

GES | 2008/09



Global Economic Solutions

Proposals from the Global Economic Symposium

Edited by Alessio J.G. Brown and Dennis J. Snower,
in cooperation with Romesh Vaitilingam

Global Economic Symposium



“The present Age of Globalization must now be supplemented by an Age of Global Cooperation, where shared goals motivate diverse stakeholders to pull in the same direction.”

Dennis J. Snower

Content

Seeking Solutions to Global Problems	4
The Global Economic Symposium (GES)	11
The Global Economic Solutions	14
The GESolutions: The Global Economy	20
The GESolutions: The Global Society	134
The GESolutions: The Global Polity	190
The GESolutions: The Global Environment	246
Organizers, Sponsors and Partners	312
Imprint	314

Seeking Solutions to Global Problems

by Dennis J. Snower

Two giant transformations are shaping the current world order. One is the widespread integration of the global economy. The other is the progressive fragmentation of global society.

The integration of the global economy – globalization – is driven by free enterprise in global markets, creating a new worldwide division of labor.

The fragmentation of global society is illustrated by our numerous failures of global problem solving. Towards the end of the first decade of the 21st century, we find ourselves confronted by a multiplicity of problems requiring a global response: climate change; rising disparities between the world's richest and poorest countries; terrorism, ethnic conflict and social fragmentation; food shortages, energy insecurity and water scarcity; financial risk, the threat of protectionism and job insecurity.

Each of these problems requires cooperation among countries and disparate decision-makers, but in today's multi-polar world, this cooperation has often been lacking. But the many current efforts at collaboration in tackling climate change, overcoming the global financial crisis, dealing with water management, stimulating world trade and so on, highlight a renewed acknowledgement by many countries around the world that global problems need to be addressed globally.

The progressive integration of the global economy has brought millions of people spectacular material success despite occasional lapses (such as excessive debt, excessive foreign currency exposure, and so on).

The gross world product – the sum of all the goods and services produced in this world – has risen approximately eightfold since 1950. And this growth is reaching a progressively larger proportion of the world's population. While sustained improvements in material living standards used to be restricted to Europe, Japan, the U.S. and a few other countries, it is now reaching Brazil, China, India and other emerging market economies.

One important reason for this material success is that over the past decades, more and more countries have discovered the magic of free markets. When people are compensated for the benefits they provide and pay for the costs they impose on others, then free markets enable them to satisfy their needs at minimum resource cost. Free market exchange is the engine that has lifted 300 million Chinese and 200 million Indians out of extreme poverty in the past quarter of a century, while powering steady growth in the developed economies.

So the world community is cooperating more and more successfully in the arena of the global economy. But when this cooperation engenders global problems that require us to cooperate as a global society, we repeatedly fall short of our potential.



Global Economic Solutions

The failure of the Kyoto Protocol to reduce greenhouse gas emissions; the collapse of the Doha Round of international trade negotiations; the persistent pockets of poverty, disease and political instability; the growing threats of military conflict and nuclear proliferation – these are all symptoms of an underlying disease that may be called *globusclerosis*, a failure to solve global problems cooperatively.

We face similar difficulties in achieving cooperation between generations, occupations and income classes. In particular, many countries struggle to support their ageing populations, to generate employment for their unskilled, to finance health care for their poor and to make their economic growth socially inclusive.

All these failures have something striking in common: they are all problems that free markets alone are powerless to solve:

- Some failures concern *public goods*. For example, there have been insufficient efforts to reduce greenhouse gas emissions and contain the spread of weapons, since the costs usually fall on those involved in the efforts, whereas the benefits are shared by the entire world community.
- Other failures concern what is called the *tragedy of the commons*. For example, deforestation, overgrazing and overfishing occur because people lack the incentives to preserve common property resources.
- And yet other failures involve the *inequalities* of income, wealth and knowledge.

- Free markets do not deal adequately with public goods, common property and inequality. In the presence of public goods and common property, people are not fully compensated or charged for the benefits and costs they generate, and thus markets cease to work properly. And while market forces have lifted hundreds of millions out of extreme poverty, free markets do not necessarily tend to equalize the incomes, educational opportunities or job security of people around the globe.
- Our predicament is that nowadays most of our serious global problems are centered precisely on public goods, common property and inequality. We have succeeded in exploiting the magic of markets, but we often fail where those markets fail.

To tackle our global problems, we need to supplement market forces through global cooperation among stakeholders in the political, business, academic, non-governmental and civic communities. Our existing international organizations have an important role to play in achieving such cooperation. But they alone are not sufficient for the simple reason that they are unable to redistribute incomes and allocate public goods and common property globally. Global cooperation among diverse stakeholders is necessary.



Global Economic Solutions

National governments must help provide some of the necessary education, research and infrastructure. Businesses need to exploit technological advances to meet their customers' needs. Academics and researchers need to analyze global problems and suggest unbiased blueprint solutions. Non-governmental organizations (NGOs) and social networks need to engage in public advocacy, demand accountability and create the personal connections on which trust can be built. Philanthropists and civic organizations can provide seed funding for implementing promising solutions. And so on in complex webs of interaction.

Our global problems cannot be solved by any of these stakeholders acting in isolation. The present Age of Globalization must now to be supplemented by an Age of Global Cooperation, where shared goals motivate diverse stakeholders to pull in the same direction.

It is not necessary that millions die each year from diseases for which cures are known. It is not necessary for globalization to bypass a third of the world's population where help is needed most. It is not necessary that the poor be deprived of basic health services or the elderly of heat, food and care. It is not necessary that pockets of our societies languish in unemployment.

On a purely scientific and technical level, we now have the competence – if we wished – to satisfy the basic needs of all people on this planet for food, shelter, sanitation and clothing, while at the same time preserving the earth's topsoil, water supplies and natural habitats. We also have the wherewithal to provide basic education and skills worldwide.

And most importantly, we have learned much in the past decades about how to help one another. Through the experiences of countless welfare states, foreign aid programs, NGO initiatives and philanthropic activities, we have learned that the most effective help is helping people to help themselves. Active labor market policies tend to be more effective than passive ones. Foreign aid that empowers the poor through skills and infrastructure has more transformative power than handouts from rich countries' bureaucracies to poor countries' governments.

Much is intellectually and technically within our grasp. What is often missing is the will to global cooperation. Powerful interest groups, the temptation to "free-ride" on the efforts of others, ignorance about best practice policies and voting procedures that are not conducive to global problem solving, all play their part in generating globusclerosis.

The will to global cooperation must be nurtured through shared visions of the future that induce diverse decision-makers to work together.



Global Economic Solutions

In this multi-polar world, we know that there is no conception of the common good that is valid for all humankind – be it Enlightenment individualism, Middle and Far Eastern communitarianism, religious canons or ideological dogmas. Over the past century – after two world wars and countless other conflicts and atrocities – we have outgrown the presumption that there is one true, consistent and universally recognizable guide to human action. But we have also learned that this need not be an insuperable obstacle to global cooperation.

Despite differences in ultimate values, there is still much that we, as a world community, can do to help one another achieve our disparate ends. And there is still vast, unexploited scope to promote solidarity in the pursuit of common goals – in dealing with climate change, promoting health and welfare, creating a safer world, tackling poverty and social fragmentation, benefiting from globalization, and much more. With due respect for our differences, we must find this common ground through practical, measurable achievements. For this purpose, it is useful to have a neutral, creative space – removed from the everyday political constraints, lobby groups, institutional impediments – to think afresh about how global problems can be solved. The Global Economic Symposium (GES) is meant to be one such neutral, creative space.

We hope that the GES and the strategic dialogue it initiates, will contribute to the insight and drive that can help turn our potential for global cooperation into reality.

The Global Economic Symposium

The Global Economic Symposium (GES) 2008 convened at a time of deepening financial crisis and rising concerns about the failures of multilateral problem solving.

These failures include the inability of the world community to reduce greenhouse gas emissions, to coordinate a global regulatory response to the disruption of global financial markets, to help the world's poorest countries, to provide energy security, to address the crisis of water shortages, to tackle social fragmentation, to prevent food prices from creating poverty and malnutrition, to enable poor countries to share knowledge, and much more.

The need to overcome these failures is becoming steadily more obvious and urgent, as witnessed in the intense efforts of the G20 countries to tackle the global financial crisis and the many international deliberations on tackling climate change.

Tackling these difficulties requires cooperation across countries and disparate decision-makers, but nowadays such cooperation is often not forthcoming. The world community is also frequently unable to achieve cooperation between generations and income classes. This is evident when countries strain to support their ageing populations, create employment for their unskilled and finance health care for their poor.



