



Curtin University



Faculty of Business and Law

2020 Australian Government Research Training Program Scholarships

Strategic Project Profile

PROJECT TITLE: Towards optimal taxation, pensions and welfare policy design for 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), Blundell and Shephard (2011), Blundell and MaCurdy (1999) 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. As it stands, we're unable to provide objective answers to important policy questions that should ideally guide public spending decisions – for example:

- How cost-effective would employment tax credits be in promoting employment and alleviating poverty among the working poor, compared with, say, active labour market policies or award wage reforms?
- What would be the optimal way of spending \$X billion on public policies to promote employment?

- What structures of personal taxation would be optimal for Australia under alternative efficiency, equity or work incentive criteria?
- How should family support policies and childcare subsidies be co-designed to better address the financial barriers to labour force participation, or to optimise employment outcomes for women or for other equity groups?

The most comprehensive microeconomic approach to assess the impact of tax and welfare reform on household outcomes is through the application of behavioural microsimulation models (Blundell and MaCurdy 1999; Creedy and Duncan 2002). This approach to policy evaluation 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 then 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. Blundell et al (2000) demonstrate the feasibility of the microsimulation approach, evaluating the impact of the Working Families Tax Credit in the UK. However, their approach is limited by a unitary representation in which individual decisions within a household are assumed to be driven by a single collective welfare function (Chiappori 1992). They show that behavioural responses reduce the cost of the WFTC by 14% relative to a non-behavioural scenario, driven by increased participation among second earners in couples. This project will lead to a number of significant innovations that enhance the scope of microsimulation 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. Recently, 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 assuming that individual employment, spending and household production decisions are based on cooperative negotiation between partners (Blundell, Chiappori and Meghir 2005; Chiappori, Fortin and Lacroix 2002; Donni 2003).
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 welfare outcomes are distributed between genders within households. The decisions that may be affected by redistributive policies include employment, savings and family composition choices (marriage/partnership, childcare, fertility).
4. The project will develop practical methods by which tax/welfare policies can be set to target specific objectives (increasing employment outcomes, 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, allowance tapers, 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 2001, 2002). The research will assess the salience of proposed tax/welfare policy designs, and specifically assess whether systems can be justified through an optimal tax argument.
5. Taking advantage of the EVITA tax policy microsimulation infrastructure developed at the Bankwest Curtin Economics Centre (BCEC), the research will use the distribution of hourly wages from ABS household unit record data as well as estimated labour supply elasticities and demographic data for different family types to propose optimal tax/welfare designs to inform public policy debate in Australia.

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

The research support the project will receive from the Bankwest Curtin Economics Centre, the Faculty and the Graduate Research School will be entirely sufficient to deliver a successful project outcome. The Faculty will provide a laptop, shared workspace and research training. The Graduate Research School will meet the standard provision of research funds for PhD students in the form of consumables and travel. The Bankwest Curtin Economics Centre provides desk space within the Centre for its PhD scholars to co-locate with BCEC researchers. Any further provision of IT peripherals, data or administrative support will be resourced by the Centre, as is the case for all BCEC PhD Students.

WHAT MINIMAL ATTRIBUTES AND SKILLS EXPECTED BY THE CANDIDATE BE COMPETITIVE:

The candidate should have a tertiary degree at Honours I or higher, with evidence of expertise/aptitude in data analysis, econometric modelling and computer programming. An awareness of tax and public policy issues is also strongly desirable.

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 are advised to contact the Project Lead listed below prior to submission of their scholarship application to discuss their suitability to be involved in this strategic project.

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