

THE ECONOMICS OF IMMIGRATION

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A larger population results in a larger economy. A greater number of people generate more demand for goods and services and provide an increase in the number of workers available to meet that demand. Since immigration has contributed a major part of Australia's population growth over the two centuries since European settlement, it follows that it has also contributed substantially to creating the Australian economy as it is today.

A summary measure of the economy is gross domestic product (GDP). Australia's GDP at the end of the 20th Century is approaching \$600billion. Migrants and the children of migrants have provided almost 60 percent of post-war growth in the Australian workforce. Without migration it is likely that the economy might have been as small as one half of its current size, a much reduced presence in the world economy.

Of course while GDP is relevant, and is seen by many as a measure of the contribution of migration to 'development', there is much more that is of interest in the linkage even from immigration to the economy, let alone to broader issues. In the long-run a crucial question is whether immigration also increases per capita income and not just aggregate national income. There is also the question of how income growth is distributed, including between existing residents and newcomers, and effects on broader social considerations, including demographic ageing. In the shorter-term there are basic economic issues such as the implications of immigration for unemployment, training, public outlays, the balance of payments, wages and inflation. There are also some interesting questions concerning the linkages from the economy to immigration itself, both through the motivation for migration and through the influence the economy has on government and its migration policies. These are the issues that are looked at in this article.

And these issues are of some importance and not only for economists. For economic argument is often a central element in public debate over immigration. On the one hand many supporters of substantial immigration base their position on its perceived role in Australian development and prosperity. On the other hand many opponents of high immigration take that position because of their concern that immigration is a source of national economic problems such as unemployment and national debt.

There is in fact a quite extensive body of research available to help guide discussion of these issues, if not fully resolve them. Australian economists have been major contributors to understanding the economics of immigration. In the early post-war period, major names in economics such as Karmel, Corden, Bensussan-Butt and Arndt found immigration a topic worthy of their close attention. In more recent times economists such as Gregory, Norman, Lloyd, Chapman, Neville, Pope, Nieuwenhysen, Junankar and others have been ongoing contributors. A growing trend has been for economic consultancies such as Econtech, Access Economics and the Centre for International Economics to provide valuable commissioned studies in

the field. However a blossoming of relevant work in the 1980s under the aegis of the Bureau of Immigration, Population and Multicultural Research stopped when the incoming Howard government abolished that Bureau in 1996.

Long-Run Growth

The most common summary indicator of material standard of living for any country is average real income. Broadly speaking, income equals production, so that this is typically measured as GDP per capita, adjusted over time for movements in purchasing power due to price changes.

Underpinning real GDP per capita is productivity. As US economist Paul Krugman once put it, “Productivity isn’t everything, but in the long run it is almost everything. A country’s ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker”.

Migration can influence productivity in a number of ways. The two systematic avenues for this most examined by economists are through capital accumulation and labour quality. Capital and labour are the factor inputs that post-war (“neoclassical”) growth theory has emphasised.

On the capital front, migration raises traditional concerns which have been present in various guises since at least Malthus. That is, more people added to existing resources and capital means ultimately diminished marginal productivity and so slow-down in growth.

There is a counter-view, popular among some economic historians and enunciated by Lord Keynes. In observing US growth, Keynes commented that “it was largely because of migration that the United States’ economy was always growing rapidly and outstripping capacity. There was consequently less risk in under-taking investment, and capital formation was larger, more rapid and more confident.”

The balance of such opposing pressures is an empirical question. And for Australia there have been empirical studies looking at the linkage both historically and for more recent times. These find a strong positive linkage of investment (and foreign capital flows funding that investment) and immigration. Moreover the linkage is such that immigration has kept private investment at a fairly constant share of (expanding) GDP, with public investment a more variable share according to changing policy criteria. However this outcome may not have stopped some diminution of the level of capital per head below the level it would otherwise have been, so imposing some pressure for actually reducing productivity from this source.

This negative capital effect needs to be set against a possible positive benefit from labour quality. Various studies have shown that immigration has increased the average level of education, training and skills possessed in the Australian workforce.

Some would add that this is reinforced by the greater energy, motivation and zeal of migrant workers. But these latter influences are hard to measure.

