
Television and the Internet: Are they real competitors?

EMRO Conference 2006 – Tallinn (Estonia), May 2006

Carlos Lamas, AIMC

Introduction

Ever since the Internet's penetration began to be significant (from around 1996 onwards), people have been warning about the threat this new medium poses to television consumption. Although the warnings were not as strident, the phenomenon paralleled the doom-laden predictions made many years before, that the emergence and growth of television would sound the death knell of radio.

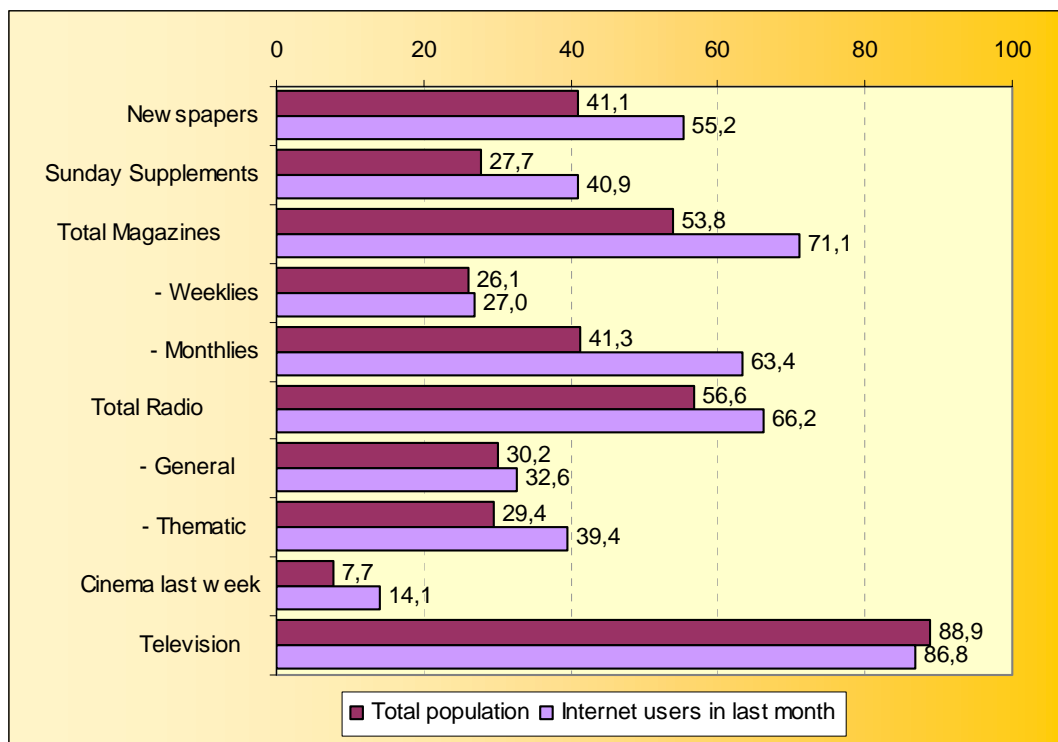
As might be expected, this idea of a confrontation between media channels inspired academics worldwide to analyse the effects of Internet use on television. However, these studies have so far failed to produce any conclusive results overall, as in purely numeric terms, there are at the moment as many studies correlating the rise of the Internet with the decline of television as those that find no significant impact of one medium on the other.

Historically, without wishing to exclude other less common approaches, this issue has been studied using two basic methodological focuses: the comparative analysis of television consumption among Internet users and the population at large (or between Internet users and non-Internet users) and surveys of Internet users asking them what activities have been most powerfully affected by the time they now spend online. We will comment on the characteristics and findings of each of these focuses and put forward an approach aiming to overcome their limitations.

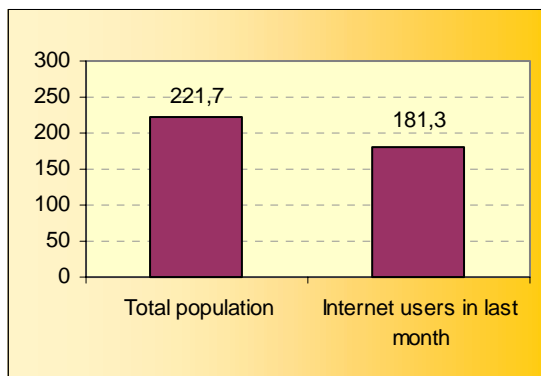
Comparative analysis of Internet-users and non-Internet users

The idea is to compare the behaviour of the population in general with that of Internet users as a group as regards media (television and the Internet specifically) so as to identify any differences and derive their consequences. The source of information is necessarily a survey measuring different media simultaneously.

