Analysis of Australia's permanent migration program using Treasury's Overlapping Generations Model of the Australian Economy

Jessica Hua[1], **Baily Hepple[2]**, Linus Gustafsson[3]

1 Commonwealth Treasury
2 Commonwealth Treasury
3 Commonwealth Treasury

Australia's migration program is designed to achieve a range of economic and social outcomes, with different streams designed for different purposes. For instance, skilled streams are designed to improve economic outcomes, while family and partner streams enable Australians to reunite with family from overseas. Previous analysis of the permanent migration program's economic contribution has examined its effects on the supply and demand sides of the economy, as well as its fiscal impact. Computable general equilibrium models have been used in the literature to analyse the economy-wide effects of migration in Australia, and the Fiscal Impact of New Australians model was developed by The Treasury to estimate the impact of permanent migrants on government revenues and expenditure over their lifetimes. Building on these approaches, this paper seeks to quantify one specific aspect of the migration program's outcomes: permanent migrants' lifetime contribution to real gross domestic product. To do this we use Treasury's Overlapping Generations Model of the Australian Economy – a dynamic lifecycle general equilibrium model of the Australian economy calibrated with personal income tax and visa data from the 2018-19 permanent migrant cohort. This framework allows us to analyse the supply and demand effects of migration simultaneously and accounts for the varying economic and fiscal impacts that permanent migrants have at different stages across their lifetimes. We use the model to estimate per-migrant contributions to economic activity for each visa category in the permanent migration program. We find that the lifetime contribution of permanent migrants depends largely on their age and skill distribution at arrival, with younger and more highly skilled migrants making a larger contribution. On average, primary skilled visa holders have the largest positive contribution to GDP. This is because permanent migrants that arrive on primary Skilled Independent, Employer Sponsored and State and Territory Nominated visas are likely to be young – over half are aged 35 and below – and are highly skilled. Although secondary skilled visa holders have a similar age distribution to primary skilled visa holders, these migrants have a lower contribution to GDP as they are likely to have lower rates of labour force participation and be lower skilled compared with primary visa holders. In total, we estimate the 2018-19 migrant cohort will add over $300 billion to real GDP over their lifetimes, with primary skilled migrants making the largest contribution. Decomposing the contributions, we find that the effect on economic activity reflects not only the additional labour income generated by a higher labour supply, but also additional investment by Australian firms which generates a similar increase in capital income. The income generated by the permanent migration program is distributed across both the resident and migrant populations.

Key Words

Migration, general equilibrium, lifetime economic contribution