

## DOLLY PCs. THE CASE OF THE SPANISH BASQUE COUNTRY

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The capacity to use administrative information for statistical aims constitutes one of the demands that faces official statistics not only from governmental or administrative authorities, but also more and more from society itself, which is somewhat saturated from answering questionnaires or requests from a great variety of origins.

The Basque Government Programme 'Konekta-Zaitez' (Get Connected) has provided a database that enables us to analyse the amount and characteristics of home computer equipment, sold over a determined period.

The aim of this programme, included in the 'Basque Country in the Information Society Plan', consists of introducing Basque families to the Information Society by means of a 270 euro subsidy for the purchase of personal computers (PC, Mac or laptop) with an Internet connection and certain minimum technical characteristics according to the type of equipment. A list of these characteristics may be found at:

<http://www.eustat.es/varios/informes/inf1783.pdf> (pages 3 & 4).

The size of the subsidy, which represents 19.3% of the average price of equipment in the year 2000 and 20.5% in 2001, leads us to believe that the vast majority of the equipment used by families has been bought through this programme.

It should be noted that the Basque Government provides 56% of the subsidy and the rest comes from a series of financial institutions that collaborate with the programme, if the purchase is financed through them. The campaign started at the end of November 2000. In the first year, 17,989 computers were sold through the programme and another 88,373 in the whole of 2001.

Let us now look at the characteristics of buyers, equipment and their evolution in time.

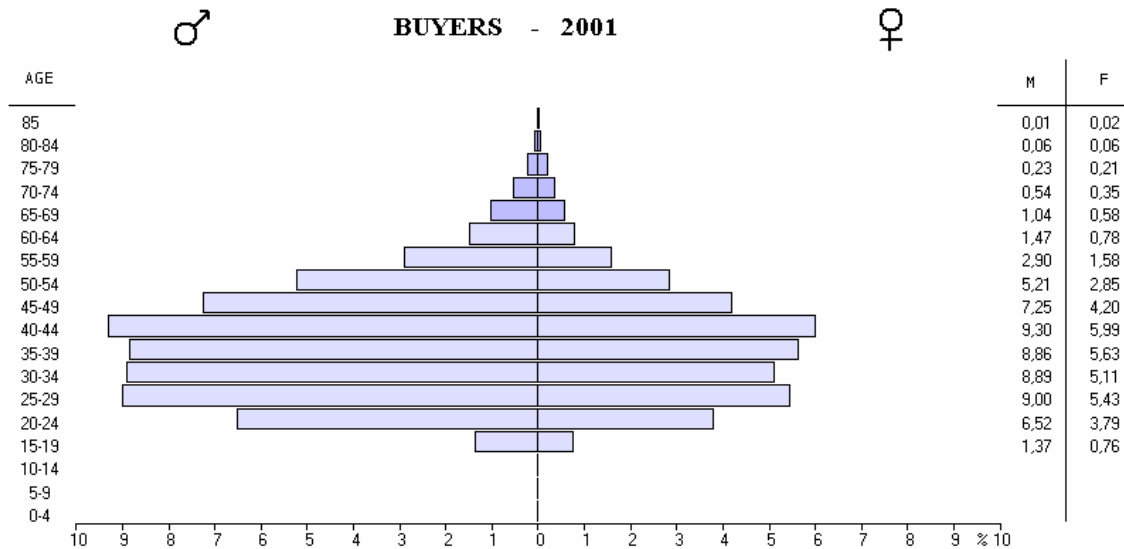
### **Characteristics of buyers**

Three personal characteristics are included in the management of the programme: sex, age and town of residence.

In the year 2001, almost two in three buyers of home computers were male –62.7%, a drop of only one percent in comparison with the year 2000. The distance between sexes found in the surveys on families in the Information Society and appears again in the selection and purchase of equipment. See

<http://www.eustat.es/varios/informes/inf1781.pdf> (page 23)

The average age of buyers is 38 (both for males and females), which indicates that we are speaking predominantly about parents. In fact, 50% of purchasers are aged between 35 and 54 years. 2 in 5 are young persons aged between 15 and 34. The remaining 10% are persons aged 55 and over; more than likely, many are parents and grandparents purchasing equipment for their children/grandchildren.

