on which the Commission has sought expert advice and engaged in extensive consultation. Access pricing in telecommunications also illustrates the breadth of the constraints under which the Commission operates. In particular, nearly half of the price for access to the PSTN is an 'access deficit contribution' included to assist Telstra in recouping the loss it makes on providing line rentals, the prices of which are restricted by retail price controls.

The claim is frequently made that the Commission's pricing determinations do not provide sufficient return to investors and are restraining the development of new infrastructure. This has been a particular concern in the Productivity Commission's inquiries into the operation of Parts IIIA and XIC. As the Productivity Commission notes, this is a difficult issue because it is necessary to establish the counterfactual — that is, what would have been the level and pattern of investment in the absence of the regulation?

With respect to rates of return, work was recently commissioned from National Economic Research Associates (n/e/r/a, 2001) to assess regulatory levels of WACC set in other jurisdictions. While such international comparisons must be interpreted carefully, the n/e/r/a study did not provide any evidence that the Commission has been setting relatively low rates of return.

With respect to investment volume, evidence assembled by the ACCC shows that investment in regulated industries has continued at robust levels, and, on the surface, is not the cause of any immediate concern. For example, new electricity generation facilities have been brought online in Queensland and Victoria. A major new gas pipeline is operating in Eastern Australia. Major new investments are being undertaken at a number of regulated airports.

In telecommunications there is evidence of strong investment by both Telstra and by new entrants. This is detailed in the ACCC's response to the Productivity Commission's Draft Report, available on the Productivity Commission's web-site. Perhaps if the record had been one of falling or even static investment by Telstra, the extent of the Productivity Commission's concern could have some basis. As it stands, it is difficult to accept the Commission's claim of being 'unable to determine' whether investment has been damaged 'so far'. It clearly has not been. When the record on the flow of investments outside of Telstra is examined, there is evidence of strong investments especially in mobiles, fibre optics, xDSL, and LMDS. This is based on information gathered in a recent survey of more than 50 carriers conducted for the ACCC by BIS Shrapnel (2001).

## **Conclusion**

The effectiveness of access regulation, as for all regulation, must ultimately be judged by its outcomes. Consequently, the Commission has adopted a watchful approach in an effort to ensure that regulation continues to secure the objectives required by the legislation. In our experience, where difficulties have arisen, they appear largely transitional in nature, or are the result of factors outside the access regime itself. In some cases, the Commission has suggested amendments to the operational arrangements that may enable them to achieve their objectives in a faster, more cost-effective and transparent way. Further, the ACCC has been an active participant in the year-long debate surrounding the Productivity Commission's inquiries.

The reasons for intervening in the industries covered by this paper — gas, electricity, telecommunications, airports and rail — is that there is natural monopoly power that would lead to unsatisfactory outcomes in its absence. In general, the Commission is satisfied that the framework for access regulation laid down in the legislation and codes appears to be robust, and that its approaches to declaration and coverage and to access pricing balance the interests of suppliers and consumers and provide the right incentives for efficient industry development.

In contrast to this view, those with an interest in weakening the access regime have expended vast resources in their quest to avoid coverage and to have the ability to charge much higher access prices, including in their approaches to the Productivity Commission. The view the ACCC has put to the Productivity Commission is that, while the regimes are still in a fairly early stage, the Commission's experience does not suggest that they require fundamental revision of either the tests for declaration or coverage of facilities essential to fostering competition or the procedures for the setting of access charges. In the ACCC's

view, a strong enough case has not been made for basic changes to a regulatory structure that has appropriately enhanced the well-being of Australians.

## **References**

ACCC (2000), *Annual Report 1999-2000*, AusInfo, Canberra.

ACCC (2001a), *Changes in the Prices Paid for Telecommunications Services in Australia 1996-97 to 1999-2000*, Melbourne, April.

ACCC (2001b), *Infrastructure Industries Telecommunications*, Melbourne, May.

BIS Shrapnel (2001), *Telecommunications Infrastructures in Australia 2001*, Research Report prepared for the ACCC, Melbourne, July.

Collins, P., M. McCutcheon and E. Osiowy (2000), *Benefits to Consumers of Telecommunications Services in Australia 1995-96 to 1999-2000*, Report prepared for the Australian Communications Authority.

Miller, R. (2001), *Miller's Annotated Trade Practices Act 2001*, 22<sup>nd</sup> edition, LBC Information Services, Sydney.

National Economic Research Associates (2001), 'International Comparison of Utilities Regulated Post-tax Rates of Return in North America, the UK, Northern Ireland and Australia', Report prepared by n/e/r/a for the ACCC, Sydney, March.

Port Jackson Partners (2000), 'Australia's Energy Reform: An Incomplete Journey', Report to the Business Council of Australia, 14 March.

Productivity Commission (2001a), 'Review of the National Access Regime', Position Paper, Canberra, March.

Productivity Commission (2001b), *Telecommunications Competition Regulation*, Draft Report, Canberra, March.

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## **Community Participation in Pollution Control**

**Ian Wills**

**R**egulation of pollution requires direct contact between the regulator and polluting firms, but direct involvement of affected citizens is uncommon. This may lead to inefficiencies where local pollution impacts are (or are perceived to be) severe, local circumstances differ, and government regulation does not adequately account for local circumstances, knowledge and preferences. In such cases, efficient pollution control may require direct communication between the firm, the community and the regulator.

In recent years the Victorian Environmental Protection Agency (EPA) has introduced Environment Improvement Plans (EIPs). EIPs are comprehensive strategies to improve an industrial company's environmental performance, drawn up in consultation with the EPA and the local community. Companies publicly commit to continuous improvement, to the community's right to know, and to community involvement in ongoing monitoring and review of industry plans and operations. EIPs involve the formation of community liaison committees (CLCs), including industry site managers, community members and EPA staff, to undertake the reporting, monitoring and review processes. EIPs operate alongside, and are intended to reduce the need for, the EPA's statutory enforcement powers (EPA, 1993).

Victorian EPA staff believe that communication of different industry, community and EPA perceptions of the risks attached to proximity to industrial sites is one important justification for the creation of CLCs (EPA, 1998). There is an extensive literature on lay perceptions of the risks associated with the use of modern technologies for human purposes, and their implications for communication and management of risks in modern democratic societies (see, for example, National Research Council (NRC), 1996; Presidential-Congressional Commission on Risk Assessment and Risk Management, 1997; The Royal Society Study Group, 1992).

This paper explores possible justifications for community participation in pollution control decisions and the circumstances where it is most likely to be socially advantageous. Inadequate communication of knowledge and perceptions between resource users, affected communities and regulators may also occur in the regulation of other forms of environmental degradation (for example, salinisation due to vegetation removal). Thus many of the arguments about community participation presented in the paper are expected to apply to environmental protection measures other than pollution control, although no such generalisations are made in this paper.

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The paper proceeds as follows. Ways in which information can be distorted in regulation involving bilateral dealings between the regulator and firms are considered. Risk analysts' findings about lay perceptions of risks are reviewed, and their implications for information exchange in pollution control considered. Evidence concerning the gains from community participation at industrial sites in Victoria is examined. After a brief review of different approaches to community participation, information from the preceding sections is combined in a summary of the possible advantages and problems of community participation in pollution control, and the situations where it is likely to work best. There is no intention to pass judgement on community participation — the concluding section assesses its possible value as a means of communication and coordination between polluting firms, communities and regulators.

### **Information Problems with Government Regulation**

Government regulation of pollution in a modern democracy involves extensive transfers of information between parties. At a minimum, information must pass between emitters, the regulator (EPA), scientific experts, elected legislators and those community members who perceive harm from pollution. The longer the chain of information transfers, the greater the chances of information gaps and of distortions of information and parties' incentives along the way. There are several ways in which information and incentives can be missing and/or distorted when polluting firms and the regulator have no direct contact with pollution sufferers:

- Cognitive distortions regarding firms' and sufferers' and the regulator's aims and circumstances may prevent satisfactory resolution of differences between polluters and sufferers. For example, local communities may fail to appreciate technical and labour relations constraints impeding rapid emissions reductions, and firms and the regulator may be poorly informed about risk perceptions in the local community. Such distortions of information specific to pollution problems may be exacerbated by parties' ignorance of other groups' culture and learning processes. For example, most community members and many EPA staff may know little about firms' internal organisation, staff routines and culture. Yet to reduce emissions firms often have to adjust organisation, routines, monitoring and reward/penalty systems; the extent of such intra-firm adjustments will affect the rate and costs of emissions reductions.
- Some types of information about pollution and its impacts, such as fatality and injury rates and dollar values of material damages, are more readily and accurately quantified and communicated than others, such as scientific uncertainty about hazards, citizens' fears and insecurities and the contexts in which possible harms arise. Non-quantifiable characteristics of environmental harms are more likely to get filtered out when pollution regulation is in the hands of technical and economic experts (NRC, 1996).



However, as discussed below, such characteristics of pollution may be important components of citizens' welfare.

- Intermediaries in the regulatory process, including legislators and bureaucrats, being generally physically and contractually remote from polluters and pollution sufferers, often have the ability to pursue goals other than maximising net benefits to polluters and sufferers. Where this is the case, there may be further information filtering on the basis of the decision maker's self-interest.

Recognition that distortions of information occur along the chain of information transfers between polluters and pollution sufferers is likely to increase firm, community and regulator uncertainty about the possible outcomes of pollution control measures. Put another way, asymmetric information between the parties is likely to multiply the possible outcomes for any one party in the multiplayer pollution control game.

### **Lay Risk Perceptions**

When questioned directly about their perceptions of technological hazards, laypersons typically report that their feelings are dependent on multiple characteristics of the risks associated with those hazards. People's judgments about natural and technological hazards are based on both their quantitative (such as fatality rates) and qualitative (such as the voluntariness of exposure) characteristics (NRC, 1996:61-66; Slovic, 1992; The Royal Society Study Group, 1992:101-08). Particular risk attributes may have different significance for different people. In particular, scientific or other experts are generally more concerned with quantitative characteristics than are laypersons.

Qualitative risk characteristics of major (adverse) concern to lay people include involuntary exposure, uncontrollability, non-observability, not being known or understood, delayed effects, threats to future generations, fatal consequences, catastrophic potential (in terms of number of victims per incident), and unequal distribution of benefits and costs (American Chemical Society, 1998:30-32; NRC, 1996:61-64). Slovic (1992) and his co-workers group these qualitative characteristics into two dimensions; the degree to which a risk is perceived or known or understood, and the degree to which it is uncontrolled and evokes perceptions of dread (fear) and catastrophe. Hazards creating risks which are unknown, uncontrolled and dreaded are of the greatest concern to laypersons. Slovic (1992:124) points to public attitudes to nuclear power following the reactor accident at Three Mile Island in the USA in 1979 as an example of factors other than injury, death and property damage imposing enormous costs on industry.

Many risk analysts believe that laypersons' concern with qualitative characteristics of the risks of modern industrial technologies is tied to perceptions of the allocation of the risks and benefits of technologies in modern industrial societies. Wynne (1992:282) sees lay concerns with hazard attributes such as involuntary exposure, uncontrollability and being unknown as surrogates for

public concern about the inaccessible and non-negotiated nature of collective decision-making processes. Leiss and Chociolko (1994:2) make a similar point when they describe risk controversies as:

... rooted in the fear of falling victim unfairly to uncompensated loss ...  
when their (the general public's) exposure is involuntary.

In other words, members of the public frequently see themselves as subject to negative externalities when government and private organisations initiate risky projects, and frequently do not trust government or private organisations to inform them about all the possible associated hazards, or to obtain their *ex ante* consent by offering some form of compensation.

The distinction between the more quantitative characterisation of hazards by experts and laypersons' greater concern with qualitative characteristics raises the question: Are the experts right and the laypersons wrong? Today, almost all risk analysts would answer no, on the grounds that judgments and value-based choices are involved in all concepts of risk — all characterisations of risk, expert and lay, are to some extent subjective (The Royal Society Study Group, 1992:94-98). The National Research Council (NRC, 1996:38) in the USA puts it this way:

... the concept of risk helps people to interpret and cope with the dangers and uncertainties of life, including but not limited to the prospect of physical harm, and that concept is shaped by human minds and cultures. That is, there are many different kinds and qualities of dangers and many potentially useful ways of making sense of them, and even though many of these are measurable in principle, it is judgments and values that determine which ones are defined in terms of risk and actually subjected to measurement.

Not only do all understandings of risk have subjective content, but since the people who perceive risk are social beings living and working in communities governed by social and cultural norms and with particular histories, perceptions of risk are in part determined by culture and the social circumstances of the particular community (also see Jasanoff, 1999; Rayner, 1992; The Royal Society Study Group, 1992:111-14). Recent studies of risk perception suggest the relevant social context can be locality-specific. For example, Walker et al. (1998) report on cases where public awareness and concern about industrial site risks are substantially influenced by past industry-community relationships at the particular site.

The view of risk perception as being influenced by social context and group cultural norms leads many risk analysts to skepticism about expert judgments on risk. These writers point out that expert cultures, and the organisational routines and commercial and political pressures to which experts are often subject, can cause them to ignore or misjudge risks which turn out to be important to society *ex post*, as was the case for the O-ring failures which were the immediate cause of the Challenger space shuttle accident (Vaughan, 1996; Otway, 1992).

## Risk Perceptions and Environmental Policy Making

Now consider some plausible implications of the above risk perception findings for information exchanges and organisational arrangements in environmental policy making, and for the role of economic analysis in policy decisions:

- Experts focus most attention on those consequences of hazards that they can measure, particularly where market or quasi-market valuations permit interpersonal comparisons of possible costs. Thus non-quantifiable and non-monetised attributes of pollution are likely to get less *ex ante* attention in the normal processes of collective choice over pollution control measures, despite their significance to the lay population.
- Experts focusing on the technical aspects of risk assessment emphasised in their professional culture may miss the social impacts of hazardous situations.
- The qualitative attributes of pollution hazards identified as very important to laypersons are not measurable in cardinal terms, let alone valued in markets. Thus they are not communicable between parties concerned about pollution control in ways that permit ready interpersonal comparisons of benefits and costs. In addition, because of the measurement problems, they provide opportunities for strategic distortions of preferences by interested parties.
- If qualitative attributes of pollution hazards are perceived differently by different individuals and groups in society, and difficult to compare across persons, resolution of differences about pollution control measures cannot be achieved by arms-length benefit-cost analysis. It is more likely to be achieved by consultation or negotiation between the parties, and most likely to be resolved by the political process, with or without explicit consideration of community perceptions.
- When dealing with the allocation of the risks and benefits of modern technologies, different interested parties have different access to, and clout in, regular political processes<sup>1</sup>. One issue in regulation of risky public and private projects is lay public rights — rights to information about technologies and the assumptions underlying collective decision processes, and rights of lay participation in choices about the selection and deployment of pollution control measures.

Involving members of the lay public in deliberation over pollution control decision making will add to the resource and time costs involved: lay participants have to be briefed on technical issues, and industry and regulatory participants on lay understandings and concerns; adding participants and issues to the decision

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<sup>1</sup> In the view of Otway (1992:219), the policy establishment and expert peer groups, who generally have ‘the power to define the limits of the system in public discourse also implicitly decide who is being rational. You can quite rationally oppose a technical system that engineers have certified as “safe” if it turns out that their definition of “the system” did not include the things you care about most’.

process increases opportunities for strategic delaying behaviour. On the other hand, attempts to decide an issue on more narrowly-defined technical and legal bases, involving only industry and the regulator, often backfire leading to legal challenges and/or political opposition which can ultimately cause greatly-increased delays and costs. This appears to have been the case in the issue of disposal of high-level nuclear waste in the USA (NRC, 1996:133-37) and in CSR's aborted 1998 attempt to establish a disposal facility for hazardous wastes from the Melbourne area in a former quarry near Werribee (*The Age*, 1998). Risk analysts point out that trust in public and private risk management institutions can be created by investing time and effort in frank communication with the lay public, and that, once achieved, public trust in institutions can substitute for large amounts of costly information exchange (NRC, 1996:115; The Royal Society Study Group, 1992:122-23; Wynne, 1992:277-81).

### **Community Participation under Victorian EIPs**

The first CLC to operate at an industrial site in Victoria was established at the Altona Petrochemical Complex in 1989 (Hardy, 1998). Beginning in the 1960s, several adjacent chemical manufacturing plants were established in the western suburbs of Melbourne to use feedstock from the nearby Mobil Altona Refinery. Up until the 1980s, local residents, although fearful of exposures to the hazardous chemicals used and stored at the sites, and upset at periodic noise, odours and liquid discharges from the Complex, felt powerless to influence industry actions: the chemical industry was very important to the local economy; the command-and-control regulator, the EPA, was seen as remote and slow to respond to complaints, and there was no dialogue between industry managers and the community. In the 1980s, a distrustful local community began to oppose all development proposals at the Complex. The stalemate was broken in 1989 by the formation of the Altona Complex Neighbourhood Consultative Group (ACNCG), comprising industry site managers, residents, and EPA and local government representatives. As reported by Hardy (1998:3):

The '*them and us*' attitude decreased as the industry representatives learned that it was possible to explain technical problems to untrained people (untrained, that is, in chemical engineering) and the residents have learned to focus on the problems at hand. ... (T)here has been a substantial reduction in emissions and other adverse effects from industry and a more responsible attitude now prevails.

According to Unglik (1996:89):

Between 1992 and 1995 \$1.8 billion was invested (in the Altona area) — not a single dollar of which was opposed by the local community. Consequently, companies such as Mobil, Exxon and Toyota were able to feel secure in their investment knowing they had the support of the community ... .

The success of the ACNCG no doubt contributed to the emphasis the EPA places on three-way consultation in the creation of EIPs<sup>2</sup>. There are now about 50 companies participating in EIPs at about 45 industrial sites across Victoria represented on local CLCs. CLCs include one or more representatives from site management(s), the local community and the EPA. CLCs are continuing bodies that typically meet every second or third month throughout the year.

A survey of industry, community and EPA participants in eleven CLCs operating in Victoria in 1999 reports on the information exchanged and participants' views of the gains and costs involved (Wills and Fritschy, 2000). Community consultation resulted in the exchange of much additional information about industrial operations, pollution impacts, pollution control and each other's perceptions and actions. Ninety per cent of respondents reported gains from the consultation process. The major gains were in the forms of better communication and relationships between the three parties and more operational feedback to the firm managers concerned. Few participants felt that consultation involved significant sacrifices, and its benefits were generally seen as far greater than its costs and risks. The major cost involved was the participants' time — time requirements were a major deterrent to greater community participation.

The Victorian survey results suggest that the consultation process commonly leads both community and industry participants to greater understanding of the other side's situation and concerns: in the case of industry, consultation helps industry to recognise the legitimacy of community perceptions and fears about industry and pollution; on the community side, a better understanding of plant operations and the technical and behavioural barriers that firms face in controlling emissions helps to legitimate the technical and economic concerns of industry in the eyes of the community. This interpretation of the survey results is consistent with the views of the NRC (1996:114-16) and Wynne (1992) that an improved understanding of the social context within which others view risks (in this case, the risks stemming from emissions from industrial plants) can help to integrate the different world views of polluters and pollution sufferers. As a result, each is more willing to accept information provided by, and recognise legitimate rights of, the other.

Richer and more credible information exchanges between industry, community and regulator are not the only possible explanation for the observed cases of community participation in pollution control. Other, not mutually exclusive, explanations for ongoing local community involvement include community satisfaction from being involved<sup>3</sup>, regulatory budget constraints, leading to the enlistment of local communities in the monitoring process and, in the case of industry initiatives, industry and company aims to avert stricter

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<sup>2</sup> Details of regular information exchanges and the rights and responsibilities of participants at ACNCG meetings are given in Wills (1998).

<sup>3</sup> As suggested by a referee, laypersons are more likely to feel comfortable when participating in deliberations undertaken in a non-formal and non-hierarchical setting, as opposed to the due process and appeals mechanisms operated by councils and the courts.

regulation and/or reduce local opposition to industrial activities (Simmons and Wynne, 1992; Maxwell, Lyon and Hackett, 1999).

### **Disciplinary Perspectives on Community Participation**

Political scientists, sociologists, lawyers and risk analysts have written on, and frequently advocated, more community participation in pollution control decisions in recent years (Lafferty and Meadowcroft, 1996; Renn, Webler and Wiedemann, 1995; Gunningham and Grabowsky, 1998). Two national multidisciplinary reviews of risk assessment and risk management in the US have strongly advocated deliberative approaches to health and environmental risks, by which they mean involving all interested and affected parties in all stages of the risk assessment and management processes, thereby integrating expert and lay understandings throughout (NRC, 1996; Presidential/Congressional Commission on Risk Assessment and Risk Management, 1997).

Economists generally do not visualise the direct participation of affected citizens in pollution control decisions, as opposed to their indirect involvement as voters. Economic studies of pollution control commonly focus on information exchanges between the regulator and emitter firms<sup>4</sup>. Economic analyses also commonly ignore the obstacles to rapid adjustment in firms and regulatory agencies posed by internal organization, routines and culture. Both firms and the regulator are usually assumed to be 'black boxes', in the sense that changes in legislative directives or market or tax/charge signals will quickly produce adjustment to maximise the agency budget or minimise organisational costs or maximise profits or whatever. For discussion and evidence on impediments to rapid adjustments, see Demsetz, 1995:30-39; Rees, 1994; Steinzor, 1998:122-30).

Only economists writing on facility siting, in particular, public decisions on the siting of facilities to store or dispose of hazardous wastes, appear to have given close attention to the *ex ante* involvement of local communities in pollution control decisions (for example, Kunreuther, Fitzgerald and Aarts, 1993; Frey and Oberholzer-Gee, 1996). Yet, if the risk analysts are right, economists' non-engagement with the issue of community participation may be contributing to a prolongation of the past preoccupation with scientific and technical expertise (including quantitative economics expertise) in the public determination of pollution control measures and associated risk management choices. This is at the expense of lay concerns and, many would add, democratic participation by those most seriously affected by localised industrial pollution.

