The Engines of Growth

Forget the familiar big global brands. Germany's economy is powered by a legion of smaller companies.

By Brian Blackstone and Vanessa Fuhrmans

LANGEN, Germany—If you buy a subway ticket in Germany or smoke a cigarette in the Middle East, odds are pretty good that Kirsten Schoder-Steinmüller's handiwork is involved.

If you have old fillings in your teeth, new light bulbs in your lamp or dollar bills in your pocket, you might want to thank Horst Linn.

Mr. Linn and Ms. Schoder-Steinmüller run two of the Germany's 3.5 million small and midsize businesses collectively known as Mittelstand, which together have powered this country's export-driven economy for more than a century.

Germany's recovery from the global recession has been among the fastest of major economies, surging at a 6.1% annualized rate in the first quarter of 2011 alone. Its budget deficit is a small fraction of those in the U.S., Britain and Japan. Whereas the U.S. faces chronic unemployment, Germany's jobless rate is at a 20-year low.

While German business is associated abroad with global brands such as Siemens, Daimler and SAP, this economic renaissance is actually grounded in hidden champions such as **Schoder** GmbH and **Linn High Therm** GmbH, companies that employ anywhere from a couple of dozen to several hundred workers and that count their revenue in the millions, not billions.

Mittelstand are dominant global players in valuable niches that are largely invisible to the average consumer—tools, parts and components—niches that nevertheless are critical to the manufacturing process. In Schoder's case, these include metal face plates for electrical machines including bus and subway ticket dispensers, and high-tech engraving tools that can stamp logos on everything from car parts to cigarette papers. Linn High Therm's super-hot industrial and laboratory furnaces, once used to cast tooth fillings, now help produce materials used in light bulbs and for numerous other applications.

Economic Backbone

"Mittelstand is the backbone of the economy," says Volker Treier, chief economist at the German chamber of commerce and industry, DIHK, based in Berlin. Small and midsize companies make up nearly 80% of private-sector employment in Germany, the world's fourth-largest economy, and 98% of its 350,000 exporters. Mittelstand companies ship products to, on average, 16 different foreign markets.

Their philosophy: "We are always looking for niche markets," says Ms. Schoder-Steinmüller in a small conference room a stone's throw from her factory floor in Langen, just outside Frankfurt. Her grandfather started Schoder in 1924 by engraving numbers and letters on early typewriters.

As Germany's economy evolved, so did Schoder. From the 1950s to 1970s, it moved away from typewriters and started engraving serial numbers on car parts, mostly for German auto makers. It also started to produce steel face plates for machines. Under Ms. Schoder-Steinmüller, who has run the business since her father retired in 2003, the company has gone even more high-tech. In addition to stamping logos on cigarette papers for clients in the United Arab Emirates, she uses state-of-the-art milling machines to build parts for high-strength lids on gas turbines. A potential new business: engraving on lipstick.

Twenty years ago, sales were almost entirely in Germany. Now, exports make up around 20% of Schoder's €10 million ($14.3 million) in annual revenues. "I am looking for steady increases of our sales," she says.

Technologically Advanced

Though most Mittelstand are family owned and thoroughly rooted in old economy products, such as machine tools, many firms operate in a mode not unlike high-tech start-ups.

"We have to constantly innovate, and we have to do it smarter and faster than competitors that have the benefit of a lower cost base," says Mr. Linn, the 66-year-old founder of Linn High Therm, an industrial and laboratory furnace maker in the northern Bavarian town of Eschenfelden.

Mr. Linn founded the company in 1969 with a small loan and a 550-square-foot rented workshop. He quickly developed a brisk business in manufacturing laboratory furnaces used to cast dental crowns and cavity fillings.

Linn High Therm long ago exited that market, which is now flooded with hundreds of low-cost manufacturers. But it has continued to enter and dominate new and highly profitable niches, such as furnaces for making the fluorescent materials used as an anti-counterfeiting measure in bank notes, and in energy-saving light bulbs. The company has more than 90 registered patents to show for its strategy—nearly three for every four of its 125 employees.

Staying Local

Keeping community roots strong is common to Mittelstand, and goes a long way in explaining how Germany has remained an export powerhouse, despite its relatively large manufacturing base and high labor costs. Experts credit cooperative labor-management relations at companies like Schoder and Linn High Therm with shielding German workers from the worst of the 2008-2009 recession that pummeled other labor markets in Europe and the U.S.

"There is a personal relationship," says DIHK's Mr. Treier. "Firms are embedded in their regions," he says.

But there are other reasons for those tight bonds as well. During the recession, "we couldn't afford to [lay people off]," Mr. Linn says. "Once you lose your highest skilled people, you never get them back."

Ms. Schoder-Steinmüller tells a similar story. Her business took a big hit even before the recession, when a single client canceled a large number of orders. Like many other Mittelstand, she got help from a government program known as Kurzarbeit that subsidizes companies that cut hours, not staff. To get by, she also suspended a bonus program with a promise to repay workers once profits returned. She cut costs elsewhere by reducing office cleaning and using some of her idled factory workers to make deliveries, all in order to "keep these people on board as long as possible."

Keeping her 70-person staff intact "cost me a lot of money," she recalls.

Finding fresh, highly skilled workers amid a growing shortage of German engineers and technicians is one of the Mittelstand's biggest challenges. Ms. Schoder-Steinmüller uses an apprenticeship program to ensure a steady source of skilled labor. Mr. Linn says during the recession he snapped up a handful of engineers who had lost jobs elsewhere.

Meanwhile, in light of Germany's falling birth rate, Mr. Treier, from the chamber of commerce, wonders "whether Mittelstand have enough sons, daughters and friends to run these companies down the road."

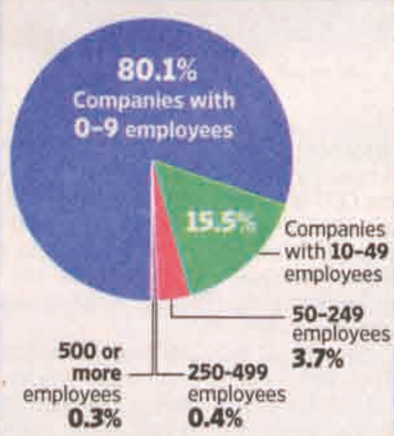
On that, Ms. Schoder-Steinmüller and Mr. Linn appear covered. Mr. Linn's son will soon take the reins of his company, and Ms. Schoder-Steinmüller hopes one of her three daughters will someday join her firm.

Mr. Blackstone is a reporter for The Wall Street Journal in Frankfurt. Ms. Fuhrmans is a reporter in the Berlin bureau of The Wall Street Journal. They can be reached at **brian.blackstone@wsj.com** and **vanessa.fuhrmans@wsj.com**.

The Mighty Mittelstand

Siemens, BMW and Bosch are global brands. But small and middle-sized businesses represent 99.7% of all German companies.

Definition of Mittelstand	Companies with fewer than 500 employees or less than €50 million annual revenue
3.5 mil.	Number of Mittelstand companies
78.5%	Percentage of German workforce
53%	Share of German GDP



Source: Association of German Chambers of Industry and Commerce (DIHK)