3. Some Economic Aspects of Immigration

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1. Introduction

Australia now realises that the long-standing policy of protecting inefficient manufacturing and relying on primary commodity exports will not provide sustainable improvements in our living standards. Our manufacturing sector has not become internationally competitive and our export income has been slashed by declining terms of trade and overseas protection.

We must rationalise the inefficient industries, promote new competitive export industries, and target our investment towards improving productivity. Reforms to the training system and the structure of the labour market are also required to improve the skills and flexibility of the resident work-force.

Policy must seek to maximise the benefits of restructuring by eliminating inconsistencies. It would be counter-productive to foster high-technology industries (with low labour requirements implied) while implementing labour-force growth policies.

Conventional wisdom focussed on expanding the domestic market to achieve efficient scale economies. In the future, efficiencies will come from the penetration of world markets. Rapid growth in the local population is no longer a necessary precondition. The Centre for International Economics (CIE) concluded that

> "...to the extent that scale economies can be achieved in traded industries it is inappropriate to consider immigration as being a valid policy instrument. The adoption of more internationally oriented trading policies, by encouraging domestic industries to produce for and compete on the much larger international market, has the

> potential to achieve much more in the way of efficient (least-cost) industry production techniques than policies such as immigration which increase the size of the domestic market". [1]

While this article argues against the current immigration levels on both economic and environmental grounds, it does not also advocate a low growth policy. Environmentalists tend to associate population growth with economic growth, and oppose both. A low population growth strategy can be pursued coincidentally with a high growth strategy. Indeed, a high economic growth-low population growth strategy is the most effective way to enhance social equity goals and achieve environmental balance. A low growth policy will reduce the economy's ability to advance the welfare of the under-privileged in Australia and abroad, and to generate the funds necessary to resolve our environmental problems.

2. Recent Developments

Many researchers have studied the short- and long-term advantages and disadvantages of immigration. Following the 1985 report of the Committee for Economic Development (CEDA) [2], a major report was released in 1988 by the Committee to Advise on Australia's Immigration Policy (CAAIP) [3], particularly a chapter by the Centre for International Economics entitled "The relationship between Immigration and Economic Pertormance".

The CAAIP report argued that immigration policies should aim

> "to achieve a sharper economic focus...which was to be achieved by a small increase in the aggregate intake...where the selection process would favour skill, entrepreneurship and growth". [4]

In May 1989, the Federal Government, on Fitzgerald's recommendation, established the Bureau of Immigration Research (BIR). Several publications have come from the BIR to date. The thrust of all this research has been to support the hypothesis that immigration has been (and will continue to be) of long-term economic benefit to Australia. However, the research is largely inconclusive, and in many respects misleading. More importantly it is retrospective, in the sense that they fail to outline how immigration fits into a future of high-technology export oriented industries. Even if the high rate of post-war migration was beneficial during the 1950s, 1960s, and perhaps the 1970s, it does not follow that the same policy is applicable into the 1990s.

The public debate in 1989 and the early period of 1990 was wide-ranging. With a federal election looming, the Opposition parties used immigration to give its ailing campaign some impetus. Further, the Chinese students decision, juxtaposed with the plight of the Kampuchean refugees stranded in Darwin as 'economic refugees', clearly highlighted the fundamental problems that the Government and the community were experiencing in framing and implementing a coherent population policy.

There has been dissent within the Government. The former Minister for Finance, Peter Walsh has written that

> "it is beyond any reasonable doubt that the present immigration policy is seriously aggravating our short- and medium-term economic problems. Its mostly non-economic focus enhances the damage". [5]

The CEDA study was analysed in detail in the chapter in *How Many More Australians* entitled "The Economic Implications of High Population Growth". [6] The more recent work from the CAAIP and the BIR have not as yet been closely scrutinised. In this chapter, I argue that on the basis of the analysis presented, the additional work cannot be used to justify the claim that immigration yields a conclusive long-term economic benefit.

3. The Growth Imperative

Workers and firms struggle with each other for their respective shares in National Income. At any point in time, an increase in the target real wage by workers implies a lower profit margin for firms, and vice-versa. If either group resist a move by the other to gain a higher share, a wage-price spiral can result from the conflict. The government can use recession to stifle the conflict. However, social democratic governments are generally reluctant to pursue contractionary policies which result in large-scale unemployment and widespread bankruptcy for fear of political retribution from the electorate.

