

WHO BEARS THE INTEREST RATE BURDEN?

There is a case for more use of competition policy and less use of monetary policy in controlling inflation, suggests **Garry M. White**

In March 2005 the Reserve Bank of Australia implemented the first official interest rate increase in 14 months. The Governor, Ian Macfarlane, stated that ‘... an increase in the cash rate was warranted in order to reduce the risk of an unacceptable rise in inflation in the medium term’.¹ But how does an increase in short-term interest rates reduce the risk of inflation?

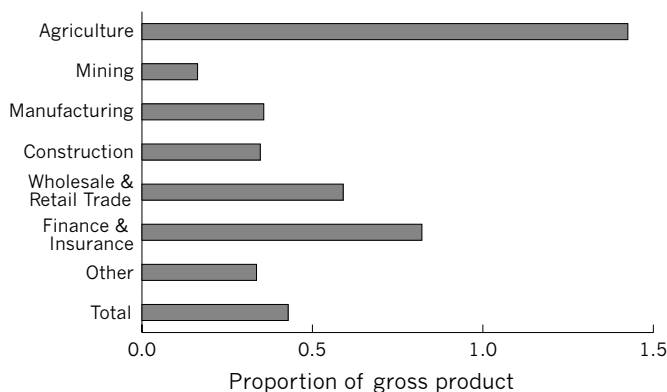
The traditional explanation is that higher interest rates lead to ‘reductions in domestic demand’. Clearly those who borrow money are affected directly by higher interest costs. At the most basic, they must allocate a higher proportion of income to debt service and they are less likely to borrow to fund additional expenditure. Australian household debt is on average equal to about 125% of disposable income.² Businesses also have debt but in general

their level of indebtedness relative to disposable income (other than farmers) is much lower than households. On average, businesses only have debt equal to about 43% of their gross product. This is illustrated in Figure 1 which shows sector debt as a proportion of each sector’s gross product.

However, less than half of all households have any debt and only 28% of households are purchasing their homes.³ Also, the impact of interest rate rises is further muted by lending which is on fixed rate terms. About 7% of mortgage lending and much consumer debt is on fixed rates. Presumably the majority of the households which have no debt have various amounts of money on deposit and may actually have higher disposable incomes as the result of an interest rate increase.

Nevertheless in all sectors of the economy there will be households and businesses where even small changes in interest rates will cause changes in spending or employment decisions, but the aggregate data suggest that these impacts will be very small overall. We need to look elsewhere to explain the effect of interest rates on economic activity.

Garry M. White is a consultant economist who has worked in banking, stock broking, industry and government.

Figure 1. Lending to business

Source: RBA, Table D08 Bank Lending to Business—Selected Statistics; ABS, *Australian System of National Accounts*, Cat No. 5204, Table 11 Industry Gross Value Added, Current Prices.

Interest rates and exchange rates

Import prices

A more pervasive and widespread mechanism for the transmission of monetary policy is via international capital flows and the exchange rate. If higher interest rates attract capital to Australia the exchange rate will increase as investors buy Australian dollars. A strong Australian dollar makes tradeable goods and services cheaper for all Australian households and businesses. In contrast, Australian producers of tradeable goods will be disadvantaged by greater competition from cheaper imports. Evidence from research published by both the Reserve Bank and the Australian Treasury makes clear that cheaper imports result in higher imports, especially for consumer goods.⁴

The economic mechanisms which link capital flows, exchange rates and the current account (i.e. the impact on imports and exports) were summarised in a 1999 conference paper by Stephen Grenville and David Gruen of the Reserve Bank:

The standard model for incorporating capital flows into the analysis is the portfolio balance view, where the main action is with interest differentials. With some interest differential in place, enough capital flows to the country to push up the exchange rate so that expected returns are equalised internationally (risk-adjusted, of course). The higher exchange rate helps to open up a current account deficit, which provides the real transfer counterpart of the financial flows.⁵

When the Reserve Bank raises interest rates it is clearly impacting upon interest differentials,

international capital markets respond and therefore an exchange rate and hence a relative price impact can be expected. In an earlier paper Stephen Grenville presented evidence suggesting that ‘a 1% increase in the real cash rate, lasting for two years, would raise the exchange rate by around 3%’.⁶

The impact of even modest price changes on consumer behaviour can be large. Treasury officers Deborah Dark and John Hawkins cite Treasury and Reserve Bank research suggesting a price elasticity of demand for imports of between -0.5 and -1.0. That is, a 1% fall in the price of imports (a modest change) will increase imports by between 0.5 and 1% (a large change in macroeconomic terms). Because consumers react so strongly to the relative price of imports to domestic goods it can be safely assumed that domestic producers of import substitutes and exports will need to follow to a large degree the movements in international prices.

