

IS THE AUSTRALIAN FINANCIAL SECTOR *too big?*

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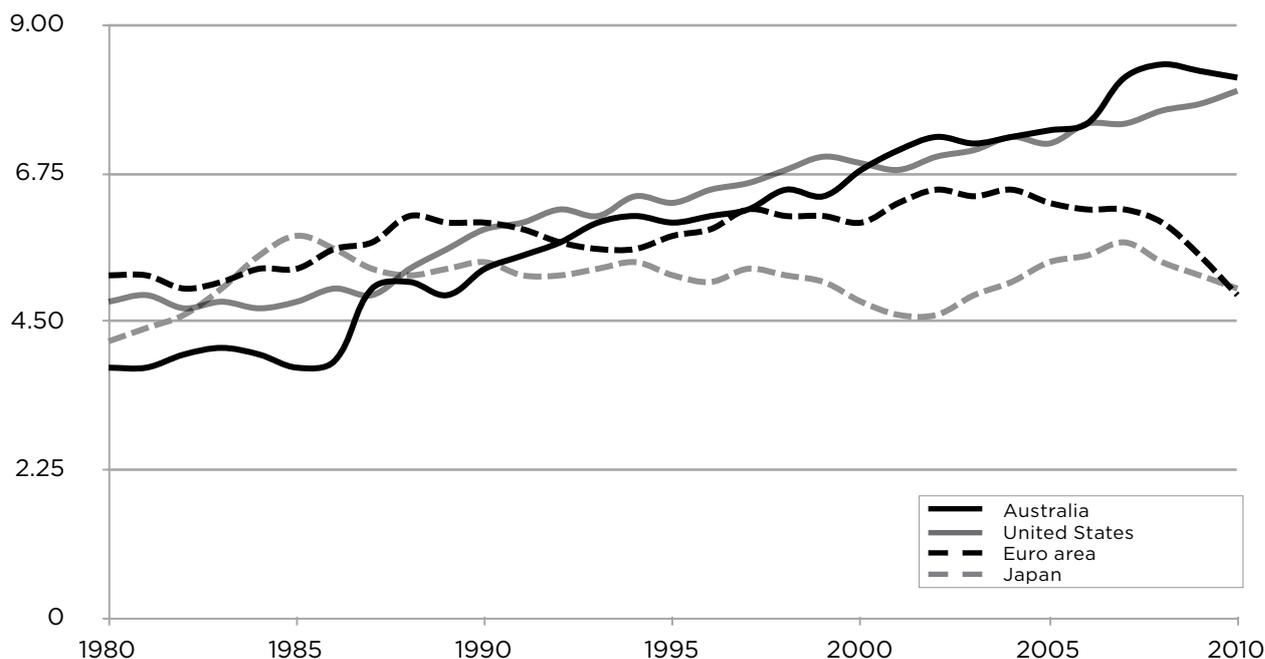
The Australian financial sector has grown rapidly in recent decades and now looks big by global standards. This paper suggests that most of the growth has been the result of outward shifts in the demand for financial services driven by household preferences, the availability of a wider range of financial tools, and active government policy. Despite the increase in demand, margins for many financial services have fallen sharply, most notably in areas where better technology has been brought to bear. An earlier version of this paper was presented to the 2013 Australian Centre for Financial Studies' Melbourne Money and Finance Conference.

The financial sector of the economy has grown rapidly over recent decades. It now represents more than 10 per cent of the total value added, up from 5 per cent in the mid-1980s, and closer to 2 per cent in the years immediately following World War II. The Australian financial sector is also large relative to many other countries (see Figure 1).

