

ATMs and cash dispensers — past, present and future

By Torben Jessen

ATMs have now become an integral part of European financial institutions' personal banking strategies. The number of operational ATMs has increased rapidly in recent years and it is expected that it will almost double by 1995.

ATM development in Europe

Barclays Bank claims to have installed the world's first operational ATM in 1967. However, the number of ATMs in Europe did not really take off until the 1980s. In 1970 there were less than 700 operational ATMs in Europe, by 1980 the number had increased to 6,500, and by the beginning of 1987 there were over 38,000 ATMs. In only 20 years ATMs have

become an accepted means of providing personal banking services, especially cash.

The original motives for installing ATMs differed greatly from country to country. In some countries the original impetus was to gain competitive advantage, for example in the UK and France, and this resulted in the rapid growth of competing proprietary networks. In contrast, other countries emphasised the setting up of a rational, economic ATM infrastructure. Switzerland, for example, developed a non-competitive ATM pool from the beginning.

A third group of countries can also be identified, those where financial institutions believed that ATMs were uneconomic and would lead to

unprofitable competition, and which waited for more than a decade before installing ATMs. This third group of countries included the Netherlands and Denmark.

ATMs have now been installed in all European countries, although the level of installations varies considerably between individual countries and, indeed, between individual financial institutions.

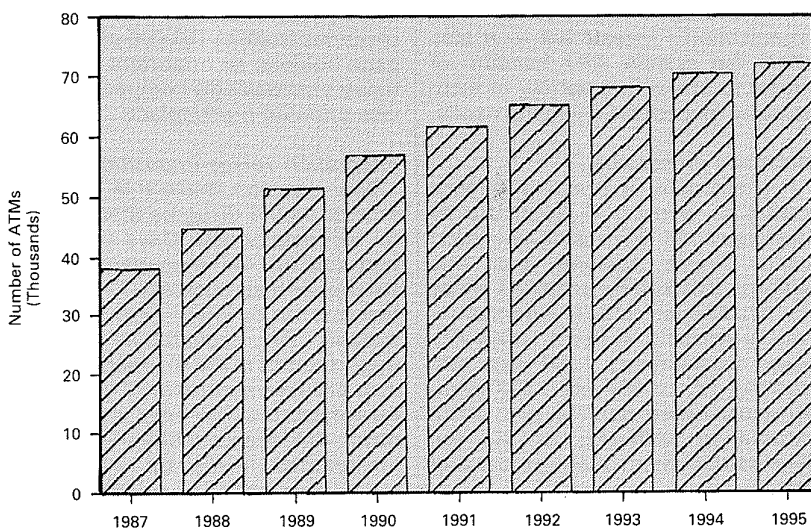
Current situation

Despite the recent rapid increase in the number of European ATMs, Europe is still a long way behind some other regions. For instance, the USA had 67,000 ATMs at the beginning of 1987 and Japan had 60,000, while Europe had only 38,000.

Within Europe the countries with the largest number of ATMs at the beginning of 1987 were the UK, with 10,578 machines, and France, with 9,373 machines. In both these countries competition was the primary motive for early ATM installations and this fuelled a rapid growth in the number of machines. France and the UK between them had over 50% of the operational ATMs in Europe.

The number of ATMs installed is a crude measure of how significant these machines are in the provision of personal customer services in a particular country. A more reliable measure is the number of ATMs per million inhabitants. Japan had by far the highest density of ATMs with 504 per million inhabitants, the USA had 283 and Europe had only 109. These figures show just how far Europe is behind Japan and the USA in the installation of ATMs.

Forecast Growth in the Number of ATMs Operating in Europe 1988-1995



Source: Prospects for the European ATM Market 1988-1995, published by the Battelle Financial Industry Systems Group.

→ 26

← 24

The European countries with the highest ATM densities at the beginning of 1987 were Norway with 223, Finland with 199, the UK with 188, and Sweden with 179. The lowest ATM densities were found in Greece with only seven ATMs per million inhabitants, the Netherlands with 17, and Portugal with 32.

Financial institutions in these countries have only recently begun to develop their ATM networks. In fact, Portugal was the last country in western Europe to install ATMs. These figures indicate that there is still considerable room for expansion in the number of ATMs in many European countries.

Commercial banks vs savings banks

The proportion of ATMs installed by different types of financial institution in Europe varies considerably. The commercial banks had more than twice as many ATMs as the savings banks, 23,922 compared to 10,731 at the beginning of 1987. In the UK and France ATM installations are dominated by the commercial banks. In the UK 85% of operational ATMs have been installed by commercial banks with most of the remaining machines installed by building societies. In France, 80% of ATMs have been installed by commercial banks and only 13% by the savings banks.