If we look at the results provided by the EGM multimedia survey, the situation for Spain looks as follows:



In addition to the daily reach of television shown by the preceding graph, it is also worth comparing relative television consumption (average daily viewing in minutes) between the two groups:

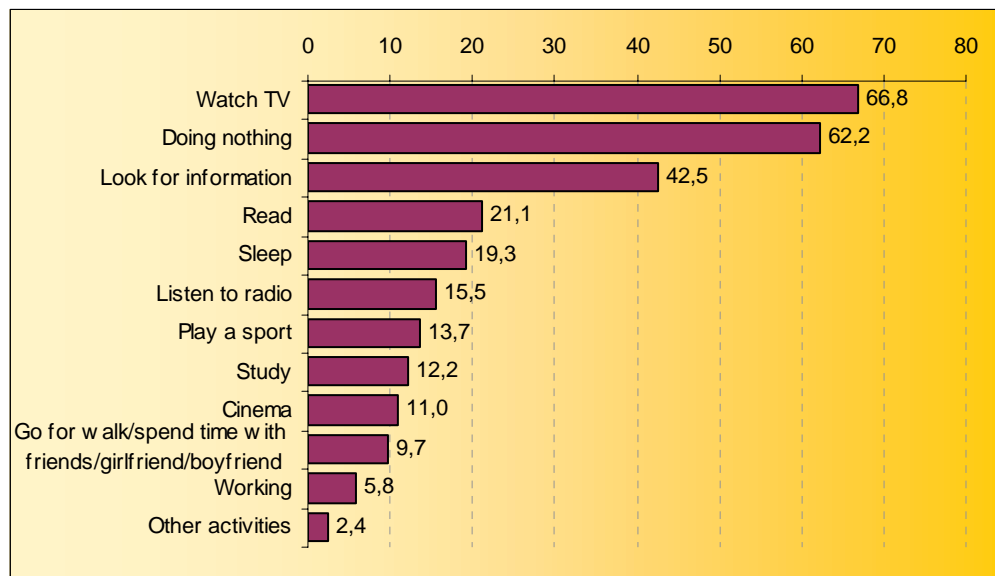


The first figure clearly shows that, in general, Internet users consume more media than non-Internet users. The Internet-using population reads more newspapers, more magazines (particularly monthlies), listens to more radio (particularly musical stations) and goes to the cinema more often. The only exception to this rule is the share accounted for by television, as Internet users devote 18% less time to television than the average for the population as a whole.

The problem with this type of analysis is that it is basically descriptive and static, which makes it hard to argue for any cause-effect relationships. In other words, Internet users go to the cinema more often, for example, but it is impossible to deduce that this difference in their habits is a result of their having started to use the Internet. It is more reasonable to suppose that other factors are at work to explain their differences in behaviour, such as age, educational attainment, size of habitat, etc. In other words, it is quite possible that the Internet user was a strong media consumer or watched television less than average before going online.

Internet-user surveys

As mentioned, in these surveys a sample of Internet users are asked their opinion about what activity (from a list of possible activities) they have cut down on in order to make time for the Internet in their schedule. AIMC introduced this question in January 2000 in the third edition of the *la Encuesta AIMC a usuarios de Internet* (AIMC survey of Internet users). The replies to this question in the most recent published edition of the survey (January 2006 with a sample of 57.310 interviews) were as follows:



Here we see that it is television consumption that is considered to be most powerfully affected. This result matches with that found in most surveys of this kind.

Nevertheless, it is difficult to consider these statements to be conclusive. People's relationship to television is generally very strong, but they are often a little ashamed to admit it. This can shape the answers given and imbue them with a deceptive subjective charge.

Moreover, the fact that "doing nothing" is the activity mentioned in second place suggests that people's memory is highly imprecise.

The TV meter panel

In the search for a more appropriate means of investigation it would seem, first of all, that we should concentrate on the home, as use of the Internet in the workplace - although undoubtedly significant- has no great likelihood of reducing television viewing time. Similarly, the potential effect on television is almost exclusively concentrated in households with Internet access.

Moreover, the ideal instrument of analysis would be provided by an ongoing panel-observation study (rather than a questionnaire-based survey) which measures television and Internet use at the same time. This could be achieved using a classic TV meter panel such as the *TNS AM* in Spain, in which homes with Internet access could be equipped with monitoring and control software such as that used by *NetRatings*.

