

China's Economic Outlook



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Prospects for Consumption-Based Growth in China

by Christian Dreger and Yanqun Zhang

The Chinese model for economic growth is undergoing a fundamental reorientation. While output has been driven by investments and exports in recent decades, private consumption is expected to become a major trigger for future GDP growth. However, the conditions for higher demand from households are far from optimal: the savings rate is high, driven in particular by the low level of social security and highly regulated financial markets. It remains to be seen whether the government can transform China into a consumer society without causing major friction.

The People's Republic of China has just experienced a breathtaking phase of economic expansion. Real production has increased by an average of approximately ten percent per annum in recent decades. As a result, the country has contributed significantly to the growth of the global economy. China has since become the second largest economy in the world—it will probably take another few years before the US is dislodged from its position at the top of this ranking. However, economic growth in China is currently slowing: the increase in real gross domestic product (GDP) in the fourth quarter of 2012 was still at 7.9 percent, in the first quarter of 2013 the economy grew by 7.7 percent, and in the second quarter by only 7.5 percent. While this slowdown initially appears to be negligible, it could nevertheless be due to a development that might lead to permanently lower growth rates. The new Chinese government has signaled its intention to accept slightly lower GDP growth in future, possibly even over a longer period of time. The expansion of its economy might then fall below the threshold of 7.5 percent, regarded by many observers as a minimum to ensure adequate employment opportunities for its millions of migrant workers.¹ If jobs are no longer guaranteed, the political stability of the country might also ultimately be endangered—with substantial consequences for the global economy. Therefore, the report considers the causes of lower growth. How will the Chinese government deal with this process and what are the prospects of successfully transforming the Chinese economic model?

¹ The number of employees in rural areas has been declining for years. Job cuts due to the declining importance of agriculture to value added are particularly prevalent in state-owned enterprises. Redundant workers migrate to the cities to find work, particularly in the industrial sector. Despite the job cuts that have already been made in agriculture, more than a third of workers are still employed in this sector, while ten years previously the corresponding figure was approximately 50 percent.

Limitations of the Old Growth Model

China's economy was able to expand in recent years, mainly thanks to high levels of investment and increasing exports. The industrialized nations are crucial as sales markets for the export sector: approximately one-third of exports are delivered to the US and the member countries of the European Union (EU). Export dynamics have cooled significantly as a result of modest US growth and the debt crisis in the euro area. Exports to the US in the first half of 2013 rose by no more than two percent over the same period in the previous year; exports to the EU in the same period actually fell by five percent.

The Japanese government's economic stimulus measures have had a negative impact on Chinese export prospects: it has led to a depreciation of the Japanese yen and, in turn, to a revaluation of the Chinese renminbi. Consequently, the competitiveness of Chinese exporters deteriorated. Once again, it is clear that China is heavily dependent on development in the industrialized countries and cannot be regarded as an autonomous growth pole in the global economy.²

Foreign sales slumped sharply during the global financial crisis, by approximately ten percent in 2009. Although exports make up approximately one-third of GDP, a marked slowdown of growth was prevented because the government supported the economy by implementing various stimulus measures. According to the International Monetary Fund (IMF), the programs had a scope of around six percent of GDP spread over two years.³ This allowed production to increase at its usual pace. However, it has also delayed the transformation of the Chinese economy and increased the risks.

In particular, the economic stimulus package has kick-started investments in infrastructure. Furthermore, four public banks have given the country's enterprises generous loans to stimulate the economy. Credit checks have often not been as thorough as they might have been.⁴ State-owned enterprises in particular have benefited from informal lending practices, not only on

the basis of any common interests with the banks but also due to the supposedly lower default risk—from the banks' point of view—because the government would protect enterprises from bankruptcy in an emergency. However, the capacity of the government budget is not unlimited, and the risks could ultimately remain in the financial sector. Therefore, the proportion of potentially bad loans on bank balance sheets ought to have increased significantly.

In addition, local governments have apparently taken over management of the economic stimulus packages. While central government debt is officially only about 20 percent of GDP, the provinces are not included in that figure. No one currently knows precisely how high the real debt burden is. The government has commissioned the Court of Auditors to produce an overview of local government debt to create transparency.

The reactions of the government to the financial and economic crisis have exacerbated imbalances within the country. The investment to GDP ratio, which was already approximately one-third at the turn of the millennium, has increased to almost 50 percent due to the investment boom of recent years (see figure). As a consequence of government-prescribed low interest rates, credit has also been plowed into less productive sectors, leading to overcapacity. The transformation of the Chinese economy remains largely on track due to its one-sided promotion of outdated structures. Private companies still receive virtually no loans from the commercial banks and are dependent on a less transparent and probably also highly inefficient system of shadow banks. In many cases, they are forced to buy up foreign capital at excessively high interest rates.

The Chinese government may maintain its usual response pattern for a while longer and react with expansionary measures to counter the slowdown in growth. As long as growth remains sufficiently high, resources are generated that can be used to control the accompanying adverse effects. In addition, the country holds the most foreign exchange reserves in the world, and these can be used to stabilize the economy in an emergency. However, such a strategy would further increase the risks and development could veer out of control in just a few years. Therefore, the new government has apparently decided to shift toward a more sustainable economic course. It aims to achieve a more balanced growth path, with a greater focus on private consumption.

² See also C. Dreger and Y. Zhang, "China: Trotz hoher gesamtwirtschaftlicher Dynamik noch keine Lokomotive der Weltwirtschaft," Wochenbericht des DIW Berlin, no. 33 (2012).