Global Economic Solutions

These global problems have some striking features in common:

- The problems are interconnected. For example, the problem of climate change is closely related to the problems of energy security and food security. Some of the world's poorest countries are trapped in a vicious cycle of disease, poor education, violence, corruption and environmental degradation. These interconnections are often ignored when policy-makers devise partial responses to individual problems.
- They cannot be solved by individual countries or stakeholders acting in isolation. Instead, policy-makers, business leaders, academics and decision-makers in civil society must work together, across national and cultural boundaries, to make progress.
- *Since these diverse decision-makers are sovereign and independent*, global cooperation requires shared visions of the future that induce them to work together voluntarily. The work must be embodied in concrete strategies to achieve these visions.

The GES 2008 aimed to make a contribution to creating these visions and formulating the resulting strategies. These contributions – small but useful steps in a constructive direction, supported by decision-makers from diverse walks of life – we label “Solutions”. This label is obviously not meant to imply exhaustive answers, but rather insights concerning concrete actions that could move us up the ladder of global collaboration.

Centering the debates in the GES on “Solutions” also emphasizes the two hallmarks of the forum, namely, that it is *action-oriented* – focusing on the question “what is to be done?” – and *research-based* – supported by state-of-the-art research, collected in the Virtual GES, the internet platform of the GES. In this sense, the GES 2008 aimed to be a solution forum, rather than a discussion forum.

Our research base rests on the contributions of many experts. The researchers of the Kiel Institute for the World Economy provided a backbone of information, analysis, literature and more for the GES sessions. Each session was also supported by a distinguished team of international experts, who proposed panelists and gave feedback on the session content. Our distinguished advisory board provided strategic perspectives, innovative ideas and valuable contacts, thereby playing a role of overarching importance.



Global Economic Solutions

The Global Economic Solutions

This document summarizes some prominent, innovative proposals generated by the GES 2008. The proposals achieved sizable agreement from the GES panelists and the wider GES community – although there were naturally dissenting voices, which are also given a hearing here.

The proposals aim to provide shared visions of the future, which are meant to inspire cooperative efforts to address global problems. Where possible, they are also meant to be practical, feasible actions towards well-defined goals. The proposals are grouped into four broad areas, each subdivided into topics corresponding to the sessions of the GES:





Global Economic Solutions

Needless to say, there is a lot of overlap among the four areas, for the simple reason that the GES places particular emphasis on global economic problems, many with environmental consequences, with important implications for global society, whose solutions can be addressed through global polity. Nevertheless, the reader may well find the four areas useful for organizing ideas about global issues.

The topics in the area of “The Global Economy” are primarily economic; those in the area of “The Global Polity” are primarily political; and so on. So, for example, the topic “Global policy responses to climate change” is first and foremost an environmental issue, even though it clearly has massive economic, social and political consequences.

Naturally we do not claim that all the proposals made here are new. We do not aspire to novelty per se, but to usefulness. Myriads of new policies and strategies are invented in response to global problems each year. Our aim is not to add to their number. Rather, the epochal challenge we face today – in this world of missing cooperation under growing interdependence – is to identify a coherent set of insights that can provide a basis for concrete cooperative action.

These insights should ideally satisfy a number of basic prerequisites:

- The insights should be internally consistent. All too often policies and strategies are created in mental silos, each formulated without reference to the others. For example, pension policies are often designed independently of employment policies; redistribution policies are usually formulated independently of growth-promoting measures; energy policies often conflict with the objectives of environmental policies. The GES strives to avoid this pitfall. It seeks awareness of the interconnections among global problems, along with the consequent interconnections among the policy and strategy responses.
- They aim to serve the global public interest in the widest sense. In particular, they are meant to be inclusive in geographical terms – relevant to the countries of the world, whether developed or developing. They also aim to be occupationally and socially inclusive – relevant to the business, policy-making, academic and civic communities, to the employed and unemployed, and to the rich and poor.
- They focus on actions that are meant to make the world a better place for the next generation. This means that the underlying problems are lasting ones, not those that are likely to disappear in a matter of years. The insights involve the longer-term thinking that is often displaced by the urgent day-to-day issues with which business leaders, policy-makers and other representatives of civil society must deal. They aim to provide a picture of the future towards which we must strive through concrete policies and strategies.



Global Economic Solutions

Needless to say, this is a tall order. Success can only be achieved through the cumulation of many small steps in a coherent direction. The GES is meant to contribute to this process. The insights presented here are the product of a prolonged exchange of ideas – during the GES and in the months before and after it – among leaders from the business, policy-making, academic and civic communities. Although the GES participants come from diverse walks of life, they share the belief that we need a reawakening of global cooperation in our current multi-polar world.

All past instances of global cooperation began as ideas in the heads of individuals that grew into visions that aligned people’s diverse efforts. The GES seeks to help generate such ideas. While none of us can make a substantial difference in isolation, each of us can make limited, concrete changes towards the common good, and the sum of all these changes will be our legacy for the next generation.

We hope that this document will stimulate further research, debate and policy initiatives. If the GES is to have real value, it must be merely the beginning of a continuing process – a process of creating a shared framework of thought that can inspire diverse decision-makers to pull in the same direction.

Disclaimer

The proposals summarized in this document are meant to provide insights for action to promote global cooperation in addressing major global problems. These insights have received sizable agreement from the GES panelists, participants and the wider GES community, but they do not reflect the views of any particular panelist, participant or community member. Nor do they reflect the views of any organization to which these individuals belong.

1. The Global Economy

Reaping Benefits of Globalization

1. Skills for the New Wave of Globalization
2. Creating Employment
3. Enabling Poor Countries to Share Knowledge
4. Strengthening the Global Financial System
5. Globalization, Growth and Inclusiveness

2. The Global Society

1. Tackling Social Fragmentation
2. Inequality and Globalization
3. Tackling the Ageing Syndrome
4. Financing Health Care for the Poor
5. Designing Immigration Policy

GES | Solutions
2008/09

3. The Global Polity

1. Dealing with Terrorism
2. Empowering the World's Poor Countries
3. Fighting Corruption in Developing Countries
4. How Globalization Transforms the Welfare State
5. Reconsidering the International Trading System

4. The Global Environment

1. Global Policy Responses to Climate Change
2. Food versus Fuel
3. Energy versus Climate Change
4. Securing Access to Energy
5. Preventing Food Prices from Creating Poverty and Malnutrition
6. The Crisis of Water Management

Content



1. Skills for the New Wave of Globalization	22
Challenge	24
GESolutions	25
Background	32



2. Creating Employment	36
Challenge	38
GESolutions	39
Background	47
Qualifications	48



3. Enabling Poor Countries to Share Knowledge	50
Challenge	52
GESolutions	53
Background	59



4. Strengthening the Global Financial System	62
Challenge	64
GESolutions	65
Background	71
Appendix	74



5. Globalization, Growth and Inclusiveness	126
Challenge	128
GESolutions	129
Background	132

1. Skills for the New Wave of Globalization



1. Skills for the New Wave of Globalization



Challenge

The new wave of globalization – in which outsourcing and offshoring include not only unskilled and manufacturing jobs, but also skilled and service sector jobs – makes new demands on education and training systems around the world. Globalization is no longer just about trade in things that can be put in a box, but also about trade in everything that can be digitalized.

This process radically widens the circle of workers directly affected by international competition. To enable individuals, firms and societies to cope with the challenges from the new wave of globalization, education and skills will be key.

What skills do workers need to benefit from the new wave of globalization? What policies are required to develop the skill base that allows individuals, firms and societies to be successful in a highly competitive global economy? How do education systems need to be changed to best prepare today's children for their future working lives?

GESolution 1

Reform current educational systems to enable people to take a higher level of personal responsibility for their own and their children's education and development and to pursue lifelong learning.

This will involve providing more temporarily flexible education modules, spreading educational expenditures across people's working lifetimes and raising on spending lifelong learning at least in line with the extra tax revenues such learning is expected to generate. As the new wave of globalization will imply more change in shorter intervals, individuals need to be open to new developments. Individuals will have to take a higher level of personal responsibility for their lives. They have to be flexible, accept change and be able to cope with change. Given the increasing speed and unpredictability of changes in the composition of jobs available and the job specific skills required, learning how to learn will be more important than learning any particular set of skills. People need to embrace continuous learning as a positive that makes their lives more interesting and stimulating.

