



## ISAE INVESTMENT SURVEY ON INDUSTRIAL FIRMS

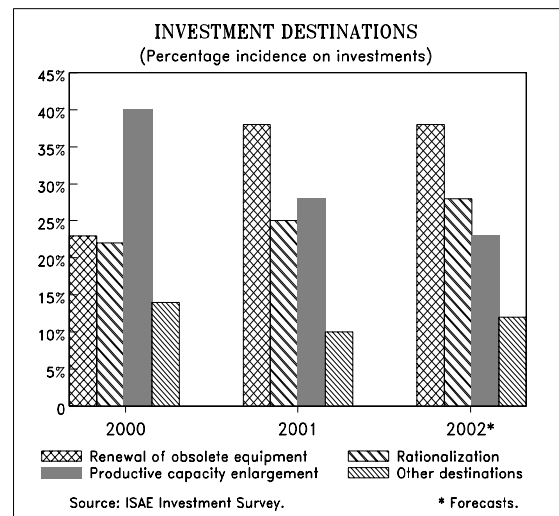
November 2001

### General Results

According to the ISAE Bi-Annual Investment Survey carried out in November 2001 within the European Commission Business Survey, 62% of manufacturing firms reduced their spending plans, mainly because of the productive plan worsening. Also other (non-specified) reasons played a role, maybe linked to the difficult international situation caused by the September 11 terrorist attacks.

Besides, most firms indicate that their 2001 expenditure was aimed at obsolete machinery renewal and, to a lesser extent, to productive capacity enhancement. For 2002, entrepreneurs confirm that the accumulation process is mainly meant for plant renewal. Indeed, the share of firms intentioned to make rationalisation investments, enhance safety standards and improve their environmental impact - for instance by reducing their polluting emissions - is growing.

Turning to details, investments in 2001 and in 2002 are mainly aimed at the automation and mechanisation of the existing productive processes. An important role is also played by investments to enhance productive capacity within the existing schedules, while the introduction of new products seems to have played a marginal role.



### Variations of investment plans for 2001

According to 62% of respondents, their annual investment plans for 2001 were reduced, while 12% of the sample report an expenditure increase and 25% declare that their investment schedules remained substantially unchanged. That result was strongly influenced by the replies provided by firms producing machinery, equipment and transport: indeed, 82% of firms operating in this area witnessed a reduction in their investment schedules. In all other sectors, most entrepreneurs signal stable investment plans. The share of firms reporting an enlargement of their spending plans is high in the extractive industry (42% of the sample) and in firms producing consumer goods (32%). Looking at the classification by size, the investment plan reduction mainly concerned large firms, while small firms (between 5 and 99 employees) signalled most investment plan increases.

In all sectors, and particular in machinery, equipment and transport - mainly because of the productive plan worsening and of other non-specified factors - the annual investment plan contraction is



### INVESTMENT PLAN VARIATIONS FOR 2001 (a)

(Percentage incidence of replies)

	During the year, the firm has modified the amount of investments scheduled for 2000			Reasons for the increase (Multiple replies)						Reasons for the increase (Multiple replies)					
	YES, by increasing them	YES, by reducing them	NO	1	2	3	4	5	6	7	8	3	4	5	6
ECONOMIC ACTIVITY															
Basic industries	18	30	52	4	53	1	5	21	47	33	56	1	0	0	50
Iron and steel	12	5	82	1	51	1	5	29	65	0	100	0	0	100	0
Machinery, equipment and transport	6	82	12	10	54	12	3	10	36	1	78	20	0	1	80
Consumer good manufacturing	32	23	44	24	45	6	0	6	52	10	28	39	0	7	37
Extractive industries	42	3	54	88	2	22	0	38	26	0	0	21	0	79	21
Food and akin	28	32	39	1	3	5	0	27	66	7	97	2	0	3	9
TOTAL	12	62	25	14	41	6	2	16	51	4	76	19	0	1	73
SIZE															
Small Firms (5-99 employees)	45	10	44	18	24	11	2	10	55	32	22	30	2	29	30
Medium-Sized Firms (100-499 employees)	30	21	49	24	53	8	5	11	59	17	59	14	0	14	65
Large Firms (over 499 employees)	7	74	20	0	43	0	0	25	38	3	77	19	0	0	74

(a) ISAE Investment Survey (November 2001).