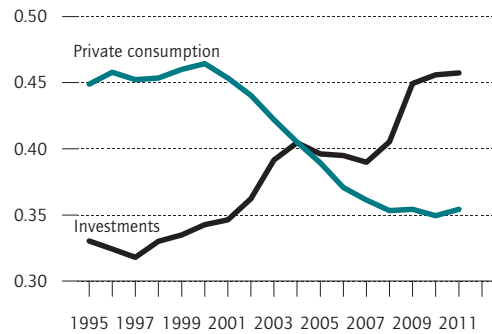
³ See also International Monetary Fund, "Navigating the fiscal challenges ahead," IMF Fiscal Monitor (Washington, D.C.: May 2010). The individual components of the stimulus package are, for example, discussed by B. Naughton, "Understanding the Chinese stimulus package," China Leadership Monitor 28 (2009).

⁴ The Bank of China, the People's Construction Bank of China, the Agriculture Bank of China, and the Industrial and Commercial Bank of China operate in different market segments. For an analysis of the structure of the Chinese banking sector, see F. Allen, J. Qian, C. Zhang, and M. Zhao, "China's

Financial System: Opportunities and Challenges," NBER Working Paper 17828 (2012).

Figure

Private Consumption and Investments in China Relative to GDP



Source: National Bureau of Statistics of China; calculations by DIW Berlin.

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Investments exceed private consumption by far.

Structural Factors Slowing Consumption

Households have continuously expanded their consumer spending in the past few years. Nevertheless, growth in consumption has been disproportionately low; its share of GDP fell in the course of the last decade from almost 50 percent to 35 percent at present. Around 80 percent of this consumption is accounted for by urban households, although the urban and rural populations are approximately the same size.

The relatively modest increase in private consumption is the result of various structural factors. For instance, previous gains in disposable income did not generally keep pace with GDP growth. For a long time, China's price competitiveness in export markets was paid for by low wage growth. Therefore, the disproportionately low increase in consumption can initially be explained by income development. Furthermore, an increasing proportion of disposable income is not being used for consumption at all, however, but is being set aside for a rainy day: the savings rate of households is almost 30 percent.⁵ One reason for this is the insufficient level of social security. Although the government has been spending significantly more on old age pensions and on sick and unemployment benefits since the turn of the millennium, this does not even amount to five percent of GDP overall. Spending is not expected to increase significantly in the near future, particularly not if government debt

proves critical. Many households are thus forced to provide for themselves to a large extent—a trend which is compounded by the statutory one-child policy and the decreasing average household size.

In addition, households are faced with liquidity constraints. Larger purchases are frequently financed by withdrawing savings since the corresponding loans are not available. For this reason, too, the development on the financial markets has little bearing on consumer behavior. Although low interest rates have encouraged investment, they have simultaneously slowed down growth of disposable income.

Reform Strategies Will Take Some Time

The country's new political leaders seem to have recognized the economic imbalances and are apparently prepared to take measures to put the economy back on a path of sustainable growth. Companies in sectors with overcapacities will not receive any new loans unless they want to use them to close down their operations. This indicates that the Chinese government is willing to accept a somewhat lower growth of GDP. The current five-year plan aims to base economic development on private consumption to a greater extent than previously. The crisis in the industrialized countries has massively contributed to the paradigm shift. The conditions for stronger consumer-based growth have not been fulfilled, however, so further reforms are still needed.

Greater consumption growth could initially be aided by a stronger increase in disposable income. On the one hand, higher wage growth could play a role here. In recent years, wages rose faster than productivity growth plus inflation, albeit from a low initial level. Furthermore, minimum wages have increased significantly, not least in order to prevent feared social unrest.⁶ However, high wage growth may make it more difficult to set up innovative companies. Employee earnings in the private sector are not directly regulated by the government—but state-owned enterprises offer higher wages and, in the competition for suitable staff, private companies are likely to follow suit. Therefore, wage growth which continuously exceeds the scope of a neutral impact on the income distribution would not be optimal and could have an adverse effect on employment. On the other hand, an increase in disposable income could also be supported by potentially higher interest rates as savings targets can be achieved with a relatively lower savings rate. At the same time, investment growth would

⁵ The aggregate savings rate of households, enterprises, and the government is over 50 percent of GDP.

⁶ See also C. Dreger and Y. Zhang, "Inflation in China ist zunehmend hausgemacht," Wochenbericht des DIW Berlin, no. 50 (2011).

slow down. As a result, production would be less capital intensive. Hence, a certain level of employment could be maintained even with lower output growth—particularly since the working-age population has already begun to decrease. Ultimately, the new strategy of ongoing urbanization should also promote consumption growth, since urban centers provide a better and wider range of consumer opportunities. However, this requires reforms in the household registration system, known as “hukou,” which classifies every Chinese citizen as belonging to the urban or rural population. The current regulation excludes, or at least makes it more difficult for migrant workers to receive many social security benefits.⁷

Liberalizing Financial Markets on the Agenda

One decisive factor in the change of direction of the Chinese growth model is the further liberalization of the financial markets. Private companies and households need easier access to loans so that liquidity restrictions become less binding. Particularly in the banking sector, reforms should be made to encourage competition. Initial steps in this direction have already been taken: for instance, the central bank recently allowed lending rates to be reduced, meaning that banks can offer households and companies lower interest rates. Before restrictions were relaxed, this was only possible within a band fixed by the central bank. It is not clear, however, to what extent this reform does in fact stimulate private demand. Private stakeholders do not receive any loans from the state-owned banks in any case. Consequently, this step could primarily serve to reduce the borrowing costs of public debtors and ailing state-owned enterprises and to save heavily indebted local governments. Furthermore, the banks retain an increasing proportion of potentially bad loans on their balance sheets, so they have become more cautious about lending. The demand for loans is therefore likely to remain high for financial institutions that do not cut their interest rates.