Supporting and nurturing the required skills cannot be restricted to schools and universities, but should extend from early childhood up to old age, from families to kindergarten to school and university to business, government entities and society at large. Too many people assume that the skills and knowledge they acquired at school and university or during vocational training should remain adequate for their whole working life. Globalization and technological change that render some of that knowledge obsolete are therefore accompanied with excessive anxieties, feelings of powerlessness and calls for government intervention.



1. Skills for the New Wave of Globalization

GESolution 2

Focus education systems more heavily on developing students' imaginations, social competence and communication skills.


Creativity, inventiveness, spontaneity, social competence and communications skills will become ever more important for individuals to attain a competitive edge in the globalized service economy.

Elementary and secondary schools need to place more emphasis on developing these skills. They need to develop children's imaginations and people skills as well as basic literacy and numeracy. Schools need to nurture children's ability to solve novel, non-routine problems, to combine different bodies of knowledge and to interact productively with other people.

This will require changes in school curricula and in the ways of testing and grading students. Instead of rote drills on questions with simple right/wrong answers, teachers should pose more open-ended questions and novel and even ill-defined problems that have no simple answers – questions that can be wrestled with productively.

More group activities and interactions may also be essential components of the new curriculum, including, where appropriate, grading the group's performance rather than the individual's. Both schools and universities need to emphasize a more participatory learning process that features learning by doing. Learning to learn and learning to formalize and solve novel problems is generally more important than acquiring any specific knowledge.

In many countries, despite recent reforms, many of the skills that will be increasingly important in the future are not systematically taught in schools that still focus too much on things that were important to serve the needs of the factory age (such as following instructions and doing well-defined assigned work, much of which is highly standardized). All too often schools still focus too much on developing traditional cognitive skills, on teaching narrow facts and solving routine problems with rules-based solution.



1. Skills for the New Wave of Globalization

GESolution 3

Raise the status of vocational education. Adapt vocational education and training programs to promote workers' flexibility and versatility (rather than just the narrow vocational/technical qualifications), creativity, social competence and communication skills.

There seems to be little or no correlation between educational requirements and how "offshorable" jobs are. Many trained workers and craftsmen are performing tasks that are and will probably remain (for quite some time) secure from offshoring. These workers may face better employment prospects than some of the university graduates that produce impersonal services that can be delivered electronically.

An unconditional advertising of college and university education over vocational education is therefore inappropriate. The widespread view that vocational training occupations are generally a step down from those that require a university degree is inappropriate and needs to change. More vocational education may actually be necessary – not less.


But, as for schools and universities, vocational training programs have to adapt to the changes associated with the new phase of globalization. They will have to emphasize and foster workers' flexibility and versatility across tasks rather than just the traditional vocational/technical qualifications. And they need to focus more on developing workers' creativity, social competence and communication skills that are required by many of the non-routine, personal delivery tasks that are (more) secure from offshoring.

GESolution 4

Diversify the content of secondary and tertiary education to permit a multiple-track approach to jobs, promoting skill diversity.

As talent and intellectual ability are multi-dimensional, a one-size-fits-all educational approach is not going to mobilize the full potential of many. Education systems should promote individuals' diverse special abilities and provide multiple tracks towards creative jobs of all varieties. At the same time, the content of secondary and tertiary education must become more flexible to adapt to the changing needs of the labor market.

The current standard role model of learning does not fit either people's diversity of talents and attitude nor the demands of future employers.



1. Skills for the New Wave of Globalization

GESolution 5

Complement family and social policies with early childhood education, to emphasize social competence, communication skills and motivation to learn.

Early childhood education is crucial in creating the abilities and motivations that affect learning throughout an individual's life. Any reform of the education system therefore has to pay particular attention to pre-school and elementary school education.

Family policy and social policy are of major importance in the context of early childhood learning. Social competence, communication skills and motivation to learn are developed at a young age in the home and the residential neighborhood as much as in school. Often, cognitive and non-cognitive deficits emerge early, before schooling and, are difficult to correct later on.

Thus, successful families and a healthy social environment are major determinants of successful schools. Greater emphasis needs to be directed towards family and social policies. Education policies need to be complemented by policies to support disadvantaged families, integrate immigrants, improve urban neighborhoods and reduce rural poverty.

Traditionally skill formation and education policies focus too much on schools and in particular on secondary and tertiary education. They generally pay too little attention to early childhood education and to the importance that family and social environments have for the development of cognitive and non-cognitive skills.

1. Skills for the New Wave of Globalization



Background

Globalization has entered a new phase in which an increasing number of jobs previously sheltered from international competition are threatened by potential outsourcing and offshoring. These are mainly jobs producing impersonally delivered services. These changes are significant since the new wave of globalization radically widens the circle of workers affected by international competition given that services constitute the major part of employment in developed countries.

In addition, due mainly to progress in information and communication technologies, the dividing line between services that have to be personally delivered and those that do not is constantly changing in a way that exposes ever more jobs to international competition.

In the new wave of globalization, the forces of globalization will achieve a far finer resolution. International competition will increasingly play itself at the level of tasks and individuals within firms – not just at the level of firms, sectors or skill groups. Since individual tasks in offices and factories can be offshored, globalization may help some workers in a given firm while harming others.

Similarly, the old correlation between skill groups and winners and losers from globalization breaks down. Certain highly skilled tasks may turn out to be “offshorable”, while other highly skilled tasks will not. Increased offshoring will therefore not systematically help or hurt skilled workers in the developed countries.

The new wave of globalization will have important implications for future skill requirements, and countries will have to reform their educational institutions in ways that help young people live up to the future challenges. Important features of the new wave of globalization are suddenness and unpredictability of change, including change in work profiles and the specific skills required.

Since it is hard to predict, what jobs will be available in the future, learning how to learn may be more important than learning any particular set of skills. Assuming that those tasks most at risk of being offshored are those that are routine or prone to routinization and that do not require personal presence, creativity and imagination, social competence and communication skills will become ever more important.

Many of the skills that will be particularly important in the future are not systematically taught in schools, which still have many features designed to serve the needs of the factory age. Reforming schools and universities will therefore be a key policy response to the new wave of globalization.

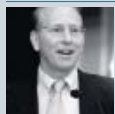
Nurturing the required skills cannot be restricted to schools and universities. Families, schools and firms, are all important in promoting skill formation. Skill acquisition is a dynamic process in which early inputs strongly affect the productivity of later inputs. Early childhood is therefore of great importance in creating the abilities and motivation that affect learning and skill acquisition throughout the life cycle. Successful families are a major determinant of successful schools.

1. Skills for the New Wave of Globalization

Panelists



H.E. Sheika Lubna Al Qasimi
Minister of Foreign Trade, United Arab Emirates



Richard E. Baldwin
Professor of Economics,
Graduate Institute of International and Development Studies



Alan S. Blinder
Professor of Economics and Public
Affairs, Princeton University



Hans-Paul Buerkner
President and CEO, The Boston Consulting Group



Moderator: Roland Tichy
Editor-in-Chief, WirtschaftsWoche

2. Creating Employment



2. Creating Employment



Challenge

Many people in the developed world are not participating in the growth of the world economy. In some countries, unemployment remains high, whereas others suffer from the problems of the working poor. What are the most effective policies for creating employment – particularly in well-paid, satisfying jobs – in OECD countries?

How does the choice of these policies depend on what other policies are in place elsewhere in the welfare system? What role can business play in creating employment? What interplay between public policy and private enterprise enables the poor to benefit from the globalization process?

GESolution 1

Redesign welfare systems so as to strengthen individual incentives for job search and for work, such as through hiring and wage subsidies, as well as payroll tax reductions, instead of generous and prolonged unemployment benefits. Remove institutional barriers to supplying labor, especially in the tax and social security system.

Economic research has shown that, across developed countries, unemployment rates are highly correlated with measures of the generosity of the welfare system. There seems to be a close connection to the level of unemployment benefits and the duration of entitlements.

In addition, the restrictiveness of the unemployment benefit system seems to play an important role. Given the empirical evidence, reforms of the welfare system that strengthen the individual incentives for job search and for work in general should be high on the political agenda in many countries.

Average working hours vary substantially across countries. In some cases, low hours may reflect deliberate choices, but evidence shows that the incentives arising from high marginal effective tax rates as well as the social insurance system have a major influence as well.

2. Creating Employment



GESolution 2

Use retraining subsidies for the long-term unemployed and low-skilled workers to strengthen the market power of labor market “outsiders.”