Modern institutional economics, which allows for costly information and transactions, endogenises the choice of organisations and behavioural rules, both those operating within agencies and firms and those governing their interactions (Eggertsson, 1990). These organisations and rules are determined in the search for

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<sup>4</sup> Open hearings held by the Productivity Commission provide an indirect means of communication between industries, communities and government regulators when regulatory policies are being formulated.

combinations of transactions and production costs and production outcomes (which may include pollution not valued in markets) that will yield the greatest net benefits to those with influence over the choice of organisations and rules (who may not include all affected groups in the community).

Applied to community consultation in pollution control, institutional economics logic would suggest that, in a democracy, the introduction of community participation measures would occur in response to failures of other forms of regulation, such as command and control and economic incentive measures, to achieve commercial and emissions outcomes deemed acceptable by both polluting firms and affected communities. This appears to have been the case in the creation of the ACNCG at Altona, described previously.

### **Advantages and Problems of Community Participation**

The preceding discussion suggests a number of advantages of community participation in pollution control decisions. Community participation can:

- reduce the opportunities and incentives for cognitive and self-interested distortions of information by parties involved in transferring information between polluters and pollution sufferers.
- educate firms, communities and the regulator about the technical and administrative capabilities, organisational and community cultures, values and routines of the others. (The resulting reduction in the asymmetry in the technical and behavioural knowledge possessed by the parties reduces uncertainty for all.)
- reduce mutual misunderstanding and mistrust, born of different lay and expert views about the nature of modern technologies and the reliable functioning of the organisations responsible for operating and monitoring them.
- reduce local community apprehension about pollution risks, since local community participation can increase both knowledge of and feelings of control over hazards.

The discussion also suggests some problems:

- Because major benefits of community participation, reduced misunderstanding and apprehension and reduced uncertainty about others' values, circumstances and possible actions, are qualitative, it will be difficult to assess the benefits, as opposed to the costs, of community participation.
- Community participation in decision-making involves additional time and resource costs. In the Victorian survey, the time involved in CLC participation was said to be a significant disincentive to greater community involvement.
- Limited community and industry (where numbers of small-medium firms are involved) participation may lead to unrepresentative membership. If

participants are not representative, the goals of mutual education and reduction of mistrust among parties may not be achieved.

- If any of the participants, industry, community or regulator representatives, fail to accept the legitimacy of others' perceptions of modern technologies and resulting risks, misunderstanding and mistrust can be exacerbated.
- Informational asymmetries can encourage distortions of technical and commercial information by industry, and of preferences by the community.
- Local community participation at particular sites could impact adversely on non-local communities not represented in the consultation process.

Where might community participation work best, in two senses: first, both firms and communities being interested in consultation, and second, the benefits of consultation being most likely to exceed its costs?

- Firms and communities will be more interested in dialogue if each has some actual or potential control over assets that the other values — in Williamson's (1983) terms, each must have hostages in the hands of the other. In the case of the Altona Petrochemical Complex in Victoria, which led to the prototype CLC in Victoria, firms' actions affected the value of local citizens' homes, and the local community had the political clout to veto, or at least seriously delay, firms' development plans. In these, as in other circumstances where the parties expect repeated interactions in the future, each party has more reason to rely on information supplied by the other.
- The greater the geographic spread of emissions, the greater the costs of regular consultation. The case for affected community participation is stronger the more local circumstances (including past industry-community relationships) differ, the more emissions are geographically concentrated and the more severe the emission impacts.
- Since information transmission under non-participatory regulation may filter out non-quantifiable characteristics of pollution impacts that are of major concern to citizens, such as the degree to which pollution impacts are borne involuntarily, are unknown and are unobservable, the case for community participation is stronger where pollution has such characteristics. It follows that, in general, communities will benefit more from consultation focussing on unknown and unpredictable industrial accidents than on known emissions resulting from normal plant operations.
- Unequal political access may filter out the concerns of those with less political influence. Thus there is a stronger social welfare case for sufferer participation where pollution impacts are disproportionately borne by such groups.

### **A Provisional Assessment**

A recent paper in this Journal called for more critical assessment of public consultation processes in public policy development in Australia (Kerley and



Starr, 2000). Kerley and Starr point out that it is extremely difficult to identify all those affected by major government policy proposals, that often only organised interests (and more often the losers than the winners from policy changes) can be identified and respond, and that effective public consultation takes time and involves shared responsibility. One result is that public consultation requirements can lead to a loss of governments' will to initiate change. Another is a substantial public relations component in many consultation exercises, leading to cynicism on the part of many of those affected.

At least some of the frustration with modest results from public consultation stems from the need for a clear focus on additional information exchange between the parties (including information about the veracity of others), as opposed to creating fora for public relations exercises. This is the case for Victorian CLCs, where representation is confined to locals and organisations with environmental regulatory responsibilities at industrial sites, and outsiders and the media only have access to proceedings by common consent of the participants. In these circumstances, local consultation may be the most effective means of communicating information about what we might, paraphrasing Hayek, term 'the particular circumstances of time and place and society' in respect of pollution and other environmental problems. Kerley and Starr report (2000:190) that involving affected communities in change processes has been more successful in the case of small communities represented by locally-based groups.

The experience of the ACNCG (Hardy, 1998) and the results of the Victorian survey of CLCs suggest that the most valuable information from consultation is information that helps decision makers to identify others' possible actions and the possible consequences of actions. Costs of decision-making under uncertainty are reduced because information about the values and circumstances of others enables industry managers, local residents and the regulator to formulate simpler and more specific decision and event trees. Also, to the extent that managers, residents and regulatory decision makers are risk averse, they will benefit from the reduced uncertainty. However, while it is in principle conceivable that decision makers could estimate many of the resulting time and cost savings *ex post*, this seems almost impossible in practice.

There is also a conceptual barrier to benefit-cost analysis of community participation in pollution control. Effective community participation realistically implies some change in rights to information and to control the use of natural resources. Thus, strictly speaking, it is not possible to compare the economic efficiency of pollution regulation with and without community participation; when rights change, the identity of the people whose efficiency judgements count changes, and so what is judged efficient may also change.

Otway (1992), Wynne (1992) and Leiss (1994:chapter 2) emphasise the importance of rights and control in decision-making. Leiss argues (1996:52) that the initiators of risky activities 'have a direct interest in under-assessing and under-estimating risks so as to maximise net benefits to themselves.' Lay recognition of this possibility is one reason for the wide advocacy of public consultation in cases of LULUs (locally unacceptable land uses) such as hazardous waste facility siting.

Recall that the creation of mutual trust between regulators, industry and the public is likely to be a very important product of community participation (Walker et al., 1998:s.2.3). Since trust involves 'a willing acceptance of vulnerability' (p. 11), the creation of mutual trust implies a shift in control towards local communities, which renders industry and government vulnerable to the decisions of communities, as well as communities being vulnerable to the decisions of industry and government. Given the historic reliance of industry and government on expert and political judgements, their scepticism about lay rationality, and the time and resources required for effective public participation, relinquishing some control to communities is no small matter. On the other hand, if the lay public trusted industrial firms and the relevant government agencies to always act in the public interest, to observe the best possible technical and safety practices, and to communicate fully on these matters, the public's qualitative concerns about industrial risks, and consequent barriers to industrial development, would be reduced. This appears to have been the case at Altona, and could be the most important product of community consultation measures.

Economists, as a rule, ignore culture and the behavioural norms and organisational routines that flow from culture within organisations and communities. However, the modern literature on accidents emphasises the importance of routines and culture in understanding the causes of accidents (see, for example, Perrow, 1984 and Vaughan, 1996). Where pollution is the result of industrial accidents, as is commonly the case for localised hazardous pollution, behaviour which is *ex ante* economically-sensible in normal operational circumstances is sometimes pathological. In these circumstances, a possible advantage of community participation in local pollution control, one which is unlikely to figure in any conventional economic analysis, is that it requires the firm and the EPA to consider the views of outsiders, people with specific local knowledge who are much less likely to accept firm and EPA operational norms and routines.

Pollution control is a social coordination problem, requiring exchange of information between the parties concerned and incentives to provide true information and to respond to the concerns of others. If it is too difficult to measure the additional benefits and costs due to a switch to local community participation in pollution control, it will still be useful to study the information-generating and incentive effects of institutions involving community participation in local pollution control, both in principle and as they exist in the real world.

## References

- Demsetz, H. (1995), *The Economics of the Business Firm*, Cambridge University Press, Cambridge.
- Eggertsson, T. (1990), *Economic Behaviour and Institutions*, Cambridge University Press, Cambridge.

- Environmental Protection Agency (1998), *Strategic Approaches to Community Participation: Theoretical and Practical Perspectives*, unpublished, July (Working Paper).
- Environmental Protection Agency (1993), *Enforcement Policy*, Publication 384, EPA, Melbourne.
- Frey, B., and F. Oberholzer-Gee (1996), 'Fair Siting Procedures: An Empirical Analysis Of Their Importance And Characteristics', *Journal of Policy Analysis and Management* 15:353-76.
- Gunningham, N. and P. Grabowsky (1998), *Smart Regulation*, Clarendon Press, Oxford.
- Hardy, N. (1998), 'The Altona Complex Neighbourhood Consultative Group', unpublished, ACNCG.
- Jasanoff, S. (1999), 'The Songlines of Risk', *Environmental Values* 8:135-52.
- Kerley, B. and G. Starr (2000), 'Public Consultation: Adding Value or Impeding Policy?', *Agenda* 7:185-92.
- Kunreuther, H., K. Fitzgerald and T. Aarts (1993), 'A Test of the Facility Siting Credo', *Risk Analysis* 13:301-15.
- Lafferty, W., and J. Meadowcroft (eds) (1996), *Democracy and the Environment: Problems and Prospects*, Edward Elgar, Cheltenham, UK.
- Leiss, W. and C. Chociolko (1994), *Risk and Responsibility*, McGill-Queen's University Press, Montreal and Kingston.
- Maxwell, J., T. Lyon and S. Hackett (1998), 'Self-regulation and Social Welfare: the Political Economy of Corporate Environmentalism', available at [http://papers.ssrn.com/paper.taf?ABSTRACT\\_ID=147888](http://papers.ssrn.com/paper.taf?ABSTRACT_ID=147888).
- National Research Council (1996), *Understanding Risk: Informing Decisions in a Democratic Society*, National Academic Press, Washington, DC.
- Otway, H. (1992), 'Public Wisdom, Expert Fallibility: Toward a Contextual Theory of Risk', pp. 215-28 in S. Krimsky and D. Golding (eds), *Social Theories of Risk*, Praeger, Westport, Conn.
- Perrow, C. (1984), *Normal Accidents: Living with High-Risk Technologies*, Basic Books, New York.
- Presidential-Congressional Commission on Risk Assessment and Risk Management (1997), *Final Report*, (2 vols), available at <http://www.riskworld.com/Nreports/1997/risk-rpt/html/epajana.htm>.
- Rayner, S. (1992), 'Cultural Theory and Risk Analysis', pp. 83-115 in S. Krimsky and D. Golding (eds), *Social Theories of Risk*, Praeger, Westport, Conn.
- Rees, J. (1994), *Hostages of Each Other: The Transformation of Nuclear Safety Since Three Mile Island*, University of Chicago Press, Chicago.

Renn, O., T. Webler and P. Wiedemann (eds) (1995), *Fairness and Competence in Citizen Participation*, Kluwer Academic, Dordrecht, Netherlands.

Simmons, P. and B. Wynne (1991), 'Responsible Care: Trust, Credibility and Environmental Management', pp. 210-26 in K. Fischer and J. Schot (eds), *Environmental Strategies for Industry*, Island Press, Washington, DC.

Slovic, P. (1992), 'Perception of Risk: Reflections on the Psychometric Paradigm', pp. 117-52 in S. Krimsky and D. Golding (eds), *Social Theories of Risk*, Praeger, Westport, Conn.

Steinzor, R. (1998), 'Reinventing Environmental Regulation: the Dangerous Journey from Command to Self-control', *The Harvard Environmental Law Review* 22:103-202.

*The Age* (1998), 'Don't Dump on Werribee', Editorial, 6 May.

The Royal Society Study Group (1992), *Risk: Analysis, Perception and Management*, The Royal Society, London.

Unglik, A. (1996), *Between a Rock and a Hard Place*, Publication 503, EPA, Melbourne.

Vaughan, D. (1996), *The Challenger Launch Decision: Risky Technology, Culture and Deviance at NASA*, University of Chicago Press, Chicago.

Walker, G., P. Simmons, A. Irwin and B. Wynne (1998), *Public Perceptions of Risks Associated with Major Accident Hazards*, HSE Books, Sudbury, Suffolk.

Williamson, O. (1983), 'Credible Commitments: Using Hostages to Support Exchange', *American Economic Review* 74:519-40.

Wills, I. (1998), 'Information Exchange in Pollution Regulation', Paper presented to the 27<sup>th</sup> Conference of Economists, University of Sydney, 28-30 September.

Wills, I. and S. Fritschy (2000), *Industry-Community-EPA Consultation in Pollution Control: The Victorian Experience*, Research Report, Department of Economics, Monash University, May.

Wynne, B. (1992), 'Risk to Social Learning: Reification to Engagement', pp. 275-97 in S. Krimsky and D. Golding (eds), *Social Theories of Risk*, Praeger, Westport, Conn.

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## **The New International Financial Architecture: Bail-ins, Bail-outs, Bail-ups and Newspeak**

**George Fane**

**T**he term ‘bailing in the private sector’ is used to describe several quite different proposals with the common feature that they all seek to make private lenders to developing countries share in the costs of financial or currency crises in these countries. The International Monetary Fund (IMF) regards it as one of the main pillars of the ‘new international financial architecture’ — that is, the package of proposals for reforming the international financial system that is intended to reduce the frequency and severity of financial and currency crises in emerging markets. The other pillars of the IMF’s proposed package are transparency, prudential regulation of financial institutions, cautious liberalisation of international capital markets and the implementation of codes of international best practice for making and documenting economic policies.

There are three main groups of proposals for bailing in the private sector:

1. Governments or central banks in developing countries should explicitly purchase insurance against financial and currency crises from private financial institutions in international capital markets. There are already some examples of developing countries that have negotiated a contingent credit line (CCL) with major international banks that can be drawn down in specified circumstances. Alternatively, some bond contracts might contain clauses that would automatically trigger reduced repayment, or perhaps even increased new lending, in certain specified adverse circumstances for the borrower. The rarity of explicit insurance against financial and currency crises probably reflects the difficulty of defining such crises with enough precision to make insurance contracts legally enforceable. There is broad agreement in econometric studies that financial crises involve widespread bank failures, and currency crises involve both large increases in short-term interest rates and either large losses of foreign exchange reserves, or large exchange rate depreciation, or both. However, these circumstances depend either on subjective judgements, or on variables that could be readily manipulated by a central bank.
2. To make it easier for developing country governments to force private creditors to concede partial forgiveness of debts in a crisis, the IMF should sometimes ‘lend into arrears’ — that is, it should lend to countries that are in default on contracted debt service payments to banks or private bond holders. During the Latin American debt crisis of the 1980s, the IMF refrained from lending to

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countries in arrears to private creditors, but it began to do so in 1989, and further extended the conditions under which it was willing to do so in 1999.

3. The IMF and G-7 governments should promote the use of collective action clauses in sovereign bond contracts.<sup>1</sup> These clauses make it easier for a super-majority of bondholders to overrule objections from the remainder to a proposal by the debtor to reduce, or postpone, contracted debt service payments.

These proposals all seek to make foreign private lenders to emerging markets provide some form of insurance against financial and currency crises, but differ radically in the extent to which this insurance is explicitly contracted for in advance of a crisis. The first group of proposals seeks to encourage the development of market mechanisms that allow countries to buy insurance in advance of a crisis. In contrast, the second group seeks to force private foreign lenders to provide insurance pay-outs in the event of a crisis, despite never having explicitly contracted to do so in advance. The third group contains elements of both the previous ones.

It is argued here that proposals of the first type, which encourage countries to purchase insurance against financial and currency crises, are potentially sensible but are unlikely to achieve much. The effectiveness of such insurance is constrained by moral hazard and by the difficulty of designing contracts that unambiguously specify the event being insured against. There is little that governments or the IMF can do to ease these constraints. In contrast, proposals of the second type, which seek to force private lenders to provide insurance without having contracted to do so have nothing to recommend them. These are the proposals referred to here as 'bail-ups', since in the absence of explicit insurance contracts lenders will not willingly provide insurance. Once bail-ups are anticipated, foreign lenders will demand an interest rate premium for the implicit insurance services that they are being forced to bundle with their loans. The result will be increased borrowing costs for all developing countries and the crowding out of more efficient forms of insurance.

A minor theme of this article is that although the IMF and the other official financial architects regularly describe transparency as one of the main pillars of the new financial architecture, they apparently feel that in the case of their own transparency it is possible to have too much of a good thing. This article gives several examples of lack of transparency in IMF and other official attempts to help developing country governments to renege on private debts. 'Reneging' on a debt is used here to describe what happens when the terms of a loan contract are changed to the permanent disadvantage of the lender. It differs from 'default' only because the lenders may reluctantly agree to proposed contractual amendments if the expected gains from taking legal action to enforce the original contract are less than the expected costs.

Their lack of transparency indicates that the IMF and the other official architects are slightly ashamed of undermining loan contracts between developing

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<sup>1</sup> The leaders of seven of the world's largest and richest countries – Canada, France, Germany, Italy, Japan, UK and USA – meet regularly as the Group of Seven (G-7) to try to coordinate economic policy making.

country governments and private foreign lenders. In order to gloss over the fact that they are doing so, IMF and other official reports use terms like ‘orderly restructuring of debts’, ‘rescheduling of debts’ and ‘temporary suspension of debt service payments’ to describe reneging by governments on their contracted debt service payments. It is logically possible to change the terms of a debt contract without disadvantaging the creditor. But in practice, restructuring, rescheduling and temporary suspension of debt service by countries hit by a financial or currency crisis almost always cause permanent losses to creditors. The reason is that the sovereign risk premiums that markets apply to new loans to such countries are far in excess of the interest rates offered by reneging countries. If the amendments proposed by the debtor were really sufficient to compensate the creditors for all the risks that they face, there would be no need for restructuring, rescheduling, or suspension of existing loans, since the debtor’s cash flow problems could be met by completely new borrowing.

‘Orderly restructuring’, ‘rescheduling of debts’ and ‘temporary suspension of debt service payments’, therefore, are all examples of Orwellian Newspeak. That is, they are jargon invented to camouflage reneging on debts by creating the false impression that lenders do not suffer permanent losses. The term ‘new international financial architecture’, is another example of Newspeak, since it creates the impression that the proposed plans are well designed and structurally sound.

### **Purchasing Insurance Against Financial and Currency Crises**

A 1998 report of the Group of 22 (G-22)<sup>2</sup> proposed that sovereign bond issues should contain clauses requiring bondholders to accept reduced repayments, or even provide new loans, in specified adverse circumstances for the debtor country. In effect, such clauses would amount to the purchase of insurance by debtor governments from bondholders. This has the merit, relative to ‘bailing-up’ proposals, that the provision of insurance would be made explicit in the contract. Unfortunately, it is likely to be impracticable. Official bodies, like the G-22, can make the proposal, but since bond contracts are certainly not the least cost way of providing insurance, it is unlikely that private bondholders would be willing to offer such contracts at interest rates acceptable to the governments and central banks of debtor countries.

Another way in which a developing country can buy insurance against financial and currency crises is for its central bank to arrange a CCL from international banks that can be drawn down in specified circumstances. Argentina, Mexico and Indonesia have already done this, and Indonesia and Argentina have already made use of their credit lines. The obvious similarity between this and the G-22 proposal raises the question why some lines of credit have been arranged, whereas bond contracts providing for reduced repayments in certain circumstances have not. One possible answer is that a line of credit can provide insurance against crises without

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<sup>2</sup> The G-22 consists of the G-7 plus Argentina, Australia, Brazil, China, Hong Kong, India, Indonesia, Korea, Malaysia, Mexico, Poland, Russia, Singapore, South Africa, Thailand.

the need to explicitly define what constitutes a crisis. If the contract establishing the line of credit specifies an interest rate above that at which the country could borrow in normal circumstances, but below the almost prohibitive rates that a country experiencing a financial or currency crisis would have to offer to attract new lending, it will only be in the borrower's interest to make use of the credit line if a crisis occurs. A second possible answer is that the fact that only two countries have ever used CCLs indicates that they too do not work very well.

### **Transparency and Official Encouragement of Default**

The Mexican and Asian crises demonstrated that the IMF has become an international lender of last resort. It performs this role in conjunction with the US government, the other members of the G-7 and the Paris Club of official creditors.<sup>3</sup> The IMF is an agent of these richest countries, since they largely finance it and have a dominant influence on the Executive Board that controls its policies.

There are now several examples of last resort loans being made to countries that are in arrears to private creditors and even examples of official demands that debtor governments force private bondholders to accept 'rescheduling of debts' as a condition for last resort loans. The New York based Emerging Markets Traders Association (EMTA) states that in early 1999 'reports began to circulate that the IMF had requested Romania to roll over upcoming Eurobond payments' and that in February 1999, the Paris Club demanded that Pakistan reschedule its Eurobonds as a condition for a rescheduling of official debt (EMTA, 1999). Ukraine, while under an IMF program, rescheduled debt service obligations in a unilateral fashion in 1998 and 1999 before reaching agreement with private bondholders in 2000. According to the Financial Times (1999), 'Ecuador's recent default on its Eurobonds has been quietly welcomed in official circles'. Warburg Dillon Read (1999) commented that the timing of the announcement of Ecuador's default on its Eurobonds and Brady bonds, 'just a day before President Mahuad was due to announce an agreement with the IMF, raises the suspicion that the IMF was in fact requiring initiation of Brady restructuring as a pre-condition of the agreement. Warburg Dillon Read (1999) also stated that:

Ecuador's loud and frequent assertions that the country is acting with the full support of the IMF, the World Bank, the IDB, the US Treasury and President Clinton (but not so far, the Pope) has not met with any official denial, and is apparently true.