While an effective financial sector is essential to the efficient operation of the national economy, it is not clear that it is appropriate to have the finance sector

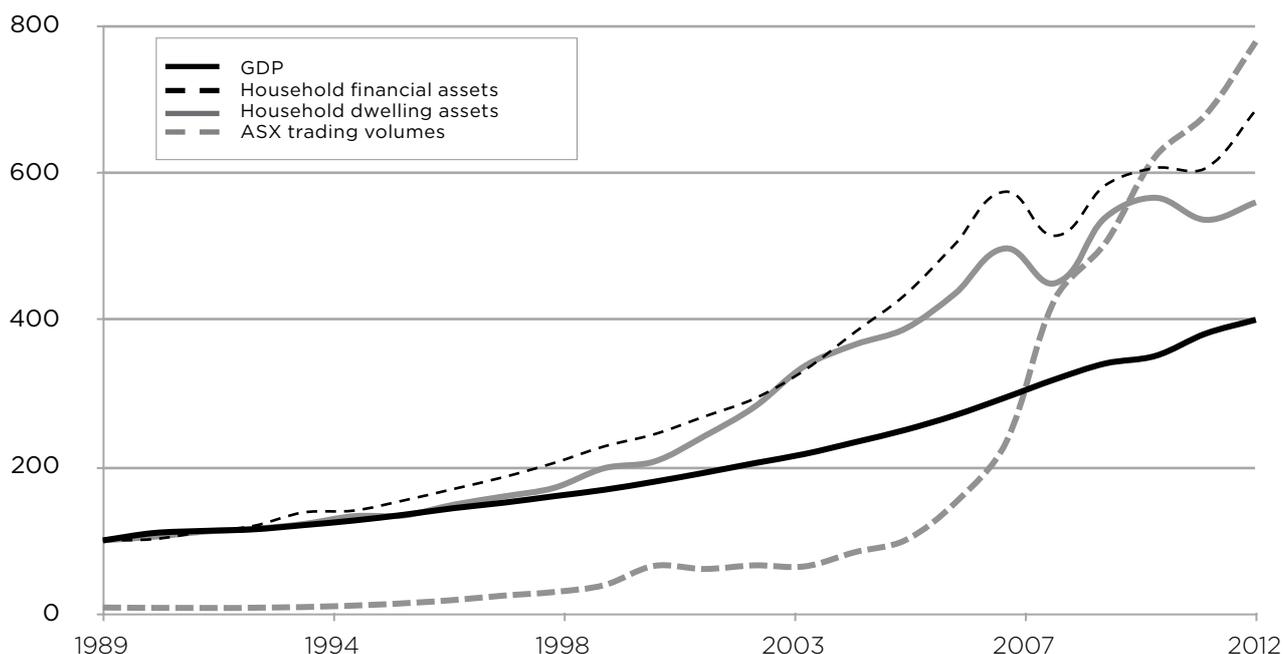
generating one dollar of value for every 10 created in the economy. The rapid growth in finance globally has led to an emerging debate about whether the current balance is desirable, and if it has arisen out of particular distortions in our economy. Most pointedly the Bank for International Settlements recently found that financial sector growth above a certain level has a negative impact on overall economic growth (Cecchetti 2012). *The Journal of Economic Perspectives*, Spring 2013, collected a series of papers addressing this topic but mainly with a US focus.

FIGURE 1: Financial sector as a percentage of the total value added in the economy



Source: BIS.

FIGURE 2: Indicators of increased demand for financial services relative to GDP



Sources: GDP data from ABS; financial assets data from Reserve Bank of Australia (RBA); Australian Securities Exchange (ASX) turnover data from annual reports (with some changes in classification). All based at 1989 = 100 except the market turnover based at 2005=100.

The normal approach to demonstrating that a particular sector is too large is to look for economic and regulatory distortions which support its growth. To do that, we first have to unpack the growth of the sector.

There are three background problems:

- The Australian Bureau of Statistics (ABS) simply presents the sector (in value-added terms) as an undifferentiated mass. There are no time series data for the different sub-sectors of finance in Australia.
- Whether the output of the sector is well measured in value-added terms (essentially profits plus labour payments) has been disputed.
- International comparisons are complicated because superannuation in Australia falls clearly into the measured financial sector rather the corporate sector.