We currently lack this ideal instrument, however. Nevertheless *TNS AM* has gathered Internet access data on the homes in its Spanish meter panel and this will enable us to tackle the issue of the effect of the Internet on television viewing from a new viewpoint¹.

¹ A similar study was reported in the Netherlands by *Paul van Niekerk and Marlies van Bergen* on data from the *Intomart GFK* panel. Their findings were presented at WAM in Montreal in June 2005.

Analysis conducted

Information is available on whether each household in the *TNS AM* panel has Internet access together with the six-month period in which the Internet was first accessed.

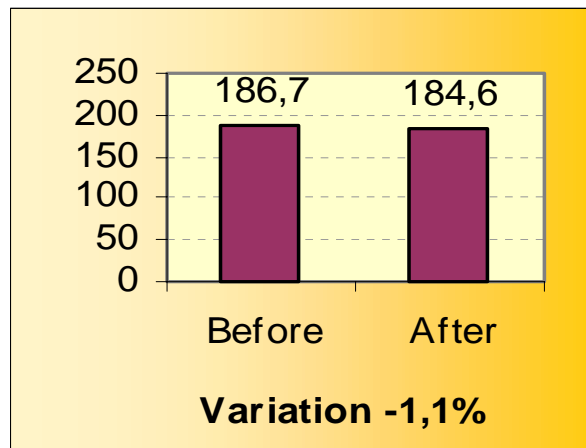
Start of Internet access	1 half year later		2 half years later	
	Households	Individuals	Households	Individuals
2nd half of 97	2	4	2	4
1st half of 98	6	18	5	16
2nd half of 98	12	42	12	42
1st half of 99	15	53	13	49
2nd half of 99	27	85	19	61
1st half of 00	25	81	19	63
2nd half of 00	37	121	25	79
1st half of 01	24	75	19	58
2nd half of 01	28	87	22	65
1st half of 02	18	54	15	45
2nd half of 02	19	61	12	38
1st half of 03	13	41	9	28
2nd half of 03	19	53	16	41
1st half of 04	18	55	15	50
2nd half of 04	15	52	-	-
Total	278	882	203	639

The table above shows the number of experimental units broken down by the half year intervals in which each household was first connected to the Internet. In order to obtain sufficiently solid consumption estimates at the individual level, only those panellists who belonged to the usable (in-tab) sample of the panel on at least 20 days of each and every month in the six month period before the period where the Internet connection took place and one or two half years afterwards have been taken into account.

Individual and six-monthly consumption reported by the panel has been adjusted to cancel out seasonal effects. These adjustment factors were calculated based on the relative consumption of the first and second half of 2000 to 2005. It was not considered necessary to apply adjustments by year given the stability of annual consumption since 2000.

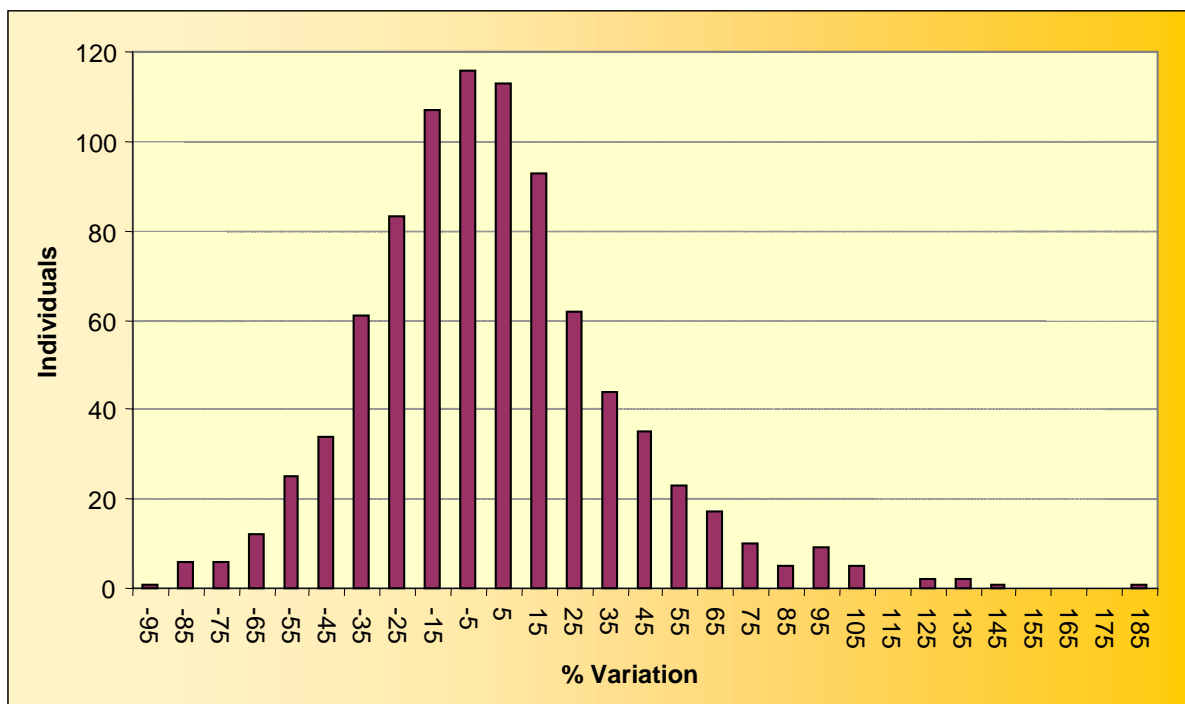
Finally, adjusted consumption was consolidated for the two half-years immediately preceding and immediately following the half-year in which Internet access began. The data aggregate the results of a common sample (both half years) of 882 individuals.

