A path to recovery: A behavioral guide to managing the economic crisis

Paper to accompany an address to the Financial Counsellors' Association of Queensland, March 2009.

Ian McAuley, University of Canberra and Center for Policy Development (www.cpd.org.au).

Introduction – the crisis and its consequences

It's stating the obvious to say that hard economic times are putting a load on financial counsellors.

We can go beyond such broad generalization, however, and make a more detailed examination of that load.

Tolstoy, in the opening of *Anna Karenina*, said "Happy families are all alike; every unhappy family in unhappy in its own way." Similarly, while the good times have a predictable pattern, every economic downturn has its own unique elements. Policymakers usually learn from a recession and take steps to protect the economy in the future, but new problems emerge, and old ones, long forgotten, re-emerge – problems for which governments are unprepared.

That's why governments are groping, unsure whether to apply fiscal stimulus, monetary easing, or both. Unsure whether to prop up existing banks, to quarantine their toxic debt, or to nationalize them. Unsure about the path any regulatory reform should take. And unsure about how to manage in the long term, for the immediate concern is how to stop the damage spreading.

What started out being called the "global financial crisis" is now called the "global economic crisis", as the collapse of credit is affecting the real economy, and not just the paper economy of finance.

How it came about

We may wonder what has happened when there is no visible cause of our problems. There has been no war destroying our factories and infrastructure. There has been no surge in oil prices of the type that triggered recessions in the 1970s and 1980s. There has been no physical disruption akin to what we may expect to result from climate change. Our physical assets are still intact, as are our human assets of skills, experience and entrepreneurial energy.

What has been destroyed, however, is credit. It's not just that all those weird financial inventions such as CDOs have lost their value. More generally we have lost trust. The very word "credit" derives from the Latin *credere* – "to trust, to have confidence in". As we sift through the wreckage of Lehman Brothers, the Royal Bank of Scotland, or, closer to home, Storm Financial Services, we feel betrayed. We have been betrayed by people in financial institutions, and we have been betrayed by our governments. To put it bluntly, our governments looked the other way while there has been theft on a scale we have not seen before, indeed on a scale we could not have contemplated.

It is not as if we were not warned. Ten years ago at a seminar at our university, Bernie Fraser, former Governor of our Reserve Bank, commented on the 1998 bail out of the US hedge funds. He acknowledged that the bail out had averted a financial crisis, but he warned that in doing so there had developed an expectation that governments would always be there to underwrite the folly of the private sector. The US Government had just issued a license for recklessness; as a result, Fraser warned, the next recession would be far worse. Since then there have been many more warnings, but party poopers and Cassandras always find it hard to get an audience.

Now we are facing up to the reality of the boom of the last 15 years. Like the Americans we were living beyond our means. One hardly needs a PhD in economics to realize that in the long run we cannot consume more than we produce; we cannot go on borrowing from the rest of the world to support our lifestyle. Unfortunately, our political élites, including our former Treasurer, claimed credit for a new age of enduring prosperity, and failed to take advantage of our few years of plenty to strengthen the Australian economy. That may read like a partisan comment, but I don’t know whether a Labor government would have resisted the temptation to shield us from reality; it wasn’t in office.

It will take a long time to restore trust and confidence. In fact, we haven’t even started, for we are still dealing with the technicalities of limiting the damage. Just as no one was able to predict the savagery of this crisis, no one can say with confidence what will emerge, but it is reasonably certain that the puerile notion that our economy is best left to an unrestrained market will be consigned to the dustbin along with other dysfunctional philosophies, such as Soviet central planning.

The consequences – growing unemployment and financial stress

For now, our concern is how this recession is affecting people, particularly those who, for some reason, come seeking the assistance of financial counsellors.

The first manifestation of this recession has been falling prices of financial instruments. The ASX 200 share market index has slid from a peak of 6700 to 3200 in the short period between late 2007 and early 2009. The immediate effect has been to remove cover from high risk and dodgy ventures, ranging from firms which took too many financial risks, such as ABC Learning, through to firms which duped investors in “too good to be true” Ponzi schemes.

The casualty list from this financial collapse transcends class boundaries. Financial counsellors will have been helping those small investors whose savings have been wiped out by fraudulent or reckless firms. There are also people from the other end of town who were taken in by scamsters such as Bernard Madoff. It’s a reminder of one of the findings of behavioral economics, that the rich and the poor, the highly educated and the unschooled alike, all make the same mistakes with their money. The difference, of course, is in the consequences. Most of the well-off have enough waste in their lives to adjust without too much pain; they can trade down from a BMW 760 (RRP $360K) to a Corolla, or withdraw their children from an exclusive private school. Once they are over the humiliation of having been seen dropping their children at the local state school, they can resume their comforting belief that the poor are poor because they lack the skills and self-discipline of financial management.

The second manifestation of the recession has been a rapid contraction in manufacturing. For non-perishable manufactured products there are typically large stockpiles of finished goods in the chain between factory and retailer, and the fastest adjustment is to cut production. Also, consumers can defer replacement of durable goods. It is hardly surprising that we have seen big cutbacks in manufacturing industries ranging from clothing through to automobiles.

