

# Pachinko: Declining Popularity or a Continuing Japanese Social Problem?

Graham Brooks, Tom Ellis, C Lewis

## Pachinko: Declining Popularity or a Continuing Japanese Social Problem? [1]

By Graham Brooks, Thomas Ellis, and Chris Lewis

Pachinko refers to the peculiarly Japanese [2] amusement arcade game that was supposedly modelled on the 'Corinthian', a US pinball machine, imported to Japan in the 1920s. Pachinko machines closely resemble pinball machines, though they are somewhat smaller and have a vertical, as opposed to horizontal, playing surface. Pachinko machines are played almost exclusively in specialist pachinko parlours, where the compactness of the machines is an important factor, as we shall see. In 2005, there were an estimated 17.1 million pachinko players, providing revenue of just over 28.7 trillion yen (US\$250 billion). It is difficult to think of another developed society in which gambling is as universally accessible and widely practiced on a daily basis by such a significant portion of the adult population. [3]

In examining the available literature, and gathering new data from the Japanese National Police Agency (NPA), it is clear that there is: a wealth of information on the historical development of pachinko; many journalistic accounts of its popularity; business and forecasting reports; reference to its links to organised crime; and its relationship with police corruption. However, there is little academic analysis of the popularity of pachinko in relation to the social consequences of playing such a

potentially addictive 'game.' Pachinko has all the hallmarks and structural features of gaming machines worldwide: low initial stake; stimulation of visual and aural senses; rapid and continual cycles of play; and the opportunity to experience a frequent and regular 'small win' to lure the player to put more money into the machine. We therefore wish to examine here: the current pachinko context and changes to the regulation of it; trends in pachinko popularity, and the potential for pachinko addiction, due to the grey line between 'playing a game' and 'gambling' in Japan.

## Playing Pachinko



Pachinko is notable for the ease with which one can understand and play it. Pachinko players must be over 18 to enter a Japanese parlour, where they pay for a supply of small 'steel balls' that are dropped by the machine into a moulded plastic tray. The player propels the balls continuously into the machine by turning a handle on the front of the machine. The balls cascade down the machine through a maze of 'pins' toward, the player hopes, single or multiple 'open slots'. Where the player is successful in this, the machine dispenses more balls.

There are, however, 3 main types of pachinko machine: *hanemono*, which has a central slot with 'wings' on either side that open under certain playing conditions, making it easier to direct balls into the open slot; *deji-pachi*, which is a computer based machine that features a LED display in the centre of the machine which activates when a ball enters a particular slot; and *kenrimono*, where certain 'rights' accrue throughout the course of play and which appeals more to the 'serious' pachinko player.

Furthermore, pachinko parlours also have a 'poker-style' machine, known as 'pachislot'. These types of machines resemble what is referred to as 'fruit machines' in Britain, 'gaming machines' in the US, and 'pokie machines' in Australia. These machines first appeared in Japan in 1976 and require players to set the reels of symbols spinning, and use stop buttons to line-up these symbols in a winning pattern. Many of these features are now computerised, as the picture below shows.



## Playing a Game, or Gambling?

While pachinko and pachislot are officially seen as 'playing a game' rather than 'gambling', there are 2 interrelated issues which are crucial to assessing whether this is the case from the player's perspective. First, the extent to which pachinko playing can produce monetary gain; and second, the extent to which, for some, pachinko becomes a compulsion.

### *Monetary Gain from Pachinko Playing*

Regardless of the type of pachinko game, the aim for the players is to amass as many balls as possible, which they take to the parlour counter to exchange for a prize of equivalent value.

What happens next is the subject of some debate, and the process is constantly changing according to changes in policing policy. Much of the available English language literature provides a perhaps somewhat outmoded view of this exchange process. It is certainly the case that players used to exchange the 'prize' (mostly of nominal value within the exchange process, but valueless to the outside world, e.g. a pack of washing powder), in a nearby specialist 'office' for a cash value of a certain percentage under the nominal value of the 'prize'. Several sources have suggested that the 'prize', once exchanged, is sold back by the 'office' to the pachinko parlour, to be used again. Via this process, the player, when successful, obtains more cash, the pachinko parlour has a continuing player, and the office (generally seen as connected to organised crime) makes a profit through deducting a percentage and re-sale of the 'prize'.