1=More financing opportunities; 2=Demand variations; 3=Economic policy provisions; 4= Price variations in investment goods; 5=Internal administrative reasons; 6=Other reasons; 7=Less financing opportunities; 8=Production plan variations.

### TOTAL FIRMS: INVESTMENT-INFLUENCING FACTORS

(percentage incidence of replies)

	Very important	Stimulating	No influence at all	Limitating	Very limiting	No reply
2001 (*)						
1. Demand evolution	63	17	6	10	1	2
2. Availability of funds or profit expectations	23	19	44	11	1	3
3. Technical factors (technological development, availability of labour, etc.)	13	35	48	0	0	4
4. Other factors (fiscal policy, etc.)	3	9	57	3	3	26
2002 (**)						
1. Demand evolution	28	15	7	1	11	38
2. Availability of funds or profit expectations	16	20	11	13	1	39
3. Technical factors (technological development, availability of labour, etc.)	12	29	19	0	0	39
4. Other factors (fiscal policy, etc.)	2	10	21	3	3	62

(\*) Pre-balances, ISAE Investment Survey (November 2001).

(\*\*) Forecasts, ISAE Investment Survey (November 2001).

probably due to the international crisis following upon the September 11 terrorist attacks. The consumer goods and extractive sectors, where investment plans showed an increasing trend in 2001, were positively affected by demand structure modifications. This was an important element favouring investment expansion in large and medium-sized firms. Indeed, large firms were negatively influenced by production plan reductions (apart from other non-specified factors).

### **Investment destinations**

In 2001, investments to renew obsolete plants accounted for 38% of overall investments. Indeed, 25% of total expenditure funded rationalisation, 28% the enhancing of production capacity and about 10% is meant for other destinations, among which safety standards and pollution control. For 2002, 38% of investments are expected to be allocated for plant renewal, while the share aimed at other destinations and at rationalisation rise to 12 and 28% respectively. The percentage of funds allotted for productive capacity enhancement falls down to 23%.

Obsolete machinery renewal plays a fundamental role in the extractive industry (61% of expenditure in 2001 and 59% in 2002), in machinery, equipment and transport (46% and 43% in 2001 and 2002 respectively) and in food and akin (44% of expenditure both in 2001 and 2002) and - in terms of dimensions - in large firms in particular. Between 2001 and 2002, a rise in the share of expenditure aimed at rationalising the production process in machinery, equipment and transport is signalled (from 18 to 27% of total expenditure) to the detriment of the funds for productive capacity enhancement (from 28 to 21%). This tends to diminish in all sectors with the exception of iron and steel, the extractive industry and food and akin.

### **Rationalisation and productive capacity enhancement**

It is possible to dwell in details and further divide investments for rationalisation and productive capacity enhancement into expenditure for automation and mechanisation of the productive processes and introduction of new technologies on the one side, and capacity enhancement within the existing plans and introduction of new products on the other side. On the basis of this sub-classification, the rationalisation expenditure is mainly aimed at the automation of the existing processes, though the share slightly decreases between 2001 and 2002 (from 81 to 77). This trend is particularly evident among firms producing consumer goods and basic goods. An opposing trend is however shown by firms operating in the iron and steel sector, where - between 2001 and 2002 - the expenditure for automation strongly rose. Capacity-enhancing investments are indeed prevailing within existing plans, while the expenditure for the introduction of new products plays a marginal role and is slightly diminishing between 2001 and 2002. The introduction of new products absorbs a larger share on average in the basic industry and in machinery, equipment and transport. In this area, however, that share should come back to the average values of the manufacturing industry in 2002. In terms of dimensions, investments for new products play a significant role among firms with more than 500 employees.