Maximum and minimum limits still apply to interest on cash deposits. The abolition of the fixed bands should have a major impact, at least on households. The banks would then have to compete for savings with higher interest rates. Greater market liberalization, also for foreign banks, could help squeeze out the largely unregulated and opaque shadow banking sector. Economic growth would be determined to a larger extent by the domestic economy.

Policy Implications

More heavily consumer-based growth in China requires structural reforms: besides urbanization, these include easier access to urban social benefits for former rural populations and a liberalization of the financial markets so that liquidity restrictions are less binding. Rising interest rates could also contribute to higher consumer growth if they lead to lower savings rates. A sustainable expansion of the currently relatively low level of social security should stimulate spending by households but is not likely to be implemented in the near future due to heavily indebted public budgets.

Although the one-child policy eases the situation on the labor market on the one hand, it could lead to another increase in savings rates on the other hand: since this policy has led to a surplus of men in the population, households are also saving to improve the chances of their male line of descendants on the marriage market.⁸

Overall, the transition to more consumer-based growth in China is not likely to be a smooth one and is expected to take quite some time.

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Keywords: Chinese economy, savings rate, transformation and growth

⁷ See C. Dreger and Y. Zhang, “Understanding Chinese consumption. The impact of Hukou,” DIW Discussion Paper 1341 (2013).

⁸ See S.-J. Wei and X. Zhang, “The competitive saving motive: Evidence from rising sex ratios and savings rates in China,” *Journal of Political Economy* 119 (2011): 511–564.



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FIVE QUESTIONS TO CHRISTIAN DREGER

»China's New Course: Strengthening Private Consumption«

1. Professor Dreger, the Chinese economy has experienced tremendous growth in recent years sustained by successful exports. Now the government is setting a new economic course toward private consumption. What is to change? In recent years, China has grown mainly through its exports and investments. The vulnerability of this model was exposed during the global financial crisis. In 2009, exports fell by approximately ten percent. Nevertheless, China was able to maintain its strong GDP growth because the government responded with a gigantic fiscal stimulus package. This has, however, reinforced existing imbalances in the country. To achieve a path toward more sustainable growth, China is attempting to strengthen the importance of its domestic economy. In recent years, the focus of economic policy has not been on the consumer and, in fact, the consumption ratio has also fallen. It is now at only 35 percent. Although consumption has grown, it has done so less than GDP.
2. What measures is the Chinese government planning? We know that cities tend to consume more than rural areas. As a result, economic development is being promoted through greater urbanization. Of course, the Chinese government also knows that it needs to liberalize the financial markets further to ease liquidity restrictions on households. At the same time, the aim is to reinforce the importance of the renminbi as an international reserve currency. China is now the second major country in the global economy and will overtake the US in a few years' time; it is therefore incongruent that the renminbi should only play such a regional role.
3. Do ordinary Chinese citizens actually have enough money to consume more? In recent years, disposable income

has increased, often quite significantly. One main problem is the high savings rate which has continued to grow in recent years. There are a variety of reasons for this development, including inadequate social security, liquidity constraints, which impact on many households, or the lack of access to urban services for households registered in rural areas.

4. What impact could China's new course have on the global economy? The global economy ought to benefit from China focusing more on domestic growth because China would then have to import more goods. This is a normal development for a country integrating more into the global economy. The question is how will China achieve this transformation? There is overcapacity in the investment sector which, in the past, was encouraged by less restrictive lending by banks. Many loans are certainly beyond recovery. This represents a significant risk to the national budget. In altering its economic course, China faces considerable challenges and it is not even clear whether this reform process will be successful.
5. How great is the risk? It remains to be seen how much bad debt there actually is. While it has fallen since the turn of the millennium, the country's vulnerability further increased during the financial crisis because most state-owned banks gave loans to state-owned enterprises without any credit checks. Ultimately, if the enterprise goes bankrupt, the government will jump in, increasing public debt. Generally, the Chinese government's response to the financial crisis has actually delayed the necessary transformation toward a higher weighting of the private sector. But this kind of change is imperative to achieve high growth rates in future.

Interview by Erich Wittenberg.

German-Chinese Economic Relations—Opportunities and Risks for Germany

by Georg Erber

During the last few years, the People's Republic of China has become an increasingly important trading partner for Germany. Particularly in the wake of the global economic and financial crisis that began in 2008, trade with China has been an important driver of economic growth in Germany as German industry benefited from the increase in Chinese import demand more than other European countries. However, Chinese economic growth has slowed somewhat since then. After recording double-digit growth rates in the past, the new Chinese government is now attempting to stabilize annual economic growth at 7.5 percent. It is therefore likely that future German export growth rates to China will be lower than in recent years. Further, according to the government's new plans, Chinese economic growth should rely less on export and investment, as has been the case to date, and more on domestic performance and private consumption in the future. It is anticipated that this shift will also have a negative impact on German export industry, which is dominated by capital goods. Additionally, Chinese demand for imports is likely to decline as China's domestic production of cars and machinery expands.