Though common until recently this type of exchange has always outlawed by the NPA, with the express intention of reducing the extent to which pachinko resembles 'gambling by proxy' and increasing its 'entertainment' features. It is still illegal for the pachinko parlour operator to buy any prize they have offered to the player. The NPA brought legal action against pachinko parlour operators on precisely these grounds: 11 times in 2004, 14 times in 2005, and 9 times in 2006. This may seem a small number of cases with so many pachinko parlours throughout Japan (see figure 4), but it is a sign that those involved in the pachinko exchange process will have to react in order to remain legal. Furthermore, commentators have noted that earlier anti-*boryokudan* laws have made it more difficult for organised crime to remain involved in the pachinko business.

The current system requires the pachinko parlours to issue a receipt confirming the number of balls won, at a value of 4 yen per ball. The player then chooses a prize that,

based on NPA application of the law, is equivalent to the calculated value. These prizes must have real market value, e.g. white goods, TVs, or laptops, such that the process of monetary gain is broken. The intention here is to ensure that the appeal is broader, that 'gambling by proxy' is not taking place (i.e., because legally, 'winning goods' is not gambling, whereas winning cash, even indirectly, is) and that the environment is therefore less addictive. Without an exchange 'office', re-sale values of secondhand goods are low.

### *Compulsive Features of Pachinko*

Pachinko, with its continuous play features, has all the hallmarks of a potentially addictive game, where some players claim they are in control of a machine. However, Langer [4] has argued that this only produces the illusion of control, in which personal expectation far exceeds the objective probability, leads players to develop 'strategies'; confidence in their 'skills', and 'faith' in their ability to predict the outcome of an event. In short, it is not possible to make a living by playing pachinko, as the parlour revenues testify. While no doubt a form of entertainment for many people, some pachinko players claim that they are 'pachinko pros.' Such 'serious' players will be in the parlour at closing time checking out which machines are ringing up big wins. Those are the machines they go to next morning. While it is not our position to deny that some skill might be involved in playing pachinko, the belief in control over any electronic machine is questionable.

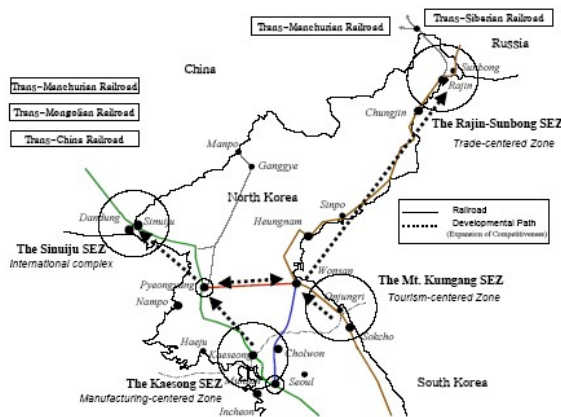
Before exploring the addictive or compulsive potential of pachinko further, it is important to look at trends in the level of popularity of pachinko.



## Trends in Pachinko Popularity

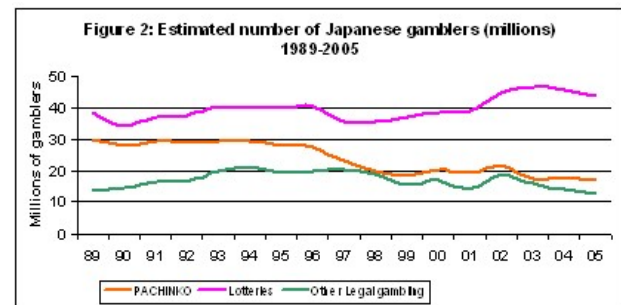
The popularity of playing Pachinko is not in doubt. However, while the figure of around 30 million players is still often cited, the most recent data, presented in Figure 1, are extracted from *The Leisure White Paper* (Japan Productivity Centre for Socio-Economic Development 2005). They show that pachinko declined in popularity, going from an estimated 29.9 million players in 1989 to 17.1 million players in 2005. This, however, is still around 20% of the Japanese adult population.