The results obtained were as follows:



The drop in consumption of 1.1% is, however you look at it, insignificant.

Obviously, this negligible effect is the aggregated result of variations in the viewing habits of various individuals, some of whom will have increased consumption and some decreased. The frequency distribution of the percentage variations at individual level shows the following shape:



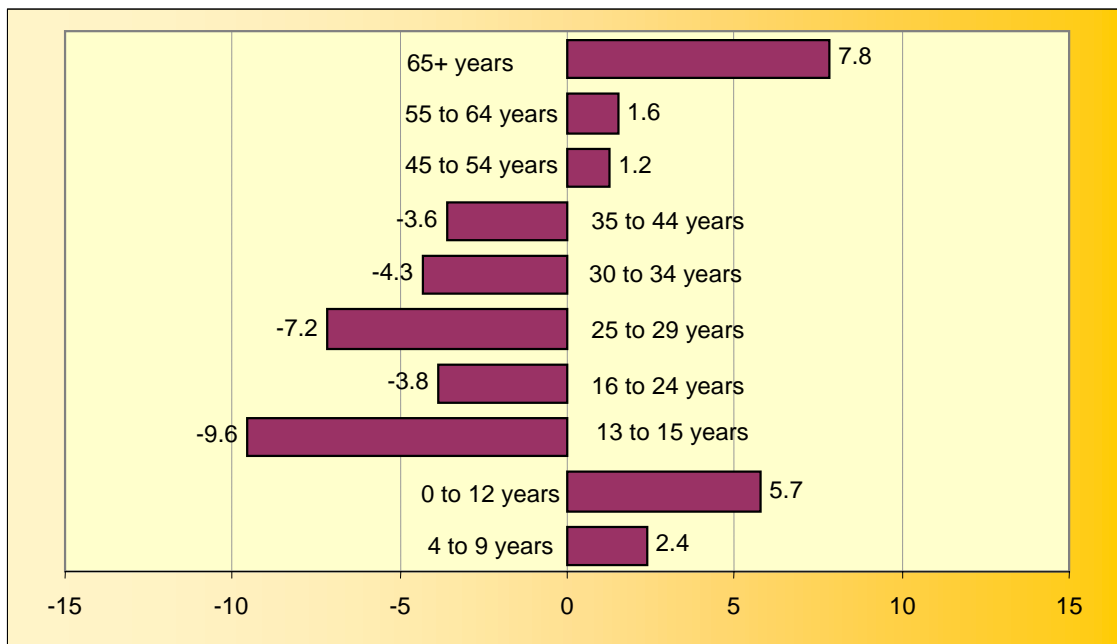
We obtain a slightly asymmetrical bell-shaped curve, limited to the left at -100.

To interpret these results correctly it is essential to take into account the fact that all the individuals in the household that has had an Internet access installed are included. However, not all the members of these households have necessary become Internet users. Hence any effect Internet use may have will be damped to some extent in this analysis.

The overall information has been analysed by age, sex, social class, etc. and the most revealing segmentation is that for age.

	Average minutes previous half year	Average minutes following half year	Variation	No. individuals
4 to 9 years	142.2	145.6	2.4	64
10 to 12 years	141.0	149.1	5.7	33
13 to 15 years	154.4	139.6	-9.6	46
16 to 24 years	151.2	145.4	-3.8	141
25 to 29 years	150.4	139.6	-7.2	79
30 to 34 years	204.7	195.9	-4.3	74
35 to 44 years	192.2	185.3	-3.6	169
45 to 54 years	208.8	211.4	1.2	131
55 to 64 years	234.2	237.8	1.6	84
65+ years	261.2	281.6	7.8	61

The direction of the differences can perhaps be seen best graphically.

