

Centre of Full Employment and Equity

Working Paper No. 98-02

Why high levels of net migration presents problems for unemployment and external debt stabilisation

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February 1998

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Introduction

Recent pro-immigration statements by president of the Business Council of Australia, Ian Salmon have once again raised whether there are economic benefits from a high immigration policy. Salmon challenges the view that immigration causes unemployment. His major claim is, that without short-run injections of selected skilled labour, the economy will be constrained by shortages of essential human capital. He concludes, "a sufficiently large program is needed to satisfy the needs of business." Salmon completely ignores the questions of whether the growth needed to absorb the higher population is sustainable; given the problems Australia has with external debt.

In this paper, I show how two key economic policy objectives of the Federal Government are not compatible with the current immigration policies being pursued.

In Working Nation, the Federal Government stated it intended to achieve a 5 per cent unemployment rate by the year 2000⁴. The goal has been restated several times since, most recently in the mid year Budget review brought down by the Treasurer in December.⁵

Further, Australia has had a 'managed' decline in economic growth intended to control the leakage on the trade accounts and to maintain a sustainable external debt to Gross Domestic Product (GDP) ratio.⁶ Despite nearly 12 years of active policy designed to break this boombust behaviour, the growth path of the Australian economy is still constrained by the Balance of Payments.

There has been a long debate as to whether immigration promotes a deterioration in the unemployment rate. Several studies have examined this issue.⁷ It has been argued that the importation of skilled labour during a recession increases structural unemployment.⁸ But whether immigration affects the aggregate unemployment rate is unresolved. The increases in labour supply have to be assessed against the possible demand-side effects. Output and employment growth are increased by the stimulus to aggregate demand for final consumption goods and services, public capital works spending, and business investment (provided in part by the migrants themselves).

Whether migrants add enough to aggregate demand to ensure the labour-force growth they promote is absorbed is moot. We can readily measure the increases in labour supply for different net migration assumptions. As we show, the link between the GDP growth, labour productivity growth, and labour-force growth is provided by the unemployment rate. Thus, if

GDP growth (increasing demand for labour) is greater than the sum of labour productivity (reducing labour requirements) and labour-force growth (with participation rates constant), the unemployment rate falls. However, if the sum of labour-force growth and labour productivity growth outstrips GDP growth, then the unemployment rate rises.⁹

Further, we can estimate the feasible growth in GDP, for given export growth, which would be consistent with a stable external debt/GDP ratio. ¹⁰ The task is then to compare the GDP growth rate necessary to maintain a constant unemployment rate to the GDP growth rate necessary to stabilise the external debt ratio. If the former exceeds the latter, then it doesn't matter if immigrants add enough to aggregate demand to ensure the labour-force growth they promote is absorbed. The external situation constrains the feasible domestic growth rate and the unemployment rate will rise over time.

Feasible Growth Rates

There is a framework used by economists, which allows us to make predictions about changes in the unemployment rate given the rate of growth of GDP. Simply stated, labour productivity growth reduces the amount of labour required for each unit of output, while labour-force growth increases the number of jobs that have to be created if unemployment is to remain unchanged. So both growth rates place upward pressure on the unemployment rate. If GDP growth is strong enough, the economy can absorb the labour supply and labour productivity growth. For the unemployment rate to be constant, real GDP growth has to equal the sum of labour-force growth and labour productivity growth. We can call this the required rate of GDP growth. Any better will lead to a falling unemployment rate, while any deficiencies in the required rate will see the unemployment rate rising.

Labour-force Growth Projections

Between 1966 and 1989, the labour-force grew at an annual average rate of 2.3 per cent.¹² There were periods when the growth was below average (1976-81, 1.6 per cent per annum), above average (1986-89, 2.8 per cent per annum) and well above average (1966-71, 3.8 per cent per annum). DEET concluded that:¹³

Most of the variation can be ascribed to changing immigration rates, although increasing labour-force participation rates have accounted for some of the high growth over recent years.