Figure 1. The Developmental Path of the North Korean SEZs



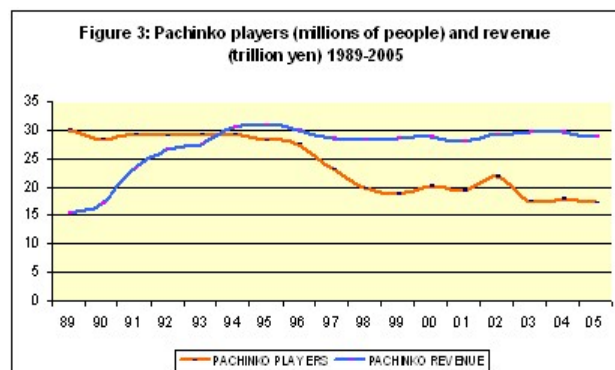
In contrast, there has been a noticeable, almost equivalent rise in the popularity of non-gambling 'game centres' over the same time period (13.7 million in 1989 to 22.7 million in 2005), and a smaller proportionate increase in the numbers participating in lotteries (from 38.3 million to 43.8 million). It may be that a certain proportion of those originally involved in pachinko playing have switched to game centres. However, if pachinko is considered 'gambling by proxy', it is also important to compare it to other state-controlled gambling markets. Looking at Figure 2, it is clear that while pachinko's popularity declined between 1989 and 2005, only the lottery has remained a more popular form of gambling. Apart from a relatively slight rise from 1992 to 2005, all

'other state-controlled gambling', which consists of national and local horse racing; bicycle racing; motorboat racing; motorcycle racing; and since 2002, soccer lottery, has remained stable. Since 1997, pachinko and all 'other' gambling have maintained very similar levels of popularity, though pachinko has maintained the edge.

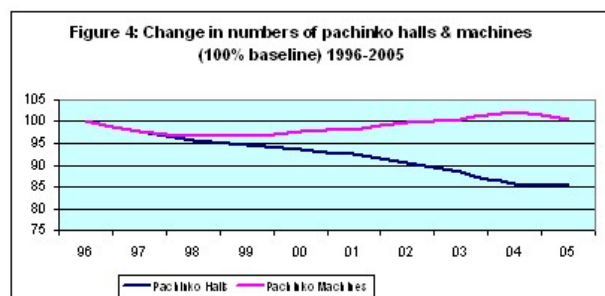


The decline in the number of people playing pachinko should not, however, be confused with a decline in revenue. In fact, as Figure 3 shows, revenue has risen from 15.3 trillion yen in 1989, to 28.7 trillion yen in 2005. [5] In short, the number of people playing has decreased by nearly 11 million, but the revenue has nearly doubled. Perhaps a more important observation regarding this trend data, is that pachinko revenue sharply increased until 1994, and has remained around the 30 trillion yen mark ever since the collapse of the Japanese economic bubble. In a period of economic stagnation, therefore, gambling revenue is not necessarily threatened. This might be explained from a psychological, sociological or popular point of view. For those who are addicted to a type of gambling, the rise and fall of worldwide economic markets is of little concern, and their personal circumstances and financial commitments often continue to be neglected. In addition to this, pachinko could be seen as a form of release in an otherwise difficult life. It offers a sense of escape where, rather than spending money on an expensive night out, there is always the chance one might win at

pachinko. Furthermore, for those with little personal spending power, the hope of a substantial win may be more tempting. Therefore, there is no correlation between economic decline and/or stagnation, and propensity to seek out the opportunity to gamble.

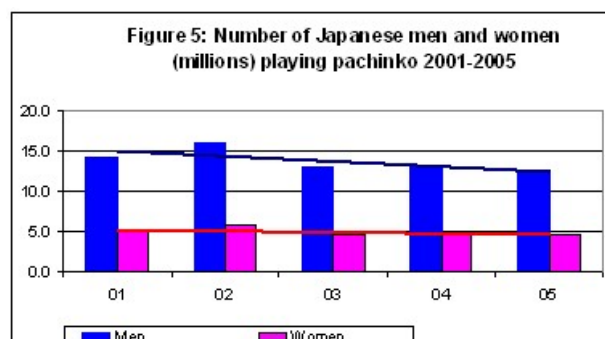


While the number involved has dropped, the volume of play by the remaining individuals has increased. What these figures may indicate, is that the population continuing to play pachinko are more likely to be the hard core of addictive gamblers, although some account must be given that to the fact that the stakes on the machines have risen. Both of these points are supported by the fact that, while the number of pachinko halls has declined from 18,164 in 1996 to 15,165 in 2005, the number of pachinko/pachislot machines has recovered from an initial drop from 4.87 million in 1996, to 4.71 million in 1999, to a high of 4.97 million in 2004. Figure 4 shows the relative change between 1996 and 2005, using 1996 as a baseline of 100. The number of machines in 2005 tailed off a little to 4.9 million, but this is still higher than in 1996, and the ratio of machines to halls has increased over this time period from 268 to 314.

