



## Export generation: Germany

### Abstract

*Germany has a 9 percent share of the world's merchandise exports, larger than that of the United States, an economy that is four times its size. It is Europe's export leader and has strengthened its position as Europe's growth engine during the crisis as exports rebounded to grow by 14 percent in 2010 after falling in 2009. German exports have almost doubled as a share of GDP since 1990. There are a number of key reasons for this performance. German manufacturers export to European, American, and Asian markets. Germany has taken advantage of its proximity to cheaper economies in Eastern Europe to offshore some of its production and increase efficiency both in these countries and at home. Exporters in Germany tend to be bigger than their Spanish or Italian counterparts, allowing for economies of scale and global competitiveness. A decade of successful industrial and labor reforms have led to wage restraint coupled with greater job security, allowing employers to reduce work hours without severing links with workers. Finally, a long-term mindset has encouraged medium and large businesses to maintain sizeable investments in R&D, totaling more than 2.5 percent of GDP. Germany's economic performance has helped others in Europe: a 1 percent increase in German GDP increases eurozone output by 0.5 percent and Central European GDP by 1 percent.*

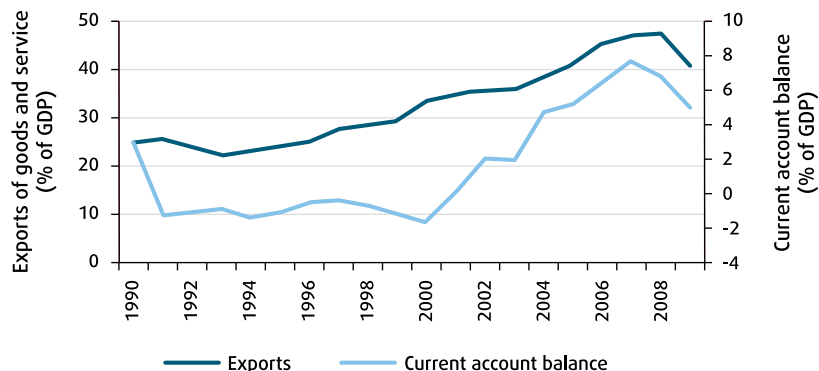
Many countries want to fuel their economic growth with exports. Germany has been exceptionally successful in achieving this objective. Thanks to growing exports (the growth rate of exports was 14.2 percent in 2010) the country was able to quickly emerge from the recent economic crisis. After a sharp decline in 2008 of nearly -5 percent, German GDP grew by 3.5 percent in 2009 and 2.5 percent in 2010.<sup>1</sup> In March 2011 German exports reached a record value of nearly €100 billion.<sup>2</sup> The country's Ifo Business Confidence Index rating surpassed its precrisis values in early 2011, rising to 110.4 in April.<sup>3</sup> Germany ranked fifth in the Global Competitiveness Report 2010–2011 (after Switzerland, Sweden, Singapore, and the United States) and 16<sup>th</sup> in the World Competitiveness Yearbook 2010.

### Europe's export leader

As one of the global leaders in merchandise trade, Germany accounts for about 9 percent of world merchandise exports (see figure 30 and figure 31, in appendix). Although the country lost the title of world's biggest merchandise exporter to China in 2009, it is still first in Europe. German exports as a share of GDP rose from 24.8 percent in 1990 to 47.5 percent in 2008, falling to 40.8 percent of GDP in 2009 (figure 27). The fall in volume of German exports was sizeable in 2009 (-14.29 percent) and practically equal to the euro area (14.28 percent).<sup>4</sup> Exports rebounded by 14.2 percent in 2010, according to the Federal Ministry of Economics and Technology, and are forecasted to grow further by 6.5 percent in 2011.<sup>5</sup>

Merchandise imports amounted to US\$938 billion in 2009 (7.4 percent of global merchandise imports). In terms of services, Germany accounted for 6.3 percent of global commercial services exports in 2009, surpassed only by the United States (14.1 percent) and the United Kingdom (7.0 percent).<sup>6</sup> In 2009 imports of commercial services, adding up to US\$253 billion, exceeded exports (US\$227 billion).<sup>7</sup> Nevertheless, since 2001 the country has enjoyed rising current account surpluses, from 2.0 percent in 2002 to 7.6 percent in 2007 and 5.3 percent in 2010 (figure 27).