Both income receiving groups in the economy aspire to growth in their respective real incomes. Distributional conflict can be attenuated by economic growth because it reduces the possibility that the competing claims will be incompatible. Economic crises originating from such conflict is thus minimised when GDP is growing strongly.

Further, economic growth increases the ability of the society to finance environmental enhancements. A stagnant economy has difficulty in financing the investment in technology necessary to redress the current and future environmental problems.

The role of government in ameliorating environmental decay and improving the prospects of the underprivileged is crucial. The private market fails to resolve these difficulties because it has no equity dimension and its outcomes are the result of a private cost-benefit calculus which ignore social costs and benefits. When growth is weak, the public sector faces a fiscal crisis. The ability of the public sector to play a creative role in the economy increases when growth is robust.

It is also important to place Australia in a world context. The low growth lobby has no answer to the problems facing the poorer countries throughout the world. It is only through the generation of surpluses in the richer, technologically advanced economies that resources can be freed to aid the suffering obvious in the poor nations.

While growth *per se* is not a sufficient condition for improved *per capita* incomes, it is probably a necessary condition. In other words, without sustained economic growth, continuous improvement in economic opportunities and status of an economy's population, including the lower income groups, will be impossible. The important consideration is that growth must be based on high productivity-low waste industries, rather than broad-based manufacturing.

4. Some general economic issues

Most studies examine the effects of immigration on the growth in average (*per capita*) GDP. So, if a positive correlation between immigration and *per capita* income growth is found then immigration must be of economic benefit. Causality is assumed rather than established. In the case of CEDA (1985) [7] no positive correlation was even established.

But are we concerned about the welfare of the new arrivals exclusively, the pre-immigration population exclusively, or both groups? CIE (1988) [8] uses the post-immigration

per capita GDP measure to assess the economic affects of immigration. GNP *per capita* is a better measure because it captures incomes accruing to domestic residents. CEDA used the GNP measure for this reason. But Parmenter [9] goes further. He distinguishes between the post-immigration and pre-immigration population. Presumably, the new arrivals gain from migration or else they would not have migrated. But does the welfare of the previous residents rise as a result of immigration? It is possible due to distributional effects for the *per capita* post-immigration GNP (GDP) to rise, but for the corresponding pre-immigration figure to decline. Thus, the new arrivals benefit at the expense of the existing population.

Parmenter focusses on two dimensions of immigration: the relative productivities of the new entrants, and the external effects that accompany their arrival (for example, the generation of scale economies (positive externality) or scale diseconomies (negative externality)). He compares combinations of assumptions about these two broad parameters.

CIE (1988) assumes that the new arrivals have higher relative productivity, but probably generate moderate negative externalities (for example, urban congestion). Parmenter [10] shows that if we are exclusively concerned with the pre-immigration population (assuming the new arrivals are always better off), then the CIE conclusion "that the net economic effects of immigration are favourable..." is wrong.

Both CEDA and the CIE studies employed the ORANI forecasting model to forecast the effects of varying the immigration intake. While other large scale econometric models are built by estimating hypothesised relationships against real data, ORANI is a numerical model. It has never been tested (nor could it be tested) against real world data. ORANI is a market clearing neoclassical model with very strong, in-built relative price effects (any relative price change will generate large quantity changes). "ORANI lacks any genuine macroeconomic linkages such as those between expenditure, incomes and wages". [11] ORANI simulations simply assume away the problem of deficient aggregate demand that might arise from real wage cuts. Further, ORANI assumes that relative prices will always render supply equal to demand (markets always clear).

Thus, the effects of increased immigration are preordained by the model's assumptions. Immigrants increase the labour supply and the real wage falls to ensure that employment grows commensurately. ORANI assumes that a lower real wage makes the economy more competitive and so exports and import replacements promote growth in national income.

The real wage must fall because diminishing returns to the labour input (all other inputs fully employed) is asserted as a matter of faith even though empirical evidence overwhelmingly rejects the assertion that productivity moves in a counter-cyclical fashion. Economies rarely operate on the so-called intensive margin. Labour, land and capital resources are often idle. As extra labour is employed, capital utilisation increases and diminishing returns are avoided. Diminishing returns would only logically be encountered when capital and land were fully employed. Of course, at that point there would be no reason to increase the population through immigration anyway!