Two assumptions about net migration are often made to make projections. DEET use a central scenario of 100,000 per year net migration and a high net migration scenario of 150,000 per year.¹⁴

DEET shows that the civilian population in 1989 was 13075.6 thousand and under the central scenario was projected to rise to 15,370.8 thousand by 2001, and under the high-migration assumption to 15,990 thousand by 2001. They also estimate labour-force participation rates based on each scenario. In 1989, for persons it was 62.7 per cent. By 2001, under the central scenario it was estimated to be 63.8 per cent and under the high net migration assumption it would be 65.6 per cent. Table 1 shows the labour-force implications of these assumptions. With a considerably lower net migration rate per annum, the average annual labour-force growth rate would in turn be lower. Mitchell estimated that with zero net migration the labour-force would grow at an annual rate of 0.72 per cent between 1986 to 2001. With net migration of 50,000 per annum the corresponding figure was around 1.2 per cent per annum. 16

Table 1 Population and Labour-force Projections 1

	Civilian Population (000s)	Labour-force Participation - (per cent)	Labour-force (000s)	Average Annual Labour-force Growth Rate
1989	13075.6	62.7	8198.4	-
2001 (a)	15370.8	63.8	9806.5	1.50
2001 (b)	15880.0	65.6	10417.3	2.00

^{1.} Labour-force projections are for working age population

Source: DEET (1991)

Labour Productivity Growth Projections

During the 1980s, Australia's labour productivity performance was very sluggish. The OECD estimated that between 1970 and 1989, labour productivity grew at an average rate of 1.0 per cent per annum. In the period 1989 to 1994, the rate increased to 1.8 per cent per annum.¹⁷

Philip Lowe estimates that non-farm labour productivity grew by an average rate of 1.34 per cent per annum between 1978 -83. For the period 1983-91, the growth rate was 0.68 per cent per annum. Rather surprisingly, since 1991, labour productivity has grown at 2.51 per cent per annum. He shows that over the entire period (1978:1 to 1994:2) the average labour productivity growth rate for the non-farm Sector was 1.21 per cent per annum. Mitchell

⁽a) DEET (1991) Central Scenario - 100,000 a year net migration

⁽b) DEET (1991) High migration - 150,000 a year net migration

argues that since the 1980s, an annual average rate of 1.4 per cent in labour productivity growth is evident.¹⁹

The relevant question is whether the increase in the rate of labour productivity growth in recent years represents a break on the previous performance of the 1980s. There have been major policy initiatives aimed at increasing the productivity performance of Australian industry. We might therefore expect that the higher figure since the 1990s is more likely to persist.²⁰

Required GDP Growth to Maintain a Constant Unemployment Rate

Based on the previous discussion, we model the required rate for three productivity growth assumptions: low (1.4 per cent per annum), medium (2.0 per cent per annum), and high (2.5 per cent per annum). The higher the labour productivity growth rate, other things being equal, the higher is the required GDP growth rate. We also project the real GDP growth rate that would yield a 5 per cent unemployment rate by the year 2000, assuming that the unemployment rate at the start of 1996 was 8.6 per cent and decreases smoothly to 5 per cent by 2000. Table 2 calculates, for a range of labour-force and productivity growth assumptions, the required rates of GDP growth.

Table 2 Required real GDP growth (per annum) to maintain a constant unemployment rate (at 8.6 per cent) and a reduced rate (5 per cent) by 2000.

Net Migration Assumption (per annum intake)	Labour-force Growth 1989- 2000 estimated (per cent)	Trend Labour Productivity Growth (per cent pa)	Required GDP Growth for a constant unemployment rate by 2000	GDP Growth for a 5 per cent Unemployment Rate by 2000
zero	0.7 (a)	1.4	2.1	3.0
zero	0.7 (a)	2.0	2.7	3.6
zero	0.7 (a)	2.5	3.2	4.1
50,000	1.2	1.4	2.6	3.5
50,000	1.2	2.0	3.2	4.1
50,000	1.2	2.5	3.7	4.6
100,000	1.5	1.4	2.9	3.8
100,000	1.5	2.0	3.5	4.4
100,000	1.5	2.5	4.0	4.9
150,000	2.0	1.4	3.4	4.3
150,000	2.0	2.0	4.0	4.9
150,000	2.0	2.5	4.5	5.4

⁽a) Mitchell (1988) calculated the zero net migration labour-force growth for the period 1986-2001.

Table 2 shows the problem facing Australia. The higher the net migration rate, the higher the labour-force growth, and for any given labour productivity growth rate, the higher the required GDP growth which just maintains the unemployment rate at its current unacceptably high level. The situation for each labour-force growth rate is exacerbated by higher rates of productivity growth.

There would be no problem if the real GDP growth rates shown in the last column of Table 2 were feasible. It is possible that the higher rates of immigration stimulate demand sufficiently to help make such rates of GDP growth possible. But we have to assess the plausibility of the required rates of GDP growth in the context of the other major macroeconomic goal of stabilising the external debt levels and overcoming persistent current account balance deficits.