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<sup>3</sup> The Paris Club is the forum in which the G-7 governments, together with those of 12 of the next largest and richest countries, negotiate the rescheduling of the official debts of developing countries that are in imminent danger of defaulting. The group acts like a cartel because its principles of consensus and solidarity ensure that each member applies the terms agreed by the Club. Information on the Paris Club is available at: <http://www.clubdeparis.org>.



A recent IMF (2001) Issues Brief states that:

In some sense, the IMF already gives moral support to some standstills by agreeing to lend to countries that are in arrears to their private creditors, as long as they are negotiating with those creditors in good faith to reach a collaborative agreement.

It is disingenuous of the IMF to imply that its practice of lending to countries that are in arrears to private creditors gives only 'moral' support to debtors that unilaterally suspend contracted debt service payments. The difficulty of forcing debtor governments to honour their contracts used to be ameliorated by the IMF's refusal to lend into arrears; its new willingness to lend into arrears has therefore removed part of the underpinning of sovereign bond contracts. While the IMF cannot prevent private bondholders from taking legal actions to enforce contracts, it can exert enormous influence on a debtor's decision to renege on debts, or to repay them in full. The reason for this is that Paris Club agreements to reschedule debts are normally conditional on the debtor government satisfying the IMF that it is keeping to the terms of an IMF economic policy program. Whether the IMF approves or condemns a debtor government's policies on repayment of private debts is therefore crucial to obtaining the support of the Paris Club. This in turn is of vital importance to a debtor government, since the Paris Club's principles of consensus and solidarity make it a cartel of the world's largest and richest lenders.

A report for the Group of 10<sup>4</sup> (1996) stated that IMF lending into arrears would 'improve the bargaining position of the debtor substantially' and would 'signal to the unpaid creditors that their interests are best served by quickly reaching an agreement with the debtor.' This report is itself disingenuous. It pays lip service to the view that 'it is essential to maintain the basic principles that the terms and conditions of all debt contracts are to be met in full and that market discipline must be preserved', but nevertheless supports IMF lending to countries in arrears to their private creditors, despite arguing that such lending substantially strengthens the bargaining position of the debtor in default.

Reports by the IMF and other official bodies treat transparency as a cardinal virtue. It is ironic, therefore, that the Financial Times should refer to Ecuador's default being 'quietly welcomed' in official circles, and that such major (and therefore presumably well informed) players as the (EMTA) and Warburg Dillon Read should have to use phrases like 'reports began to circulate' and 'is apparently true', to describe alleged IMF encouragement of Ecuador's default. The EMTA (2000) has complained that:

What is surprising to us after months of consultation between the private sector and official creditors is the comparatively little effort on

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<sup>4</sup> The Group of 10, which now has 11 members, consists of the G-7 plus Belgium, Netherlands, Sweden and Switzerland.

the part of official creditors to clarify the application of private burden sharing and the Paris Club principle of Comparability.

Like all virtues, transparency is easier to recommend to others than to apply to oneself.

Two potential justifications for official encouragement of reneging by governments on private debts are sometimes offered:

1. that it helps to reduce moral hazard; and
2. that it helps to ensure comparability of treatment between private and official creditors.

The next two sections demonstrate the inadequacy of these attempted justifications. A possible alternative explanation for the official community's desire to force private lenders to provide *ex post* crisis insurance to developing countries is that the revenue from this implicit tax on lending does not appear on the budgets of the G-7 governments. Rather, it automatically reduces the explicit cost to the IMF, and therefore to the G-7 governments, of financing bail-outs. If, instead, the full costs of such bail-outs were met only by the IMF, its resources would have to be supplemented by explicit transfers of on-budget revenue, which would have to come mainly from the G-7 countries. Persuading their governments, and in particular the US Congress, to further expand the funds available to the IMF by raising taxes or reducing other expenditures would be extremely difficult. This provides another example of official policy seeking to avoid being transparent.

### **Moral Hazard and Excessive Risk Taking**

An argument that is frequently made in favour of making private bondholders share in the cost of financial crises is that doing so reduces excessive risk taking and moral hazard.<sup>5</sup> The argument is that if bondholders are always repaid in full, they have no incentive to check on the borrower's ability to repay, and will lend to finance excessively risky projects. Of course, this is similar to the argument that can be made against government provision of guarantees or compulsory insurance of deposits in commercial banks. However, for a given readiness of official last resort lenders to provide bail-outs, it is likely that making it easier for a government to renege on its private debts would increase, rather than reduce, moral hazard and excessive risk taking.

Moral hazard and excessive risk taking might indeed be reduced if bailing-in the private sector were used to reduce the size of official bail-outs. However, this merely provides a justification for encouraging governments of developing countries

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<sup>5</sup> Moral hazard refers to the increase in the expected losses arising from an adverse outcome that occurs when a person buys insurance. The increase occurs because the purchase of insurance reduces incentives to take precautions that cannot easily be monitored by the insurance provider.

to find ways of insuring themselves against adverse events. It does not justify forcing lenders to provide an inefficient form of insurance that would tend to crowd out more efficient forms. Since loans are less likely to be repaid in full when a debtor is in financial difficulty, it is inevitable that lending and insurance are bundled to some extent. If the IMF and the G-7 governments undermine attempts by foreign private lenders to enforce the terms of contracts against governments that have been hit by financial or currency crises, they increase the extent to which all private lending must be bundled with de facto insurance (in the form of the borrower's ability to renege on its originally contracted repayments in adverse, but imprecisely specified circumstances). Because this form of insurance is opaque and can be manipulated by the borrower, it is likely to be much less efficient. Therefore, it is ultimately more costly for the borrower than negotiating a CCL or holding high foreign exchange reserves.

### **Comparability of Burden Sharing**

The Paris Club tries to insist on the principle of comparability between private and official creditors in the sharing of the burden of partial default by debtor countries. This principle does not prevent loans by the IMF and World Bank, which are agents of the Paris Club governments, from being given precedence over the claims of private and other official lenders. For example, in writing about Ecuador's default on its Brady bonds, Warburg Dillon Read (1999) stated that 'we can be sure that the IMF and multilateral debt (roughly \$4.5 billion of the total [\$16 billion of public domestic and external debt]) will not be rescheduled in any way'.

The Paris Club governments do not apply the principle of comparability in the context of domestic last resort lending by their own central banks. Although such lending regularly involves them in large losses, central banks do not propose that other creditors of the banks receiving last resort loans must forgive part of what they are owed. Nor is the principle of comparability applied to IMF-financed bail-outs of depositors in failed commercial banks. In the Mexican and Asian crises, the IMF did not recommend that part of the bail-out costs should be met by discouraging other bank creditors from taking normal legal actions to recover what was owed to them. Quite to the contrary, the IMF has insisted on the benefits of reforming national bankruptcy laws to strengthen the ability of creditors to enforce loan contracts against recalcitrant debtors.

Paris Club rescheduling of the debts of governments that experience crises is a form of last resort lending. It is also influenced by political considerations and is clearly not a normal commercial transaction. The fact that the official community may decide to bail out developing country governments whose survival is important to G-7 governments, or to extend last resort loans that are intended to preserve the stability of the international financial system, rather than to be profitable in narrowly commercial terms, is therefore not a valid reason for weakening the enforceability of normal commercial contracts. In the unlikely event that they can be justified at all, the costs of bail-outs undertaken by governments for strategic reasons, and of

official last resort lending designed to prevent systemic financial failures, should be met out of general tax revenue and paid for by small increases in all taxes, rather than by trying to finance most of it by the extremely inefficient method of undermining contractual rights.

### **Collective Action Clauses**

Collective action clauses, which make it possible for the borrower to change the amounts to be repaid if 75 per cent or 90 per cent of bondholders agree to the proposal, have been advocated as being in the interest of most bondholders, as well as the borrower.<sup>6</sup> This argument is often based on an analogy to Chapter 11 of the US Bankruptcy Code — once a firm is in financial difficulty, it may well be in the interest of individual creditors to seize its assets at the earliest opportunity, even if doing so can be expected to reduce the total repayments made to all creditors as a group. Chapter 11 provisions can be used to prevent such a creditor grab. In the absence of an international bankruptcy court, the advocates of collective action clauses argue that they are needed ‘to discourage maverick investors from resorting to lawsuits and other ways of obstructing settlements beneficial to the debtor and the majority of creditors’ (Eichengreen and Mody, 2000).

From the point of view of most bondholders, the actions of the maverick investors are indeed harmful if they so exacerbate the debtor’s situation that total repayments are reduced. There is however, a second collective action problem facing private bondholders — the problem of coordinating resistance to attempts by borrowers to obtain partial debt forgiveness in circumstances in which full repayment is possible. A majority of bondholders may be willing to accept partial debt forgiveness if each believes that legal action is costly and unlikely to succeed. But, even if a few firms are ready to take legal action if not repaid in full, the borrower may be deterred from ever attempting to obtain partial forgiveness. By making it harder for a few bondholders to resist an attempt by the borrower to obtain partial debt forgiveness in adverse circumstances, collective action clauses may exacerbate this second collective action problem.

Eichengreen and Mody have investigated the effects of collective action clauses on the cost of borrowing by comparing the yields on bonds issued under US governing law that requires unanimous agreement of bondholders to any proposal for altering the terms of a bond to extend the repayment period, or to reduce the amount to be repaid, with those issued under British governing law that sometimes include collective action clauses. After controlling for factors that might affect the likelihood that a borrower will default, Eichengreen and Mody divide their sample into two roughly equal halves, according to the borrower’s credit rating. They

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<sup>6</sup> Sharing clauses have also been proposed. These would require a creditor that brought a successful legal action against the debtor to share the proceeds with all other creditors. Sharing clauses have little to recommend them since they would create massive free rider problems of their own, and greatly increase the scope for debtors to avoid their contractual obligations.

estimate that sovereign borrowers with poor credit ratings have to pay a premium of about 130 basis points (1.3 percent per year) if they issue bonds containing collective action clauses, but that those with relatively good credit ratings can reduce the interest rate that they have to pay by about 50 basis points (0.5 percent per year) by including collective action clauses.

Eichengreen and Mody interpret their results as implying that the prevention of creditor grabs does indeed increase the total amounts that bondholders are likely to recover in the event that full repayment of debts is impossible. They suggest that this is the dominant effect in the case of bonds issued by borrowers with relatively high credit ratings. But in the case of investors with relatively poor credit ratings, the dominant effect is 'the moral hazard and default risk associated with renegotiation-friendly loan provisions' (Eichengreen and Mody, 2000:3). They do not explain what type of moral hazard they have in mind. However, since they argue that the inclusion of collective action clauses raises the interest rate demanded by lenders to such countries, it must reduce the total amount that bondholders expect to be repaid. Their rationale must presumably be something very like the second type of collective action problem described above; namely, that the ease of preventing litigation by some disgruntled bondholders makes it easier for a borrower, perhaps encouraged by the IMF and the Paris Club, to force all bondholders to accept partial forgiveness of debts even if full repayment would have been possible.

Eichengreen and Mody's econometric evidence is itself open to question. Since debt rescheduling is very rare for sovereign borrowers with relatively high credit ratings, it is hard to believe that collective action clauses, which can only be relevant in the event of rescheduling, can really reduce interest rates by 50 basis points. This is larger than most estimates of the entire country risk premium for the Australian government relative to the World Bank or the US Treasury. A communiqué of the G-10 (2000) states that in January 2000, the UK included a majority-action clause in its euro-denominated treasury note program and that this had no discernible effect on price or liquidity. A study by Becker, Richards and Thaicharoen (2000) controls for a wider range of variables than that used by Eichengreen and Mody and concludes that collective action clauses have little or no discernible effects on bond yields in secondary markets.

If, as seems to be the case, collective action clauses have little or no effect on the interest rates, then their widespread adoption would do little either to raise or to lower efficiency. Alternatively, if Eichengreen and Mody's econometric results are correct, the implication is that borrowers with relatively good credit ratings should adopt these clauses, but that moral hazard would be exacerbated if they were adopted by relatively high-risk borrowers. For obvious reasons, the borrowers with the best credit ratings pose few problems for the international financial system. Proposals to strengthen it, therefore, have focused on reducing the likelihood of default by high-risk borrowers. It follows that their results, even if they were correct, would not justify their Panglossian conclusion that collective action clauses are 'an important element in the campaign to strengthen the international financial architecture' (Eichengreen and Mody, 2000:abstract).

## Conclusion

Proposals that governments of developing countries should insure against financial crises by arranging CCLs from major international banks is sensible enough, but somewhat empty. So far, only two countries have ever used CCLs from international banks. If they are such a good idea, why are such credit lines so rarely used, and what is to be done if more countries do not take out such insurance? In part, the apparent lack of interest in credit lines may reflect the fact that they are a close substitute for the foreign currency reserves that all central banks hold in the form of money at call in the major international financial centres. In part, it may also be that the willingness of the IMF and the G-7 governments to bail out governments facing financial crises reduces the incentives for these countries either to hold large reserves, or to negotiate insurance contracts that are close substitutes for them. This possibility is supported by the fact that the two governments with the largest ratio of reserves to GDP are those of Hong Kong and Taiwan, which are not members of the IMF. The G-22 Report's proposal for clauses in bond contracts to provide for reduced repayments in specified circumstances is similar in aim to the proposal for CCLs from international banks, but would be even harder to implement in practice.

There are two main objections to bailing up private lenders by having the IMF, or G-7 governments, provide support to governments that suspend debt service payments to private bondholders. First, the real conditions that govern bond contracts, as opposed to the nominal conditions, become obscured and ambiguous. Second, negotiating CCLs with international banks appears to be a less inefficient way for governments to buy insurance than issuing bonds containing explicit, let alone implicit and ambiguous, conditions for reduced debt service payments in adverse circumstances.

The IMF and G-7 governments could answer both the above objections to bailing in by proposing a new form of bond contract, which would specify that debt service payments would be suspended for the duration of a 'declared financial crisis', and that the maturity of the bonds would be extended by the duration of the crisis. The IMF would be the arbiter of when a crisis started and when it ended. It would be easy to design more elaborate contracts that provided for different adjustments in response to the intensity of the crisis, as judged by the IMF. This proposal would offer a more efficient form of insurance than the current proposals for bailing in private bondholders by lending into arrears because the contracts would be relatively unambiguous and transparent. Of course, such contracts might never be used. Even though they would dominate the existing IMF bailing in proposals in terms of efficiency and transparency, the interest rate premium demanded by lenders for the insurance provided would probably be so high that few, if any, borrowers would be willing to pay it. Proposals to bail up private bondholders avoid this potential embarrassment for the new architects by forcing all bond contracts into a mould that is even less efficient than one that would probably be rejected by almost all borrowers and lenders if they were allowed to choose.

## References

Becker, T., A. Richards and Y. Thaicharoen (2000), 'Collective Action Clauses for Emerging Market Bonds: Good News for Lower Rated Borrowers Too', *draft*, International Monetary Fund, Washington, DC.

Eichengreen, B. and A. Mody (2000), 'Would Collective Action Clauses Raise Borrowing Costs? An Update and Additional Results', Center for International Research and Development, University of California, Berkeley (Working Paper No C00-114).

EMTA (1999), 'Paris Club Asks Pakistan to Reschedule Eurobonds', available at: <http://www.emta.org/emarkets>.

EMTA (2000), 'What is the Best Way to Facilitate Sovereign Debt Workouts?' 3 March, available at: <http://www.emta.org/emarkets>.

*Financial Times* (1999), 'Lenders Beware', Leader, 12 October.

Group of 10 (1996), *The Resolution of Sovereign Liquidity Crises: A Report to the Ministers and Governors*, Bank for International Settlements, Basle.

Group of 10 (2000), 'Communiqué of the Ministers and Governors of the Group of Ten', Press Release, Bank for International Settlements, 16 April, available at: <http://www.bis.org/press/p000416.htm>.

Group of 22 (1998), 'Report of the Working Group on International Financial Crises, 1998', available at: <http://www.ustreas.gov/menu/html>.

IMF (2001), 'Resolving and Preventing Financial Crises: The Role of the Private Sector', available at: <http://www.imf.org>.

Warburg Dillon Read (1999), 'Ecuador: Beyond Comparability. From "Burden Sharing" to "Burden Shifting"?' available at: <http://www.emta.org/emarkets>.

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## **National Saving and Population Ageing**

**Ross Guest and Ian McDonald**

**L**ike most industrialised countries, Australia's population is ageing due to the progression of the baby boom generations, increasing longevity and decreasing fertility. These trends, with no further decrease in fertility, imply that the proportion of population aged over 74 years will increase from 11.6 per cent in 1999 to 15.4 per cent in 2024 and 23.2 per cent by 2051 (ABS, 1998:11). Should, as seems likely, fertility fall further from its current level then these proportions of old people will increase even further in the future. The economic impact of this ageing population is increased by the fact that old people consume relatively large amounts. According to the calculations in Guest and McDonald (2001a), for people aged over 74 years private plus public expenditures are 19 per cent higher than for other adults. High expenditures on health are the major driving force for this difference. These two factors, the ageing population and the relatively high consumption demands of the old, imply a fall in the labour force relative to the consumption demands of the population by about 12 per cent by 2051.

In addition to this, the perennial immigration debate is being fuelled by supporters of lower immigration, such as the Premier of NSW, Bob Carr, and the One Nation Party. So Australia faces the possibility of demographic change, not just from population ageing but also from lower immigration. A decrease in immigration would tend to increase further the proportion of the aged in the total population.

What are the economic implications of such demographic changes? How will demographic change affect living standards in the future? Is the prospective demographic change faced by Australia a good reason for the introduction of government policies aimed at increasing national saving? This paper explains how our recent research can help to answer these questions.

The consensus view is that Australia is not saving enough. For example, a survey of government, private sector and academic economists, members of the Canberra branch of the Economic Society of Australia, revealed a 'high consensus support for the proposition that increasing national saving should be a major policy priority' (see Argy, 2001:3). Politicians also appear to accept the view that saving is too low. Alan Wood recently wrote '... there now seems to be bipartisan acceptance that Australia has a national savings problem' (Wood, 2001).

Three reasons can be identified for thinking that Australia has a saving problem. First, there was a downward trend in the rate of national saving from the early 1970's to the 1990's. Second, associated with this, was an increase in

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Australia's net foreign liabilities. Third, as noted above, prospective demographic trends suggest a problem in the future of too many consumers and too few producers. It is argued that one way to prepare for this future is an immediate increase in the rate of national saving.

Fitzgerald (1993; 1996; 1999) argued on the basis of the three reasons above — low national saving, rising net foreign liabilities and the prospective ageing of the population — that Australia would be well served by an increase in the rate of national saving of five per cent of GDP. Ablett (1996), using an intergenerational accounting model, made calculations that show that future increases in consumption per capita will lag behind productivity increases. From this, Ablett argued that Australia's current rate of national saving is inadequate to permit intergenerational balance. Cashin and McDermott (1998), on the basis of an econometric analysis of past trends in saving and the current account balance, conclude that 'the increase in net national saving required to satisfy (Australia's) external borrowing constraint is about two to four per cent of GDP'.

In this paper we use our research on the implications of prospective demographic change in Australia to assess the case for Australia to increase its current rate of saving. The distinguishing feature of our research is that it addresses explicitly the link between saving and living standards. Because of this link, one can on the basis of our research judge the desirability of a particular level of saving by considering the implications for living standards. It is the latter which are important. Living standards are the ultimate objective of economic policy — other economic objectives such as increasing the rate of saving or satisfying the external borrowing constraint are intermediate objectives whose importance depends on their impact on living standards. It will be seen that, by focusing on living standards, a different view emerges from those noted above. In particular, it appears that Australia does not have a problem of insufficient saving.

Milton Friedman (1990) points out that the optimal level of saving is the level chosen by households if their choice is undistorted. Friedman sees the government as the distorter. Loayza, Schmidt-Hebbel and Servén (2000) take a broader approach, listing the distortions that push the level of saving away from the socially optimal as externalities, market failures and policy-induced distortions. As they point out, some of these distortions lead to excessive saving (for example, the lack of risk-sharing instruments) and others to under-saving, such as insufficient government saving. *A priori*, the net effect of these distortions is ambiguous.

From the viewpoint of inter-generational equity there is one striking fact that suggests no problem of insufficient saving. That fact is the positive secular trend of living standards. For the last 100 years, and longer, the later generations did better than the earlier. Thus the decisions of earlier generations did not reduce the living standards of those coming after. Instead, their chosen level of saving was high enough to generate rising living standards. From the viewpoint of inter-generational equity, this suggests that the net effect of the distortions has been to cause excessive saving.

### **The Simulation Model**

Our simulations reported below are calculated from applying a model of optimal per capita consumption to Australia (see Guest and McDonald, 2001a). The essence of the model can be described as follows:

- In each year over a long, effectively infinite, projection period a cash flow is calculated as output less investment.
- The output component of this cash flow is produced by the employment of labour and capital, according to a production function.
- The path of employment levels over the projection period is calculated from the population projection.
- The capital stock with which the employees work grows according to investment and depreciation.
- Investment is determined optimally, in that the marginal product of investment adjusted for depreciation is equal to the real world rate of interest which is assumed fixed at six per cent. The implication of optimal investment is that the capital stock grows with employment.
- The productivity of labour and capital grows at the rate of total factor productivity. In line with the experience over the previous century, the annual rate of growth of total factor productivity is assumed to be 1 per cent.
- The cash flow of output minus investment calculated in this way is used to finance the path of consumption per capita (called living standards) over the projection period and to accumulate a level of wealth (defined as the domestic capital stock less net liabilities to overseas residents) at the end of the projection period that satisfies a terminal wealth condition. The terminal wealth condition prevents a run-down in wealth.