**Figure 27: Exports of goods and services (%GDP) and current account balance (%GDP) in Germany, 1990–2009**

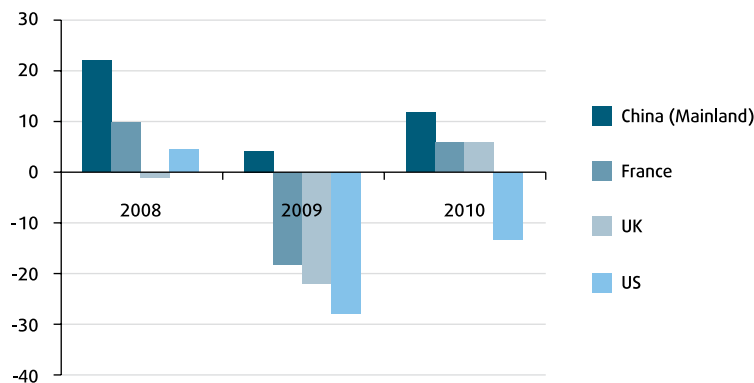


Source: World Bank WDI, IMF WEO.

**What did Germany do?**

There are several factors that led to Germany’s success. First, thanks to its specialized, high value-added exports—especially machinery and transport equipment (44.5 percent)—the country tapped both industrialized and emerging markets.<sup>8</sup> More than 60 percent of German exports goes to the EU27, followed by the United States (6.7 percent) and China (4.5 percent).<sup>9</sup> By strengthening its ties with emerging economies, Germany accounted for more than one-third of EU exports to Brazil, Russia, India, China, and South Asia in 2009. Although exports to China were only 1.9 percent of German GDP in 2009, they grew by nearly 15 percent in 2010 (figure 28).<sup>10</sup>

**Figure 28: German exports to China, France, the US, and the UK (% change from the previous year), 2008–10**



Source: IMF Direction of Trade.

Second, Germany took advantage of its proximity to the cheaper labor force in Eastern Europe. Off-shoring production to Poland, the Czech Republic, Ukraine, and Russia not only made the cost structure leaner but also resulted in higher productivity in Eastern European facilities as well as their counterparts in Germany (Marin 2009). In the case of the automotive industry, factories in Eastern Europe became a part of Germany-centered value chains. For example, Volkswagen built plants in the Czech Republic, Hungary, Poland, and the Slovak Republic. Allard et al. (2005)



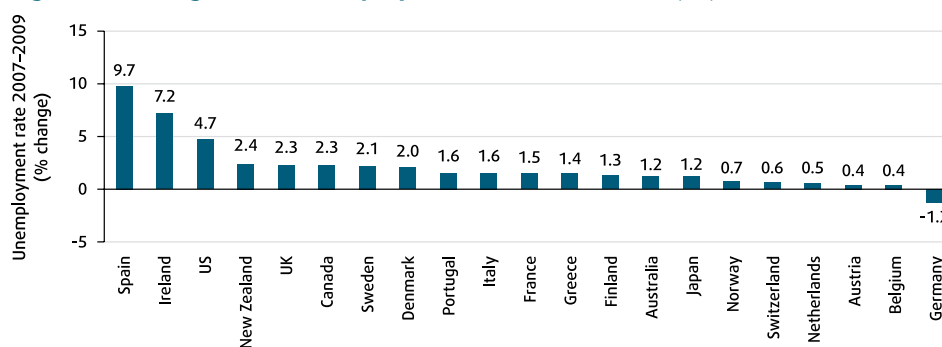
estimate that these two factors accounted for around 60 percent of the surge in German exports between 2000 and 2005.

Third, the characteristics of companies may have been another factor behind Germany's export success. Traditionally, German enterprises are associated with the term *Mittelstand* that denotes small- and medium-sized enterprises dominating the manufacturing sector. Yet, *Mittelstand* may be more a concept than a fact. A study by Navaretti et al. (2010) suggests that German companies tend to be larger than their Spanish or Italian counterparts. Size allows exporting enterprises to take advantage of economies of scale and face costs of new technologies, complex management structures, and brand recognition.

