February 2009

Economic Development of the German Coin-Operated Gaming and Amusement Machine Industry 2008 and Outlook for 2009

Study Commissioned by the

German Working Committee of Coin-operated Machines
– Arbeitsausschuss Münzautomaten (AMA) –

Hans-Günther Vieweg

ifo Institute for
Economic Research
at the University of Munich

Department: Industry Branch Research

TABLE OF CONTENTS

1. The German Jukebox, Sport-games and Amusement Machine Industry

1.1. Market for Jukeboxes, Sport-games and Amusement Machines

Coin-operated amusement machines comprise three different product groups:

- Amusement machines with prizes (AWPs), which are strictly regulated by the German Gaming Ordinance.
- A second group contains gaming machines without prizes, such as touch-screen machines, video games, pinball machines etc. Until the end of 2005 fun games were also part of this category. Since 1 January 2006 – when the new German Gaming Ordinance went into effect – these once widespread machines have been prohibited.
- A third group includes sport-game machines, such as billiards, darts, table soccer, air-hockey etc.

A fourth group of machines that allows players to use their skills to influence the outcome of the game is subsumed under the term “other games” subject to § 33d of the Trade, Commerce and Industry Regulation Act (Gewerbeordnung (GewO)). The Federal Criminal Investigation Agency (Bundeskriminalamt) uses the licensing process for these machines in such a restrictive and inapprehensible manner that in general the legal regulations have little relevance. There are only very few devices of this kind of machines on the market.

In 2008 a total of 108,240 **jukeboxes, sport-games and amusement machines with and without prizes** were marketed, a reduction of 7.1% as compared with the previous year.[1] Since 2007 the market analysis also comprises Internet terminals that are installed in amusement arcades and in pubs, bars and restaurants. Excluding this strongly growing market segment, industry turnover fell by 8.1% in 2008. The market share for all machine groups of the members of the German Industry Association for Coin-operated Amusement Machines (Verband der Deutschen Automatenindustrie e.V. (VDAI)), the German industry's association, is, on average, about 90% (Table 1).

For the most important product group, AWPs, the number of new licences is recorded by the National Metrology Institute (PTB). Up until now, these statistics were a good indicator for market development, even though not all of the approved licences led to sales. A certain number of licences were used for AWPs that were only put on the market for testing purposes. This means that the actual market volume was less – around 5% of total new licences.

In recent years more and more screen-based AWPs have been introduced on the market. They comprise a broad range of different games not all of which have been designed by German manufacturers in their own facilities. The dissemination of advanced information and communication technology in connection with the opportunities provided by the new Gaming Ordinance has enabled the manufacturers to exploit the pool of globally available games, based on software programs. In the past two years they have adapted many of these games to the requirement of German regulations and have developed the ability to quickly exchange games. New products are no longer

---

1 It must be noted that in spite of the reduction of the number of amusement machines sold, rented or leased, the total turnover of machine manufacturers and wholesale distributors grew in 2008. Since the new Gaming Ordinance (Spielverordnung (SpielV)) took effect, a decoupling of the distribution of machines and games has taken place in the market for AWPs. The demand for AWPs is related to replacement and expansion investment. However, the demand for games is dependent on an attractive supply of new games. Until the end of 2005 it was necessary to invest in new AWPs if an operator wanted to offer new games to his clients. These days he can update the machines with new games within the framework of the Type Approval (Bauartzulassung). In spite of the reduced number of amusement machines, total turnover of manufacturers and wholesale distributors grew by 18.4% in 2008 (see: Table 3)

marketed primarily by the marketing of complete amusement machines but by an update of available machines within the framework of the Type Approval (Bauartzulassung). As a result, the distribution of games has gained importance.

Table 1: Market for jukeboxes, sport-games and amusement machines with and without prizes