**Graph 1. Pyramid of computer equipment buyers in the Basque Country. 2001.**

Source: Eustat, EKZ-2001.

The place of residence is also linked to the distribution of buyers: the larger the size of town of residence the higher the purchase rate, large towns more than doubling the rate for smaller villages. The rate increased from 19.1‰ for villages of 500 inhabitants or less to 48.6‰ for populations of over 100,000. Comparing the same rate with the provinces of Bizkaia and Gipuzkoa, Álava presented a rate 11 percentage points higher.

**Table 1. Population, buyers and annual purchase rate by size of town and province. 2001. (‰)**

	1996 Population	Buyers	Annual Rate o/oo
<b>ALL</b>	<b>2.098.055</b>	<b>88373</b>	<b>42,1</b>
≤ 500 Inhabitants	19.315	369	19,1
501 - 1.000	30.854	759	24,6
1.001 - 5.000	173.870	5894	33,9
5.001 - 10.000	165.590	6577	39,7
10.001 - 40.000	567.987	20980	36,9
40.001 - 100.000	289.948	12445	42,9
>100.000 Inhabitants	850.491	41349	48,6
<b>PROVINCE</b>			
Álava	281.821	14624	51,9
Bizkaia	1.140.026	46317	40,6
Gipuzkoa	676.208	27432	40,6

Source: Eustat, EKZ-2001.

The ageing population in the rural world, the alienation of the agricultural world from communication and information technologies and the distance to get to equipment information and sales outlets, may all contribute to the lower level of sales in small villages. The macrocephaly of Álava, whose capital –Vitoria-Gasteiz–, concentrates three quarters of the population in the province, would explain the higher rate in comparison with other provinces.

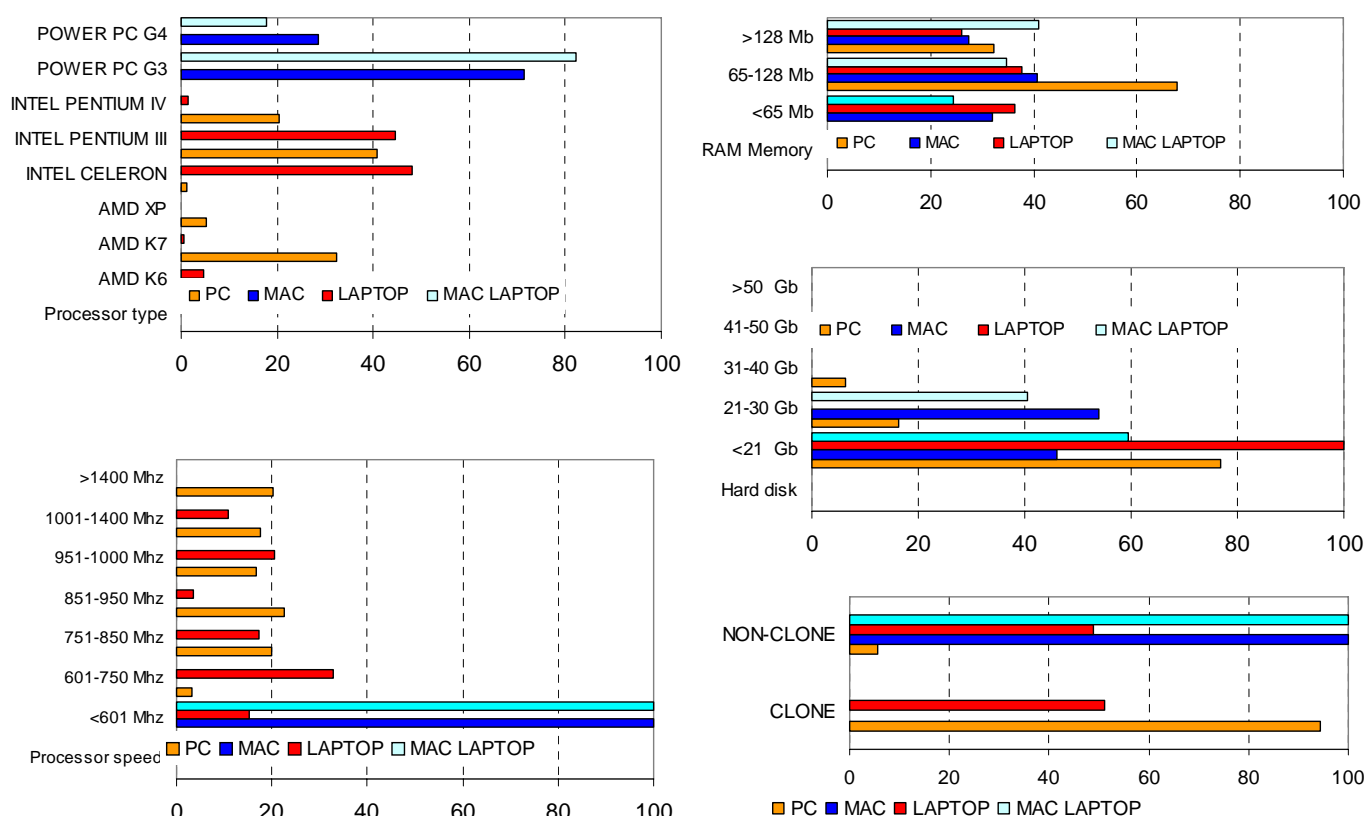
## Equipment: characteristics and components

