

Hilpert, Hanns Günther (Ed.); Mildner, Stormy (Ed.)

Research Report

The financial crisis: Collateral damage and responses

SWP Research Paper, No. RP 6/2009

Provided in Cooperation with:

Stiftung Wissenschaft und Politik (SWP), German Institute for International and Security Affairs, Berlin

Suggested Citation: Hilpert, Hanns Günther (Ed.); Mildner, Stormy (Ed.) (2009) : The financial crisis: Collateral damage and responses, SWP Research Paper, No. RP 6/2009, Stiftung Wissenschaft und Politik (SWP), Berlin

This Version is available at:

<https://hdl.handle.net/10419/253091>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

SWP Research Paper

Stiftung Wissenschaft und Politik
German Institute for International
and Security Affairs

Hanns Günther Hilpert and Stormy Mildner (Eds.)

The Financial Crisis: Collateral Damage and Responses

RP 6
May 2009
Berlin

All rights reserved.

© Stiftung Wissenschaft
und Politik, 2009

This Research Paper reflects
solely the authors' view.

SWP

Stiftung Wissenschaft
und Politik
German Institute
for International
and Security Affairs

Ludwigkirchplatz 3-4
10719 Berlin
Germany
Phone +49 30 880 07-0
Fax +49 30 880 07-100
www.swp-berlin.org
swp@swp-berlin.org

ISSN 1863-1053

Translation by Deborah Bowen

(English version of selected
and updated contributions
to SWP-Studie 4/2009)

The translation and publi-
cation of this research paper
was made possible through
the generous support of
Deutsche BP AG and the
collaboration of the Forum
Ebenhausen

Table of Contents

- 5 **Introduction**
Hanns Günther Hilpert and Stormy Mildner
- 11 **Financial Crisis and World Trade:
Successful Completion of the Doha Development Round
Could Provide an Important Impetus to Trade**
Christina Langhorst and Stormy Mildner
- 20 **From the Financial Crisis to the Energy Crisis?**
Kirsten Westphal
- 26 **How the Financial Crisis Is Turning the Food Crisis
into a Hunger Crisis**
Bettina Rudloff
- 33 **Climate Policy in Times of Economic Crisis**
Susanne Dröge
- 40 **Effects of the Crisis on the Eurozone**
Daniela Schwarzer
- 49 **Abbreviations**
- 50 **The Authors**

Introduction

Hanns Günther Hilpert and Stormy Mildner

Within just a short span of time, what started out as a local housing crisis in the US has grown into the worst global economic crisis since the Great Depression of the 1930s. Due to speculation on securitized US mortgage debts and other investment products, financial institutions worldwide have found themselves in a state of imbalance that has yet to be corrected. As a result, a massive insolvency and confidence crisis have emerged, paralyzing financial markets since fall 2008 and tightening the supply of capital and credit to the real economy. The crisis originated in the United States and spread first to Western Europe, being deeply intertwined with the US financial market. However, it soon became evident that even countries like Japan, Brazil, China, India, and South Africa, whose banks had scarcely participated in speculation on opaque financial products, could avoid being hit by the crisis due to the close integration of international goods and capital markets. Within countries, the crisis quickly spread to the real economy, and as a result, world trade began to spiral downward. Past experiences with financial crises indicate that we are facing a deep and enduring economic downturn. According to the International Monetary Fund (IMF) world gross domestic product (GDP) is forecasted to decline in 2009 for the first time since 1945.

The global slowdown in economic growth as well as the destruction of capital and prosperity worldwide have broader implications beyond their impact on the financial sector and the real economy. Dangerous distortions have emerged in many areas, including the international food, commodities, and energy markets. In large parts of the third world, the humanitarian situation has deteriorated dramatically. Poverty, hunger, and malnutrition are once again on the rise. The pressure to justify international climate protection policies has grown. And not least of all, new risks have emerged for international politics and security. As a result, the project of European integration is also facing new challenges just as some other regional integration projects such as Mercosur or ASEAN are. Such indirect effects of the international financial crisis can be described as its collateral damage.

For political decision-makers, efforts towards crisis management and resolution are inevitably centered on the financial markets and the real economy. First and foremost, governments focused on stabilizing the financial markets, backing failing banks and providing much needed liquidity as well as stabilizing aggregate demand by passing large fiscal stimulus packages. The subsequent step now is a reform of the national financial architecture. That there is a particularly large need for reform in the US has become evident through the crisis. But the US is not the only country, currently contemplating reform measures. Reforms of the over-

sight and regulation of financial institutions and markets as well as new concepts to strengthen the IMF and bolster its legitimacy have been discussed internationally at various G8 and G20 meetings. In this respect, the decision taken at the second world finance summit of the world's 20 biggest industrial and emerging economies (G20) on April 2 in London to supply the IMF with new financial resources and to assign new governance responsibilities is an encouraging development.

But there is also an urgent need for action on the part of international political institutions in numerous policy fields that are not an explicit topic of the G20 summits. Here, too, coordinated international efforts are desperately needed. Only in this way can the collateral damage incurred due to the financial crisis be reduced. Against this backdrop, the present study addresses five policy areas of vital importance to international politics: trade, agricultural markets, energy markets, climate protection, and European integration.

The far-reaching impact of the financial crisis

In 2009, global trade will experience its worst downturn in about 80 years. The WTO is forecasting a nine percent contraction in global export and import volumes. Along with losses in economic growth and the associated decline in demand, global trade is also suffering due to the decline in liquidity for trade finance. What's more the negative growth prospects could induce countries to adopt protectionist measures such as tariffs and antidumping-duties as well as to subsidize key industries. The World Trade Organization (WTO) limits its member states in the use of such protectionist measures, but its rules and regulations leave numerous loopholes. The completion of the Doha round would act as an important catalyst to keep markets open and improve the world trade climate—even if this cannot be expected to produce a direct, short-term impact on growth. And as desirable as a quick conclusion of the Doha round would be, the fact that negotiations are now in their eighth year clearly demonstrates the huge difficulties still to overcome.

But the liquidity crunch and confidence crisis on the international financial markets does not only affect trade finance negatively. It has become more difficult than ever to finance investments in research and development, infrastructure, climate protection, and in guaranteeing an adequate food and energy supply. Their financing stands fundamentally in question; the projects themselves are now of secondary priority. This is seen particularly clearly in the field of energy policy: while long-term-oriented investments to ensure energy supply have been severely neglected over the last twenty years, these kinds of investments—which are risky, expensive, but absolutely crucial not just for energy security but also for climate protection—have become significantly less likely than ever. Lower oil prices reduce the incentives to invest in alternative energies, especially as loans have become much more expensive and difficult to obtain. The financial market crisis came at a critical point in time, when the energy

systems worldwide stand at a crossroads: A shortage of the fossil fuels oil and gas looms large on the horizon just as are conflicts due to the global distribution and use of these resources. Large portions of the energy sector infrastructure in the industrialized countries have become obsolete. The energy industry faces two challenges: ensuring the supply of affordable energy and transforming itself into a sustainable and environmentally friendly system. In the face of the financial crisis, this is anything but an easy task.

However, not just energy policy, also national and international climate change policy is in one of its most critical phases: In 2012 the Kyoto Protocol runs out. The conference in Copenhagen at the end of 2009 is essential for agreeing on a new climate pact. The question arises whether the EU and Germany will still be able to provide for climate protection and leadership in spite of the economic difficulties arising from the economic collapse. The effects of the financial crisis on climate change policies are twofold: On one hand, investments in alternative energies have become more expensive. On the other hand, large national economic stimulus packages offered the opportunity research and development in climate-friendly technologies—an opportunity not all countries used. In order to avoid enduring conflicts, public policy would have to live up to its dual responsibility for energy security and climate protection. After all, the problems entailed by climate change are—compared to the task of overcoming the financial crisis—of a much more long-term nature.

Agricultural markets and agricultural policy are indirectly affected by the financial crisis as well. The economic crisis poses an additional risk for food security because trade restrictions, cuts in development aid, and government agricultural programs undermine agricultural production, particularly in developing countries. In view of the already low food stocks worldwide, many developing countries are threatened by famine if the food supply diminishes further. To stabilize food production, it is just as important to provide financial assistance as it is to build sustainable food reserves. Furthermore, export restrictions should be prevented since they drive up world market prices further. The importance of the agricultural sector particularly in developing countries during the financial crisis cannot be overestimated: First, it is of immediate significance for the domestic food supply as parts of the population may be forced to produce agricultural goods for their own sustenance. Second, the agricultural sector is capable of mitigating risks to the broader economy. Increasing or at least stabilizing agricultural income can mitigate a possible decline in demand and potentially resulting growth reductions and job losses in other sectors.

While unilateral “go-it-alone” strategies are undoubtedly not the right way to tackle the crisis, regional initiatives could certainly be useful. The eurozone could serve as a model: it has proven itself as an area of stability during the financial turmoil of fall 2008 and has thus become more attractive to previous non-members. Yet the decentralized structure of the eurozone still poses uncertainties for investors. Doubts as to whether its members can react to the financial crisis in an adequately quick and co-

ordinated fashion have been manifested in the intermittent rise in value of the dollar against the euro. Within the eurozone, increasing willingness for cooperation has been seen over the course of the crisis, but only the rudiments of a coordinated policy were in the end to be observed. The proposed common bank rescue fund, for example, has not been established. And although a coordinated if not common fiscal policy reaction would have been sensible from an economic point of view, the EMU countries only agreed on basic principles, but not on a coherent economic stimulus package. It still remains unclear how the community will proceed in the not impossible case that an EMU member country becomes insolvent. If the eurozone is to maintain its stability and efficacy in the future, common economic policy instruments should be discussed, and the respective EU governance mechanisms need to be improved.

Global crises demand global answers

The most important lesson to be learned from the financial and economic crisis should be that global economic interdependence is a fact of life—not just between countries but also between different policy fields. Global markets thus need globally valid rules; global challenges can only be mastered successfully in international accord. But at the same time, international coordination and cooperation are anything but givens. While the economic and financial system is structured globally, political decisions continue to be based on national logics. While ensuring the food and energy supply and enforcing climate policy are global tasks, the regulation of agricultural, commodities, and energy markets is taking place mainly at the national level. Economic policy is following its natural reflexes when reacting to the threats arising from the financial market crisis with measures designed to protect domestic production and employment and to ensure the national food supply. The repercussions for international markets or foreign trade partners are often not taken into account in national-level decision-making processes. And of course, the (failed) crisis management of the 1930s provided sufficient proof that going-it-alone strategies in a global economic crisis do not lead to success. Not only did the US-led trend toward protectionism cause the crisis to spread around the world; the abandonment of the fixed exchange rate system also did not achieve the desired outcome of global economic recovery. The expansive monetary and fiscal policy measures—which in any case were introduced much too late—remained uncoordinated and accompanied by competitive currency devaluation. As we know, the results were fatal.

When countries try to set their national economic policies alone, without the involvement of other countries, there is a strong temptation to engage in “beggar-thy-neighbor” policies, in which countries try to gain advantages for themselves while shifting the costs to others. In the long term, however, everyone loses. There is no doubt that the international political system and economic conditions differ significantly from those of the 1930s. Yet the tendency for countries to attempt to improve their own

economic situation through monetary and trade policy at the expense of other countries still exists to this day. Thus, numerous examples can be cited of policy-makers protecting domestic companies and markets to the disadvantage of foreign countries. Already in 2008, the export duties imposed on foodstuffs and fertilizers in many countries exacerbated the international food crisis. Another example is the subsidization of exports under economic stimulus packages, which in an era of shrinking markets has led to the crowding-out of foreign competitors. In this situation, the latter feel compelled to follow suit with subsidy programs of their own. New tariff and non-tariff measures to protect local companies and sectors provoke similar acts of trade policy retaliation. An even greater risk may arise from an increasing trend of competitive devaluations. By means of currency depreciation countries may improve their international price competitiveness, but provoke retaliatory depreciations of their trading partners. As a consequence world trade could be shrinking even more than already predicted.