Type of machine	Market volume 2006 [a)] Units	2007 [a)] Units	2008 [b)] Units	2008 / 2007 [b)] Change in %
Amusement machines [c)]		**6,400**	**6,180**	**-3.4**
excluding Internet terminals	***3,870***	***3,400***	***2,180***	***-35.9***
Pinball	230	250	250	0.0
Internet-terminals etc. [c)]		6,000	5,800	-3.3
Score games etc. [d)]	*3,400*	*3,000*	*1,800*	*-40.0*
Video games	240	150	130	-13.3
Amusement machines with prizes (AWP)	**90,200**	**108,000**	**100,000**	**-7.4**
Sport-games machines	2,330	2,050	2,060	0.5
Soccer	480	400	380	-5.0
Billiards	240	150	130	-13.3
Darts	1,610	1,500	1,550	3.3
Total [e)]		**116,450**	**108,240**	**-7.1**
excluding Internet terminals	***96,400***	***113,450***	***104,240***	***-8.1***

a) Extrapolation of the market volume based on the sales of the members of the industry's association, VDAI.[e)]
b) Estimations of the Ifo Institute.
c) The figures comprise not only score games, but touch-screen machines, juke boxes and other amusement machines.
d) Product group c) excluding Internet terminals.
e) The market share of the members of the VDAI is at around 90%; with AWPs at around 95%. (In recent years renting and leasing has become more important. Presently, more jukeboxes, sport-games and amusement machines are rented and leased by the operators than are purchased).

Source: PTB; VDAI; calculations of the Ifo Institute.

The PTB statistics on new licences are no longer a matching indicator for the sales of AWPs. New technologies in line with the new Gaming Ordinance have induced changes in the product programme and in the business policy of the manufacturers. Most of the AWPs that are based on the Gaming Ordinance that took effect on 1 January 2006 are marked by a modular design. Hardware and software can be combined in many different ways. The box with the processors and the electronic control can be equipped with a variety of games within the framework of the Type Approval. Moreover the number of games available in only one machine has been markedly increased. As a result the dissemination of new games has accelerated. An investment in new games does not necessarily result in an extension of the overall capacity or a scrapping of existing machines.[2]

The obligatory disinvestment of fun games required by the new Gaming Ordinance was not fully achieved in 2008. The average number of fun games per amusement arcade was reduced from 8.3 to 0.3 in 2008. However the sale of AWPs already shrank in 2008.[3] The big manufacturers estimated a reduction of 7.4% down to 100,000 AWPs. This was caused by two factors: The legal life of an AWP which was previously restricted to four years was eliminated by the new Gaming Ordinance and the updating

---

2 This is of special importance for the replacement of games that came on the market in early 2006. During that time there was a bottleneck in the supply of AWPs based on the new Gaming Ordinance, whereby operators had to dismantle all of their fun games without any transition period and their demand for new AWPs could hardly be fulfilled. However, the attractiveness of these “first generation” AWPs was relatively low and they have to be replaced now. Most of the machines will be updated by the installation of only recently developed games within the Type Approval. For the problems during the initial phase of the new Gaming Ordinance, see: H.-G. Vieweg, Die Spielverordnung konterkariert in der Anfangsphase die mit ihr verfolgten Ziele, in: ifo Schnelldienst 2/2006 (59. Jg.) München 2006, pp. 44.

3 The number of AWPs installed in amusement arcades was increased once more in 2008, up to 10.8 per arcade concession (Spielstättenkonzession). It has converged towards the maximal number of 12 AWPs per arcade licence with a remaining 10% left for further expansion in existing arcades. See: J. Trümper, Umsetzung der novellierten Spielverordnung – Feldstudie 2008, Berlin, p. 17.

of the games no longer requires a complete exchange of the machines. But the new games must be within the Type Approval [4]

At the end of 2005 around 87,000 fun games were in operation. Fun games are amusement machines with the issue of tokens. They were developed from AWPs based on British or Dutch legislation and were well-received by clients. The speed of the games made them particularly attractive. Cycles of only a few seconds and absorbing sequences are the reasons players give for choosing fun games instead of AWPs, games that took longer. But fun games were not only used within the regulations. To a certain extent they were abused by the “black sheep” in the industry to provide illegal gambling opportunities. Fun games were then banned as of 1 January 2006 by the new Gaming Ordinance.

From 28 August to 10 December 2006, an empirical study was carried out to investigate the supply of legal and illegal games. It was revealed that only from August 2006 onward did nationwide investment in the new generation of AWPs take place. Their number was 8.28 per concession as of 1 January 2006 and increased by 1.85 to 10.13 machines for the operation of an amusement arcade by the end of 2006. During that period more than five fun-games were dismantled per concession, from 8.3 at the beginning of 2006 down to 2.7 by the end of the year.[5]

---

[4] The operators of amusement arcades have had good experience with AWPs based on the Technical Directive (Technische Richtlinie, (TR)) 3.3. New licences for these AWPs are no longer emitted as of 1 January 2009. From this date only licences are emitted for AWPs based on the Technical Directive 4.0 and higher. The operators have had only little experience with these new AWPs because few machines were made available in 2008 and on-site tests were hardly possible. Accordingly the operators of amusement arcades ordered many of games based on the TR 3.3 in 2008. In pubs, bars and restaurants the situation is a bit different. There the clients do not have much experience with these machines and in this market segment the operators expect the AWPs based on the TR 4.0 to be successful.