In the year 2001 the percentage of personal computers sold that could be considered clones came to 88.8%, this figure having fallen with regard to the year 2000, when it was 93%. Clones are considered to be computers resulting from the assembly of different components originating from different suppliers. Non-clones are sold bearing trademarks identified in the market. They are usually better known and their components are mainly manufactured and assembled with the same mark of identification.

If we consider the type of equipment, 94% of PCs are clones, while laptops are divided more equally between clones -51%- and non-clones.

88.3% of the equipment sold is PCs, 10.6% are laptops and the rest are MAC, either desktop or laptop. With regard to the year 2000, we may say that laptops have doubled in number, and represent 4.8% of the total this year.

**Graph 2. Equipment sold by basic characteristics, according to type of computer. 2001.%.**

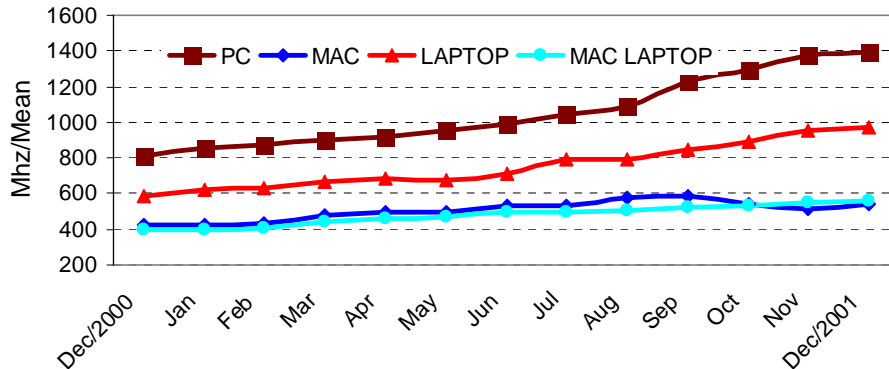


Source: Eustat,EKZ2001

Starting with PCs, we can say that 41% have an Intel Pentium III processor, 32% an AMD K7 and 20% an Intel Pentium IV. Among PCs sold in the year 2000, 84% had Intel Pentium III processors, as the Pentium IV had hardly started to be distributed. Almost half the laptops were equipped with an Intel Celeron, and 45% with Intel Pentium III.

71% of the desktop Macs and 82% of laptop Macs had a POWER PC G3 processor, without significant variations with regard to 2000.