The pay off to higher skills is muted by some skill transferability problems and by some problems with the fair recognition of overseas training. However the average migrant skill levels in the later decades of the 1900s, were sufficiently above local workforce levels that such offsets would have had to be huge to negate the benefit to workforce productivity overall. Of course, a continued contribution of this kind does require close policy attention to the composition of migration, to selection criteria used, and to success in competition for such migrants with other settler countries. The process of National Competition Policy developed in Australia from the 1980s is helping to diminish restrictions on recognition of overseas qualifications, where these have no public interest defence.

Given a potentially negative effect of immigration on productivity through capital accumulation and positive effect through skill enhancement, the question that arises is the balance of these effects. To answer this a range of studies using so called “computable general equilibrium” (CGE) models sought to quantitatively simulate the net implications of immigration from the 1970s. The conclusion of a certain number of these studies was influential and came to be characterised as a finding that there is either a neutral or small positive effect of immigration on per capita income, though depending importantly upon how much skill content for new migrants was assumed. Most recently this view has been transformed in some official circles into the judgement that “there is no clear link”.

However such conclusions were premature. They characterised some but not all CGE studies and, even then, were too uncritically reliant upon the results of computable general equilibrium methodology. Such models do not directly estimate historical experience and are better for simulating resource reallocation implications of policy changes than for analysing long-run growth experience. Conventionally and for this reason, they find very few policy changes (whether tariffs, industrial relations arrangements etc.) that have any greater benefit for per capita income growth, than such models find for immigration policy.

In particular such models do not easily allow for scale economies or diseconomies, which many see as important for sustained immigration over time. Nor can they easily allow for behavior changes arising from immigrants’ different motivation and background. Nor can they adequately reflect various spillovers or externalities from both increased scale and its form eg. capital vintages, new ideas, entrepreneurship, global integration.

To illustrate , in a major early contribution the Australian economist Salter introduced the notion of capital quality (“vintage”) as well as quantity of capital as being important for productivity. A higher growth rate of population will increase the

share of recent vintage capital in the capital stock, so benefiting worker productivity and potentially offsetting any quantity-based capital dilution effect.

Increasingly modern economics (notably “endogenous growth theory”) has come to stress such factors as these as of the essence for growth, rather than simply looking at direct capital and labour effects. And in Australia those studies that have directly estimated the historical linkage of immigration to per capita income have usually found a strong positive relation, as this newer analysis would postulate. So too have those few computable general equilibrium models, which have sought, by various ‘ad hoc’ methods, to comprehensively incorporate scale and technology effects from migration.

Similarly, another alternative methodology viz case studies, has also found substantial synergy from immigration in such areas as business migration and employment and export growth, reinforcing findings of the macro-economic estimation approach.

The potential existence of a large positive linkage still seems counter-intuitive to some. After all if population is a source of positive benefit, why is Bangladesh poor and Sweden rich? The answer is to ask why Chad is poor and the USA rich? From this response it should be seen that the link from population scale and growth to material standard of living is a conditional one: it also depends upon complementary conditions and policies eg whether investment in infrastructure and plant and equipment keeps pace. A rich industrial country that can properly invest for a growing workforce can obtain payoffs from population that other poorer countries need not. It is not that there is no link, only that it is complex and conditional eg conditional on suitable education levels of migrants and investment in physical capital. .

Issues in Social Economics

In interpreting the long run growth economics, some related social economics dimension are also important. One such matter in the immigration field has been the need to elucidate who are the beneficiaries in the case of higher per capita income. The computable general equilibrium models have provided detailed analysis of occupational , industrial and regional distribution. By adding up these insights one more general conclusion emerging from this literature is that migrants might benefit more than natives in this process. This is because the models used emphasize how extra workers will bid down wages or create unemployment if wages are inflexible.

But once again the result flows from the dominance of diminishing marginal returns in most such models. The results can in fact be otherwise once two extra factors are allowed for viz. the offsetting positive dynamic benefits already discussed, and the ownership of capital by existing residents. In the latter case, if the return to labour did decrease with immigration, the return to capital will increase. This capital is

largely owned by residents. And when housing stock is acknowledged as part of capital and when ownership of shares is widespread (eg through superannuation), then capital return benefit can also be quite widespread.

A further calculation that has been made is of the benefit to migrants compared to their likely position in their home country had they not migrated. The calculation does show that migrants have gained greater income increases on average (compared to the general trends in their source countries) than for the Australian born. The usefulness of this depends upon views as to how far “welfare” measures should acknowledge the direct benefits to migrants from their relocation.