Future efforts should focus not only on preventing the profoundly negative impact of “beggar-thy-neighbor” policies, but also on promoting the positive impact that can result from international cooperation. Although the dramatic economic collapse of the past months has increased political willingness to engage in cooperation, sometimes ideas about which measures are necessary diverge wildly. Furthermore, some themes are not even on the agenda of the G20 summit. While global trade has been given a prominent position in the negotiations—for example, a special fund for trade finance has been agreed upon—neither energy and climate policy nor agricultural policy have been identified as areas for negotiation. Indeed, the summit was not the right place for such discussions since its main objective was to agree on economic stimulus policies and on how to reform the international financial architecture. Other meetings will therefore need to tackle the “collateral damage” of the economic and financial crisis, including the upcoming summit of the G8 agricultural ministers and the Copenhagen summit. The topics that were not discussed in Washington and London are far too urgent to be allowed to fall by the wayside. Whether they are discussed in the G20 framework or in a different context is of comparatively minor importance.

Financial Crisis and World Trade: Successful Completion of the Doha Development Round Could Provide an Important Impetus to Trade

Christina Langhorst and Stormy Mildner

In 2009, there will be a major collapse of world trade. While the volume of merchandise trade (imports and exports) increased continuously between 2003 and 2007 at an average rate of around seven percent, the financial crisis triggered a slowdown in world trade growth to about two percent in 2008 according to the World Trade Organization (WTO). At current estimates, the volume of world trade will contract by nine percent in 2009, the first decline in trade growth since 1982.¹ International trade has suffered the negative impacts of the financial crisis in a number of ways simultaneously: through the sluggish growth of the world economy, financial bottlenecks, and protectionist tendencies. According to the IMF, global economic growth may turn negative in 2009 for the first time in recent decades.² This will significantly dampen import demand—especially in the emerging market economies and developing countries, the major engines of growth in recent years. Furthermore, trade is suffering from the liquidity squeeze induced by the confidence crisis on the financial markets. The OECD and the WTO fear a dramatic decline in export financing worldwide similar to the Asian financial crisis of 1997/98. And finally, history shows that countries increasingly tend to adopt protectionist measures in response to economic crises in order to protect jobs and the standard of living at home. The fact that despite numerous efforts the WTO's Doha Development Round still has not been concluded introduces additional uncertainties. At the same time, trade flows are an indirect channel of transmission for the symptoms of the financial and economic crisis. Through trade, the crisis is being felt by even those countries whose banks were scarcely involved in trading high-risk, structured financial products. If international trade collapses even further, the economic crisis can be expected to expand and worsen.

Gaps in trade financing

Up to 90 percent of the 13 to 14 trillion dollars in world trade is funded by trade finance. While trade finance, being highly collateralized, is usually a relatively low-risk business, the financial crisis has made access to trade financing significantly more difficult. Although there are not yet any

¹ See, "Protectionism Cannot Be 'Smart'," Pascal Lamy in: *WTO News*, March 2009, www.wto.org/english/news_e/sppl_e/sppl117_e.htm.

² See IMF, "World Growth Grinds to Virtual Halt, IMF Urges Decisive Global Policy Response," in: *IMF Survey online*, January 2009, www.imf.org/external/pubs/ft/survey/so/2009/RES012809A.htm.

reliable statistics on banks' current credit policies towards exporters and importers, it is evident that their willingness to take risks has decreased significantly. Thus exporters' refinancing possibilities are currently severely limited. In late 2008, the WTO estimated the funding shortfall at around 25 billion dollars.³ In spring 2009, the WTO stated that flows of trade finance to developing countries have actually fallen by six percent or more year-on-year. That would mean that the market gap could be well over the 25 billion dollar estimate mentioned above—up to \$100 billion, possibly more.⁴

The fact that financing and insurance gaps in private capital markets widen during fiscal crises can ultimately be seen in the Asian crisis of the late 1990s, when—due to the dramatic increase in risks—private export financing came almost to a complete standstill. Government loans, insurance, and guarantees therefore took on increased importance as a means to insure against risks and maintain financing and thus stabilize trade with the crisis region. The unique aspect of the current crisis is that not only are the country-specific default risks again increasing, but private banks and insurance companies have become more risk-averse in general and are toughening their conditions by shortening the terms and volumes of loans and increasing insurance premiums. As a result, the price of credit has grown significantly while credit availability has simultaneously dried up, particularly for developing countries. Exporters, too, are therefore adopting stricter risk selection criteria. The consequence is a dramatic reduction in exports, affecting not just trade with developing countries, but also trade between the OECD countries. But the reduction of trade finance is not due just to the liquidity crunch on the international financial markets; it also reflects falling demand as exports slump. The World Bank even estimates that 90 percent of the reduction in trade finance could be the consequence of falling demand.⁵

In order to stabilize world trade, Director-General of the WTO Pascal Lamy urged the WTO member-states at an expert conference on November 12, 2008, to ensure the continued availability of affordable export trade finance. World Bank President Robert B. Zoellick announced that the International Finance Corporation would double its trade finance support program to three billion dollars to help banks continue supporting international trade.⁶ At the end of November, the OECD member states announced that they would provide significantly higher volumes of

³ See "Lamy Warns Trade Finance Situation 'Deteriorating'" in: *WTO News*, November 12, 2008, www.wto.org/english/news_e/news08_e/gc_dg_stat_12nov08_e.htm.

⁴ See Marc Auboin citing an unpublished survey by the Banker's Association for Finance and Trade, in: Richard Baldwin and Simon Evenett, *The Collapse of Global Trade, Murky Protectionism, and the Crisis: Recommendations for the G20*, Center for Economic Policy Research 2009.

⁵ See "Global Trade Finance Gap Widens as Recession Bites," in: *Khaleej Times*, March 18, 2009, www.khaleejtimes.com/biz/inside.asp?xfile=/data/internationalbusiness/2009/March/internationalbusiness_March126.xml§ion=internationalbusiness.

⁶ See "IFC to Double Trade Finance Support Programme," in: *Trade and Forfeiting Review*, December 1, 2008.

finance in loans and project guarantees through their export credit agencies (ECA) than in recent years, in order to mitigate the effects of the financial crisis on world trade. Furthermore, the EU Commission decided on December 16, 2008, to allow temporary government export credit insurance also for short-term transactions with OECD countries if it can be adequately shown that no coverage is available through the private insurance market. The German Federal Minister of Economics at that time, Michael Glos, supported this temporary exception in view of the significantly declining availability of private insurance on the basis that it would provide help in particular to small and medium-sized businesses in the European Union (EU) and OECD countries. Regardless of this, he promised the German export sector an expansion of export financing, especially through export credit guarantees (Hermes cover). Trade finance also played a role at the London summit of the G20 group of leading nations on April 2. The G20 economies pledged to render \$250 billion available to support trade finance through national export credit and investment agencies and multilateral financing institutions.⁷

World Bank proposed to create a global trade finance liquidity pool of 10–11 billion dollars to foster commercial bank lending.

Protectionism through the back door

The fear that individual states could resort to increasingly protectionist measures in response to the precarious state of the world economy and the huge resulting uncertainties is not entirely unfounded. History shows an increased use of protective trade policy instruments during economic crises, as well as an increase in agricultural subsidies, protective measures for key industries, and even export restrictions on specific natural resources. The fact that all this will not lead to a solution but rather to a further intensification and expansion of the crisis internationally can be seen in the Great Depression of the 1930s and the enactment of the Smoot-Hawley Tariff Act in the US in 1930. The Act, which President Herbert Hoover signed into law, increased the average tariffs on all imported goods subject to tariffs in the USA to over 60 percent. It empowered the US Tariff Commission to adapt the tariff rates to the difference in prices at home and those abroad. In addition, tariffs were allowed as an instrument to combat all forms of subsidies by the trade partners. The outcomes of the Smoot-Hawley Tariff Act were devastating. Since the trade partners of the USA retaliated with trade restrictions of their own, it resulted in a dramatic decline in world trade.

There is no doubt that even in the current economic crisis, there are some developments such as the devaluation of numerous currencies or the demands for protection of certain industries that create abundant pressures to implement protectionist measures. Nonetheless, a protection-

⁷ See: The London Summit 2009, “Leaders’ Statement (02/04/2009),” www.g20.org/Documents/g20_communique_020409.pdf, p. 5.

ist backlash à la Smoot-Hawley is not very likely. First, increasingly fragmented supply chains resulting from the proliferation of international production, investment, and joint ventures serve as powerful disincentives to protectionist measures as import barriers directly hurt the domestic economy. Second, in contrast to the 1930s, tariffs and subsidies are restricted by the WTO, which creates fair conditions for world trade by establishing reliable and multilaterally accepted legal norms. Among the most important of these norms are the unconditional most-favored nation (MFN) principle and national treatment, stipulating equal treatment of foreigners and nationals, as well as the principle of transparency. Furthermore, with its legal regulations governing liberalization, its examination of national trade policies, and its dispute settlement mechanism, the WTO ensures adherence to these binding rules and promotes the settlement of trade disputes. With this in mind, Director-General Pascal Lamy announced in December 2008 that the WTO would closely monitor trade policy responses to the economic crisis, particularly the use of tariffs and subsidies. The WTO released its first report on trade measures in January, 2009,⁸ the World Bank followed with a report on protectionist measures in early March.

Nevertheless, the WTO regulations do leave significant room for protectionist measures. In particular there is a major difference between the tariffs or subsidies bound at the WTO and the effectively applied rates (so-called “binding overhang”). According to calculations by the International Food Policy Research Institute (IFPRI), world trade could contract by 7.7 percent if tariff rates were to be increased to the maximum currently bound rates.⁹ The difference between bound and effective duties is most pronounced in the developing countries, which have unilaterally opened their markets for trade in industrial goods in recent years, while at the same time retaining the right to revoke this step towards liberalization and thus not binding themselves to WTO rules. Also in the case of many of the newly industrializing countries, there is significant potential to increase import tariffs. India, for example, imposes an average rate of just below 10 percent on its imports, but could raise these rates, fully in line with WTO regulations, to 50 percent—a level that last existed in the year 1989.¹⁰ The same goes for agricultural trade subsidies, except that here, the “binding overhang” for the industrialized countries is especially high. The insecurity this “binding overhang” creates for export companies is not to be underestimated.

⁸ See WTO, *Report to the TPRB from the Director General on the Financial and Economic Crises and Trade-related Developments*, JOB(09)2, January 23, 2009.

⁹ See Antoine Bouët and David Laborde, *The Potential Cost of a Failed Doha Round*, Washington, D.C.: International Food Policy Research Institute (IFPRI), December 2008 (IFPRI Issue Brief 56), www.ifpri.org/pubs/ib/ib56.asp.

¹⁰ See Simon J. Evenett, “No Turning Back: Lock-in 20 Years of Reforms at the WTO,” in: Richard Baldwin and Simon J. Evenett, *What World Leaders Must Do to Halt the Spread of Protectionism*, London: Centre for Economic Policy Research, 2008, pp. 39–42, www.voxeu.org/index.php?q=node/2651.

Increasing anti-dumping measures and temporary safeguard tariffs could also become problematic. The WTO regulations allow a country to impose tariffs under particular conditions—for example, when a foreign company is offering its goods at prices below the production costs on the domestic market (dumping), or when a country wants to give domestic industry a breather from stiff international competition to undertake the necessary structural adjustments. However, these measures have repeatedly been misused to protect domestic industries, particularly in times of economic downturn. The declining use of these measures in recent years could therefore easily be reversed. Already, the number of initiations of new antidumping investigations in 2008 increased by 31 percent compared to 2007. The number of new antidumping measures applied in 2008 increased by 19 percent compared to 2007 according to the Global Anti-dumping Database.¹¹

Furthermore, non-tariff barriers (NTBs)—for example, product standards and discriminatory border mechanisms—could increase, as in the 1970s, when oil price shocks led to a wave of creeping protectionism. Since these measures are significantly less regulated by the WTO than tariffs, they are referred to as “gray-area” measures. The World Bank notes that tighter standards have already slowed import entry in several cases, including the Chinese import ban on Irish pork as well as the Indian ban on Chinese toys. There is also an additional problem: even if the planned financial market regulations are intended neither to be protectionist nor to have an impact on trade, they could ultimately move in this direction, particularly in the case of trade in financial services.