The other industry to suffer casualties is the finance sector itself, most recently the Bank of Queensland. Their departure is less visible than that of protesting Pacific Brands workers parading in their Bonds Y fronts and tank tops. It is manifest in empty business class seats in airlines and overstocked showrooms in luxury car dealerships.

One likely consequence of tightening conditions in the corporate sector is a fall in philanthropy. This could affect some agencies responsible for giving emergency aid. Corporate philanthropy is probably one of the worst forms of funding for charities, for it is pro-cyclical; it is likely to dry up when it is most needed. Private philanthropy could fall away too, not only because of the economic crisis, but also because of donor fatigue following the huge response to the Victorian bushfires.

Still to come is a probable contraction in building and construction. Most partly finished buildings will be completed, but the question is whether there will be new projects. There has been a failure of finance, for the banks have been very tight in lending for working capital for developers. It's extraordinarily short-sighted, for Australia, unlike the US and some other countries, does not have a housing over-supply; thanks to high immigration and a high growth in the Australian-born population in the age of household formation, we have a housing shortage, but financial institutions have switched from recklessness to obsessive risk aversion.

The effect, we can reasonably confidently predict, is that there will be layoffs in the building and construction industries. And a by-product will be a shortage of housing, particularly of apartments (which don't get built unless there is a pool of working capital), so there is likely to be heightened rental stress. Of course there are major construction projects in the pipeline, funded by the Commonwealth's fiscal stimulus, but these take time, and there is a risk that projects such as Brisbane's cross city tunnel may be stalled while investors deal with the shemozzle of BrisConnect, a too-clever-by-half creation of financial innovation. (One not unwelcome casualty of the recession may be those slick deals known as PPPs; there may be a return to the lower-cost option of direct government funding of infrastructure.)

And we are yet to see any effect of re-negotiated export commodity prices, for we are still enjoying the benefits of high prices negotiated in earlier times. These re-negotiations will take place over the next few months, and will have consequences in Western Australia and Queensland, which so far have been largely shielded from the downturn.

So we can expect some further economic contraction, and a greater load on counsellors. Of course politicians, when they are not engaged in gladiatorial conflicts with their political opponents, will talk up the economy, as will bankers and business leaders. That's their job, and any small contribution to confidence is welcome. And the Commonwealth, like other national governments, will try to keep consumption going, in order to avoid a destructive positive feedback loop of declining demand leading to declining employment leading to declining demand ... The message for now has to be that we can continue spending, but the longer term reality is that we all have to cut back, to live within our means, and to make those productive investments to cope with future challenges, particularly climate change and other environmental pressures.

In our current difficulties, the burden of job losses will not be even. Some firms which have survived through the times of prosperity will fold; recessions tend to take out the least efficient companies. Some firms are in reasonably recession-proof markets, such as basic food retailing, health and aged care. People on government payrolls, particularly in agencies delivering direct services, will be relatively secure. Because of the relative growth of recession-proof industries, and because governments understand the need for rapid corrective fiscal and monetary responses, we are not looking at a 1930s scenario, but it is still not very pretty.

It is likely that firms will try to hold on to their most productive workers, for they know that when the recovery comes there will be labor shortages. Those without specific skills are the first to lose their jobs. Traditionally we have thought of unskilled laborers as dominating this category, but the days of the blue/white collar divide are well over, and we can expect to see many semi-skilled clerical and managerial workers join the job queues, particularly older people who will find their retirement is involuntarily pulled forward. And of the others, there will be a loss of overtime and in some industries there will be across-the-board reductions in hours and wages. Many casual and part-time staff will be found to be dispensable.

We should not forget the impact on retirees, and on those who had planned retirement. People have seen their superannuation balances fall dramatically, and there is a degree of panic – a point to which I will return when we look at some of the ways people’s behavior is likely to respond to the crisis.

So, for financial counsellors, that’s the bad news. Provided governments have the good sense to keep funding financial counselling services (and I understand that in Queensland there has been some recognition of the need), counsellors can expect busy times ahead, but their client base and their needs may be changing over time.

A little good news – more solid balance sheets

What is possibly good news, however, is the claimed “failure” of the first Commonwealth stimulatory package. There are suggestions that it has gone mainly into saving, and the national accounts certainly do show a boost to saving, though there is no evidence of a causal relationship, for the government payments were made in mid December, and the national accounts take us up only to December 31. Also, there was evidence of growing savings in earlier quarters, well before there was talk of a recession.