We should strengthen the market power of labor market “outsiders,” that is, unemployed workers, individuals living on different types of social benefits and new entrants to the labor market (including immigrants). Obvious examples of such policies are so-called active labor market policies, including retraining and employment subsidies for long-term unemployed and individuals with little appropriate skills.

In countries, such as the U.S. and the U.K., where the wage dispersion is huge and the number of working poor is large, it is natural to give the subsidies in the form of income transfers directly to low-wage workers (to encourage them to work). By contrast, in countries with more compressed wage dispersion (perhaps as a result of high minimum wages), it makes more sense to subsidize wage costs for firms that hire low-skilled workers.

GESolution 3

Use demand management policies to boost employment in countries with high unemployment and where labor supply is sufficiently flexible to respond to variations in product demand.

Without an increase in the demand for labor, an increase in labor supply might simply raise unemployment. For example, higher labor supply may not automatically contribute to lower real product wages and hence boost the demand for labor. Moreover, if firms hire workers who previously lived on various benefit systems, the income of these workers will only increase marginally, since the after-tax replacement rates in the benefit systems are often around 60–80%.

Hence, product demand may not increase enough (as a result of new hiring) to contribute to a sufficient sustained increase in derived demand for labor. Of course, employment subsidies may help boost aggregate labor demand for a while.

But Keynesian demand management may be useful in reducing unemployment. Policies such as tax reductions, public sector investment and public sector consumption – as a complement to supply-side policies – might be considered.

Monetary and fiscal policies should keep employment at its maximum sustainable level – the level possible without generating rising inflation. In this regard, features of unemployment benefit systems and active labor market policies help to determine to what extent an added labor supply is “effective.”



2. Creating Employment

GESolution 4

Promote deregulation and encourage entrepreneurship and investment to boost employment.

In addition to short-term demand management, long-term structural reforms may also help to boost employment. Deregulation, designed to encourage entrepreneurship, innovation and investment, especially in the service sector, may therefore have long-term positive effects on employment creation. Policies to strengthen investment and competition help to ensure that labor demand responds more strongly to increases in supply.

To reduce unemployment and keep it low, it is important that policies do not impede and indeed sometimes assist, dynamic adjustment in the labor market in response to general developments in an economy. This calls for adequate wage flexibility and mobility of labor – which are affected by factors such as unemployment benefits and housing policies – but also training opportunities and job search assistance.

Investment in public infrastructure, such as the development of high-speed telecommunications fiber networks, has a role to play in creating employment over the longer run by supporting innovative and user-oriented services.

GESolution 5

Consider unemployment accounts as a possible option to provide incentives for unemployed workers.

Under this system, workers make monthly contributions to their individual accounts and make specified withdrawals when they are unemployed. While governments' redistributive objectives could be met by taxing and subsidizing account contributions, unemployed workers would gain greater incentives to work, provided that account balances on retirement can be transferred to pension or health accounts.



2. Creating Employment

GESolution 6

In various OECD countries, stimulate employment of older workers by reducing incentives for early retirement.

With respect to labor supply in general, actuarially unfair public pension systems, early retirement schemes and lenient rules for older recipients of unemployment benefits all skew people's incentives in the direction of ceasing to work at an early age.

Across OECD countries, the employment of older workers is strongly related to the strength of such incentives. With rising longevity, further reform in this area is not just a question of removing barriers to employment but also about ensuring fiscal sustainability.

GESolution 7

Pursue policies to provide work and work incentives for disabled people.

Disability rates have been increasing in many OECD countries over past decades, despite general improvements in health status. They now exceed unemployment rates in some countries.

Lax entry conditions to disability schemes, limited subsequent control, weak efforts at rehabilitation and insufficient opportunities for people with reduced work capacity to seek and get a job are among the barriers to labor supply in this area.

2. Creating Employment



GESolution 8

Stimulate the participation of women in the labor forces of various OECD countries, particularly through reform of the tax system and childcare provision.

With improved education, women's participation in labor markets is approaching that of men in many countries. But there are still barriers to female participation arising from tax systems or related to childcare.

GESolution 9

In various OECD countries, promote the employment of minority groups through education reforms designed to promote social integration.

Specific groups, including ethnic minorities and second-generation immigrants, have low participation rates in many countries. Educational failure and associated low earnings capacity, discrimination and insufficient work focus in public transfer programs are among the reasons why such groups may be discouraged from participating.

Background

Flexible labor markets seem to be superior in creating employment and income opportunities for the poor, in contrast to labor protection schemes such as minimum wages. In many countries, the welfare system seems to be an obstacle to employment of the less qualified. Reforms should address the problem of guaranteeing a minimum income for the less qualified while maintaining incentives to work.

Demand for workers with relatively low skills may be penalized by overly high labor costs. Barriers in this area include wage floors – either statutory minimum wages or de facto minima driven by public transfers. But wages sufficiently low to clear the market may not be socially acceptable and ways to alleviate the trade-off between social and employment objectives include in-work benefits and labor subsidies. But these are not without problems.

To reduce youth unemployment, vocational training systems have in some countries proven to be successful. Government training schemes, in contrast, have often proven expensive and not effective. Some types of supply-side policy have not been successful. Training programs for low-skilled adult individuals have seldom contributed to many jobs.

Moreover, employment subsidies, while often helping specific individuals to be hired, tend to crowd out employed workers from non-subsidized work. Harsher supply-side policies in the labor market may also be required.

An obvious example is a softening of job security legislation for market “insiders,” that is, workers with well-protected jobs in the formal sector of the economy.

2. Creating Employment



Other examples are a removal of laws that automatically extend collective wage agreements to firms without organized workers, and a softening of minimum wage legislation, in particular for young and inexperienced workers. Clearly, such policies have social and distributional disadvantages for those who already have jobs. The political difficulties are therefore obvious.

Qualifications

There are differences of opinion as to the appropriate mix of supply- and demand-side policies. In particular, there are differences in emphasis on measures to increase the incentives to work by increasing demand (by fiscal and/or monetary policy).

One panelist argues that there is evidence of a trade-off between inflation and unemployment at low rates of inflation: in such circumstances, while high inflation should definitely be avoided, central banks pursuing very low inflation targets may risk increasing unemployment.

Panelists



George A. Akerlof
Nobel Laureate; Professor of Economics,
University of California, Berkeley



Jørgen Elmeskov
Director of the Policy Studies Branch,
OECD Economics Department



Assar Lindbeck
Professor of International Economics,
University of Stockholm



René Obermann
CEO, Deutsche Telekom AG



Moderator: Thomas Fricke
Chief Economist,
Financial Times Deutschland

3. Enabling Poor Countries to Share Knowledge



3. Enabling Poor Countries to Share Knowledge



Challenge

Poor countries are typically rich in people but poor in human capital. To benefit from an increasingly global division of labor and to stand their ground in a competitive economic environment, they have to make their people more knowledgeable. In this, they face considerable challenges: they may lack a workable institutional infrastructure for education and information; they may lack political and social leadership that foresees the benefit of investment in technology and skills; and their access to advanced knowledge may be restricted by strict enforcement of intellectual property rights.

Public policy in poor countries should focus on raising literacy. This approach should be supported by foreign aid and an international strategic partnership to bridge the digital divide between and within countries and to establish open and inclusive knowledge societies in poor countries.

GESolution 1

Use foreign aid to support poor countries in developing virtual education.

Virtual distance education programs can help poor countries not only to reduce to constraints on access to knowledge but also to fight potential gaps in institutional infrastructure. For example, a big challenge is training teachers in developing countries: about 35 million need to upgrade their skills. This cannot be achieved only by traditional classroom based programs. Therefore, this proposal is to invest in e-learning methods for teachers.

Educational provision in poor countries often suffers from infrastructure problems, such as transport and location, and differences in the quality of teachers.

3. Enabling Poor Countries to Share Knowledge



GESolution 2

Encourage free, independent and pluralistic media in poor countries.

The media can play a crucial role in education. The development of local, free and independent media can empower people to get access to knowledge to improve their lives and alleviate poverty. National governments should promote the development of new digital offerings and create small multimedia centers.

In addition to traditional radio and television programming, big global broadcasters like Deutsche Welle, the BBC and Radio France Internationale provide educational products and courses focused on the needs of developing countries.

GESolution 3

Commit multinational investors and business leaders to facilitate the transfer of knowledge in poor countries. Evaluate the effectiveness of such transfer through an independent agency.

