German Machine-Builders Survive With China

by Rainer Apel

At a press briefing on Sept. 24, the association of machine-building firms in Germany, VDMA, reported that whereas Western exports markets have not been doing well recently, exports to China show a marked increase: up by 36% during the first six months of 2003. This has made China the number-three importer of German machines, replacing Japan, which has held this position, after the European Union and the United States.

Big infrastructure projects and the related, immense increase of new industrial enterprises in China, have created a massive increase in demand for German machines, the VDMA reported. This trend mostly benefits the smaller and medium-sized German firms that have specialized in manufacturing high-quality machines for export, but it also includes the expansion of German firms on the Chinese market itself. German firms are investing more in China, and many have begun to establish production there, and their branches in China import vital machinery from Germany, as well. Certain categories of machines and machine-tools and special products of electric engineering increased 60% during the first six months of this year, as compared to the same period in 2002.

The Chinese boom, which has also been noticed in other Asian countries, has contributed to pushing Germany far ahead of other machine-building countries: Whereas machine-builders exported 53% of their annual production in 1992, it was already 68% in 2002, an increasing tendency (which also has to do, however, with a slump in domestic orders for machines). German machine exporters conquered 19% of the world market in 2002, leaving far behind the United States with 14.9%, Japan with 12.2%, and Italy with 9.7%.

The same trend was reported on Sept. 23 by the Asia-Pacific Committee of German Industry (APA), during the Asia-Pacific Weeks in Berlin. The APA said that trade with Asia and the Pacific has jumped from 28 billion euros to 134 billion, since 1993.

Direct investments of German firms in China increased by a factor of five, during the same period, which to a signifcant extent is the work of *Mittelstand* (small and medium-sized) firms. But also Siemens, one of the big firms, has huge investments, and employs 21,000 Chinese workers and engineers. All in all, Germany's exports to China increased by 30% during the first six months of 2003, machine exports even by 36%. The increase in exports to Vietnam is 38%, to Malaysia and the Philippines 17% each. Certain categories of German machines show similar rates of increase in exports to India, South Korea, and Russia, the APA said.

The role of the German machine-building sector as a catalyst in that is, however, undermined by Germany's private banks, VDMA general manager Dieter Klingelnberg charged at a Frankfurt press conference on Sept. 24. Banks have cut credit-lines to *Mittelstand* firms even more, during recent months, so that if that trend is not reversed in the near future, 10%, or even 15%, of German firms in the machine-building sector will not be able to survive, he said.

The increased interest in broader Eurasian economic and political development perspectives that goes along with the intensified trade and cooperation between Germany and Asia, is illustrated also with a special China edition of *Wirtschaftswoche*, Germany's leading economics weekly. The feature appeared in a dual German-Chinese language edition, in cooperation with China's leading economics magazine, *Jingji Ribao.*

Domestic Investment Crisis

Whereas the exports to Asian markets have undoubtedly saved the German machine-building sector from collapsing from the big losses on traditional Western export markets last year, doubts are being voiced in Germany whether many firms can survive in the long run, if the slump continues in domestic industrial investment.

Just as these new figures on exports were published by the VDMA and the APA, Hans Joerg Bullinger, president of the Fraunhofer Society, called attention to the domestic investment slump. The German economy is in a downward spiral, Bullinger said; capacity utilization in the machine-building sector is down to an alarming 82%. This downward trend since the 1990s is also reflected in sinking reserves of engineers: in the mid-1990s, 48,000 young Germans received an engineer's diploma every year; today that figure is down to 35,000. And whereas in the mid-'90s, 19,000 other natural scientists of the non-engineering branches graduated from universities every year, today that figure is down to 15,000. Sooner or later, a shortage of engineers and specialists in certain branches of the industrial production will occur, if that downward trend is not reversed.

Industrial innovation is also declining. In the year 2000, technological innovations were produced by 60% of industrial firms; but today only by 53%, Bullinger noted. But there still are sectors that show a upward potential, like the machine-builders: with more than 4,000 new patents listed in 2002, Germany has the lead there, on a global scale. The share of almost 20% of the entire global market for machines, which Germany conquered in 2002, reflects the attractiveness of that sector's production. But as domestic investments are too low, Germany's industry cannot fully benefit from the innovative powers of the machine-building sector, which reduces the potential productivity rate, and, in the medium term also, Germany's competitiveness on foreign export markets.