Household saving has increased, since around 2003. (See Figure 1.) Level-headed economists, without a political ax to grind, refer to this recovery in saving as “repairing the household balance sheet”, and we seem to be returning to historical levels of saving. It should be noted that while savings in the 1960s and 1970s were about 8 to 10 percent of income, this

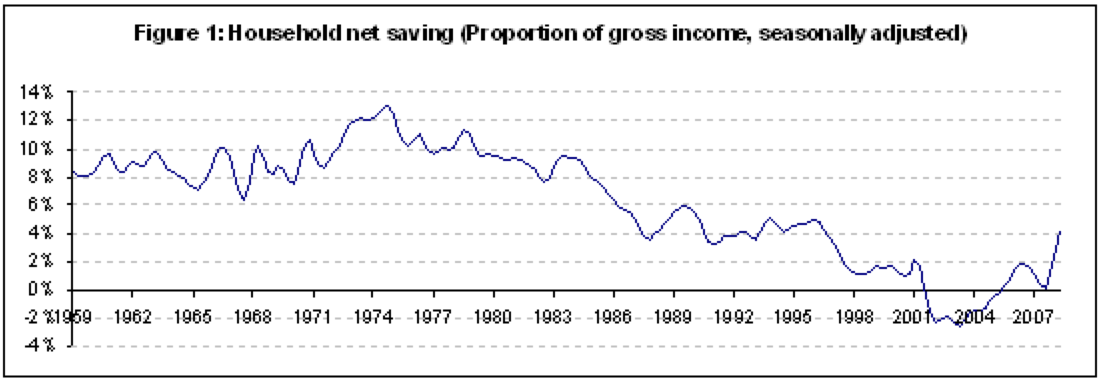


Figure 1: Household net saving (Proportion of gross income, seasonally adjusted)

was before compulsory superannuation, which would add about 6 percent to the most recent figure of 4 percent. (Superannuation would not add a full 9 percent because not everyone in a household is employed in superannuation-paying occupations). In short, household savings have returned to their earlier high levels, and, unless there is overshoot, there is every reason to expect future household stimuli to show up in consumption.

The fact that households now have more saving, some of which is liquid, must be sending a chill down the spines of those who provide consumer credit for household appliances and cars, and for the retail chains with alliances with credit providers. Consumers who walk into a shop with cash in their pockets are likely to walk out to go to another supplier if they don't like what's on offer. An invasion of markets by empowered and cashed-up consumers could be very damaging to finance companies, while bringing some relief to financial counsellors dealing with consumers unwittingly trapped by high interest and penalty payments and threats of repossession. It is little wonder that we hear wails of pain from those who fear the demise of a richly rewarding system of capitalism based on consumer debt.

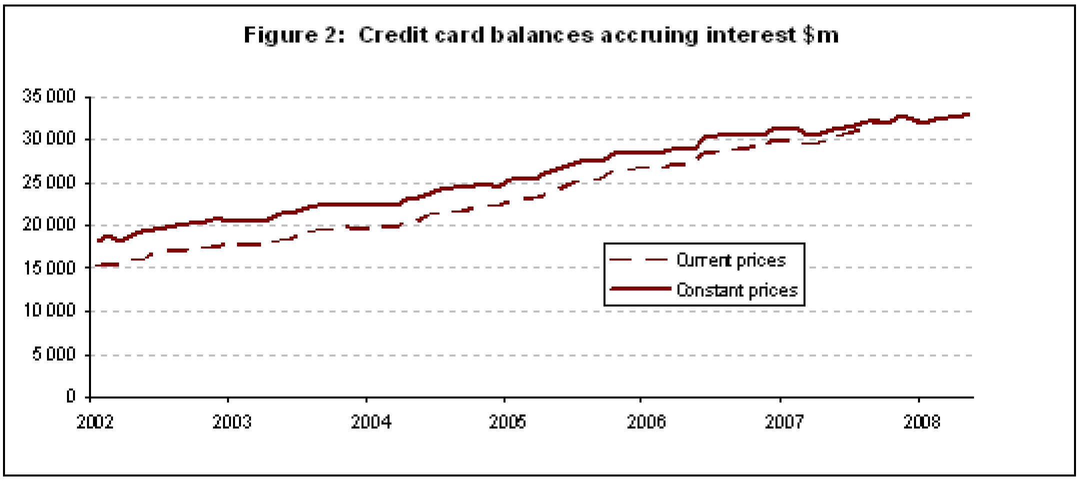


Figure 2: Credit card balances accruing interest $m

It would be comforting if that were the whole story, but it is clear that this repair of households' balance sheets is far from universal. Credit card balances which accrue interest (as opposed to those being used as convenient interest-free rolling credit) continue to rise, and are now at about $1600 a head, or $4000 a household. This is an average across all households, including those where the balance is paid off every month, so among a significant proportion of people the average debt would be much higher.

Having set the macroeconomic context, I want to discuss how people come to make poor financial decisions. I stress, once again, that we all make poor decisions, and are all being buffeted by forces over which we have no control, but those who turn up in counsellors' offices will be those who don't have the means to absorb these shocks.