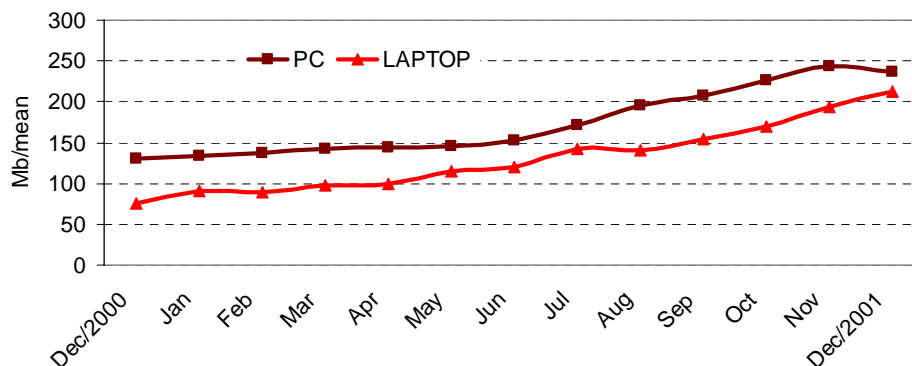
**Graph 3. Montly evolution of average processor speed of equipment sold by type. 2000-2001 .Mean.**



Source: Eustat, EKZ2000-2001.

From December 2000 to the same month in 2001, PCs sold to families increased in speed by 72%, laptops increased 66%, Mac laptops 43% and Mac desktops only 27%.

**Graph 3. Monthly evolution of the average processor memory of equipment sold by type. 2000-2001. Mean.**



Source: Eustat, EKZ2000-2001.

Processor RAM memory grew more sharply: for PCs it almost doubled in a year, increasing from 130 Mb to 237 on average. However, the most spectacular growth was found among laptops which almost tripled, rising from 76 Mb in December 2000 to 212 in December 2001. Macs also offered similar increases: 90 Mb for desktops increasing to 211 on average.

Hard Disk capacity did not seem to vary: the vast majority of equipment has 20 Gb (77% of PCs and 100% of laptops).

With regard to 2000, in which only 18% of equipment sold was equipped with a DVD device, in 2001 almost all equipment had this peripheral.

The other peripheral that produced a positive evolution was screens: 17'' screens for 60% of PCs, compared with 47% in 2000.

### Sales and prices

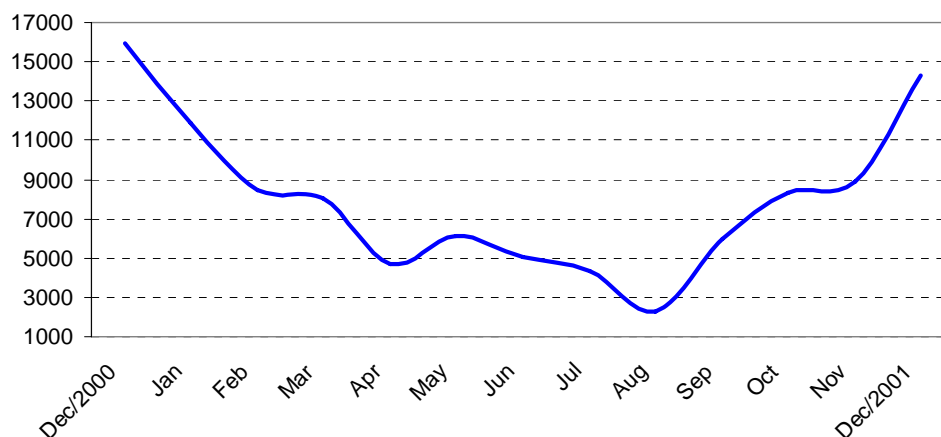
Volume of sales follows a seasonal trend on the one hand, and the impulses due to the start or modifications in the subsidy programme, on the other.

To date, December 2000 was the month with highest sales: 16,000, 15% of all the equipment sold between December 2000 and December 2001. Probably many potential buyers delayed their purchases until the subsidy programme started. The effects of Christmas campaigns on sales are also clear, together with the start of the school year in September.

The fall in prices and increase in the features of new equipment is also linked to the growth in sales in the latter half of the year 2001.