Looking below the level of the single aggregate, it is clear that three sub-sectors have been responsible for much of the growth of the financial sector: lending for housing, the growth of superannuation and the expansion of capital markets trading. Figure 2 tracks the main trends; it is important to note that the growth in stock market turnover had to be rebased to fit it on the chart. While these are partial indicators, they do suggest areas in which we should look for the drivers of financial sector growth.

The approach adopted in this paper is simply to ask:

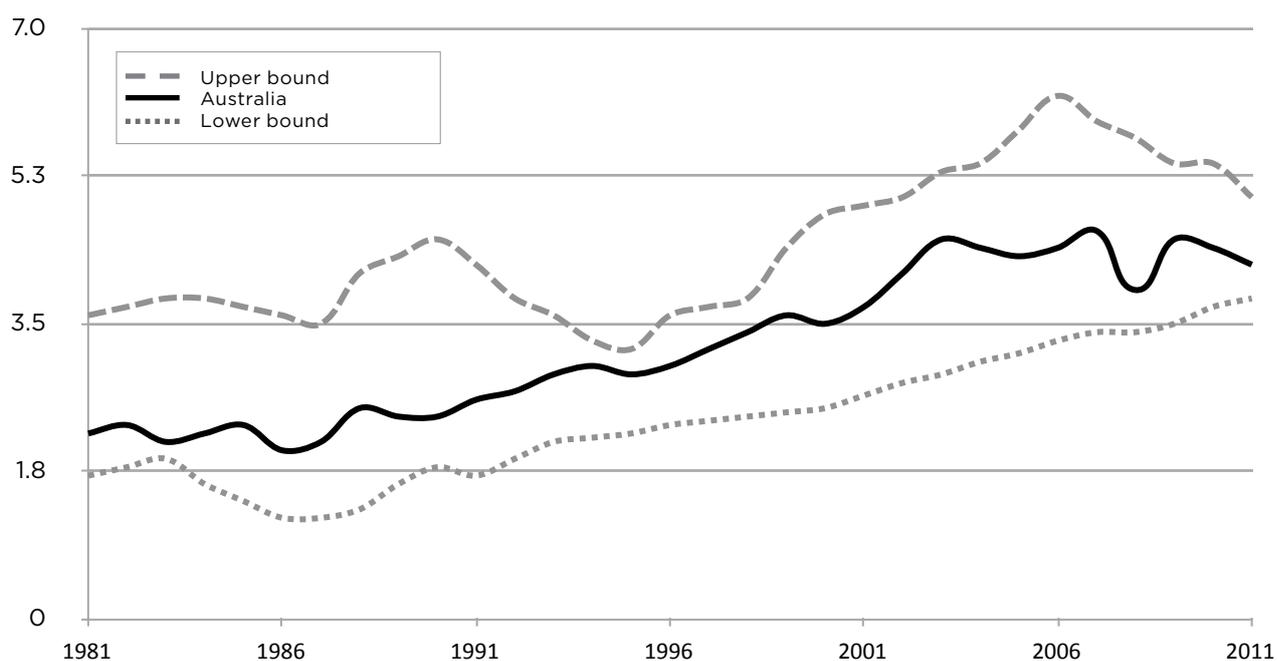
- *Questions about volumes:* Why has demand for these financial services grown? To what extent are regulatory distortions responsible for the growth?
- *Questions about margins:* Are financial service profit margins and wages too high? Are regulatory distortions responsible if margins appear excessive?

Demand-side drivers

Scaled to GDP or incomes, the growth in house prices over recent decades has been large: average house prices went from two to four times household disposable income between 1980 and 2010. This seems mainly to have been driven by households' choices. While it is well known that the failure to tax capital gains on the family house in Australia causes a degree of overinvestment in the sector, and we have had changes which promoted purchases by investors, it is notable that house prices in many countries rose sharply over the same period, with Australia in the middle of the pack (see Figure 3).