[5] Jürgen Trümper (ed.), Alles beim Alten?! From the folder of the working group against pathological gaming for the nationwide conference held in Unna in the Ruhr Area on 9 November 2006, Unna, January 2007 (period of investigation: August to December 2006, p. 48).

In autumn 2008 the number of AWPs installed in amusement arcades amounted to 10.8 per concession. At the same time, the number of fun games had been reduced to 0.3.[6] This means that the total structural change induced by the Gaming Ordinance between 1 January 2006 and the end of 2008 led to a nearly complete disinvestment of fun games, whereas the number of AWPs was increased by 2.5 per amusement arcade concession. This equals a net reduction of the total number of installed amusement machines per arcade of 5.5.

The lower number of amusement machines installed per arcade must not be seen as a disadvantage. There is more freedom for interior design that can be used to make the premises more attractive. This makes new entertainment offerings possible, in particular those with a need for space, such as billiards, which had not often been considered as an opportunity in the past. Also more freedom was given to the design of AWPs within the requirements of the new Gaming Ordinance to prevent the simultanous playing on two and more AWPs.[7]

AWPs are no longer the traditional amusement machines that display gaming results on discs. Newly created features now provide a wide repertoire of games that offer winnings for the successful completion of complex gaming processes. There are different levels of skill linked to different levels of winnings. Moreover, video-based games offer 20 or more three-dimensional games with more exciting plots. These new products attract a broad public and are utilized to a higher degree than the old AWPs. The number of women players has also become remarkably high. Their share of all

---

6 J. Trümper, Umsetzung der novellierten Spielverordnung – Feldstudie 2008, Berlin 2008, p. 17.

7 In practice, the simultaneous playing on more AWPs has become a minor problem since the coming into force of the new Gaming Ordinance. An empirical study revealed: The average gamer does not run more than 1.31 AWPs simultaneously. See: J. Trümper, Umsetzung der novellierten Spielverordnung – Feldstudie 2008, Berlin 2008, p. 70.

gamers using AWPs – a former domain of male clients – rose from 10.3% (2007) to 13.9% (2008).

The introduction of AWPs based on the new Gaming Ordinance has accelerated the dissemination of advanced information and communication technologies. The newly designed machines are controlled by software and usually contain many different games. These so-called multi-gamblers provide a broad range of games with prizes, sometimes more than 50. These AWPs help to reduce bottlenecks during rush hours. This is an important issue, because the ban of fun games induced a significant reduction in the number of machines installed, on average, per amusement arcade.

The entertainment value of the new AWPs is high. They appeal to players and their utilization has increased very much since 2006. The games have become more diversified and induce clients to stay longer.[8] Simultaneously, the pay-out ratio (Auszahlquote) has increased. This means that profitability has not changed in line with the higher capacity utilization. In 2007, on average, a gamer on an AWP had to pay around €20 to €25 for one hour of gaming. In 2008; the average expenses of a gamer have been reduced to €10 to €15 per hour. This payment is much below the upper limit of €33 set by the Gaming Ordinance (§ 12 Abs. 2a SpielV). As a result much of the increased capacity utilization has been compensated by the higher pay-out ratio.

[8] The attractiveness of the AWPs based on the new Gaming Ordinance has led to a higher utilization of capacities. Trümper states that comparing 2008 with 2007, utilization grew from 12% to 26%. According to his findings for fun games, their utilization declined from 13% to 7%. One of the objectives of the new Gaming Ordinance – to pull the rug out from under the fun games – has been reached. The reduced level of utilization indicates the loss in their attractiveness. See: J. Trümper, Umsetzung der novellierten Spielverordnung – Feldstudie 2008, Berlin 2008, p. 68.