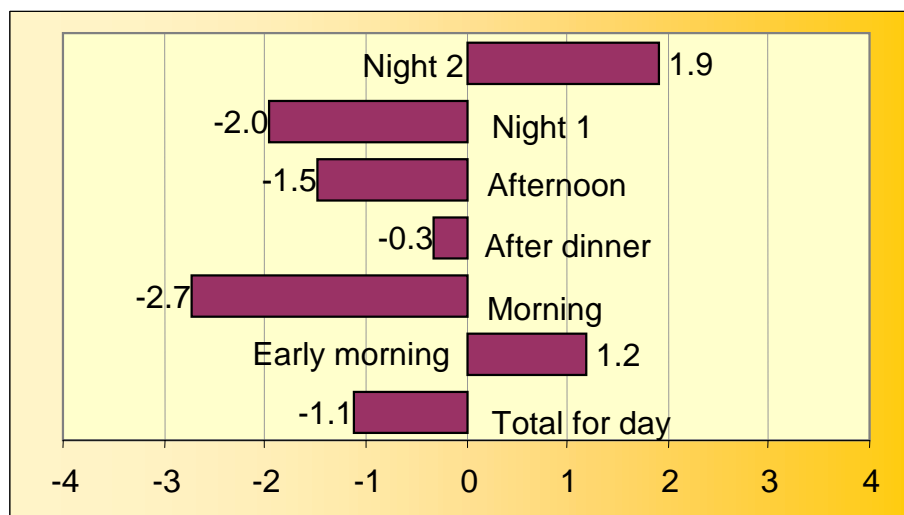


As the figure shows, it is among young people and the middle aged (the most likely Internet users in the household) where the drop in television consumption seems to have a small effect.

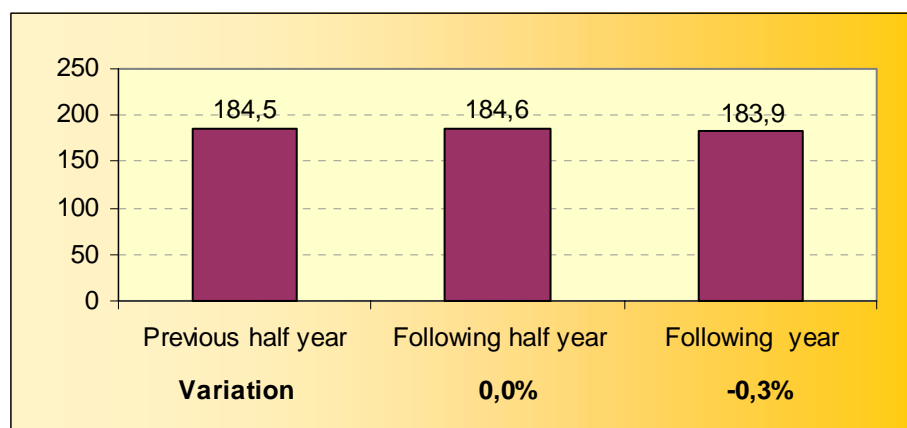
No significant results emerge when the data are segmented along other variables.

	Average minutes previous half year	Average minutes following half year	Variation	No. individuals
Male	174.7	172.8	-1.1	431
Female	198.1	195.9	-1.1	451
Employed	194.2	193.9	-0.1	515
Unemployed	176.1	171.6	-2.5	367
University degree	164.6	160.9	-2.2	143
Secondary education	182.4	178.1	-2.4	269
Primary education	214.3	214.3	0.0	310
No education	159.9	159.2	-0.4	160
Upper socio-economic class	156.2	146.6	-6.1	103
Mid-upper socio-econ. class	180.0	180.9	0.5	219
Mid-middle socio-econ. class	188.6	187.7	-0.5	340
Lower-middle socio-econ. class	198.9	197.2	-0.9	179
Lower socio-econ. class	229.3	219.6	-4.2	41
1-2 people	185.1	187.5	1.3	134
3-4 people	191.2	185.3	-3.1	504
5 or more people	178.1	181.6	1.9	244
<2,000 inhabitants	182.2	182.2	0.0	69
2,000 to 10,000 inhabitants	195.7	190.8	-2.5	141
10,000 to 50,000 inhabitants	196.4	191.2	-2.7	203
50,000 to 200,000 inhabitants	167.0	173.0	3.6	204
200,000 to 500,000 inhabitants	180.0	182.5	1.4	108
Over 500,000 inhabitants	198.0	188.2	-5.0	157
Andalusia	200.0	197.0	-1.5	128
Catalonia	207.5	208.5	0.5	114
Basque Region	177.5	168.5	-5.1	104
Galicia	157.3	153.8	-2.3	52
Madrid	192.4	180.7	-6.1	135
Valencia Region	197.5	196.1	-0.7	94
Canary Islands	177.7	187.2	5.4	127
Castilla-La Mancha	164.1	165.9	1.1	98
Rest of Spain	185.3	182.5	-1.5	30

