A MACROECONOMICS FORECASTING GAME: DESCRIPTION AND EVALUATION*

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ABSTRACT

This paper makes two contributions – it adds another game to the stock of macroeconomics games which is much smaller than that of microeconomics games, and it provides some comments on the complex nature of game evaluation. The game is a macroeconomics forecasting game suitable for economics and commerce courses. Although applicable to courses of all sizes and levels, it is particularly effective in large or very large classes. The game has an entry fee and a final prize, and takes the form of a competition between students to forecast a nominated variable, for example, a floating exchange rate. Its objectives are to facilitate student learning and interest by both direct and indirect means – introducing an element of fun and interest into a content-focused course, revealing the links between theory and the real world, discussing the domestic and global forces causing fluctuations in the variable, providing a brief introduction to the nature of forecasting, and learning about risk-taking and personal attitudes to risk. As well as providing numerous opportunities for instruction during classes, the game helps build community atmosphere in the lecture theatre. The paper also discusses the evaluation of the game from several viewpoints, and stresses the importance of context in such evaluations.

Keywords: macroeconomic games, large class learning, forecasting and risk.

JEL classifications: A20, A22, A23

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1. INTRODUCTION

Good games are very effective teaching devices. They create student involvement in the subject, promote learning of material and engender positive class atmospheres. This paper outlines a forecasting game which has been successfully conducted for fourteen years at two Australian universities. The particular context is a very large first year, one semester course in macroeconomics with an enrolment of around 1200 heterogeneous students displaying variations in almost every dimension – academic ability, previous study in economics, economics/non-economics major, domestic/international, ethnic background, income, gender, full time/part time, day/evening, and so on. However, the structure of the game is quite general and can easily be adapted to environments with different contents, class sizes, compositions and levels.

The motivation for developing the game was to improve very large class teaching in introductory economics which is often prone to delivering boring, off-putting experiences for students. What was needed was an activity that was simultaneously instructional, fun, community-building, practicable, and of extended duration. The size and heterogeneity of the class, the design of the lecture theatre and the need to prevent erosion of lecture time did not favour games involving student activities during lectures. The same factors, together with the importance of uncertainty in the real world and expectations in economic theorising, led to the view that a forecasting game with broad appeal, minimal resource requirements and easy management was a promising option. The game differs from other games in being prolonged over time rather than completed in one session.

Any real world variable that possesses significance to course material and sufficient volatility can be chosen as the subject of the forecasting activity. A particularly suitable variable, and the one used here, is a floating exchange rate. This has a better combination of advantages than many of the alternatives. It is reported daily in all media; virtually everyone is aware of it or has an interest in it; it is frequently analysed by commentators; it is always fluctuating...

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1 The game was first created by the author in 1993 during a period when the sizes of many Australian commerce-related courses increased dramatically due in part to high levels of international enrolments. Ongoing shifts towards mass education posed major challenges for which lecturers were not well prepared. Refinements over the years have led to the game’s present form.
sometimes rapidly and dramatically; it is easily linked to the content of many economics and commerce courses; and it provides a ready source of material for discussion. Other economic variables, such as the growth rate, the cash interest rate, the inflation rate, GDP, investment or the current account balance, are much less appealing because they are published less frequently, their fluctuations are often smaller or less dramatic, and some hold no immediate interest for students in their personal lives. For some courses, stock market prices or indices could provide suitable alternatives to exchange rates.

