



# Income Related Loans for Public Policy

*The exercise is designed to highlight the arguably very significant potential of IRL to improve the operation of, and to make fairer, modern economies. There is thus seen to be the prospect in what follows to change radically the current Australian, and other countries', economic policy landscape.* Bruce Chapman

Bruce Chapman is a Professor of Economics in the Economics Program in the Research School of Social Sciences at the Australian National University. He has a PhD from Yale University and is a labour and education economist having published over a hundred articles in the areas of training, wage determination, higher education and schooling. This is an edited version of the presentation given at a Blake Dawson Waldron Lecture at the National Museum of Australia, Canberra on 9 June 2004.

## 1. BACKGROUND AND SUMMARY

A major role recently recognised for government<sup>1</sup> involves the management and distribution of risks. This can take many diverse forms, for example, including the application of speed limits for automobiles, national health insurance, disaster relief and social security. One particular genre of intervention of government involvement related to risk concerns what are known as "income related loans" (IRL) and there are now several well-established Australian examples of policies of this type.

An IRL takes the form of an individual or business being provided with finance—which could come from either of or both the private and public sectors—for agreed activities. The financial resources are treated as a special kind of loan, an income related loan, in which repayment streams depend on the future prosperity of the assisted agents. A critical point is that those experiencing adverse economic circumstances have no repayment obligations in that period, a feature known as "default insurance."

Perhaps the best-known IRL is the Higher Education Contribution Scheme (HECS), in which, for the first time with respect to a national intervention, in 1989 the Australian government imposed a charge on university students. Those assisted are required to pay the charge when and only if their personal incomes exceeded a certain level, which at the time was equivalent to average earnings. This approach to higher education financing has since been adopted in New Zealand (1991), South Africa (1994), the US (1995) and Chile (1996), and will be implemented in 2005 and 2006 in the UK and Thailand respectively.

Australia also introduced a different form of IRL mechanism in 1987, known as the Child Support Scheme, in which child support payments are collected through the tax system from non-custodial parents contingent in part on their income. Similarly, the AUSTUDY Loans Supplement, introduced in 1993, was an IRL very much in the flavour of HECS involving eligible higher education students repaying some part of their income support, again contingent on their future incomes. Australia has been a world leader with respect to this form of public sector risk management.

What follows is a brief explanation of possible additional applications of IRL involving many disparate areas of government social and economic

intervention. The exercise is designed to highlight the arguably very significant potential of IRL to improve the operation of, and to make fairer, modern economies. There is thus seen to be the prospect in what follows to change radically the current Australian, and other countries', economic policy landscape.

*What follows is a brief explanation of possible additional applications of IRL involving many disparate areas of government social and economic intervention.*

An important aspect of what follows promotes for discussion possible institutional reform concerning the development, operation and monitoring of IRL in what are quite diverse areas of policy. Such an organisation might need to be established to help design, provide finance to, and manage IRLs.

There has by now been considerable research into the application of IRL, but there is still work to be done in several areas with respect to conceptual and policy development. Even so, on the basis of both empirical experience and economic analysis, IRLs offer significant potential for public sector policy reform demonstratively characterised by increased economic efficiency, greater lifetime income progressivity, and lower burdens for taxpayers.

## 2. THE ECONOMICS OF INCOME RELATED LOAN REFORM

What now follows examines briefly the conceptual basis of IRL, to help position the later discussion of disparate applications of these forms of policy in a broader analytic framework.

In general IRL can be thought of as a public sector financial instrument designed to address aspects of so-called "market failure". Some of the shortcomings of the operation of the private sector with respect to risk might result in an absence of private sector institutions developing in response to social and/or economic need (such as with respect to the commercial provision of loans for human capital investments), and in this case public sector intervention has the capacity to fill a significant void.

In other cases there might well be evolved market responses to particular private sector needs, but these might be handled more equitably or in administratively more efficient ways through the use of an IRL mechanism. In some possible IRL applications the issue of equity looms large, since some current government grant schemes are arguably regressive (for example, taxpayer grants to farms for drought relief). For each possible application it is important to be precise about the nature of a market failure, and/or the alleged advantages of an IRL compared to current approaches in order that the nature of the problem and the solution are well understood.

Related to the above is that one of the important motivations for IRLs organised through the public sector is that such interventions, compared to commercial bank loans, have the capacity to significantly reduce borrowing risks from private beneficiaries in a way that might be both equitable and beneficial to society generally. In some cases these arrangements mean also that finance can be made available for projects that would otherwise not have access to loans (such as the Chapman/Simes project described below). As implied above, there are other reasons for such interventions, such as to reduce public sector outlays and to make fairer government intervention by converting government grants into IRLs (such as with respect to drought relief).