Key to the technological development of a country is enlightened leadership at the very top of the government, which is willing to invest in technology. It is not easy to get suitably enlightened leaders but showing examples of others and benchmarking with other leading countries can help. Multinational investors are mostly global leaders in innovation; their activities in developing countries can be transformative. Business leaders must recognize that their corporate governance affects the governance of their host country.

A great hindrance for individuals, firms and governments are failures in government attitudes towards economic freedom and civil and individual liberty.

3. Enabling Poor Countries to Share Knowledge



GESolution 4

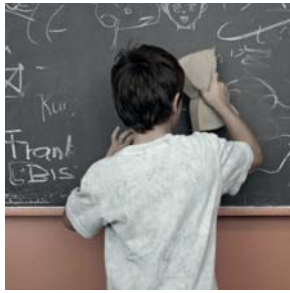
Use “advance market commitments” to stimulate and reward innovators, not just in the funding of vaccines and other medicines for developing countries, but also for key technologies to integrate poor countries into the knowledge economy. Expand the World Health Organization to become a clearinghouse for best practices in advance market commitments and the management of intellectual property rights for medicines.

A promising approach comprises “advance market commitments”, whereby donors commit money to guarantee the price of vaccines or other medicines once they have been successfully developed, thus creating the potential for a viable future market. In principle, such a system could be extended beyond the area of vaccines and even beyond the health care system to any key technology that seems essential for integrating poor countries into the knowledge economy. The financial funds for rewarding the innovators could be raised by national foreign aid as well as by international institutions such as the UNCTAD or even by private charities.

The role of the World Health Organization has to be expanded as a location for globally provided assistance funds to encourage the development of new drugs for diseases of poor countries. It could be a clearinghouse for best practices information on advance market commitments and the management of intellectual property rights in public-private drug and vaccine development initiatives.

The present approach of strengthening intellectual property rights within the WTO needs further consideration. While the requirements that countries adopt more transparent intellectual property rights has promise for improving international technology transfer, rigorous standards of protection for patents, copyrights and plant varieties could diminish the access of poor countries to new knowledge. Further tightening of these standards should be avoided with respect to developing countries.

3. Enabling Poor Countries to Share Knowledge



GESolution 5

Preserve and catalog indigenous knowledge to encourage poor countries to develop and benefit from their local knowledge. Negotiate a multilateral treaty at the World Trade Organization on access to basic science and technology in areas of global public goods, such as health, education, environment and food technologies.

Knowledge of today is not the only knowledge that matters. Indigenous knowledge is crucial to the lives of local communities, a core element in their food security, health, education and natural resources management. Consequently, it is important to preserve and catalogue this kind of knowledge to enable poor countries to help themselves and find local solutions. Many people in poor countries have lost access to the indigenous knowledge of their community.

We should work towards establishing national pools with indigenous knowledge and international pools of knowledge in key areas of global public goods (health, education, environment, food technologies) to which widespread access would be provided.

Governments are increasingly imposing restraints on the use of knowledge generated by public research or through public funding. Such restrictions arise in part from regulations designed to protect national competitiveness and in part from product regulations that emerge from the increasing scope of intellectual property protection for basic scientific results in the EU and the U.S., which remain the primary generators of knowledge.

Background

Successfully tapping the pool of global knowledge requires the ability of the domestic economy to make use of superior knowledge, which in turn requires a sufficiently educated domestic labor force. Tertiary education has largely been overlooked by the international community as an important component of a country's development strategy.

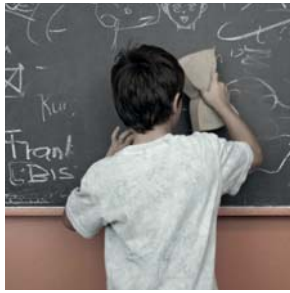
Even if knowledge and technical information are widely available on global markets or within public sources, they are useful only to the extent they can be absorbed and implemented into local production and provision of public services. And since much of that information may be available electronically, a focus on both education and computer skills seems appropriate for developing countries.

Time and money should be invested in evaluating what works in the field of aid in education. E-learning has many potential benefits for the developing world as well as for secondary and tertiary education and lifelong learning.

Another aspect of lifelong learning and the access to information and knowledge is covered by international and national media. UNESCO has launched initiatives to provide the general public with affordable access to information and a variety of government services, using information and communication technologies.

The institutional environment plays a central role in the ability of countries to find ways out of the "knowledge poverty" trap. All countries need to implement

3. Enabling Poor Countries to Share Knowledge



policies that encourage innovation, access and the development of advanced skills to nurture creativity in a highly competitive, innovation-driven environment. For developing countries, it means reforms that emphasize openness to new ideas, new products and new investment, especially in information and communication technologies.

In the global context, patent protection is a very important issue. The current system is not sufficient to give poor countries access to knowledge, particularly in the areas of public health, food security and environmental protection. Improved integration of poor countries into the global knowledge economy calls for a facilitated access to patented technical knowledge.

Under a system of advanced market commitments, donors commit money to guarantee the price of vaccines once they have been developed, thus creating the potential for a viable future market. Decisions about which diseases to target, criteria for effectiveness, price and long-term availability are made in advance by an independent advisory group.

The donor commitments provide vaccine makers with the incentives they need to invest the considerable sums required to conduct research, train staff and build manufacturing facilities. At the same time, vaccine makers no longer have exclusive intellectual property rights that would entitle them to prosecute imitators.

Panelists



Soumitra Dutta

Dean of External Relations, INSEAD Business School



Abdul Waheed Khan

Assistant Director-General for Communication and Information, UNESCO



Keith E. Maskus

Associate Dean for Social Science, University of Colorado at Boulder



Moderator: Marco Vollmar

Editor-in-chief of German/English Programs, Deutsche Welle Radio

4. Strengthening the Global Financial System



4. Strengthening the Global Financial System

Challenge

The repeated occurrence of financial crises since the early 1990s has led to calls for institutional reform. The increasingly blurred boundaries between banking, securities and insurance, as well as the formation of large financial conglomerates operating on a worldwide scale, contrast with regulation and supervision that is still national, fragmented even within countries and lagging behind market developments.

Financial globalization helps individual market participants to diversify risk but need not stabilize the international financial system as a whole. Given highly complex financial innovations and interconnected markets, a shock in one particular market segment is bound to trigger serious contagion in other segments. The recent U.S. housing market decline led to contagion in a broad range of financial markets, which has infected the real economy worldwide.

How can we reduce the probability of future financial crises and limit their potential costs? What policies are required to minimize systemic risk? Which kind of regulatory and supervisory approaches are appropriate? How does financial regulation relate to monetary policy, both during the run-up to crises and after the bursting of financial bubbles?

GESolution 1

Enhance transparency by standardization of complex financial contracts and shifting the trading of derivatives onto regulated exchanges.

Consensus to improve transparency and accountability has routinely been reached after every financial crisis. But since the financial system is evolving continuously, the battle is never over. As the system generates new complexity and obscurity over time, regulation and supervision need to evolve accordingly. Yet transparency is required to help restore market confidence, notably in the market for derivatives such as credit default swaps.

Standardized contracts would reduce complexity and uncertainty. The development of exchange-based trading (as opposed to over-the-counter trading) should be encouraged since this is conducive to standardization, more liquid markets and greater ease of pricing avoiding large counterparty or trading positions on the balance sheets of banks.

Regulators should devise new methods to improve the quality of disclosure. For example, the Senior Supervisors Group has proposed a template for this purpose, but there has been little momentum to follow through on this initiative for large numbers of systemically relevant financial institutions.

4. Strengthening the Global Financial System

GESolution 2

Strengthen regulation and supervision of all systemically relevant financial institutions – both in the banking and shadow-banking sectors – but avoid regulatory overkill by focusing on simple rules on capital adequacy.

Financial institutions above a certain threshold size should be required to meet “basic disclosure requirements.” Capital requirements for risky and complex exposures have to be reviewed and probably raised. This should pertain to the systemically relevant financial institutions not just to the banking sector, but also in the “shadow banking” sector (which includes money market funds, hedge funds and financial insurers) across all the relevant countries. International cooperation should help enforce best practice and prevent regulatory arbitrage.

But regulatory overkill should be avoided to prevent financial innovation being stifled altogether. This calls for relatively simple rules and regulations such as clear minimum capital-asset ratios combined with higher risk capital requirements for proprietary trading positions and for hedge funds, recognizing the operational risk they are running.

As supervisory authorities do not currently have responsibility for promoting the stability of the financial system as a whole, macro-prudential supervision should be explored further, with a view to enabling supervisory authorities to join fiscal authorities and central banks in providing safeguards against financial distress.