Insights from behavioral economics

For those seeking a more formal presentation on behavioral economics there is no shortage of material.[1] Here I want to outline some of the ways in which our decision-making departs from the "rational" economic models, often to our own detriment. We have many ingrained patterns of behavior which have served us well in our evolutionary past, and which still serve us well most of the time, but which can lead us astray in making some important decisions. I will outline some of the main instances of "behavioral biasses" which are relevant in our current economic situation and which are relevant for financial counsellors. These are:

1. The money illusion
2. The short-term bias and the optimism bias
3. Gambling fallacies
4. Mental accounts
5. The endowment bias

1. The money illusion

Over the million years we have been on this planet, until very recently we haven't had to make many decisions about whether to borrow or invest. Even once we made the transition from a feudal to a monetarized system, the basic rule was that what came in every period was spent in the following period. It was not until a middle class arose in the nineteenth century that options to pull forward or to defer expenditure became available to a large number of people. Indeed, much of the prosperity of the twentieth century can be traced to the ready availability of consumer credit.

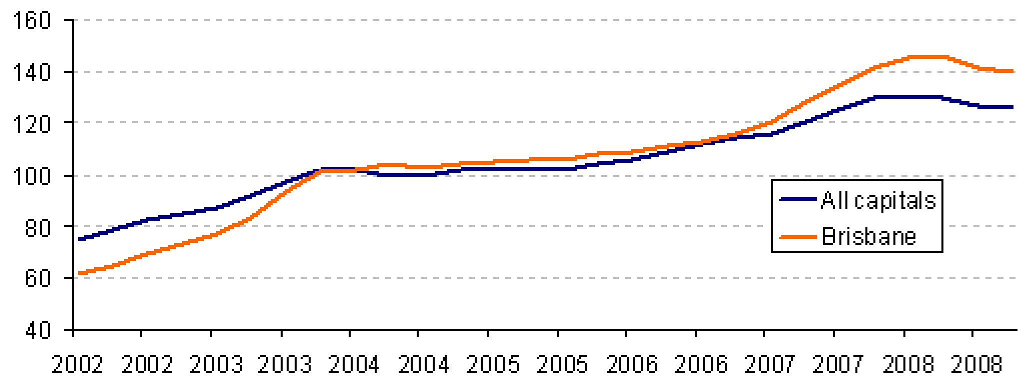
[1] I can immodestly point to some of the work available in my website: http://www.home.netspeed.com.au/mcau/academic/Default.htm, particularly a 2008 presentation to the Australian Bankers' Association and work for the OECD. My own role has been to collate and to apply to policy situations the work of other, specialized, scholars. The bibliographies in those works should provide a rich source for those who want to look at behavioral economics in more detail.

We are still catching up, therefore, learning how to handle borrowing and investment. In particular, we do not understand how inflation influences the outcomes of our saving and borrowing decisions.

One consequence of our inability to deal with inflation is an illusion of wealth or of deprivation.

I recall watching the telecast of the 2004 federal election, in the early stages before there were clear results, when reporters were wandering through the crowds asking how they voted and why. One man stated clearly that he had voted for Howard, because in 1996, when Howard was elected, his house had been worth only $200 000, and it was now worth $700 000. How could he vote against a government which had made him a half million dollars richer?

Figure 3: Price index of established homes



John Howard is on record as saying:

> I haven't met anybody yet who's stopped me in the street and shaken their fist at me and said, "Howard, I'm angry with you, my house has got more valuable".

It's a pity that in his long power walks our former prime minister didn't run into an economist who might have explained to him the difference between price inflation and growth in value.

With just a little detachment it's clear to see that the infatuated voter I saw on election night had become carried away with housing price inflation. (In fact, over time, most houses deteriorate with the ravages inflicted by children.) But this illusion of wealth was widespread, and led to innovations such as mortgage re-draw whereby people could borrow against the rising market values of their houses.

As a result of this exuberance of over-borrowing, we now face two obvious problems. Those who have borrowed against rising house values now find that source of apparent wealth has evaporated. And those who entered the housing market at the peak with small deposits are at risk of finding they have negative equity. If one is a banker whose negative equity is measured in the tens of billions, then there may be a benign government coming to the rescue, but if one is a house buyer with negative equity in the tens of thousands, then foreclosure is a high risk. Fortunately, our problems are minor compared with those experienced by borrowers in the USA, where there was more use of minimum equity loans and teaser interest rates, and where there has been severe housing over-supply in certain regions.

A less obvious problem, as housing prices fall, is an illusion of deprivation, the mirror-image of the illusion of wealth. In fact, this is more evident in superannuation than it is in housing prices, because share prices have fallen much more severely than house prices. In the same period that share prices (as measured by the ASX 200) have halved, reported earnings by those same companies have hardly changed and their dividends have fallen by only 13 percent. Because the latest earnings reports relate to the period up to December 2008, we can reasonably expect some further fall in earnings and dividends, but it would be extraordinary if this fall came to be anywhere near the fall in share prices. People's income from investments is likely to be more robust than the capital value of those investments, but it is the fall of value that is driving the panic.

Unfortunately, an illusion of deprivation will play out in two ways. In a macroeconomic sense, people will be reluctant to spend as they see their paper losses accumulate. Some people will unnecessarily crimp their lifestyle. And some people with a choice of superannuation funds, will switch from "growth" to "safe" options such as cash or capital-stable options, exiting equity markets at the worst possible time, and crystallizing their losses. That may not present an immediate problem for financial counsellors, but it will present a problem in time as their superannuation earnings stagnate.

