

and development activities over the period; the chemical and electrical products industries reported the greatest absolute increases, together having accounted for over 40 p.c. of total intramural expenditures (excluding those of transportation equipment) since 1955.

3.—Intramural Research and Development Expenditures, by Industry, 1959-62

Industry	1959	1960 ¹	1961	1962 ¹
	\$	\$	\$	\$
Mining, quarrying and oil wells.....	4,907,029	5,168,654	6,727,567	6,368,903
Manufacturing—				
Foods and beverages.....	1,793,626	1,971,900	2,784,502	3,335,989
Rubber products.....	1,219,165	1,199,140	1,371,755	1,295,777
Textile products.....	1,395,769	1,462,940	1,057,633	976,000
Wood products.....	102,081	109,096	61,088	63,900
Paper products.....	6,571,953	6,822,565	7,003,047	7,084,784
Furniture and fixtures.....	27,500	33,156	116,800	118,000
Primary metal.....	6,626,528	7,557,460	7,488,118	8,069,250
Metal fabricating.....	1,724,907	1,810,620	2,182,490	2,144,350
Machinery.....	3,121,907	3,089,325	4,814,738	5,210,377
Electrical apparatus and supplies.....	15,903,065	17,551,660	21,745,019	23,480,119
Non-metallic mineral products.....	1,353,830	1,444,771	1,357,936	1,527,760
Products of petroleum and coal.....	3,761,700	4,224,000	5,038,500	6,304,000
Chemicals and chemical products.....	14,133,296	12,818,696	20,251,461	21,260,933
Other manufacturing (incl. tobacco and tobacco products, leather products, clothing and knitting mills, and miscellaneous).....	3,004,378	2,617,766	5,194,825	6,487,507
Transportation, storage, communication and other utilities.....	2,779,440	3,126,460	3,102,796	3,610,000
Other non-manufacturing (incl. construction industry, scientific and engineering services and trade associations).....	2,593,485	2,600,840	3,100,363	3,239,850
Totals (excl. transportation equipment).....	71,019,659	73,609,049	93,398,638	100,577,499
Transportation equipment.....	25,570,722	8,072,106	19,856,661	17,690,830
Totals, All Industries.....	96,590,381	81,681,155	113,255,299	118,258,329

¹ Estimates based on the companies' intentions for these years.

The product group for which the largest percentage of research and development expenditures was made in 1961 was the chemicals group (17.5 p.c.). Aircraft and parts, which in 1959 accounted for almost one quarter of intramural expenditures, declined considerably in relation to other product groups in 1961. In that year the aircraft and parts product group received only 15.7 p.c. of the expenditures, almost \$6,000,000 less than in 1959. After chemicals and aircraft, the product groups receiving the largest amounts were, as in 1959, electronics and primary metals.

4.—Intramural Research and Development Expenditures, by Product Group, 1961

Product Group	Amount	P.C. of Total	Product Group	Amount	P.C. of Total
				\$	
Aircraft and parts.....	17,831,092	15.7	Machinery (except electrical).....	6,212,215	5.5
Chemicals (except drugs and medicines).....	19,780,636	17.5	Motor vehicles and parts.....	1,681,975	1.5
Drugs and medicines.....	2,789,438	2.5	Petroleum and natural gas.....	4,935,351	4.4
Electrical equipment (except electronics).....	9,743,112	8.6	Primary metals.....	13,299,359	11.7
Electronics.....	15,561,769	13.7	Professional and scientific instruments.....	1,096,660	1.0
Fabricated metals.....	2,835,754	2.5	Other.....	10,461,758	9.2
Forest Products—					
Pulp and paper.....	6,089,000	5.4			
Other.....	937,180	0.8			
			Totals.....	113,255,299	100.0