Domestic prices

Over recent decades domestic prices have become more responsive to international prices. Tariffs have been steadily reduced and, more importantly, quantitative import barriers, which for all practical purposes turn tradeable goods into non-tradeables, have been effectively abolished. Intense import competition characterises almost all facets of the goods and services purchased by Australian consumers, and local producers have no choice but to compete on price. The Australian motor vehicle market provides a clear example of prices falling with tariff reductions over recent years. Even medical and educational services are now competing strongly for foreign consumers and facing competition from foreign competitors.

One exception to the trend to greater competition remains the anti-dumping regime. Businesses facing import competition can obtain relief through informal price and quantity undertakings that would be illegal under domestic competition policy regimes. Where anti-dumping measures are put in place (about 60 at this time) a ‘normal price’ is established and any imports at a lower price are subject to a tariff which increases the import price to the normal value. Through such mechanisms consumers are deprived of the benefit of lower prices, including those which would result from an exchange rate movement.

Households in detail

The impact of interest rate increases on households is best assessed by looking at their patterns of expenditure. The most recent data available is from the Australian Bureau of Statistics 1998-99 Household Expenditure Survey.⁷ While these data are seven years old they still illustrate the relative importance of interest payments, interest receipts and expenditure on tradeable goods. The first section of Table 2 (p.14) presents household expenditure by housing tenure. Estimated expenditure on imports, domestically produced import substitutes or exportables is derived from more detailed expenditure data.⁸ While these estimates involve judgments about the tradeable share of expenditure, household expenditure is increasingly subject to international competition. For example, all food, petroleum fuels, clothing, footwear and holidays were assumed to be subject to international competition. Medical and educational services were assumed to be essentially non-traded for the purpose of this analysis, although recent indications suggest that international competition will become important in the future.

The final three columns of Table 1 are derived by multiplying the first three columns by the estimated share of tradeable goods in household consumption.

Importantly less than 30% of households had a mortgage in 1998-99 and this group reported an average weekly expenditure on interest of \$86.56.⁹ This is equivalent to less than 10% of total weekly expenditure on goods and services and about 17% of estimated weekly expenditure on tradeable goods and services.¹⁰ Clearly, only a small change in the price of tradable goods is capable of offsetting an interest rate increase.

For more than 70% of households there is no mortgage and therefore the impact of higher interest rates on the exchange rate will, in general, be a benefit.

The clear losers amongst households are those with large mortgages relative to their incomes. In broad terms this group must be less than 30% of all households. Those with significant cash on deposit and no interest rate sensitive debt will be winners. In 2001-02 the ATO recorded 3,880,229 taxpayers declaring receipt of interest in the amount of \$5,124 million or \$1,392 each per annum.¹¹

This is equivalent to \$27 per week per person and perhaps twice this on average for each household. Taking into account interest receipts puts the efficacy of interest rates as a policy option even further in question.

The (typical?) household with no mortgage, secure employment, average consumption of tradeable goods and money on deposit will be demonstrably better off if the Reserve Bank increases interest rates. It is little wonder that interest rates only impact on the overall economy, in terms of achieving a slowing of economic activity, after a long lag. The slowing of economic activity may well result from the impact on business rather than through an impact on household borrowing.

Businesses in detail

Interest rates have a much larger impact on some industries than others. The farming sector has relatively high debt levels and the greatest exposure to international markets. It is most affected by interest rate increases. Mining and manufacturing industries are also very sensitive to international markets. Energy and mineral products are relatively homogeneous and the price effects of exchange rate changes will be immediately felt in spot markets. Hedging and contract terms may cushion some producers from price effects, but these provide only temporary isolation from market price movements. Manufactures are increasingly commoditised and, for example, local producers of cars and clothing have no option but to follow the prices at which foreign products are available.

One rationale for the slowing of the economy through higher interest rates is skills shortages in the labour market generating inflationary pressures. *The Australian Financial Review* recently reported unpublished ABS data for those industry subdivisions where wages were increasing well ahead of the overall average of 4.1%.¹² These data are set out in Table 2 (p.14).

Of the 'hot spot' industries in which wages are rising at well-above-average levels, higher interest rates are only likely to have a significant impact on construction trade services which derive activity from clients who typically fund construction from borrowings. While this sector may be the first casualty of higher interest rates it is also subject to extensive government regulation and controls.