The inauguration of the new Chinese leadership in spring 2013 represented more than just a change in government—under the new regime, a shift in the direction of Chinese economic policy has also been evident. Responding to its foreign trade partners, China is set to reduce its substantial current account surplus to redress the structural imbalances in the world economy.¹

Germany finds itself under similar pressure since, after China, it is among those countries recording high current account surpluses in the global trade in goods year after year.² However, Germany has reported a moderate trade deficit with China to date, i.e., Germany imports more than it exports.³

In the first half of 2013, the total value of German companies' exports to China was approximately 32.3 billion euros. Compared with the same period in 2012, this represented a decline of almost six percent. Thus, it seems that there is already evidence of a post-boom slowdown in German-Chinese trade. However, recent figures point towards a slight upturn. In July 2013, for example, exports totaled 6.1 billion euros, which represented a three-percent increase compared with July 2012. Nevertheless, exports for 2013, up to and including July, remained 4.6 percent below the figure for the same period of 2012.

German imports from China also followed a downward trend in 2013: in the first half of 2013, they totaled 35.4 billion euros, which was 5.6 percent lower than the corresponding figure for the previous year. Here too, July 2013 saw significantly better results, with Chinese exports to Germany declining by only 1.9 percent, in com-

¹ W. Pettis, *The Great Rebalancing: Trade, Conflict, and the Perilous Road Ahead for the World Economy* (Princeton, NJ: Princeton University Press, 2013).

² "Deutschland vor größtem Überschuss aller Zeiten," *Die Welt*, September 5, 2013.

³ G. Erber, "Economic Relations between China and the EU, the Euro Area and Germany," SSRN Paper (July 2013).

parison with July 2012, to just over 6.5 billion euros.⁴ Nonetheless, in the first seven months of 2013, Chinese exports to Germany were still five percent below the corresponding figure for the previous year.

China's Fragile Financial System

Based on developments to date, a slowdown in China's economic growth should be expected (see Figure 1). However, a major slump is unlikely despite initial fears generated by a series of liquidity bottlenecks in the Chinese Internet banking market.⁵ As a result of the Chinese central bank implementing measures to curb credit growth and suppress the shadow banking system, June 2013 saw a surge in Chinese interbank interest rates.⁶ However, the central bank immediately relaxed the measures to steady the markets again. Yet the situation was an early warning signal for the vulnerability of the Chinese financial system which had also experienced unprecedented levels of excess liquidity as a consequence of the global economic and financial crisis, much the same as Western countries.⁷ The result was a substantial increase in the fragility of China's financial system.

In 2009, not only did the People's Republic issue the largest economic stimulus package (based on GDP),⁸ but also relaxed credit conditions considerably.⁹ This resulted in significant growth of the Chinese shadow banking system, which, according to expert estimates, is now worth approximately 5.8 trillion US dollars,¹⁰ a figure equivalent to around 64 percent of China's GDP.

Officially, massive capital controls are in place; however, they can be circumvented using a variety of meth-

ods, such as transfer pricing¹¹ and fake invoices,¹² in particular, which enable easy movement of capital across China's borders. Hong Kong serves as a key hub in this process.¹³ Thus, like countries with convertible currencies and free movement of capital, to a great extent, China also faces the monetary-policy "trilemma";¹⁴ in these circumstances, exchange rate and price stability cannot be regulated simultaneously. The real effective Chinese currency exchange rate has already been on the increase for some time (see Figure 2). What remains unclear is whether this is a deliberate political choice or the result of extremely ineffective capital controls. The latter could also be a motive for the Chinese government to make the renminbi convertible.¹⁵

Corruption in China Also Affects Foreign Trade

One of the key objectives of the new Chinese leadership is to combat the country's excessive corruption, which the previous government had already recognized as a major threat to the stability of Chinese society.¹⁶ A series of high-profile trials of leading government and Communist Party representatives signaled the first steps in the fight against corruption. The trial of the former minister of railroads for large-scale bribery and abuse of power while in office, which resulted in a suspended death sentence, is clear evidence of how corruption has spread right up to the top echelons of the party and the government.¹⁷ As the Chinese economy has flourished, corruption has taken on ever greater proportions.

⁴ Destatis, Außenhandel – Zusammenfassende Übersichten für den Außenhandel (Wiesbaden: Federal Statistical Office, July 2013).

⁵ "Markets Precipitate Tightening," BIS Quarterly Review (September 1-11, 2013).

⁶ G. Ma and C. Shu, "Interbank Volatility in China," BIS Quarterly Review (September 10, 2013).

⁷ Carl E. Walter and F. J. T. Howie, *Red Capitalism—The Fragile Financial Foundation of China's Extraordinary Rise* (Singapore: Wiley & Sons, 2012).

⁸ In 2009, China increased its national deficit by 16 percent of its GDP to support the economy, far exceeding all other countries' efforts. Stimulus packages implemented in the US (14 percent of GDP) and Germany (seven percent of GDP) were substantially smaller. IMF, *Fiscal Monitor – Fiscal Adjustment in an Uncertain World*, (Washington D.C.: International Monetary Fund, April 2013).

⁹ "...in 2009 and 2010 things went too far. Spurred on by the government, China's banks increased their lending by almost 9.6 trillion yuan (\$1.5 trillion) in 2009. That is roughly twice the size of the Indian banking system, as Bank Credit Analyst, a research company, has pointed out. In other words, China's lenders added two Indias to their loanbook in the space of a year." Simon Cox, "China. Keynes vs. Hayek in China," *The Economist*, November 17, 2011.

¹⁰ D. Roberts, "China's Shadow Banking Sector Tops \$5.8 Trillion, Report Says," *Businessweek*, May 8, 2013.

¹¹ This entails a system of transfer prices which are significantly too high or too low compared with the actual value of goods, with the aim of transferring profits or losses abroad. See also PriceWaterhouseCoopers, *Standing out from competition—Transfer Pricing in China*, (Shenzhen: 2013).