Strategic industrial policy gaining ground

The subsidies offered in many countries pose a particular problem. In order to sustain threatened industries and companies and to protect jobs, aid packages are being discussed in many places for strategically important sectors. In addition to the rescue plans—ranging from bank guarantees to (partial) nationalization—being unfurled for banks worldwide, sweeping aid packages for the faltering automobile industry are at the focus of the discussion in the USA and Europe. Subsidies proposed for the auto industry total almost 50 billion dollars worldwide, mostly in high-income countries, including the US, Canada, France, Germany, Sweden, and Italy. But also emerging economies such as China, Brazil, and Argentina have directly or indirectly provided help to their struggling auto companies.

Plans announced by French President Nicolas Sarkozy to set up an investment fund to support French companies in all sectors and protect strategic major corporations from foreign takeover was met with little understanding from France’s European neighbors in October 2008.

¹¹ See Chad P. Bown, “Monitoring Update to the Global Antidumping Database,” March 2009, www.brandeis.edu/~cbown/global_ad/.

Another example is the “Buy American” clause in the US bailout package, which was passed in February 2009 by Congress. The clause stipulates that only US steel and iron should be used in government-funded infrastructural projects. The intention behind this is understandable: to increase or at least to stabilize the number of jobs in the iron, steel, and manufacturing industry. But the effects are more than uncertain. While the clause is to be applied in a manner consistent with US obligations under international agreements, some countries, especially those that are not members of the WTO’s plurilateral Agreement on Government Procurement (such as Brazil) have already announced that they will challenge the clause through the WTO.

The dangers entailed by subsidies are similar to those affecting tariffs: both run the risk of discriminating against foreign companies and products, distorting their trade, and provoking acts of retaliation. During the economic crisis of the 1970s, this logic prompted decision-makers on both sides of the Atlantic to engage in domestic economic intervention on a massive scale. Although international trade law prohibits subsidies that demonstrably distort trade and serve to give domestic products an artificial advantage over imported goods, in actual practice, the subsidies agreement of the WTO contains numerous loopholes: government benefits can, for example, be granted in the form of research and development support and thus be brought into conformity with WTO law. Another back door to protectionist measures is offered by the so-called countervailing duties. WTO law allows a country to levy these tariffs temporarily when domestic industries come under pressure from subsidized foreign rivals. But these tariffs are not always directed against subsidization abroad. As in the case of the anti-dumping measures, they are often misused to protect local industries.

The EU provides compelling evidence that international agreements are not always capable of standing up to a crisis-induced scramble for subsidies: under pressure from a large number of member states, the European Commission loosened its subsidies schemes in December 2008, permitting a series of measures that member states can undertake up to the end of 2010 to cope with the economic crisis. German companies will profit from low-interest loans provided by the German Credit Institute for Reconstruction (KfW) and from the raised cap on government subsidies subject to the official notification requirements (from 200,000 to 500,000 euros).

Conclusion of the Doha Round could provide a significant impetus to trade

In view of these risks, a policy of open markets is more important than ever. Achieving a rapid breakthrough in the Doha Round negotiations has therefore taken on new urgency in the wake of the economic crisis. The heads of state of the world’s twenty biggest economic powers (G20) already agreed on November 15, 2008 in Washington D.C. to urge their trade ministers to strive towards reaching agreement on the key issues of the

Doha negotiations as quickly as possible. Furthermore, the participants of the G20 financial summit declared their commitment to free-market economic policies: in their communiqué, they vowed to erect no new barriers to trade or investment in the upcoming twelve months. Just after the summit's conclusion, however, this moratorium already proved to lack any significant binding force. Russia, for example, imposed import tariffs on foreign automobiles, and India imposed border taxes on imported steel. Although not a G20 member, Ecuador passed higher import tariffs and import restrictions on more than 600 products. The EU announced that it would reintroduce export subsidies on milk products—an act that provoked bitter protest from the Cairns Group, a group of 17 agricultural exporting countries. Although there is certainly no widespread protectionism yet, the World Bank has identified 47 trade-restricting measures. About a third of these actions are tariff increases; the rest are subsidies. Against this background, the G20, when meeting in London on April 2, 2009, not only renewed the pledge they had made in Washington D.C. but even extended it further to the end of 2010 and promised to “promptly rectify any restrictive measure.” Furthermore, they agreed to “minimize the negative impact on trade and investment of domestic policy actions including fiscal policy, and action in support of the financial sector.”¹²

It is true that the conclusion of the Doha Round will not immediately result in a strong economic stimulus. At least in industrial products, the tariff reductions established in the negotiations would hardly surpass the tariff level achieved through the unilateral cuts of the last few decades. Since the welfare effects would only be felt with some delay, the measures are not suitable for immediate crisis management. What is decisive, however, is that concluding the Doha Round would mitigate protectionist tendencies by reducing the “binding overhang,” that is, the scope for tariff increases in line with WTO regulations. The psychological and symbolic effect of such a conclusion should also not be underestimated: it would send a powerful signal for free trade in times of economic hardship, both to the international community and to internationally active companies. Furthermore, a conclusion of the Doha Round would—despite the rocky path it would take to get there—demonstrate that the WTO is capable of acting in times of crisis, while at the same time renewing its credibility as the central pillar of the world trade system. Lastly, it would open the door for much needed institutional reform within the WTO.

It would not be the first time that an economic crisis provided a new impetus for multilateral negotiations. Even the start of the Doha Round in Qatar, 2001, was influenced substantially by the global political (and economic) situation: along with the terrorist attacks of September 11 and the increased willingness of the US and EU to seek compromise, the sharp decline in world trade in 2000/2001 due to the bursting of the IT bubble also played a major role. Nevertheless, as important as a rapid conclusion of the negotiations may be, it will be anything but easy to achieve. Despite

¹² See: The London Summit 2009, “Leaders’ Statement (02/04/2009),” (see n. 7), pp. 6–7.

intense negotiations and substantial progress in numerous areas, the talks have stalled repeatedly. The blame for this lies not just with individual states. The Doha Round has become deadlocked over a number of issues; many of the problems that remain are structural in nature. With the Obama administration taking office, the presidential elections in India, and elections to the European parliament, as well as the change of the EU Commission, the upcoming negotiations of 2009 will not be any easier than in the past. Even more: under the weight of the crisis, many countries will be focusing primarily on internal issues. In the current period of rising unemployment and increasing corporate bankruptcies, domestic economic issues and the political challenges they entail will be setting the national agendas. The scope for negotiations within the Doha Round may thus become even narrower.

The crisis as an opportunity for regional integration

But at the same time, the crisis offers opportunities—for example, the chance for regional integration. This could provide instruments for a regionally coordinated, sustainable form of crisis management and could thus mitigate protectionist tendencies. In contrast to the majority of bilateral free trade agreements of recent years—which have not always produced a positive impact on world trade—regional free trade agreements could provide an important stimulus to growth and development. Of course, it has to be kept in mind: they will only be sustainable in the long term if they are designed to conform to WTO rules.

In Africa, the current crisis appears to have already increased the desire for regional integration. As a reaction to the crisis, the heads of state of a total of 26 countries decided on October 22, 2008, to further develop three regional trade blocks (EAC, SADC, and COMESA) into a unified free trade zone. Increased economic integration was defined as a goal and a means of achieving sustainable growth—even beyond the financial crisis. This is an important step, especially for Africa, where major deficits in regional cooperation create an acute need for effective remedies. Along with the removal of tariffs, this would also entail improving the transport infrastructure, improving access to financing, but also enforcing the rule of law.

The ASEAN countries have also taken the crisis as occasion to cooperate more closely. They had already begun working closely during the Asia crisis of 1997/98 in order to rebuild and stabilize the system of trade finance, which had collapsed in the wake of the crisis. Whether the current crisis will provide such an impetus to South-East Asian integration and accelerate the ASEAN+3 initiative—the integration of China, Japan, and South Korea in the ASEAN process—remains to be seen. At least, China, South Korea, and Japan have already concluded a trade policy non-aggression pact: the heads of state agreed that in view of the crisis, they will not create any new trade barriers in 2009, and if necessary will provide each other with financial aid. What is more, at their summit meeting in late February 2009, the ASEAN countries initiated a common

internal market to be achieved by 2015, featuring a gross national product of approximately 2 trillion dollars. Furthermore, they signed a free trade deal with Australia and New Zealand. The FTA, which will be one of Asia's largest trade agreements, will take effect in December. Trade in goods and services is estimated to increase by 48 billion dollars over the next decade.¹³

A strong trend towards deeper integration is not likely in all regions, however. Tensions within the South American Mercosur could again significantly increase as a result of the crisis. A coordinated strategy of crisis management is still lacking in this regional agreement. The devaluation of the Brazilian real and the resulting increase of exports to neighboring countries could put their economies under significant pressure. It would not be the first time that Argentina imposed quotas on various import products during a crisis. Under these conditions, the number of trade conflicts in South America would likely increase. In early March, at the 36th Summit of Mercosur, the member countries announced their willingness to deepen cooperation in dealing with the consequences of the global financial crisis. But while agreeing on the importance of promoting regional trade, they failed to strike a deal on ending the so-called Common External Fee (TEC), which levies double tariffs when a product enters a Mercosur country by way of another.

Open market policy

As the crisis increasingly spills over into the real economy, structural failures in particular industrial sectors will become ever more apparent, and the tendency will increase to protect domestic economies with import tariffs and subsidies. Measures along these lines run counter to fair conditions for global trade. The problems of recession, unemployment, and the credit crunch must be tackled, first and foremost, through individually tailored monetary and fiscal policy measures as well as internationally coordinated action. For world trade, much would be gained if politicians and policy-makers focused on this, and resisted the temptation to pump money into loss-making industries or to use tariffs to discriminate against foreign goods.

¹³ See "ASEAN Pushes for Deeper Integration, Signs FTA with Australia, New Zealand," in: *Bridges Weekly Trade News Digest*, Vol. 13, No. 8, March 4, 2009; "Der ASEAN-Gipfel im Zeichen der Wirtschaftskrise und der Menschenrechte," in: *Länderberichte der Konrad-Adenauer-Stiftung*, March 2009, www.kas.de/proj/home/pub/6/1/year-2009/dokument_id-15872/index.html.

From the Financial Crisis to the Energy Crisis?

Kirsten Westphal

The financial market crisis has hit the energy industry worldwide at a critical point in time, when the energy system already stands at a crossroads.¹ A shortage of the fossil fuels oil and gas looms large on the horizon. This not only raises questions about the future affordability of carbon-based energy sources, but also bears potential for conflicts due to the global distribution and use of these resources. At the same time, large portions of the energy sector infrastructure in the industrialized countries have become obsolete. Here, the time frame available for urgently needed modernization is limited. On a global level, the energy industry faces two fundamental challenges: ensuring the supply of affordable energy, and transforming itself into a sustainable and above all environmentally friendly system. In the following, we focus on the issue of energy supply.

Aggravation of the structural crisis on the oil markets

In the medium term, it is uncertain whether a sustainable and adequate supply of oil—which makes up 34 percent of total energy provision—can be ensured. International oil markets have become tighter and tighter in recent years: the demand has increased exponentially, and oil production has been unable to keep up. Very recently, additional oil production capacities have declined to something on the order of two million barrels per day, at a level of worldwide oil demand of 85 million barrels per day. The most troubling aspect of this situation is that, for the first time ever, a reduction is being seen in economically recoverable reserves.²

By the year 2015, approximately 30 million additional barrels of oil will be needed per day, according to forecasts of the International Energy Agency (IEA), which predicts a persistent slight increase in demand of about one percent annually. The projects currently planned or just being launched will provide only 23 million barrels daily—if they are carried out to completion.³ For comparison: the daily oil production of the world's largest oil producer, Saudi Arabia, is just 10.2 million barrels. This reduction is also worrisome because it affects the large conventional oil fields. In the future, therefore, small fields in distant regions or under the ocean will have to be developed, which will be an expensive undertaking. The investments are correspondingly risky: the age of “cheap oil” is essentially over. With natural gas, the situation is similar: the IEA estimated invest-

¹ The International Energy Agency (IEA) points this out in its *World Energy Outlook 2008*, Paris 2008.

