A BROADER CONCEPT OF INVESTMENT

A follow-up of the 1989 report

Voorburg Group on Service Statistics Paris, France October 1-5 1990

by Gunila Nockhammar 1990-08-31

A BROADER CONCEPT OF INVESTMENT

A follow-up of the 1989 report.

Last year Statistics Sweden presented a paper on this issue, with an appeal for international coordination. As a result of the discussions at the meeting, we promised a new report on the work progress, including new results from the 1990 inquiry.

Once a year, the current investment survey in Sweden includes supplementary questions about investment other than investment in fixed capital. The figures for investments in fixed capital are also adjusted by figures about leased assets.

We started in 1986 with a voluntary pilot study, but since 1988 the inquiry is compulsory for manufacturing enterprises with more than 500 employees. The investment of these enterprises represent about 65 per cent of the total industry in Sweden. Although we are not satisfied with the coverage neither in respect to enterprises nor the investment concept for the enterprises we cover, this is what we are able to manage with the available resources.

However, the inquiry now enjoys a positive response from the users and a good acceptance from the respondents. The users ask for more information for analysis and decision-making.

The problems of the first years with partial non-response for the supplementary questions are decreasing. The rate of non-response in this group of enterprises, with more than 500 employees is about 2 per cent in the regular investment survey. The rate for the supplementary questions is still somewhat higher and differ between activities as well as variables, but the rate is decreasing. The higher rate depends on the greater difficulties to demarcate other investment from fixed capital formation and to lack of basic data within the enterprises.

The highest rate of non-respondse is shown for investments in software (EDP-systems), about 20 per cent. Software is often intergrated with hardware, and when software is produced within the enterprise, there are often problems to indentify the specific cost.

Research and development is a variable we have had less problem with, and a rate of partial non-response not higher than for the regular survey.

Concerning marketing costs we have not been able to

improve our concept, we still ask for total marketing costs. We assume that it is marketing investment that is behind the main part of the changes in the level of marketing costs. The rate of partial non-response mounts to about 10 per cent in the inquiry of 1990.

Results from the Swedish inquiries

Table 1. Total investments in 1989, by industry

Billion Sw kronor (SEK)

Industry	Buildings machinery equipment	R and D	Marketing	EDP
Food production Wood, paper, pulp and	2.4	0.2	2.0	0.1
printing	9.0	1.1	0.9	0,1
Chemical industry Ferrous and non-ferrous	2.6	1.9	2.1	0.1
metal	2.6	0.6	0.8	0.1
Manufacturing industry	12.3	14.3	9.5	0.5
Others	1.4	0.2	0.3	0.0
TOTAL	30.3	18.3	15.6	0.9

Table 2 Total investments in 1987, 1988 and 1989 Billion Sw kronor (SEK)

Investments in:	1987	1988	1989
R and D Marketing EDP-systems Sub-total	15.1 14.7 0.7 30.5	15.8 13.7 0.8 30.3	18.3 15.6 0.9 34.8
Buildings, machinery and equipment	26.2	26.2	30.3
TOTAL INVESTMENTS	56.7	56.5	65.1

In spite of the shortcomings of the inquiry, some conclusions about the investment trends during the period can be drawn.

Investments other than fixed capital formation are of considerable importance, and are even higher than the material ones. Even if that part of marketing which should be treated as cost for ongoing business would be excluded by some definition, the investments in other than fixed capital may be as high as investment in fixed capital.

The investment structure varies somewhat between the years and rather a lot between industries. In 1989 there was an increase of the R and D cost after 1988's temporary stagnation. The manufacture of transport equipment accounted for 40 per cent of the total R and D cost. Companies in manufacturing of chemicals and electrical machinery and supplies increased their R and D cost as well.

Marketing showed a minor increase in 1989, after a drop in 1988. Compared to the 1987 volume of marketing cost the 1989 figure meant a decrease due to inflation.

Looking at different industries, R and D as well as marketing are essential for enterprises in manufacture of fabricated metal products, machinery, transport equipment and pharmaceuticals, while in pulp, paper, and paper products, wood and wood products the investments in buildings, machinery and equipment are dominating.