Importantly, immigration has no unique role to play in the ORANI scenario. ORANI makes the underlying key assumption that "the average real wage level in the economy adjusts to ensure that the addition to the labour-force from immigration is fully employed". [12] By assumption, no skill bottlenecks occur irrespective of the skill mixes that different immigration intakes could generate. So using the ORANI-logic, the same effects should occur if some of the 450,000 currently unemployed workers were given jobs. Why hasn't the real wage fallen far enough to employ these workers and increase *per capita* income?

5. The GDP Implications of Alternative Immigration Policies

In *How Many More Australians*, some Okun's law arithmetic relating the major output and labour-force aggregates was presented and used to form expectations about changes in the aggregate unemployment rate based on output growth rates. A series of accounting identities underpins Okun's Law and helps us understand the labour market and output implications of a high population policy. Take the following short-run explanation of output:

$$Y = G(1 - UR)LH \qquad (1)$$

where Y is real Gross Domestic Product (GDP), G is labour productivity (output per unit of labour input), H is the average number of hours worked by the labour-force, UR is the aggregate unemployment rate (unemployed persons as a percentage of the total labour-force), L is the labour-force (which is the sum of the employed and unemployed persons). L (1 - UR) is total persons employed, and the produce LH is total labour input measured in hours of work. Equation (1) simply says that total output produced in a period is equal to total labour input, (1 - UR)LH times the amount of output each input of labour hours produces, G.

Simple calculus converts (1) into a dynamic equation expressing percentage growth rates, which in turn, provides a simple benchmark to estimate, for given labour-force and productivity growth, the increase in output required to achieve a desired unemployment rate. [13] Accordingly, the small letters indicating percentage growth rates and assuming that hours worked is more or less constant, we get:

$$y = g + (1-ur) + 1 \qquad (2)$$

Re-arranging (2) as:

$$ur = 1 + g + 1 - y \qquad (3)$$

shows that if the unemployment rate is to remain constant, the rate of real output growth must equal the rate of growth in the labour-force plus the increase in labour productivity. Short-run cyclical movements in labour productivity and the labour-force will disturb this benchmark and modify the predictions from equation (3). [14]

The labour-force projections in the CIE [15], were converted into labour-force growth rates for each net migration assumption for the sub-periods 1990-95, 1990-2000 and 1990-2005.

Table 1 Projected Labour-force Growth Rates under Different Net Annual Migration Assumptions - Annual Percentage Changes

Net Annual Migration Assumption	PERIOD		
	1990-95	1990-2000	1990-2005
zero	1.16	0.96	0.73
125,000	1.99	1.79	1.56
280,000	2.91	2.67	2.41
540,000	4.26	3.91	3.55

ABS estimates for the period 1979-85 indicate a productivity growth rate of 2.1 per cent per annum for the whole economy (output per hour worked). [16] While this is likely to be stable for some time, if restructuring policies (especially in the award wage restructuring area) were successful, productivity would be expected to increase. For our purposes this would increase the growth in real GDP required to keep unemployment stable.

Table 2 shows the rate of growth in output (real GDP) required to maintain a stable unemployment rate for given estimates of labour-force and productivity growth.

Table 2 Required real output growth (per annum) under alternative net annual migration assumptions to maintain a constant unemployment rate

Net Annual Migration Assumption	PERIOD		
	1990-95	1990-2000	1990-2005
zero	3.26	3.10	2.84
125,000	4.10	3.90	3.66
280,000	5.01	4.87	4.51
540,000	6.36	6.10	5.65

Real non-farm GDP growth has averaged 3.27 per cent between June 1980 and June 1990. This decade has been a period of strong growth. Certainly, a growth rate above this average would be unusual and would run into external constraints (see next section). In the last years of the decade the growth rate has slowed and became negative over September 1989 to September 1990. The current prospects summarised from *The Age* Economic Forecasts appear to be a negative growth rate over 1990-91, with a growth of around 2 per cent emerging in 1991-92. [17] Referring to Table 2 makes it clear that labour-force growth implied by current net intake (125,000) is simply untenable, if we are to avoid a rising aggregate unemployment rate.

6. Australia's Capital Needs

There is a clear relationship between output and capital requirements. EPAC [18] say that "a key factor in any estimate of investment requirements is the economic growth to be supported". EPAC conclude that if the investment to GDP ratio remains around the 1980s average (24.6 per cent), a growth rate of 3 per cent is possible, external constraints aside. In addition, "our saving performance - measured in terms of aggregate gross saving relative to current price GDP - has been closer to the corresponding OECD average". [19]

Further, any sustained increase in our productivity growth will require commensurate increases in the level of investment. Recent evidence from EPAC (1990) shows that while "Australia has tended to devote a higher share of its national product to investment than most other OECD countries, it also has one of the fastest rates of population and employment growth" [20], which leads to our *per capita* growth rate being 'average at best' Australia's relatively high rate of investment is therefore due to our faster population growth.

