



# AICGS ISSUE BRIEF

JULY 2005

03

## European Growth Troubles: Divergences and Challenges in a Global Economy

BY STEFAN BERGHEIM

Why has European growth been so soft in the past years?

Can different population growth rates explain the differences in GDP growth between the United States and the EU?

Why has the Spanish economy grown so much faster than the German economy?

What role is there for differences in the accumulation of human capital?

Have different economies opened up to their trading partners at different speeds?

Are there cross-country differences within the EU in the way countries adjust to increasing trade openness?

Is the strong growth of India and China sustainable?

Disappointment with economic performance and slow growth was one important element behind the rejection of the EU constitution in France and in the Netherlands this spring. It is also one of the reasons for the likely demise of the Red-Green government in Germany. And it is seen as one of the forces behind the ever-widening current account deficit in the United States. Even more, large differences in growth rates within the European Monetary Union (EMU) may make life harder for European policymakers. On the other hand, the rapid growth rates of China and India are set to have a major impact on the EU and on their relative weights in geopolitics.

Unfortunately, despite these many worries about economic growth, most European governments have not really been able to reinvigorate their economies. The Lisbon strategy<sup>1</sup> has been implemented only partially. However, focusing attention on the development of human capital and the openness of economies can go a long way in answering many questions. In addition, a forward-looking analysis of trends can help produce substantiated forecasts on how the major economies are likely to develop over the coming decades.

### Deutsche Bank Research's Megatopic: Global Growth Centres<sup>2</sup>

In February 2005, Deutsche Bank Research published an introductory study on its new megatopic, Global Growth Centres. In a structured and interdisciplinary approach, DBR developed a model to identify the countries with the highest rates of GDP growth in the period 2006-20. India, Malaysia, and China came out on top, while Germany ended up twenty-seventh out of thirty-three countries.

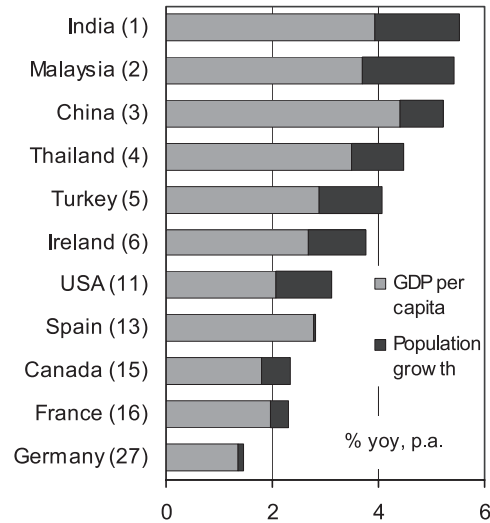
Stefan Bergheim, lead analyst for this megatopic and author of this Issue Brief, presented the key results and their policy implications at AICGS and at the IMF this June during his fellowship stay at AICGS. The introductory study, follow-up analyses on human capital and openness, and country-specials on India and Turkey are accessible at [www.dbresearch.com](http://www.dbresearch.com) (Megatopic Global Growth Centres).

## Four Elements of Long-Run Growth Analysis

The first element of strong overall GDP growth is population growth. The well-known demographic challenges in Europe are depressing trends in growth partly because the policies to handle them still are not in place. Low birth rates and rising life expectancy can be dealt with by more family-friendly policies, by allowing immigration, and, crucially, by allowing increasingly healthy people to have longer working lives. Countries like France, Sweden, or Spain are successful in at least one of these policy areas and therefore their populations are growing faster than those of Germany or Italy. But even they trail countries like India (high birth rates) and the United States (strong immigration) on population growth and, therefore, on overall GDP growth. However, the well-being of individuals depends more on their own income than on the economy's overall GDP. Therefore, individuals should focus on per capita GDP growth, which also determines their view of the need for policy changes in a given country.

