



Faculty of Business and Law

2021 Australian Government Research Training Program Scholarships

Strategic Project Profile

PROJECT TITLE: Optimal taxation, welfare policy and pensions design in Australia

FIELD OF RESEARCH CODE: 1402

PROJECT SYNOPSIS:

This project will combine theoretical and empirical innovations in behavioural tax/welfare policy evaluation and household decision modelling to improve the quality and effectiveness of tax/welfare policy design. Building on the work of Blundell et al (2000) and Creedy et al (2002), the project will address the critical policy imperative to ensure that reforms to personal taxation, pensions, payments, family assistance and child-care support – in isolation and in combination - are designed in the most cost-effective way to target specific objectives.

We're unable to provide objective answers to important policy questions that should ideally guide public spending decisions – for example:

- How cost-effective are employment tax credits in promoting employment and alleviating poverty among the working poor, compared with, say, active labour market policies or wage subsidies?

- What would be the optimal way of spending \$X billion on policies to promote employment?
- What taxation structures are optimal under alternative efficiency, equity or employment criteria?
- How should family support policies and childcare subsidies be co-designed to better address the financial barriers to optimise employment outcomes for women or for other equity groups?

This PhD project will seek to address these questions, using a comprehensive microeconomic approach to assess the impact of tax and welfare reform on household outcomes using behavioural microsimulation (Creedy and Duncan 2002). This approach is based on an empirical representation of the environment faced by economic agents, their budget profiles under alternative tax/welfare scenarios, and econometric models of household decisions. By creating such an environment, one can conduct 'policy simulations' that evaluate the impact of tax-welfare reform or the economic environment on a series of indicators of individual/household choice and welfare.

This project will lead to significant innovations in the use of microeconomic methods applied to tax/welfare policy design:

1. The project will develop a full behavioural microsimulation capability for Australia that projects employment responses to tax/welfare reform under different representations of household decisions, and factors those responses into adjusted estimates of taxation revenues and welfare costs/caseloads.
2. The unitary representation of household choice has been challenged by models that account for the presence of several decision-makers with specific (possibly different) preferences. This project will address these limitations by comparing employment, spending and household production decisions using collective choice models (Blundell, Chiappori and Meghir 2005).
3. This new generation of models is crucial to an improved understanding of the drivers of intra-household resource allocation, and provides a great opportunity to understand the complex implications of tax/welfare policies for individual welfare within households. They can also reveal how employment, savings and family composition choices (marriage/partnership, childcare, fertility) may be affected by intra-household redistributive policies.
4. The project will develop practical methods by which tax/welfare policies can be set to target specific objectives (increasing employment, reducing poverty among certain equity groups), or to optimise tax policy design according to a single criterion or set of criteria (Blundell and Shephard 2012). The research will improve on current ad hoc approaches in Australia to setting tax rates/thresholds, allowances, pensions or childcare subsidies. The method will be grounded in optimal taxation theory (Diamond 1998) but will adapt to provide empirical simulations of optimal tax/welfare policy designs (Saez 2002).
5. Taking advantage of the EVITA tax policy microsimulation infrastructure developed at the Bankwest Curtin Economics Centre, the research will use the distribution of wages from ABS unit record data as well as labour supply elasticities and demographic data to propose optimal tax/welfare designs to inform public policy debate in Australia.

References

- Blundell, R.W, P - A Chiappori and C.H.D. Meghir (2005), Collective Labor Supply with Children, *Journal of Political Economy*, 113(6), 1277-1306.
- Blundell, R.W. and A. Shephard (2012), Employment, Hours of Work and the Optimal Taxation of Low-Income Families, *Review of Economic Studies*, 79(2), 481–510.
- Blundell, R.W., A.S. Duncan, J. McCrae and C.H.D. Meghir (2000), The Labour Market Impact of the Working Families Tax Credit, *Fiscal Studies*, 21, 75-104.
- Creedy, J. and A.S. Duncan (2002), Behavioural Microsimulation with Labour Supply Responses, *Journal of Economic Surveys*, 16, 1-38.
- Creedy, J., A.S. Duncan, M.N. Harris and R. Scutella (2002), *Microsimulation Modelling of Taxation and the Labour Market: the Melbourne Institute Tax and Transfer Simulator*, Cheltenham: Edward Elgar.
- Diamond, P.A. (1998), Optimal Income Taxation: An Example with a U-Shaped Pattern of Optimal Marginal Tax Rates, *American Economic Review*, 88(1), 83-95.
- Mirrlees, J. A. (1971), An Exploration in the Theory of Optimum Income Taxation, *Review of Economic Studies*, 38, 175-208.
- Saez, E. (2002), Optimal Income Transfer Programs: Intensive versus Extensive Labor Supply Responses, *Quarterly Journal of Economics*, 117, 1039-1073.

FEASIBILITY AND RESOURCING – DESCRIPTION OF THE SUPPORT THIS PROJECT WILL RECEIVE:

The supervision team has a world reputation for excellence in microeconomic modelling and policy evaluation, especially in areas of household decision-making, tax policy evaluation and microsimulation: all cornerstones of the proposed Project. They are also experienced in analysing large micro-level datasets including those to be utilised in the Project. The Bankwest Curtin Economics Centre will provide a 33% enhancement to the standard HDR student stipend, and desk space to facilitate co-location with BCEC researchers. Any IT peripherals, data or administrative support beyond the normal entitlement will be resourced by the Centre, as is the case for all BCEC PhD Students.

THE SIGNIFICANCE OF THE PROJECT/ PROGRAM FOR THE ENROLLING SCHOOL OR INSTITUTION:

The Bankwest Curtin Economics Centre is one of the most reputable economics research groups in Australia. The Centre contributes to the Faculty's priority research area of applied economics, and has strong links with economics researchers nationally and internationally. BCEC has a significant research program in tax/welfare policy, and in household behaviour. The proposed research is possible because of the unique EVITA - Evaluation of Income and Taxes in Australia – tax modelling infrastructure developed by BCEC. This research will enhance EVITA to accommodate behavioural responses to tax/welfare reform, and enable policy comment on the benefits of reform to special equity groups.

Students must express interest in this scholarship opportunity by emailing the Project Lead listed below. Please provide a copy of your current curriculum vitae and detail your suitability to be involved in this strategic project.

PROJECT LEAD CONTACT:

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