A further welfare measurement issue is that of the adequacy of the economists’ conventional focus on income. Measures such as GDP per capita have been criticized for ignoring a number of other relevant considerations ranging from crime through urban congestion to resource over-exploitation. Attempts are in train to measure such extra effects – and these attempts are themselves subject to various methodological criticisms. Moreover the linkage of the broader measures to immigration remains to be made, though there are a number of studies linking the immigration process to Australian greenhouse gas emissions. Whether concerns on this front will be offset by claims of “Kuznets curve” benefits from higher per capita income being associated with improved environmental amenity, remain to be established for Australia.

A different issue in social economics that has occupied attention is the role of immigration in moderating the costs of demographic ageing. Immigration Minister Hurford in the early 1980s said that the benefits of immigration in reducing the relative costs of an ageing population were one of the key reasons for a Labour Government agreeing to increase migration at a time of high unemployment. The issue has returned to the agenda in the late 1990s, as demographic projections indicate a major increase in the older age share of the population from 2030, as the “baby-boom” generation moves into retirement. With declining fertility also evident, this has raised the prospect again as to whether immigration has a role to play in creating a younger Australia than is otherwise in prospect.

While Australia has had a younger population profile than most OECD nations, standard demographic projections indicate a significant increase in the aged share of the population from 2030. Continuation of trends evident in the 1990s would double the share of aged by mid century. This would still be a younger demographic profile than that for most industrial nations, but it would also never-the-less be a major shift for Australia’s own demography.

Internationally, books such as *Agequake* and *Grey Dawn* have raised the consequences of such population ageing to populist scare level – just as has been the case for over-population and the environment with books such as *The Population Bomb*.

A view has been strongly expressed that such concern is overstated for ageing and, moreover, that immigration is an inefficient instrument for responding to such concern anyway. Certainly Immigration Minister Ruddock in the Howard Government has accepted that “we would need to have a very much larger program than people have been prepared to entertain in order to have even marginal impacts on the ageing process.” Economists have also added that Australia has progressed further than many countries in compulsory self-funding for retirement and in enhancing age-related health insurance pricing. In these circumstances the usual concern in population ageing, the transfer burden upon a smaller relative working age population, is said to be manageable.

An alternative view is that the policy settings for full self-funding of aged care are far from guaranteed, particularly as the voting population itself increasingly ages. If so a package of measures to moderate the ageing effect could be helpful and immigration could have a role to play in this context. In particular it is further argued that traditional demographic projections (based on fixed migrant composition and fixed absolute levels of migration) might understate the benefits of migration for this purpose, so that the inclusion of immigration as one element of response to ageing is not unreasonable. International debate over such matters in Europe and Japan is also increasingly evident over time.

Also in the broad field of demographic economics, the implications of immigration for population distribution has been the subject of academic and policy review. Of particular concern has been the increasing concentration of migrant arrivals in Sydney. The presumed implications of this for infrastructure and service provision and for urban congestion have convinced some NSW – based politicians to support low immigration.

Critics of this stance point to the revenue generated by migrants as the source of solutions to such problems, along with enhanced urban policies generally. It is also pointed out that internal out-migration from Sydney has meant that in fact Sydney’s population growth has not been too far above the rate of natural increase and that growth problems or benefits, as the case may be, are actually displaced much more to areas such as Brisbane and Perth, with double the population growth rate of Sydney.

Macro-Economics of Immigration.

In relation to short-term economic issues for immigration, the research and policy debates have focussed on unemployment, training, inflation, wages, public outlays and the balance of payments. In each case considerable policy concern has been evinced from time to time regarding perceived adverse consequences of migration for these matters. In almost each case research however has consistently shown a basically neutral outcome of immigration for the economy. This is not to say precisely neutral. But the key point emerging from the economic research in all of these areas listed is to recognise that immigration impacts on both the supply and

demand sides of the economy, thus producing offsetting effects. Much of the popular public debate recognises only one side or the other for these impacts. Often this is understandable, since the offsetting effects may be subtle, indirect or complex. But this is not to say they are not equally important. The precise balance of effects is a matter for empirical investigation, the results to date of which are now discussed in this section.

Labour Market Outcomes.

Particular concern often arises over the labour market effects of immigration. A popular view is that immigration only adds to the number of workers and so increases the level of unemployment or, more specifically, that newly arrived migrants take jobs from existing residents.