A given path of cash flow can finance an infinite variety of patterns of living standards. To choose between these, we impose an optimality criterion. This criterion requires the path of living standards to maximise a social welfare function. The path of living standards so chosen is smooth, in that it has a roughly constant rate of growth. This accords with the usual idea of economists that people prefer not to experience fluctuations in their living standards.

The role of saving in the model is to ‘support’ (i.e. finance) the path of living standards and accumulate the terminal wealth stock, given the cash flow generated by output less investment. If demographic change can be expected to be a burden in that it will threaten the level of living standards in the future then the model will calculate a large level of saving in the present so that the future burden (i.e. the reduction in living standards) is shared between those alive now and those alive in the future.

Will population ageing threaten future living standards? The model captures several mechanisms through which population ageing influences living standards. Two mechanisms tend to reduce living standards. First, a falling employment to population ratio, implied by population ageing, reduces output per capita and thus

the per capita size of the discounted cash flow. Second, an increasing proportion of old people will reduce the consumption per capita from a given level of total consumption because of the relatively high levels of consumption per old person. This effect will also tend to reduce living standards. However, there are three other mechanisms through which ageing tends to increase living standards. First, an ageing population will yield an investment dividend because of the reduced capital requirements of a smaller workforce. This tends to increase the cash flow and so increase living standards. Second, an ageing population will yield a consumption dividend because of the reduced consumption demands from a smaller number of children. Third, an older workforce is more productive. By capturing these effects, our model calculates the net effect of demographic change on living standards.

A number of demographic scenarios are specified in Table 1. These scenarios have been chosen to illustrate the influence of the ageing that will occur with unchanged fertility and immigration and the influences of further reductions in the total fertility rate (TFR) and reductions in the net immigration rate.

**Table 1: Demographic scenarios**

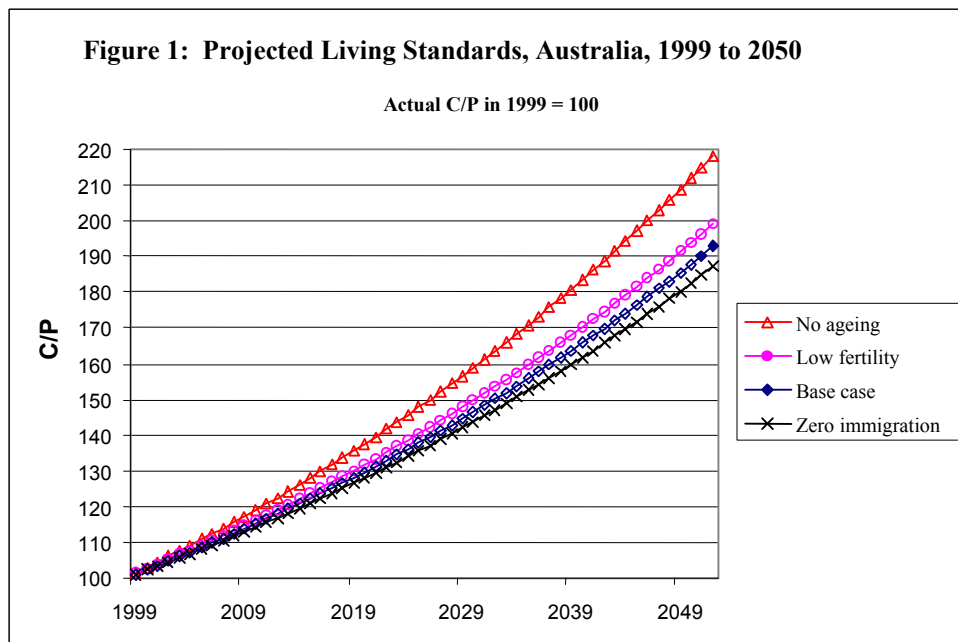
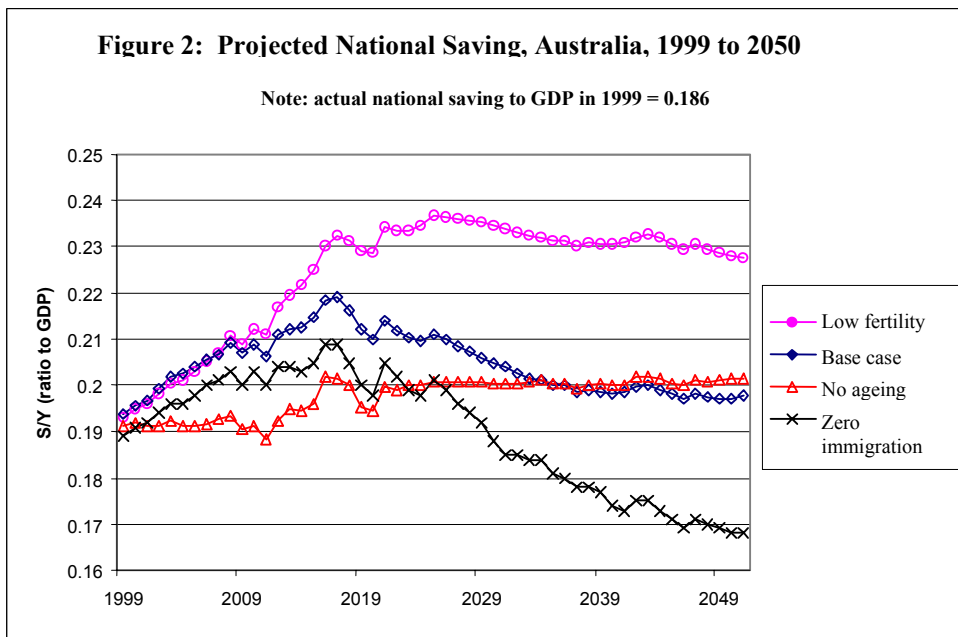
Scenario name	Description
Base case	TFR = 1.75; annual net immigration = 0.54% of population
Low fertility	TFR falls from 1.75 in 1997 to 1.30 in 2009; annual net immigration = 0.54% of population
Zero immigration	TFR = 1.75; annual net immigration = 0
No ageing	Base case population projection. Constant aggregate employment to population ratio. Hence, aggregate employment grows (or declines) at the same rate as total population from 1997.

Notes: TFR is total fertility rate. The base case rate of 1.75 is close to the number observed in Australia in the last two years. The rate of TFR = 1.3 can be thought of as the lowest likely fertility rate  
 Base case immigration rate of 0.54% of the population is close to the actual rate of immigration in recent decades.  
 In all projections, for future mortality it is assumed that life expectancy will increase by 0.4 years every 5 years

## Results

### *Living standards*

Simulating our model using the demographic scenarios in Table 1 yields the projections for optimal living standards and national saving shown in Figures 1 and 2 respectively.

**Figure 1: Projected Living Standards, Australia, 1999 to 2050****Figure 2: Projected National Saving, Australia, 1999 to 2050**

We first discuss the effects of the demographic scenarios on optimal living standards or consumption per capita (C/P).

To consider the impact on living standards of the population ageing implied by what can be called the demographic status quo in 1999 (including: the baby

boom; a fertility rate that decreased to 1.75 by 1999; and a life expectancy that is expected to increase into the future), it is useful to compare the 'No ageing' and the base case simulations. For the no ageing simulation, we hold the aggregate employment to population ratio constant at its 1999 level throughout the projection period. This implies that aggregate employment grows at the same rate as aggregate population. This is faster than the rate of growth for the base case, because of the ageing effect captured in the latter. The comparison of the no ageing and the base case illustrated in Figure 1 reveals that by the year 2050, if there were no ageing then living standards would be 12.7 per cent higher than with allowing for the effects of ageing

From this comparison we see that the net effect of the five mechanisms described in the previous section is to reduce living standards. However, note that living standards still grow at the annual rate of 1.20 per cent. This implies that with ageing effects taken into account, living standards in 2050 are projected to be 85.8 per cent higher than in 1999. So the effect of ageing, 12.7 per cent compared with 85.8 per cent, is small.

The small size of the ageing effect shows that the levels of future living standards are dominated by the projected annual rate of growth of total factor productivity, of 1 per cent. (Setting a different rate of productivity growth would change the rate of growth of living standards *pro rata*.) That rate of growth, and our assumption of optimal investment, implies that the annual rate of growth of output per worker is 1.43 per cent. Thus between 1999 and 2050, the rate of growth of living standards lags behind the rate of growth of labour productivity. Later, in the 21<sup>st</sup> century, the rate of growth of the simulated path of living standards approaches the 'steady state' rate of growth of labour productivity.

To assess the effect on living standards due to the possibility that anti-immigration pressures in Australia may be successful in reducing the rate of immigration, consider the path of living standards implied by the zero immigration simulation in Figure 1. If we were to have zero immigration from 1999 onwards then optimal living standards would be 3.2 per cent lower by 2050. This illustrates a general feature of our work, that lower immigration has a slightly negative impact on living standards. The dominance of young adults in the age distribution of immigrants is the cause of this effect. Thus immigration reduces slightly the relative size of the young and old dependent populations.

In many countries fertility has declined in recent years to astonishingly low levels. Most notable are Germany and Italy, where the total fertility rate declined to 1.3 and 1.2 respectively in the period 1995-2000. In Australia fertility has also decreased, but not, at least yet, to such low levels. In 1998 the TFR in Australia was 1.76, a decrease from 1.9 for the 1990-1995 period. The real possibility that fertility in Australia will decrease below the current low level has led to concerns about the effect on future living standards and pressure for government policy to discourage low fertility (for more details, see Guest and McDonald, 2001b).

The impact of lower fertility on living standards is illustrated in Figure 1 by the path of living standards implied by the TFR1.3 simulation. A total fertility rate of 1.3 can be thought of as the lowest plausible outcome for the TFR. As

Figure 1 shows there is in fact a positive, albeit small, effect on optimal living standards from this extreme decrease in fertility. By 2050 living standards are 3.0 per cent higher with the low fertility scenario compared with the base case. This is in marked contrast to the fears of some. Two forces drive this positive effect. First is an investment dividend, or the reduced capital requirements of a more slowly growing level of employment. The second is a consumption dividend from reductions in fertility due to the smaller number of children.

In summary, the results of the simulations with respect to living standards suggest that the future annual rate of growth of living standards, whilst less than that enjoyed over the last 30 years, will be over one per cent, whatever reductions in the fertility and immigration may be. For these demographic shocks, the effect on the rate of growth of living standards is to be slightly reduced by lower immigration in the future and slightly increased by lower fertility in the future. Thus the simulation suggests that there is little risk to living standards from changes in immigration or fertility. Some have suggested that living standards may fall because of demographic shocks. For example the President of the Australian Population Institute, Albert Dennis (2000), claims that 'a substantial drop in our standard of living was inevitable unless' among other things we 'increase our fertility rate to the replacement level of 2.1 to 1 female'. Clearly, this fear is completely out of the ballpark.

#### *National saving*

The paths of future living standards shown in Figure 1 are supported by paths of optimal national saving, investment and current account balances. The paths of optimal national saving for the four projections are shown in Figure 2. Except for the no ageing case, the saving profiles underlying the projections of living standards in Figure 1 exhibit a hump shape. This is because for at least the next decade or so, the exact number of years depending on the demographic assumptions, the capacity of the economy to meet consumption demands actually rises until the baby boomers start to retire, after which it falls. The consumption smoothing of our optimality approach implies that we should take advantage of the period before the baby boomers start to retire by increasing saving. This hump in saving will enhance living standards in the future when the per capita consumption capacity of the economy falls.

In the base case it is optimal to increase the national saving rate from its current rate to peak at just under 22 per cent of GDP in 2017. This is about 3 percentage points above the 1999 rate of 18.6 per cent. Thereafter the optimal rate of national saving decreases to be 20 per cent of GDP by 2050. In the case where there is no ageing, the optimal saving rate increases to about 20 per cent of GDP by 2016 and remains unchanged for the rest of the period to 2050.

Zero immigration is associated with a slightly smaller increase in the saving rate relative to the base case until the common peak year of 2017. Thereafter the optimal saving rate with no ageing decreases faster relative to the base case, to be

only 17 per cent of GDP in 2050. On the other hand, low fertility implies a higher saving rate throughout the projection period.

That it would be a good idea to have a higher rate of saving before the baby boom retires, of course, is what many commentators have in mind when calling for an increase in saving to cope with the retirement of the baby boom generation. However, our simulations suggest that this increase in saving is small. Further work, to which we now turn, suggests that the case for even this increase is very weak.

Some people may question our simulations on the basis that the increase in national saving and the associated reduction in the current account deficit will not eventuate for Australia. There is a degree of pessimism in some quarters about increasing saving and reducing the current account deficit. While we would counter with the point that along our projected paths the increase in national saving does not require a reduction in living standards, it is of interest to consider what would happen if the ratio of national saving to GDP stays at its 1999 level. Would this be a problem? Is the growth in living standards in our projections totally dependent on the hump increase in national saving?

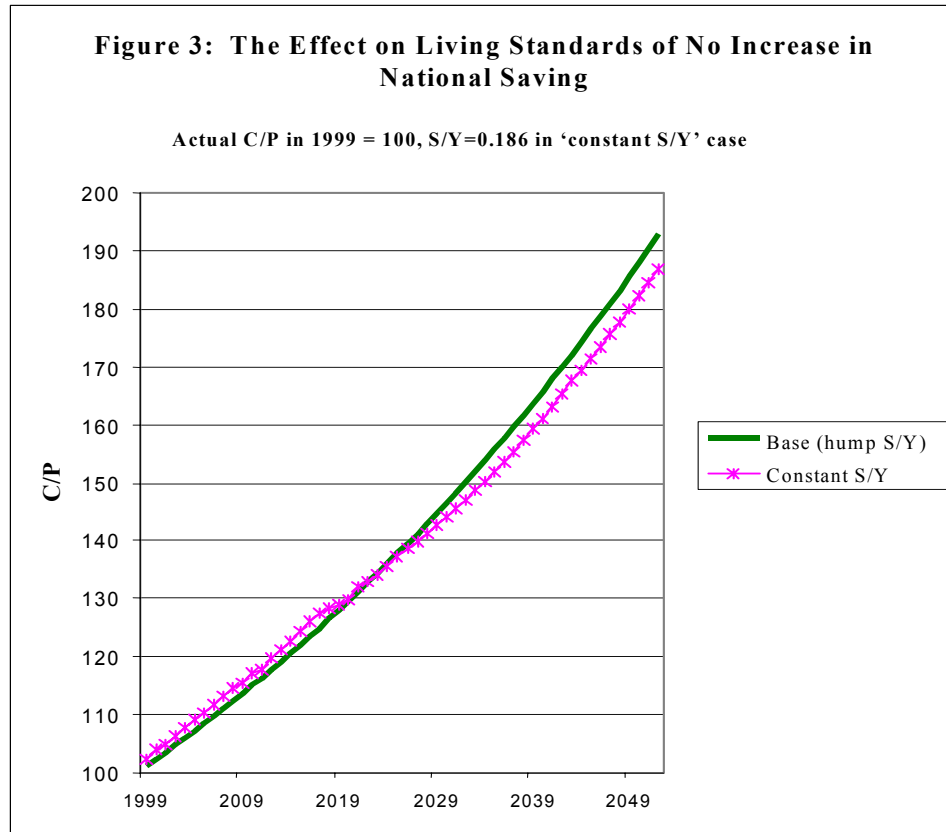
To answer these questions, we consider the impact on living standards of a failure of national saving to increase as a share of GDP above its present level, and thus a failure of the current account deficit to fall below its current level. We do this by assuming that investment is determined optimally, as in the base case above, but that the rate of national saving is constrained to be equal to the actual rate of national saving in 1999 (i.e. 18.6 per cent of GDP). This projection yields a path of living standards shown by 'constant S/Y base' in Figure 3. As would be expected by the lower rate of saving implied by removing the hump, the initial effect is for slightly higher living standards. Indeed the constant S/Y base projection yields higher living standards than the base case up to 2022. Thereafter the lower rate of saving exerts its negative effect. After 2022, living standards are lower if there is no hump in saving in the early part of the 20<sup>th</sup> century.

Evaluation of the benefit of the hump in saving depends on evaluation of the two paths of living standards in Figure 3. This evaluation depends on one's value judgements. In our judgement, the increasing living standard, even if there is no hump increase in saving, implies that it is not imperative to increase national saving. If people in Australia choose not to increase saving in the hump fashion in the next decades, there is little reason for the government to adopt policies to force an increase in saving. This would be reducing the living standards of the less well off in order to benefit the living standards of the better off (i.e. people alive in the future). According to our value judgements, this would not be desirable.

In summary, the simulation results presented here project living standards to grow at significant rates from their actual 1999 level, despite population ageing. This is true even in the face of the most draconian immigration policies (i.e. no immigration) and the most extreme and persistent negative shock that is plausible to fertility (i.e. a decrease in the total fertility rate to 1.3). These paths of increasing living standards are supported by paths of national saving that show a small increase from the current rate over the next two decades and then a



continuous decrease. Our simulations also show that living standards will grow if there is no increase in the rate of national saving and no decrease in the current account deficit. This is an optimistic message.



### Comparison with Other Studies on National Saving

As we noted in the introduction, the consensus view appears to be that Australia should increase its rate of national saving. In this section we compare our results with previous studies that support the consensus view.

Fitzgerald has been a leading advocate of using government policy to force an increase in the rate of national saving. Fitzgerald (1996:7-8) sets out his argument concisely. He argues that to achieve a growth rate of GDP of five per cent requires a ratio of investment to GDP of 25 per cent. However to stabilise the external debt/GDP ratio to avoid, in his language, spiralling increases in external liabilities requires a current account deficit of no more than 3 per cent of GDP. Hence, using the macroeconomic accounting conditions, the ratio of saving to GDP should be at least 22 per cent.

Even although our framework is close to Fitzgerald's, in that we make projections into the future using a macroeconomic model, we come to a different conclusion. This is partly because our simulations suggest that the optimal investment/GDP ratio is lower than the value argued for by Fitzgerald. For our base case, the optimal ratio of investment to GDP, averaged over the period 1999 to 2010, is 22 per cent. Our optimal ratio of the current account deficit to GDP is slightly lower than Fitzgerald's, averaging 2.5 per cent for the period 1999 to 2010. These two numbers imply an optimal rate of national saving of 19.5 per cent of GDP. Our lower investment level reflects the investment dividend from reduced growth in employment due to demographic change. For our base case, the projected annual rate of growth of employment, in efficiency units, for 2000 to 2010 is 1.0 per cent, significantly less than the annual rate from 1990 to 1999 of 1.5 percent. And taking a longer period, annual employment growth is only 0.6 per cent for the period 2000 to 2050. With lower employment growth, the optimal level of investment is lower because there are fewer new workers to equip with capital goods.

As we noted above, Fitzgerald's recommendation for increased national saving is partly due to his concern to reduce the size of the current account deficit. This concern is based on the implications for the growing size of net liabilities owed by Australian residents to foreign residents. From our simulations we can calculate the implied levels of net foreign liabilities. For our base case, these liabilities fluctuate around 60 per cent of GDP for the course of the 21<sup>st</sup> century. Given that these projections are based on a slightly lower current account deficit than that with which Fitzgerald is comfortable, we can presume that he would be comfortable with them. Of possible concern to Fitzgerald would be our simulation in which there is no increase in national saving. The higher current account deficit in that simulation implies higher levels of net foreign liabilities in the future. The path of these liabilities is to progressively increase from 60 per cent in 1999 to 100 per cent by 2026, 135 per cent by 2100 and 155 per cent by 2150. However, we do not interpret this path as a crisis or a spiral.

To assess the adequacy of Australia's saving rate, Cashin and McDermott (1998) look at the actual current account deficits in the past and compare these with the optimal current account deficits resulting from a consumption smoothing model. They interpret the actual deficits as sustainable if the differences between the actual and their calculation of the optimal do not grow over time. They conclude that Australia's deficits have not been sustainable and that 'the increase in net national saving required to satisfy (Australia's) external borrowing constraint is about 2 to 4 per cent of GDP'. The similarity between their approach and ours is that we also apply a consumption smoothing model in order to calculate optimal consumption, saving, investment and therefore current account balances. However, our concern is with present and future optimal values based on projections of exogenous variables from the present to the future. In particular we focus on the impact of demographic projections on optimal living standards and national saving. The Cashin and McDermott study on the other hand does not use any such projections of exogenous variables.

Ablett (1996) extends the inter-generational accounting framework of Kotlikoff and others to include private consumption transfers. From this extension, Ablett finds that that future increases in consumption per capita will lag behind productivity increases. He concludes that 'current savings rates in Australia are inadequate to permit inter-generational balance'. The feature in common with our approach and differing from the Cashin and McDermott approach is that Ablett uses demographic projections, including migration scenarios.

In our work it is also the case that, in the future, increases in consumption per capita will lag behind productivity increases. We do not interpret this as an inter-generational imbalance at the expense of generations alive in the future because, even with this lag, future generations will be better off than current generations. Going further, our method can also shed light on what it would take to generate a rate of growth of living standards comparable to the rate of growth of labour productivity. An immediate increase in the rate of national saving to 23.3 per cent of GDP, to be followed by further increases up to a peak of 26.2 per cent of GDP by 2017 would generate such an outcome. However, the cost would be an immediate cut of 5.8 per cent in living standards, caused by the immediate increase in saving. Along this faster growth path, living standards would not catch up with the base case simulation until 2022. In our view to force the faster growth path of living standards on the Australian population would be a case of inter-generational imbalance at the expense of the currently alive population.

## Conclusion

From our research reported here, we conclude that there is no case for government policies to increase national saving to deal with population ageing. At the current time, one of these policies being discussed is whether to increase the compulsory superannuation levy. Our results cast doubt on the argument that the superannuation levy should be increased in order to increase national saving. Furthermore, there is no case based on the notion of protecting future living standards for policies to increase the rate of fertility, or to slow down or stop the decrease in fertility observed in recent years. While there are important economic problems in Australia, notably the high rate of unemployment, there is no case for forcing an increase in national saving to prepare for prospective demographic change.