² Bundesanstalt für Geowissenschaften und Rohstoffe, *Reserven, Ressourcen und Verfügbarkeit von Energierohstoffen 2007*, Hannover, October 31, 2008 (short study), pp. 19–22.

³ IEA, *World Energy Outlook 2008*, Paris 2008, pp. 40f.

ment needs in the oil and gas sector, in a conservative scenario, to be 350 billion dollars per year.⁴

It is obvious that too little was invested in the development of oil and gas fields in the past. This problem emerged gradually in the 1990s. The fact that the energy corporations made only low investments at that time was due to the low oil prices, among other things. The market was saturated; demand was weak. When prices began to rise rapidly in 2001, this trend was first utilized to boost share prices. Many oil companies have used more than half of their capital to buy back their own shares and to make dividend payments instead of investing in new crude oil extraction, production and processing projects. Today, this short-term strategy is having a doubly severe impact on multinational energy corporations.

The reasons include past developments in the energy-rich countries: there, increased oil prices flooded government coffers and triggered greed among national elites. Worldwide, the oil industry was hit by a wave of nationalization or renationalization. The numerous production-sharing agreements concluded with western companies in the 1990s were gradually revised. Today, access to oil reserves is controlled mainly by national oil companies, while the large international (privately held) companies control only about 15 percent of all production. In this constellation, the state-owned enterprises are concerned mainly with the short-sighted absorption of oil rents as a means to achieve political ends both at home and abroad. In consequence, the energy-rich countries are suffering particularly heavily from the collapse in prices.

For the first time ever, there exists close cooperation between OPEC and Russia. The objective they have been striving for—up to now unsuccessfully—is to keep the oil price at around 75 dollars per barrel. It is known that Russia calculates an oil price of 70 dollars per barrel in its longer-term budget planning. In the Arab countries as well, the pain threshold is only slightly below the OPEC target. In this delicate situation, investments are being put off even further into the future. The situation on the global oil and gas markets will become even more acute than it is today once the worst of the economic crisis is over and demand again begins to rise. Since a further shortage of available fossil fuels and huge price increases are to be expected, recovery is highly uncertain. Then, questions will arise on the global level about availability, distribution, and justice.

Consequences for energy security

Against this backdrop, crucial investments have to be made in an environmentally compatible and climate-friendly energy system. The IEA estimates that 32.5 trillion dollars of investment will be needed up to 2030,⁵ or about 0.55 percent of global GDP. Price incentives for renewable energy are sinking because of the financial market crisis, which has caused the per-

⁴ Ibid., p. 44.

⁵ IEA, *World Energy Outlook 2008*, Paris 2008, p. 39 and 49.

spectives for business activity to deteriorate, triggering a slump in oil prices. Here, oil prices also serve other energy providers as a kind of reserve currency. In the gas sector, Russia, Iran, and Qatar are working together in the so-called “gas troika” to stop the decline in prices. It is not improbable that more widespread cooperation and coordination will emerge in the Forum of Gas-Exporting Countries.

In contrast to oil, which plays a dominant role in the transport sector, gas faces much stronger competition on its sales markets. Even now, an expansion is underway in coal-based electricity production. Coal is distributed relatively evenly worldwide and thus offers energy security and relative price stability. In the case of conventional use, however, coal poses disastrous consequences for the climate. The development and introduction of clean coal technologies is thus a central technical and financial challenge. Nuclear energy, on the other hand, has gained new momentum thanks to concerns about climate change. At least prior to the financial crisis, a trend was appearing in the USA and Europe toward maintaining existing capacities and replacing old plants. A number of Asian countries have begun increasing the share of nuclear power in electricity generation. And even oil-rich countries like the United Arab Emirates and Saudi Arabia are planning to expand their overall energy mix to include nuclear components. Here, the need exists to improve mechanisms for reducing the proliferation risks that arise when services in the nuclear fuel chain become widespread. In any case, the developments described above show one thing clearly: up to now, the paths being taken to secure energy provision have been traditional and conventional. The financial crisis will further accelerate this trend toward “business as usual.” After all, investments made during the crisis entail higher risks, since the yields are more difficult to calculate.

As such, climate protection and security of supply have to be seen as two sides of the same coin: indeed, the cleanest and cheapest form of energy is the one that is still not even being used at all. In the current energy system, there is vast potential for increasing savings and efficiency; but exploiting this potential requires investments. At the same time, diversification in the energy mix and thus the development of renewable energies are imperatives to ensure a sustainable energy supply. The great challenge remains how to utilize the potential of solar energy. Projects like the “solar plan” for the Mediterranean point in the right direction. In the present situation, however, such initiatives stand in danger of being put off into the indefinite future.

The global energy system stands at a crossroads, not only because of climate change, but also because parts of it are simply outdated. Some components of the infrastructure—power generation parks, pipelines, and electricity networks—need to be renewed, modernized, and expanded. This should not be done in a conventional manner but according to the highest technological standards, even if this is more expensive in the short term. Upgrading later is usually less efficient and more expensive. The crux of the matter is that the financial and capital market reacts to short-term

signals, while the energy sector generally follows medium to long-term investment cycles. It takes between five and twelve years for a new oil or gas field to reach full production capacity. Power plants, on the other hand, have 30 to 40-year lifespans. Decisions on infrastructural and pipeline networks shape transport routes and directions for decades to come. The danger exists that the financial crisis will act as a check on the energy industry to prevent strategically decisive improvements from being made. This could significantly exacerbate the impacts of the impending energy crisis.

The energy industry, financial markets, and stock market speculation

Acquiring financial capital for large-scale projects could prove to be one of the major challenges in the present situation. Price fluctuations undermine the planning and investment security of energy companies. The rest of the economy, too, needs time to adapt to changed conditions. At the same time, prices in the energy sector are only to a very limited degree “market prices”—that is, mediators between supply and demand. The energy sector is characterized by diverse market imperfections. The unequal geographical distribution of fossil fuel resources and politically motivated restrictions on access play a contributing role, as does the fact that companies are vertically integrated on both the supply and the demand side (for example, production and processing). The same companies are usually still involved in (grid-bound) trade and thus use economies of scale, which further impedes real competition and makes market entry and exit highly cost-intensive.

Even on the oil market—where price swings on the commodities exchanges are a subject of daily news—there is no complete information on the actual price behavior of the market. It is widely unknown that a large majority of world oil is supplied on the basis of long-term contracts, whose details remain secret and whose price formulae are only partly tied to spot markets. Furthermore, no more than half of world oil is sold on spot markets in London and New York. These intransparencies are also one reason why OPEC’s policy of stabilizing prices through crude oil production quotas was ultimately rather unsuccessful both in times of economic boom and in times of economic downturn.

Furthermore, stock market cycles and financial transactions began to exercise a stronger impact in the 1990s due to their shorter-term effects. At that time, the commodities markets became the focus of attention for investment banks and investment companies. Today, the issue of speculation and oil prices is attracting considerable public attention, particularly through the debate on stronger regulation of financial markets. To what extent the severe price fluctuations of recent years were fuelled by past speculation on the stock markets is the subject of much discussion—and is ultimately a very difficult question to answer. It is certain, in any case, that the price leaps increased significantly precisely at the time when financial

service providers invaded the market en masse. This was seen in the extreme and unprecedented fluctuations in oil prices by over 100 dollars in an approximately four-month period of 2008. It is also certain that this new type of market player has no interest in the physical business itself, but is instead simply speculating on rising or falling prices during a particular period. This explains the extreme deviations in both directions. These, however, are reactions to fluctuations in the dollar, and particularly to real economic developments such as the rapid increase in demand from China and India, strikes in the Venezuelan and Nigerian oil industries, the YUKOS affair in Russia, hurricane Katrina, and even reports of impending recession.

Policy makers are obliged to act

In the current crisis, political leadership is needed now more urgently than ever. Here, Europe will take on a pivotal and pioneering role. Plodding along well-worn paths with a “keep-on-going” attitude would be fatal. If the EU does not succeed in bringing about a profound transformation of the energy system, the consequences will be severe—not just for the climate, but also for the security of the energy supply. Even today, Europe imports 54 percent of its total energy requirements. European competitiveness and quality of life will soon depend on how efficiently Europeans manage their energy resources. If the demand for fossil fuels for conventional energy use continues to increase, the divide between (energy-) rich and (energy-) poor countries will continue to widen, with all the ensuing consequences for future conflicts over rapidly diminishing resources.

At the European level as well as at national levels, further work needs to be done to adopt regulations and standards in line with the Energy and Climate Change package. The so-called “20-20-20 goals” of the EU point in the right direction: they call for a 20 percent reduction in greenhouse gas emissions from 1990 levels, bringing renewable energy use up to 20 percent of the total, and to improve energy efficiency by 20 percent. In the current tense economic situation, it is unlikely that energy firms will abandon their beaten paths to engage in innovative but risky investment behavior. For this reason, policy makers need to prepare the groundwork for a sustainable energy system that promotes the utilization of renewable energies—especially solar energy. This will simultaneously require the development and adoption of new storage technologies.

However, the allocation of resources to research and development is not enough; this must be flanked by political support for companies taking the risky step of launching new technologies on the market and putting them into serial production. To this end, it is just as important that competitive bids are put out for pilot projects as it is that timely political decisions are made on technical norms and standards. Of central importance for efficient energy provision is the modernization of the energy infrastructure, especially of electricity and gas networks. Here a support program could be established to expand transnational networks and equip

them with information technologies. The software-supported coordination of all the elements in the energy system—including the producers, the long-distance and distribution networks, and even the end-users—would be a decisive precondition for maximizing energy efficiency, but also for expanding the use of renewable energies.

On the global level, the financial and economic crisis not only bears enormous risks for the energy supply. It also opens up a time frame in which increased dialogue and cooperation is possible. After all, the “petrodiplo-macy” of powerful oil and gas producing countries like Venezuela and Russia is also in crisis. Their profits are falling, while their investment needs are rising—and at the same time, their possibilities for playing politics with petrodollars are shrinking. Increased dialogue is needed on several levels. For one, individual projects should be discussed: for example, building pipelines or developing new oil fields under international joint ventures with political support. Tighter regulation of international energy relationships—for example, in the framework of the Energy Charter Treaty—is important for achieving greater legal security and protection for investments and transit as well as for cooperation, with the goal of higher energy efficiency. Volatile prices offer a further point of departure. While these affect the different participants in the world energy system in different ways, they affect everyone severely. Here, effective initiatives are needed to increase transparency and the exchange of information between producing and consuming countries. Furthermore, the trade on commodities markets needs to be made more transparent. Here, ideas aimed at achieving better regulation of financial markets will be important—for the energy sector as well.

The central challenge remains to achieve the fundamental transformation of the energy economy into a sustainable energy system—a goal closely related to that of achieving global energy security. And it can only be reached if the UN climate negotiations in 2009 are successful and if the mechanisms for transferring technology and know-how can be expanded effectively. To accomplish this, it will be necessary to seek dialogue soon with the new US administration, with China and India, but also with Russia.

How the Financial Crisis Is Turning the Food Crisis into a Hunger Crisis

Bettina Rudloff

During financial and economic crises, the agricultural sector takes on particular importance for the economy as a whole. First, it is of immediate significance for domestic food security, since in times of crisis even segments of the non-agricultural population may be forced to produce agricultural goods for their own sustenance. Second, the agricultural sector is capable of mitigating risks to the broader economy. Given that income changes have a stronger effect on the demand for manufactured goods and services than on the demand for food products, increasing or at least stabilizing agricultural income can mitigate a possible decline in demand and potentially resulting growth reductions and job losses in other sectors. From a macroeconomic perspective, therefore, any negative effects of the financial crisis on the agricultural sector should be avoided or at least minimized as much as possible.