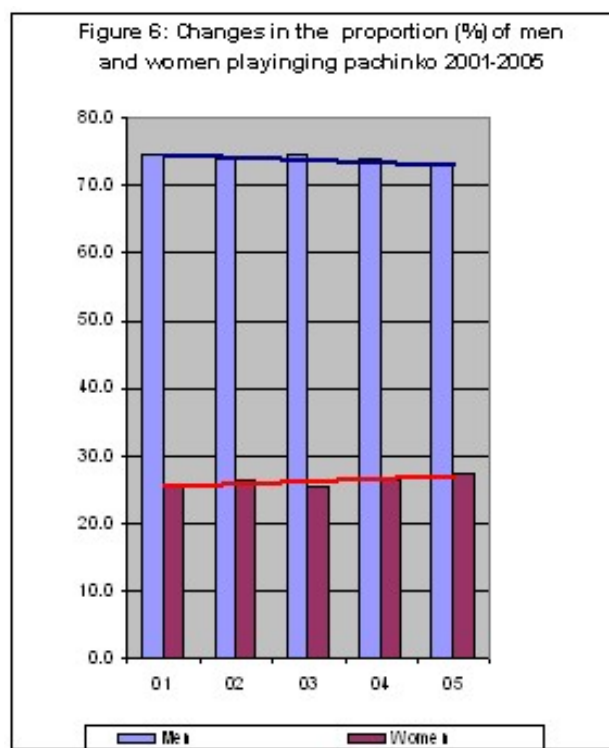


There are noticeable reactions to this trend, not only by the NPA, but by the parlours themselves as they seek to squeeze more revenue out of a shrinking, potentially problematic, male market, often seen as seedy and rather desperate. Seemingly in line with the NPA's notion of encouraging a more leisure-based view of pachinko, pachinko parlours have responded by offering free coffee, miniature television screens attached to the pachinko machines, and refrigerators, so that women can keep their food fresh while they stop to play pachinko on the way home from shopping. The reform of the prizes has also led to high-end items popular among women, such as handbags being offered. These changes are clearly geared towards encouraging more women to play.

As Figures 5 shows, the number of women playing pachinko, while smaller than that of the men, has not declined since 2001 and is relatively stable at around 5 million.



With the number of male players declining, between 2001 and 2005, the percentage of women players increased by 2%.



This poses new questions. Will this move to 'feminise' the parlours maintain a 'hard core' of female pachinko players? Will it draw in new women players? Is the growing concern in the press over kids left in cars a result of the feminisation of pachinko?

All of this points to increasing social problems (or increasing concerns) related to pachinko playing for a smaller, more problematic hard core of 'serious' pachinko players. Sensational examples highlighted in the *Daily Yomiuri* include: a person employed by Osaka prefecture (City Hall) who embezzled 2 million yen to play pachislot machines, and a man who murdered a woman to fund a pachinko addiction.

Furthermore, there is increasing media focus on

children being neglected by parents addicted to pachinko. In the most extreme cases, there have been 15 recorded deaths of children between 2002-2005, most of whom have died of heatstroke and dehydration when they were left in cars while their parent(s) were playing pachinko.

### Tackling Problem Gambling: Are There Any Lessons for Japan from Elsewhere?

Prior to this relatively recent recognition of a potential social problem, pachinko was widely considered a harmless form of entertainment. This is similar to previous attitudes to the equivalent of pachislot machines in the UK, USA and Australia, and there may well be some transferable value in the approaches developed here, for Japanese policy makers.

In the early twentieth century it was noted and proposed that gambling was a 'mania' and that it might take a compulsive form in western countries. However, until the late 1960s, pathological gambling had been ignored in comparison to alcohol and substance misuse. At this point, a psychoanalytical approach to gambling was developed and applied. Not until psychiatrists developed a special interest in what they referred to as 'pathological gambling' was there recognition of gambling as a social problem. The focus was on the strength of the preoccupation with gambling, the loss of personal control, and its compulsiveness in *some people*, which caused economic, social and psychological harm. Such harm manifested itself in debt, loss of employment, familial problems, depression and crime.