There may be particular difficulties, however, for those approaching retirement with a low superannuation balance and who feel they are constrained to buy an allocated pension, because of the pension means-test provisions which give an advantage to "non acccount-based" pensions, or because they do not want the bother of setting up more flexible arrangements such as self-managed funds. These managed pension products are not necessarily good value for money at a time when asset prices are depressed, for their income streams are likely to be based on very conservative estimates of future earnings.

2. The short-term bias and the optimism bias

We are not good at delayed gratification. Indeed, over most of our evolutionary history until we moved out of Africa in recent times, it made no sense to hoard food, because of the risks of rot, predation by animals, and theft by other tribes.

In our decisions involving a tradeoff between immediate benefits and longer term costs we are often very irrational. Anyone who has ever regretted an extravagant purchase will know about bias towards short-term gratification. Adam Smith referred to the tension between the "indifferent spectator", cool and calculating, and the "fury of his desires." (When I raise the topic with undergraduates I use the illustration of cleaning up after a party; it is much easier to clean up before going to bed, before the food sticks to the plates and before the red wine stains sink in, but we inevitably leave it to the morning.)

We also have an optimism or overconfidence bias. As a short mental exercise, consider your answers to some of the following questions:

How often have you

underestimated the time it would take to complete a task?

overestimated the time it would take to complete a task?

underestimated your ability in a physical challenge?

overestimated your ability in a physical challenge?

Between them, these two biases lead us to take on debts that, on reflection, we would have preferred to have avoided.

They play out particularly strongly in the case of credit cards. To understand the way we get into credit card debt, it is useful to look at the way behavioural economists classify behavior. They refer to people as "sophisticated" or "naive", and as "disciplined" or "undisciplined". In relation to credit cards:

The sophisticated and disciplined person knows that interest rates are high, but being disciplined, limits her use of the credit card and pays it off in the interest-free period;

The sophisticated and undisciplined person optimistically believes she will pay off the card, but, overcome with temptation, fails to pay it off and gets into debt;

The naive and undisciplined person accumulates credit card debt without thinking of the consequences;

The naive and disciplined person knows vaguely that credit card debt is bad, knows she cannot control her own expenditure, and cuts up her card, thus losing the convenience of card purchases with an interest-free period.

The banks' favourite customers are those who are sophisticated and unsophisticated. The naive and undisciplined have also been attractive customers at times, because as their debt accumulates the bank's assets accumulates and the accrued (but unpaid) interest accumulates.

In fact, the dynamic of the present crisis is explained by such accounting. When people do not pay their debts (often resulting from reckless lending, fuelled by commissions), but let their liabilities accumulate, on an accrual basis the bank's profit and asset base both grow.

A practical example may help us understand the counter-intuitive notion that a bad debtor actually improves a bank's profit.

Imagine you are a bank employee, and have just lent me $100 000 at 10.0 percent interest. I have no means of paying it back, but that doesn't really matter. You get your commission on making the loan, and that's only the start of the story.

As time goes by, and I don't pay, the interest accumulates, and the size of the loan accumulates. This accumulation is shown in the table below (in $'000):

Year	Amount outstanding beginning of year	Interest accrued	Amount outstanding end of year
1	100	10	110
2	110	11	121
3	121	12	133
4	133	13	146
5	146	15	161

> Each year there is a higher contribution of accrued interest to the bank's reported profit, and the bank's asset base is growing – by $61 000 by the end of five years. Your boss's share options have risen in value and his pay has gone up, thanks to such a boost in profit.
>
> After five years, however, you may be a little concerned that I may never pay, particularly seeing for the past four years the post office has been returning all the mail your bank has sent – "not known at this address". You could have the loss realized and the loan written off – a loss of $161 000 – but that would not be a good career move.
>
> Rather, you bundle it up with a few other shonky loans, call the bundle a "collateralized debt obligation" or CDO, and sell it your old friend from university days who works in a rival bank. You get another commission, and your bank's capital base is preserved.
>
> At the same time someone else in your bank is buying CDOs from your friend's bank. It's a neat win-win situation, with commissions all around.
>
> Until ...

My own suggestion is that banks and other lenders should be required to realize bad debts as soon as a loan is delinquent. Financial counsellors may baulk at this suggestion, because at first sight it could result in very aggressive action to recover doubtful debts. But its benefit is that it would cease to reward poor lending with impressive (but fictional) company reports. Those bad debts would be shown as losses. Any subsequent recovery would be shown as a profit. The practice of aggressive recovery of bad debts is a separate issue. And, of course, by now it should be plainly evident that commission-based incentives on staff and agents in lending agencies should be outlawed.