Table 1. Household expenditure and characteristics, by tenure type

	<i>Owners with a mortgage</i>	<i>Others</i>	<i>All households</i>	<i>Estimated tradeable share</i>	<i>Owners with a mortgage</i>	<i>Others</i>	<i>All households</i>
<i>Estimated number in population ('000)</i>	2117.9	5004.9	7122.8				
<i>(%)</i>	29.73%	70.27%	100.00%				
AVERAGE WEEKLY HOUSEHOLD EXPENDITURE							
Total				Tradeables			
Broad expenditure group - Goods and services							
Current housing costs (selected dwelling)	136.66	80.83	97.43	0.00%	0.00	0.00	0.00
Domestic fuel and power	20.96	16.56	17.87	5.54%	1.16	0.92	0.99
Food and non-alcoholic beverages	153.08	115.95	126.99	100.00%	153.08	115.95	126.99
Alcoholic beverages	24.96	18.51	20.43	100.00%	24.96	18.51	20.43
Tobacco products	11.49	10.42	10.74	100.00%	11.49	10.42	10.74
Clothing and footwear	42.00	27.63	31.9	100.00%	42.00	27.63	31.90
Household furnishings and equipment	57.93	35.57	42.22	100.00%	57.93	35.57	42.22
Household services and operation	51.09	37.10	41.26	12.70%	6.49	4.71	5.24
Medical care and health expenses	37.1	30.51	32.47	24.92%	9.25	7.60	8.09
Transport	151.5	103.57	117.82	65.25%	98.85	67.58	76.88
Recreation	103.81	82.46	88.81	65.74%	68.24	54.21	58.38
Personal care	16.35	12.62	13.73	63.51%	10.38	8.02	8.72
Miscellaneous goods and services	74.59	50.00	57.31	18.50%	13.80	9.25	10.60
Total goods and services expenditure	881.51	621.74	698.97		497.64	360.37	401.19
Selected other payments							
Income tax	269.13	137.76	176.82				
Mortgage repayments-principal (selected dwelling)	92.00	0.00	27.58				
Mortgage repayments-interest (selected dwelling)	86.56	0.00	25.95				
Superannuation and life insurance	31.34	19.44	22.98				

Source: ABS, Household Expenditure Survey Detailed Items, Cat. No. 6535 (1998-99), Table 2.

Table 2. Wages growth* by industry subdivision: Year to November 2004

	Employment	Increase (%)
Construction trade services	318,000	6.75
Road transport	150,000	7.1
Services to transport	64,000	15.1
Storage	37,000	11.7
Government administration	398,000	6.0
Motion picture, radio & TV	45,000	10.6
Sport & recreation	107,000	9.45
Sport		8.5
Gambling		11.8
Insurance	59,000	9.3

*Average weekly ordinary time earnings for full-time adult employees.

Restrictions on builders (requiring among other things insurance cover) and the limited access to insurance cover, following the HIH collapse, have helped to increase costs in this sector through reduced competition.

The impact on road transport, services to transport and storage is ambiguous. The higher import volumes likely to be generated by lower import prices could well increase demand for labour in these industries. Probably a more important factor affecting wage increases in the transport sector is the predominance of government-owned transport services and extensive regulation of privately owned transport services. For example, taxis in Sydney are restricted in number to the extent that each taxi plate has a market value of more than \$200,000.

Ironically, given government pressure on the Reserve Bank to keep interest rates down, the largest wage hot spot as measured by employee numbers is government administration, a sector immune to interest rate or exchange rate changes. The other listed hot spots are not easily characterised as industries where interest rates or exchange rate changes would have an obvious impact. They are, however, characterised by government policies which restrain competition (foreign and domestic) in some manner. For, example, radio and TV services and gambling are licensed by government and subject

to a range of regulations which restrict the capacity for new entrants and foreign competition.

The predominant sectors of the economy where wage pressures are becoming obvious are generally areas where government involvement and regulation is relatively extensive. They are also industries where the impact of higher interest rates directly, or indirectly through a higher exchange rate, is unlikely to have much impact.

Policy options

Are there any better policy options for controlling inflation than raising interest rates? Governments can maintain budget balance or surpluses—here Australian Governments have been very successful in recent years. Australia is far from being a banana republic fuelling inflation by printing money to fund budget deficits. The other arm of government policy is microeconomic policy—essentially competition policy. With adequate competition in product and factor markets it is difficult for price inflation to develop.

Tariff reductions and removal of import quotas have had a pervasive impact on previously protected industries. Import prices now essentially set domestic price levels and local producers and their employees either receive rewards consistent with those price conditions or move elsewhere. There remain some areas where competition in international trade remains constrained, such as where anti-dumping provisions have been used, and these could be reviewed as an aid to avoiding inflation.

The fact that the wages hot spots are predominantly in industries with extensive government regulation raises a key question. Have these regulations, designed often to assist or protect consumers, actually been captured by industries and their employees to protect a favoured position? Local content rules, barriers to entry (foreign and domestic) and excessive regulation can result in inflationary pressures. Solving inflationary pressures resulting from these sources is currently beyond the ambit of the Reserve Bank.