**INVESTMENT DESTINATIONS**  
(Percentage incidence on investments)

	2001 (a)				2002 (a)			
	1	2	3	4	1	2	3	4
ECONOMIC ACTIVITY								
Basic industries	26	31	30	13	30	31	23	17
Iron and steel	18	45	22	15	18	45	24	13
Machinery, equipment and transport	46	18	28	8	43	27	21	10
Consumer good manufacturing	30	20	37	12	31	21	32	15
Extractive industries	61	13	15	10	59	11	19	11
Food and akin	44	39	14	4	44	29	19	8
TOTAL	38	25	28	10	38	28	23	12
SIZE								
Small Firms (5-99 employees)	31	20	40	9	35	21	34	10
Medium-Sized Firms (100-499 employees)	28	27	32	12	27	25	34	14
Large Firms (over 499 employees)	42	24	25	9	42	30	17	11

(a) ISAE Investment Survey, (November 2001).

1 = Renewal of out of date equipment; 2 = Rationalisation; 3 = Productive capacity widening; 4 = Other destinations (security, pollution control and so on).

**ANALYSIS OF INVESTMENT DESTINATIONS**

(Rate of answers)

	2001 (a)				2002 (a)			
	Rationalisation		Productive capacity widening		Rationalisation		Productive capacity widening	
	1	2	3	4	1	2	3	4
ECONOMIC ACTIVITY								
Basic industries	85	37	60	63	70	45	61	63
Iron and steel	59	68	78	29	91	32	84	47
Machinery, equipment and transport	77	70	82	66	75	65	77	53
Consumer good manufacturing	84	43	73	51	78	41	72	53
Extractive industries	60	45	66	38	54	52	63	40
Food and akin	93	35	83	34	91	51	88	45
TOTAL	81	52	75	54	77	50	74	53
SIZE								
Small Firms (5-99 employees)	75	43	76	41	79	38	74	45
Medium-Sized Firms (100-499 employees)	90	48	81	55	91	49	78	55
Large Firms (over 499 employees)	76	76	88	79	74	72	87	75

(a) ISAE Investment Survey (November 2001).

1 = Automation and mechanisation of existent productive processes; 2 = Introduction of new productive techniques; 3 = In the frame of existent productive programmes; 4 = Introduction of new products.

N.B. The sum of frequencies could be greater than 100 as the firm can give more than an answer.



## NOTES TO THE INVESTMENT SURVEY

ISAE carries out its Investment Survey on manufacturing and extractive industries within the E.C. Business Survey on the same panel of about 4,000 business firms interviewed for its monthly surveys. The interviews are made via mail in March-April and October-November of each year and specifically concern firms which have made investments. The rate of reply is therefore considerably lower than that of the monthly survey (about 30%).

Hereafter a list is provided of the main survey's characteristics:

- Investment surveys comprise (apart from quantitative information on the number of employees) four qualitative questions aimed at obtaining information on the amount of investments made, on their destinations and forecasts as well as on investment goods prices. Given the very nature of questions, the time reference is the year. Indeed, the time lapse considered in both surveys is wide-ranging, as it embraces a three-year period which differs in the two surveys. In April of the  $t$  year, the information refer to the previous and to the current years and to forecasts for the following year (i.e. they refer to the three-year period  $t_{-1}$   $t$   $t_{+1}$ ); in November of the  $t$  year, the information concern the current year and the two forthcoming years (namely  $t$   $t_{+1}$   $t_{+2}$ ). In April, further information on the grade of plant utilisation, on the productive capacity variation and on leasing are requested. In November, additional information concern modifications in the firms' investment plans and the factors influencing investment decisions.
- The data-processing is similar to that applied to the ISAE Monthly Business Survey. Nevertheless, data are aggregated by adopting different weighting systems according to the nature of the question and by utilising the amount of investments for questions on the kind of investments, on their forecasts and on investment destinations. Besides, the value added external weight is only applied to some questions of qualitative nature. The data concerning the value of investments are not weighted, otherwise the partial nature of the sample (due to the small rate of reply) would imply the risk of an uncontrollable distortion of the overall results.
- The Investment Survey is also a useful instrument to carry out ad hoc surveys aimed at highlighting the structural aspects of phenomena which cannot be easily analysed through other information sources.