Bad point of departure: low food stocks and existing food insecurity

The current situation is, particularly from the point of view of the developing countries, an unfortunate combination of different crisis factors: early 2008 saw a dramatic increase of up to 100 percent in the prices of staple foods, triggered or exacerbated by shortages in the food supply. According to the United Nations' Food and Agriculture Organization (FAO), this price increase alone pushed 100 million more people below the absolute poverty line, forcing them to survive on just one dollar per day.¹ This caused the number of undernourished people worldwide to rise by 40 million to a total of almost one billion. Simultaneously rising oil prices not only caused the costs of producing and transporting agricultural products to soar, but also prompted increased investments in the cultivation of renewable natural resources. In combination with policies in some industrialized countries promoting renewable energy use, the increased oil prices—and ensuing competition between renewable raw materials and staple foods for limited arable land—had a crowding-out effect on the production of foodstuffs, thus exacerbating price inflation. At present, both oil and agricultural prices are beginning to settle again. But this does not mean that the situation has improved. First of all, agricultural prices remain on a higher level than last year. Second, it always takes time for adaptations in agricultural production to have an effect, and in developing countries,

¹ Food and Agriculture Organization (FAO), "World Food Day Reminder of Daily Crisis Borne by Millions," Press release, Rome, October 16, 2008; "Hunger on the Rise: Soaring Prices Add 75 Million People to Global Hunger Rolls," Briefing paper, Rome, September 18, 2008.

the positive effects are often offset by diverse institutional deficits such as insufficient transportation infrastructure and inadequate marketing. And third, the currently skyrocketing production costs—due, for example, to fertilizer use—are causing profit margins to shrink. As a result, the production incentives are disappearing, and in some cases, the necessary financial resources have dried up altogether. Production costs are being driven up further by knee-jerk policies aimed at protecting local food supplies, as was the case with the recent Chinese tax on fertilizer exports.

The main reason behind the recent price decline also implies the risk of future price increases: the decline is due largely to high crop yields in the summer of 2008 that increased the available world food supply. Agricultural prices are extremely sensitive to changes in supply, and even minor supply fluctuations trigger major price fluctuations. Since the world's food supply remains—despite some increases—at a generally low level, any future reduction in supply can bring price increases in its wake. Negative effects of the financial crisis on agricultural production and thus on the world food supply may therefore trigger dramatic price spikes as early as next year. In the worst-case scenario, this may ultimately put the number of starving people worldwide over the one billion threshold.

Effects of the financial crisis on the developing countries

For the developing countries—in contrast to the developed countries—the impact of the financial crisis is not so much the direct effect of events on domestic private capital markets as it is the indirect effect of critical events in the developed world. Perhaps the most important factors here are potential reductions in government loans provided as development assistance, and the overall reduction in world trade. The decline in growth in developing countries due to the financial crisis is estimated at 1.6 percent—down from very high growth rates of up to seven percent in recent years. This alone has been calculated to add another 60 million to the ranks of people living in poverty. Hereby both the financial crisis and the food crisis together may lead to a poverty increase of an additional 160 million people. Depending on the duration of the crisis and the adequacy—or inadequacy—of the global response, an even more severe increase may yet occur.

External risks: Decreased development assistance, protectionism and foreign currency losses

Decreasing development assistance. When public pressure to reduce budgets in the developed countries leads to cuts in promised development assistance, it becomes impossible to establish optimal conditions for agricultural assistance programs or to expand local agricultural capacities. At the international level—for instance, according to the Second UN Global Conference on Financing for Development in November 2008—a freeze on development finance is currently out of the question. However, past aid payments

always ended up being lower than the amount promised—even before the financial crisis. The UN target of providing aid in the amount of 0.7 percent of gross national income (GNI) has not yet been reached. According to data collected by the OECD, the development assistance provided by the donor countries in the year 2007, totaling 103 billion dollars, made up only 0.28 percent of GNI, which was even below the previous years' levels.² At the end of 2008, the EU member states did agree that they would provide financing for a new food facility in the amount of one billion euros by 2010.³ But even with these additional funds, the UN target will not be reached.

Inadequate food aid. According to the United Nations' World Food Programme, the dramatic price inflation of early 2008 prevented the allocated sums of assistance from covering actual food needs.⁴ The current price downturn may provide a brief period of respite: the volume of physical food aid and world market prices for the same commodities generally follow an anticyclical pattern. In low-price phases, existing physical food supplies are larger and at the same time, the losses due to foregone export revenues are small, which increases the willingness to provide assistance. But when it comes to the recommended provision of monetary aid to foster the more sustainable purchase of foods on local markets in developing countries, the same problem exists as for development aid: tighter budgetary restrictions may cause a decrease in food assistance.

Protectionism by trade partners. Prophylactic trade restrictions—in the form of export restrictions, for example—keep food products in the domestic economy and thus secure the domestic food supply. In the long term, however, they exacerbate the situation because they not only remove price stimuli for local producers, but also reduce supplies on global markets. The consequences of rapidly escalating prices and increasing import expenditures were just seen this spring, when over 40 countries imposed export bans.

Decline in foreign exchange revenues. The countries now suffering most severely from food supply shortages experienced a particularly strong depreciation in their own currencies against the dollar prior to the crisis. For currency reasons alone, this caused an even steeper increase in expenditures for food imports priced in dollars. Depending on the further evolution of the US dollar exchange rate, import expenditures could increase still further, if political intervention does manage to stabilize the exchange rate. At the same time, export revenues—which were rising steadily in developing countries prior to the crisis—would disappear due to the reduced demand from developed countries. This could make it even

² OECD, *Official Development Aid by Donor*, OECD.StatExtracts, 2008, at http://stats.oecd.org/wbos/Index.aspx?DatasetCode=ODA_DONOR.

³ Council of the European Union, 2906. Meeting of the Ministers for Economics and Finance, Brussels, November 21, 2008, News Release, 16076/08 (Presse 337).

⁴ World Food Programme (WFP), "Hilferuf der Helfer—Den Vereinten Nationen fehlt Geld," *WFP in den Medien*, February 27, 2008, at www.wfp.org/german/?NodeID=43&k=346#IDAFBPKCIDAGBPKC.

harder to finance the increasing import expenditures. In view of the already-low foreign currency reserves, the need for loans may increase—while the high indebtedness of these countries will place severe limits on the potential amount made available.

Reduction in agricultural research. Activities relating to research on agricultural technologies and well-adapted crop varieties, on irrigation methods, or on locally viable and sustainable production in developing countries can fall victim to budget pressures in the developed world. Cutbacks would not only affect public research funds, but also agriculturally relevant industrial research on fertilizers and breeding. Research findings that could potentially be put to use to increase agricultural output would thus be delayed—if not prevented entirely.

External opportunities: less competition for arable land and reduced speculation

Reduced demand for refined products and energy. Slowed global growth may also be reflected in a decline in the demand for the highly income-dependent products meat and milk. The immediate negative producer price effects will affect especially the developed countries that are the main producers of these products. This may lead to short-term positive effects in developing countries: because of the decline in the demand for grain for use as a feedstock, there will tend to be more of these products available for human direct consumption. A potential decline in energy use due to reduced production activities worldwide would have a similar impact. A resultant reduction in the prices for energy sources could make the use of agricultural products for power generation less attractive. These agricultural products could thus be made available for food consumption. In the long term, oil price developments and the extent to which industrialized countries promote the production of renewable resources may be the decisive factors affecting competition between food production and renewable resource production.

Less exchange trading in agricultural commodities. The fact that there is less speculation on agricultural commodities markets is due both to the financial crisis and to the general price evolution on agricultural markets: the gradual easing of prices has already reduced transactions in agricultural products in recent months. The restricted liquidity of commodities market participants in the wake of the financial crisis and indications of stricter political regulation may further aggravate this trend. Both determinants may lead to less impact of speculation on price volatility.

Internal risks: reduction of national agricultural assistance

The expected slowdown of growth in the developing countries, which will be worsened by external risks, may well lead to reductions in public spending. The greatest danger this would pose for the food supply—and the risk of contagion spreading to other sectors—lies in the curtailment of agri-

cultural assistance programs. These programs were newly implemented or expanded in many developing countries as an appropriate response to the price inflation of early 2008:⁵ in some countries, producer subsidies were initiated or increased (Algeria, Azerbaijan, Zambia) and in others, existing agricultural tax burdens were removed (Kenya). Seed or fertilizer subsidies and generous agricultural loans by private banks (Ghana, Mauritania, Guyana) were also provided to help lower input costs. With the discontinuation of these measures, it will be impossible to curb shrinking profit margins—due to sinking producer prices at still-high costs—either on the price side or on the cost side. This will reduce the agricultural production incentives, which will further diminish the future food supply. According to estimates of the Director General of the Washington International Food Policy Research Institute (IFPRI), Joachim von Braun, the food shortages that would result from an economic growth slowdown of just two percent annually, and the resultant effects of reduced agricultural investments, would lead to 16 million more malnourished children in the year 2020. Regionally, according to his estimates, the largest percentage of these children would be in Sub-Saharan Africa.⁶

Gloomy prospects for low-income net agricultural importers

The FAO recently classified 32 countries as being in acute crisis due to their inadequate food supply.⁷ All of them belonged to the group of “Low-income food-deficit countries” (LIFDC), which are characterized by low per capita income and weak domestic agricultural production. As a result, they are all dependent on food imports, for which they lack adequate purchasing power. For the aforementioned reasons, these countries are acutely susceptible to the principle risks of the financial crisis, especially to the external risk of increasing import expenditures due to market foreclosure and foreign exchange losses. For almost one-third of these countries (including Afghanistan, Ethiopia, and Haiti), there is no improvement in sight for the food supply due to bad climatic conditions or crop losses caused by pest infestations—even without taking factors related to the financial crisis into consideration. In view of the dire forecasts for low crop yields, the severe food supply shortages in these countries—Ethiopia, for example, would need to produce three billion tons more grain just to provide for its population’s basic food needs—can only be bridged by

⁵ FAO, *Crop Prospects and Food Situation No. 5*, December 2008, <ftp://ftp.fao.org/docrep/fao/011/ai476e/ai476e00.pdf>.

⁶ Joachim von Braun, *Food and Financial Crises: Implications for Agriculture and the Poor*, Brief prepared for the Consultative Group on International Agricultural Research (CGIAR) annual general meeting held in Maputo, Mozambique, December 2008.

⁷ FAO, “Eat What You Produce and Produce What You Eat,” in: *UNRIC Magazine* (United Nations Regional Information Centre for Western Europe, Brussels), (October 2008) 25.

increased imports or food aid.⁸ And exactly these options are limited by the risks accompanying the financial market crisis.

Don't save on the wrong end: agricultural stabilization now more important than ever

Due to the continuing worldwide shortages of food stocks, even the status quo harbors substantial risks. These risks will increase significantly with every further reduction in agricultural capacities. Since the currently existing stockpiles are scarcely adequate to buffer crop shortfalls, similar price spikes and drastic shortages to those of early 2008 can be expected again at any time.

Increasing financial agricultural assistance is, in view of the potential negative effects of the financial crisis on agricultural production, even more urgent now than it was at the beginning of the food crisis:

(1) *Increasing agriculturally oriented development assistance and research.* The share of agriculturally oriented development assistance in total development aid has been declining sharply in recent decades: while it was still above 15 percent in the 1970s, it fell to below four percent in 2006, which corresponds to a sum of three billion dollars. This poses an obstacle to the urgently needed long-term stabilization of the agricultural sector. The FAO recently estimated the annual need for development assistance in the agricultural sector alone at 30 billion dollars. In view of current levels, this assistance should be increased substantially.⁹ Agricultural research can generate vast potentials for increased supply. For Sub-Saharan Africa, von Braun estimates the possible research-related growth stimulus in the agricultural sector at 2.7 percent.¹⁰ Despite pressure to cut government spending, this research should be expanded.

(2) *Supporting the development of national reserves as a means of crisis management.* Some countries have been initiating or pushing for the development of national food reserves since summer 2008 (Kenya, Bangladesh, Nepal, Honduras, Ukraine). However, most of these countries lack both the necessary physical stocks as well as adequate financial resources, due to their weak agricultural capacities. There already exist food assistance programs as mechanisms to promote cooperation between the large developed food producers and the countries affected by the food crisis, but these need to be expanded in volume and strengthened, and most importantly, they should be structured to work anticyclically. In the long term, financing should go toward the construction of storehouses in developing countries

⁸ Birgit Meade, Stacey Rosen, and Shahla Shapouri, *Food Security Assessment, 2006*, Washington, D.C.: United States Department of Agriculture, Economic Research Service, Juni 2007 (Global Food Assessment [GFA] 18), www.ers.usda.gov/publications/gfa18/gfa18.pdf.