Immigration increases the number of jobs that have to be created and encourages capital widening rather than capital deepening. Merely absorbing scarce investment funds in capital widening (equipping each new worker with capital of the same technique as the last) does not improve productivity.

To support a 3 per cent GDP growth target and improve our long-term productivity, our investment to GDP ratio must remain relatively higher than the OECD average. The vital issue concerns the financing of this investment. It is here that our external constraints become critical.

With the public sector in surplus, the savings-investment imbalance noted above has manifested as an external deficit. The private sector is spending more than it earns by drawing on the savings of foreigners. So if domestic savings are low and the public sector is in surplus, increased private investment spending must be financed by external borrowing. [21]

By introducing the external sector we now have two medium-term targets: a favourable growth in GDP (with the implied capital requirements), and a reduction in the excessive current account balance. The growth goal and the external balance target are interrelated.

EPAC [22] conclude that if the investment to GDP ratio remains at the levels of the 1980s, then *per capita* income could grow, and "the task of external debt stabilisation over a medium-term horizon appears more manageable". But if the investment to GDP ratio which characterised the late 1980s had to be continued to generate this same level of economic growth, then debt stabilisation is problematic and the "question is whether such growth could then be accommodated without causing unacceptable delay in external adjustment". [23]

What are the solutions? To correct the current account problem, private savings must rise and/or private investment must fall. In addition, increasing the competitiveness of our traded goods sector will help to promote export income and allow import replacement to occur.

If investment falls, to the extent that it is externally financed, the current account will improve. But the growth target will be the casuality. Alternatively, a rise in investment (relying heavily on imported capital goods) will cause an immediate deterioration in the external balance. But such investment not only stimulates growth in output, but also allows labour productivity to rise, unit costs to fall, competitiveness to rise, all of which helps resolve, over time, the external problem. Economic growth also increases the level of savings which reduces the reliance on external financing of the investment.

Additionally, what is the correct investment to GDP ratio which will allow the 3 per cent growth target to be achieved? To avoid the high levels of the 1980s (and the problem mentioned above of external imbalance), Australia needs to make every investment dollar count. Capital deepening must be our target to improve the Nation's productivity and competitiveness.

Inasmuch as immigration promotes forces for capital widening it will be detrimental to the twin goals of growth and external balance. The higher the net immigration over the next five years, the more likely it will be that our required investment to GDP ratio will approximate the levels of the late 1980s, rather than the lower 1980s average.

What about increased savings coming from the immigrants? CEDA (1985) found the new arrivals are not high savers. Their expenditure injection was found to be uneven and weighted to the early years after arrival. It was concentrated in the housing industry which is clearly not the most efficient or productive use of scarce capital. The failure to use their capital for capacity expansion helps to explain why *per capita* growth has not responded positively to migration. In addition, the concentration of demand in highly congested urban centres like Sydney and Melbourne produce substantial negative externalities. [24]

The CIE [25] argue that apart from their consumption value, the funds "are a source of foreign exchange that makes a positive contribution to the current account". Earlier, CIE [26] had concluded that it is "unlikely that immigration...operates to make more difficult the task of reducing the current account deficit". In other words, the benefits of capital inflow offset the higher imports. However, this does not take into account the necessity for higher than otherwise growth rates to stabilise the unemployment rate that immigration necessitates, and the import effects that ensue.

To conclude this section, even achieving an average annual growth rate of 3 per cent throughout the 1990s will be difficult, given the external constraints. From Table 2 this growth rate will not be sufficient to maintain the unemployment rate at its present level if labour-force growth is buttressed with the current immigration numbers. Higher rates of growth require ever higher amounts of investment and external debt. Our debt could not be stabilised if growth was above the average 3 per cent per annum throughout the 1990s.

7. Immigration and Aggregate Unemployment

Recently, as government has struggled to find effective policies to combat external imbalance, and persistently high inflation, the question of whether immigration policy can become a valid stabilisation tool has emerged. Even though Australia is now experiencing a policy-induced recession, imports and our external debt are responding very slowly.