Such a view is understandable. It does seem obvious that there is competition for jobs and that migrants may displace other residents. But this view misses the demand created by migration, for immigration can boost spending on goods and services which, in turn, increases demand for the labour to produce those goods and services. This is to say migrants are not only workers but are also consumers. Moreover many also bring capital funds with them and they may induce others to spend eg domestic and foreign business investment meet the greater consumer demand.

This issue has been examined in a wide range of studies in Australia over different time periods and using different methodologies eg time-series analysis, structural modeling, simulation. The burden of evidence is that immigration has not caused any net increase in the unemployment rate in Australia.

This finding is in no way incompatible with the observed fact of higher average unemployment rates for recently arrived migrants. Settlement adjustment can take time and in the interim, expenditure effects may disproportionately benefit the employment prospects of existing residents. The conclusion is also consistent with an impact that can vary across industries, occupations and regions. Moreover some migrant groups themselves experience very low unemployment and others can have quite high rates. For instance, it is not surprising that many refugees whose education and work have suffered massive dislocation as a result of their experiences, may have higher than average unemployment.

In contrast to public concern over perceived adverse unemployment consequences of immigration, a long-standing concern of the union movement has been instead the potential impact of immigration on training opportunities for existing workers. If immigration is used by employers to fill shortages of skilled workers, the fear is that this provides an incentive to avoid proper training of local employees. Of course, recruiting migrant workers is not cost-less. It is subject to problems of lags before they arrive, problems of compatibility of qualifications, and problems of retention. Migrant workers are also subject to the same minimum requirements for conditions

of employment as for existing residents. Never-the-less employers do seek skilled migrants and the remaining issue is whether the numbers arriving displace local skill formation.

The answer, as with unemployment, is a matter of the balance between offsetting effects. In the case of training, as with jobs, migrant-created demand itself induces a need for new training slots wherever that demand is sourced. And while there could be particular imbalances from time to time in the process, the available research evidence finds an overall match of extra skill supplied and extra training induced.

Finally, in terms of labour market effects, it is possible that unemployment effects of immigration are muted if adjustment in the labour market took place via changes in wages. Then imbalance between supply and demand effects would not be observed in unemployment, but rather in wage movements. Local workers would suffer from reduced wages, rather than from unemployment.

This is less likely to be the outcome for Australia's part however, as the Australian labour market has been one of the most highly regulated amongst industrial countries. The extensive system of minimum wages in place since early in the twentieth century has meant limited capacity for wage reduction. Never-the-less it is possible that wage-setting authorities may have themselves responded to the presence of migration in fixing wage and, in recent years, the wages system has itself become increasingly deregulated. Or, again, the immigration could have induced inflation, so reducing real wages if not nominal wages. Empirical research, however, both past and recent has found that there is no linkage from immigration to nominal wages-nor to price inflation, thus confirming again a broad balance between aggregate demand and supply effects on the macro-economy.

Current Account Deficits

With broad macro-balance a consistent finding of labour market studies in relation to immigration, it would be surprising if a different result held for the balance of payments.

Never-the-less this could be possible. The demand created by migrants could well be "bunched" so producing foreign borrowing requirements for that period, or, if migrants bring in fairly large sums of lifetime accumulated finds, when they arrive in Australia, there could be improvements on the balance of payments, offset later by the prospect of remittances. Some have suggested migrants are irrelevant to much of Australia's exports (eg agricultural and mineral products), but may be major importers, including of products from their source countries. Or will there be a foreign exchange benefit from visits from friends and relatives?

Clearly there are a myriad of transmission mechanisms for an effect on the current account – and there are further downstream induced effects. In addition while it is

likely that any one cohort may have a definable sequence of impact eg early borrowing and subsequent saving, overlapping cohort effects must also be taken into account. The only effective resolution of the issue can be empirical. And again the available evidence in this respect is that migrant arrivals are neutral with respect to the current account balance, though an emigration ‘brain drain’ may have had a significant negative effect on the balance of payments. Certainly the composition of departures is even more skewed to skilled persons than is arrivals. Within arrivals, there are studies showing high export pay-offs to particular migration categories eg business migrants, but overall there has been a basically neutral average impact.

Very major changes in migrant entry composition could shift outcomes somewhat. But the migration program itself represents an ongoing political balancing of competing humanitarian, economic and social objectives such that complete dominance by any one type of migration is unlikely for Australia – and hence so is dramatic change in impact. By contrast, there are US studies showing that the lower skill composition of US immigration has had some more particular negative net consequences there for some workers (especially in local labour markets) than has been discernable for Australia (and for Canada).