This suggests that the price rise was not the result of a local distortion, or if it was, that the distortion was shared by many other countries. The literature has focused on the key drivers as being: the fall in inflation and the increase in female workforce participation which allowed households to service higher borrowings; and the removal of financial market distortions which had restricted the supply of credit to many households. The broad inference

FIGURE 3: Average dwelling price to average disposable income in developed markets



Source: RBA Bulletin, December 2012. Countries covered are Belgium, Denmark, Canada, France, Germany, Ireland, Italy, Netherlands, New Zealand, Norway, Spain, United Kingdom.

is that households were credit constrained during the post-war period, and that the removal of those constraints combined with an ability to service larger loans induced the large increase in house prices experienced globally (Maddock and Munckton 2013). Planning restrictions combined with agglomeration amenities may too have contributed.

The behaviour of financial institutions played a role but it is fairly clear that this was a secondary role. Lending margins fell and new products were introduced, both of which will have helped drive up volumes. In some countries it is also clear that credit standards were reduced and business processes weakened but there is no clear evidence that this played a major role in Australia. Where local banks borrowed offshore to fund lending, they paid prices appropriate to their credit ratings so that if there was an underlying distortion it was in global rather than local markets, or they had the wrong credit ratings.

Overall it is difficult to conclude that any increase in the size of the financial sector as a result of the rapid growth in household borrowing was the result of financial sector distortions. Individuals made their own decisions to live with higher levels of debt and bid up asset prices.

Superannuation is a second sector where growth has been significant. Connolly (2007) finds that superannuation increased domestic savings significantly with only a minor displacement of other private savings — perhaps 20 per cent. If this is the

case, 80 per cent of the increase in superannuation funds was driven by a tax distortion. By shifting funds from consumption into savings, the tax distortion has shifted value added in the economy from other sectors into the financial sector. While there will be second-round effects as the economy has adjusted to changes in savings levels and the flow of funds, the primary impact has been to deflect resources into finance. The growth of the sector has been driven primarily by a tax distortion.

Measurement issues are also likely to have been important. Before the introduction of compulsory superannuation, only about half the workforce had retirement benefits and 80 per cent of that was provided by employers (some outsourced to insurance companies). Much of this would have been managed internally since the number of corporate funds has fallen from over 2000 to under 200 in the past decade. This suggests that much of these retirement savings was previously hidden within defined benefit retirement schemes run by corporates and governments, rather than run externally. From a measurement point of view this means any value added has been moved from the other sectors and is now measured in the financial sector (see Table 1).

The third area where we have seen very significant growth in the demand for financial services is in financial markets, for equities, debt, currencies and their derivatives.

TABLE 1: Growth of markets, physical and derivative

Turnover (AUD billion)						
	Debt		Currency		Equities	
	Physical	Derivative	Physical	Derivative	Physical	Derivative
1999-00	8,804	11,886	5,706	10,842	361	541
2004-05	17,306	29,767	9,675	25,156	806	950
2011-12	13,549	65,903	10,843	30,007	1,185	3,387

Source: Davis (2013), originally sourced from Australian Financial Markets Association (AFMA).

One component of the growth in equity market valuation is the result of governments privatising assets which, in earlier periods (and other countries), were run within the government sector. Businesses which were previously government owned constitute some 20 per cent of the market's capitalisation. Tax changes have also been important with franking making equities particularly tax-effective and with the removal of transactions taxes making it cheaper to trade around one's portfolio, that is, policy removed additional distortions.

In other markets, volumes have increased by even more than in equity markets. This appears to have been driven purely by individual preferences without significant market distortions. The removal of some distortions, such as the decision to allow the currency to float, has created the opportunity for currency markets to develop. The move from a fixed exchange rate to a variable one has also shifted risks within the economy and, hence, created the need for more extensive use of the insurance provided by hedging through markets.

In summary, the increased demand for financial services seems to have been driven by three different adaptations by private sector players. The increased demand for housing was probably driven by an increased willingness by households to take more risk in general and more debt in particular (Black et al. 2012). Second, the growth of the superannuation sector was driven by a tax distortion. And, third, the increase in the size of the financial markets has largely been driven by financial product innovation which has increased the available set of markets.