The game constitutes an addition to the relatively poor endowment of macroeconomics with classroom games compared to the abundance available in microeconomics.\(^2\) A perusal of the last few decades of the *Journal of Economic Education*, a useful guide to the literature on economics games, reveals that many more micro games are available than macro games. As Delemeester & Brauer (2000, p.406) have noted, ‘games for the principles of macroeconomics course . . . are not as plentiful as those in microeconomics’. This is hardly surprising since economics theorising conventionally rests on microfoundations, and game creation is easier when dealing with interactions between individuals or small groups. More specifically, while the above literature contains games on other topics taught in macroeconomics courses such as money demand, money creation, and rational expectations, there do not appear to be any based on exchange rates, real-time forecasting or their combination.\(^3\)

With regard to any teaching innovation, legitimate questions arise as to whether it is initially worth trying out, and then adopting as a regular element in a course. Conventional economics tends to evaluate such innovations purely from a cost-benefit perspective, but it is suggested here that game evaluation is more multi-dimensional than this. The paper concludes with some evaluative reflections on the game with special reference to the importance of context.

2. **THE NATURE OF THE GAME**

The aim of the game is to predict the magnitude of the selected variable on a given date for a particular country, normally the country

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\(^2\) Exchange rate determination is normally taught in macro courses, but the game would be equally at home in any course dealing with exchange rates such as international economics or finance.

\(^3\) See also the small sample of twelve experiments in Fels (1993), ten of which relate to micro and only two to macro.
in which the game is played. In the present case, the AUD/USD exchange rate was the natural choice.\textsuperscript{4}

The game has four dates – an opening date, a closing date, a target date, and a finalisation date. Selecting the dates requires some thought. The opening date of the competition is flexible and its timing in relation to coverage of the relevant topic can be decided by the lecturer; in the present case, it was decided the most appropriate time was immediately after the treatment of the topic in lectures which was about halfway through the course. The closing date of the competition, which lies between the opening and target dates, must be sufficiently distant from both. The target date is the date at which the nominated variable is to be forecast. About two to three weeks of lectures is usually sufficient for each of these intervals in a one semester course. For example, an opening date of 1 May, a closing date of 14 May, and a target date of 31 May allows 14 days for observation and decision-making prior to the close of entries, and 17 days of uncertainty in which tracking and class discussion continues until the arrival of the target date.

The target date (in a one semester offering) will typically fall in the second half of the course, but naturally depends on the start date; in the present case, it was set in the second last week of lectures. Given that the winning value of the variable is taken to be that determined and announced by a reputable institution such as a central bank for verifiability and transparency reasons, the finalisation date on which the winner(s) are announced and general class discussion of the lessons learned takes place will typically be one or two days after the target date. An example of the date arrangement is given in Table 1.

\begin{table}
\centering
\begin{tabular}{|c|c|c|c|}
\hline
Opening Date (competition opens) & Closing Date (competition closes) & Target Date (predicted value) & Finalisation Date (winner and discussion) \\
\hline
1 May & 14 May & 31 May & 1 June \\
\hline
\end{tabular}
\caption{Example - Forecasting Game Timetable}
\end{table}

\textsuperscript{4} For economies with two significant exchange rates, it would be possible (but not necessarily recommended) to predict both exchange rates, with the winner having the lowest sum of percentage deviations from the actual values.
On the opening date, students are made aware of the nature and rules of the game (see Appendix A), along with its purpose and benefits.

Participation is entirely voluntary. To encourage participation, the game is presented as a competition with a final prize for the winner(s) and a small entry fee for each participant. The final prize, which is the total of all entry fees, depends critically on the participation rate. The entry fee needs to be small enough to induce participation, yet large enough to generate an attractive prize. In the exchange rate game, the entry fee was typically AUD1.00 which generated a very attractive potential prize in large classes. The entry fee and prize can be either monetary or non-monetary (book vouchers, for example), but monetary ones are easy to administer and probably more appealing in large classes.

3. OBJECTIVES OF THE GAME

Pedagogically, the game has six objectives:

(i) to inject an element of fun, entertainment and ongoing interest in moderate to large classes;

(ii) to enhance learning and understanding by connecting economic theory to reality;

(iii) to stimulate curiosity and independent investigation;

(iv) to underline both the centrality of uncertainty, and the necessity of forecasting, in decision-making;

(v) to personalise risk-taking in making decisions; and

(vi) to add to the community atmosphere and morale of classes.