## References

- Ablett, J. (1996), 'Intergenerational Accounting and Saving in Australia', *Economic Record* 72(218):236-245.
- Australian Bureau of Statistics (1998), 'Population Projections 1997 to 2051', Catalogue No. 3222.0, Ausinfo, Canberra.

Argy, F. (2001), 'Economic Rationalism in Australia – Survey of Members of the Economic Society of Australia, ACT Branch', *Economic Papers* 20(1):1-14.

*Australian Financial Review* (2000), 'Tight rein on Budget a Must', Editorial, 28 February.

Cashin, P. and C. McDermott (1998), 'Are Australia's Current Account Deficits Excessive?', *Economic Record* 74(227):346-61.

Dennis, A. (2000) 'Up and Running Fast', APop Vision, available at [http://www.apop.com.au/news/july2000/0700\\_1.html](http://www.apop.com.au/news/july2000/0700_1.html).

Fitzgerald, V. (1993), *National Saving: A Report to the Treasurer*, AGPS, Canberra.

Fitzgerald, V. (1996), 'Public Policy and National Saving', *Agenda* 3(1):3-30.

Fitzgerald, V. (1999), Discussant in 'Policy Implications of the Ageing of Australia's Population', Conference Proceedings, Ausinfo, Canberra.

Guest, R. and I. McDonald (2000), 'Population Ageing and Projections of Government Social Outlays in Australia', *Australian Economic Review* 33(1):49-64.

Guest, R. and I. McDonald (2001a), 'Ageing, Optimal National Saving and Future Living Standards in Australia', *Economic Record* 77(237):117-134.

Guest, R. and I. McDonald (2001), 'Is Low Fertility a Threat to Living Standards in Australia?', available at (under 'Consumption Balance'):  
<http://melbecon.unimelb.edu.au/staffprofile/imcdonald/balance.html>.

Hewson, J. (2000), 'Ignore It and Age Will Weary Us', *Australian Financial Review*, 21 January.

Loayza, N., K. Schmidt-Hebbel, and L. Serven (2000) 'Saving in Developing Countries: An Overview', *World Bank Economic Review* 14(3):393-414.

OECD (1996), *Ageing in OECD Countries: A Critical Policy Challenge*, OECD, Paris.

Stone, J. (1993), 'How to Achieve Full Employment', *IPA Review*, 46(2):29-34.

Wood, A. (2001), 'Raising Levy isn't a Super Idea in Election Year', *The Australian*, 10 April.

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## **Distribution of 1990s Income Gains**

**Dean Parham, Paula Barnes, Paul Roberts and Sharon Kennett**

Australia was one of only a few high-income countries to experience faster growth in the 1990s than in the 1980s (OECD, 2001). Australia's performance was quite impressive on a number of counts, even in the face of external shocks (most notably the Asian economic crisis). The 1990s brought:

- nine years of continuous GDP growth averaging over 4 per cent — the longest period since the early 1970s;
- a decline in unemployment from the recession-affected rates of the early 1990s; and
- falls in inflation to rates not seen since the early 1970s.

The OECD (2001) found in its study of 1990s growth patterns that two features distinguished the better-performing countries: improved productivity growth and greater labour utilisation (the rate at which the population is actively engaged in market-based work).

Particularly on productivity, Australia rated highly. Multifactor productivity growth accelerated from an average of 0.6 per cent a year in the 1970s and 1980s to an average of 1.7 per cent a year in the 1990s (Parham and Kennett, 2001). The acceleration from 0.6 to 1.7 per cent a year is based on ABS estimates over peak-to-peak productivity cycles. There is further evidence of an acceleration of one percentage point or more in an ABS trend productivity series, in comparisons between business cycles and in econometric analysis (Parham and Kennett, 2001).

The productivity surge promoted strong growth in average income. Faster productivity growth accounted for over 90 per cent of the acceleration in average incomes from 1.4 per cent a year in the 1970s and 1980s to 2.5 per cent a year in the 1990s (Parham et al., 2000).

The limitations in using average income as a welfare measure are well known. Nevertheless, the magnitude of the increase is of some significance, suggesting that, as a whole, Australians developed a lot more wherewithal to finance consumption, save and invest for the future, and contribute to at least some social and environmental goals. The additional productivity growth in the 1990s provided an additional average income of \$2700 per person or \$7000 per household (Banks, 2001).

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*The authors are members of staff of the Productivity Commission. The views expressed in this paper are those of the authors and do not necessarily reflect those of the Productivity Commission.*

But it is also commonly argued that the distribution of income and not just average income matters for community welfare. In the 1990s context, a number of commentators have expressed concern that many Australians have been stranded by economic developments. Other concerns include whether the income gains have come at some cost in terms of lifestyle, community cohesion and environmental harm.

This paper looks at only part of the distributional picture. In particular, it examines the functional distribution of income — that is, between labour and capital. It finds that the productivity and income gains of the 1990s have been distributed evenly between labour and capital. Labour has gained from higher real wages and improved employment outcomes. Capital has earned higher profits. It appears that increased competitive pressures may have been a factor, not only in generating productivity gains, but also in ensuring that, at least at a broad level, the gains were not retained in ‘excessive’ growth in profits. Consumers and commercial users have benefited from many of the productivity gains being passed on through lower prices. The paper also makes some observations on the personal and household distribution of income, based on other studies.

### **Distribution of the 1990s Aggregate Income Gains**

There has been worldwide interest in the income distribution effects of factors, such as lower trade barriers and technological change, that enhance productivity growth. Interest commonly focuses on whether productivity-enhancing changes are factor-neutral or introduce a bias against labour, in general, or against a certain type of labour — particularly, unskilled workers. All other things equal, a bias would show up in lower rates of employment or the payment of lower wages, at least in relative terms. Either way, a bias would lead to a relative (if not absolute) decline in total payments to labour or to the labour type.

A number of developments could have enhanced productivity growth in Australia in the 1990s and, at the same time, could have altered the distribution of income between labour and capital. The possibilities include:

- technological change — some technologies are considered to be labour saving and some are considered to favour skilled labour, the increased use of information and communications technologies being a major case in point;
- reductions in trade barriers — some claim that competition from low-wage countries reduces the wage and employment prospects of low-skilled workers;
- a shift towards enterprise bargaining — there are claims that decentralisation of wage determination and associated changes have reduced the relative bargaining strengths of workers;
- the introduction of a stronger commercial focus for government business enterprises and competition in their markets — this gives enterprises incentives to reduce excess manning levels that may have built up in the past under an ‘employer of last resort’ philosophy; and

- contracting out — there are claims that contracting out reduces costs, frequently at the expense of lower wages, if not reductions in employment.

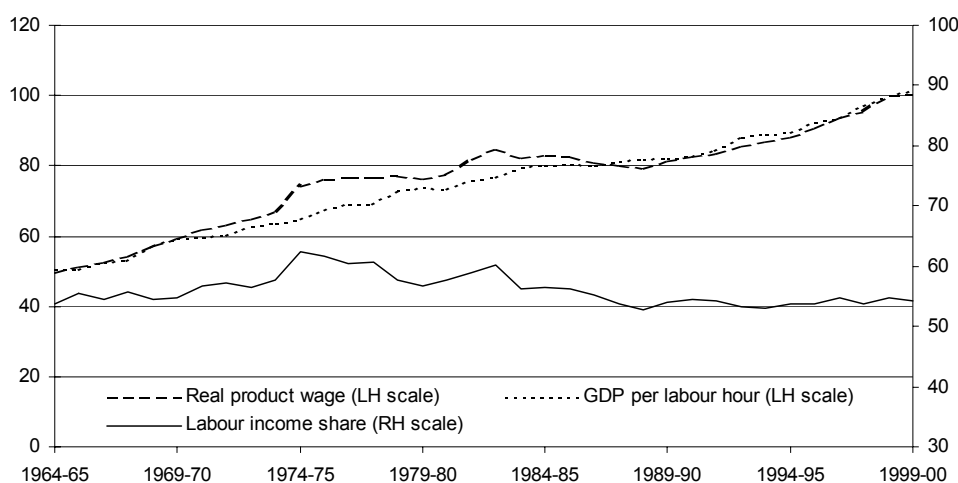
The general tenor of these claims implies that important economic changes in the 1990s have introduced biases against labour — and perhaps especially against unskilled labour. All other things equal, this would be evident in a reduction in the proportion of income distributed to labour.

The labour income share — wage and salary payments to labour as a proportion of total factor income — provides a convenient measure to track the distribution of income to both labour and capital. Movements in the capital share can be taken to be equal (but opposite) to movements in the labour share. (Capital income is the gross operating surplus before depreciation, interest and tax.)

Figure 1 shows the evidence. It reveals that there was no bias against labour at the aggregate level during the 1990s. The economy-wide labour income share was stable from the late 1980s and right through the 1990s, indicating that labour and capital shared proportionately in the strong income growth of the 1990s. (The higher labour income share in the 1970s and 1980s is discussed in a later section.)

**Figure 1: Economy-wide Labour Income Share, Real Product Wage and GDP per Labour Hour, 1964-65 to 1999-00**

Index 1997-98 = 100 (LHS) and per cent (RHS)



Data source: Estimates based on ABS data.

### *Wage and profit rates*

Changes in the labour income share can be related mathematically to productivity and wage growth. Doing so introduces an explicit link to productivity growth and its distribution through rates of payment to factors of production. Formally, as shown in Parham et al. (2000) growth in the labour income share is equal to:

- growth in the real product wage<sup>1</sup> (the average nominal hourly wage, deflated by an index of product prices — the GDP deflator in this case); less
- growth in labour productivity (as represented in the economy-wide case by GDP per hour worked).

An array of real wage and labour productivity outcomes is therefore consistent with a stable labour income share. The only requirement is that growth in real wages must match labour productivity growth.

Figure 1 shows the strong productivity growth that characterised the 1990s. Because the growth in real wages matched the strong labour productivity growth, there was no substantial movement in the labour income share. The actual growth rates are shown in Table 1 (as reported in Parham et al. (2000), there was zero growth in the factor income shares from 1990-91 to 1998-99).

The same can be shown on the capital side. The real rate of payments to capital increased, but by no more than the increase in capital productivity, thus essentially preserving the capital income share (Table 1).

This examination of the distribution of factor income is from a producer cost point of view. The use of the output price deflator is crucial to this view. The stability in the factor shares means that there was no change in the efficiency costs of employing labour and capital. Increases in the real costs of employing both factors of production were matched by increases in their productivity.

But it is also possible to view these results from an ‘income received’ perspective. From that perspective, those in employment received sufficient of the productivity gains through real wage increases to maintain their share in total income.

Real wages as a source of income are normally computed with a consumption price deflator — the CPI. The so-formed ‘real consumption wage’ also shows growth in the 1990s, although a divergence in growth between consumption and producer prices means that the real consumption wage did not grow as strongly as the real product wage (Table 1).

On the capital side, the rate of gross profit grew at over 1 per cent a year in the 1990s (Table 1), increasing from an average of 13.9 to 15.4 per cent.

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<sup>1</sup> The concepts of the real product wage and the real consumption wage are explored by Blanchard (1997).



**Table 1: Accounting for Growth in Factor Income Shares, 1990-91 to 1999-00**

Per cent per year	
<b>Growth in labour income share</b>	-0.1
<i>equals</i>	
Growth in real product wage	2.2
<i>less</i>	
Growth in labour productivity	2.3
<i>Information item:</i>	
Growth in real consumption wage	1.7
<b>Growth in capital income share</b>	0.1
<i>equals</i>	
Growth in real profitability	1.2
<i>less</i>	
Growth in capital productivity	1.1
<i>Information item:</i>	
Growth in rate of profit	1.1

Source: Estimates based on ABS data.

### The 1970s and 1980s Experience

The elevated labour income share in the 1970s and 1980s stands out in Figure 1 and belies the ‘stylised fact’ that factor income shares remain largely invariant. A review of history and the factors underlying the increase in the labour income share and its subsequent decline serves, by way of contrast, to reinforce what went ‘right’ in the 1990s.

Like many other economies, the Australian economy was hit by a number of shocks in the mid-1970s. There was a sharp decline in the terms of trade and a reduction in export volumes. On the supply side, real wages climbed sharply, but there was no accompanying productivity increase. The issue in this period was not about the distribution of strong productivity growth, but whether a wage ‘push’ could be accommodated.

The labour income share rose sharply from 1972-73 to 1974-75 as the increase in the real product wage outstripped the growth in labour productivity (Figure [Error! Not a valid link.](#)). The divergence between wage growth and productivity growth became known as ‘the real wage overhang’.

The labour income share rose by over 5 per cent a year over these two years, with increases in the real product wage of 7 per cent a year (Table 2). The higher real cost of employing labour, without a commensurate increase in productivity

and therefore income, squeezed profits. Producers had an inducement to substitute capital for labour.

**Table 2: Accounting for Growth in the Labour Income Share**

	Per cent per year					
	<i>1964/65 to 1972/73</i>	<i>1972/73 to 1974/75</i>	<i>1974/75 to 1983/84</i>	<i>1983/84 to 1988/89</i>	<i>1988/89 to 1993/94</i>	<i>1993/94 to 1999/00</i>
<b>Economy-wide</b>						
Growth in labour income share	0.6	5.2	-1.2	-1.3	0.1	0.3
<i>equals</i>						
Growth in real product wage	3.4	7.1	1.1	-0.7	1.8	2.5
<i>less</i>						
Growth in GDP per labour hour	2.8	1.8	2.3	0.6	1.7	2.2
<i>which equals</i>						
Growth in GDP	4.9	3.4	2.7	4.3	2.3	4.5
<i>less</i>						
Growth in average hours	-0.6	-1.2	-0.5	0.1	-0.2	-0.2
<i>less</i>						
Growth in the workforce	3.2	2.3	1.7	2.8	1.3	1.7
<i>less</i>						
Growth in the employment rate	-0.3	-0.1	-1.0	0.5	-0.6	0.7
<i>Information items:</i>						
Growth in real consumption wage	4.3	8.4	1.0	-1.0	1.0	1.7
Growth in rate of profit	-2.1	-11.4	0.8	1.5	0.4	0.7
<b>Market sector</b>						
Growth in labour productivity	2.4	4.2	2.1	1.5	2.1	3.1
<i>equals</i>						
Capital deepening	1.5	1.9	1.4	0.5	1.5	1.4
<i>plus</i>						
Multifactor productivity growth <sup>a</sup>	0.9	2.4	0.7	1.0	0.6	1.7

<sup>a</sup> Except for the period 1993-94 to 1998-99, the displayed rates of MFP growth should not be interpreted as underlying or trend rates of growth.

Source: Estimates based on ABS data.

The higher labour income share was not sustained. In fact, there was a very drawn-out readjustment. The labour income share gradually declined from the mid-1970s as further growth in the real wage moderated and growth in labour productivity picked up. However, labour productivity growth picked up through an undesirable source — growth in unemployment (Figure 2). The relatively high cost of labour would have contributed some ‘classical’ unemployment due to capital-labour substitution. But weakness in aggregate demand would have also been a major factor. Whatever its cause, higher unemployment was consistent with a higher ratio of output to hours worked — that is, higher labour productivity.

This mechanism is illustrated in Table 2 with a decomposition of growth in labour productivity (GDP per labour hour). The employment rate declined by one per cent a year from the mid-1970s to the mid-1980s, even with slower growth in workforce numbers (growth in the workforce, combined with a decline in the employment rate, means that unemployment increased). The faster rate of decline in the employment rate over 1974-75 to 1983-84, compared with the previous period (from -0.1 to -1.0 per cent a year), more than accounts for the 0.5 of a percentage point acceleration in labour productivity between the two periods. The decline in the employment rate and the increase in the unemployment rate are also shown in Figure 2.

The labour income share then continued its readjustment, but through a different mechanism. The prices and incomes Accords in the 1980s brought reductions in real wages. The real product wage declined by 0.7 per cent a year from 1983-84 to 1988-89. This contributed more than substantially to the reduction in the labour income share of 1.3 per cent a year. Labour productivity growth was a slow 0.6 per cent a year. The labour income share returned to around 1960s levels by the late 1980s (Figure 1).

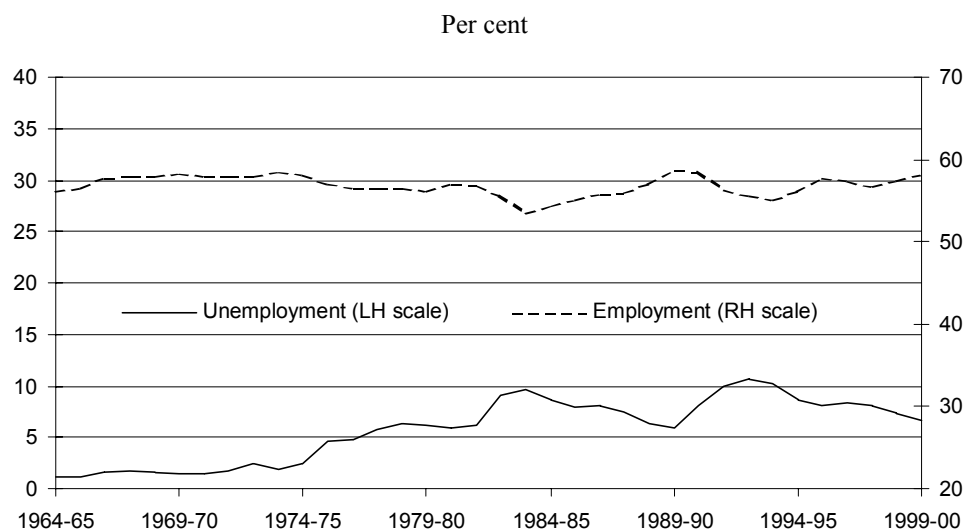
Strong multifactor productivity (MFP) growth distinguishes the 1990s — and the 1960s — from the mid-1970s to the end of the 1980s (see ‘market sector’ section of Table 2). Strong MFP growth in the 1990s sustained the increases in real wages through strong labour productivity growth.<sup>2</sup> As a result, the increased real cost of labour did not squeeze profits. Real wages and rates of profit both increased. And, with strong growth in output, employment grew and unemployment fell — after the major disruption of the early 1990s recession (Figure 2). Labour benefited from both higher real wage rates and higher employment rates. The distribution of income between labour and capital remained even.

The experience of the past three decades illustrates that productivity growth is essential to sustain increases in real wages and employment. Without commensurate productivity growth, a wage ‘push’ can contribute to unemployment and to a drawn-out and costly period of adjustment.

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<sup>2</sup> As is implied in Table 2, growth in labour productivity is equal to capital deepening (growth in the capital-labour ratio weighted by the capital income share), plus growth in multifactor productivity. Multifactor productivity is calculated for the market sector and not for the economy as a whole (see text next page).

**Figure 2: Workforce Unemployment Rate and Working-age Employment Rate, 1964-65 to 1999-00**



Data source: ABS Labour Force Statistics database on EconData.

### Industry Perspective

Whilst there was little or no bias against labour at the economy-wide level in the 1990s, there was a slight bias against labour in the market sector of the economy. The market sector covers around 60 per cent of the measured economy, but excludes service activities (such as public administration, defence, health and education) that do not have sufficiently well-measured outputs to include in productivity calculations. There was a small reduction in the labour income share in the market sector of 0.3 per cent a year from 1990-91 to 1999-00 (Table 3). In other words, production in the market sector became slightly more capital-intensive. (As can be seen from Table 3, the experience of individual industries differed, with the labour income share decreasing in some industries, but increasing in others.)

However, the essentially stable share for the economy as a whole implies that the slight bias against labour in the market sector has been mostly offset by a slight bias in favour of labour in the non-market sector. For example, the strong employment growth in business services could have been one offsetting development.<sup>3</sup>

<sup>3</sup> There were insufficient data to examine the direction of distributional biases in the non-market sector.

**Table 3: Growth in Labour Income Shares, by Market Sector Industry, 1990-91 to 1999-00**

	Per cent per year		
	<i>Real product wage</i>	<i>Labour productivity</i>	<i>Labour income share</i>
Agriculture	5.1	3.0	2.1
Mining	4.0	6.3	-2.1
Manufacturing	1.5	2.6	-1.1
Electricity, gas & water	1.0	4.0	-3.0
Construction	0.6	0.5	0.2
Wholesale trade	5.9	5.1	0.8
Retail trade	1.8	1.3	0.5
Accommodation, cafes & restaurants	0.1	-0.1	0.2
Transport & storage	2.2	2.7	-0.5
Communication services	4.3	7.2	-2.7
Finance & insurance	3.8	5.1	-1.3
Cultural & recreational services	-0.8	-1.3	0.5
Market sector	2.1	2.4	-0.3

Source: Estimates based on ABS data.