In other industries where import competition is less direct or impossible it may be necessary to allow greater factor mobility. If the current problem with shortages of skilled labour is the greatest threat to domestic inflation, immigration, temporary or permanent, may be a better solution than increasing

interest rates to slow output in the affected industries. In particular, where the industries facing skill shortages are not those particularly affected by higher interest rates and exchange rates, then the collateral damage of higher interest rates may be experienced with none of the intended benefits.

If microeconomic policy can provide a more cost-effective means of controlling inflation, especially where inflationary pressures are apparent only in particular sectors of the economy, current institutional arrangements may not be appropriate. In particular, the Reserve Bank does not currently have the skills needed to assess microeconomic policy options which may be more effective than the use of monetary policy. Skills in microeconomic policy reside elsewhere in the Commonwealth Public Service, notably in the Productivity Commission and Australian Consumer and Competition Commission (ACCC). It may be that the premier microeconomic agencies need to engage with the Reserve Bank in some formal way in developing more efficient policy responses to inflationary pressures. Where the microeconomic policy stance needs to be redesigned, the Productivity Commission would have the appropriate expertise. The ACCC would have expertise where competition law needs to be enforced or strengthened to deal with anti-competitive behaviour.

The advantage of taking a microeconomic policy approach to controlling inflation is that there will in general be long-term growth benefits from those policies together with a relatively certain short-term price impact. In contrast the use of higher interest rates generally comes with an uncertain loss of output for an uncertain period of time in the future. Put bluntly, if businesses and employment need to be squeezed by a lower price environment, why not take advantage of the structural adjustment pressures that often come with microeconomic reform.

Conclusion

Higher official interest rates have widely different effects across the Australian economy, and do not necessarily target the parts of the economy in which inflationary pressures are building. Households typically (70%) have no mortgage and, relative to interest expense, consume a large proportion of tradeable goods. In the short term most households can therefore expect to benefit in net terms from

an official interest rate increase. Less than 30% of households have mortgages and even a substantial proportion of these can be expected to be net beneficiaries of an interest rate increase.

The industries most likely to suffer adverse effects from higher interest rates are not necessarily those exhibiting the wage growth pressures that concern the Reserve Bank. However, the hot spot industries exhibiting relatively strong wages growth are characterised by high levels of government regulation. Attention to competition in product and factor markets may be a more efficient and cost-effective way to control inflation than higher official interest rates.

Endnotes

- ¹ RBA Media Release (2 March 2005).
- ² Gianni La Cava, John Simon, *A Tale of Two Surveys: Household Debt and Financial Constraints in Australia* Reserve Bank of Australia Discussion Paper (July 2003).
- ³ ABS, *2001 Census of Population and Housing*.
- ⁴ Tracey Horton and Jenny Wilkinson, 'An Analysis of the Determinants of Imports', RBA Research Discussion Paper (December 1989); Deborah Dark and John Hawkins 'Why have Australia's imports of goods increased so much?' http://www.treasury.gov.au/documents/958/HTML/docshell.asp?URL=04_Imports_of_goods.asp; Jacqueline Dwyer and Christopher Kent, *A Re-Examination Of The Determinants Of Australia's Imports* RBA Research Discussion Paper, see 9312 <http://www.rba.gov.au/rdp/RDP9312.pdf>
- ⁵ Stephen Grenville and David Gruen, 'Capital Flows and Exchange Rates', see <http://www.rba.gov.au/PublicationsAndResearch/Conferences/1999/GrenvilleGruen.pdf>
- ⁶ Stephen Grenville, 'The Monetary Policy Transmission Process: What Do We Know? (And What Don't We Know?)' Reserve Bank of Australia Bulletin (September 1995), 19-33.
- ⁷ ABS, *Household Expenditure Survey*, Cat No. 6530 (1998-99), Table 6.
- ⁸ ABS, *Household Expenditure Survey Detailed Items* Cat. No. 6535 (1998-99), Table 2.
- ⁹ Housing interest rates in 1998-99 were similar to those of the current period.
- ¹⁰ Since 1998-99 both debt and incomes have each increased but there are no data available which provide a measure of how the distribution among households of interest expenditure relative to income might have changed.
- ¹¹ Australian Taxation Office, *Income Tax Statistics 2001-02: A summary of taxation, superannuation and industry benchmark statistics 2001-02 and 2002-03*, Table 3.1.
- ¹² *The Australian Financial Review* (29 March 2005), 1, 4. Wages are measured as average weekly ordinary time earnings for full-time adult employees.