¹² "China Confiscates 70 Million Fake Invoices," *Xinhua*, July 13, 2011.

¹³ R. Fisman and E. Miguel, *Economic Gangsters: Corruption, Violence, and the Poverty of Nations* (Princeton: Princeton University Press, 2008).

¹⁴ The Impossible Trinity model was developed both by John Marcus Fleming in 1962 and Robert Alexander Mundell in 1963, independently from one another. In simplified terms, the model can be described as a triangle whose corners represent the three exchange rate policy objectives: stable exchange rate, sovereign monetary policy, and free capital flow. In the trilemma, a maximum of two of these objectives can be achieved at the same time. According to the model, it is impossible to achieve all three simultaneously.

¹⁵ G. Erber, *China: Country of Endless Opportunities?*, 20 December 2013, SSRN-paper.

¹⁶ Reuters, "China's Hu Says Graft Threatens State, Party Must Stay in Charge," November 8, 2012; T. Yanqi and L. Shaohua, *Bloomberg*, "Wen Pledges to Curb Graft, Income Inequality as Police Head Off Protests," February 28, 2011.

¹⁷ "Chinesischer Ex-Minister zu Todesstrafe auf Bewährung verurteilt," *Süddeutsche Zeitung*, July 8, 2013.

Evidently, foreign companies are also implicated in this corruption to a great extent.¹⁸ US and UK pharmaceutical companies in particular have come under massive pressure for bribing doctors and hospitals.¹⁹ As a result of such illegal business practices by foreign drug companies, prices charged in China for pharmaceuticals are significantly inflated compared to the US and Europe. Thus, China's fight against corruption and bribery has acquired a dimension that also impacts foreign trade.

Trade Sanctions Lead to Tensions

The conflict over “dumping prices” and illegal subsidies for Chinese photovoltaic panels led to international disputes with the Chinese government. After a number of solar panel manufacturers in the US and the European Union (EU) were no longer able to withstand the price pressure of cheap imports from China, the US imposed anti-dumping import duties.²⁰ The European Commission, on the other hand, was able to negotiate a provisional agreement with China, determining the volume and prices of Chinese imports to the EU²¹ and averting an escalation in the trade dispute with China for the time being. Since Germany is China's most important trade partner in the EU,²² German manufacturers in particular would have suffered from the consequences of such a development. However, this conflict is far from being the only problem in foreign trade with China requiring a solution: by 2017 at the latest, the People's Republic would like to be recognized as a market economy under World Trade Organization (WTO) rules. If this were to happen, the range of possible sanctions that could be imposed on Chinese imports, should they be at an advantage due to unfair competitive conditions, would no longer be available.²³ Since China's state-owned enterprises

¹⁸ “According to Beijing-based private research firm Anbound Group, of some 500,000 corruption cases investigated in China from 2000 to 2009, about 64 percent were linked to international trade and foreign businesses.” C. Weihua, “Multinationals Under Scrutiny for Corruption,” *China Daily*, September 8, 2010. “Why Corruption is Inevitable in China's Pharmaceutical Industry,” *China Briefing*, July 25, 2013.

¹⁹ “The allegations follow a series of corruption claims in the pharmaceuticals business and probes opened by the authorities against Novartis, Sanofi, Lundbeck and AstraZeneca. GlaxoSmithKline has been accused of handing over illegal payments totaling up to \$500m.” A. Jack and P. Waldmeir, “Eli Lilly Drawn into Pharmaceutical Corruption Claims in China,” *Financial Times*, August 22, 2013.

²⁰ “Timeline: China-EU, China-US Tug of War on Solar Duties,” *People's Daily*, June 17, 2013.

²¹ “We found an amicable solution in the EU-China solar panels case that will lead to a new market equilibrium at sustainable prices.” Commissioner De Gucht, press release, July 27, 2013 (European Commission, 2013).

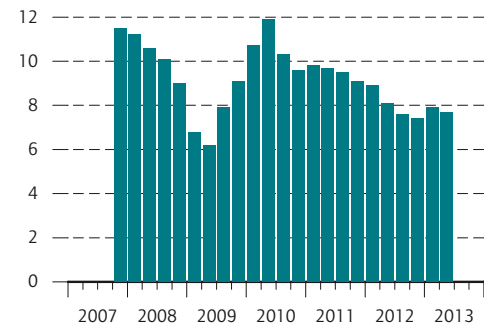
²² G. Erber, “German-Chinese Economic Relations—Opportunities and Risks,” *DIW Economic Bulletin*, no. 50 (2011): 3–7.

²³ U. C. V. Haley, *Subsidies to Chinese Industry: State Capitalism, Business Strategy, and Trade Policy* (Oxford University Press, 2013).

Figure 1

Quarterly Real Growth in China's GDP

In percent, compared with same quarter of previous year



Source: Bureau of Statistics of China.

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China's growth recovered quickly after the global financial and economic crisis, but recently tailed off again.

and banks are so tightly interlocked and their business policies are subject to political influence, it is likely to become more difficult to provide evidence of unfair trading practices in individual cases in the future.²⁴ Even if misguided subsidies were to cause the Chinese economy long-term damage,²⁵ foreign competitors would still remain at a disadvantage.