However, in several European countries the savings banks have taken the lead in ATM installation. In

NUMBER OF ATMs INSTALLED BY COUNTRY AND TYPE OF FINANCIAL INSTITUTION

	Number of ATMs	ATM ¹ density	Percentage of ATMs installed by:		
			Savings banks ²	Commercial banks	Others ³
Austria	485	64	32	44	24
Belgium	723	73	41	49	11
Denmark	462	90	28	42	30
Finland	970	199	16	76	8
France	9,573	175	13	80	7
Germany	3,300	54	56	17	27
Greece	69	7	0	100	0
Ireland	255	73	9	91	0
Italy	2,539	45	39	61	0
Luxembourg	30	81	23	63	13
Netherlands	240	17	44	13	43
Norway	916	223	56	44	0
Portugal	320	32	9	91	0
Spain	5,040	132	62	38	0
Sweden	1,489	179	54	46	0
Switzerland	1,065	164	NA	NA	NA
United Kingdom	10,578	188	13	85	2
European total	38,054	109	29	65	6

¹ATMs per million inhabitants.

²Includes building societies.

³Includes postal banks, Co-operative banks, and jointly owned networks.

Source: ATMs and cash dispensers: An International Survey and Analyses — 1987, published by the Battelle Financial Industry Systems Group.

Spain, ATM installations are dominated by the savings banks which have 62% of operational ATMs, while the commercial banks have the remaining 38%. In Germany, the Netherlands, Norway and Sweden, the savings banks all have more ATMs than the commercial banks.


Usage

Customer usage of ATMs varies

considerably from country to country, and between individual banks within a country. Swedish ATMs are the most heavily used of ATMs in Europe averaging some 7,400 cash withdrawals per ATM per month. This is over twice the European average of 3,611 and considerably higher than the second placed country, Belgium, which had an average of 5,202. Greece had the lowest average number of cash withdrawals with only 707.

Some ATMs located in popular sites such as shopping centres and railway stations generate very high transaction levels. The busiest European ATM in 1987, in terms of cash withdrawals, was located in the central railway station in Stockholm and generated nearly 26,000 withdrawals in a month.

Many financial institutions will need to increase considerably the average number of transactions generated by their ATMs if their networks are to be economic. It is estimated that the number of transactions required for an ATM to



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break-even is about 4,000; this is well above the current European average. The trend in ATM usage in Europe is upwards — the average number of withdrawals per machine per month increased by 6% in the year to January 1987.

However, the increase in the total number of European ATM cash withdrawals was much higher with an increase of over 26% to 1.6 billion withdrawals. The reason for this difference is the large increase in the number of operational ATMs during this period.

Withdrawal values in Europe also show marked country differences. The highest average withdrawal values were achieved by Switzerland with £146, well over twice the European average of £57. The trend in withdrawal values is generally flat; increasing by up to 10% in some countries but in others remaining stable or even falling slightly.

Future trends

The key to the future growth of ATM networks is the demand for cash and the systems for delivering it. It is expected that there will be a steady fall in the use of cash as the use of



ATMs: the number in Europe will be 72,000 by 1995.

cheques, pre-authorised payments and debit and credit cards continue to grow. However, this decline is expected to be slow, and cash is likely to remain the dominant method of payment for the next 10 years, and probably for the foreseeable future.

Given that bank customers will require cash for the foreseeable future, are there any new cash deliv-

ery systems which will challenge ATMs? The development of EFTPOS services in many European countries could influence ATM usage in two ways. First, EFTPOS could substitute card-based transactions for use of cash. Second, and probably more significant, will be its impact as a source of cash through "cash back" facilities. This would allow shoppers to obtain cash without making a detour to find an ATM.

In the long term the development of EFTPOS is likely to effect ATM usage adversely but not until well into the 1990s. In the meantime the demand for cash and the low density of ATMs in many European countries will result in continued growth in the number of ATMs. The number of European ATMs is expected to almost double by 1995 to 72,000, with the bulk of the increase in the next few years. ■

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ATM USAGE: AVERAGE NUMBER OF CASH WITHDRAWALS BY COUNTRY

Country	Average no. of	Average value of
	cash withdrawals	cash withdrawals
	1987	(£)
Austria	3,349	£88
Belgium	5,202	£57
Denmark	1,716	£46
Finland	3,601	£54
France	2,945	£55
Germany	4,023	£92
Greece	707	£60
Ireland	4,528	£41
Italy	2,078	£116
Luxembourg	4,558	£75
Netherlands	1,824	£59
Norway	2,700	£52
Portugal	4,536	£24
Spain	3,119	£63
Sweden	7,405	£54
Switzerland	3,380	£146
United Kingdom	4,465	£36
European average	3,611	£57

Source: ATMs and cash dispensers: An International Survey and Analysis — 1987, published by the Battelle Financial Industry Systems Group.