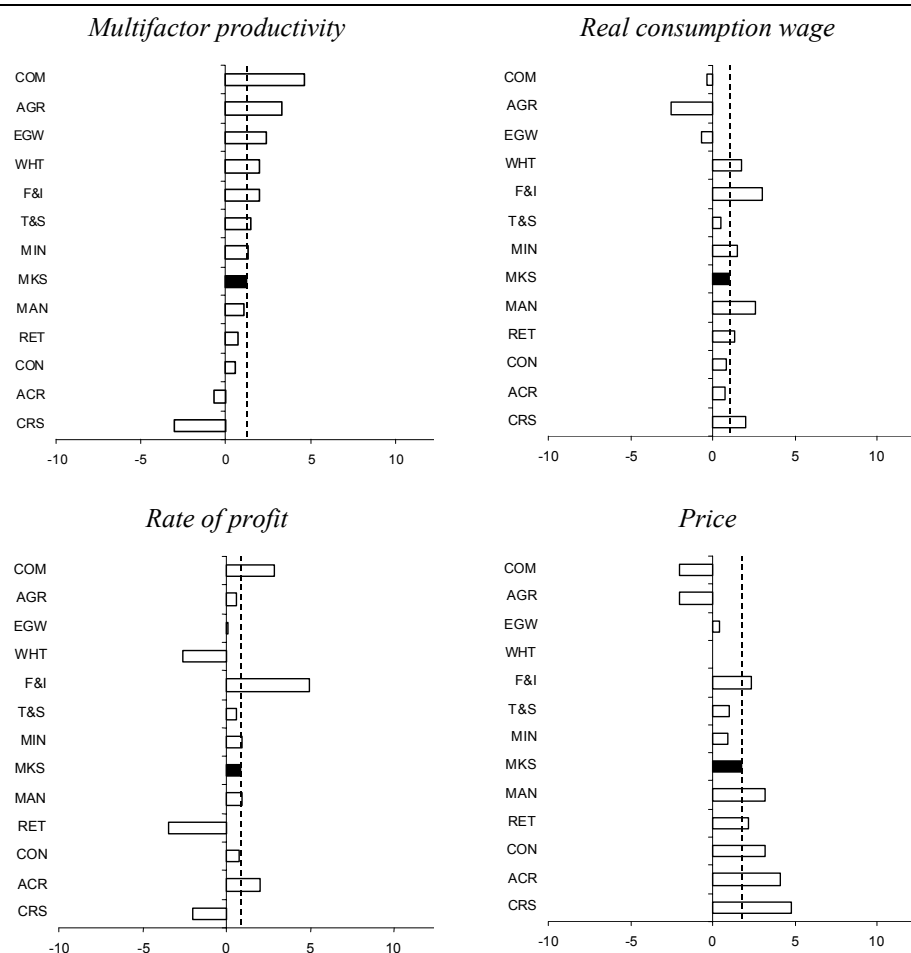
The industry perspective also allows closer examination of the distribution of productivity gains through higher wages or higher profits or, with lower costs, through lower prices charged for goods and services produced.<sup>4</sup> In the latter case, it is industrial and household purchasers who gain.

Figure 3 ranks industries in terms of their MFP growth in the 1990s. Wage, profit and price outcomes are also displayed in the same industry order.

<sup>4</sup> It is possible to examine *relative* prices at the industry level and their association with relative productivity growth. This abstracts from the multitude of policy and other factors that determine the aggregate price level.

**Figure 3: Average Growth in Multifactor Productivity, Real Consumption Wage, Rate of Profit and Price<sup>a</sup>, Industry Sectors, 1988-89 to 1999-00**

Per cent per year



COM	Communication services	MKS	Market sector
AGR	Agriculture	MAN	Manufacturing
EGW	Electricity, gas and water	RET	Retail trade
WHT	Wholesale trade	CON	Construction
F&I	Finance and insurance	ACR	Accommodation, cafes and restaurants
T&S	Transport and storage	CRS	Cultural and recreational services
MIN	Mining		

<sup>a</sup> price growth = changes in industry-specific price deflators for value added.

Data source: Estimates based on ABS data.

The relatively high productivity growth industries did not pay higher wage rises. In fact, there was relatively little variation in wage growth across industries, except for the aberration in Agriculture. There was wider variation in profit growth but no strong pattern consistent with productivity growth.

The strongest pattern is in price growth, which is negatively correlated with productivity growth. The high productivity growth industries had lower price increases and, in some cases, had price decreases.

These results are summarised in the correlation coefficients in Table 4. The strong negative correlation between productivity and prices (-0.9) is confirmed. The size and the sign of the correlation between productivity growth and wage growth appears somewhat spurious, driven in particular by the negative wage growth in Agriculture.

Table 4 also shows an earlier period from the mid-1970s and through the 1980s. This period shows stronger correlation with profits (principally in Communication services and Electricity, gas & water, as governments set firmer commercial targets for their business enterprises), but weaker correlation with prices.

**Table 4: Correlation Coefficients Between Sectoral Multifactor Productivity Growth And Sectoral Growth in Wages, Profits and Prices**

	<i>1974-75 to 1988-89</i>	<i>1988-89 to 1999-00</i>	<i>1974-75 to 1990-00</i>
Real consumption wage	0.55	-0.49	0.49
Rate of profit	0.75	0.37	0.69
Prices	-0.57	-0.90	-0.83

The correlations for the two periods indicate that, while productivity growth is important for growth in the general levels of real wages and profitability, industry variations in productivity growth have not translated nearly as readily into wage and profit growth differentials across industries. Industries with high productivity growth have not systematically raised wages by more than other industries. Industries with high productivity growth have paid the going wage increases, taken a little extra in profits in some cases (after weathering declines through the 1970s and early 1980s) but, mostly, have lowered their prices relative to other industries.

Moreover, the trend toward passing productivity gains on through lower prices has been stronger in the 1990s than in the past. This is consistent with producers facing stronger competitive pressure in the 1990s.

Competitive pressures thus appear to be important not only in contributing to the generation of productivity gains by sharpening incentives to be more

productive (PC, 1999), but also in influencing the distribution of the gains. Competitive pressures are likely to have put some brake on nominal wage increases and profit growth, and to have encouraged productivity gains to be passed on through lower prices.

### **Other Distributional Dimensions**

The distribution of productivity and income gains between labour and capital is only part of the complete distributional picture. However, mapping the functional distribution of income to the distribution of personal and household income is beyond the scope of this paper. Rather, the results of other studies are used to fill in some of the gaps.

The available evidence suggests that, while the distribution of income between labour and capital has been even, the distribution of earnings among individuals has become more unequal in the 1990s. The increase, however, is a continuation of the growth in earnings inequality during the 1980s, rather than a step up in the 1990s (Norris and McLean, 1999).

Other studies provide evidence of a bias in the growth in labour payments in favour of skilled workers. Their share of the total wage bill has risen from around 37 per cent in the mid-1980s to around 42.5 per cent in the late 1990s. Most of this increase took place in the 1990s. The evidence from Australian and overseas studies finds that technological change (especially computer related) is a source of bias in favour of skilled workers, but trade liberalisation appears to have little direct effect (de Laine, Laplagne and Stone, 2000).

Moreover, the change in the distribution of payments to labour does not appear to be the result of a change in the wage premium for skill. The growth in payments to skilled labour appears to be due more to faster growth in employment (relative to unskilled workers) than to faster growth in wages (de Laine, Laplagne and Stone, 2000).

There is evidence of faster wage growth for some individual occupation groups. For example, the salaries of chief executive officers increased at more than double the rate of average earnings over the decade to 1998 (Kryger, 1999). But, since chief executive officers only represent a small proportion of the working population, the effect on overall wage dispersion is likely to be small.

Ann Harding and others at the National Centre for Social and Economic Modelling (NATSEM, 2000) have investigated the dispersion in earnings at the personal and household level and the effects of government redistribution policies operating through the tax and transfer system. Both earned income (wages, salaries and self-employment income) and market income (earned income plus investment and superannuation income) became more unequal in the 1990s, compared with the early 1980s (Table 5). However, government transfers (pensions, allowances and other welfare payments) have reduced both the level of and growth in inequality in market income. Gini coefficients for gross income (market income plus transfers) show the effect of transfers and Gini coefficients



for disposable income (gross income less income tax) show the effect of income tax.

**Table 5: Gini Coefficient Measures of Inequality in the Distribution of Income<sup>a</sup>**

	1982	1996-97
Earned income	0.477	0.538
Market income	0.457	0.511
Gross income	0.386	0.398
Disposable income	0.337	0.346

<sup>a</sup> A higher Gini coefficient indicates greater income inequality. Measured for income units (groups of persons within households whose command over income is assumed to be shared).

Source: NATSEM (2000).

Importantly, the distribution of disposable income amongst individuals and households has remained relatively stable between the early 1980s and the mid-1990s, despite the increased inequality in market incomes. This implies that the tax and transfer system has been largely effective in counteracting the increased inequality in market incomes.

However, middle-income earners have not shared equally in the income gains. Income earners at the top and bottom have both received more income, while middle income earners have missed out (NATSEM, 2000).

Whilst the NATSEM results refer to the period up to the mid-1990s, the ABS (2001) found that since then income distribution has not changed significantly.

Parham et al. (2000) provided some other distributional information. Governments have shared proportionately in the income gains of the 1990s through their revenue raisings, whilst there is a mixed picture in terms of the distribution of gains between urban and rural and regional communities. The data also suggest that foreigners did not receive a greater share of the 1990s income gains.

Finally, passing on productivity gains through lower prices is likely to have had its own distributional effects. For example, lower relative prices for goods and services that form a prominent part of expenditure in low-income households would be of greater benefit to low-income households.

General equilibrium or indirect effects also have distributional consequences. Earlier research by the Industry Commission (1996) into the effects of price changes for electricity and other utility services found that, even where the narrowing of cross subsidies increased prices to households, most households —

including those with lower incomes — benefited overall, when the indirect effects through lower business costs were factored in.

### **Concluding Remarks**

This paper has not taken a view on what the appropriate distribution of income might be. But it has presented evidence to suggest that the distributional consequences of the 1990s productivity and income gains have either been relatively benign or have been counteracted by policy measures.

The paper has shown that the strong income growth due in large part to a surge in productivity growth in the 1990s has been distributed evenly between labour and capital.

There has been little or no bias against labour at the aggregate level, despite a number of developments that are sometimes perceived to have an anti-labour bias. This does not mean that there have not been biases against labour in specific areas. Indeed, some such areas have been identified — at the industry level and in terms of skill level. But specific areas of bias against labour cannot be extrapolated. The economy has been operating in such a way that a bias against labour in one area has been counteracted by a bias in favour of labour in another area.

Other studies have provided evidence of increased dispersion in earnings in the 1990s, following on from trends emerging in the 1980s. However, the tax and transfer system has been largely effective in counteracting these trends.

The paper has also shown that the 1990s productivity surge sustained increases in real wages. But since higher wage rates were matched by higher productivity, there was no inducement for producers to substitute capital for labour. Indeed, with strong output growth, employment growth accompanied the real wage growth.

Wages and employment growth are both important, not only in determining the amount of income distributed to labour in aggregate, but also in influencing the distribution of income gains between those in and out of work. An important question — and one that has been exercising some academic economists — is whether wage and income measures can be introduced to promote additional employment growth, in order to make further inroads into unemployment.

The paper also points to the importance of competition. Competition is not only a driver of productivity growth, but it also provides incentives for productivity gains to be passed on to purchasers — with wider distributional consequences — rather than being retained within businesses in profit or wage growth.

### **References**

Australian Bureau of Statistics (2001), *Income Distribution 1999-2000*, ABS Cat. no. 6523.0, AGPS, Canberra.

Banks, G. (2001), 'Competition and the Public Interest', Speech to National Competition Council Workshop, 'The Public Interest Test Under National Competition Policy', Colonial Stadium, Melbourne, 12 July, available at: <http://www.pc.gov.au/research/speeches/cs120701.pdf>.

Blanchard, O. (1997), 'The Medium Run', Brookings Papers on Economic Activity, no. 2, pp. 89-158.

de Laine, C., P. Laplagne and S. Stone (2000), *The Increasing Demand for Skilled Workers in Australia: The Role of Technical Change*, Productivity Commission Staff Research Paper, AusInfo, Canberra.

Industry Commission (1996), *Reform and the Distribution of Income — an Economy-wide Approach*, Staff Information Paper, AGPS, Canberra.

Kryger, T. 1999, 'Private Sector Executive Salaries', Parliamentary Library Research Note 24, 1998-99, available at: <http://www.aph.gov.au/library/rn/1998-99/99rn24.htm> (accessed 3 April 2000).

National Centre for Social and Economic Modelling (2000), 'Income Distribution Trends 1982 to 1996-97', report prepared for *The Australian*, available at: <http://www.highered.theoz.com.au/flathtml/extra/where/data/trends.pdf> (accessed 30 June 2000).

Norris, K. and B. McLean 1999, 'Changes in Earnings Inequality, 1975 to 1998', *Australian Bulletin of Labour* 25(1):23-31.

Organisation for Economic Co-operation and Development (2001), *The New Economy: Beyond the Hype*, Final Report on the OECD Growth Project, Executive Summary, OECD, Paris.

Parham, D., P. Barnes, P. Roberts, and S. Kennett (2000), *Distribution of the Economic Gains of the 1990s*, Productivity Commission Staff Research Paper, AusInfo, Canberra.

Parham, D. and S. Kennett (2001), *Australia's Aggregate Productivity Performance to 1999-00*, Productivity Commission Staff Research Paper (forthcoming).

Productivity Commission (1999), *Microeconomic Reforms and Australian Productivity: Exploring the Links*, Commission Research Paper, AusInfo, Canberra.

*The authors are grateful for helpful comments from anonymous referees. The material in this article is based on and updates Parham et al. (2000).*



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## **REVIEWS**

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### **Kids Money**

*Smith, D. (ed.), **Indigenous Families and the Welfare System: Two Community Case Studies**, Research Monograph No. 17, Centre for Aboriginal Economic Policy, The Australian National University, Canberra, 2000*

*Reviewed by **John Quiggin***

**T**he problems of the welfare system in indigenous communities have been brought into sharp relief by Noel Pearson's recent denunciation of welfare as 'poison'. As well as reflecting concerns of many people involved with indigenous issues, Pearson's arguments were seen by the Howard government as supporting their broader campaign for welfare reform, centred on the concept of 'mutual obligation'.

Before the 1970s, indigenous communities were largely excluded from the general welfare system. In large measure this reflected the design of the system as part of a 'wage-earners welfare state'. Indigenous workers, particularly in the pastoral industry, were paid primarily in kind (rations for the workers and their extended families) rather than receiving award wages. In the wake of the 1967 referendum (formally amending the 'race power' in Section 51 of the constitution to allow the Commonwealth to legislate with respect to Aborigines, but generally regarded as giving Aborigines the vote), the policies that had excluded Aborigines from the award system and unemployment benefits became untenable. The move from the rations system to award wages was followed by rapid reductions in the employment of Aboriginal workers by the pastoral industry, which accelerated during the slump in beef prices in the mid-1970s.

The arrival of welfare in the form of unemployment benefits therefore coincided with the complete and permanent collapse of the pastoral labour market that had previously operated in remote areas. It is important to note that equal pay and the availability of welfare probably did little more than hasten an inevitable outcome. Undoubtedly, the requirement to pay award wages was the proximate cause of the decline in employment. However, the replacement of the large pastoral estates with correspondingly large workforces by family-operated properties employing few or no workers was probably inevitable even without these changes.

The present study was designed and undertaken before Pearson's speech. Moreover, by virtue of its funding by the Department of Family and Community Services, its concerns were limited fairly strictly to the operation of the welfare system, with particular reference to 'kids money'. The approach taken was a

detailed study of two communities: Kuranda near Cairns in North Queensland and the remote Northern Territory community of Yuendumu.

The most salient finding of the study is that the family structures and economic relationships in Aboriginal communities bear little or no relationship to those for which the Australian welfare system was designed. From World War II until the 1970s, the system was essentially a 'wage-earners welfare state' focused on the needs of families with male breadwinners who might experience short periods of unemployment or sickness. Subsequent developments broadened the range of admissible types to include two-earner and single-parent households.

The Supporting Parents Benefit, available to single-parent households represented something of a break with the 'wage-earners welfare state' since it was available without a work test as long as the recipient was supporting children under the age of 18. In practice, the typical recipient was a divorced woman who received the benefit for only a couple of years before returning to the workforce or remarrying.

The main focus of the present study is on the mismatch between the ideal notion of a household on which the welfare system is based and the reality in indigenous communities. The ideal household for the welfare system consists of one or two adults with their dependent children. Possibilities such as that of blended families linked to absent biological parents of some children have been addressed (for example, through the Child Support Scheme) with considerable difficulty.

By contrast with the 'ideal' nuclear family for which the welfare system is designed, a typical household considered in the Kuranda study contained eleven people from four generations. Only three of the 28 Kuranda households contained anything approximating a nuclear family of a couple and their biological offspring. Moreover, members of the communities, including children, frequently moved from household to household for short or long periods.

The other crucial assumption of the welfare system is that it works in a context where most adults (or at least most adult males) are employed. Hence, the system is designed to cope with temporary unemployment or sickness, and to provide for a minority of the population unable to participate in the workforce because of age, chronic disability or sole parent status.

Once again, the design assumptions of the welfare system are inconsistent with the realities of indigenous communities. The communities examined in this study are characterised by long-term reliance on the welfare system as a major source of income. In the Yuendumu study, only 10 per cent of the adult population in the sample received wage income other than from the Community Development Employment Program (CDEP), which is a 'work for welfare' scheme funded from the welfare budget. A majority relied either on Newstart (unemployment benefit) or Family Allowance and Parenting Payments.

Although the study indicates that the existing welfare system is not working very well, it gives little comfort to advocates of the alternative approaches that are currently popular. First, consider policies designed to facilitate transitions from welfare to work. The fundamental assumption supporting these policies is that the

labour market is functioning adequately, but that individuals have particular problems, such as lack of skills and job readiness, which prevent them from obtaining employment. Particularly for remote communities like Yuendumu, there is no functioning labour market into which to make a transition.

Second, consider policies aimed at generating economic self-reliance, based on market-oriented activities independent of government support, as recently advocated by Noel Pearson. It is clear from the study that the CEDP scheme is the closest approximation to sustainable economic activity available to these communities. Moreover, the decline of rural populations in general suggests that it is most unlikely that any remote Aboriginal community will generate commercially viable market-based employment sufficient for more than a tiny fraction of existing populations.

It would be preferable to consider the policy problem of developing an economic and social assistance framework in which members of Aboriginal communities can receive adequate incomes while making an appropriate contribution to the community and achieving the self-respect that goes with making such a contribution. The idea of commercial viability is chimerical in the context of a policy driven by the social objective of sustaining remote communities with long-standing ties to particular areas or land. Moreover, commercial viability is irrelevant to the kinds of concerns raised by Pearson and others about the corrosive effects of passive reliance on welfare. Apart from free-market ideologues, no-one would suggest that the self-respect of Australian manufacturing workers was diminished by the fact that their jobs relied on tariffs and subsidies.

Finally, although the indigenous communities included in this study are not typical of the Australian community as a whole, the problems of the welfare system discussed in this study are not confined to the indigenous population. Since the 1970s, rates of unemployment and family breakdown have been consistently higher than those prevailing during the 'long boom' that followed World War II. Our capacity to address the manifestations of these problems in Aboriginal communities will be an indicator of the longer-term viability of the welfare system as a whole.

## References

Pearson, N. (2000), 'Our Right to Take Responsibility', Noel Pearson and Associates, Cairns.

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## **Economic Rationalists and Irrationalists**

*William Coleman and Alf Hagger, **Exasperating Calculators: The Rage Over Economic Rationalism and the Campaign Against Australian Economists**, Macleay Press, Paddington NSW, 2001*

*Reviewed by **James Cox***

The authors of this book argue that the debate over economic rationalism has damaged Australia. A campaign was launched in 1991 against economic rationalism, an economic policy that was adopted by Australian governments during the 1980s and 1990s. But increasingly the campaign came to be fought against economists. This is because, in the minds of the critics, it is economists who give rise to economic rationalism. Coleman and Hagger use the term 'economic irrationalists' to refer to the critics of economic rationalism and it is convenient for me to do the same in this review.

The campaign against economic rationalism, the economic policy, has in the authors' view been largely unsuccessful (p. 297). This is because policies such as tariff reductions and privatisation continued to be implemented during the 1990s despite the efforts of the campaigners. Nevertheless, there is less support for these policies in the general community now than during the 1980s and politicians have adjusted to the changed climate of opinion. The authors argue that, by contrast, the campaign against economists has been much more successful. The results of this success can be seen in declining enrolments in economics courses in secondary and tertiary education, less attention given by the media and academic colleagues to the views of economists on problems such as unemployment and, above all, increased unpopularity of economists which leads to embarrassment in social settings such as dinner parties and games of golf. 'Overall', the authors (p. 300) argue,:

the end result of Economic Irrationalism has been to reduce the authority of economists, to reduce the respect for research and specialism in the public mind, and to lodge in their place a horrid incubus, to alarm and, of course, to be blamed. Conversely, another part of the legacy has been to confer honours on those prominent in the Irrationalism campaign .... We wonder if the campaign against economics has encumbered the problem-solving ability of Australia in general and given room to tirade and propaganda in general.

The authors are, they say, motivated by a 'sense of shock at the exaltation of the state that we thought had been extinguished by the events of the 20<sup>th</sup> century – a disgust at the disrespect by the public culture for intellectual standards, and indignation at the swinish calumny heaped upon decent and useful people.'

*Exasperating Calculators* is, like *Economic Rationalism* in Canberra (the famous book by Michael Pusey that launched the debate) organised in a number of

levels. The first level provides Coleman's and Hagger's assessment of the worth of the contributions made by the economic irrationalists. The authors argue that these contributions are without value. The second level provides an assessment of the contributions that Australia's economists have made to the economic rationalism debate.

Coleman and Hagger conclude that, on the whole, economists have not been effective in the debate. Few economists took part in the debate and those who did were unnecessarily tentative. By contrast, Coleman and Hagger argue that economists should have pointed out the weaknesses in the arguments of the economic irrationalists and drawn the public's attention to those things concerning the role of government in the economy that economists agree on rather than those things that economists do not agree on.

The third level of Coleman's and Hagger's argument places the debate over economic rationalism into the broader context of anti-economics. They point to the long history of anti-economics in Australia and elsewhere and to the enthusiasm with which economic irrationalist views were taken up by certain sections of the media. They argue that episodes similar to the debate about economic rationalism are likely to occur in future and that economists need to be better prepared for them.

I now turn to the more detailed comments on Coleman's and Hagger's contribution at each of the levels. The assessment of books and articles of economic irrationalist intellectuals is the foundation on which the Coleman's and Hagger's book rests. Coleman and Hagger (p. 290) have defined the criterion for success for this part of their work as follows:

We hope that, in opening these pages [our readers] held Economic Irrationalism to have some value: that it landed some palpable hits on Economic Rationalism and economists (even if it exaggerated those hits), or that it was a worthwhile corrective to Economic Rationalism (even if it was biased). It is to purchase the assent of such readers to our claim of worthlessness that we have written this book.