German Automobile Manufacturers Enter Chinese Market

An important goal of the new Chinese government's economic policy is the further expansion of a domestic automotive sector. This goes beyond the domestic Chinese market: the People's Republic is seeking to become a global export leader also in the auto industry by 2016 with at least one producer among the ten largest in the world by then. The Shanghai Automotive Industry Corporation (SAIC) aims to increase exports by over 130 percent every year from now on and sell roughly 800,000

²⁴ “In contrast, China's state-owned firms typically enjoy preferential treatment in terms of administrative approval and bank loans. Although most firms report profits, totaling US\$ 920 billion from 2001 to 2009, the state is saddled with a negative 1.47 per cent real average return on equity after accounting for US\$1.19 trillion of subsidy and foregone costs.” Z. Yajing and W. Jun Jie, “China Has Need of Well-Run State-Owned Enterprises,” *South China Morning Post*, August 28, 2013.

²⁵ Dexter Roberts, “China Profit Rise Masks State Enterprise Weakness,” *Businessweek*, June 27, 2013.

vehicles abroad in 2015. The Dongfeng Motor Corporation also has high growth targets: a 50-percent increase every year through 2016, to approximately 300,000 vehicles. The most important markets for these companies are in Asia, but China also plans to establish itself as a powerful competitor in Europe.²⁶

German automobile manufacturers in particular have been successful in China in recent years—primarily in joint ventures: for example, Volkswagen (VW) has been cooperating for years with SAIC, currently the largest Chinese group manufacturing cars, motorcycles, and car parts, as well as with First Automotive Group (FAW), the top Chinese manufacturer of diesel engines, cars, and medium to heavy buses and trucks. Thus, Germany's largest auto manufacturer has close ties to two Chinese state-owned companies. To underline the close cooperation with the Chinese government, VW's chief executive was the only German representative and the only automobile executive to be appointed to a central advisory body of the Chinese prime minister.²⁷

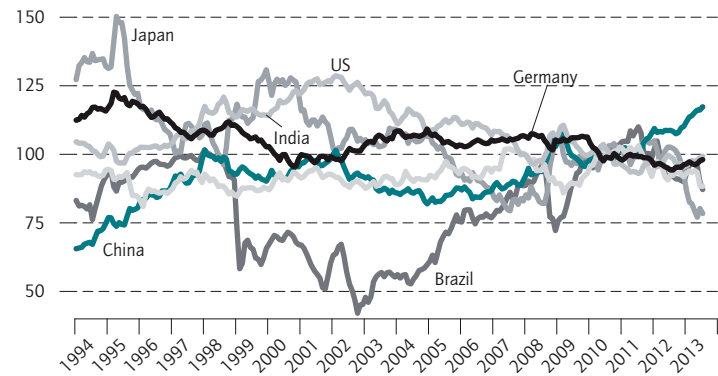
After General Motors (GM), VW is one of the largest foreign automobile manufacturers on the Chinese market.

However, BMW and Daimler-Benz are also increasing their production capacity in China. BMW is cooperating with the Chinese manufacturer Brilliance China Auto (BMC) and producing some cars for the Asian market directly in China. Daimler-Benz is also producing trucks in a joint venture with Beijing Automotive Industry Holding (BAIC), the fifth-largest Chinese manufacturer, and is planning to produce cars in the same manner in the near future.²⁸ The ten-percent stake of the China Investment Cooperation (CIC) in Daimler-Benz, which had originally been envisaged, seems to have been abandoned for the time being.²⁹ However, all these ac-

Figure 2

Real Effective Exchange Rates

Index 2010 = 100



Source: Bank for International Settlements (BIS).

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China's currency exchange rate has been increasing strongly for some time.

tivities demonstrate that German manufacturers in particular are involved in advancing the massive expansion of capacity in the Chinese automotive sector.

From the perspective of the individual companies, this may be the right strategy, but in the medium to long term, it is likely to have an impact on German automobile exports to China: from the Chinese point of view, it can be assumed that automobile imports from Germany will generally be substituted by means of production facilities in China. The example of Daimler-Benz shows that this refers not only to final assembly of vehicles. One of the facilities in the world's largest auto industry park near Beijing is a Daimler engine plant, and in the future there will also be a painting plant.³⁰

According to the German Association of the Automotive Industry (VDA), roughly 20 percent of the cars currently sold in China carry a German corporate brand. Since 2005, German auto manufacturers have increased their sales in China sevenfold. Recent figures provided by the Chinese Association of Automotive Manufacturers (CAAM) show that roughly 14 million vehicles were produced from January to August of 2013. In the previous year, production in China totaled approximately 15.5 million vehicles. For comparison: roughly 5.4 million cars were produced in Germany in 2012, 285,000 of which were exported to China.

²⁶ L. Bay, "China stützt Europas Autobauer—Mit den Flügeln des Drachen," Handelsblatt, July 10, 2013.

²⁷ Martin Winterkorn, "Chinas Machthaber macht Volkswagen-Chef zum Top-Berater," Spiegel Online, June 5, 2013.

²⁸ On February 1, 2013, BAIC and Daimler AG signed an agreement according to which Daimler will hold a 12-percent stake in BAIC Motor, the automobile division of BAIC. This is the first time a foreign car company has held shares in a Chinese manufacturer. It was to take place in advance of BAIC's planned initial public offering and be completed by issuing new stocks to Daimler in the course of 2013. In addition, Daimler will have two seats on BAIC Motor's supervisory board. Daimler-Benz, "Daimler AG beteiligt sich mit zwölf Prozent an BAIC Motor," press release, February 1, 2013.

²⁹ "Following the withdrawal of Daimler's largest individual investor Aabar from Abu Dhabi, the automobile manufacturer may have found a new major shareholder in China. As the state-owned Chinese newspaper People's Daily wrote on its website on Monday, referring to insiders, the sovereign wealth fund China Investment Cooperation (CIC) seeks to purchase four to ten percent of Daimler's shares, with a market value of 1.8 to 4.5 billion euros." DPA, "Chinesen wollen offenbar bei Daimler einsteigen," Handelsblatt, January 7, 2013.