Our current immigration policy may be exacerbating this need for restraint via its effects on aggregate demand. The CIE (1990) analyses the notion "that immigration policy should now be used as an adjunct to other tools of macroeconomic management, such as fiscal and monetary devices and instruments...". [27]

They conclude "that the short term macroeconomic consequences of minor variations in the immigration intake are so small as to be effectively negligible". [28] On the question of using immigration as a tool to facilitate microeconomic reform, the CIE [29] conclude "that immigration is less relevant than conventional policy instruments in microeconomic management". While labour market pressures in both good and bad times will place strains on these strategies, population policies should not be varied over the cycle. Business cycles will always cut across a long-term population programme.

The performance of the population programme should be appraised independently of cyclical variations. A high unemployment rate does not *per se* signal that a particular net inflow of immigrants, for example, is inappropriate. Critics who call for immigration cutbacks when the economy enters a low period of activity, solely because the level of job vacancies is low relative to the labour-force, reveal a lack of understanding of short-term and long-term dimensions of economic activity. The question which must be addressed is the relevance of immigration policy to the long-term goals of the economy.

Would the rate of unemployment be higher or lower if the immigration intake were higher or lower? Several studies have examined this issue. [30] Immigration can affect the level and rate of unemployment through its influence on all the variables in equation (2).

Prior to the 1970s, migrants added proportionally more to the labour-force than to the population. [31] More recent evidence indicates that the labour-force participation rates for male migrants has fallen and is very similar to males born in Australia, while labour-force participation of Australian born females has outstripped those of migrant women. [32]

Even so, the slightly higher participation rates may cause measured unemployment to temporarily increase because the short-run impact of labour-force growth is likely to be greater than the impact on output and productivity. This is not necessarily a cause for alarm, because longer-term demand effects may offset the short-run changes.

Thus the supply-side effects must be assessed against the demand side-effects. Output and job growth are increased by the stimulus to aggregate demand for government capital works expenditure and business investment provided by migrants themselves and by other bodies. Harrison [33] concluded that the proportionate increase in the labour supply and the proportionate increase in labour demand are equal, although there is a higher unemployment incidence among new arrivals, which suggests that new jobs created as a result of increased demand are taken in disproportionate numbers by locals. Withers [34] also concludes that migration does not add to unemployment.

The issue of whether our past migration has caused higher or lower unemployment (rates or levels) is largely irrelevant for future policy directions. Past industry and population strategies are not consistent with the goals of selective restructuring. Labour force growth (given the pool of current unemployed) must be a passive factor. Absolute GDP growth rates are unlikely to be high enough to be constrained by an aggregate labour-force deficiency. Specific compositional bottlenecks should, in the first instance, be addressed through micro-labour market policy aimed at absorbing the current unemployed labour-force.

8. Immigration and the Non-Accelerating Inflationary Rate of Unemployment (NAIRU)

Several studies have examined the effects of migration on the level of structural unemployment. [35] Structural unemployment is a sign of labour market inefficiency. The greater the degree of structural unemployment, the higher will be the unemployment rate required to maintain a stable inflation rate.

There are conflicting conclusions drawn about the effect of immigration on structural unemployment. [36] Withers [37] concluded that neither the findings of Harper (implicitly Hughes), nor those of Warren, are robust into an updated sample period. Migration does not appear to improve labour market efficiency. Evidence, such as the similar mobility of migrants and the Australian-born, strengthens this conclusion. [38]

The U-V model and the Holt search model which underpin the studies use a fairly simplistic view of structural unemployment. [39] Various labour market adjustments occur over the course of a business cycle. [40] In brief, with expansion, unemployed workers are offered jobs with on-the-job training opportunities attached [41] Displaced workers (whose skills may be obsolete) gain retraining, and entry positions are available for young, inexperienced people leaving formal training.

Persistent recession introduces asymmetries to this upgrading process. The general skills of the displaced workers atrophy and their job-specific skills become obsolete. Retraining can more quickly replace job-specific skills if the general skills (like work discipline, concentration, punctuality) are intact. So the ability to reabsorb displaced workers into employment varies inversely with the duration of unemployment. School-leavers who spend a long period unemployed are also in danger of becoming difficult to employ. If a recession overlaps school years, the most recent school-leavers will be preferred to the pool of unemployed from earlier years.

Migrants have ready skills and are unlikely to have the disincentives associated with prolonged unemployment and its related welfare dependence. As demand is stimulated, the inflationary pressures could therefore be avoided by selective imported labour-force growth. This is the basis of the increased labour marked efficiency argument.