This last objective should not be overlooked. As Durkheim noted in 1911:

There is a special form of psychology which has a very particular importance for the pedagogue: it is collective psychology. A class, indeed, is a small society, and it must not be conducted as if it were only a simple agglomeration of subjects independent of one another.

(Durkheim, 1956, p.112)

The same theme has been emphasised more recently by Waugh & Waugh (1999, pp.35, 45).

[We] think of teaching (lecturing) in terms of individuals learning both as a group and within a group. In the lecture, it is the group that
is primary, and from the group we go back to the individual . . . [T]he good lecturer must learn to emphasize the things that bind the group and put less emphasis on the individual traits that split the group. Now what these binding things are will vary through time and place.

In the present context, the forecasting game seeks to act as a binding element.

Note also that while enhancement of learning is certainly one of the aims, the objectives, taken as a whole, are not narrowly concerned with the drilling of content, and are more qualitative than quantitative in nature. Both characteristics are pertinent to the evaluation of the game (see below).

4. CONDUCTING THE GAME
There are four aspects to conducting the game:

(1) Pre-Game Announcements
These create interest and curiosity, but are not essential. They can take the form of hints and teases without giving anything away, such as ‘In two weeks time, I’m going to present the class with an interesting group activity/an opportunity to gain skills that will increase your job prospects/a chance to make you successful in life whatever you choose to do’.

(2) Introducing the Game
On the opening date, students are informed of the game – its aim, structure, entry fee, rules, benefits to both winners and non-winners, and its educational outcomes. In the present case, this was done immediately after the relevant course material was completed since this increased the information students brought into the game. Students were told they were now capable of understanding many of the forces driving the exchange rate, so that they were better positioned to understand real world events and media commentary, and therefore to have some capacity for generating predictions. To enliven the introduction and increase student engagement, my practice was to ‘ham things up’ somewhat through a mixture of humour and seriousness (see Appendix B).

(3) During the Game
To underpin the pedagogical objectives and maintain interest, it is crucial to follow the nominated variable and its current determinants up to the finalisation date by providing ongoing commentary on real
world events as they unfold. This can be done by showing slides of the variable’s movements over the previous week, press clippings commenting on any major fluctuations in the variable and their probable determinants, or other media items linking the variable to events in the domestic or global economies. Showing these when the lecturer first enters (so that they can read them as other students arrive and the class settles down), and then discussing their main points is a useful practice. Before creating slides, press clippings can be edited to make them more concise by excluding irrelevant material. Depending on events, these commentaries usually occur every one or two lectures.

![Mock Forecasting Certificate](image)

**Figure 1: Mock Forecasting Certificate.**

(4) **Concluding the Game**

On the finalisation date, the winning value is declared, the winner(s) are announced, and the game is concluded by discussing the lessons that can be drawn from it. The winner is also presented with a mock certificate (see Figure 1). The game’s lessons may be treated under three headings:

(i) The main influences on the variable over the period of the game, these being linked back to the economic theory in the course to reinforce knowledge and understanding.
(ii) The practice of forecasting. This can refer to its necessity but high error-proneness, to the roles of information, judgment and ‘gut’ feeling, to real world situations where *ceteris* are not *paribus* and opposing influences may need to be combined, and to the difficulty of forecasting spot values as distinct from the more sensible practice of forecasting bands or intervals. As a consolation to non-winners, it is pointed out that forecasts made by the majority of professional economists turn out to be wrong, often by wide margins.

(iii) The personal psychology of risk-taking. This can refer to active and passive risk-taking, good and bad risks, and the necessity for courage and ‘leaps of belief’ in real risk-taking and entrepreneurial behaviour.

Again, in concluding the game, a mixture of humour and seriousness is a useful combination (Appendix B).

5. PRACTICAL EXPERIENCE

A number of points can be made from my experience of running the game.