Public Outlays and Revenue

As with labour markets and the current account, the effect of immigrants on the public purse is a matter of balance between demand and supply – side effects.

In the popular debate over immigration and the public purse, criticism of immigration focuses on the demand generated through migration for government spending on welfare services, education and health and wider infrastructure eg roads, water. But there is equally a need to examine the less evident supply effects for public revenue through income tax, indirect tax, charges and the like.

There has been some debate over migrant-specific services where, in the early stages of settlement, it is likely that outlays do exceed revenue eg language classes. Also it is likely that for a specific intake there is a period where migrant-induced public expenditure exceeds revenue generated for a time, but thereafter moderates. It equally needs to be recognised that, with adult migrants, expenditure on education, training and health costs prior to arrival have been incurred elsewhere, a major saving for the Australian taxpayer – just as is receipt of pension for retirees who relocate to Australia on overseas pensions. Conversely those who retire overseas on Australian pensions constitute a budget cost.

The net impact of the many considerations such as these will vary with the type of migrant and the level of government. It will also vary over time as the nature of public sector activity alters eg greater requirements for self-funding in retirement and for family health insurance. But for the circumstances that have prevailed in recent

decades the burden of the empirical evidence indicates that there has been an overall positive contribution of immigration to the public purse.

A particular policy issue of interest in this context is the position of illegal migrants. Given their restricted take-up of social support, it is possible that illegals make a larger net contribution to the public purse than legal migrants. However no case for their toleration on these grounds has been made. The spillover cost to society of toleration of illegality is no doubt instinctively seen as too great.

Wider Immigration Economics

Economists have examined a wide range of other issues beyond the impact of migration on long-run growth, social expenditure and the macroeconomic conditions of the economy. An earlier literature associated with the economic historians has examined the role of wage, unemployment and transport cost levels between source and host countries as explanators of migration movements. This was not to deny other motives but, given those other motives, to measure the influence of such pecuniary factors. However while their effect is clear in earlier times, such as the less constrained migration movements of the nineteenth century, their role in more recent times tends to be masked. One reason for this is that entry is now well controlled by Australian authorities, so that free responses are not being observed. That this is the appropriate explanation, and is not simply a reflection of absence of economic motivation, is demonstrated by analyses of trans-Tasman migration. For such movements no visa requirements apply and there the economic variables play a reliable and significant role.

A related political economy issue is whether the quotas set for visaed migration themselves are responsive to economic forces. And certainly the Australian tradition has been to expand allowable entry during boom times and to contract back during recession. Two major exceptions exist in the post-war period – a raise in permitted migration during high unemployment under the first Hawke Labour Government and maintenance of low permitted migration during a period of sustained expansion under the Howard Government – each breaking the longer historical pattern previously evident.

Economists have also devoted significant attention to the post-arrival outcomes of migrants, particularly using the approach of “human capital theory”. This relates earnings to the characteristics of individuals and allows a statistical analysis of outcomes for migrants and non-migrants. Early studies discerned a reasonable convergence over time between migrants and existing residents, implying ultimately similar rewards for education and experience. Subsequent work affirms intergenerational mobility and like returns to qualifications and experience acquired in Australia, so that simple “discrimination” interpretations of difference based on ascriptive characteristics lack plausibility. But there apparently remains a gap in

returns to overseas qualifications and experience, especially for the non-english speaking born, that requires more complex interpretation.

Conclusion

A lot of economic review of immigration has focussed on the relatively short-run effects on aggregates such as unemployment, wages, inflation, public finance and the foreign debt. Yet the general finding in all of these areas is that the effects have been reasonably balanced or, where not, marginally positive for the Australian macro-economy.

Of course further work may be needed to examine and refine these findings further, especially in relation to export performance and tax revenue. But an even greater priority might lie with examining implications for longer-run growth in per capita income. There, an earlier view that immigration may even reduce or be neutral in its effects has been challenged by a re-examination of earlier studies and methodologies in the light of new growth economics. A more positive and substantial contribution has been claimed and further testing is needed to test those claims.

The salience of a renewed focus on longer-term pay offs, both in productivity and also in relation to social outlays, is emphasized by a unique demographic transition facing Australia for the first time since European settlement viz the prospect of negative natural increase. The role of immigration (both permanent and long-term) in sustaining a prosperous economy with an ageing workforce is a core issue that is likely to occupy economic analysis of immigration in Australia for some time to come.