1.2. Number of Installed Machines in Germany

The German Industry Association for Coin-operated Amusement Machines, VDAI, maintains records of the amusement machines installed at the end of each year. The machines recorded are not only those supplied by member businesses but also those from other manufacturers, distributors and direct imports. They comprise the number of installed jukeboxes, pinball, sport-games and amusement machines with and without prizes.[9] Since 2007 the number of Internet terminals delivered to amusement arcades, pubs, bars and restaurants has also been included. The total number of installed machines amounted to 295,500 in 2008. (Table 2)

[9] A revision of the stock revealed that the existing wastage rates and the assumptions on the average lifespan of amusement machines was not appropriate for some of the product groups. During the recent past, the reduction of pinball and sport-game machines took place much quicker than experts forecast. The economic lifespan has turned out to be well below the technical possibilities.

Table 2: Installed amusement machines and sport games machines

Type of machine	Number of machines a), b)			
	2005	2006	2007	2008
Amusement machines without prizes			**54,050**	**46,000**
excluding Internet terminals	*102,600*	*42,800*	*36,050*	*26,000*
Pinball machines	2,600	2,500	2,450	2,400
Internet terminals etc. c)			38,000	30,000
Score games etc. d)	*87,000*	*27,000*	*20,000*	*10,000*
Video games	13,000	13,300	13,600	13,600
With prizes	**183,000**	**200,000**	**210,000**	**225,000**
Sport-games machines e)	**26,000**	**25,500**	**25,000**	**24,500**
Total			**289,050**	**295,500**
excluding Internet terminals	*311,600*	*268,300*	*271,050*	*275,500*

a) The estimated number of all machines as of 31 December is based on surveys of the VDAI for the entire market and on other available empirical studies.
b) The figures include machines of non-VDAI members (estimated) and all those sold, rented and leased.
c) Inclusive score games, touch-screen machines, jukeboxes and other amusement machines.
d) Equals product group c) minus Internet terminals.
e) Billiard, dart, table soccer, skittle alleys, bowling, air hockey etc.

Source: VDAI; Arbeitskreis gegen Spielsucht e.V.; FfH Institut für Markt- und Wirtschaftsforschung; calculations of the Ifo Institute for Economic Research.

For many years there has been a reduction in capacities of the installed music, sport-games and amusement machines with and without prizes. This development has been the result of an economically difficult situation for the operators that they have been confronted with for some time. Commercial gaming competes with gambling offered by public companies or by private companies with a public licence. These quasi monopolistic operators have pursued an expansive business strategy and have continuously expanded their product programme. They successfully gained shares in the gambling and gaming market, whereas the AWPs lost ground.

In 2005 the decline of the number of installed AWPs bottomed out with 183,000. This was around 50,000 AWPs less than the 235,000 units in 1996. Since the new Gaming Ordinance took effect on 1 January 2006, the number of AWPs strongly grew and reached 210,000 in 2007. Preliminary figures indicate that the number increased further in 2008 up to 225,000 AWPs. This development indicates that the structural change envisaged by the new Gaming Ordinance has reached one of its objectives: the strengthening of commercial gaming in competition with the public and publicly-licenced gambling and Internet-gambling and gaming.

The improvement of the framework conditions for commercial gaming was linked with the obligation that all fun games and jack-pots have to be dismantled completely and without delay. This process has been nearly concluded and is reflected in the stock of fun games: 87,000 machines were installed at the end of 2005 in 2008 there were only 10,000 fun games left.[10]

Likewise the stock of amusement machines without prizes and sport-games machines has shrunk. For most of the product groups, the decline has not yet come to an end. Two factors are worth mentioning: The operators’ investment budgets have been very much focused on the procurement of AWPs, leaving few funds for the procurement of other amusement machines. The remarkable attractiveness of the new AWPs has induced new clients, who in the past used other entertainment offerings of the amusement machine industry, to shift their activity to AWPs. It is assumed that the additional investment expenditures that have been caused by the new Gaming Ordinance will be concluded in 2009. This provides a better outlook for those market segments that have not yet benefited from the good investment climate with the operators. It is expected that the

[10] Empirical investigations have determined that the number of fun games per amusement arcade licence was 8.3 at the end of 2005. By the end of 2008 the number was reduced to only 0.3 fun games. See: J. Trümper, Umsetzung der novellierten Spielverordnung – Feldstudie 2008, Berlin 2008, p. 17.

share of amusement machines without prizes and of sport-games machines in the stock of installed machines will at least not be reduced further.