The second element of any substantiated growth analysis is the accumulation of physical capital. Given the right incentives and profit opportunities, companies tend to invest in new plants and equipment to boost productive capacity. However, German investment expenditure as a share of GDP has been on a downward trend for four decades, having started at comparatively high levels. By contrast, investment rates in Spain and the United States have been on an upward trend for most of the 1990s and are now above those in Germany. The underlying reason for this is the low return of physical capital in Germany because of low labor input and because of an overly restrictive regulatory environment—a characteristic common to most large countries in the EMU. At the moment,

**Ranking of GDP growth 2006-20**



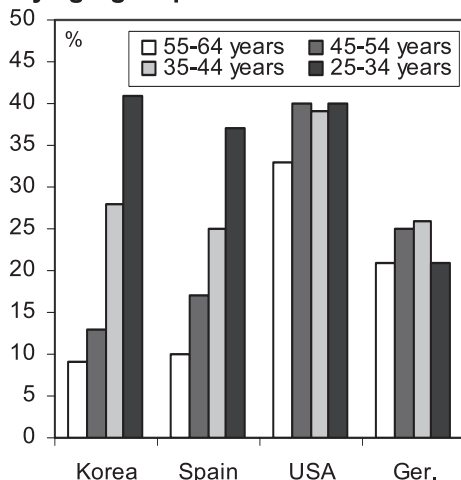
Source: Deutsche Bank Research *Formel-G*,  
Numbers in brackets are ranks among 33 economies

high private savings rates in Germany combine with low investment rates and lead to a sizeable current account surplus. Put differently, Germany is investing abroad, which is consistent with its low birth rates and its relatively rapidly aging population.

The third and often neglected ingredient in strong economic growth is an increase in human capital. Better educated workers can apply and generate new ideas and can work more efficiently. Studies of data on individual workers show that an additional year of education tends to lead to a 10 percent rise in income. Macroeconomic estimates indicate that a 10 percent rise in the average level of education leads to a roughly 9 percent rise in per capita GDP. As with the first two elements of growth analysis, Germany is trailing most other countries with respect to changes in human capital, which is best proxied by the average years of education of the working age population. The currently very high level of human capital in Germany (and the resulting high level of income) is limiting the perceived need for change. The years of education as the best proxy of human capital are highly correlated with many other variables that are seen as important elements of the growth process or as results thereof: economic freedom, research and development expenditures, and health.

Divergences in human capital turn out to be one of the reasons for the diverging growth experience between Spain and Germany. While 40 percent of young Spaniards now have a tertiary education, just 20 percent of Germans do. While the

**Population with tertiary education by age group**



Source: OECD Education at a glance 2004

percentage of Spaniards with higher education has risen sharply over the past decades, Germany's average education level has been stagnant. It is no wonder then that German GDP has barely grown for many years. On top of this, measures of educational quality like the OECD's PISA study<sup>3</sup> show young Germans performing quite poorly relative to the high education level of their parents' generation—a disappointment they share with U.S. students. Education attainment rates are also stagnant in the United States, although at much higher levels than in Germany. The result will be the same: a slow rise in human capital.

The fourth element in DBR's growth model is the change in the degree of trade openness. More open economies tend to adopt more new technologies from their trading partners, and they tend to produce more efficiently because of competitive pressures from foreign suppliers. Since small countries tend to

trade a lot more with the rest of the world than large countries do, we adjusted the share of trade in a country's GDP for the size of its population to calculate our measure of trade openness. Germany is the most open economy among the thirty-four countries in the DBR model. Belgium, the Netherlands, Malaysia, and Korea take the next highest positions in the 2001 ranking, while New Zealand and Argentina are at the end of the table. Although the level of openness is highest in Germany, Spain and Ireland have opened up even faster than Germany over the past fifteen years and have in the process seen higher GDP growth. In addition, Germany has not been able to re-employ in other sectors a lot of the labor set free by this opening. Instead, it is now facing more than 5 million unemployed workers and a large number of early retirees. In addition, it has had to integrate eastern Germany with its relatively low productivity. By contrast, Spain has been able to cut its unemployment rate by half over the past ten years.

## The Way Forward for Germany

For Germany to significantly boost its long-run growth performance, it has to start putting more emphasis on human capital and end the current stagnation that has been in the making for years. Aiming for a 40 percent tertiary education attainment rate similar to levels in the United States, Korea, and Spain could be an important goal for German policymakers. This would require significant changes in all layers of the educational system, including more places in day-care facilities, more support for less motivated pupils, but also the use of tuition for university education.