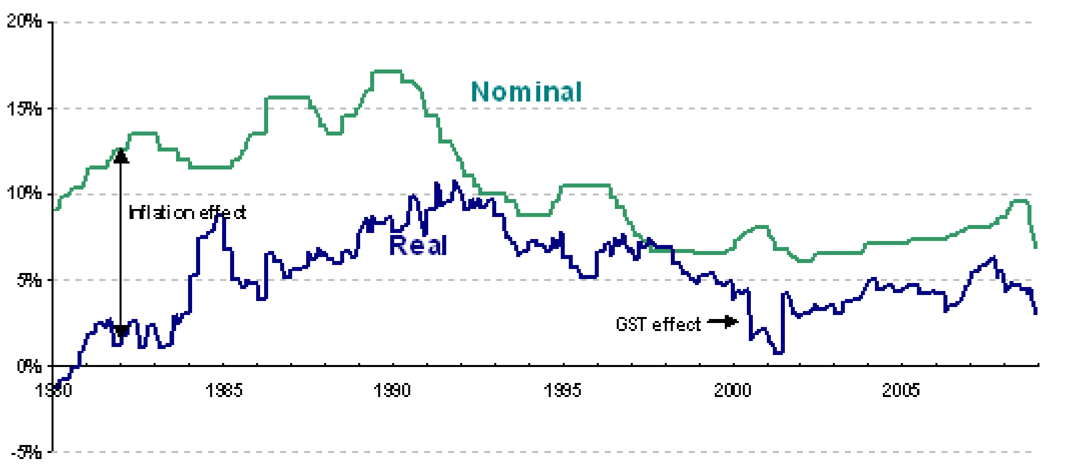
The question often arises why, in a competitive market, banks don't lower their rates on credit cards. The reason is that the bank which makes the first move and lowers rates will attract the naive and undisciplined, who, attracted by comparatively low rates, may run up high debts, but the lower rates will have no attraction for the sophisticated and undisciplined, because they don't believe they will go into debt.

Similarly, the short-term and optimism biases help explain why we find attractive deals such as offered by finance companies involving repayment holidays, followed by usurious interest rates. Even if we are aware of the huge penalties for default (and often we are unaware), we are optimistic enough to believe we will never be in such a situation.

These two biases – short termism and optimism – have conspired with our misunderstanding of inflation to aggravate mortgage stress.

When we take a mortgage our main consideration is usually the burden of immediate repayment, rather than the outlays over time. That's our short-term bias at work. And because we are optimistic we don't take into account risks such as illness or unemployment. Reinforcing these biases is the knowledge that our parents and grandparents had mortgages and they got through. And, over most of the last fifteen years, we had a federal treasurer telling us that interest rates had never been so low.

Fifure 4: Nominal and real standard bank housing interest rates



Source: Rates from Reserve Bank, and CPI deflator from ABS

What we forgot is that in the 1970s and 1980s, there was comparatively high inflation, in the order of ten percent. Interest rates – what are referred to as "nominal interest rates" – are usually about five percent higher than inflation. Housing interest rates did indeed hit 15 to 17 percent as the treasurer claimed. But these were nominal rates that built in an inflationary component..

When people took out a mortgage at high nominal interest rates, they faced very high initial repayments, but, because of inflation, their (nominal) wages rose, while the mortgage remained frozen. For example, a $200 000 mortgage at 15 percent over 20 years involves an initial payment of $32 000, a high burden on a household with an income of $100 000. But, if inflation is 10 percent, and is fully paid out in wages, after a year that income has risen to $110 000, and after two years to $121 000, and so on, while the mortgage repayments remain at $32 000. Inflation helps compensate for the biases towards over-commitment.

In a low-inflation environment, however, while nominal interest rates are lower, there is not the offsetting benefit of increasing nominal incomes. The burden of repayment remains high. In fact, if there is a bout of deflation, as happened in Japan in its earlier crisis, the burden of loan repayment actually increases. That is one reason governments are now so concerned about the risk of deflation.

It is unfortunate that people do not understand the difference between nominal interest rates (the rates posted) and real interest rates (the rates after inflation). The simple formula is:

real rate = nominal rate – inflation

As the graph shows, real rates have fallen somewhat over the 1990s, before starting to rise again in the 2000s and falling over the last few months, but in recent decades they have generally been more stable than in earlier times, when our Reserve Bank was less independent. (Note, particularly, the very low and even negative real rates of the early 1980s, which help explain the privileged position of baby boomers who have had little difficulty in paying off their mortgages.)

The former treasurer's practice of spruiking up lending by referring only nominal rates was irresponsible, and has led to a great deal of misery. (Would any other treasurer have foregone the opportunity for such deception, however?) What is less excusable is the fact that this simple one line formula has not been taught in schools and in government-sponsored financial literacy programs. (See the box for an 80 word explanation.)

Understanding the difference between real and nominal rates.

The equation is most easily understood by example. Imagine a university receives a $1 000 000 bequest to fund scholarships in perpetuity. The posted (nominal) interest rate is 7 percent, and inflation is 3 percent. How much can the university draw to fund the scholarships?