⁹ FAO, *Crop Prospects and Food Situation No. 5* [see n. 5].

¹⁰ Von Braun, *Food and Financial Crises* [see n. 6].

so that they can maintain their own food stockpiles. This goal can only be met through a development policy providing for ongoing agricultural assistance and through national aid programs based in the target countries.

(3) *Avoiding reactive trade barriers.* Due to the high price sensitivity export restrictions cause drastic price increases on agricultural world markets. As a result, food shortages are passed on to other countries through rising prices. Even the spring 2008 announcement by China, Vietnam, Cambodia, and India of their plans to stop exporting rice led to a tripling in rice prices within a matter of days.¹¹ According to the multilateral regulations of the WTO, such measures are generally forbidden, but exceptions are permitted in the situation of a food crisis. But what exactly constitutes a food crisis is inadequately defined, and the permissible duration of any such export restriction is only vaguely described as “short-term.” The WTO Agricultural Agreement also provides only very general recommendations for timely notification, and urges that potentially negative effects of such measures on trade partners be taken into consideration. Even the recent compromise paper of December 2008, which presents the various negotiating positions of all the WTO members on a new Agricultural Agreement, lacks proposals for criteria or for means of limiting export restrictions. The need for further regulation in this area is urgent.

¹¹ Milan Brahmbhatt and Luc Christiaensen, “The Run on Rice,” in: *World Policy Journal*, 25 (2008) 2, pp. 29–37.

Climate Policy in Times of Economic Crisis

Susanne Dröge

National and international climate policy is in one of its most critical phases. Germany and the European Union (EU) are translating ambitious climate protection goals into political measures, while negotiations are underway at the international level to forge a new climate treaty by the end of 2009. The financial crisis is affecting climate policy in two ways. On the one hand, it raises the question of whether the EU and Germany will still be able to provide for climate protection in spite of the economic difficulties. The decisions made at the end of 2008 in the wake of the financial crisis on European emissions trading and EU standards for more climate-friendly cars show that in times of economic crisis, the additional burdens one can impose on companies and private households are limited. On the other hand, the existing climate-friendly investment programs—for example, subsidies for energy-efficient building refurbishment in Germany—have been praised as economic stimulus measures that could actually help to combat the economic downturn. As new infrastructural measures in the energy and transport sector are currently being debated across Europe, further issues are included in plans for a “green” recovery.

These aspects raise the issue of what role climate policy can play in a phase of economic slowdown. Can measures to reduce emissions be used to achieve the aims of economic policy? Moreover, from a climate policy perspective, one has to ask to what extent economic stimulus measures can be reconciled with climate protection. At the very least, such measures should comply with existing climate policy regulations, but they should also take current international efforts toward global climate protection into account.

The cost impact of climate protection

Environmental protection is often neglected whenever the economy goes into recession, because of the political reluctance to impose additional burdens on industry and private households during already difficult times. The impact of the financial crisis on the decisions regarding the 2008 EU climate and energy package was similar. On the one hand, the decision was made to continue emissions trading after 2013, to support low carbon coal-fired power stations, and to introduce stricter emissions standards for the auto industry. On the other hand, the actual implementation has been watered down: emissions allowances will be allocated to the most energy-intensive companies in Europe for free, full auctioning in the power sector is limited to West European power producers from 2013 onwards, and the introduction of an emissions standard of 120 grams of carbon dioxide

(CO₂) per kilometer for private automobiles was delayed to 2015 for the time being.¹

The actual impact of climate protection costs and the burden sharing among actors depends on the technologies used and the future technological options. As global surveys by McKinsey show, the costs of reducing CO₂ emissions vary drastically. While long-term profits can be generated, for example, through the use of electronic appliances and building insulation, some types of low-carbon energy generation in particular (solar energy or carbon capture and storage) can add up to average costs of as much as 10 to 50 euros per ton of CO₂ equivalent saved.² Furthermore, the political framework is decisive. Cost impacts could arise through direct and indirect carbon pricing from emission allowances or through legal requirements, such as product standards.

The logic of a carbon price (implemented by emissions trading or by CO₂ taxes) is that companies and households have to pay for their use of the earth's atmosphere. A CO₂ price provides an incentive to reduce costs by reducing emissions. Neither type of price formation—emissions trading or taxation—interferes with economic competitiveness in the long term when emissions can be successfully reduced through innovations, and when potentially conflicting national regulations can be harmonized in the framework of international climate policy cooperation. Since emissions decline in times of economic downturn, once a system is introduced, it will have a procyclical effect. In other words, the burdens of certificates or taxes will decline when the economic activity declines. This does not eliminate the possibility, however, that the cost structures of companies will shift during an economic crisis—for example, because climate protection costs pose a greater burden when profits are shrinking, or if climate protection becomes relatively more expensive than the rest of the production process.

The introduction of a carbon price is not a trivial exercise. For many companies, the costs of climate protection that result from emissions trading with auctioning of CO₂ emission certificates are not by any means easy to absorb. If this period of transition coincides with an economic crisis, the burdens rise exponentially. Companies are also confronted with the question of whether their international competitors are subject to similar burdens.

1 "Autoindustrie braucht CO₂-Regelung 'mit Augenmaß'," in: *Wirtschaftswoche*, October 18, 2008; "EU-Staaten gehen auf die Industrie zu," in: *Frankfurter Allgemeine Zeitung*, December 12, 2008; "EU beschließt Paket für den Klimaschutz," in: *Süddeutsche Zeitung*, December 13, 2008. "E.U. Leaders Commit to Steps to Try to Curb Climate Change," Edward Cody, December 13, 2008, *Washington Post*, washingtonpost.com; "Industry Set to Win EU Climate Concessions," *Euroactiv.com*, December 12, 2008, www.euroactive.com (download April 5, 2009).

2 In scenarios that take developments up to 2030 into account and that are based on the assumption that these technologies are already available or in the pipeline. See McKinsey&Company, *Pathways to a Low-Carbon Economy*. Version 2 of the Global Greenhouse Gas Abatement Cost Curve, 2009, www.mckinsey.com.

In order to install a reliable carbon cost system, it is thus important to maintain balance in the transitional period by supporting low-carbon investments at home, while keeping an eye on a transparent CO₂ pricing system. A reliable framework provides companies and private actors with the incentive to include these costs in their budget calculations. If an economic crisis creates acute problems, temporary relief measures can be implemented in areas beyond the carbon pricing system, for example, by granting tax breaks or by lowering non-wage labor costs.

Economic stimulus through climate protection?

Based on the German 2007 “Meseberg decisions”³ on climate and energy policy, several measures to promote investments in climate protection were already under implementation when the crisis began to loom—for example, energy-efficient building refurbishment and the obligation to switch to renewable energies in heating. This has laid the ground for further such measures in the economic stimulus packages. A federal loan and guarantee program is supposed to provide companies with additional support.⁴ Given the impact of the financial crisis on private investors, companies that want to invest in low-emissions technologies are facing severe constraints on the capital market. Volatility of stock markets and the general slump in asset prices threaten the financial basis of companies that are providing new, climate-friendly technologies. Private households that want to convert to energy-efficient technologies—such as those subsidized through tax breaks and low-interest loans in the second economic stimulus package—are more cautious about taking out loans in times of recession. The crisis of trust in the capital markets is thus acting as a hindrance to private financing for climate-friendly investments, even when federal aid is already available.

The construction industry benefits in the long term from climate change—even without government incentives—since, given rising energy prices, the demand to install efficient insulation and heating technologies in both existing and new structures will increase.⁵ Since this sector is particularly crucial to bring about an economic recovery, private households should take advantage of the grants and subsidies available as quickly as possible. In Germany, there are currently numerous subsidy programs for the building sector. This calls for increased effort on the part of builders to apply for the most beneficial form of support available to them. If existing

³ BMU, *Key Elements of an Integrated Energy and Climate Programme*. Decision of German Cabinet on August 23rd/24th 2007 in Meseberg. Background Paper, “Costs and Benefits of the German Government’s Energy and climate Package,” 2007; Federal Ministry for the Environment, *Nature Conservancy, and Nuclear Safety*, www.bmu.de.

⁴ The 50 billion euro German stimulus package allocates approximately 18 billion euros alone to improving the infrastructure (streets, rails, public buildings); www.spiegel-online.de (accessed on: January 13, 2009).

⁵ See Deutsche Bank Research, *Building a Cleaner Planet*, November 14, 2008 (Energy and Climate Change Series), www.dbresearch.com.

bureaucratic hurdles are not lowered, it could become difficult to generate short-term stimulus through additional building subsidies aimed at achieving climate policy objectives. Instead, it is likely that the positive effects will be felt further down the road, when the overall economic situation improves.

The bottlenecks on the capital market are also affecting projects that are only indirectly related to climate protection. The restructuring of the European power grid is particularly urgent because, for one, cross-border capacities (interconnectors) are needed to promote the EU internal market, and on the other hand, because the facilities for using renewable energy sources like wind and sun need to be connected to the major transmission grids. Building a more efficient and also more intelligent power infrastructure would be an investment that would pay off in the long run and create jobs in the short run. This will only be true, however, if current plans can be put into effect quickly. Since basically all investments in the energy sector need to be made by private companies, the role of the state would be limited to guaranteeing loans and removing bureaucratic hurdles.

The crisis as an opportunity for more climate policy?

If in times of recession, governments aim at investment assistance for individual sectors, it is crucial to keep the European emissions trading in mind. At present, about 40 percent of European emissions are covered by the emissions trading scheme. This includes the manufacturing industry and the energy producers, but not transport, public and private buildings, or agriculture. Even if stimulus programs seem useful from an economic point of view, they are only useful from a climate policy point of view when they do not undermine the price stimulus generated by emissions trading. A long-term risk of false incentives exists if the green stimulus packages subsidise additional emissions reduction measures that should have been carried out by the private sector due to the CO₂ price. If a company that falls under the emissions trading scheme saves money by taking advantage of federal investment assistance provided through an economic stimulus program, it can put emissions allowances up for sale on the market. If a number of similar cases arise, the price for the emission rights will fall. Private investment incentives will then be reduced through the price effect.

State intervention thus could lead to a lower carbon price, which in turn reduces the push for innovation. The European climate policy sets an upper limit for CO₂ emissions, the so-called cap. This cap would need to be adjusted downwards if individual member states decide to subsidise sectors that are subject to emissions trading. The very idea of carbon pricing would be undermined and the needed long-term signal would fail due to the short-term efforts to save inefficient industries. This argument also holds for subsidies provided to low-carbon technologies. The German Renewable Energy Law (EEG), which guarantees feed-in tariffs for renew-

able energy sources, has been criticised because the electricity sector is simultaneously subject to emissions trading.

Providing longer-term loan guarantees or investment assistance to sectors that have to buy emissions certificates only makes sense if the companies in question would relocate without such assistance. As long as companies receive their CO₂ allowances for free, such commitments should be made sparingly, and each case should be checked individually—not least because they fall under the scope of the European legislation.

From a climate policy perspective, the economic crisis may very well accelerate the process of restructuring the economy towards low carbon emissions activities. Particularly in times of crisis, companies tend to reconsider their investment strategies, and a reliable climate policy could thus affect entrepreneurial expectations.⁶ The new and replacement investments by firms and private individuals that occur once the economic recovers will be oriented around expected CO₂ prices and the broader political framework. Thus, it is crucial that the price of greenhouse gas certificates signals an upward trend. Investment assistance to sectors that are not participating in emissions trading should be made conditional on a “climate component,” such as the stipulated use of climate-friendly technologies or adherence to emissions standards. If, on the other hand, federal assistance is used to keep emissions-intensive industrial sectors alive through the crisis, crucially needed restructuring will be postponed. This may be advantageous if it takes longer for more efficient technologies to become available. However, such short-term emergency help, delaying necessary investments could make later restructuring more expensive or even prevent them from being made at all.