The relevant chapters of Coleman's and Hagger's book satisfy this demanding requirement to varying extents. Chapter Three examines the book that started the debate – Michael Pusey's famous 'Economic Rationalism in Canberra'. In this chapter Coleman and Hagger establish convincingly that Michael Pusey's conclusions that 'a disproportionate number of bureaucrats come from privileged social backgrounds' and 'our top public servants are far more conservative than they say or believe' are not well supported by his survey of Senior Executive Service Officers in Canberra. Rather, these conclusions were arrived at by reading into the survey results supplementary information that may have been available to Pusey but certainly was not available to his readers, and by rhetorical devices that appear to make something out of nothing. In honour of its subject, the notoriously

unfactual Michael Pusey, this section includes some factual errors — see, for example, pages 52 and 55<sup>1</sup>.

So far, so good. However, an open-minded reader who is moderately sympathetic to economic irrationalism might note that Coleman and Hagger discuss only two of Pusey's six chapters. Although they raise some interesting issues, I agree with Coleman and Hagger that the missing few chapters are not any great value. However, their readers will have to take Coleman's and Hagger's word for this.

Chapters Five and Six deal, respectively, with the contributions of the economic irrationalists of the left and the right. These contributions are dealt with fairly briefly. A summary of the author's argument is presented, followed by an assessment by Coleman and Hagger. These assessments emphasise (in particular) the factual errors made by the economic irrationalists, but also their ignorance of economics and history, logical errors, weakness of argument and (sometimes) unpleasant social values. Chapter 11 (on 'Third Ways and Half Measures' includes similar material, especially in assessing contributions by the prophets of antiglobalisation, Saul and Gray. Coleman and Hagger think that open-minded readers will be impressed by the sheer number of factual errors that they find in the work of the economic irrationalists.

These errors, in the author's view, go beyond carelessness and indicate an absence of concern for reality. Or perhaps Coleman and Hagger think that calling the economic irrationalists to account for their misdeeds will discourage similar productions in future. I am not sure that they are right about this. Despite the factual errors, an open-minded reader might conclude that there is something in what the economic irrationalists were trying to say but they had not managed to say it very well. In particular, Coleman and Hagger do not attempt to guide the reader to a more satisfactory analysis of the issues raised by the economic irrationalists. It is interesting to compare Coleman and Hagger's discussion of Robert Manne's views on the desirability of protecting Australian industry (pages 78-90 of *Exasperating Calculators*) with their account of John Stone's response to Manne (pages 168-171). Coleman and Hagger point to the factual errors made by Manne and the view that he 'insinuates' (p. 85) that 'it is beneficial if economists are ignored in the formulation of economic policy'. By contrast, Stone gets to grips with Manne's arguments and explains why they do not support Manne's conclusions.

The second level of Coleman's and Hagger's analysis examines the contributions of economists to the economic rationalism debate. The authors think that economists have been far too charitable to their adversaries. This is not an error that Coleman and Hagger wish to perpetrate. No one emerges unscathed

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<sup>1</sup> The errors are as follows: at page 52. Coleman and Hagger write: 'We start with questions 20 and 21, the first two questions in Part Two. They are dealt with in Chapter 4 of the Pusey book' — in fact, they are dealt with in Chapter 1 of that book. At page 55 they write: 'One gathers from the wording of the seventeen page commentary which Pusey presents, following the two tables in question (Pusey 1991:37-44) ...' — as the page reference suggests, seven pages is correct.

from their examination – not even John Stone, although he does better than most. Chapter Six examines the contributions of those who attempted to order the debate by providing a definition of economic rationalism. This, ultimately, has proved to be a fruitless task because the debate has been about many things, not one thing. Chapter Seven examines the writing of economists who were in favour of economic rationalism. Some of these economists attempted to destroy the arguments of the economic irrationalists. Coleman and Hagger approve of this activity but they think that economists (with the notable exception of John Stone) have not been very good at it. Other economists attempted to provide arguments in favour of economic rationalism. According to Coleman and Hagger, these arguments have not been very effective; I should add that I am one of those criticised here.

Chapter Eight examines ‘the sociologically interesting phenomenon of economists spurning Economic Rationalism and, indeed, economics’ (p. 206). This chapter makes the useful point that economic rationalism is not the same thing as neoclassical economic theory. Chapter Nine examines why economists were so ineffective in the debate and draws attention to some truly embarrassing attempts by some economists to appease their adversaries.

The most interesting chapter in this second level of analysis is Chapter 10 which presents the authors’ views about what economists should say to the wider community about the economic role of government. The authors believe that economists should talk to the wider community about the things they agree on rather than the things they do not agree on. They then present their own views about what economists agree on.

The result is strongly reminiscent of our old friend, the analysis of market failure. To my mind at least government failure, while recognised, is under-emphasised. As has been noted recently (see, for example, Stiglitz, 1998) there are systemic reasons why governments often find it hard to achieve the objectives they set for themselves. A more important point is that the account of things that economists agree on presented by Coleman and Hagger is entirely theoretical. As such, it provides no useful guidance on what should be done in a practical situation. Empirical knowledge, which economists certainly possess, is needed for this. As is well known, arguments for industry protection that are perfectly consistent with neoclassical economic analysis are invented (or rediscovered) from time to time. The desirability of low rates of protection is something that most (but not all) economists agree on because they doubt the empirical applicability of the arguments for protection. The things that (most) economists agree on should, in my view, therefore be extended to include some empirical knowledge.

The third level of analysis in Coleman’s and Hagger’s book looks for the reasons for the popularity of the campaign against economic rationalism. Chapter One points to the surprising success of Michael Pusey’s unreadable book. Chapter Two discusses some contributions to the debate by members of the public who were not professional intellectuals. Finally, Chapter 12 offers some reflections on why the debate on economic rationalism occurred. The campaign took off, the authors argue, because some sections of the media agreed with the views of the

economic irrationalists. The role of Pusey's book was to provide academic legitimacy for views the media already held. As Coleman and Hagger (p. 306) put it:

In 1991 University Tests Proved that Economic Rationalism was bad for you, and the media fell for the shaggiest line in the ad man's book.

Coleman and Hagger discuss 'the campaign against Australian economists' largely in terms of the writings of economic irrationalists and their opponents. Although what is written is important, there is surely much more to the campaign than this. Moreover, although Coleman and Hagger emphasise the extent to which economic irrationalism is offensive to commonly held social values in Australia, it is equally clear that the climate of opinion has become increasingly hostile to the market economy in recent years throughout the developed world as well as in Australia. I suspect that many members of the general public as well as the media would have agreed with much of the criticism of economic rationalism. Most people who have not been trained economics (and even professional economists in their less guarded moments) hold what David Henderson (2001) calls pre-economic ideas that tend to be protectionist, hostile to the market economy and supportive of government intervention. Henderson refers (p. 86) to:

the strongly held intuitive notion that market economies, which are taken to be anarchic and amoral, are heavily populated with non beneficiaries and victims — the deprived, condemned, excluded or marginalised — whose well-being depends on collective action by (society) or 'the international community' to bring deliverance from above.

On page 87, he notes the emergence of new millennial collectivism,

in which mistrust and misunderstanding of markets goes with global salvationist ideas and a strong intuitive bias towards interventionism. In effect, there is today an informal but wide-ranging alliance of those who share this view of the world and broadly agree on what needs to be done. Besides many businesses and some business organisations, it comprises trade unions, the moderate NGOs, commentators and public figures including parliamentarians, political leaders and civil servants in a good many government departments, a range of interventionist quangos, and most U.N. agencies.

Coleman and Hagger point (eg, pp 83-90) to the real, although not very precise, knowledge of economic processes that economists possess. Economists, in their view, can provide the best guide to the likely economic consequences of government policies. In practice, economists are valued by policy makers more for their technical skills than for the general ideas they hold about good economic and social policy. On these broader issues policymakers, who may well have studied economics in their youth, and who consider their experience of life to be at

least equal to that of the average economic adviser, are more likely to be guided by pre-economic ideas.

What conclusions can be drawn from this discussion about the success of the campaigns about economic rationalism and economics? Coleman and Hagger are right to note that economic rationalist policies were, at least in some policy areas, followed during the 1990s. Despite the rhetoric, governments (for reasons of their own) continue to follow some economic rationalist policies, including privatisation. However, the impetus towards further microeconomic reform has eased in recent years and the regulation of business for 'social' rather than economic reasons has tended to increase.

Perhaps Coleman and Hagger do not emphasise sufficiently how exceptional the 1980s were in Australian history. Economic rationalist policies were embraced, not because they were especially liked but because they were thought necessary to address poor economic performance. The impetus to make further reforms receded as economic performance improved during the 1990s; the community chose to give greater weight to objectives other than economic objectives. However, as noted earlier in this review, the growth in influence of ideas that are hostile to the market economy is worrying. It is notable that Treasuries and Departments of Finance have not been effective in countering these views either in Australia or overseas countries. Indeed, less effort is now being made to explain the advantages of economic reform to the general community than during the 1970s and 1980s. A renewed campaign to explain the advantages of low protection and economic reform more generally may be needed during the next few years.

What about the success of the campaign against the economists? Here I think that Coleman and Hagger are guilty of exaggerating both the extent to which economists have lost ground in recent years and the extent to which the debate over economic rationalism has been responsible for economists losing ground. Economists have not, contrary to Michael Pusey's wishes, been expelled from the institutions. Nor are they likely to be. Their quantitative skills are far too valuable to policy makers even if their values are suspect. Good economics graduates readily find employment, enrolments have been maintained at the honours level (as Coleman and Hagger note) and professional economists continue to be appointed to influential positions. It is true that enrolments have fallen at secondary and pass degree levels, but the growth of business education as an alternative (and easier) route to a vocationally relevant education is an alternative explanation that is likely to appeal to many economists. Even here, economists may be successful in persuading students that courses in economics are an important part of a vocationally relevant education (see, for example, Ward et al, 2001; Keneley and Hellier, 2001).

Coleman and Hagger argue (p. 298) that New Zealand has had a lesser decline in final year high school enrolments in economics than Australia. This, in their view, illustrates the success of the campaign against economists. Two points should be made here. First, New Zealand like Australia has seen a retreat from the politics of economic reform in recent years. There has been much in common

between the two countries in terms of the movement in public opinion. Secondly, the authors of the article from which Coleman's and Hagger's data is taken (Alvey and Smith, 1999) attribute the decline (in both countries) to competition from business studies programs, which may have taken a more virulent form in Australia (pp 94-95). The reader of Coleman's and Hagger's book is not told this.

The final word here should be about the issue of popularity. As noted, Coleman and Hagger are concerned about the decline in the social standing of economists. It is not easy to be someone who advances unpopular views. A desire by Australian economists to avoid unpopularity may well have been an important reason why they went to such great lengths to accommodate their adversaries in the debate over economic rationalism. However, during his Australian visit in 1976 F. A. Hayek presented an alternative view about the unpopularity of economists. Like Coleman and Hagger, Hayek quotes Sir Keith Hancock: 'Australians have always disliked scientific economics and (still more) scientific economists.' Hayek (1979:1) added:

This seems to show that Australian economists have done their duty and performed the greatest service economists can render to the public. This is to question public beliefs which to them seem to be delusions, warning against measures and procedures which they have reason to think will fall short of what they are meant to achieve, and may often produce opposite results.

Hayek thought that economists should not only tell the public about the things they agree on but should draw the public's attention to the predictable (although perhaps unintended) consequences of government policy. Such a course of action is unlikely to achieve popularity. It is a tough job which may not raise the social standing of economists, but someone has to do it.

## References

- Alvey, J. and L. Smith (1999), 'Recent Changes in Economics Enrolments: A Note Comparing the Situation in New Zealand', *Economic Papers* 18(3):91-95.
- Cox, J. (1992), 'Changing Minds, Changing Attitudes: Michael Pusey's Economic Rationalism in Canberra: A Nation – Building State Changes its Mind', *Policy* 8(1):37-40.
- Hayek, F.A. (1979), *Social Justice, Socialism and Democracy: Three Australian Lectures by F. A. Hayek*, Occasional Papers 2, The Centre for Independent Studies, St Leonards NSW.
- Henderson, D. (2001), *Misguided Virtue: False Notions of Corporate Social Responsibility*, New Zealand Business Roundtable, Wellington.
- James, M. (1991), 'Economic Rationalism and the Liberal Tradition', *Policy* 7(3):2-5.

Keneley, M. and P. Hellier (2001), 'A Market Orientated Approach to Australian Undergraduate Economics Education: Justification And Explanation,' *Economic Papers* 20(2):81-91.

Pusey, M. (1991), *Economic Rationalism in Canberra: A Nation – Building State Changes its Mind*, Cambridge University Press, Cambridge.

Stiglitz, J. (1998), 'The Private Uses of Public Interests: Incentives and Institutions', *Journal of Economic Perspectives* 12(2):3-22.

Ward, I., G. Crosling and J. Marangos (2001), 'The Effectiveness of the Economics Orientation Tutorial: Some Further Results', *Economic Papers* 20(1):85-88.

*James Cox is a Member of the NSW Pricing Tribunal. He notes for the record: 'Some articles by Michael James and myself are among the many contributions assessed by Coleman and Hagger. I do not wish to reply to them at length but not to do so at all would only confirm the authors in their poor opinion of Australia economists. In both our cases, I think that Coleman and Hagger present a very selective summary of what we wrote and then criticise it. Readers who are sufficiently interested may wish to compare the articles by James and Cox listed below with pages 162 and 165 of Exasperating Calculators.'*



## Capital Controls in Developing Nations

George Fane, *Capital Mobility, Exchange Rates and Economic Crises*  
Edward Elgar, Cheltenham, UK, 2000

Reviewed by **Geoffrey Kingston**

Two decades ago the case for liberalising international capital movements was revived in Australia. The trailblazer was Michael Porter. He had recently graduated from Stanford University, where his teachers included E S Shaw and R I McKinnon, who were pioneering the case for freeing up capital markets in developing countries. Also at Stanford, William Sharpe was pioneering the development of the capital asset pricing model, which was rapidly becoming the workhorse of financial risk management.

Porter made liberal use of the two-period Fisher diagram in order to show that the argument for freeing up the capital and financial account of the balance of payments parallels the argument for freeing up the current account. This was at a time when some economists, including Treasury ones, were simultaneously supporting current account liberalisation and opposing capital account liberalisation.

Porter also used the basic Sharpe diagram, with expected portfolio returns on one axis and the volatility of returns on the other, to show that restricting domestic access to foreign equity markets could have the unintended consequence of *reducing* the domestic demand for domestic equities – Kim Beazley and Alan Jones (who are among the public figures claiming that Australian superannuation funds have invested too much offshore in the sense that risky yet superior domestic opportunities have been passed up) please take note.

Porter fine-tuned his ideas at the Australian National University (before serving briefly at Monash University.) Indeed, the ANU had previously acted as a sounding board for Max Corden's ideas on the inefficiency of current account controls, and was shortly to do the same for Ted Sieper and George Fane, who wrote a detailed critique of Australia's capital account controls at the behest of the Campbell Committee. A decade later, Tony Makin, now at the University of Queensland, was reviving the Fisher diagram at the ANU, in order to demonstrate that current account deficits are not necessarily harmful.

The book under review is a new landmark in this ANU tradition of powerful critiques of controls on the balance of payments. Having gone a considerable distance towards liberalisation during the 1980s – and in the aftermath of a handy rise to ninth position on the OECD League Table by 1999 — Australia has become progressively less in need of ANU strictures on the need for economic openness. Accordingly, the book under review reverts to Shaw and McKinnon's topic, namely, capital controls in developing nations. Particular attention is paid to countries in our part of the world, including Indonesia, Malaysia, Thailand,

Korea, Taiwan and Chile. Policy instruments first analysed by Porter, such as regulating offshore borrowings by means of a Variable Deposit Ratio, are treated in depth. As with Sieper and Fane's analysis of the Australian case two decades ago, Fane's solo work here is distinguished by patient efforts to unravel and explain the complexities of particular institutional arrangements; the book displays a real knack for this. On the other hand, elegant geometry built on solid microeconomic foundations is nowhere to be found. I admit to being ambivalent about this particular departure from ANU tradition.

Chapter One provides an outline of the book. There is also a handy thumbnail history of major speculative attacks during the 1990s: the crisis of Europe's Exchange Rate Mechanism in 1992-93; the 'Tequila' crisis of 1994-95; and the Asian/emerging markets crisis of 1997-98.

Chapter Two lays out a portfolio balance model of the exchange rate, the share price index, and the short-term interest rate in a small open economy. While this exercise is carried out professionally, it may be a little terse for students. Also, my personal preference would have been for more emphasis on arguments involving currency substitution. Although currency substitution models may have failed to live up to their initial promise, I know of no better way of modelling the contagion issues raised by exchange rate crises.

Chapter Three presents case studies of capital controls in Taiwan, Malaysia, Korea and Chile. It concludes by casting doubt on the proposition that controls were effective in ameliorating currency crises.

Chapter Four is a careful discussion of first-best and second-best arguments for capital controls. Chapter Five is mostly devoted to a review of the theory of speculative crises. The sources range from Friedman to Krugman. There is also a brief review of empirical evidence.

Chapter Six is on the interplay between banks, moral hazard and prudential regulation in developing countries, drawing on commentators spanning Bagehot to Kane, Merton and Bodie. This chapter sensibly recommends either much higher capital adequacy ratios for banks in developing countries or, alternatively, much higher risk weights on loans to borrowers in developing countries regardless of where the lending banks are domiciled.

Chapters Seven and Eight are on monetary and exchange rate policies. Their central concern is the familiar one of monetary authorities that are unwilling either to allow a clean float, or to accept that if fixing is in fact the preferred exchange rate policy then little or no scope remains for an independent national monetary policy. Problems created by attempting to sterilise the monetary impacts of capital inflows are explained. Currency boards are discussed. 'The case for a currency board is particularly strong when a country's reputation for monetary discipline is poor' (p. 171).

The final chapter is on 'reforming the international financial architecture'. The topics include expansion of the authority of the International Monetary Fund, the possibility of an Asian monetary fund, the desirability of official guarantees for loans to developing countries (a proposal championed by George Soros), and the desirability of taxes on spot transactions in foreign exchange (a proposal

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Overall, this is a skilful blend of sound economic reasoning and institutional knowledge. The writing is clear and concise. The policy conclusions are valuable antidotes to various manifestations of economic snake-oil. Teachers of development economics and international money should find the book useful. Investors in emerging markets could also read it with profit. Above all, present and prospective policymakers in developing nations need to read this book.

## References

Porter, M. (1979), 'Money and Finance: The Direction of the Australian Capital Market in the 1970s', pp. 62-128 in Reserve Bank of Australia (ed.) (1979), *Conference in Applied Economic Research*, Reserve Bank of Australia, Sydney.

Sieper, E. and G. Fane (1982), 'Exchange Control and Exchange Rate Policy', in pp. 129-282, Australian Financial System Inquiry (1982), *Commissioned Studies and Selected Papers*, Part 2, Australian Government Publishing Service, Canberra.

*Geoffrey Kingston is Associate Professor of Economics at The University of New South Wales.*



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## References

Porter, M. (1979), 'Money and Finance: The Direction of the Australian Capital Market in the 1970s', pp. 62-128 in Reserve Bank of Australia (ed.) (1979), *Conference in Applied Economic Research*, Reserve Bank of Australia, Sydney.

Sieper, E. and G. Fane (1982), 'Exchange Control and Exchange Rate Policy', in pp. 129-282, Australian Financial System Inquiry (1982), *Commissioned Studies and Selected Papers*, Part 2, Australian Government Publishing Service, Canberra.

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## ***NON-AGENDA***

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With the view of causing an increase to take place in the mass of national wealth, or with a view to increase of the means either of subsistence or enjoyment, without some special reason, the general rule is, that nothing ought to be done or attempted by government. The motto, or watchword of government, on these occasions, ought to be — Be quiet...Whatever measures, therefore, cannot be justified as exceptions to that rule, may be considered as *non-agenda* on the part of government.

— *Jeremy Bentham* (c.1801)

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## **Ted Evans to the Rescue**

**Ian Henderson**

When Ted Evans returned to Australia in May 1993 to take up the post of Treasury Secretary after four years in Washington DC on the board of the International Monetary Fund, he found local economists — including policy advisers in his Department and many others with a professional interest in economic policy and analysis — in a mess.

It was a mess largely of their own making, although it had been aided and abetted by widespread superficial commentary, especially from politicians who had absorbed the views of their expert official advisers, promoted them in the public's mind and were thereby seemingly locked into those views, almost regardless of their stupidity.

At issue was the significance of the balance of payments current account deficit (CAD) for policy, including whether policy-makers should, and if so, how they should, attempt to narrow that deficit. As Reserve Bank of Australia (RBA) economists David Gruen and Glenn Stevens (2000:58) put it in a recent description and analysis of the state of play at the start of the 1990s:

Concern about the current account and Australia's foreign debt probably reached a peak at the beginning of the new decade. At times during the 1990s — especially when the deficit was rising as a proportion of GDP — the debate was again intense, but there were gradual shifts of view and refinements of argument.

The previous decade's obsession with the size of the CAD and with the view that a big CAD was a matter that demanded an urgent public policy response as a matter of high priority had, by the end of the 1980s, been challenged by Tony

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*Ian Henderson is political correspondent, The Australian.*

Makin (1989), John Pitchford (1989) and Max Corden (1991) in particular. Putting it succinctly, their alternative argument was that a large CAD was not necessarily either good or bad from an economic perspective, and that neither fiscal policy nor monetary policy should be focused on the CAD.

Fiscal policy-making was also still to some extent bedevilled by the subsequently discredited ‘twin deficits hypothesis’: That a correlation between public sector and current account deficits — a correlation that became, at least in the public mind, a causal relationship — meant that Commonwealth Budget surpluses were a necessary condition for narrowing the CAD (see, for example, Keating and Dixon, 1989).