Fourth, domestic corporate sector and labor reforms improved cost competitiveness of German enterprises. After rising criticism of high social entitlements, an aging population, and gloomy economic prospects in the 1990s, the German government started implementing a set of reforms. First, so-called Hartz reforms reduced social spending by, among other things, cutting unemployment benefits as well as modernizing the government agencies dealing with labor issues.<sup>11</sup> Ecological tax reform raised taxes on energy use and transferred part of additional funds to the pension system, hence cutting employee's contributions. Additional proposals followed in 2003, when Chancellor Schröder presented Agenda 2010. This policy was aimed at two goals: creating a suitable environment for economic and employment growth, while providing social assistance to citizens. Finally, the implementation of moderate wage agreements allowed businesses to keep wages from rising and to adjust working hours according to current demand in exchange for greater job security. Now, when demand is high, employees work longer, and in times of a downturn, hours are reduced with the state partly subsidizing lost salaries.<sup>12</sup>

This was possible because German workers chose more work with lower wages rather than pushing for higher salaries and risking the loss of jobs to neighboring countries. All these measures helped to keep labor costs in check within the existing social contract. Darius et al. (2010) find that Germany had the best employment performance among the OECD countries (figure 29). However, as indicated in a Federal Ministry of Economics and Technology report (BMWi 2011), labor costs in Germany still remain one of the highest in the eurozone (BMWi 2011).

**Figure 29: Change in the unemployment harmonized rate (%) in OECD countries, 2007-09**



Source: OECD and Center for Economic and Policy Research.

Finally, in the era of increased competitive pressures from abroad, the long-term mindset of the German *Mittelstand* is an important virtue. Companies tend to focus on investing in new

technologies, rather than realizing high profits. According to Eurostat, in 2007 Germany had the highest proportion of enterprises involved in innovation activities (63 percent) in Europe. Total R&D expenditure amounted to 2.5 percent of GDP, with the business enterprise sector accounting for 70 percent.<sup>13</sup> The German skilled labor force receives both in-class vocational training and on-site practice, a dual system of training that has been a feature Germany's economy for several centuries.

### Europe's growth engine?

During the recession of 2008-09 and, with it, a fall in external demand for manufactured capital goods, Germany's merchandise exports fell by 14.3 percent. GDP contracted by 4.7 percent. In 2009, the German auto industry, which is an important contributor to exports, lost nearly a third of its export revenues. But GDP started to recover quickly, thanks partly to a rapid increase in exports.

It is not clear how sustainable this export-based model will be in the medium term. A dependence on exports together with an aging population is believed by many to pose a long-term threat to Germany's economic prospects. The IMF forecasts that growth will slow after 2011, reaching only 1.3 percent in 2016.<sup>14</sup> Some experts point out that low wages limit household consumption, which if higher, would increase demand and boost growth. High current account surpluses contribute to the imbalances among EU countries and result in bilateral deficits in Germany's trading partners.

However, German growth is beneficial for other European nations, both inside and outside the eurozone. A recent study by the IMF (2008) suggests that between 1998 and 2007 an increase in German GDP of 0.5 percent was associated with a 0.25 percent increase in eurozone economic growth and a 0.5 percent increase in new member-state economic growth after three quarters.

Still, other countries can draw some useful lessons from what German workers, entrepreneurs, and policy makers have done during the past two decades. The mix of industrialized and emerging market trading partners allows the country to tap the potential of both groups and be more flexible when demand from Western countries falls. German entrepreneurs have cut costs by integrating regionally and producing goods that rising economies need. A long-term attitude toward doing business has enabled the country to invest more in technologies of the future (e.g. green technologies). Finally, over the years and despite some criticism, Germany kept its focus on manufacturing rather than services.

The risks come from an aging population and policies toward immigration. Germany needs the same long-term thinking that characterizes its business sector in addressing problems related to aging, education, and immigration. If German small and medium-sized companies are to succeed in the future, they will need skilled and dedicated workers. Education systems that benefit immigrants and natives differentially may jeopardize skill accumulation and hurt German industry.



