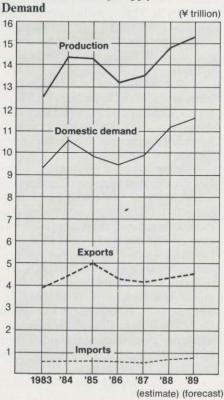
Going Automatic

A wide variety of industries including electrical, automobile, industrial and precision machinery manufacturers, are intensively investing in factory automation and other streamlining measures as well as in expanding production capacity to cope with active domestic demand. This greatly encouraged the industrial machinery industry-particularly machine tool and construction machinery makers-in 1988.

On the export front, efforts to introduce higher value-added items coincided with active demand from the NIEs for capital goods and parts, and 1988 turned out to be a year of surpluses for the industry-for the first time in three years.

The trend will prevail through 1989 with little notable change. Yet the industry's growth looks likely to slow down in 1989, because production of construction and freezing machinery, which is already at very high levels, will reach a plateau. Further, expanding offshore production of construction machinery (in Europe and the U.S.), office equipment (in the

Industrial Machinery Supply and



NIEs) and machine tools (in the U.S.) will combine to curb exports originating from Japan.

Construction machinery

The construction machinery market was solid in 1988, as active demand for urban office buildings and the launching of public works projects have offset declines in private homes construction starts. Active construction in central urban sites has particularly expanded demand for small, highly maneuverable, multipurpose excavators, a new trend in the industry. This high-level domestic demand is expected to continue throughout 1989. Expansion of offshore production in the wake of trade friction disputes will lead 1989 exports to another round of decline.

Machine tools

Domestic machine tool demand was very strong in 1988, as the industry's main clients-makers of industrial machinery. electrical machinery and automobileshave kept up investment for cost-cutting to overcome the yen's appreciation and to meet increasingly diversified and sophisticated consumer demand. The industry is expected to maintain the current high production level throughout 1989.

There appears to be little chance of export growth in 1989, as voluntary restraint of shipments to the U.S. of machining centers and numerically controlled lathes is expected to continue.

Office machinery

Domestic demand for office machinery was strong in 1988, with the industry strenuously developing and marketing high value-added items such as business word processors and electronic notebooks. In 1989, this field will be joined by new entrants such as portable copying machines and other "personal" equip-ment, which will further expand the market.

The industry, traditionally heavily dependent on exports, will suffer moderate declines in 1989 in exports as well as domestic production as a result of spreading overseas production and zooming im-



Strong domestic demand for urban office buildings and public works projects kept the construction machinery market firm in 1988. Domestic demand should stay strong in the current year

ports of inexpensive goods such as electronic calculators from the NIEs.

Precision machinery

On the 1988 domestic front as regards precision machinery, demand for highclass single-lens reflex cameras declined while that for less expensive compact cameras remained solid. This trend is expected to prevail through 1989. Yet imports of cheaper compacts, produced mainly in Taiwan, have started to flood the Japanese market, and the share of such models in domestic demand is expected to reach 45% in terms of units and 15% in terms of value by the end of 1989.

The watch and clock industry, meanwhile, will see continued growth in inexpensive digital watch imports as well as increasing exports of watch movements. the core of these NIEs' devices.

Agricultural machinery

Tormented by lower rice prices and deregulation of imports of agricultural products, the agricultural machinery industry is facing hard times. Domestic demand was expected to record a sharp decline again in 1988. But the market is expected to bottom out in 1989, helped by new demand triggered by initiatives involving structural reforms as well as the introduction of less expensive models.

Exports will continue slipping in 1989. as the U.S. market for family-use tractors and lawn mowers-the mainstay of the industry in the past-has lost its momentum.

(Makoto Tamaki, senior economist)