But this only sidesteps the constraints and maintains the long-term pool of unemployed. The influence of migration on the NAIRU is therefore not independent of the timing of migration flows with respect to the business cycle (and the persistence of the cycle). With hysteresis structural imbalance (the proportion of labour with obsolete or no skills) worsens as activity declines (see note [21]). If we measured structural imbalance at comparable stages in the cycle, these proportionate changes would not be observed.

The steady state proportions are disturbed if skilled migrants are injected into the labour-force as a downturn. The potential imbalance between labour demand and supply becomes an actual structural problem because when the economy improves, workers who would have received training as activity increases, remain unskilled and unemployed. Importing skills in this context locks the economy into a higher level of structural unemployment than necessary.

Restructuring will create obsolescence of skills as it creates the demand for new skills. A structural problem will occur if displaced workers are not absorbed back into the growing areas. If migrant skills are imported, expanding firms have less incentive to lower hiring standards and establish internal training processes. The real GDP growth needed to reduce unemployment thus increases.

Labour force growth could be accommodated if structural changes were rapid. Jobs in labour-intensive service areas would be stimulated by strong and speedy multiplier effects. But restructuring will take time and will involve a focus on selective initiatives. EPAC [42] argues that "...attempts to achieve competitiveness 'across the board' in high technology industries are unlikely to be successful". Capital deepening investment is required. Not only will labour have to be retrained and relocated, but initially restructuring will reduce the absolute amount of labour demanded.

Inertia-prone firms would probably restructure incentives if they foresaw a continued supply of low-cost, low-productivity labour. For all these reasons, labour-force growth must (passively) follow the establishment of a revised industry structure and the implementation of labour relocation and retraining schemes. The CAAIP Report [43] has recognised that the concern should be about the composition of new entrants rather than the level. We no longer need large numbers of low-skill, compliant workers.

9. Microeconomic Constraints on Economic Growth - The Training Imperative

EPAC (1988) [44] studied the microeconomic constraints on economic growth in Australia and focussed on how our traded goods sector can improve its standing in the world markets. They identified skill shortages and rigidities as important microeconomic constraints facing Australia.

Even though many on-the-job training opportunities emerge as the level of business activity improves, skill shortages still occur at high levels of activity. A large number of long-term unemployed are by-passed by the upturn. Thus extra training initiatives have to be taken. In fact, Australia must adopt a training imperative!

The Australian work-force must acquire new, broader, and more flexible skills. The Department of Trade [45] summarised the elements of an active labour market policy:

> "These labour market policies emphasise: skill formation, including skill flexibility, adaptability, and capacity for innovation; job placement (matching supply and demand); the reduction of labour market segmentation to enhance overall flexibility and equity; and payment of unemployment benefits as a last resort".

The ACTU/TDC Mission found that Sweden, Norway, Austria, and West Germany all pursued active labour market programmes. EPAC [46] notes that "Australia's education and training performance appears to lag behind successful industrialised economies". CTEC (1986) [47] reviewed our tertiary system and found it to be relatively ineffective and inefficient.

Reform is urgently required to our school, training and tertiary education systems. Employers must also take more responsibility for provision of relevant on-the-job training. Higher education must become more focussed on the requirements of high technology industries.

It is true that temporary skill shortages will always arise that cannot be immediately met by the local training system. Immigration is a suitable means to resolve these short-term difficulties. It is expected that the numbers arriving to satisfy this need would be small. EPAC concludes that:

> "While immigration has made and will continue to make a valuable contribution to Australia's economy, the option of importing skills should be seen as complementing, and not substituting for, intensive education and training efforts to improve the skill base of our domestic workers". [48]

10. Labour Market Restructuring - Reducing Segmentation

EPAC (1988) [49] also identified the large degree of labour market segmentation as a microeconomic constraint facing Australia. A high degree of occupational segregation, reinforced by discriminatory hiring practices, reduces the flexibility of the labour market. Occupational segregation prevents workers from realising and contributing their full potential. The Department of Trade [50] quote an OECD report which concluded "that Australia had...[in 1980]...one of the most segregated labour markets of all the industrialised countries".

Since the early 1970s, there has been a large increase in female involvement in the market sector of the economy. In the early 1970's, females comprised around 31 per cent of the labour-force and their labour-force participation rate was 37 per cent (males 80 per cent). In July 1990, females comprised about 38 per cent of the labour-force and their participation rate was 52.5 per cent (male 75.9 per cent).