Of these three, only the intervention to require households to save more through superannuation than they would have privately appears to be welfare-reducing, although this is usually justified by presuming that households are myopic and government knows better what is good for them. Since households offset so little of the forced savings, the policy was probably welfare-enhancing. The other two adjustments also appear to be welfare-enhancing: (i) households chose to take more risk and have managed it well; and (ii) allowing players to access a wider range of markets is a positive change.

Taking a positivist stance, we see households now increasing savings and reducing debt, which suggests they have taken on more debt than they really prefer, so the housing market may well be too big i.e. households appear to think they made a mistake. Similarly, the volume of contributions to superannuation in excess of the compulsory minimum level has fallen. This could be for many reasons but it too is consistent with the view that more households may increasingly reduce private savings as they are forced to save more: it is too early to tell. The increase in the compulsory contribution rate should see the sector manage greatly increased funds and, all else being equal, it will continue to expand.

For markets, the picture is less clear. The opening up of new markets clearly creates demand but if the pace of innovation slows, or if innovations are increasingly peripheral, the new markets should stabilise at their natural equilibria. That is, behaviourally, individual players may have decided that they have consumed more financial services than they really prefer.

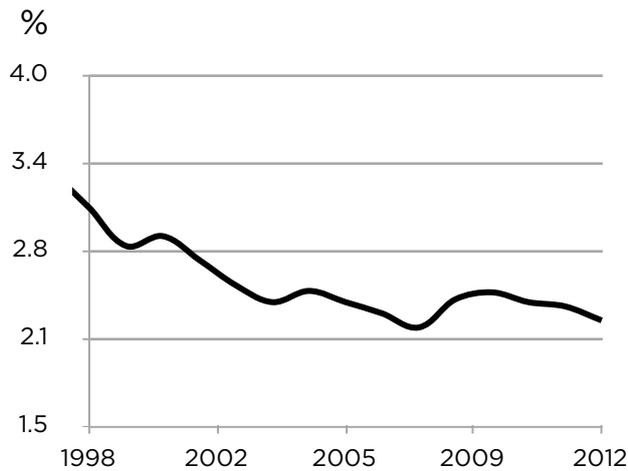
Costs, margins and wages

Normally when the demand curve for a service shifts outwards, as has apparently happened in these three markets, we would not see supplier margins fall. In fact, they would normally rise at least for a period until entry chiselled away the excess profits.

Surprisingly then, bank margins have fallen quite consistently with net interest margins roughly halving since the 1990s and bank fees per asset funded also falling (see Figure 4). However, since most countries have had a downward trend in net interest margins, technology and globalisation were probably the drivers rather than local factors (e.g. mortgage brokers). And, while Australian bank margins have fallen sharply over 20 years, the Bank for International Settlements suggests they are still only in the middle of the range globally (US 249 bps, Spain 238 bps, Australia 183 bps, Canada 160 bps, UK 115 bps, France 102 bps). What does stand out, however, is the efficiency of the banking system. The Productivity Commission has found the sector to have sustained levels of total factor productivity improvement well above industry averages. The global data reveals a similar picture with operating

FIGURE 4: Decline in bank net margins and fees

Major Bank's Net Interest Margin*, domestic, half yearly



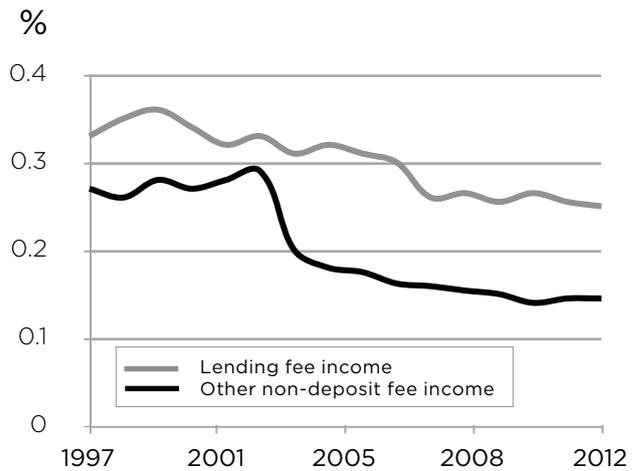
*From 2006 data are on an IFRS basis; prior years are on AGAAP basis; excludes St. George Bank and Bankwest prior to the first half of 2009.
Sources: RBA; banks' financial reports.