*In general IRL can be thought of as a public sector financial instrument designed to address aspects of so-called "market failure".*

Over the last several years a number of public policy case studies have been developed concerning applications of IRLs. In all applications there has been engagement and involvement with many of Australia's experts in specific areas of policy. There is now a number of completed papers, many presented to conferences and close to publication in refereed journals. As examples I note the following:

- (i) Social enterprise financing for economically disadvantaged areas. A proposal to encourage additional community social and regional enterprises. To involve contributions from

banks, the enterprise and the government, with some part of the loans to be collected contingent on the enterprise's future profits (Chapman and Simes, forthcoming 2004).

- (ii) Transforming drought relief into top-up income related loans. An alternative to grants-based drought assistance, involving both banks and the government in the provision of loans to farm businesses in times of exceptional circumstances (Botterill and Chapman, forthcoming 2004).
- (iii) Income related loans for elite athletes. A scheme designed to reduce taxpayer grants to athletes (such as through the AIS), a significant number of whom earn extremely high future incomes. The proposal could involve the most successful athletes repaying more than is provided in their scholarships, with the funds being used to reduce direct private subsidies. (Denniss and Hamilton (2003), and Chapman, Denniss and Palacios (in production)).
- (iv) Income related support for the maintenance of housing. A suggestion to allow individuals and families to access income related loans in periods of adversity to maintain housing. (Gans and King, 2004).
- (v) The use of the income tax system as a substitute for fines imposed on low-level criminal activity, such as assault, theft and drunken driving. This would allow the substitution of current practices (which are characterised by high social costs and low enforcement), with income related fines, ensuring low defaults, higher penalties and likely much higher collections. (Chapman, Freiberg, Quiggin and Tait, forthcoming 2004).
- (vi) Using the tax system to collect fines (from profits and incomes) from collusion and insider trading offences. An alternative to fines with the capacity to collect high fine levels, reward whistleblowers and potentially diminish significantly defaults (Chapman and Denniss, under review).
- (vii) The part replacement of R & D subsidies with profit related loans. In this proposal firms benefiting from R & D grants would be required to repay a proportion of the subsidy as a small proportion of future profits (a paper being planned by Amanda Dadd (Australian Treasury), Glenn Withers (ANU) and Bruce Chapman).

If designed properly schemes such as the above involve to some extent: increased progressivity in a

lifecycle sense; improvements in both social and economic outcomes; useful financing partnerships with commercial banks; and decreases in taxpayer subsidies. Overall, the proposals arguably mean increased equity, more efficient financing systems, and lower taxpayer outlays.

### 3. SOME COMPLICATIONS

In some of the proposed applications there are significant economic and administrative issues that have to be addressed to ensure successful policy implementation. The most important of these are: so-called "adverse selection"; so-called "moral hazard"; and, the design of loan collection arrangements.

Adverse selection in the context of income related loans is the notion that if agents are offered choices as to whether or not take a loan to be repaid contingent on future success, the take-up will be higher for those expecting to do poorly. Adverse selection thus has the potential to undermine the basis of an IRL, resulting in low repayments and heavy subsidies to the least efficient and least deserving of those targeted for assistance. It is a very serious issue, and one explaining significant failure of the income related loan introduced to its students by Yale University in 1972.

Income related loan schemes involving the public sector have a relatively high potential to resolve the adverse selection problem since some arrangements can be made compulsory by law. As examples with respect to the cases studies noted above, all Australian higher education undergraduates are required to pay HECS, low level criminal offenders would have no choice but to be obligated to undertake the debt (or pay it up-front), and elite athletes would not be admitted to sporting programs without agreeing to the loan obligation.

However, in some instances there would need to be a vetting of loan applicants to ensure that the chances of non-repayment are not high. This already occurs to some extent with respect to HECS, since admission to universities is in part conditional on the expectation that potential students have the capacity to benefit from the university experience. It is also clearly the case with respect to elite athletes since admission to government financed programs is conditional on being considered by experts to have significant sporting potential.

In other areas some institutional vetting arrangements would need to be put in place. The two obvious examples from the above are social enterprise financing and top-up income related loans

for drought relief. In both cases adverse selection is addressed through the role and involvement of private sector banks. The part financing of assistance with the commercial funding is a critical aspect of these policy suggestions; it is designed to minimise adverse selection since enterprises or farms considered by banks to have very poor prospects would not qualify for income related loan assistance.

Moral hazard in the context of income related loans is the notion that debtors might be able to avoid repayments through unethical behaviours, such as tax (and thus IRL) evasion. A different form of moral hazard might be related to labour market or business effort, since debt obligations are lower if an individual or enterprise is relatively unsuccessful.

There are several pertinent issues related to moral hazard with respect to IRL policy. One is that it is likely to be the case that the form of moral hazard will vary significantly between the disparate applications noted above. Three examples are now offered to illustrate this.