Regardless of the disquiet from within the ranks of the local economics profession, for better or worse, it was to be some time yet — as Gruen and Stevens point out — before the policy-makers’ obsession with the CAD was overcome. It was to be some time yet before good economics drove out the bad. Indeed, the Pitchford, Corden and Makin challenges initially contributed to the confusion, especially among policy-makers and fringe players in the private sector, many of whom remained wedded to their flawed obsession, despite the power of their critics’ case. In the words of Gruen and Stevens (2000:58): ‘When these ideas were first presented, they were treated as academic — in the pejorative sense of the word.’ There is scant evidence on the public record that either Treasury or the central bank paid any significant amount of attention to the views of the main critics of the officially-sanctioned line.

As if this debate were not enough to keep economists with an interest in public policy fully occupied, during the early years of the 1990s, a second and related, policy debate was also bubbling away largely behind the scenes. The latter debate surrounded the merits or otherwise of the frameworks used and then discarded by the RBA, as its guide to the implementation of monetary policy.

In a valuable account of the evolution of monetary policy between the early 1970s and the late 1990s, RBA Governor Ian Macfarlane (1998:14) noted the failure of the central bank’s policy framework during the late 1980s and the consequences of that situation in the early years of the 1990s:

During this period, a lack of a monetary policy framework that could command widespread support had its costs. It meant that each of the monetary policy easings of 1990 and 1991 were met by the charge that they were done for political reasons. ... There was clearly great distrust of monetary policy, the Government and the Reserve Bank.

But when it came to saying just what the problem was with the RBA’s framework for monetary policy at the turn of the decade, Macfarlane was, to say the least, discreet — if not a mite disingenuous. The bank, he said, was compelled to keep a low profile in that debate during the period between the 1990 federal election (the one just before the recession hit) and the 1993 poll (the one just after the recovery from recession got, very slowly, under way). The reason for that, he suggested, stemmed largely from the widely-shared perception that the central

bank had not been in charge of its own policy decisions, that it had been little more than the hand-maiden of the Hawke Labor Government and especially of its Treasurer Paul Keating during the second half of the 1980s.

It was little wonder the bank suffered, as Macfarlane said, from a lack of credibility at that time. Keating (1989), fond of boasting publicly that ‘they do what I say, I can assure you of that’ had ensured that virtually every outsider with so much as a passing interest in the issue would have been convinced that, contrary to the law and contrary to conventional wisdom about what constituted best practice in relation to monetary policy, Australia’s central bank lacked operational independence from the government of the day.

But while that situation was embarrassing for the RBA, and while it might very well have made the bank’s job more difficult than it already was in the challenging economic circumstances of that time, there was a more important reason why its leaders largely shied away from debate on monetary policy until the early 1990s. As Macfarlane was later to confess, monetary policy had failed during the late 1980s to keep inflation in check. At least with the benefit of hindsight, that was hardly surprising. Monetary policy had been aimed not at inflation, but at the wrong target.

For much of the 1990s, RBA officials were determined, both in public and in private, to fend off any suggestion that the bank had targeted the CAD with monetary policy during the more-or-less recent past. The most they were usually prepared to concede, when pushed, was that politicians took the wrong slant from the economists’ advice and used that poorly-understood advice to argue that the RBA was, during the late 1980s, attempting to narrow the CAD by tightening the stance of monetary policy.

Macfarlane did acknowledge, when asked directly whether the RBA took the CAD into account when setting monetary policy, that it had done so in the past but that it did so no longer. After delivering a public lecture in 1999 in honour of the late Chris Higgins (Treasury Secretary in the period 1989-90) Macfarlane was asked whether the balance of payments now entered into the bank’s thinking when it came to monetary policy decisions. His answer was, succinctly: No. But he admitted, somewhat circumspectly, that had not always been the case (Macfarlane, 1999).

I think, even though there were times in Australia when thinking about that was not as clear as it is now, I think by the very late ’80s and early ’90s — certainly in Chris’s time — he would not be at all surprised at that view, that monetary policy cannot be directed at addressing the medium-term structural problem in the balance of payments.

However, it was left to Gruen and Stevens (2000) to finally and frankly bell the cat: Yes, the RBA had in the past aimed monetary policy at the CAD, and yes, that strategy was wrong. During the late and pre-recession 1980s, ‘there was ... a widely held view that tighter monetary policy was part of the appropriate response

to the external imbalance,' they said, adding in a footnote that 'judged by its statements, the Reserve Bank shared this view at the time'.

It was not until late 1989 and mid-1990 that deputy governor John Phillips argued in public that monetary policy should be targeted not at the CAD but at inflation. For the record, the connection between the CAD and monetary policy, at least in the mind of Treasurer Keating, at about this time is clearly established in a detailed insider's account of the period (Edwards, 1996) and in an earlier account of the period surrounding the 1990-91 recession. (Tingle, 1994)

With policy-makers and other economists confused about how to manage the CAD, it was little wonder that the public, in the form of their parliamentary representatives, was searching through the dustbins of discarded and often discredited explanations and solutions to what was, in some minds at least, a current account crisis. A parliamentary committee (Joint Committee on Foreign Affairs, Defence and Trade, 1991) reported in late 1991 its concerns 'that the current account deficit will again return to high and growing levels as Australia comes out of recession.' The committee reported its uncertainty about the impact of tighter monetary policy on the CAD, and it was forced to reject suggestions from the public that a return to barrier protection offered a way out of the looming CAD crisis.

Into a policy environment shaped by and shaping those deep uncertainties stepped Evans on his return to Australia in early 1993. The incoming Secretary of Treasury enjoyed several advantages over his peers when it came to dealing with the twin dilemmas of how to restore credibility to monetary policy (the Secretary of Treasury was, and still is, ex-officio a member of the RBA's policy making board) and how to deal with the CAD issue, still prominent in public and official discussion of matters economic.

First, Evans had not been in the country when the economy was plunged officially into recession in 1990 — so his advice was relatively untarnished by that experience, even though evidence from an insider later made it clear he had been among the senior Treasury officials promoting tighter monetary policy in 1988, actions that had helped push the economy into recession (Edwards, 1996). Second, Evans had been able to stay in close touch with events on the home front while watching as an interested professional bystander as Australia and many other economies contracted sharply. Third, even Evans' previous high level experience in Treasury (he was the Department's Deputy Secretary from 1984 until 1989), largely in microeconomic reform and taxation, could not so readily be held against his credibility on macroeconomic policy issues.

Evans immediately took full advantage of his situation. In his first month back in Canberra, the new Secretary presented the third Higgins memorial lecture for the Economics Society, and within minutes announced his radical intention: To tell his high-powered audience that he had changed his mind on several key matters during his stint out of the country (Evans, 1993a:15-16).

I intend to focus upon a few issues of some current interest here on which my own views now differ somewhat from those I held four years

ago; and differ also from some of what I read in the public debate here: issues such as fiscal policy, saving and investment, and prospects for structural reform.

One matter on which Evans spoke publicly early on in his term as Secretary, with comments which earned him both praise and criticism, was unemployment. When Evans took up his new job, the unemployment rate was just beginning to fall from its post-recession peak of a little more than 11 per cent. To emphasise the point that policy could make a difference to Australia's performance on that front, the new Secretary claimed (notoriously) that the national jobless rate was a matter of choice — choose one set of policies (notably in respect of wages and productivity) and that would permit some labour market outcomes while eliminating others; choose another, and another result was likely to follow.

Evans might well have expressed his point somewhat indelicately, especially during the term of an unemployment-sensitive Labor administration. But his message about the need to make the correct policy decisions in order to see a desirable fall in the unemployment rate would have raised few eyebrows among economics practitioners, even if it did discomfort some in public life. However, Evans' views on the significance of the CAD for policy and the way policy should be used to affect the CAD would have been much more controversial.

Economists had, by the early 1990s, fallen back on the fairly orthodox view that the CAD reflects the gap between national saving and national spending on new investment (Stutchbury, 1992:chapter 5)<sup>1</sup>. That had led many to argue that the CAD would only be narrowed — an aim that many saw as a policy imperative — if national saving were raised sharply and rapidly, in part by the public sector budgeting for fatter surpluses and in part by governments encouraging increased rates of private sector saving.

But Evans saw, and proclaimed openly, that that particular emperor had no clothes (Evans, 1993a:19):

The issue is not just about saving, but about investment and the balance between the two. Indeed, to my way of thinking, unless we recognise that the issue is basically about investment, then we are unlikely to get our analysis of saving right.

That criticism of the then-current obsession was just the starting point of Evans' powerful critique (Evans, 1993a:19):

The concern should not be with the current account deficit *per se*, or the call on foreign savings which that deficit represents. Rather, the concern should be with the economic returns that are generated when those savings are put to use.

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<sup>1</sup> This is one example from the time that outlines for informed but not expert readers the saving-investment approach to analysing the CAD.

And that, he added to emphasise the point, was no more or less than traditional Treasury thinking for about three decades — since before he had joined the Department in 1969. The prominence given by the Department in the late 1980s and early 1990s to the CAD, he said, did no more than reflect a judgement ‘that the economic returns being generated may have been insufficient to service the debt that arose from those foreign savings’ (p. 19). The problem was not the size of the CAD, but the lack of attention given to ensuring that it arose from a soundly-managed economy, one in which savings — both domestic and foreign — were being used efficiently.

Accept that analysis, and it was clear that the obsession with boosting national saving as a solution to the CAD was fatally flawed. Increasing national saving — including by reducing the federal Budget deficit, and turning that deficit into a surplus — would not, of itself, solve Australia’s economic problems, despite the hopes of advocates of the twin deficits hypothesis. Evans’s aim on that particular point could scarcely have been surer, with the Labor government now led by Keating arguing for higher levels of public and private saving to deal with the CAD (Evans, 1993a:19):

We should be quite clear about this: that increasing our national saving will not, of itself, solve our economic problems. Reducing budget deficits will not, of itself, solve those problems.

Australia had long been a capital importer, and a higher saving rate would follow, rather than lead, a higher level of national income. Nor would a reduction in the level of investment spending be an appropriate solution to whatever was regarded as the CAD problem. Evans said the ‘rather obvious point’ was that the entire capital stock, and not just additions to it through investment spending, needed to be used more efficiently if the CAD was to be dealt with — and microeconomic reform was the key to that program (Evans, 1993a:19):

Australia, traditionally, has not been a low saving or low investing country. Our saving and investment ratios have been relatively high. But our growth performance has not been; and for the simple reason that the economic returns to many of our investments have been low by international standards.

Evans returned to those themes, in various ways, during his first couple of years at Treasury’s helm — arguing for example that it was ‘how to make better use of national saving’ rather than how to boost saving that counted for the nation’s prosperity, long-term, and that microeconomic reform had to be the focus of policy to deliver that desired result. (Evans, 1993b)

That policy framework was outlined during the period of Paul Keating’s term as Prime Minister. But Evans pushed it further forward (and also continued his

campaign to get the CAD into a proper perspective) under John Howard as PM and Peter Costello as Treasurer.

One of Costello's first public announcements after the Coalition won the March 1996 federal election was that the new Government would embark on a policy of fiscal consolidation, the immediate aim of which was to strengthen the budget bottom line by a total of around \$8 billion over the first two years of the Government's first term.

Evans had three years earlier set out his views on such a fiscal objective. He had argued in his first public address as Treasury Secretary that debates about the desirability or not of a Budget surplus, or deficit, or a particular figure next year were essentially outside the realms of economics (Evans, 1993a:18):

Analyses which call for front-loaded deficit reductions reflect political assessments, not economic analysis. They may well reflect astute political judgement — and they certainly reflect considerable precedent; as such, they are a legitimate part of the total debate. But let us be clear: they do not have a basis in economic requirements, which are for a sustained increase in public sector savings over the medium term.

So, contrary to what might have been expected from past practice — Keating's name as Treasurer springs to mind — Evans in 1996 wanted the public to understand that fixing the saving-investment imbalance, and thereby the CAD, was not a short-term operation. On the day that the Australian Bureau of Statistics released figures showing a roughly \$2 billion CAD for the month of April 1996 on 30 May, Evans said that result provided no grounds to support the Coalition's medium-term fiscal consolidation program, nor any grounds to accelerate that program.

The aim of fiscal consolidation, he told a Canberra insurance industry audience little more than two months after the change of government, derived not from any day-to-day, or month-to-month statistics about the state of the economy, but from 'a consideration of the country's savings and investment problems, summarised, usually, in the current account deficit figure' (Evans, 1996:10)

The CAD receives policy-makers' attention because it represents the extent to which Australia is drawing on the savings of foreigners to finance the investment needed to drive economic growth. But, according to Evans, that did not necessarily mean a large CAD was a problem, at least in the eyes of orthodox economists.

When Evans joined Treasury as an honours graduate from the University of Queensland — after a decade working in a blue collar job for the then Postmaster General's Department — the Department's view, shared within the wider economics priesthood, was that 'there were benefits in our drawing upon the savings of the rest of the world,' he told his audience in May 1996. In the longer term, financing domestic investment spending from foreign savings, 'provided we are using that for productive investment' ... and provided 'we are indeed

financing investment and not consumption', offered a quicker way to higher living standards than waiting for national saving to rise slowly.

Evans also drew attention to the 'safety valve' case for policy-makers remaining unfazed by some widening of the CAD at times of rapid domestic demand — that rising levels of imports as a consequence of rapid growth in domestic demand offered a valuable alternative to immediately slamming on the monetary policy brakes to slow a temporary rise in the pace of domestic growth. It is a view that RBA economists dare to put privately, rather than publicly, and then only rarely, even after Evans' lead.

But he was quickly back to his long-standing theme (Evans, 1996:12):

The current account deficit, and that call on savings of the rest of the world, reflects an imbalance (but) it doesn't reflect just a savings imbalance. It is an imbalance between domestic savings and the investment that we see as being necessary in the domestic economy. It is that second point that receives far less attention than the savings point. But it warrants far more.

Evans' point was neither more nor less than this: That the focus of concern when it came to the CAD — the national saving-investment gap, in the conventional accounting framework — should be how to make the existing capital stock (and not just any additions to it by way of spending on new investment) more productive.

The focus should not necessarily be on lifting the saving rate; nor on how bad a relatively wide external deficit was; and certainly not on reining in productive investment spending. And especially not just on rapidly moving the federal public sector to being a net saver, just to get that part of the economy's accounts into the black.

Simply shifting \$8 billion from the public sector to the private sector — by cutting federal budget spending by that amount, as was promised in total for the first and second budgets of the Howard-Costello Coalition government — represented, of itself, no great advance in public policy-making. Indeed, it would not necessarily even help to close the saving-investment gap (and thereby narrow the CAD) if it led households to run down their own savings by much the same amount in order to pay privately for services previously financed by the Commonwealth public sector: 'If one finds \$8 billion by cutting outlays or by increasing tax revenues in areas where there is an obvious offset to private sector saving, it's a moot point as to whether one has moved very far forward' (Evans, 1996:13).

Evans retired from the Commonwealth public service on 26 April 2001, having served almost eight years as Treasury Secretary and having not sought a further re-appointment to that post.

In assessing his contribution it is appropriate to ask whether, and how far, the making, implementation and analysis of national economic policy has moved forward since Evans' eight year term at the top of the federal government's policy



establishment began in the early 1990s. On the two related matters dealt with here, namely the current account deficit itself and the use of monetary policy to try to narrow that gap between national saving and investment spending, the economics environment has certainly changed.

In his traditional post-Budget address to business economists last year, Evans (1999) was clear and unequivocal on one point at least. With the public sector no longer a net borrower, the 'goal is finally achieved' of correcting the imbalance between saving and investment by the public sector after a decade and a half of effort, he said. But that had not led to, or been associated with, a CAD that could, by any measure, be regarded as narrow.

The 1999 federal Budget estimated the CAD for 1998-99 at \$32.5 billion or 5.5 per cent of GDP and forecast the CAD for the following year would narrow only slightly: to \$32 billion or 5.25 per cent of GDP. (As it happened, the actual figures were slightly higher, at \$32.8 billion and 5.5 per cent of GDP, and \$33.5 billion or 5.5 per cent of GDP.) For comparison, the actual figures at previous peaks in the CAD cycle were a little above 6 per cent of GDP in both 1985-86 and 1994-95, and just about spot on six per cent of GDP in 1989-90.

Yet, Evans (1999) made it clear that although the situation was far from perfect from an economic policy-maker's standpoint, it had improved:

Today, we can be somewhat more relaxed about the CAD than we could in the 1980s, but the proposition could not be put any more strongly than that.

One thing that made the situation more comfortable for policy-advisers and analysts despite the wide CAD gap was that the macroeconomic framework and institutions had been reformed for the better, since the early 1980s and for 'the even better still' since the mid-1990s. And that, Evans suggested, meant that Australian could afford to take the 'consenting adults' view of the CAD — the one scorned a decade previously when it was being advocated by Pitchford and Corden. That is, Evans said, Australian governments no longer bear any exchange rate risk if private sector borrowers or investors make faulty and costly decisions; Australian governments no longer themselves make 'opaque commitments to government-favoured industries' or force local savers and investors to operate in an environment that is fundamentally flawed by favouring inefficient decisions. (Evans, 1999)

The Secretary's warning amounted to an economist's version of the old adage the price of liberty is eternal vigilance there are always some who would turn back the fiscal reform clock if they had the chance!

Nothing could be better calculated to unwind the superior economic performance that Australia has attained than the attitude that Australia does not need Budget surpluses of the order currently projected.

Just for the record, the surpluses forecast for the current year 2000-01 and the next two — all below the figures estimated just two years ago — tend to confirm Evans' perspicacity. There is a link between that second point and the third that can be drawn about the changes that have taken place since Evans (1999) took his seat at Treasury's top table in 1993.

A more fundamental and more important reason to be concerned at the prospect of any substantial diminution of the surplus now in prospect arises from the critical role that fiscal consolidation has played in allowing monetary policy to be so well conducted over recent years.

A few months before Macfarlane's somewhat guarded confession that the central bank had, in the past, aimed monetary policy at the CAD, Evans was upfront on that issue (1999):

If we go back to the early 1990s, for example, there was an expectation that monetary policy needed to be used to help correct the burgeoning current account deficit because there was, at the time, little more that fiscal policy could contribute.

And, the Treasury Secretary made quite clear, using monetary policy to try to rein in the CAD was a strategy the abject failure of which should have been obvious in advance: 'To the extent that monetary policy was tightened on that score, the efforts were counter-productive because the capital account effect of the tightening produced exchange rates that hampered current account correction' (Evans, 1999). In other words, tightening monetary policy (increasing interest rates) led to a stronger Australian dollar, which in turn led to lower exports and contributed to a widening of the CAD. The exact opposite effect to that desired by monetary policy-makers concerned about the CAD.

A history and analysis of the RBA's change of monetary policy framework, from aiming at the CAD to targeting prospective inflation directly, is a subject for another time. And, while Evans' role in that valuable change of approach remains a matter of idle speculation for the time being, one thing is certain: Evans was an active policy player on the central bank board throughout the period when the new approach was being formulated and put into practice.

But, whatever contribution he made to that important change in Australian economic policy-making and implementation, it is certain that Evans was a key player in bringing some economic sense to the debate about the current account deficit, and to the fiscal policy approach (medium-term fiscal consolidation) now being used to deal with the CAD. And, one of the main lessons of that policy change is simply this: That sound policy needs sound economic analysis as a foundation.

Both were missing prior to Evans' stint as Treasury Secretary. Both are now present — an assessment that must include the caveat that things can change for

the worse just as smartly as they can change for the better, unless the minds of insiders remain open.

Evans did not invent, and did not claim to have invented, any fundamentally new insights into the CAD problem. What he did, however, was: take a fresh look at the arguments of economists who had been focussing on the matter; discard the views he and his Department had once held, when it became apparent they were misguided; and adopt and champion views that better reflected sound economics. In so doing, Evans contributed to an improved public understanding of what should be done to deal with the CAD, and what policies should be abandoned in that pursuit.

## References

Corden, M. (1991), 'Does the Current Account Matter? The Old and the New,' *Economic Papers* 10:1-19.

Edwards, J. (1996), *Keating: The Inside Story*, Viking, Melbourne; chs. 12 and 13.

Evans, T. (1993a), 'Australia: A Perspective From Abroad,' *Economic Round-Up*, Winter: pp. 15-22.

Evans, T. (1993b), 'The Economic Outlook,' address to Australian Business Economists, 8 September. Copy of original text.

Evans, T. (1996), Luncheon address to LISA, 30 May. Transcript supplied by Media Monitors Canberra Pty Ltd.

Evans, T. (1999), 'The Fiscal and Economic Outlook,' address to Australian Business Economists, 19 May. Text from Treasury website.

Gruen, D. and G. Stevens (2000), 'Australian Macroeconomic Performance and Policies in the 1990s,' pp. 32-72, in Gruen, D. and S. Shrestha (eds), *The Australian Economy in the 1990s*, Reserve Bank of Australia, Sydney.

Joint Committee on Foreign Affairs, Defence and Trade (1991), *Australia's Current Account Deficit and Overseas Debt*, p xxv.

Keating, M. and G. Dixon (1989), *Making Economic Policy in Australia*, Longman Cheshire, Melbourne.

Keating, P. (1989), Transcript of press conference re balance of payments, 16 February . Transcript supplied by Commonwealth parliamentary library.

Makin, A. (1989), 'Is the Current Account Deficit Sustainable?' *Australian Economic Review* 86:29-33.

Macfarlane, I. (1998), 'Australian Monetary Policy in the Last Quarter of the Twentieth Century,' *Reserve Bank of Australia Bulletin*, October.

Macfarlane, I. (1999), Author's transcript of question and answer session after delivering the Chris Higgins Memorial Lecture, 'Monetary Policy in Economic Expansions,' 27 October.

Pitchford, J. (1989), 'A Sceptical View of Australia's Current Account and Debt Problem,' *Australian Economic Review* 86:5-14.

Stutchbury, M. (1992), *Gain from the Pain*, The Financial Review Library, Sydney.

Tingle, L. (1994), *Chasing the Future*, Heinemann, Melbourne.

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