In the first year, the million dollars will pay out $70 000. But there has been 3 percent inflation, which means $30 000 must be paid back to the fund to sustain its real value. That leaves $40 000 for the scholarships.

Or, more simply:

7% (nominal) – 3% (inflation) = 4% (real)

3. Gambling fallacies

We are really bad at basic statistics. I'm not referring to our difficulties in understanding the math of the Gaussian distribution, or how to calculate a Poisson distribution, but rather to some really simple statistical concepts.

Consider the following question, used as an exercise in behavioral economics:

> The following sequences are found in five consecutive tosses of a coin. Rank them in order 1, 2, 3, from least probable to most probable.
>
> A) H T H T H
>
> B) H H T H T
>
> C) H H H H H

If we do not reflect on the question, we are likely to consider B as more likely and A and C as less likely, because A and C appear to be more orderly while B appears to be more "random". Surely a sequence of five heads implies some force favoring heads. But all outcomes are equally likely; they are simply 3 of the 32 different combinations that can arise.

Similarly, it’s not hard for gamblers to come to believe in “lucky streaks” in randomnized devices such as poker machines. And, lest we believe such irrationality is confined to the RSL and league clubs of Australian working class suburbs, we should not overlook how people have been behaving on Wall Street over the last few years. The only difference is that the Wall Street (and Collins Street) gamblers have been using other people’s money, and much more of it.

Another gambling trap is what I call escalating commitment. Consider the following two exercises:

1. You have been saving to buy a car, and have accumulated $15 000 cash, which is enough to buy a small car. While you would be satisfied with a $15 000 car you would quite like a more expensive car, costing $25 000. You have the opportunity to go to the casino and put $10 000 of your savings on an odds/evens, or a red/white roulette gamble, which give almost a 50 percent chance of doubling your bet. If you lose you have blown most of your money; if you win you can afford a $25 000 car. Do you take the bet?
2. You have taken the $15 000 you have saved for a car to the casino. It has been a bad night so far. You are down $5 000, and have $10 000 left. You can put it on an odds/evens, or a red/white gamble. If you lose, you have lost it all, while if you win you will have $15 000. Do you take the gamble, which, if you win, would restore you to your starting position (+ $15 000), and if you lose would see you lose it all?

Pairs of exercises similar to these are used to assess our attitude to gambling. In very abstract theory, the two gambles are identical; they both involve a roughly 50:50 bet of $10 000. But on average, people show very different behavior in the two bets. People are generally reluctant to take the first bet, but are far more willing to take the second bet.

The explanation lies in the science known as *prospect theory*. To put it simply, without drawing a family of curves, the difference between the bets is where we see the consequences.

In the first case the consequences are:

win	expensive car
no gamble	small car
lose	no car ($5 000 left)

In the second case the consequences are:

win	small car
no gamble	no car ($10 000 left)
lose	no car ($0 left)

In the first case you probably prefer a small car to no car. In the second case, if you do not gamble again, you have no chance to have any car. The consequence of losing the lot, in one sense, is the same as the consequence of losing $5 000 – you still cannot afford a car. The consequences of returning home to your partner and explaining what you have done are much the same. Our ancestors who came to this land had a saying “as well be hang’d for a sheep as for a lamb”, or “as well be sent to New South Wales for a sheep as for a lamb”.

It is the hope of financial redemption, however slim, that tends to keep us at the poker machine or roulette wheel, and as our funds are depleted we are likely to bet on longer and longer odds. It is not rational from a strict mathematical viewpoint, but it is how we behave.

4. Mental accounts

We tend to compartmentalize money we receive from different sources.

Exercise: Consider the two following situations:

A) You have gone to a theater and discover that you have lost your ticket, costing $50. There are plenty of seats available, and because you have a credit card you can buy another. Do you buy one?

B) You have gone to a theater to buy a $50 seat for a play and discover that you have lost $50 from your wallet. You can use your credit card, however, to buy a seat. Do you buy one?

Many more people choose to buy a ticket in situation B than in situation A. In situation A it's as if the loss is from an account called “entertainment”, while in B it’s from an account called “consolidated revenue’. In situation A we have blown the “entertainment” account.

It may not seem rational to compartmentalize our expenditure; after all money is a fungible commodity. But we do treat different sources of income differently.

In relation to the various direct stimulus packages there is a great deal of hot air about whether people will spend or save their payments. The simple message from behavioral economics is that we don’t know, but we can be sure that many people will treat their payments differently to payments they might have received from a pay rise or a tax cut.

Our behaviour in relation to bonus payments, tax refunds, lottery winnings, economic stimulations and inheritances may be quite different from our behaviour in relation to our “normal” income. We may choose to spend our windfalls much more carelessly than we spend other money, or, on the other hand, may place them entirely into our superannuation accounts. There are stories about people with modest means, living within those means, getting a large windfall inheritance or lottery winning, and blowing it all in a short time, to the extent that their financial situation worsens. It may be dumb behavior, but it shouldn’t be unexpected. I am sure financial counsellors have many such stories.