costs (including personnel costs) as a share of assets running at US 323 bps, Canada 187 bps, Spain 172 bps, UK 141 bps, Australia 117 bps, and France 112 bps (BIS data).

This and the data cited above suggests that local banks have driven productivity faster than most of their international peers and have been able to retain more of the benefits for shareholders without excessive (but still substantial) margins. It is not surprising that they are among the most profitable banks globally. This provides part of the explanation for the large size of Australia's financial sector.

While there are clear distortions in the highly regulated banking sector, it is not clear how these might have protected bank margins. There are a lot of banks and there has been a lot of entry, for example, HBOS, Citi and HSBC, and opportunistic entry by Macquarie Bank which should have made it hard to sustain excessive margins. Banks are often said to be protected by an implicit government guarantee which allows them to access funds more cheaply than other institutions and which provides them with

Bank's Fee Income



*Adjusted for breaks in sales in 2002 due to change in banks' reporting; financial year average assets and deposits have been used.
Sources: APRA; RBA.

a competitive advantage. The argument is actually hard to sustain since other Australian corporates with the same credit rating can borrow more cheaply in wholesale markets than the banks, so there is no obvious subsidy. Further, many of the entrants to the Australian market are also large in their home markets and are likely to enjoy a similar subsidy, if one exists, thus competing on equal terms, so there is no advantage. Clearly, there are other firms with different business models, funded from the wholesale market rather than from deposits, which are not very competitive at the moment, and there are banks with lower credit ratings which pay more for funds, but these are not distortions, they are business model choices.

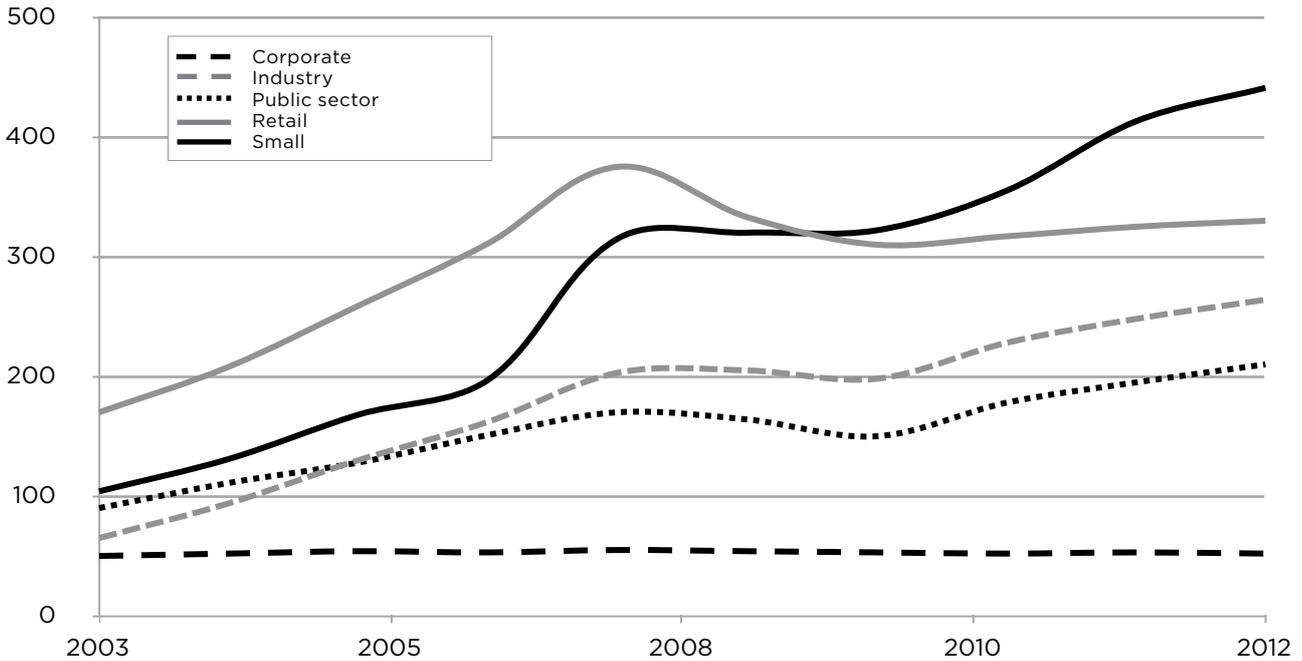
With superannuation being nearly a complete net additional to savings, with funds under administration a bit larger than GDP and with the annual cost of superannuation between 1 per cent and 2 per cent, the political decision to make superannuation compulsory adds about some 1.5 per cent to the measured size of the financial sector. While not-for-