GESolution 3

Make bailouts come at a cost; tougher supervision and tighter capital standards are the price financial institutions have to pay for official rescue operations meant to stem systemic risk.

Central banks should be cautious in bailing out financial institutions. Considering that highly leveraged institutions have increasingly been rescued recently (for reasons of being “too big to fail”), the still relatively narrow regulatory domain needs to be aligned with the expanded domain of liquidity support by central banks. Clearly, the principle to be applied in normal times for isolated failures has to be distinguished from crisis management measures.

Governments often impose only soft constraints as a quid pro quo for capital injections. Thus, the shareholders often retain their capital and the managers remain in place, even as they receive taxpayers’ capital.

Shareholders should lose part of their capital and the management be replaced, to reduce moral hazard. But this measure alone is insufficient, since it leaves the financial system undercapitalized. Furthermore, it appears that stockholders often exert little discipline on financial institutions, even when workers own a large share of them. Thus, government capital injections should be accompanied by burden sharing with debt holders and other counterparties.



4. Strengthening the Global Financial System

GESolution 4

Address the procyclicality of the financial and regulatory system by adjusting mark-to-market accounting and by introducing flexible capital adequacy requirements.

While current mark-to-market accounting clearly exacerbates the cycle, simply suspending it when crisis looms is not the solution. But limiting mark-to-market accounting to assets and liabilities with a short term of, say, less than a year, may provide a reasonable option.

Minimum capital-asset ratios should be raised during boom periods and relaxed in a slump. Specifically, to moderate excessive bank lending during a boom and encourage the build-up of reserves, regulatory capital adequacy requirements might be raised to the extent that the growth in bank asset values exceeds a predetermined level. This approach has numerous practical complications, but then so does the central bankers' task of setting interest rates today to control inflation in 18 months time.

GESolution 5

Eliminate conflicts of interest and promote competition in the credit rating market.

Financial market regulation should not rely on the ratings of credit rating agencies. In particular, central banks should no longer base their collateral rules on the assessment of fixed-income products by these agencies.

Should rating agencies continue to be given a role in financial market regulation, then conflicts of interest must be reduced by preventing any agency from participating as a structuring consultant and a rater in the same transaction. Furthermore, the special status of the three rating agencies should be mitigated by introducing more competition into the credit rating market.



4. Strengthening the Global Financial System

GESolution 6

Replace the Basel II accord, in order to ensure systemic stability by factoring both illiquidity and insolvency risks into capital adequacy requirements and to deprive credit rating agencies of their regulatory influence.

Redesigning capital adequacy requirements in another reform of the Basel Accord would be insufficient to contain systemic risk: microeconomic best practice does not ensure systemic stability. At the same time, the classical distinction between insolvency (of highly leveraged institutions) and (global) illiquidity is increasingly blurred, considering that fragile balance sheets of large financial institutions involve systemic risk due to disorderly unwinding of exposures.

GESolution 7

Gear monetary policy towards price stability first and foremost but, to avoid asset price bubbles, leave open the possibility of “leaning against the wind.”

Relying on interest rates to prick asset price bubbles would be a mistake: for the rest of the economy, the cure would be worse than the disease. Monetary policy may curb excessive credit growth and thereby prevent inflating unsustainable booms.

Background

Reforming the regulatory framework is essentially about creating sensible economic incentives for market participants. Accordingly, the need now is not for more or less regulation and supervision, but for smarter regulation and supervision.

The problem of procyclicality may be as old as financial markets themselves – but recent accounting and regulation has aggravated the problem. Current mark-to-market practices constitute a massive pro-cyclical amplifier: credit booms raise valuations, which in turn raise the banks’ ability to lend; the opposite mechanism takes hold in a downturn, as we are currently experiencing. The logic of current mark-to-market accounting is dubious, especially for assets that are funded long term. Arguably, institutions with a long-term investment horizon such as pension funds and insurance companies have been “drawn” into financial volatility through mark-to-market accounting.

By contrast, the combination of high leverage and short-term funding is particularly risky – as the fate of Bear Stearns and Lehman Brothers have attested. Excessive leverage may be easy to spot at hedge funds and investment banks, but leverage ultimately originates from commercial bank behavior. This implies that better bank regulation matters as much as extending regulation to so far unregulated institutions. Risk tends to return to the banking industry under conditions of stress. Hence, the incentives to transfer risks to off-balance sheet conduits – to reduce regulatory capital charges – need to be addressed during normal times.

4. Strengthening the Global Financial System

Countercyclical accounting procedures and regulations will not stop booms and busts, but they may mitigate them. Raising capital requirements during periods of easy credit would contain exuberance, while relaxing them in a slump would protect against the inevitable downturn.

Some central banks are blamed for having inflated an unsustainable boom. Considering assignment problems, however, it would be too much to ask central banks to deliver both price and financial stability. It is one thing to criticize monetary accommodation in the past, and another one to assign a systematic dual role to central banks.

Basel II is an improvement over Basel I in that it asks banks to take a more complete view of their capital requirements. But systemic liquidity risk would remain even if Basel II promotes microeconomic best practice. It also appears unwise to rely on the banks assessing their own vulnerability. Not only may their assessment be skewed, but this also fails to take a system-wide view.

The reliance on credit rating agencies has led, particularly with highly structured paper, to negligence and failure of due diligence with professional market participants such as traders, asset managers, loan officers, pension managers and monoline insurers. The greater role assigned to the agencies has only impaired the banks' incentives to assess credit risk carefully. But rating agencies do not appear to have either the capability or the incentives to substitute banks' central role in credit evaluation.

Panelists



Domingo F. Cavallo
Chairman and CEO, DFC Associates LLC



Joachim Fels
Managing Director and Chief Global Fixed Income Economist and Strategist,
Morgan Stanley



Richard Holmes
CEO Europe and Co-Chairman, Private Banking,
Standard Chartered Bank



Richard Portes
Professor of Economics, London Business School



Moderator: Wolfgang Munchau
Associate Editor, Financial Times



4. Strengthening the Global Financial System

Appendix

The GES 2008 took place just before the global financial crisis became truly acute. So we have supplemented the recommendations made at the GES by further proposals from the GES community that have been made subsequently.

These proposals include the following:

- Create a global regulator to identify systemically relevant financial institutions and harmonize capital adequacy ratios for them.
- Give systemically relevant financial institutions a solvency guarantee, financed by taxes and debt-for-equity swaps.
- Alternatively, return to a system of narrow banking by forcing financial institutions to choose between the status of a commercial bank and that of investment bank. Investment banks must ensure that the duration of their liabilities is on average at least as long as the duration of their assets.
- Increase transparency in the credit markets by introducing a global credit register.

Some suggestions to overcome the financial crisis^{*}

by Willem Buiter, *Professor of European Political Economy, European Institute, London School of Economics and Political Science*

G20 leaders should better coordinate their crisis “firefighting” efforts, including recapitalizations, lending guarantees, fiscal expansions and toxic-asset valuations. They should also set in motion institutional reforms:

- Establishing a new G7/8 (the U.S., the EU, Japan, China, India, Brazil, Saudi Arabia and possibly Russia or South Africa) with the IMF as its secretariat.
- Boosting IMF lending capacity.
- Creating a uniform global regulatory framework for rating agencies and for large, highly-leveraged institutions with significant cross-border activities.

The leaders of the G20 nations should consider two quite separate classes of decisions: putting out the fires; and adjusting global institutions.

^{*}This piece first appeared as “Some suggestions for the G20 on Nov. 15th” in “The essays: What G20 leaders must do to stabilise our economy and fix the financial system,” edited by Barry Eichengreen and Richard Baldwin, a VoxEU.org publication, 2008. <http://VoxEU.org>

4. Strengthening the Global Financial System

Firefighting measures

Actions to be considered include:

1. Treasury guarantees for cross-border interbank lending, or, equivalently, central banks acting as universal counterparty of last resort in unsecured interbank transactions, including cross-border unsecured interbank lending and borrowing.
2. Mandatory recapitalization of banks to a uniform international standard well in excess of the Basel II ratios. Governments should tell banks in their jurisdictions to raise their tier one capital ratios to, say, 11% by a certain date. If the shortfall cannot be made up by the deadline from private sources, the state will inject the balance, either in the form of ordinary equity or through convertible preference shares.
3. A coordinated global fiscal expansion, modulated by “ability to borrow”. Countries with stronger government budget, current account and external asset positions should engineer a stronger fiscal stimulus.
4. Fiscal bailouts of advanced industrial countries whose systemically important banks have a solvency gap that exceeds the government’s fiscal capacity. The problem of systemically important banks or other financial institutions whose need for external resources beyond what can be financed privately exceeds the fiscal capacity of its government, is not only confined to small countries with large banking sectors and their own currencies. Switzerland,

Denmark, Sweden, Australia and New Zealand are vulnerable, but so are Belgium, Ireland, the Netherlands and Luxembourg, even though they are members of the euro area. The U.K. does have a large, internationally exposed banking sector. The risk of a banking crisis whose resolution would require a foreign currency lender of last resort is real. Because sterling is not a serious global reserve currency, a combined banking crisis and sterling crisis is a threat. Other European countries with banking sectors that are not terribly large, could nevertheless find themselves at risk because their governments are already in bad fiscal shape. Greece and Italy come to mind. I hope that behind-the-curtain contingency planning is going on in finance ministries with deep pockets.