Internet terminals are considered as an additional offering that contributes to attracting new clients. However this product area is not understood as an independent new business area. It does not define any new specific entertainment activity but an unspecific service. It is offered from the standpoint of gaining new clients who might then find interest in the other services supplied by the operators. The dissemination of Internet terminals in amusement arcades and in pubs, bars and restaurants has not yet been concluded and further strong growth is expected.

1.3. Turnover of the Amusement Machine Industry

The amusement machines industry is divided into three sectors: machine manufacturers, wholesalers and operators. In 2008 their non-consolidated turnover amounted to €4.44 billion. Since 2007 the statistics also include Internet terminals designed for installation in amusement arcades, in pubs, bars and restaurants. Based on the previous classification total turnover in 2008 was €4.36 billion, surpassing the preceding year by 8.2% (Table 3).

Machine manufacturers and wholesale distributors enjoyed strong growth for the fourth consecutive year. Their turnover by sales, renting and leasing of amusement and sport-games machines (excluding Internet terminals) grew by 18.4% in 2008 up to €1.03 billion. The total market value of amusement and sport-games machines (including Internet terminals) was €1.05 billion 2008, 18.9% more than the previous year.

Table 3: Turnover of the amusement machine industry

Branch	In million euros 2006	2007	2008
Total (non consolidated) [a]		***4,090***	***4,435***
excluding Internet terminals	*3,740*	*4,030*	*4,360*
Total turnover with machinery [a), b), c)]		**880**	**1,045**
excluding Internet terminals	*770*	*870*	*1,030*
Manufacturers (own production & imports)	360	420	500
Wholesale distributors	410	450	530
Operators [a) d)]		**3,210**	**3,390**
excluding Internet terminals	*2,970*	*3,160*	*3,330*
Amusement machines with prizes [d) e)]	2,750	3,050	3,250
Amusement machines without prizes and sport-game machines		160	140
excluding Internet terminals	*220*	*110*	*80*

a) Including Internet terminals from 2007 onwards.
b) Manufacturing companies and wholesale (Sales, renting and leasing of amusement machines and software-packages, incl. licencing fees).
c) Also includes estimates for imports from non-members of the VDAI and turnover from exports of German manufacturers.
d) Income of operators = cash payments including innkeeper's share and VAT, amusement tax, etc.

Source: VDAI; calculations of the Ifo Institute.

2006 was marked by the implementation of the new Gaming Ordinance. The operators had to disinvest all their fun games without any transitional arrangement. Opportunities for compensation were lacking.[11] Until early summer, manufacturers and wholesalers were not able to make AWPs available that were designed in line with the improved

[11] H.-G. Vieweg; Wirtschaftsentwicklung Unterhaltungsautomaten 2006 und Ausblick 2007, München, January 2007, p. 23.

regulation. As a result the operators' turnover plunged. It was only in late summer that they were able to expand their businesses considerably and regain lost market shares. However, on average for 2006, total turnover fell short of that of the preceding year by more than 7%. The operators enjoyed a gain of 17% with AWPs, but with other amusement machines they suffered a setback of 60% because of the ongoing disinvestment of fun games.

Not until 2007 did the positive effects of the new Gaming Ordinance become noticeable. The turnover with AWPs increased at a double-digit rate – by 11% – and was able to compensate for the ongoing losses in the turnover with other amusement and sport-games machines. The total turnover of the operators grew by 6.5% in 2007. The upward trend continued in 2008, with total turnover exceeding that of the previous year by 5.5%.

2. The German Market for Gambling, Gaming and Amusement Machines

Commercial gaming has a long-standing tradition in Germany. Since the early 1950s it has developed on a reliable legal basis. It has always has been the most prominent business area of the amusement machine industry. Growth stimulating innovations in other product groups have never called into question the outstanding importance of commercial gaming.

At the beginning of the early 1980s numerous novelties based on touch-screen machines, which were quite primitive by today's standards, were put on the market. During the late 1980s innovations in sport-games machines were driving factors. During all of the 1990s the more advanced information and communication technologies spurred the pace in innovation. Video-game machines, touch-screen machines, driving simulators, etc. added to the supply of the amusement machine industry and became more and more sophisticated. However, commercial gaming has always remained the bread-and butter business.

Until the middle of the current decade, commercial gaming contributed around 70% to the total gross revenues of the operators. With regard to the legal framework conditions, the market penetration was high and the development of new growth potentials by a more attractive supply and the broadening of the customer basis was not possible. The Gaming Ordinance in force until the end of 2005 was extremely restrictive and only allowed minor product innovations, which were not sufficient to attract new clients or only let along retain the old.