FIGURE 5: Diversity of superannuation business models

Estimate Super Fees by Segment (2008) (% of Funds Under Management)					
Segment	Administration %	Investment Management %	Administration & Investment Management %	Cost of Advice %	Total Expenses %
Corporate	0.21	0.47	0.68		0.68
Industry	0.38	0.67	1.05		1.05
Public Sector	0.21	0.46	0.67		0.67
Retail	0.69	0.69	1.37	0.44	1.81
SMSF	0.31	0.52	0.83	0.15	0.98
Total	0.42	0.59	1.02	0.19	1.21

Source: Bank of America Securities Merrill Lynch estimates based on Rice Warner 2008 fee analysis.

FIGURE 6: Size and growth of different types of fund, (\$ billion)



Source: APRA.

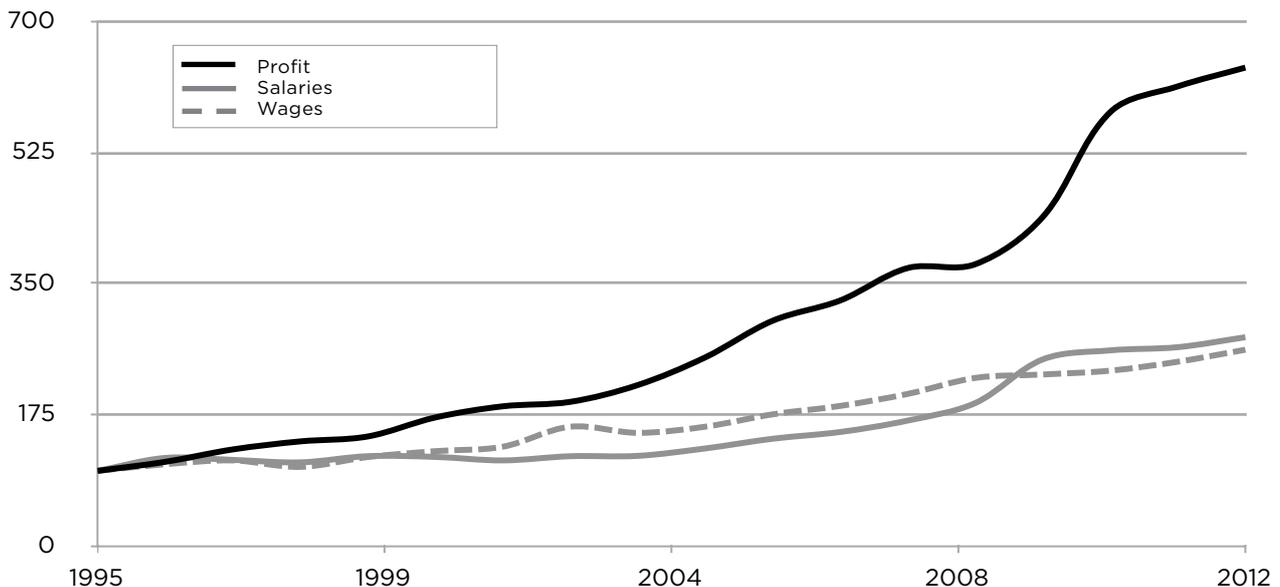
profit providers are important, the fact that they outsource much of their activity means that they feed the profit component of the value chain. As with banking, there appears to have been some gradual reduction in fees of about 2 basis points per year across all fund types.