The Balance of Payments Constraint

The Balance of Payments constraint is the fundamental reason why Australia faces a stop-go economic growth path. Irrespective of the type of exchange rate determination mechanism that is operating, imbalances in the trade sector (between exports and imports) can constrain growth because persistent trade deficits add to external debt and/or promote exchange rate depreciation, which adds pressure to domestic prices. EPAC state that:²¹

Higher levels of domestic growth, if generated via an expansion of domestic demand, are invariably accompanied by higher levels of import demand. Unless export growth increases, the resulting pressure on the current account typically means that domestic growth rates cannot be sustained.

To establish the sustainable growth of output under current conditions in the context of the stabilisation of the ratio of net debt to GDP, over say, the next four years, requires considerable mathematical analysis.²² Green, Mitchell and Watts, after calculating debt stabilisation paths for different export growth rates, concluded pessimistically that:²³

Even under the most optimistic scenario...there will be only a marginal decline in the unemployment rate...In the more realistic scenario of 2 per cent growth in exports, GDP growth of only 2 per cent per annum is possible over the three year adjustment period.

Anderson and Gruen consider the persistent accumulation of current account deficits to the longer-term growth rates of the Australian economy. They calculate the GDP growth rate

consistent with a constant real exchange rate. They estimate that, for the period 1972/73 to 1989/90, this GDP growth rate would have been around 2.0 to 2.4 per cent. Due to the fact that Australia grew more quickly than this there has been a large depreciation and an accumulation of net foreign debt (as the growth in imports was higher than export receipts).²⁴ In response, Bob Gregory says:²⁵

The suggestion that Australia can only grow at 2.0 to 2.45 per cent without real devaluations is a very pessimistic outcome. Other economic objectives, such as reducing unemployment, suggest a required GDP growth rate of nearer to 3.5 to 4.0 per cent for at least the next five years. Consequently, if we pursue the unemployment objective the prognosis is clear: reducing unemployment will involve continual devaluations....put simply, when Australia grows at a rate that makes significant inroads into unemployment, the current account deteriorates, there is downward pressure on the exchange rate and policy is tightened.

The conclusion to be drawn is that the required growth to reduce unemployment appears to be considerably higher than the corresponding growth rate consistent with debt stabilisation and a stable current account. The goals of lower unemployment and external debt stabilisation appear to be inconsistent under the prevailing economic conditions and labour-force growth.

There are several ways that immigration can increase exports and provide more "room" for GDP to grow without endangering the external debt stabilisation goals. Immigrants may help larger domestic markets to develop, which encourages economies of scale and lower unit costs; they may bring skills in latest technology; and they may have specific knowledge of or contacts in foreign markets. However, there is no empirical work to unambiguously substantiate the effects.²⁶

From Table 2, it is clear that with the most pessimistic labour productivity assumption, a medium or high immigration intake makes a reduction in the unemployment rate highly unlikely. Even if the migrants stimulate demand, the economy cannot sustain a high enough GDP growth rate.

Labour Productivity and Capital Widening

From one perspective, it is somewhat fortunate that our growth in labour productivity has been so low. A higher labour productivity growth rate would have led to higher unemployment rates. However, standards of living in the economy depend on higher labour productivity growth, which is principally determined by the rate of growth of investment. The rate of investment is also a primary determinant of real GDP growth.

EPAC conclude that after a "comparison of the Australian ratios with the OECD benchmarks suggests...that Australia has been relatively average in terms of savings, but that we have been a high investment country, especially in the 1980s." They also argue that capital productivity in Australia is around 10 per cent lower than the OECD area on average. To support even a 3 per cent GDP growth target, our investment to GDP ratio has to remain relatively higher than the OECD average. The financing of this investment also impacts on the external constraints. If the public sector is in deficit, and the savings-investment relationship is also in deficit, then the extra investment (both private and public) can only be financed by external borrowing. ²⁹

So while we need strong investment to grow and lower the unemployment rate, the financing of the investment is likely to exacerbate our current account deficit. The problem is also worsened by our relatively inefficient use of capital. To make every investment dollar count and to minimise the impact on the external deficit, Australia requires capital deepening. As immigration encourages capital widening, it does not help our goals of external stabilisation. Foster and Baker concluded that "Immigration does appear to exacerbate the trade and current account deficits, at least in the medium term, as a consequence of induced demand for investment."

It might be claimed that immigrants increase the savings rate and reduce the need for external finance. Foster and Baker conclude that "Contrary to earlier conjecture..., immigrant households, in general, save less than households with an Australian-born reference person."

Conclusion

It has been shown that if Australia wants to reduce its unemployment rate and achieve a sustainable external debt/GDP ratio, its labour-force growth rate is too high. The binding constraint on GDP growth in Australia remains the current account. It would seem that a lower migration rate would assist in rendering these principal macroeconomic goals more consistent than they presently are.