(1) The game is effective in building community atmosphere in very large, heterogeneous classes. It stimulates questions before and after class (often from groups of students), and it generates an ongoing ‘buzz’ of interest.

(2) The game caters to both individual work and group work. A significant number of students worked in small groups which strongly fosters peer learning as they track and discuss the variable before submitting individual entries.

(3) Nearly all participants rationally wait until the closing date before submitting entries. As this nears, it is important to remind students to bring the correct entry fee, and for the lecturer to prepare for the last minute rush.

(4) It is important to bring two things to class as the closing date approaches – a generous supply of envelopes, and a box to receive entries. In the first year of the game, I assumed students would bring their own envelopes, but many did not which led to the messy practice of wrapping coins in sheets of paper.

(5) A student without the correct change can team up with a student who has change, one envelope then being submitted with the
combined entry fee inside and two names and predictions on the outside.

(6) Public holidays create problems; ensure the target date does not fall on a day when relevant markets are closed, and that these days do not interfere with the finalisation date.

(7) Where large classes have different lecture streams, the lecturer(s) can choose either to run one large game or to divide the students into separate games. When lectures are repeated, as often occurs in Australian universities in introductory economics, multiple competitions can be run concurrently. In the present case, one was conducted for the main day class (about 500 students), and another for the other day class (about 400 students) and the evening class (about 300 students) combined. This distributes the winnings across the groups, while still leaving attractive potential prizes for each competition (AUD500 and AUD700).

(8) From the 17,000 odd students enrolled in the courses over the period in which the game has been played, there have never been any complaints; in particular, no one has ever objected to its presence, the rules or final decisions, and no-one has complained that it might constitute a form of gambling.

(9) For fourteen years, the participation rate has varied little, fluctuating between 20 to 30% but most often lying between 20 to 25%. The actual prizes have thus typically ranged between AUD100 and AUD150 for a class of 500 students. This level of participation was lower than expected, but variations in the game over the years have produced no significant changes. In particular, participation appears to be price-inelastic because a rise in the entry fee from 20 cents to $1 in the early years of the game had virtually no impact on the participation rate. While the rate may be determined by local factors such as the cohort of students and the way the game is presented, I nevertheless surmise that it points to a hitherto unrecognised demographic constant. This stylised fact, to be called perhaps “O’Donnell’s $r'$, is that, in large groups of young adults, only a relatively small proportion are active risk-takers. Current evidence suggests that $r$ is around 0.22, but further research is obviously needed. It may help explain why our societies produce fewer leaders than followers, fewer entrepreneurs than wage-earners, and fewer active risk-takers than passive risk-takers.
Despite the low participation rate, however, non-participants still enjoyed significant vicarious gains, analogous to spectators at sporting events. As one student put it in written feedback, ‘I must say the interesting thing about the course is the foreign exchange competition. Although I did not enter, I think it is a great way to motivate students to realise what’s going on outside [the classroom].’

6. EVALUATION OF THE GAME IN ITS CONTEXT

Game evaluations can take many forms. Six common modes are verbal student comments, survey feedback via institutional instruments, the lecturer’s own judgments, expected benefit-cost ratios, targeted questionnaires, and quantitative data processing to estimate impacts on variables of interest such as assessment performance. For reasons explained below, evaluation of this game in its particular context was restricted to the first four forms, the outcomes being as follows.

First, verbal student feedback on the game was exclusively positive, this being demonstrated during the game period by the regular queuing of students after lectures displaying interest and enthusiasm in asking questions, discussing current events and exploring future scenarios with me. Second, written student feedback was provided by institutional anonymous feedback surveys at the end of the course. The general nature of the written feedback is captured by the following comments:

The exchange rate forecasting competition was an excellent idea.

The teacher showed good enthusiasm for the subject by putting on the exchange rate competition.

A very good idea to have the [exchange rate] competition as it sparked interest.

I thought the guessing competition was cute and [the lecturer] presented it well. If you keep going like that the whole semester, I guarantee more students will enjoy economics.