An illustration of this reasoning is the commitment of European automobile manufacturers in 1998 to approach by voluntary agreement the emission targets for CO₂ in their sector. If this effort had been pushed forward through the imposition of binding long-term legal obligations, manufacturers would have had a greater incentive to develop low-emissions vehicles. Ten years later, the industry is in a structural crisis, exacerbated by an economic slump. The situation in the automobile industry is especially precarious given the number of years it takes for new motor technologies to reach market maturity—even when federal assistance is provided to promote their development. Thus, attempting to force federal funds into research and development does not work as a short-term measure to prop up the economy.⁷ Further efforts include the interim financial assistance for automobile manufacturers and the government-subsidized “scrapping premium” paying people to turn in old vehicles

⁶ The World Economic Forum (WEF) in Davos spoke out for immediate political action, particularly in the energy sector: “Green Investing. Towards a Clean Energy Infrastructure,” WEF, January 2009.

⁷ In the debate on the German economic stimulus package, Federal Transport Minister Wolfgang Tiefensee called for increased funding to promote development of sustainable and climate-friendly mobility for the future: “Tiefensee will mehr Geld für das Auto der Zukunft,” in: *Handelsblatt*, January 8, 2009.

with the purchase of new cars. Both ensure above all that previous vehicle models, former shop keepers, continue to be produced. If sales figures recover, this would only bring about a modest climate effect—and only indirectly, through the renewal of the vehicle fleet.

The international dimension

In contrast to the financial crisis and the short to medium-term economic slump that followed it, climate change is a long-term problem. The vast majority of countries are suffering from a loss of confidence in the capital markets and from a decline in economic performance. At the same time, they have been unable to escape the consequences of unchecked climate change, including an increased number of extreme weather phenomena. These consequences are only becoming evident gradually or in isolated locations. Making the necessary adjustments is difficult or in some cases impossible. Against this backdrop, it is hard to justify delaying international climate protection measures based on the financial crisis.

The financial crisis is impacting climate policy at a time when the settings for international cooperation have changed. With the change of administration in the US, negotiations aiming for a new global climate treaty in 2009 have gained new momentum.⁸ The US administration is working hard to move forward on the introduction of emissions trading, and plans to introduce federal support in the amount of hundreds of billions of dollars for climate-friendly technologies. It remains unclear, however, at what pace these plans will be implemented.

Germany and the EU want to accelerate the transition to a consistent climate policy at the international level. The establishment of a global market for CO₂ certificates would be an important step forward in reducing greenhouse gases. After all, only when CO₂ prices are introduced in other major emitting countries will there be a significant impact on global emissions. At present, companies and households can avoid the CO₂ costs as long as they can still fall back on imports from countries without CO₂ prices or produce in these countries. The EU has to perform a balancing act here between the role of trailblazer, imposing emissions costs on EU companies, and the role of international trendsetter, attempting to convince other countries to take similar steps. The economic crisis poses an impediment to this, insofar as countries like China, India, and Brazil are now even more hesitant than ever to make commitments to climate protection when the measures in question involve cost-intensive or growth-curbing policies. For them, imposing CO₂ prices is only attractive when they are allowed to join the group of sellers of emissions allowances.

Not least of all, the EU has to wait and see how its internal decisions on the climate and energy package affect its leadership role in international negotiations. In the international negotiation process, the EU countries

⁸ "Finanzkrise versus Umweltschutz? Die wirtschaftlichen Probleme rund um den Globus überschatten den Weltklimagipfel in Posen," in: *Handelsblatt*, December 1, 2008.

will be credible only when they succeed in integrating their own climate policies into their economic aid packages. This will send a signal that they still take climate change seriously, and that they still want to adhere to their previously announced emissions reduction targets.

Effects of the Crisis on the Eurozone

Daniela Schwarzer

The effects of the global economic and financial crisis have not left the European Monetary Union (EMU) unscathed. The eurozone has, for the first time since its inception more than ten years ago, slid into recession. Some forecasts estimate an overall decline in gross domestic product (GDP) of three to four percent for the year 2009. Unemployment will increase sharply. Since not every member of the monetary union is experiencing the crisis with the same intensity or suffering the same consequences, growing economic divergences and diverging political preferences may well result. The EMU is facing its toughest test thus far.

Yet the eurozone also offers a haven of stability within the economic and financial crisis. The now 16 member states benefit from the fact that, within this zone, exchange rate fluctuations cannot produce distortions that would further exacerbate the already occurring economic downturn. As was the case during the financial market crisis of 2000, which occurred after the “new economy” bubble burst, the EMU members have been spared from additional negative impacts on growth. This has been beneficial for Germany in particular. After all, if the deutschmark were still the German currency, it would undoubtedly be at considerable risk of appreciation in the present crisis: large amounts of capital would have flowed into Germany, the largest and what is considered the most reliable economy in the European Union (EU) with the deepest financial market as well as a stability culture. This would have severely jeopardized Germany’s export capacity, and this, in turn—at an export ratio of around 40 percent of GDP—would have significantly inhibited growth.¹

The EMU’s attractiveness to non-members

At the same time, the euro’s attractiveness to the EU members that have not yet joined the EMU—but also for Iceland—has increased substantially. Denmark and Great Britain, which had negotiated an opt-out of the monetary union in the Maastricht Treaty mainly for political reasons, are now considering joining. Denmark underwent a speculative attack on the krone in October 2008 that led to a devaluation of the currency and an increase in central bank interest rates to 5.5 percent (the Central Bank of Denmark had previously moved its interest rates largely in line with the European Central Bank [ECB]). Since then, in the wake of market turbulences and concerns about the stability of the national banking sector, public opinion has changed to such a degree that Danish Premier Minister Anders Fogh Rasmussen is considering calling a referendum soon on

¹ Today, the exports to non-EMU countries represent 24.3 percent of EMU GDP.

adopting the euro. In Sweden as well, discussions are underway on a change of policy with respect to the euro.

Poland is now aiming to join the EMU in the year 2012—after its accession was called fundamentally into question just last year and a referendum was called for in violation of the EU treaty—and plans to join the European Exchange Rate Mechanism II as early as June 2009.² However, a significant devaluation of the zloty against the euro increased concerns about further pressure on the Polish currency and the Polish financial market.

Other Central and Eastern European countries such as the Czech Republic and Hungary have also abandoned their skeptical stances toward the EMU. Like the Baltic states, which are contemplating accession in the year 2011, the Central and Eastern European countries are preparing for their assessment under EMU convergence criteria given the range of advantages the EMU offers: low interest rates, lower risk premiums, more stability through lower exchange rate fluctuations, higher credibility for the national banking sector, and so on. Also the fact that Slovakia—which joined the EMU on January 1, 2009—was substantially less affected than other Central and Eastern European countries by the financial market crisis has increased the interest of the latter in joining the EMU as quickly as possible.³

This does not mean, however, that eastern enlargement of the EMU is picking up speed. While weak growth rates and low commodity prices are reducing inflation in the candidate countries, the current crisis has dramatically increased the pressure on state budgets in some Central and Eastern European countries, making the fulfillment of fiscal convergence criteria possible only with significant cutbacks. The exchange rate criterion will also be very difficult for them to fulfill.

A more flexible interpretation of the convergence criteria is also unlikely from a present-day perspective since these criteria form a component of the Treaty of the European Union. Past experience over ten years of the monetary union has shown, among other things, that too much heterogeneity imposes high costs of adaptation and creates political tensions within the union. The possible disadvantages of too-hasty accession have generated heated controversies over appropriate accession strategies in some of the Central and Eastern European countries.

Internal divergences

Even if no additional countries join the EMU, it is expected that divergences in growth, inflation, and employment trends within the union will increase further in the years to come.⁴ A comparison of the economic

² Philippa Runner, "Financial Crisis Builds Polish Euro-entry Momentum," *euobserver.com*, October 28, 2008.

³ The Economist Intelligence Unit, *European Economy: An Unattainable Safe Haven?*, November 17, 2008.

⁴ BNP Parisbas, *eurozone: Internal Imbalance. Market Economics*, April 2008.

positions of the individual EMU countries would undoubtedly reveal stark differences—especially after the unexpected expenditures in the billions of euros on economic stimulus programs and the bailout of the financial sector. These problems are compounded by the effect of automatic stabilizing mechanisms, which create higher deficits in phases of economic downturn. Renewed discussion over the fiscal policy architecture of the EMU could result. Although the Stability and Growth Pact now offers a higher degree of flexibility since its reform in the year 2005—in particular, tolerance for temporarily higher deficits during recessions—some of the measures passed in the last several months to boost the economy will probably not be discontinued immediately after the recession ends. This increases the possibility that some member states may violate the pact in the not too distant future. The soundness and sustainability of national finances will therefore become an increasingly important issue on the European agenda.

Despite the stability that the euro has brought to the single market, the different member states have obviously been affected by the crisis to differing degrees. One indication of this is the dramatically widening interest rate spreads between the government bonds of different countries, which in the case of Germany and Greece lie over 250 basis points apart (3.26 percent for Germany, 5.93 percent for Greece). But also Italy and Portugal's government bonds (4.82 percent and 4.60 percent, respectively) reflect significant risk premiums.⁵ Given the impact of the financial market crisis on the real economy in the EMU, discussion has been rekindled on possible withdrawals from the eurozone.⁶

But so far, this discussion has not translated into a real loss of confidence in the euro—even if there was a considerable depreciation of the euro against the dollar and against the Japanese yen in the second half of 2008. After hitting its all-time peak on July 15, 2008 (1 euro = 1.59 dollars), the euro lost almost 20 percent of its value against the dollar in the second half of 2008. Afterwards, the exchange rate recovered somewhat. The reasons for the exchange rate fall are diverse. The outflow of capital into the dollar and yen zone is attributed, *inter alia*, to investors' conviction that financial markets in these zones have greater liquidity, and that government bonds there are more secure than on the highly segmented European bond market. After all, in the eurozone, there are fragmented national markets for government bonds with differing maturities—and not Eurobonds, which could be guaranteed by all the members of the eurozone.⁷ The dollar is also increasingly taking on the role of a "safe haven," and has solidified its role as the world's dominant currency as the bad economic prospects in other world regions create inflows of capital. In addition, there was the unwinding of the euro carry-trade (speculators had

5 "Ten-Year Government Bond Spreads" on January 27, 2009, source: Thomson Reuters, www.ft.com/markets.

6 See, e.g., Stephen Roach, *Euro Wreckage? A Remix*, Morgan Stanley, November 7, 2008.

7 Daniel Gros and Stefano Micossi, *A Call for a European Financial Stability Fund*, October 30, 2008.

been borrowing large sums in Japan and the US at super-low interest rates and selling yen and dollars to buy investments in the higher-yielding eurozone, which caused the euro exchange rate to hit record highs beyond the realm of the real economy). Furthermore, the EU's reaction to the financial market and economic crisis did not satisfy all expectations with regard to its unity, decisiveness, and speed.

Political answers to the crisis

Crisis management in the eurozone is not seen as satisfactory in every respect, given that differing national viewpoints on a number of questions have prevented a unified European response. First of all, the ECB was expected to provide answers to the emerging crisis. The ECB quickly took on the role of "lender of last resort," for example, by adapting its instruments (adjusting the liquidity supply to current needs, etc.).⁸ It also entered into joint action, for example, with the US Federal Reserve Bank in October 2008.

Very quickly, the monetary policy response proved ineffectual. The focus then turned to the national governments. The European bank rescue fund proposed by the French EU Council Presidency in autumn 2008 suffered an initial rebuff from the EMU countries, since some of the member states did not support an intra-European risk-sharing arrangement. Gradually, however, consensus emerged that the EU and its member state governments had to react to the crisis with fiscal policy measures. In view of the low growth forecasts for the eurozone, the members sought to boost internal demand sustainably—especially through investment schemes. This idea undoubtedly gains credibility through the ECB's rare appeal to its member states to stimulate demand at the national level. The International Monetary Fund (IMF) supported this emphatically as well.

After a series of disconnected national measures were put forward by different member states, the European Council decided on December 11 and 12, 2008—upon recommendation from the European Commission—to create a stimulus package at the European level to support the national stimulus packages. The EU states also announced their intention to introduce fiscal stimulus programs equivalent to 1.5 percent of GDP. Real coordination of the various national measures across the EU or EMU has not, however, taken place to this day.