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¹ Ian Salmon, "Immigration works", in The Age, 8/1/96, p.11.

² Salmon considers whether immigration will add to unemployment. He says that "Australian empirical studies have refuted this, and so does economic modelling undertaken for the Business Council, which shows employment gains in line with population gains, indicating little effect on unemployment." In itself this is a spurious statement because the relationship between employment growth and unemployment depends on the labour-force changes rather

than the population growth rate. On this point, there have been substantial increases in the labour-force participation rate (which mediates the relationship between population growth and labour-force growth) over the last 25 years which have accompanied the rising unemployment rates. Secondly, the empirical relationship between employment growth and population growth is not at all like Salmon claims. Population growth has been very steady and around 2 per cent per annum for the last 30 years. On the contrary, employment growth has been highly cyclical ranging between plus and minus 10 per cent since 1983, and averaging at around 1.5 per cent per annum.

³ Ibid, p. 11.

- ⁴ Commonwealth of Australia (1994). Working Nation, (AGPS, Canberra).
- ⁵ See Australian Financial Review, 22/12/95, p.6.
- ⁶ The absolute level of external debt is not of interest in its own right. Economists focus on the level of debt relative to the capacity to pay, measured approximately by the level of GDP.
- ⁷ See William Mitchell, 'Some Economic Aspects of Immigration', in J.W. Smith (ed.), *Immigration, Population and Sustainable Environments*, (Flinders University Press, Adelaide), 1991, pp.59-75.

⁸ Ibid.

- ⁹ This assumes that migrants place no specific pressure on the real wage. See Matthew Peter, "", *People and Place*, 1993, 1 (2), pp.32-3.
- ¹⁰ See R. Green, W. Mitchell and M. Watts, Economic Policy in Crisis: A Proposal for Jobs and Growth, (Evatt Foundation, Sydney), 1992.
- See William Mitchell, 'The Economic Implications of High Population Growth', in L.H. Day and D.T. Rowland (eds.), *How Many More Australians? The Resource and Environmental Conflicts*, (Longman Cheshire, Melbourne), 1988, pp.79-92.
- ¹² Department of Employment, Education and Training (DEET), Australia's Workforce in the Year 2001, (AGPS, Canberra), 1991.
- ¹³ Ibid, p.34.
- ¹⁴ Ibid.
- 15 Ibid.
- ¹⁶ Mitchell, op.cit., p.84.
- ¹⁷ OECD, Economic Outlook, June 1995.
- ¹⁸ Phillip Lowe, 'Labour-Productivity Growth and Relative Wages: 1978-1994', in Palle Anderson, Jacqueline Dwyer and David Gruen (eds), *Productivity and Growth*, Reserve Bank of Australia, Sydney, 1995, pp.279-310.
- William Mitchell, 'Restoring Full Employment: A Problem of Policy Balance', The Australian Economic Review, 1st Quarter 1994, pp. 24-30.

²⁰ See Lowe, op.cit., p.105.

- ²¹ Economic and Planning Advisory Council (EPAC), *Medium-Term Review: Opportunities for Growth*, (AGPS, Canberra), 1993, p.45.
- ²² See Green, Mitchell and Watts, op. Cit.
- ²³ Ibid, p.34.
- ²⁴ Palle Anderson and David Gruen, 'Macroeconomic Policies and Growth', in Anderson, Dwyer and Gruen, op.cit.,pp.279-310.
- ²⁵ R. Gregory, Comment, in Anderson, Dwyer and Gruen, op.cit., pp.320-21.
- ²⁶ See William Foster and Lyle Baker, *Immigration and the Australian Economy*, (AGPS, Canberra), 1991.
- ²⁷ EPAC, Australia's External Constraint in the 1990s, Research Paper No. 1, May, (AGPS, Canberra), 1992, p.10.
- ²⁸ See David Francis, "The Capital Needed to Provide a Job", People and Place, 3 (2).
- ²⁹ Ibid, p.11.
- ³⁰ The capital deepening is worsened by the fact that extra capital is required for housing and infrastructure. It must be noted that migrants also bring significant amounts of capital with

them. See Centre for International Economics, Immigration, Trade and Capital Flows, (AGPS, Canberra), 1990. However, other research indicates that the migrants own funds do not offset the negative effects on the current account (see Westpac, "Immigration and the Current Account Deficit", Market Insights, April, Sydney; and S. Joske, The Economics of Immigration: Who Benefits?, Legislative Research Service, Commonwealth Parliamentary Library, Canberra.

31 Foster and Baker, *op cit*, p.107.

32 Ibid, p.57