One student near the completion of her degree emailed me two years after the course to say that the lecture which wrapped up the game (in which I humourously presented certain ideas – see Appendix B) had been transformative for her in dealing with risk and overcoming her timidity in this area:
that was probably the most important lecture I received during my university education. . . I will never forget [it] because it made me think and change my attitude and approach to life in general . . . I took some steps to change my attitude and embrace intelligent risks. . . Above all, I learnt that I have to fight for my goals even though that includes a significant amount of risks and the possibility of failing . . . I wish to thank you once again for a great lesson and the big impact it had on me.

My own assessment of the game was likewise positive, not because of self-interest in a personal solution to a challenging problem, but because my observations showed that it met most or all of its objectives. Students demonstrated considerable interest, and certainly appeared to find it enjoyable, instructive and satisfying, just as I did as the teacher. Greater engagement with the course material was noticeable (including among sometimes reticent international students), this leading to better class morale and atmosphere. Judging by after-class questions, a significant number of students were doing their own research and reading which presumably improved knowledge and learning. And comments indicated that the game brought home the problems of expectations formation, forecasting and risk-taking in economics by converting them into personal experiences rather than merely abstract textbook ideas.

More generally, teacher judgments can play important roles in the assessment of games in the following ways. It often happens that, with direct experience (participation, observation or supervision) of a game, one very quickly gains knowledge of whether it is worthwhile or not in relation to one’s objectives. If one wants to teach diminishing marginal product or rising marginal cost clearly and with high retention, for example, then anyone who has experienced the marginal product game reported in Dabb et al (2001) knows immediately that it has high effectiveness, excellent memorability and low costs, and hence that it is worth adopting. It is not necessary in these cases to require knowledge be gained beforehand from controlled experiments and/or statistical analysis. Judgment can also be used in two other situations, although it now rests on somewhat less secure foundations. The first is reading about games and imagining them in the classroom. Judgment is now based on a mental experience rather than a direct or visual one, but it can still be a useful means of assessing whether a game is worth trying. The second is where one judges that the knowledge of others is reliable. If an
experienced and well-reputed teacher who uses games regularly recommends a particular game for certain purposes, this can also be sufficient grounds for initial adoption. In both cases, decisions about trials can be made without it being necessary to have prior quantitative estimates of effects, and with decisions about continuation based on these trials and any further quantitative information that might emerge.

In relation to benefit-cost estimates, Fels (1993) criticised proponents of classroom experiments for not providing enough information on costs and benefits to assist other teachers in evaluating them for adoption. In particular, he argued that non-experts faced high start-up costs and possibly high ongoing costs which could result in poor benefit-cost ratios. Most games, however, escape this type of criticism. Being simpler and less resource-intensive than experiments, their start-up and recurrent costs are both typically very low so that, provided at least satisfactory benefits are expected, games can achieve quite respectable benefit-cost ratios which may exceed those of many experiments.

The other two forms of evaluation, however, were not pursued for a variety of reasons. The fourth form (targeted questionnaires) is clearly possible and desirable in principle. The reasons it was not undertaken relate to entirely practical matters concerning the local contexts – course timetabling, syllabus organisation, infrastructure limitations, demands on class time and university requirements. The course occurred in the first semester of the first year which meant that a variety of other important activities took up class time, some of which were institutional requirements lecturers could not control. Given the arrangement of the syllabus, the game always ended in the last week of lectures with finalisation and discussion absorbing about 40% of a lecture. Having specific in-class surveys had to be traded off against other end-of-course activities such as revision of content, explanation of the format and university requirements for the final exam, and instruction on successful exam techniques at university as against inappropriate high school practices. These items had far greater importance in relation to students’ course performances in a class composed almost entirely of ex-high school or international students, virtually all of whom were doing their first final exam in an Australian university. Further, for most of the history of the game, online survey facilities at one institution were non-existent. Even if they had been
available, however, it is unclear whether the quantity or quality of data collected would have improved; voluntary online surveys do not impact on class time but typically generate lower response rates in large classes, as compared to in-class surveys which absorb class time but have high response rates due to the ‘captivity’ of students. And when a staff member running a very large class is both the main lecturer and coordinator who knows that first year failure rates are a central concern of university administrators, he/she doesn’t have much time or motivation for less than the highest priority tasks in the final week. Naturally, it is a matter of tradeoffs, but tradeoffs always occur in institutional contexts, many features of which are not of our own making. Given the above contextual constraints, I doubt many lecturers would have been willing to sacrifice activities vital to the performance of their students and themselves, in favour of data collection for the purposes of research into a single aspect of their teaching.

