Machine tool sector, the heart of German industry, threatened

by William Engdahl

One of the most revealing demonstrations of the wrong economic course of German government policy since November 1989 is the present state of the German machine tool industry. In 1989, the perspective for the German machine tool industry was more optimistic than it had been at any time since the worldwide recession induced by the oil and interest rate shocks of the 1970s. Industry order books were full beyond capacity, with a near-record average nine-month backlog of new orders for German manufacturers.

Today, only three years later, the industry speaks of the "deepest crisis of the postwar era." According to the German Machine-Tool Producers' Association (VDMA), the German machine tool industry is expected to end 1993 with a level of new orders some 45% below the peak at the beginning of 1990. Production volume of new machine tools for the same period is now expected to be down by 30% from the production level of 1990. Alone in the first quarter of 1992, production volume had dropped 18% from the same period in 1991, and all indications are that the trend is accelerating. From a recent peak employment of 102,000 in the entire German industry branch at the end of 1990, industry estimates are that only 82,000 will remain at the end of this year, a drop of 20%. At the Munich producer Deckel, the number of employees has fallen from 2,500 two years ago to about 650. Maho, near Stuttgart, has fallen from 3,500 to 1,847 workers.

German crisis most alarming

While the dramatic collapse in the outlook for the German machine tool sector is not at all unique, as Japan's industry orders last year alone plunged some 40% from one year earlier, the German crisis is arguably the most alarming for future growth prospects of world industry out of the present deepening global industrial and agricultural depression. The economic significance of the machine tool industry cannot be over-emphasized. While steel output and consumption per capita remain the best single broad measures of real economic growth for a nation, the capacity to produce state-of-the-art modern machine tools is the "technological driver" of industrial growth and increase of labor productivity per capita.

Machine tools are, simply stated, the tools by which all other branches of industry are able to produce. The machine tool sector produces the tools which produce the ultimate goods, machinery, mining equipment, and agricultural technology through which any economy today must feed, clothe, and transport itself and its goods to the world markets. In this sense, machine tools are the very heart of all industry. And arguably, the German machine tool industry as a group is the world's single most important sector. Japan has enjoyed a dramatic increase in the production of its machine tools. In the past five years in dollar terms Japanese production has even exceeded that of Germany. But, as industry authorities point out, most Japanese machine tools are mass-produced from a narrow range of types most intended to be applied in the production of automobiles. Huge producers like Toyoda Machine, Fuji, Komatsu, and Hitachi Seiki dominate the Japanese production. Most are daughter companies of large auto producers or industry conglomerates. But the German machine tool sector is dominated by medium-sized family-owned "Mittelstand" firms such as Gildemeister, Maho, Trumpf, Pittler, and Deckel. "The German machine tool sector is arguably the most diverse in the world, in that it is a market leader in production of every major tool type, from laser machine tools to numerically controlled tools to industrial robots," noted one industry spokesman.

What has gone wrong?

The dramatic crisis within the crucial German machine tool sector must be understood in terms of its causes. There had been an unusually strong boom from approximately 1987 into the autumn of 1990, occasioned by heavy Europe-wide capital investment in new equipment as companies prepared for the opening of the European Community (EC) single market by the end of 1992. As that demand factor eased, there was a somewhat natural decline in new orders. But this decline was aggravated to the point of crisis by three other factors.

First, there has been a dramatic decline in the activity and capital goods investment within the major western industrial economies since 1990. France, the United States, the United Kingdom, Italy, and Switzerland represent the largest traditional industrial country export markets for German machine tools. In the first nine months of 1992, exports to France, according to VDMA, fell by 23% compared with the same period in 1991. Those to the United States fell by 10%, to

Britain by 17%, to Italy by 31%, and to Switzerland by 21%. These are among the largest traditional German machine tool export markets.

But this dramatic drop in the exports to OECD countries was accompanied by a virtual total collapse of the formerly important markets of eastern Europe and the former Soviet Union. For years the Soviet Union had stood as the single largest (or second behind France) importer of German machine tools. In 1988, the U.S.S.R. imported some DM 1.03 billion ($650 million) of West German machine tools. In the first nine months of 1992, that figure had dropped to DM 420 million, and the rate of decline is reportedly accelerating. The emerging economies of Poland, Czechia, and Slovakia are not able to import significant volumes of German machine tools as their hard currency reserves have been in effect impounded by the International Monetary Fund as hostage to an illusory and ill-conceived currency stabilization.