But large inequalities in labour market outcomes still exist. For example, in July 1990, 92.1 per cent of employed males were in full-time employment, whereas, only 53.1 per cent of married employed females had full-time jobs and 60.7 per cent of all employed females were in full-time work. Women also experience higher unemployment rates (especially teenage girls). Females also dominate the discouraged worker category.

Some of these inequalities result from females choosing to combine part-time labour market work with other family responsibilities. But the high degree of job segregation does not allow women to escape from the lowly paid, low skilled jobs if they desire career-oriented work. The increased female participation rates has resulted in more females being squeezed into the narrow range of traditional female jobs. In February 1987, 55 per cent of all female workers were in three occupations. [51]

Segregation means waste. The economy operates with a below potential labour-force, and the individuals who are disadvantaged suffer low income, poor training, and no future. Demand-side (anti-discrimination policies, targetted subsidies, etc.) and supply-side policies (training programmes, child-care facilities, etc.) are needed to eliminate the segmentation. Immigration only serves to reinforce and prolong the inefficiencies stemming from labour market segmentation.

11. The Diseconomies from Immigration

Newly arrived migrants concentrate in New South Wales (39.6 per cent between 1981 and 1986), and Victoria (24.6 per cent of total between 1981 and 1986). This concentration is further focussed on Sydney and Melbourne (around 33 per cent of total between 1981 and 1986). [52]

Extensive evidence is available to support the notion that serious social and economic problems have occurred as diseconomies of urban settlement are encountered. [53] The CIE [54] conclude that "on balance we do not consider that the prospect of higher living standards through the achievement of scale economies with immigration-induced population growth is a likely one".

Yet, some still discount the role of immigration in producing diseconomies. The CIE [55] argue that other factors (internal migration and natural increase) also strain the scarce natural and social infrastructural resources in urban areas. [56] Their argument represents a misplaced sense of priorities. Any urban growth strains the natural environment and creates demands for social infrastructure. As settlement grows these demands and strains increase. A sensible ordering of priorities would initially assess the urban pressures which arise from the current population. These demands should be accommodated first. If further population growth from immigration pushes the urban structure into further diseconomies, then clearly it should be the first pressure eliminated.

The CIE [57] also claim that interstate migration, away from the crowded urban areas "is the safety valve which relieves some of the localised pressure created by immigration from overseas", and "marginal reductions in the migrant intake may reduce the level of interstate migration inasmuch as they reduce house rentals and prices". In other words, cutting overseas migration will allow current residents to more freely choose where they will live, rather than being forced out of their preferred location as immigration produces cost rises as diseconomies are encountered. While the "safety valve" notion certainly indicates that market forces alter the behaviour of individuals (and families) it is a strange sense of priorities to force current, mainly low-income Australians to accept less preferred outcomes.

Two solutions are often advanced to these problems. First, we could encourage the immigrants to locate in decentralised areas. Havas [58] argues that decentralisation efforts have not been successful in Australia, and that a particular direction to immigrants to locate in less populated regions is neither "feasible or desirable".

Second, the CIE [59] suggest that in the long-term we need to increase the "stock of housing and other infrastructure". No mention is made of the problems of land availability, the already high degree of urban concentration, and the increasing trend to build housing estates for the less well off on the periphery of large urban centres which are typically poorly serviced and involve burdensome travel-to-work times.

Further, no mention is made of the pressures that are already being placed on Government resources. In recent years, the new right push for smaller government has been very successful with the Labour Government substantially winding back its expenditure (especially capital formation and infrastructural development). Every dollar spent on solving the costs of over-concentration of population, is a dollar lost for the development of more sophisticated infrastructure in say, education, health, and transport.

12. Environmental and Resource Considerations

Much of the debate about immigration policy is conducted in terms of economic issues. The CIE [60] admit that the congestion and pollution costs arising from immigration "have not been accounted for in the empirical analysis and hence do not enter into the income *per capita* projections". Economists of all persuasions stress the incompleteness of money income as a measure of welfare. The only comprehensive measure is real income *per capita* which conceptually includes pollution and other social costs. In other words, despite all the science, the modelling by CEDA and the BIR (CIE) is largely incomplete and irrelevant.