The superannuation sector has a large number of players and has been subject to a lot of new entrants, both of which would suggest excess margins should have been bid away. Nevertheless, the sector looks

very immature from a competitive standpoint: the fees, returns and business models deviate wildly. One concludes that the sheer growth of the sector has insulated it from many of the normal pressures of competition.

The Cooper Review (2010) effectively concluded that there were large inefficiencies and recommended the introduction of some standardised low-cost products, and some significant procedural efficiencies. Households have also voted with their

FIGURE 7: Westpac profits, wage bill and unit wage growth, nominal dollars, based on 1995 = 100



Source: Westpac annual reports.

feet, and fled from the professional managers to run their own funds. With access to cheap default funds, and greater use of indexed funds, this is an area of the market where we can expect 'margins' to shrink even as funds under administration grow.

The declines in the trading fees for equities and currencies have been even more notable than bank or superannuation fees with retail equities margins, for example, falling from over 2 per cent per trade in the 1980s to flat fees of about \$20 on a typical transaction. Similar reductions in fees for on-market trades have occurred across a wide range of products. While all of this might have been the result of the large numbers of firms which compete in this segment, the fact that the clients are mainly institutional and that technological change has greatly facilitated trade, seem more likely explanations. Further product standardisation, as we move from an over-the-counter world to an on-market business, seems likely to narrow margins still further.

Moving away from the consideration of the profit margins of institutions, the other main component of sector value added is wages. This again is not measured directly by the Australian Tax Office or the ABS but seems unlikely to have been the major driver. Figure 7 (sourced from Westpac's annual reports) shows how much more its pre-tax profits have grown than has its wages bill (or its average wage paid). While financial sector employees earn somewhat more than average, they are somewhat better qualified and the gap has been widening: since 1988 the percentage of the financial sector workforce which is degree-qualified has grown by 18 percentage points, versus 11 percentage points for the broader workforce. However, as a broad category, they are not near the top of the wage distribution.

Conclusion

The economy is distorted in support of the financial sector mainly as a result of government policies favouring compulsory superannuation and housing investment. It is too big in that sense.

Household behaviour has also changed in ways which support financial sector growth. Households seem more comfortable with higher levels of debt, and more accustomed to volatile financial assets than was the case historically. This may be a matter of households being richer and hence desirous of diversifying their portfolios, or it may simply be that they are gradually learning how to operate in a more open capital market.

Institutional and individual adaptation to these distortions have been in the direction which suggests competitive processes have operated as expected. Margins have tended to fall, and there has been significant entry. Given the large expansion

in demand for financial services, such margin compression reflects well on the institutional design. The broad impression, however, is that competition has worked better in banking than in superannuation.

The other issue to note is the extent to which the growth of the financial sector is a consequence of its servicing wealth accumulation and protection rather than income generation. The rising value of the housing stock, the savings now being managed in the superannuation sector, and the rapid development of secondary markets all derive essentially from wealth and only indirectly from income. To the extent that we become a materially richer society we can expect any sector servicing that wealth to grow relative to national income.

It also seems possible that people enjoy consuming financial services directly. The share of consumption expenditure directed towards services has grown through time as we have found it easier to meet our material wants. The amount of media effort now directed towards supplying financial information suggests that part of the growth in the financial sector relates to the provision of entertainment services which are consumed for their own sakes. The personal-account-based superannuation system has increased the degree of financial awareness which appears to have generated demand for such services. ■

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