5. Avoiding a moral hazard race to the bottom. Unless there are binding international agreements on the kind of guarantees extended by governments to financial institutions and creditors in their jurisdictions, we will see a replay of the moral hazard explosion that followed the Irish decision to guarantee all liabilities of the six largest majority Irish-owned banks. The result could be every creditor fully guaranteed and taxpayers taken to the cleaners. Not only would this be outrageously unfair, it would create terrible incentives for future reckless lending. The IMF should monitor and police any norms adopted.
6. Agree common access rules and common methods for valuing illiquid assets in different national TARP-like structures TARP-like toxic asset dumps are essential for understanding the true balance sheets of banks and other

4. Strengthening the Global Financial System

highly leveraged institutions, and are key to cleaning up of banks' balance sheets (through mark-to-market accounting rules) and to a resumption of securitization markets. There should be common rules on who gets access to the toxic asset dumps managed by different nations. There also should be common methods for valuing illiquid assets, lest the same asset gets valued in different ways at different national TARPs, putting excessive strain on the public finances of the country offering the highest valuation.

Institutional reform

1. Increase the financial resources of the IMF

Its current lending capacity (about \$250 billion) is peanuts. If any of the larger emerging markets (Turkey, Brazil, Indonesia, Poland, or Korea) gets into trouble, \$250 billion will be gone before you can say "Special Drawing Rights." An additional \$750 billion would be the minimum required for the IMF to play a helpful part putting out emerging market fires; \$1.75 trillion would be required for the IMF to be able to act in a systemic emerging markets crisis without first having to arrange bilateral financial support for the intervention by a number of deep-pocket national governments, each one of which would then have effective veto power over the program.

2. Reform the G7/8

There is an urgent need to constitute a new G7/8 comprising the U.S., the EU (represented at the head of government/head of state level by the EU presidency – adopting the Lisbon Treaty would be helpful here), Japan, China, India, Brazil, Saudi Arabia and possibly Russia or South Africa.

3. Change IMF quotas and voting rights in line with shares of world GDP at PPP exchange rates, subject to the constraint that no country has veto power (18% of the total votes or more).

4. Turn the IMF into the permanent secretariat for the new G7/8.

5. *Agree to adhere rigorously to mark-to-market accounting and reporting principles and agree on common rules for relaxing regulatory requirements attached to mark-to-market valuations.*

It has taken decades to agree on mark-to-market (or "fair value") accounting and reporting. It would be the height of insanity to throw that achievement out of the window because regulators cannot apply common sense in their application of capital ratios, liquidity ratios and other regulatory requirements that are influenced by marked-to-market asset valuations. The regulatory consequences of valuation distortions can be adjusted, in a uniform, internationally coordinated manner.

6. *Take steps towards a single global regulator for large highly leveraged institutions that have significant border-crossing activities.*

The domain of the single regulator/supervisor has to be congruous with the domain of the market and the domain (geographically and as regards activities) of the systemically important highly leveraged institutions. An important interim step is to create a single U.S. regulator and a single EU-wide regulator for large highly leveraged institutions that have significant border-crossing activities.



4. Strengthening the Global Financial System

7. Permit capital controls and barriers to entry by foreign entities into national or regional (EU) financial markets and industries, in cases where there is not a single regulator/supervisor for the markets/instruments or for the entities and their foreign parents, subsidiaries and branches in all countries where they are active.
8. *Create a uniform global regulatory framework for rating agencies.*
Eliminate their quasi-regulatory function. Make it impossible to combine rating activities with other profit-seeking activities in the same legal entity. If payment of rating agencies by the issuers is to continue, the selection of the rating agency should be done by the regulator, not by the individual issuer.
9. *Don't waste time on multilateral surveillance.*
The IMF will never have any influence on large member states with strong government budgetary positions and strong external positions.

Returning to narrow banking^{*}

by Paul de Grauwe, *Professor, University of Leuven and CEPR*

Bubbles and crashes have been part of financial markets for centuries. Allowing banks – which inevitably borrow short and lend long – to get deeply involved in financial markets is a recipe for disaster. The solution is to restrict banks to traditional, narrow banking with traditional oversight and guarantees, while requiring firms operating in financial markets to more closely match the average maturities of their assets and liabilities.

Banks inherent instability

It is useful to start from the basics. Banks are in the business of borrowing short and lending long. In doing so they provide an essential service to the rest of us, that is, they create credit that allows the real economy to grow and expand. This credit-creation service, however, is based on an inherently fragile system. If the banks' depositors or lenders are gripped by collective distrust and all decide they want their money back, bank will go broke; the money is not there since the deposits were invested in illiquid assets. This is how a liquidity crisis erupts, setting in motion an devilish cycle of insolvency and new liquidity crises.

^{*}This piece first appeared in "The essays: What G20 leaders must do to stabilise our economy and fix the financial system," edited by Barry Eichengreen and Richard Baldwin, a VoxEU.org publication, 2008. <http://VoxEU.org>

4. Strengthening the Global Financial System

Repeal of stability regulation

We learned from the Great Depression that in order to avoid such crises we have to limit risk taking by bankers. We unlearned this lesson during the 1980s and 1990s when the banking sector was progressively deregulated, thus giving banks opportunities to seek high-risk investments. The culmination of this deregulatory movement was the repeal of the Glass-Steagall Act in 1999 under the Clinton administration. This ended the separation of the commercial and investment banking activities in the U.S. – a separation that had been in place since the 1930s banking collapse. Repeal of the Glass-Steagall Act opened the gates for U.S. banks to take on the full panoply of risky assets (securities, derivatives and structured products) either directly on their balance sheets or indirectly through off-balance sheet conduits. Similar processes of deregulation occurred elsewhere, in particular in Europe, blurring the distinction between investment and commercial banks, and in the process creating “universal banks”. It now appears that this deregulatory process has sown the seeds of instability in the banking system.

The critical lack of a firebreak

Financial markets have, for centuries, been gripped by speculative fevers that have led to bubbles and crashes; bubbles and crashes are an endemic feature of financial markets. But financial market problems do not automatically affect banks. In the most recent crisis, bubbles and crashes would not have been a major problem had banks not been involved so deeply in financial markets. Banking sector deregulation, which started in the 1980s, is what exposed the banks so catastrophically to the speculative dynamics inherent in financial

markets. Banks’ balance sheets became the mirror images of bubbles and crashes occurring in the financial markets. An explosive cocktail of credit and liquidity risks was created that was waiting to explode.

The failed Basel approach

The Basel approach to stabilize the banking system is based on an attempt to model the risks universal banks take and to compute the required capital ratios that will minimize this risk. Such an approach is unworkable. The risks that matter for universal banks are “tail risks”, that is, events which are extremely rare but which cause extremely large losses – like AIG’s near bankruptcy, or Lehman being allowed to go broke. Such risks cannot be accurately modeled (a key element of the Basel approach) precisely because they are so rare.

The only workable approach to ensuring bank stability

This leaves only one workable approach. This is a return to narrow banking in which the range of activities in which banks are allowed to engage is narrowly circumscribed. In this approach banks are excluded from investing in equities, derivatives and complex structured products. Investment in such products can only be performed by financial institutions, for example, investment banks, which are then forbidden from funding these investments by deposits (either obtained from the public or other commercial banks).

4. Strengthening the Global Financial System

In a nutshell a return to narrow banking could be implemented as follows:

- Financial institutions would be forced to choose between the status of a commercial bank and that of investment bank.
- Only the commercial banks would be allowed to attract deposits from the public and from other commercial banks and to transform these into a loan portfolio with a longer maturity (duration).
- Commercial banks would benefit from the lender of last resort facility and deposit insurance, and would be subject to the normal bank supervision and regulation.
- The other financial institutions that do not opt for a commercial bank status would have to ensure that the duration of their liabilities is on average at least as long as the duration of their assets.