In relation to quantitative processing to evaluate impacts on assessment performance, there are good grounds for doubting the relevance, feasibility and value of such exercises in this particular case. It may be thought necessary and desirable in the abstract, but questions concerning objectives, the possibility of execution, and benefit-cost ratios need to be addressed before its absence becomes a reason for criticism. Several points can be made here. First, the evaluation of any activity needs to be focused on its particular purposes and objectives, not on externally imposed ones more pertinent to other activities. As noted previously, the game’s objectives were predominantly qualitative rather than quantitative, and were not primarily concerned with the drilling and testing of content. Qualitative modes of testing are thus more appropriate in this context.

Secondly, if data collection and processing were to be attempted, what would the independent variable be that captures the full effect of the game? All students had game contact but in very different ways, depending on whether they consciously reflected on prediction, entered the competition, absorbed some information non-consciously, or were completely indifferent. Some of the main subgroups who could have been positively influenced by its presence can be classified as follows – reflective participation and competition entry; non-reflective participation and competition entry; reflective participation without entry; and non-conscious participation without entry. The
only countable variable here is the number who entered the competition, but this is open to the criticisms that it includes anyone who participated but learnt little or nothing and just had a fling, and excludes all those who learned something (consciously or non-consciously) but did not enter. To capture the full effect (the ultimate objective), we need a variable embracing all forms of pedagogical participation, but such a variable is simply not available here. This is an illustration of the sometimes daunting problems that arise when seeking to deploy mathematical techniques for meaningful quantitative evaluation. As Santos (2002, p.39) has noted elsewhere, ‘Students may enjoy participating in computer-aided exercises and report learning under such circumstances, but to demonstrate that such pedagogical tools actually facilitate learning is difficult for researchers’.5

Thirdly, given the course organisation, the only time students were assessed on exchange rates was in the final exam. Assuming there were exam questions focused on exchange rates every year (not always the case), student performance on these and other questions is obviously determined by a multitude of factors of varying importance. Among these, the presence of the game would most likely have had a much lower impact on exam performance than other significant, well-known, general factors such as prior academic achievement, language ability, mathematical skills, study time, part-time work, etc. Applying an orthodox microeconomics viewpoint, it is probable, on the basis of the high costs of quantitative evaluation and its low expected benefits, that the expected cost-benefit ratio would be high, and quite possibly so high as to deter quantitative analysis.

Finally, it deserves emphasis that respectable journals and books regularly publish papers on games and experiments that are largely or entirely evaluation-free. The Journal of Economic Education, a leading journal in the field, has for many years published articles on these activities unaccompanied by the fifth and sixth modes of evaluation (targeted questionnaires and quantitative estimations of impact on test performance). Even reports on student satisfaction, as in Santos (2002), are infrequent. A very small sample illustrating this

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5 One could try a controlled experiment of say, three years with the game and three years without. But this does not resolve the above problem of the independent variable, and it raises equity issues as well as the question of whether the total benefits would exceed the total costs of the exercise.

In short, game evaluation is a far more complicated, multi-faceted and contextual process than is allowed for in single-minded approaches focused on one preferred method. Where possible, multiple sources of information should be used, including quantitative analyses which, done carefully and meaningfully, add instructive and useful information to the information set.