In short, the once-promising export potential to eastern Europe and the Community of Independent States, including Russia, has all but collapsed since 1990. In addition, the demand within both eastern and western Germany itself has dropped dramatically as the worldwide slowdown of the automobile and other industries using large numbers of machine tools has advanced. The president of VDMA, Jan Kleinewefers, recently characterized the export conjuncture for the industry: "Never before have we experienced such a simultaneous weakening of *every* major export market at the same time."

'Technological apartheid' worsens crisis

But bad as this collapse of traditional markets in the West and the East has been for the German industry in the past two or so years, an entirely new self-inflicted barrier to German machinery export was imposed by the Bonn government which, according to people inside the machine tool industry, has caused incalculable damage to the German industry at the moment of extreme vulnerability. Indeed, the passage, under the frantic urging of then-Foreign Minister Hans-Dietrich Genscher, of the world's strictest machinery export controls in the summer of 1991, may have been the death blow to the world's most important single machine tool capacity.

Reacting to a manipulated British, American, and Israeli media attack on Germany during the Persian Gulf war against Iraq, which portrayed Saddam Hussein as the "new Adolf Hitler" and which charged that German machine tool exports were permitting Saddam's army to retool Soviet Scud missiles with chemical warheads for bombing Israel, the German Parliament passed foreign trade regulations in summer 1991.

This export control policy requires that a German company effectively prove to what application his tools will be employed by an importing country. A special export license is now required for any civilian machinery export from Germany to a special "H-list" of 34 countries. Included in this black list are the largest industrial markets of Ibero-America such as Brazil and Argentina, and the potentially huge growing markets of Asia such as China, India, Taiwan, North Korea, and Pakistan. Moreover, the Foreign Ministry has in effect banned export of German machine tools to most of the Middle East including Saudi Arabia and Kuwait, all but excluding German industry from a share of the business of reconstruction, as well as to Iran and Israel, and, of course, Iraq. The argument employed by the Foreign Ministry export authorities in deciding if an export is allowed is the hopelessly vague American term, "dual use." A machine tool for civilian use in, say, construction of a milk-bottling factory in Iraq, would be classed "dual use" because, theoretically, the same lathe could be used to bore rifle barrels.

Competitors pick up the slack

The bitter irony is that the self-imposed German export control has merely opened vast new markets for rival machine tool exporters. No other country has been foolish enough to impose on its industry such export restraints. "This new law has been a catastrophe for the German industry, dependent as we are on exports," a representative of the German machine tool industry stated. "Many customers got very angry when the German export firm was forced to ask them, 'why do you need this machine?' and such under the new law. In some cases, national governments told their industry, 'do not buy German machine tools because it is too politically risky if they can deliver.' "

The net effect of Genscher's "signal" to the world has been economically devastating. Just at the time when the industry was going into a downturn in traditional markets, almost all exports were stopped for months while Bonn sorted out its new export control rules. Customers reacted to what seemed endless delays in getting machinery.

"Many importing countries simply turned to other countries," stated a VDMA spokesman. "We estimate that fully 15-20% of the export market for German machine tools has been replaced by new competitors." At the beginning of 1991, just as the German export restrictions hit, for the first time a high-quality, lower-cost machine tool export offensive appeared out of South Korea and Taiwan. "Many of these markets we may have lost permanently." One result of the new law is that even were Daimler-Benz, for example, to want to import German machine tools for its new car production facility in South Korea, it would find it all but impossible!

But foolishly, there is little sense of urgency visible in Bonn over this crisis. There is little discussion of concrete measures, for example, to encourage creation of a large market for German machine tools in the development of a real Mittelstand in east Germany to rebuild the rotted infrastructure. Instead a "free market" dogma under the Treuhand (responsible for East German state industries) of Birgit Breuel continues to turn eastern Germany into a wasteland of deindustrialization.