However, it was only with the inclusion of gambling as a disorder by the American Psychiatric Association in its *Diagnostic and Statistical Manual* (DSM) in the 1980s ([www.psychologynet.org/ocd.html](http://www.psychologynet.org/ocd.html)) that it

became embedded within the social and political context. In looking for consistent approaches, however, there is still a good deal of confusion. The fourth edition of the DSM (1994) still refers to 'pathological gambling' as a 'form of dependence' with some changes in the individual criteria. However, due to the haphazard development of the DSM IV, pathological gambling is placed in the section of 'impulse control disorders', and yet, is based on the criteria for substance addiction. The next full revision, DSM V, is not due to be published until 2011, although preparatory work shows an ongoing discussion about the way that pathological gambling should be treated in DSM V. [6]

In Japan, due to a lack of accurate statistics, it remains difficult to accurately assess the extent of gambling, still less pathological gambling. In addition to this problem of measurement, mental health professionals have trouble diagnosing and classifying 'pathological gambling'. This is a major problem for psychology and one that is still not resolved (as a look at DSM V referred to above will confirm). Is a gambling disorder a personality disorder, psychodynamic in nature, or a problem of cognition? Or indeed, because the need for gambling seems so widespread, should it not be treated as a social problem? This is a discussion that Japan must also now enter into if it is to deal more effectively with problem gambling in general, and problems related to pachinko in particular.

Regulation of the pachinko parlours and those who have an 'excessive appetite' to play and consume pachinko and pachislot machines are both current concerns in Japan. Legally, habitual gamblers are punished by imprisonment rather than treated.

The Japanese Penal Code (Act No. 45 of 1907) chapter XXIII, article 186) states:

A person who habitually gambles shall be punished by imprisonment with work for not more than 3 years.

In 2003, 1,192 gambling/lottery violation acts were received by the prosecutor's office, of which 241 were awarded custodial sentences. Of these, 188 (78%) were in the form of suspended prison sentences.

Whatever the merits of such a punishment-orientated approach, habitual gambling is difficult to assess, hence the problem of assessing the proportion of pachinko players who are problematic. After all, what is habitual? It is difficult to define 'problem', 'pathological', or 'compulsive' gambling, since the terminology is often used interchangeably. Even working within legal 'guidelines', the law is often open to interpretation by the police, public prosecutors and the judges. Perhaps in response to the few and yet regular cases of child deaths reported above, the NPA have introduced a raft of measures. First, they have revised the regulations concerning the approval of pachinko machines to suppress what is referred to as the arousal of players' 'gambling spirits.' However, they have not reduced the speed/number of revolutions of the reels on pachislot machines in an attempt to reduce the intense rapid cycles and a continual cycle of play associated with gaming machine addiction. In addition to this, there is an attempt to promote a self-regulating system, referred to as the "Organization for the Sound Development of the Pachinko and Pachislot Industry.'

Furthermore, the 'All Japan Cooperative Association of Pachinko Operators,' (AJCAPO), the largest of all the organisations involved in pachinko, has established a Recovery Support Network (RSN). In addition to this, the RSN, which consists of 5 members, one of whom is a

doctor, provide those with ‘pachinko dependency syndrome’ information and will refer such players to a public health centre. Rather than deal with the problem itself, therefore, the RSN provides an appropriate ‘conduit’ to professional services and treatment, and it remains to be seen how many are treated for dependency.

## Conclusions

While all of the above developments are welcome, it is perhaps too early to state what such an approach will achieve. After all, the NPA are to be commended on encouraging pachinko parlours to take on some of the responsibility for vulnerable players via the AJCAPO and RSN. However, to what extent these ‘bodies’ will achieve tangible results rather than simply providing an attempt to appear to take pachinko addiction seriously is an evaluation question for the future. With the proposed change(s) in pachinko by the NPA noted above and the relaxation of the strict control of machines, which are in force until September 2007, and the encouragement given to pachinko parlours to offer and display more than 500 different types of prizes to satisfy players’ consumption, it might be wise to review the new proposed measures in time to see if they affect and reduce the incidence of addiction, and the regrettable and unnecessary death of young children.

## Notes

1. Research carried out through funding from the GB Sasakawa Foundation and the kind assistance of the NPA.



2. Pachinko is legal in Japan, but exists illegally to some extent in other countries, e.g. Taiwan.

3. Ministry of Justice (2004) *White Paper on Crime 2004: Treatment of Offenders*. Tokyo: Research and Training Institute, Ministry of Justice.

4. See Langer, E. J. (1975) The illusion of control. *Journal of Personality and Social Psychology*, 32: 311-328.

5. It is worth noting that inflation during this period in Japan has been relatively flat.

6. See the website of the DSM V Prelude Project: [www.dsm5.org](http://www.dsm5.org)

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*The authors included a [video clip](#) of one of them playing pachinko, to give a sense of the game's "flavor," but they note "the smoke-filled atmosphere still needs to be imagined!"*

*Posted at Japan Focus on May 21, 2007.*