When the available time-block information is analysed some differences can be seen, but they are not very significant. The strongest influence seems to be on the *Morning* and *Night1* intervals.



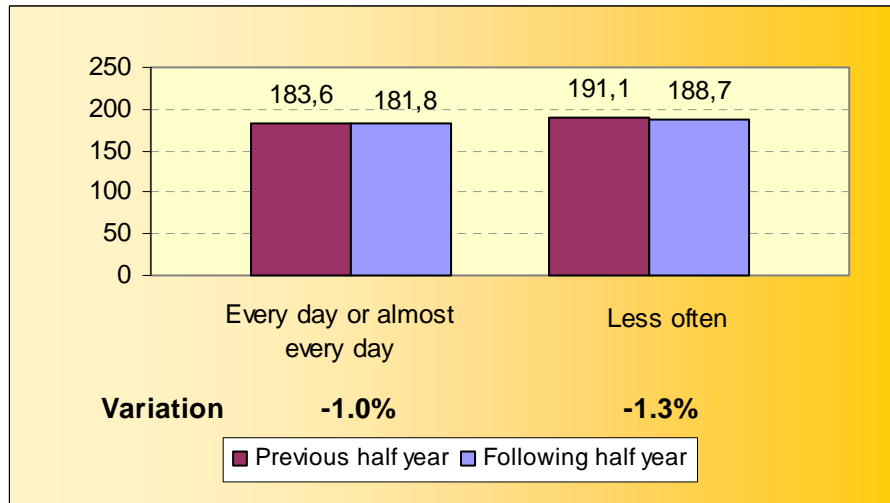
In order to see possible effects over a period longer than six months the same type of analysis was repeated for the common sample for the three half-year periods (the one immediately before getting an Internet connection and the two immediately afterwards). The result does not add anything new and continues to suggest a negligible effect.



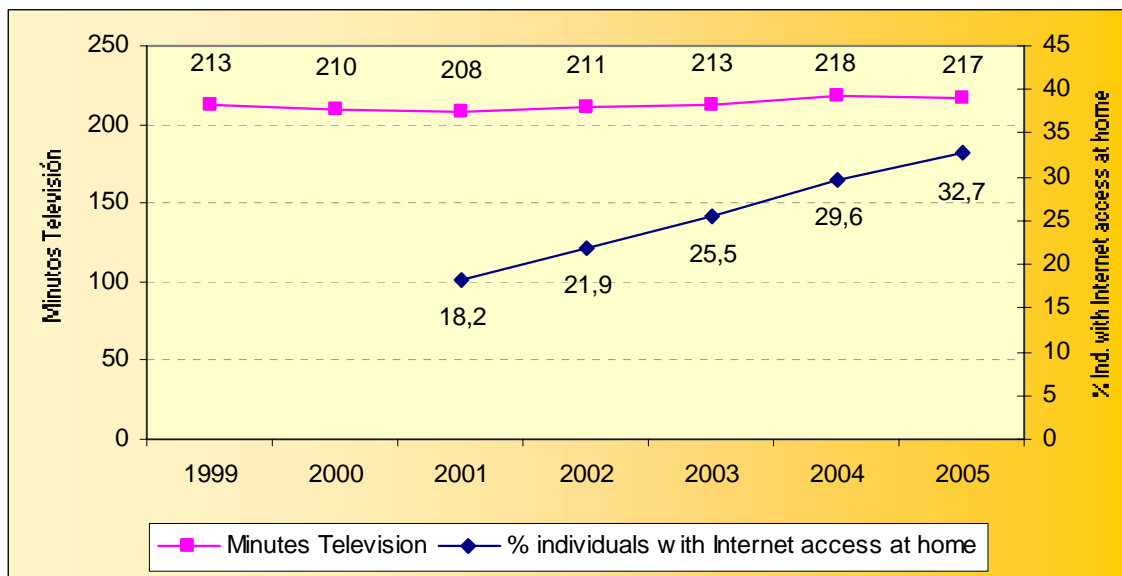
We also analysed the effects segmenting Internet users according to frequency of use. *TNS AM* collects information from its panelists regarding their answer to the question *how often the household accesses the Internet*. The answers are divided into three categories:

- Ever day or almost every day.
- Once or more a week.
- Once or more a month.