5. Endowment bias

I was recently doing some research on consumer decisions relating to energy-intensive household appliances, such as incandescent light bulbs and open bar electric radiators. The best thing anyone can do with these appliances is to throw them in the trash and replace them with more expensive but more efficient lights and heaters. The payback time in terms of electricity savings is generally only a few months.

But it’s very hard for people to get rid of something they already have, even if they would not have bought it in the first place. That’s why our wardrobes are crammed with clothes we will never wear again and why those old computers are in our garages. This tendency to hang on to what we have is known as the *endowment bias*.

It is not uncommon to find people who are experiencing financial difficulty while maintaining some rather expensive habits. One that comes easily to mind is private health insurance, a virtually worthless product for anyone with reasonable health and an income below $70 000 (where the penalty levy cuts in).

Does education help?

It is easy to put too much faith into education as a means to counter these behavioral biases. Certainly, when we look around the world's financial capitals, it is clear that even MBAs from Wharton and Harvard don't offer protection from stupid herd behavior. In fact, to the extent that such exalted qualifications encourage overconfidence, it is possible that they act to suppress people's capacity for sound judgment.

Evidence on the benefits of financial education suggests that while a lack of education impedes our capacity to make sound financial decisions, education, in itself, is not sufficient to improve our behavior. In terms of formal logic, financial education is a necessary but not a sufficient condition for sound financial decision-making.

There may be many conditions to fill before there is a sufficient set to ensure sound financial decision-making.

One candidate is skepticism, which is best developed in early childhood learning. With the populist calls for a 3Rs approach to education, skepticism can get crowded out, and the advertising industry is certainly not welcoming of skeptical consumers.

Another is establishment or realistic norms of what constitutes a reasonable living standard. Research by the Australia Institute found that even the most prosperous among us believe they cannot afford everything they want. We live in a society where conspicuous consumption abounds, where advertisements suggest that unless we have a swimming pool, a Bang and Olufsen hi fi, and at least one Mercedes in our garage, we are losers, or untermenschen. Many people are engaged in unwinnable "arms races", trying to outdo their neighbors – as Clive Hamilton said "buying things they don't need, with money they don't have, to impress neighbors they don't like". Even if we find it hard to achieve a more equal distribution of income, a restraint on vulgar displays of conspicuous consumption would help. It's a difficult adjustment following more than a decade of a government which re-defined the word "aspiration" to mean material greed.

And of course, we need governments which understand the importance of trust in our financial institutions. Policymakers, conditioned by thirty years of neoliberal propaganda, find it difficult to understand that markets function only when there is trust between buyers and sellers, and between investors and borrowers and financial institutions. Establishment and maintenance of trust requires regulation, not only to protect consumers, but also to protect honest traders from having to lower their standards in a destructive race to the bottom. Otherwise, as current events show, everyone loses.

Conclusion

In the foreseeable future financial counsellors are going to have a heavy task, helping rescue people from the destruction wrought by financial rogues who were given cover by indolent and corrupt governments.

In time, we will pull out of this mess. We must discount the media headlines of doom and dearth; Galbraith warned that all pessimism has an air of authority. At the same time we must address our problems seriously.

So far the signs are promising. Most governments, even the nominally "right wing" governments of France and Germany, are willing to apply strong regulation and appropriate fiscal and monetary measures. So far there have not been serious assaults on trade liberalization. And there is a good chance that some of the world's major banks will be nationalized, with strong charters to serve the public interest.

In Australia we still have to bear the shock of lower commodity prices, but otherwise we are better equipped than most other countries. We do not have an over-supply of housing, we still have room for more monetary and fiscal stimulus, and our financial sector is better-regulated than it is in most other countries. (The HIH collapse was our warning, and we were fortunate to act accordingly to strengthen fiduciary regulations in response.)

When recovery does come, we can expect to see re-emergence of some of the perennial problems, such as "get rich quick" schemes. Governments at present are too busy limiting the damage, but they will soon have to turn to thinking about policies for the future. One risk is that they will see the present problems purely in technical terms, to be corrected with a little tweaking of specific financial regulations, and will fail to acknowledge the essential causes of the failures of financial markets. At the opposite extreme is a possible defensive and populist reaction, as happened in Europe in the 1930s, leading to some of the most ghastly misery in history.

In particular, it will be important for public policy to restore the financial sector to its proper role – as a servant of the real economy, rather than its master.

But perhaps the greatest challenge for governments will be to ensure that the burden of reconstruction is fairly shared. We will not be able to revert to the easy times of the last 15 years. What we neglected to do then we still have to do – to invest in productive physical infrastructure, to invest in education to strengthen our human capital, and to restructure our tax system to reward productive investment rather than short term speculation. We have to make up for a long period of poor public policy, when the government of the day failed to warn us that we were living on the national credit card, when, in a futile bid to maintain an illusion of prosperity, it squandered public revenue to mask our nation's economic underperformance. That task will require short term sacrifices to ensure our future prosperity, and it's crucial that the sacrifice is fairly shared, for no society like ours can endure if it is not seen to be working in the interests of all.