³⁰ J. Erling, "Politisch steht Mercedes in China im Abseits," Die Welt, August 27, 2013.

It is likely to be only a matter of time before the changed worldwide locational conditions of global automobile production have an impact on German foreign trade statistics, too.

If the Chinese government succeeds in implementing its strategy, one must even anticipate a Chinese export offensive directed toward the European and other foreign markets. The German government should seriously address this development and its consequences. Time and again, as shown by the example of photovoltaic panels, China has established enormous capacity which, as soon as domestic sales begin to falter, results in major export efforts including international price wars, and this is before even considering whether government subsidies support such predatory competition.

China Invests in German High-Level and Cutting-Edge Technology Companies

If China is to continue on its path toward becoming a worldwide leader in high-level and cutting-edge technology, it will need to maintain the best possible access to foreign knowledge and technologies. Germany is a global leader in some sectors of the economy, such as automobiles and engineering, and is thus increasingly attractive for Chinese direct investments.³¹

Chinese direct investments totaling 500 billion US dollars are planned for the coming five years.³² Some of these funds could be invested in German high-level and cutting-edge technology companies.³³ The acquisition of the German engineering company Putzmeister by the Chinese Sany Group was an initial signal of a move in this direction.³⁴

Ultimately, the Chinese economy is seeking to systematically establish and expand its expertise. Hence, these acquisitions cannot be evaluated only from the perspective of individual companies,³⁵ as they result first and foremost from the development strategy laid down by

the state and party leadership.³⁶ A recent study conducted by the Munich Innovation Group concludes that Chinese firms are especially interested in the expertise of German technology and market leaders in key industries as determined by the Chinese leadership.³⁷

From the perspective of German economic and trade policy, it seems necessary to evaluate the situation from a cost-benefit perspective. That such a development could have an impact on the international competitiveness of the German economy cannot be ruled out. The fact that a situation does not necessarily emerge in which both sides benefit is illustrated by the example of Volvo: The Swedish commercial-vehicle corporation was taken over by a private Chinese auto manufacturer.³⁸ However, significant tensions with the new Chinese owners have developed since then. A particular problem is that Volvo is continuing to make high losses, and sales are declining. At the same time, Volvo's safety technology, with which the company set international standards, has been transferred to China.³⁹

Lack of Free Trade Agreement a Disadvantage

The EU has already agreed on a bilateral free trade agreement with South Korea,⁴⁰ and negotiations on two further agreements between the EU and the US as well as the EU⁴¹ and Japan⁴² have begun. In a countermove, China has also entered into a number of free trade agreements. The China-ASEAN Free Trade Area⁴³ and the only recently concluded free trade agreement with Switzerland⁴⁴ merit particular mention.

Following the failure of the Doha Round, increasing numbers of countries are successfully negotiating bilateral agreements in order to further liberalize glob-

³¹ "In 2012, companies and other investors from the People's Republic will invest more in Europe than the other way around: 11 billion euros of Chinese investments on the Old Continent in contrast with seven billion euros in China. And Germany is the first choice for corporations and investors from the Far East; in no other country are the Chinese investing more money—and the trend is increasing sharply." N. Doll and J. Hartmann, "Chinesen übernehmen reihenweise deutsche Firmen," *Die Welt*, December 1, 2012.

³² "China to Invest \$500B in Other Nations," Bloomberg TV, June 7, 2013.

³³ C. Rottwilm, "Aufschwung am M&A-Markt—Asiaten auf Einkaufstour in Deutschland," *Manager-Magazin*, August 13, 2013.

³⁴ F. Mayer-Kuckuk, "Sany und Putzmeister. Die „perfekte Ehe“ unter Maschinenbauern," *Handelsblatt*, June 14, 2012.

³⁵ C. Jungbluth, *Chinesische Direktinvestitionen in Deutschland* (Bertelsmann-Stiftung, 2012).

³⁶ N. Doll and J. Hartmann, "Chinesen übernehmen reihenweise deutsche Firmen," *Die Welt*, December 1, 2012.

³⁷ Munich Innovation Group, *China investiert—Patentportfolios und Investitionsstrategien chinesischer Firmen* (Munich Innovation Group in cooperation with Technische Universität München, 2013).

³⁸ H. Steuer, "Nach der Übernahme durch Geely: Chinesen treiben Volvo in die Enge," *Handelsblatt*, May 9, 2013.

³⁹ "Auto „Made in China“ schafft Top Note im Crashtest," *Die Welt*, September 25, 2013.

⁴⁰ European Commission, *The EU=Korea Free Trade Agreement in Practice* (Brussels: 2011).

⁴¹ European Commission, *Transatlantic Trade and Investment Partnership (TTIP)* (Brussels: 2013). (See the EU Commission website).

⁴² "EU und Japan wollen Freihandelszone," *Handelsblatt*, April 15, 2013.

⁴³ "Welthandel: Ostasien schafft größte Freihandelszone der Welt," *Frankfurter Allgemeine Zeitung*, January 3, 2010.

⁴⁴ "Verhandlungen abgeschlossen: China und die Schweiz schließen Freihandelsabkommen" *Frankfurter Allgemeine Zeitung*, July 6, 2013.

al trade structures at least between the countries involved. The multilateralism policy followed by the World Trade Organization to date is thus becoming less and less important.