7. CONCLUSION

The contribution of this paper is twofold – to add another game to the relatively impoverished stock of macroeconomics games compared to that of microeconomics, and to provide some comments on the complex nature of game evaluation.

Being quite general in nature, the forecasting game can be modified to suit a range of contexts and courses. In its exchange rate form and in an Australian context, it has been very successful in achieving its various objectives and in delivering significant benefits at low cost to both students and the lecturer, these mainly deriving from the involvement of the whole class, directly and indirectly, in an extended activity that simultaneously promotes learning, fun, and personal development in several directions.

REFERENCES


**APPENDIX A: FORMAL RULES AND INSTRUCTIONS**

The formal rules, expressed in general terms with examples, are as follows:

1. The object of the game is to forecast the magnitude of the selected variable on the target date to a specified number of decimal places. For example, the value of AUD1.00 expressed in US cents to two decimal places, as in 107.59 on 31 May 2012.

2. Participation is via payment of an entry fee, this being AUD1.00.

3. Only one entry per person.

4. The winning forecast is the one closest to the published magnitude on the target date.

5. The winner receives the total prize; no second or third prizes are awarded.

6. In the event of multiple winners, the prize is equally divided.

7. To enter the game, print your (a) name (b) student number and (c) prediction clearly on the outside of an envelope, put the entry fee inside, and then seal the envelope.

8. Submit your entry by placing the envelope in the box brought to lectures (or by other manner prescribed by the lecturer).

9. The winning magnitude of the variable on the target date will be that given by a reputable source, such as a government agency reported in a quality newspaper. For example, the ‘Representative Rates per $A’ provided by the Reserve Bank of Australia and published in the *Australian Financial Review* on the business day following the target date.

10. The lecturer’s decision is final on all matters.
These rules were formulated to keep the game clear, simple and easily managed. The one entry per person rule maintains equality between students and prevents ‘plunges’ by wealthier students. The winner(s) are those whose predictions have the smallest absolute deviations from the winning magnitude. For example, if the nearest forecasts to the winning value of 105.87 were 105.85 and 105.89, these two entries would share the prize equally. Obviously the rules can be modified to suit different contexts.

APPENDIX B: HUMOUR AND HYPERBOLE

The introduction and conclusion of the game provide excellent opportunities, for lecturers so inclined, to add more entertainment and atmosphere to the classroom with remarks reflecting local senses of humour and cultural attitudes. What follows is my approach which has been effective with students in an Australian environment. It is not necessary to the successful running of the game – to each according to taste and local culture.

Introducing the Game

Today I want to introduce an exciting opportunity for you to learn more about the economy and to make you more successful in your later life. This is the Annual Exchange Rate Forecasting Competition (show slide).

In this game, everyone is a winner of one kind or another. If you turn out to be the actual winner, I can promise you three things – fame, fortune, and a highly rewarding career. But even if you aren’t the winner, you will still come out well ahead. What the game involves is the following. (Using slides, describe the aim, rules and dates of the game, along with the entry fee, the total prize, and the fact that the prize depends on participation).

I promise the winner three things. Fame comes from media coverage. I have extensive contacts with all media organisations and can arrange interviews and stories with the outlets of your choice – the local radio station, the ABC, CNN, Al Jazeera, the Financial Times, the Chinese People’s Daily, or the New York Times, whichever takes your fancy. You probably don’t know it, but everyone in the business world is aware of this competition and eagerly awaits the outcome.

Fortune comes partly from the prize money which, if everyone participates, could be as much as $500 (or $700). I know this is only a small fortune, but it won’t be long before the big money starts rolling in. Because if you are the winner, you will receive this fabulous certificate to include in your CV (show colour slide of mock certificate; see Figure 1). At your next job interview, don’t think the
interviewers are turning the pages of your application to look at your excellent academic record and wonderful references. No, what they are actually looking for is this certificate, because they know about this competition and they know that anyone who can forecast the future as accurately as you will be fabulous for their business. As soon as they see the certificate, you will be offered the job. You then ask about the starting salary. If you are highly materialistic, you say: ‘I’ll take the job provided you quadruple the salary and pay 10% commission on all profits’. If you aren’t materialistic, you will say the same thing and make large donations to charities and the developing world.