The results obtained do not allow any inferences to be made as to the differential effects of frequency of access.



This absence of negative impact on television consumption is to some extent confirmed by the historical time course of the basic television and Internet indicators. The figure below shows the progressive take-up of Internet access by households² in Spain and the consistent stability of average television viewing time³.

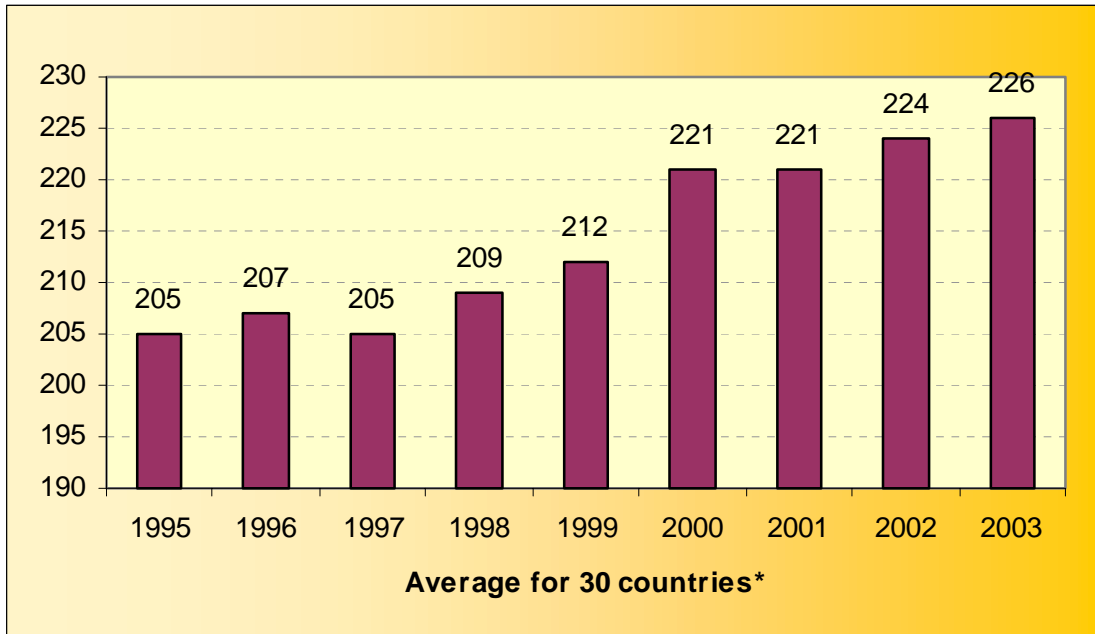


On the international level, a slight increase in television consumption is observed, while Internet penetration is increasing in all countries. The first graph shows the time course in 30 countries and the second in European countries only⁴.