## Sources

- Allard, Céline, Mario Catalan, Luc Everaert, and Silvia Sgherri. 2005. "France, Germany, Italy, and Spain: Explaining Differences in External Sector Performance among Large Euro Area Countries." IMF Country Report No. 05/401. Washington, DC.
- BMWi. 2011. "2011 Annual Economic Report: Germany on the Upswing—Securing the Prosperity of Tomorrow." German Federal Ministry of Economics and Technology. Berlin.
- Buhr, Daniel, and Josef Schmid. 2007. "Big Reform with Little Effect? Labour Market and Employment Policy in Germany." Centrum für angewandte Politikforschung (C-A-P) Working Paper. Munich.
- Cienski, Jan, and Chris Bryant. 2010. "Economy: Exports to Germany Help Relieve the Crisis." *Financial Times*, November 29.
- Czada, Roland, and Kenji Hirashima. 2009. "Germany and Japan after 1989: Reform Pressures and Political System Dynamics." Institute of Social Science University of Tokyo, ISS Research Series No.33. Tokyo.
- Darius, Reginald, Mwanza Nkusu, Alun Thomas, Athanasios Vamvakidis, Eduoard Vidon, and Francis Vitek. 2010. "Cross-cutting Themes in Employment Experiences during the Crisis." IMF Staff Position Note, SPN/10/18. Washington, DC.
- Economist. 2010. "Older and Wiser: A Special Report on Germany." March 13.
- EIU (Economist Intelligence Unit). 2011. "Germany Economy: Quick View—Exports Recover." Economist Intelligence Unit, April 8.
- Eurostat. 2010. *Science, Technology and Innovation in Europe. Eurostat Pocketbooks*. Brussels.
- Guérot, Ulrike, and Mark Leonard. 2011. "The New German Question: How Can Europe Get the Germany It Needs?" European Council on Foreign Relations Policy Brief. Brussels.
- IMF (International Monetary Fund). 2008. "Germany: Selected Issues." IMF Country Report No. 08/81. Washington, DC.
- Marin, Dalia. 2009. "The Opening Up of Eastern Europe at 20—Jobs, Skills, and 'Reverse Maquiladoras' in Austria and Germany." BRUEGEL Working Paper, September. Brussels.
- Navaretti, Giorgio Barba, Matteo Bugamelli, Fabiano Schivardi, Carlo Altomonte, Daniel Horgos, and Daniela Maggioni. 2010. "The global operations of European firms: the second EFIGE policy report."
- OECD. (Organization for Economic Cooperation and Development). 2010. *OECD Economic Surveys: Germany*. Paris.
- Schaefer, Daniel. 2010. "Exports Pull Specialists Out of Recession." *Financial Times*, November 29.
- Stephan, Catherine. 2010. "Germany: A Gradual Recovery." BNP Paribas Economic Research, April. Paris.
- WTO (World Trade Organization). 2010. *International Trade Statistics 2010*. Geneva.
- WTO. 2010. *Trade profiles 2010*. Geneva.

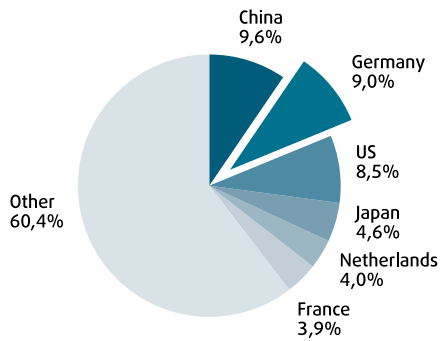
## Notes

- 1 IMF World Economic Outlook, constant prices.
- 2 Around US\$141 billion.
- 3 Ifo Business Climate Index for German trade and industry, 2000 = 100.
- 4 IMF database, exports of goods and services.
- 5 WTO, in comparison to the previous year.
- 6 WTO.
- 7 WTO, reference year: 2009.
- 8 UN Comtrade. See appendix.
- 9 WTO trade profiles 2010, reference year: 2009.
- 10 IMF.
- 11 Bundesagentur für Arbeit.
- 12 The following applies only to employees with permanent contracts.
- 13 Eurostat.
- 14 IMF WEO.
- 15 Categories according to NACE (Nomenclature générale des Activités économiques dans les Communautés européennes) rev. 1 classification.

## Appendix

**Figure 30: Top six world leaders in exports of merchandise, in 2009 (by percentage share in total world exports)**

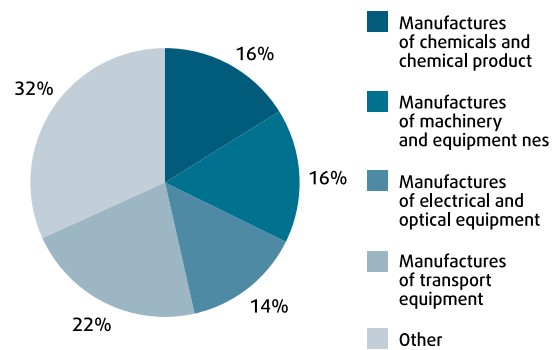
World exports in 2009



Source: WTO International Trade Statistics.

**Figure 31: German gross exports in 2009, by sector<sup>15</sup>**

Gross exports by sector



Source: UN Comtrade.