However, if you aren’t the actual winner, you still receive considerable benefits which exceed the miserably tiny entry fee. You will enjoy four non-financial benefits of participation (show slide):

(i) The enjoyment of participating in the competition, of living in hope and anticipation. Think of all the fantasies you can have for four weeks about what you would do with your newly acquired fame, wealth and future income;

(ii) Learning about exchange rate changes in the real world and reinforcing your understanding of the course material by following media reports and commentary on the exchange rate’s movements;

(iii) Learning a few things about expectations and forecasting, their necessity and challenges;

(iv) Learning about your personal attitudes to risk and risk-taking.

Surely these non-financial benefits add up to more than 25% of the cost of a cup of coffee, which is about as much as $1.00 will buy these days. So even if you never see your dollar again, you still come out well ahead.

Let me tell you a little more about risk-taking. Firstly, life is full of risks which you simply cannot avoid. Secondly, if you are going to be successful, you need to be able to distinguish between good risks and bad risks. Good risks have high upside and low downside, while bad risks are the opposite. You should embrace the good risks, and avoid the bad risks. This game offers you a fantastically good risk – an upside with two components, a financial benefit of up to $500/$700 (not counting the fame and fabulous job) and several non-financial benefits, and a downside which is one lousy dollar. I believe the non-financial benefits are actually worth more than one dollar, so there is really no downside at all, but even if you think the total downside is one dollar, it is still miniscule because $1.00 buys so little these days. When you see a good risk like this, you should pursue it as your best course of action. Especially if you are a timid person, because you, of all people, need to come out of your shell and face this risky world.
Note that the odds offered by our game are far superior to the odds available elsewhere in this country. At a maximum, the game’s probability of winning first prize are 500:1 (or 700:1) which is exceedingly low compared to the odds for first prize offered by the $5 lottery (1:180,000), standard Lotto (1:8.1 million) or Powerball (1:55 million). (Show slide of official figures). However, let me also say that, whatever it may seem, this game is not a form of gambling; it is an exercise in scientific forecasting and sensible risk-taking.

I now declare the competition open. I look forward to benefiting you all, and to launching the winner(s) on incredibly fulfilling careers.

Concluding the Game

After the winner(s) have been announced, the lessons that may be drawn from the game are discussed. The first two – the influences on the nominated variable, and the nature of forecasting – can be dealt with relatively seriously. The third lesson may be delivered with ‘tongue-in-cheek’ commentary as follows:

I would like to thank and congratulate all those who participated in the game. You can look forward to a bright future. You are the intelligent ones, the active risk-takers with the courage to project yourselves into the future. You will be successful in your chosen endeavours, you will become leaders of people, CEOs of organisations, you will earn the respect and admiration of those around you and, best of all, you will live with the partner of your dreams.

However, I feel sad for those who did not participate. You are not going to live exceptional lives, and you are not going to fulfil your potential as human beings. You will not live with your dream partner, you will not pursue the career you want, and you will not achieve your all goals whatever they may be. The best you can hope for is a dull, cautious and boring life. At worst, you will become a total loser. This is because you are afraid of risks, and aren’t smart enough to pursue good risks. This game offered you one of the best risks in the world – high upside and no downside. Did you take it? No, you turned it down, paralysed by your fears about what would happen to you if you parted with one dollar. In twenty-five years time, during your mid-life crisis, you will look back and say I wish I had taken more notice of Whatwashisname when I was at university. Right now, however, you still have a chance to change your life and create your own future. You can either stay as you are and achieve mediocrity at best, or you can change your attitudes and soar toward success and fulfilment from this moment on.