The first steps toward European cooperation are based on the recognition that in open economies it is impossible to stimulate demand adequately at the national level because the stimulus effects are always channeled directly into the larger economic area through the integrated markets. Thus, from an economic point of view, the eurozone offers a sensible framework for a demand-oriented fiscal policy, given its inte-

⁸ Werner Becker, *Die Währungsunion im Reifetest der Finanzkrise*, Frankfurt a.M.: Deutsche Bank Research, October 29, 2008 (current comment).

grated monetary system, highly integrated markets, and a comparatively low degree of openness at 22.6 percent of GDP.⁹

Although the EU partners have not put this insight into practice by striving toward cooperation, a major shift can be seen in the importance generally attributed to fiscal policy for economic stabilization. For instance, the European Commission long opposed discretionary macroeconomic stabilization and has harshly criticized discretionary budget decisions when monitoring the policies of its members. Now, however, discretionary budget policy is seen as a way out of the crisis. But so far, no consensus has been reached in the EU on the “right” form of burden-sharing. For example, the EU member states, the European Commission, and the IMF called upon the German federal government to provide stronger fiscal measures bolstering growth because of the country’s very strong economic position. The hope was that if the German economy recovered, this would create an important stimulus for economic growth across the entire euro area. The German government vehemently rejected this request at first, but then upon reflection, announced a new stimulus package in the second half of December that was to take effect in February 2009.

The discrepancy between Germany’s position and the demands of its EU partners reveals two structural problems: first, there is an economic policy disagreement (particularly between Germany and France) on the question of the appropriate response to the current crisis (this applies especially to fiscal stabilization, but also to the role of government investments and government loan guarantees and subsidies to bail out companies and banks). Second, in the common economic area of the EMU—with its open borders and currently existing structures—there is an imbalance between those who pay for the measures (for example, Germany, and specifically, its federal budget), and those who “profit” from their effects (due to the openness of the markets, this also includes Germany’s EU partners). In Germany, this tends to be seen as a problem since the federal government does not want to “pick up the tab for the others.” Germany’s reluctance, despite its strong financial position, has caused many of its partners to see it as a “free-rider” that refuses to live up to its responsibilities to the EMU.¹⁰ Furthermore, some of the EU member states have accused Germany of profiting inordinately from other countries’ stimulus programs because Germany is focusing on the foreign demand for its own products in order to recover financially. The accusation that Germany has been practicing a “beggar-thy-neighbor” policy was not a new one: it was made before at the start of the new millennium, when German competitiveness increased substantially as a result of strict wage restraint, and the upturn was mainly export-based. The effect of Germany’s restrictive wage policy on its economic competitiveness was intensified by the fact that unit labor costs rose substantially in other EU countries during the same period.

⁹ European Central Bank, *Monthly Bulletin: 10th Anniversary of the ECB*, April 2008, p. 152.

¹⁰ See, e.g., Wolfgang Münchau, “German Complacency Poses a Serious Threat,” in: *Financial Times*, November 30, 2008.

The necessity to provide some form of fiscal stimulus for the European economy during the current recession will impact eurozone governance mechanisms in other ways. In all probability, the Stability and Growth Pact, which was just reformed in 2005, will be applied more flexibly at first, and possibly also be subjected to further reform if it proves not to provide enough scope for national fiscal policy to respond to cyclical economic fluctuations. Up to now, the European Commission—like the two largest eurozone countries, Germany and France¹¹—has advocated that the EU countries be permitted to exceed their deficit ceiling of three percent of gross domestic product without having to fear sanctions.

With the current crisis, there is also an increased need for capital to restore the economic stability of EU partners who have not yet joined the monetary union. In Article 119 of the EC Treaty,¹² on November 4, 2008, the EU granted Hungary a 6.5 billion euro loan with a three-year term to reduce difficulties regarding its balance of payments and to prevent a collapse of its financial sector. On the same basis, Latvia has been granted financial assistance in the amount of 3.1 billion euros. To pay for these measures restoring stability in countries on the periphery of the eurozone, the European Commission is raising the money on the financial markets, using instruments that have not been employed since the 1990s. De facto, the Commission is issuing Eurobonds (or EU government loans) earmarked for financing loans to stabilize the balance of payments. Loans providing balance-of-payments assistance to Romania are also under discussion.

In the process of granting emergency assistance to Hungary, the European Commission initially proposed that the Eurobond issue ceiling be raised to 25 billion euros to cover balance-of-payments loans. The Council of the Economic and Finance Ministers (Ecofin) adopted this proposal at the end of 2008. At the European Council meeting of March 19–20, 2009, the ceiling was raised again to 50 billion euros. One reason why such an acute need for assistance is suddenly being perceived is that a collapse of financial sectors in the euro satellite states would entail serious risks. And since the banks in these countries based in the EU or EMU make up the lion's share of the financial sector, bank failures there would have an immediate effect on the Monetary Union—on Austria in particular. Furthermore, serious political and social destabilization is considered likely, which in fact is already becoming evident at the present time.

Beyond this, Eurogroup Chairman Jean-Claude Juncker has called for the EU to be permitted to run into debt on the financial markets in order to finance investments in infrastructural projects. Thus, alongside the ongoing evaluation of the EU budget, the crisis has fueled discussion regarding the financing of EU policies, the level of autonomy this would necessitate on the part of the Community, and also on the question of whether the option of running debt is actually advisable in certain situations.

¹¹ Angela Merkel and Nicolas Sarkozy, "Nous ne pouvons pas attendre," in: *Le Figaro*, November 26, 2008.

¹² Specified in Council Regulation (EC) No. 332/2992 of February 18, 2002.

Efforts to improve the governance mechanisms

The previous reaction of the eurozone countries to the crisis has shown, on the one hand, that the Community is—despite its complex decision-making mechanisms—capable of reacting to the challenges with some degree of flexibility. At the same time, the crisis has revealed shortcomings that are to blame for the world's second-largest economy not having the instrument of a uniform national economy and thus being unable to formulate an adequate economic policy response. Many of these shortcomings are not directly related to the crisis, but are embedded in the architecture of the eurozone per se, and have been known for years but now are taking on increased urgency.

To begin remedying these shortcomings, it would be sensible to start where the eurozone summit of October 12, 2008, left off, when EMU heads of state and government met together with the British Premier. The following topics prepared by Ecofin would offer sensible points for discussion at future eurozone summits:

- ▶ Due to the current crisis, the situation could emerge that a government becomes insolvent. The force with which the crisis has hit some EU countries could cause financial difficulties for EMU members like Greece, Portugal, Italy, or Ireland due to the pressure on government bonds. The so-called “no-bailout” clause in Article 103 of the EC Treaty stipulates that neither the Community nor any member state is liable for the commitments of another member. The emergency aid provided when a sudden crisis in the balance of payments occurs, as stipulated in Article 199 of the Treaty, can only be provided to non-EMU countries. From a political point of view, however, it is highly improbable that no assistance would be provided to an EMU member in such a situation. If this occurred, the no-bailout clause (Article 103 EC Treaty), under which neither the EU nor the other member states are liable for the commitments of other member states, would be rendered de facto invalid. After all, it seems entirely unacceptable politically to save non-EMU members from bankruptcy but not to provide similar aid to other members—particularly since destabilization would generate massive spillover effects on the rest of the eurozone.
- ▶ A possible legal basis for this could be Article 100 of the EC Treaty, which provides for financial assistance in the event of serious difficulties. The question of which instruments would be used to provide such financial assistance remains to be answered. One conceivable approach would be to issue Eurobonds to fund loans (as in the case of the balance-of-payments loans under Article 1a9 of the EU Treaty) or to provide bi- or multilateral loans.
- ▶ The role of the IMF in possible emergency aid packages in the eurozone needs to be clarified. A point in favor of joint assistance efforts with the IMF is that an outside entity like the IMF can play the role of the “bad cop” that puts insolvent governments under reform pressure to gradually eliminate their structural shortcomings.

- ▶ The approval of emergency loans for Hungary and Latvia and the debate in the EU on debt-financed stimulus programs has intensified discussion on allowing the Community to issue European bonds when necessary. De facto, this possibility of issuing Eurobonds to finance balance-of-payments loans under Article 119 has existed for decades, although it has seldom been used. Further consideration should be given to proposals for expanding the use of Eurobonds—for example, to finance infrastructural projects as called for by Eurogroup Chairman Jean-Claude Juncker; of increasing transparency in the regulations while at the same time setting a cap on debt; and of involving democratically legitimated actors more actively.
- ▶ It would be highly desirable to find a definitive answer to the cyclical divergences in the monetary union. Even without the financial and economic crisis, these divergences create tensions and even fuel debate on withdrawal from the union. After all, some individuals, regions, and member states feel that the monetary policy of the ECB—which according to the treaty and constitution is supposed to be oriented toward EMU average data—“does not fit” all the individual members equally well. The more the economic situation in one region or member state departs from the EMU average, and the longer this remains to be the case, the stronger such tensions may become. It still remains to be seen how the current crisis will affect the ability of existing market mechanisms to balance divergent regional developments. Even without a crisis, this could undergird arguments to the effect that the EMU—like other heterogeneous economies—needs a non-discretionary fiscal equalization mechanism that would foster convergence at the highest level. Such an objective could be achieved by increasing the EU budget—on the revenue side through an EU-wide business tax—or through nondiscretionary expenditures that have a stabilizing effect on the economy. At the same time, measures need to be adopted that will promote structural reforms in the EMU. The existing coordination processes—such as those laid out in the Lisbon agenda—have reached their limits. Now more than ever, it is necessary to obtain the strongest possible commitment from the member states at the highest political level. Here, one should consider convening the heads of state and government in the Eurogroup context on a regular basis to discuss issues in the EMU and their connections to national (economic) policy.
- ▶ One important issue is how the EU will position itself in the international discussion on future exchange rate regimes and the reform of the global economic and financial system, and another is who will represent the eurozone internationally in such a way that it is recognized as an equal partner by the US, China, and Japan. This is linked to the question of whether the EMU countries should pool their votes in important forums (IMF, G20, etc.) in order to play a stronger, more unified role.

The crisis has increased the willingness for coordination and cooperation within the EU. It has also shown, however, that the economic interdependencies have not been dealt with systematically in the framework of

the EU or EMU. The still-nonexistent European bank rescue fund and the limited willingness of EMU members to consider coordinated demand stimulation are clear evidence that the individual member states still want to retain their right to assess the costs and to decide whether or not to assume the respective risks. While this is understandable from a political perspective given the structure of the EMU, it prevents solution of the problems at hand—which is especially critical since the crisis can only be expected to intensify in the coming months.

Abbreviations

ASEAN	Association of Southeast Asian Nations
CO ₂	Carbon Dioxide
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
ECA	Export Credit Agency
ECB	European Central Bank
ECOFIN	The Council of the Economic and Finance Ministers
EEG	Erneuerbare Energien Gesetz (Renewable Energy Law)
EMU	European Monetary Union
EU	European Union
FAO	Food and Agriculture Organization
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GNI	Gross National Income
IEA	International Energy Agency
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
IT	Information Technology
KfW	Kreditanstalt für Wiederaufbau (German Institute for Reconstruction)
LIFDC	Low-income food-deficit countries
Mercosur	Mercado Común del Sur
MFN	Most Favoured Nation
NTB	Non-Tariff Barrier
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
SADC	Southern Africa Development Community
TEC	Tarifa Exterior
UN	United Nations
USA	United States of America
WTO	World Trade Organization

The Authors

Dr. Susanne Dröge

Researcher at SWP's Global Issues Division

Dr. Hanns Günther Hilpert

Researcher at SWP's Asia Division

Christina Langhorst

International Economic Policy Coordinator at the Department of Political Consulting, Konrad-Adenauer-Foundation Berlin

Dr. Stormy Mildner

Researcher at SWP's The Americas Division

Dr. Bettina Rudloff

Researcher at SWP's EU External Relations Division

Dr. Daniela Schwarzer

Head of at SWP's EU Integration Division

Dr. Kirsten Westphal

Researcher at SWP's Global Issues Division