Regional or bilateral trade agreements can cause trade diversion effects, as they implicitly disadvantage the other countries by means of higher tariffs or non-tariff trade barriers. Since such an agreement, at least between the EU and China, has not officially been on the agenda to date, this is likely to have a negative impact on the trade relations of the EU, and thus also of Germany, with China. However, the European Commission is already considering taking up such negotiations with China.⁴⁵

Conclusion

German-Chinese economic relations have developed very rapidly during the past decade. China's high growth rate and the integration of the country into the global economy had a key role to play in spurring German exports.

In recent years, the high degree of complementarity of the product portfolios in question has played a beneficial role. For example, China supplied textiles and basic industrial goods to Germany, while Germany tended to export high-quality capital goods, such as machinery and equipment, and also road vehicles to China.

As the significance of information and communications technologies has increased, China has gradually displaced the US as a producer of these high-tech goods from the global market, although globally active multinational corporations from Japan, South Korea, Taiwan, and the US also contributed to this process. Since Germany already withdrew from this market very early on, there have only been a small number of conflicts in its trade with China. Such a case occurred for the first time over photovoltaic panels, and the next—over wind turbines—is imminent.

In other technology-intensive sectors, such as automotive and other engineering or rail and aviation technology as well as spacecraft and satellite technology, the People's Republic is undertaking massive efforts to catch up with the countries that have been leaders in these areas to date. However, this means that China will increasingly enter into competition for capital investments for the production of specific goods—with Germany, too. As a result, foreign companies manufacturing in Chi-

na could be supplanted, as the Chinese state and party leadership seeks to establish an autonomous technology and knowledge base independent of foreign support.

A strategy of acquiring knowledge and expertise through Chinese direct investments in foreign companies may lead to conflicts in economic relations which European Union and German economic and trade policy should address soon. After all, the German economy's international competitiveness is based to a large extent on comparative competitive advantages in the field of high-level and cutting-edge technology which domestic companies rely on in the long term.

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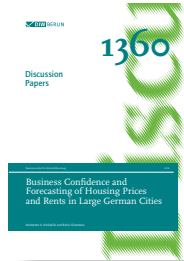
JEL: F14, F59, L16

Keywords: Germany, China, economic relations, trade and foreign direct investments

⁴⁵ "EU denkt über Freihandel mit China nach," *Frankfurter Allgemeine Zeitung*, September 18, 2013.

Discussion Papers Nr. 1360/2014

Konstantin A. Kholodilin, Boriss Siliverstovs



Business Confidence and Forecasting of Housing Prices and Rents in Large German Cities

In this paper, we evaluate the forecasting ability of 115 indicators to predict the housing prices and rents in 71 German cities. Above all, we are interested in whether the local business confidence indicators can allow substantially improving the forecasts, given the local nature of the real-estate markets. The forecast accuracy of different predictors is tested in a framework of a quasi out-of-sample forecasting. Its results are quite heterogeneous. No single indicator appears to dominate all the others for all cities and market segments. However, there are several predictors that are especially useful, namely the business confidence at the national level, consumer confidence, and price-to-rent ratios. Given the short sample size, the combinations of individual forecast do not improve the forecast accuracy. On average, the forecast improvements attain about 20%, measured by reduction in RMSFE, compared to the naïve model. In separate cases, however, the magnitude of improvement is about 50%.

JEL-Classification: C21, C23, C53

Keywords: Housing prices, housing rents, forecasting, spatial dependence, German cities, confidence indicators, chambers of commerce and industry

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Discussion Papers Nr. 1357/2014
Alexander Eickelpasch



R&D Behavior of German Manufacturing Companies during the 2008/09 Recession

This paper investigates to what extent the R&D behavior of manufacturing companies was influenced by the 2008/09 crisis. Based on a broad official data set for German manufacturing companies, only a few companies that engaged in R&D during 2008 gave it up in the following year. Some companies even started R&D during crisis. R&D expenditures declined in 2009 compared to 2008, but expanded in 2010. The development of R&D expenditures was less volatile than sales. Probit analyses show that the occurrence of R&D in 2009 is very much determined by engagement in R&D in 2008 and that changes in demand are not relevant. However, fluctuation

in demand proved to be relevant in the regressions computed where the intensity of R&D expenditures was the dependent variable. This result suggests that companies reacted counter cyclically in 2008/09, i.e. the reduction in R&D was smaller than the decline in demand, or the expansion of R&D expenditures was greater than the change in demand. Similar regressions for using R&D staff as the dependent variable did not find any influence of changes in demand. The results suggest that companies see R&D as a longer term task necessary to retain competitiveness.

JEL-Classification: E32, L60, O31

Keywords: Research and development, Business cycle, Manufacturing

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SOEPpapers 626/2013

Jörg-Peter Schräpler, Jürgen Schupp, Gert G. Wagner



Conversion of Non-Respondents in an Ongoing Panel Survey: The Case of the German Socio-Economic Panel (SOEP)

The results of a resurvey of non-respondents to the SOEP study carried out in 2006 show that this special effort of reinterviewing was relatively ineffective in two respects. First, the rate of successful conversions of passive to active respondents was low (less than 20 percent). Second, the composition of the longitudinal file did not improve. The same groups that showed high dropout rates in the SOEP (particularly low-income respondents and respondents in major cities) showed lower conversion rates in the resurvey. The resulting file of active respondents after the resurvey is therefore even more selective than the original file with regard to population means.

Furthermore, due to the low rate of resurveying, the resurvey did not significantly improve the overall statistical power of the SOEP sample. In sum, the resurvey was an interesting experiment, but it shows little potential as a means for improving the standard fieldwork of SOEP.

JEL-Classification: C18, C83, D10

Keywords: longitudinal survey, non-random attrition, non-respondent conversion, geoaddditive regression models, SOEP

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