- (i) Former students, or elite athletes, might be encouraged to emigrate, or at least leave Australia for a significant period of time, to avoid repaying all of a HECS debt. To cover this possibility, students committing to a HECS debt could also be required to agree (in a legally binding way) to repay the minimum annual HECS obligation for periods spent overseas (from 2005 this would be around \$1400).
- (ii) Farm businesses might be able to avoid repaying IRL debts through, for example, the dissolution of partnerships, the transferral of farm property to relatives, or via inheritance. These and other problems, and possible solutions to them, are discussed in details in Chapman, Botterill and Egan (2004).
- (iii) With respect to social community investment IRL projects, there are two mechanisms proposed to address moral hazard: a relative high real rate of interest on the debt, which means there would be financial penalties associated with extending periods of repayment; and two, the requirement that enterprises provide some part of the initial finance, meaning that low levels of business effort impose direct personal costs on IRL debtors.

The second important point concerning moral hazard in this context is that IRL policies need to be designed in such a way as to limit the per period burden of repayment. If repayment obligations in a given year are kept sufficiently low, it is less likely that the IRL will itself encourage debt repayment avoidance. Having relatively low repayment obligations also sits comfortably with the significant advantage of these forms of debt being associated with default-protected repayment.

A final complication concerns the need for flexibility in the design of IRL collection arrangements. These are likely to be quite different requirements depending on the nature of the application, and this is taken up further below.

#### 4. INSTITUTIONAL CHANGE

The policy reform would likely entail the creation of a new public sector institution. Its aim would involve the application of income related loan mechanisms to a host of policy areas, including some of those outlined above.

It is important to recognise that for specific proposals the operational parameters of the basic idea will necessarily be different and conditional on the nature of the activity targeted. The particular arrangements could be determined by the new institution, with examples of the importance of treatment differentiation being illustrated by the following, and much more:

- (i) Social enterprise financing would require contributions from individuals or groups, as well as a commercial bank and the government, but this would not necessarily be the case with other applications;
- (ii) The repayment of HECS depends on individual taxable income but the recovery of social enterprise loans and drought relief support would require a different basis because the policy concerns businesses, not individuals;
- (iii) Requiring some form of grant recovery from elite athletes who receive their training from government financing might well involve the most successful (e.g. elite tennis players or members of the Australian cricket team) repaying a bit more than they actually receive

when their personal circumstances are very propitious, which essentially treats the debt as equity;

- (iv) The repayment rules associated with insider-trading fraud might have to consider company, as well as, individual obligations; and
- (v) The use of such a system for the repayment of low level criminal fines would need to consider States' jurisdiction with respect to legal issues.

## ENDNOTES

1 See David Moss (2002).

## References

- Botterill, L and Chapman, B forthcoming 2004, 'Towards More Equitable and Efficient Drought Relief', *Australian Journal of Public Administration*.
- Chapman, B, Freiberg, A, Quiggan, J and Tait D forthcoming 2004, 'Using the Tax System to Collect Fines', *Australian Journal of Public Administration*.
- Chapman, B, Botterill, L and Egan, M 2004, *Income Related Loans for Drought Relief*, submission to the Drought Review Panel, Commonwealth Government, Canberra, ACT.
- Chapman, B and Simes, R forthcoming 2004, 'Profit Related Loans for Economically Disadvantaged Regions', mimeo, Centre for Economic Policy Research, Australian National University.
- Chapman, B and Denniss, R (under review), 'Using financial incentives and income contingent penalties to detect and punish collusion and insider trading'.
- Denniss, R and Hamilton, C 2003, *Funding Sport Fairly*, The Australia Institute, Canberra, ACT.
- Gans, J and King, S 2004, 'The Housing Lifeline: A Housing Affordability Policy', *Agenda*, Vol. 11(2): 143-155.
- Moss, D 2002, *When All Else Fails*, Harvard University Press, Cambridge, Massachusetts.

## Set yourself apart

The best managers get the best out of people. So get the best out of your management education. We offer rigorous and challenging graduate courses such as:

- Public Policy and Management
- International Business
- Diplomacy and Trade
- Industrial and Employee Relations

With part or full-time courses at Masters, Graduate Diploma, Graduate and Executive Certificate levels, we offer you choice and flexibility. Many courses are also offered off-campus.

See the broad range of graduate courses offered by the Department of Management at [www.buseco.monash.edu.au/depts/mgt/courses/graduate/](http://www.buseco.monash.edu.au/depts/mgt/courses/graduate/)

You can download a copy of our 2005 Graduate Program Guide from our website. Alternatively, call toll free 1800 628 242 or email: [enquiries.mgt@buseco.monash.edu.au](mailto:enquiries.mgt@buseco.monash.edu.au)



**MONASH** University  
Graduate School of Business

08A CRES113