Increasingly, environmental issues are entering the discussions as research points to the resource constraints faced by Australia. It is now obvious that land alone is not sufficient to accommodate large population numbers. Neoclassical economics has little to offer in this regard. The standard response from an orthodox free-market economist is that the price system will solve pollution and other resource constraints. Accordingly, if a price is attached to pollution then the polluting activity will become so costly that its demand will fall until desirable output levels are attained. Unfortunately, this approach ignores the issue of scale. As long as the economy is producing on the production frontier, then efficiency is attained. But if that scale of output is such that the environment is not capable of regeneration, then the neoclassically efficient level of production is non-sustainable. This is where the environmental experts must provide the debate with sound analysis.

A number of studies have debated the issue of an optimal population. The optimal population debate loses some focus when it is suggested that a country's optimal population should not be defined exclusively in terms of numbers of people. Birrell and Rowland [61] indicate that the best population allows the country to maximise the quality of life of current and future residents. So while population growth may lead to environmental degradation, it also brings cultural stimuli which enhances the quality of life independently of the *per capita* income effects.

The debate can thus become tautological. If the environment is degraded and the economy static (growth in *per capita* income stagnant), a proponent of increased population growth can always point to the unmeasurable, intangible things like cultural enrichment. While it is important to broaden the debate beyond the economic focus on *per capita* incomes, it is also important to retain some degree of tractability in the debate. Otherwise no resolution is possible.

13. Conclusion

The economic debate about the advantages and disadvantages of continued high levels of immigration is largely inconclusive. The studies which have supported the current policy are unreliable and should not be the basis for policy design. Our analysis has shown that the growth rates needed to support the labour-force expansion under current immigration policies is not sustainable, given the implied capital requirements, the need to stabilise our parlous level of external debt, and the desire to maintain stable unemployment rate levels.

Moreover, the idea of rapid labour-force growth runs contrary to the goals of high technology development. We would be better served by reforming the training systems and eliminating labour market rigidities which prevent certain labour groups from achieving their true productivity.

Most importantly, the economic analysis presented in the major studies ignores the social costs and benefits associated with immigration. Cultural enrichment is a clear benefit, although it is probable that the major gains in this area have already been made. Diseconomies like urban congestion are clear disadvantages. These will worsen as population pressure mounts. While Australia is a large country, its water resources are limited (discussed elsewhere in this volume). It is also likely that our ecological balance is delicate and will not support large decentralised population centres. As an economist I must take counsel on these issues from the environmental experts. The latter must take centre stage given the lack of definitive economic justification for the immigration policy.

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11. Bureau of Labour Market Research (BLMR), *The Wages-Employment Relationship in Australian Macro-Econometric Models*, (by D.W. Challen), Monograph Series No. 2, (Australian Government Publishing Service, Canberra, 1984). Citation p. 35.

12. CIE, (1988), op. cit. note 1, p. 58.

13. With L being the sum of unemployment (U) and employment (N), the rate of growth in L, l is equal to (u + n), where small letters refer to percentage growth rates. The percentage growth in employment, n, is approximately equal to the rate of growth in GDP, y, minus the growth in labour productivity, g. Combining the two relations gives ur = l + y - g, where ur is the percentage change in the unemployment rate.

14. It has been estimated that the labour-force participation rate increases by approximately 0.4 per cent every time the unemployment rate falls by one per cent. In other words, for every ten jobs created, six people leave the unemployment queue (as measured) and four people enter employment from outside the labour-force (cf. State of Play 4, *The Indecs Economics Special Report*, (Allen and Unwin, Sydney, 1986)). Procyclical productivity patterns are also observed, due to the adjustment costs of employment changes. Employment growth is thus less if both output and productivity increase together, and these two cyclical patterns will modify the rules of thumb based on stable assumptions of the variables in the identities.

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18. Economic Planning Advisory Council (EPAC), *Australia's Capital Needs in the 1990s*, Council Paper No. 43, October, (Australian Government Publishing Service, Canberra, 1990). Citation pp. 8-9.

19. ibid. pp. 35-36.

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21. EPAC (1990) ibid. p. 38, estimate that overseas debt has financed about 20 per cent of domestic investment during the 1980s.

22. ibid. p. 40.

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36. Mitchell, op. cit. note 6.

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39. The distinction between demand-deficient and structural unemployment underpinning the U-V analysis (with respect to shifts and movements) is not wholly satisfactory. This is due to the observed cyclical labour adjustments that promote a type of structural unemployment (cf. W.F. Mitchell, "The NAIRU, Structural Imbalance and the Macroequilibrium Unemployment Rate", *Australian Economic Papers*, 1987). The cycle provides jobs and retraining coincidentally as hiring occurs. This mechanism suggests that immigration can lock the economy into a higher full employment/unemployment level.

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