Under these difficult conditions, commercial gaming was not able to compete with publicly-licensed and public companies that offered gambling in a quasi monopolistic environment. As a result it lost market shares. The operators in the commercial gaming market did not have sufficient leeway to counter the expansive business strategies of the suppliers in the gambling market with comparably attractive products. This fact induced the Federal Ministry of Economics (BMWi) in 2000 to start a structural reform of the Gaming Ordinance, which was not concluded until the end of 2005.[12] Since 1 January 2006 the amusement machine industry has been operating under the more favourable framework conditions of the new Gaming Ordinance, which has provided scope for the exploitation of the possibilities of advanced information and communication technologies.

Until the end of the 1970s traditional casino games – such as Roulette, Baccarat, Craps, Poker – were the main business area of public and publicly-licenced casinos. In the beginning of the 1980s, gambling with slot-machines only accounted for around one

---

[12] H.-G. Vieweg, Wirtschaftsentwicklung Unterhaltungsautomaten 2000 und Ausblick 2001, München 2001, p. 17.

tenth of gross revenues. Since then the casinos have placed much emphasis on the expansion of this business area. They did not only invest in new capacities for slot-machine parlours in their traditional premises but also in new branches above all in downtown areas. Already in 1990 slot-machines contributed 45% to the casinos' gross revenues. A decade later it had reached 70% and currently the share is 75%.

The public and publicly-licenced casinos successfully ran a "trading-down" strategy and developed a new customer base. A new clientele has been won, in particular by erecting slot-machine parlours in downtown areas, abolishing dress regulations and offering the opportunity of low stakes. The admission age was reduced from 21 to 18 years and the access prohibition for residents has been lifted. The changes in the regulatory environment and the strategies of the casinos have been directed at clients with a small purse.

Since 2000 the casinos' pace of growth has slowed down. This is interpreted as a growing market penetration, although it varies significantly among the German federal states.[13] But beyond market penetration a growing, competing legal and illegal gambling supply – such as online-casinos, sports betting and Internet-poker as well as a variety of lotteries without stakes in the media – is now as large as the whole gambling and gaming market. Nevertheless, the gross revenues of the casinos with slot-machines experienced an average annual growth of 1.1% between 2000 and 2007. But the situation in traditional casino games has turned out to be extremely difficult. It suffered losses and shrank by 4.2% per annum, on average (Table 4).

---

[13] The market penetration – measured by the number of slot-machines per 1,000,000 inhabitants – varies strongly among the German federal states. In 2007 Saarland was on top with 424 slot-machines, followed by the Free Hanseatic Cities of Bremen and Hamburg with 382 and 281 slot-machines, respectively. Thuringia was at the bottom with only 39 slot-machines in the casino of Erfurt, only established in 2005. (Calculations based on statistics of the Federal Statistical Office of Germany)