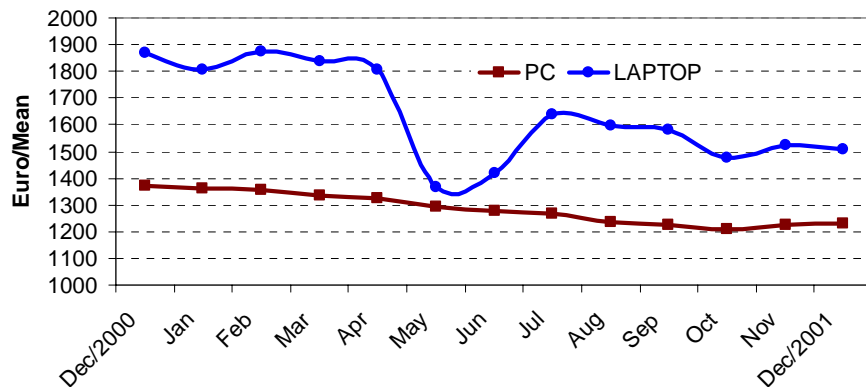
Through the Survey on the Information Society and Families carried out by the Eustat every six months since the year 2000, we are aware of the high correlation between availability of computer equipment in the home and the student population. See: <http://www.eustat.es/varios/informes/inf1781.pdf> (page 4).

**Graph 4. Monthly evaluation of equipment sales. 2000-2001. Units.**



Source: Eustat, EKZ2000-2001

Together with the huge development in the features of basic equipment and in their peripherals, there is a clear trend in the lowering of prices. Between December 2000 and December 2001 computer equipment purchased through the programme fell 9.6% on average -135 euros. PCs fell 10.6%, Macs (desktop and laptop) dropped 8.2% and even laptops were reduced by 19.2% -359 euros-

**Graph 5. Monthly evolution in average prices of equipment. 2000-2001. Euros.**

Source: Eustat, EKZ2000-2001.

### Aims and results.

The Basque Government in the 'Basque Country in the Information Society Plan' aimed at getting 65% of households to possess at least one PC in the year 2005 (154,000 families more than at present, from a total of 716,000).

**Table 2. Families according to PC or Internet in the home by quarter. (Thousand)**

		Families	Computer	Internet
2000	II. quarter	669,0	222,1	68,9
	IV. quarter	679,3	247,9	88,3
2001	II. quarter	699,9	288,4	135,8
	IV. quarter	716,0	311,5	172,6
IV2000-IV2001			63,5	84,2

Source: Eustat, ESIF-2000-2001.

If we stop briefly to look at the evolution of the number of families with a PC and/or Internet and if we compare with sales under the promotion programme, we may reach certain conclusions: at least 28% of the equipment sold in 2001 served to replace other old equipment or to have more than one computer in the home, as almost 25,000 more computers were sold than the increase in families with equipment. At least 5% already had a connection to the Internet.

Despite this effect, the aim set for the year 2005, at the speed of penetration of computers in the family in 2001, could be achieved in the year 2004.

However, a direct relation may not be established between the subsidy and the motivation for purchase as other Spanish regions without institutional aid have similar rates of penetration. Nevertheless, according to the EGM in the first quarter of 2002 the Spanish Basque Country has a higher proportion of Internet users. See:

<http://www.aimc.es/datosegm/internet6.pdf> .

## **Conclusions**

Besides the low cost, administrative sources offer information that often may not be accessed through statistical channels (for example: spatial disaggregation or the type of computer equipment and its features, as well as its evolution over short periods of time).

The rapid growth in processor speed and memory (not only in production possibilities, but also in the field of distribution), and at the same time the progressive reduction in prices, besides being useful information in itself, poses questions as to areas of use and new possibilities.

The sharp increase in laptop computers and the struggle by brands to regain the family market add to the list of data offered by the administrative file.

The changes mentioned are configured as inputs in the process of decision making in purchases, whether for a first, second computer or for replacing old equipment.

In addition, this may and must serve to assess and determine public policy itself, without this limiting the possibilities of analysis. The definition of the so-called digital gap as a measurement of lower access by women and the aged population to the purchase of computer equipment or unequal possibilities for the population residing in small towns, reaffirm this approach.

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