Secondly, it has to boost usage of the available labor force. While the average hours worked per year per person aged 15-64 has risen by 240 hours in Spain to 1100 over the past ten years, it has declined by 50 in Germany to 930—a level well below the OECD average.<sup>4</sup> Cuts in social security benefits (e.g. early retirement), more wage differentiation, lower taxes on labor, and less restrictive firing rules are important steps towards higher usage of labor. The effective average retirement age in Germany has barely changed over the past forty years and stood at sixty-one years in 2004. Meanwhile, the life expectancy of a (much healthier) sixty-year-old jumped from ten years to twenty-one years over the same period with the resulting strains on the social security system. Of course, Germany has made significant progress in several important policy areas over the past years: income tax rates were cut significantly, a move towards privately funded pensions was made, and the Hartz IV reforms boosted work incentives.<sup>5</sup> With these policy reforms and with its competitive global companies, Germany has made more progress than many other economies within the EMU.

As Germany addresses its main weaknesses, companies will again start to invest more in physical capital and Germany will be able to reap the full benefits of its openness to international trade. The structural weakness of German economic growth over the past years has deep roots in the policies of the 1970s and 1980s. Getting out of the stagnation, therefore, is also a long-term process. There are no quick fixes. ■

## References

1 The Lisbon strategy was agreed upon at the European Council meeting in Lisbon in March 2000 and aims at making the European Union "the most dynamic and competitive knowledge-based economy in the world" by 2010, with a focus on research and development as well as job creation.

2 For the introductory study to the project see Stefan Bergheim, *Global Growth Centres 2020*, Deutsche Bank Research, Current Issues (2005).

3 The OECD's Program for International Student Assessment (PISA) is a triennial test of skills and knowledge for fifteen-year olds.

4 An analysis of the low labor input is provided in Stefan Bergheim and Marco Neuhaus, *Bottleneck Labour – An Empirical Growth Analysis*, Deutsche Bank Research, Current Issues (2002).

5 The many difficulties of moving ahead with reforms are outlined in Stefan Bergheim, Stefan Schneider, and Marco Neuhaus, *Reformstau – Causes and Remedies*, Deutsche Bank Research, Current Issues (2003).

6 India is DBR's latest megatopic. See the introductory study by Jennifer Mund, *India Rising*, Deutsche Bank Research, Current Issues (2005).

# Global Outlook

The countries set to post the strongest rates of GDP growth—in the thirty-four country group in the “Global Growth Centres” framework—over the next fifteen years are India, Malaysia, and China. In India, strong population growth combines with a relatively rapid rise in education levels and a significant further opening of the economy to generate annual GDP growth rates of 5.5 percent.<sup>6</sup> This still leaves per capita incomes very low in international comparison. However, with 1.4 billion people, India will be the third largest economy of the world in 2020, overtaking Japan. Malaysia’s 33 million people in 2020 will probably achieve 5.4 percent average annual GDP growth after 2006, as the focus on education and modern technologies pays off. China comes only in third place in the 2006-20 growth league mainly because its working-age population is set to shrink towards the end of the forecasting horizon. Still, with 5.2 percent GDP growth it will remain the second largest economy in the world in 2020 with a per capita income near today’s level of Chile. However, the 9 percent-plus growth rates over the past years do not appear sustainable according to this analysis. Japan and Switzerland bring up the rear in the growth league of 2006-20 with their shrinking populations and only small expected gains in human capital and in openness.

Building knowledge, insights, and networks for German-American relations.

Located in Washington, D.C., the American Institute for Contemporary German Studies is an independent, non-profit public policy organization that works in Germany and the United States to address current and emerging policy challenges. Founded in 1983, the Institute is affiliated with The Johns Hopkins University. The Institute is governed by its own Board of Trustees, which includes prominent German and American leaders from the business, policy, and academic communities.

**AICGS**

1755 Massachusetts Ave., NW  
Suite 700  
Washington, D.C. 20036 – USA  
T: (+1-202) 332-9312  
F: (+1-202) 265-9531  
E: [info@aicgs.org](mailto:info@aicgs.org)  
[www.aicgs.org](http://www.aicgs.org)

---

**AMERICAN INSTITUTE  
FOR CONTEMPORARY  
GERMAN STUDIES**

THE JOHNS HOPKINS UNIVERSITY