Table 4: The Gambling and Gaming Market in Germany

- calculated by gross revenues -

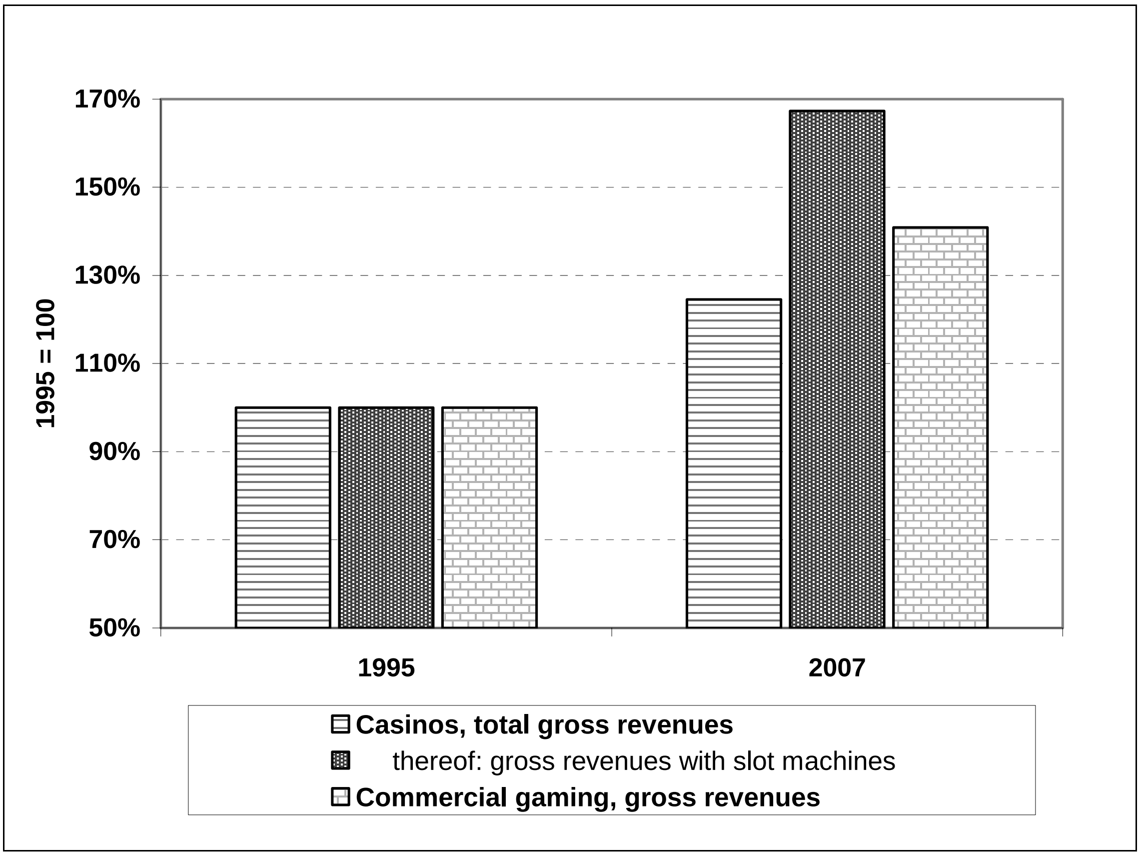
Market segments	**Units**	**2000**	**2005**	**2007**	**2001 – 2007** Annual average change rate in %
Casinos	**mn €**	**945**	**940**	**923**	**-0.3 %**
thereoff:					
Slot machines	mn €	662	705	713	1.1 %
Share of total	in %	70.0	75.0	77.2	
Traditional casino games	mn €	284	235	210	-4.2 %
Commercial gaming (amusement machines with and without prizes and sport-games machines)	**mn €**	**3,170**	**3,200**	**3,160**	**-0.05 %**
thereoff:					
AWP	mn €	2,260	2,350	3,050	4.4 %
Share of total	in %	71.3	73.4	96.5	
Amusement machines without prizes and sport-games machines	mn €	910	850	110	-26.0 %

Source: Syndicate and Working Group of German Casinos (DeSIA); Archiv und Informationsstelle der Deutschen Lotto- und Toto-Unternehmen; Ifo Institute for Economic Research.

For the period under consideration, commercial gaming showed a better development, on average. Gross revenues expanded by an annual average rate of 4.4% between 2000 and 2007. But this growth was nearly entirely caused by developments in 2006 and 2007. Under the framework conditions of the new Gaming Ordinance, the operators were able to expand their gross revenues by around one third. This upsurge shows that the amusement machine industry can compete with the public and publicly-licenced gambling. This was one of the objectives pursued with the revision of the Gaming Ordinance. But a close look at the revenues from amusement machines without prizes and sport-games machines reveals that the complete abolishment of the fun games – another objective pursued with the new Gaming Ordinance – has taken its toll. They slumped to one eighth of what their value was only two years earlier. Total revenues of the operators during the years under consideration – from 2000 to 2007 – largely stagnated. It was not even possible to compensate for inflation.

Because of the strong growth of commercial gaming during 2006 and 2007, the amusement machine industry has gained shares in the total market for gambling and gaming. However, a long-term analysis discloses that – as compared with the mid-1990s – the recent expansion has only compensated for some of the losses of the past. The gross revenues of commercial gaming in 2007 were 40% higher than in 1995. This is less than the expansion of gross revenues with slot-machines in the casinos and slot-machine parlours in downtown areas, which recorded a plus of 67% in 2007. (Graph 1)

Graph 1: Gross Revenues of Casinos and Commercial Gaming



Source: Syndicate and Working Group of German Casinos (DeSIA); Archiv und Informationsstelle der Deutschen Lotto- und Toto-Unternehmen; Ifo Institute for Economic Research.