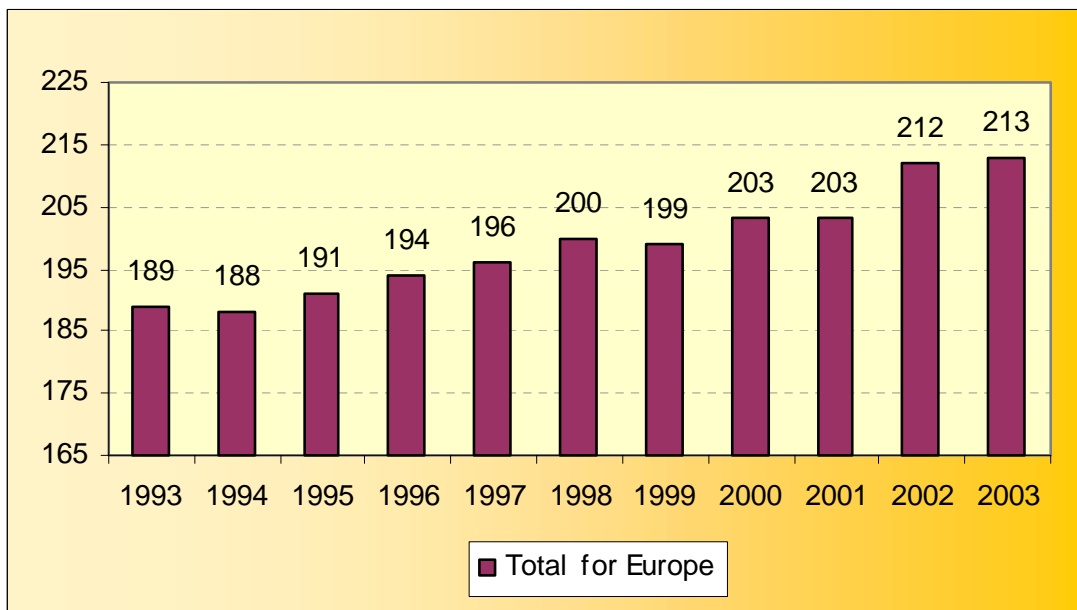
² EGM data

³ TNS AM panel

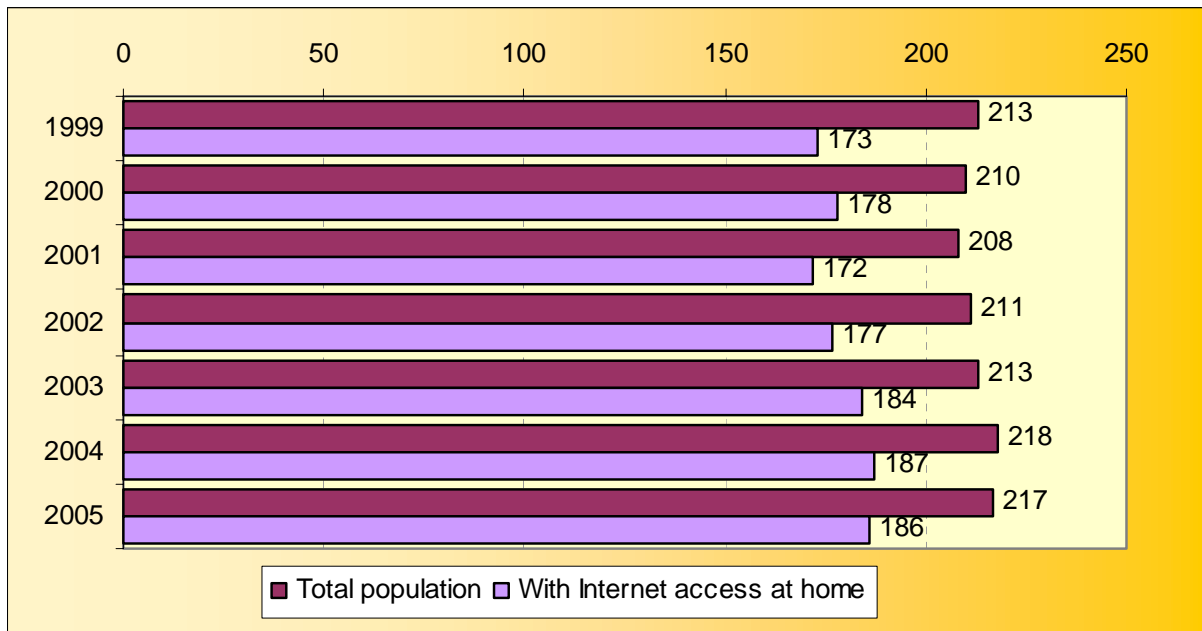
⁴ Médiamétrie / Eurodata TV data



* Belgium (north and south), Denmark, Finland, France, Germany, Greece, Ireland, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, UK, Hungary, Turkey, Argentina, Brazil, Chile, Mexico, Venezuela, Canada, USA, Australia (Melbourne and Sydney) and South Africa.



The Spanish meter panel confirms the EGM's findings that Internet users consume less television than the population in general. According to the *TNS AM* panel, individuals belonging to households with an Internet connection systematically consume 14% to 19% less than the total population in a given year. As might be expected, the differences can be seen to decrease over time.



Conclusion

The analysis conducted does not suggest that a household's becoming connected to the Internet has a significant effect on television consumption. So television does not need to worry yet about competition from the Internet.

In short, the winner in this zero-sum game of competition for a share of our time is the use of the screen. Whether it is used to surf the web or watch television (and more still if we add mobile phone or PDA screens), electronic screens are occupying an ever more important place in our lives.

Bibliographic References

- AIMC. *7^a Encuesta AIMC a usuarios de Internet*. January 2005.
- Braun, Jacques et al. *Television viewing, channels market shares. Top 10 programmes in 72 territories. Latest trends in TV programmes*. Médiamétrie, 2004.
- Van Niekerk, Paul and Van Bergen, Marlies. *Television use by different generations of Internet users*. WAM, Montreal, 2005.