This last point would imply, for example, that they would not be allowed to finance their illiquid assets by short-term credit lines from commercial banks.

International coordination to avoid a classic, regulatory race to the bottom

A return to narrow banking can only occur if it is embedded in an international agreement. This is where the G20 comes into the picture. When only one or a few countries return to narrow banking, the banks of these countries will face a competitive disadvantage. They will lose market shares to banks less tightly regulated – a result that would produce forceful lobby against the restrictions. In the end, the governments of these countries will yield and the whole process of deregulation will start again.

A comprehensive international agreement will be necessary to remodel banking systems and to separate commercial banks from investment banking activities. This is what a Bretton Woods II conference should focus on. Clearly there are other desirable reforms, such as improving the incentive structures of bank managers and rating agencies, and a better representation of emerging countries in the IMF. The focus of Bretton Woods II, however, should be to reform the banking system so that it does not get involved in bubbles and crashes that are endemic to financial markets.

4. Strengthening the Global Financial System

How to prevent future crises: create a World Financial Organization*

by **Barry Eichengreen**, *George C. Pardee and Helen N. Pardee, Professor of Economics and Political Science at the University of California, Berkeley*

In the wake of the “second Bretton Woods conference,” expectations have fallen to earth. It should now be possible to discard overheated rhetoric about the end of Anglo-Saxon capitalism and get to work. The work in question should center on strengthening the financial system. Purely national regulation is inadequate. The cross-border spillovers and negative externalities thrown off by subpar (one is tempted to say “subprime”) regulation are simply too great. At the same time there is no appetite for a global regulator. We will get a global regulator at about the same time we get a global army and a global police force.

Given that neither national nor supranational regulation is feasible, the challenge is to carve out something in between. This is where the intellectual challenge and interesting issues lie. What has been done along these lines to date – the Basel Committee of Banking Supervisors and the FSF – is not enough or we wouldn’t be in the current mess. Nor is it obvious that a College of Supervisors along the lines suggested by the members of the EU will differ significantly from the status quo. The idea and its name will make the academics among us think of department meetings in our own colleges where every member of the faculty gets a say and at the end of which nothing much is decided.

At least as important as exchanging ideas and information and harmonizing regulatory practices, which are the putative goals of the Basel Committee, the FSF and the College of Supervisors, are actual consequences for countries that fail to meet the standards they prescribe. How do we go about getting them?

At the more ambitious end of the spectrum, Stijn Claessens has proposed creating an international bank charter for banks engaged in cross-border activity. Internationally active banks would have to receive a charter from an international College of Supervisors, and they would be subject to its supervision. When the members of the College determined that banks were in violation of its charter, it could impose cease-and-desist orders, limit the operations of said institutions, and require remedial action. This would be a great outcome were it only feasible. Unfortunately it is not. U.S. officials and politicians, among others, would clearly regard it as a bridge too far.

Somewhat less ambitious but more politically realistic, I would argue, is my proposal for a World Financial Organization (WFO) analogous to the already-existing World Trade Organization. Membership would be obligatory for all countries seeking freedom of access to foreign markets for domestically chartered financial institutions. The WFO would define obligations for its members; the latter would be obliged to meet international standards for supervision and regulation of their financial markets and institutions. It would appoint independent panels of experts to determine whether countries were in compliance with those obligations. Importantly, it would authorize the

*This piece first appeared in *Swiss Business Week*, Nov. 24, 2008.



4. Strengthening the Global Financial System

imposition of sanctions against countries that failed to comply. Other countries would be within their rights to restrict the ability of banks and nonbank financial institutions chartered in the offending country to do business in their markets. This would provide a real incentive to comply.

The move to a WFO would presumably occur after some years of satisfactory experience with a GATT-like predecessor if the history of the WTO is any guide. It will be objected that the U.S., among others, would never let an international organization dictate its domestic regulatory policies. The rebuttal is that the WFO would not dictate. The specifics of implementation would be left to the individual country. There would still be scope for the U.S. and other members to tailor supervision and regulation to the peculiarities of their national financial markets.

But those regulatory specifics would have to comply with the broad principles set down in the WFO charter and associated obligations. We already do the equivalent for trade. Dispute settlement panels already determine whether, inter alia, U.S. tariffs on timber imports from Canada are in compliance with our WTO obligations. If not, we have the choice of whether to change those laws or face sanctions and retaliation. If the U.S. and other countries accept this in the case of trade, why should they not accept it for finance?

Least ambitious of all would be to simply try to raise the reputational costs for countries whose domestic regulatory practices are not up to snuff. Proposals for the FSF and the IMF to provide firmer surveillance of national regulatory practice move in this direction. Gordon Brown, for example, would have the FSF define acceptable practice and the IMF determine whether national regulation meets that standard.

But is the FSF adequately legitimate and accountable, given its membership? (We will have to see whether the G20 follows through on its November 15th communiqué and appropriately expands the FSF.) Does the Forum have adequate staff? Does the IMF, for its part, have the backbone to take on its large shareholders when their national practices are not up to snuff? Doesn't this proposal presuppose a more politically independent IMF? You will forgive me: this is a case that some of us have been making for going on ten years. It is hard not to have mixed feelings on hearing prominent politicians like Horst Koehler now endorse this idea when they have not exactly stuck their necks out in the past.

The weakest step of all, if the conclusion is that all of the above are impractical, is to create an independent commission to provide an annual evaluation of the adequacy of regulatory practice. Some will dismiss even this out of hand. But think of it as analogous to the European Commission evaluating the adequacy of national budgetary practice in the context of the Growth or Stability Pact,



4. Strengthening the Global Financial System

where experts are allowed to tell countries “your budget is recklessly out of control.” Why couldn’t a similar Commission similarly tell national governments “your financial supervision is recklessly out of control?”

The answer, presumably, is that the members of the EU, because their internal market is so integrated, recognize fiscal spillovers to be of first-order importance. Well, we now all recognize that cross-border financial spillovers are of first-order importance, so what is possible in Europe should be possible globally. Another answer is that the European Commission has the legitimacy needed to undertake this task, embedded as it is in the larger process of European economic and political integration. Well, if this is the answer, then we need to endow our multilateral financial institutions with comparable legitimacy.

Five proposals to improve the robustness of global financial institutions

by **Wolfgang Münchau**, *co-founder and director of Eurointelligence Advisers Limited, associate editor of the Financial Times*

A well designed regulatory framework should ensure that financial institutions are robust when confronted with economic shocks, financial innovation, regulatory arbitrage, as well as higher than average asset price volatility. The standard response is for long lists of regulatory measures. I am proposing an approach routed in economic analysis and political economy instead.

1. The most important regulatory principle that should be adopted is what I call “principle of economic intent.”

It means that we should not draw up long legal rules that try to anticipated every circumstance (Basel I and II were just that), and that can always circumvented given a sufficient degree of ill will. Instead one should introduce an element of constructive ambiguity on the part of the banks by allowing regulators to use economic analysis in their decision-making.

An example: a credit default swap may be technically a swap, but it is economically insurance. It should thus be regulated like an insurance market, unless there are traded on regulated exchanges, in which case the exchange regulator is responsible. The rule would obviate any need to pass complex regulation about how to push the CDS market on to regulated exchange. It would happen naturally, if an insurance regulator was entitled to regulate everything he regards as insurance.



4. Strengthening the Global Financial System

Another example: if banks seek “regulatory relief” through the use of securitization, this should be regarded for what it is: a purely legal trick that does not change the underlying economics. Regulators should thus be empowered to count off-balance sheet exposure or even to bring it back onto the balance sheet. That rule alone would probably have prevented the worst abuses in the market for securitized credit products.

2. In recognition of the global flows of finance, we should adopt a three-stage proposal to establish, successively:
 - A. Global co-operation, and more effective exchange of information.
 - B. Joint rule-making with national implementation.
 - C. A degree of global implementation by a global regulator, yet to be established.

Global co-ordination and co-operation is necessary for rule number one to work in practice. Otherwise, financial institutions will engage in cross-border regulatory arbitrage, and we would be back to where we started from. To the extent that global regulation is not realistic, we should adopt intra-regional regulation, for example, at EU, or Asean level – and then co-ordinate between those blocks.

3. We should explicitly impose ceilings on the overall size of financial institutions.

This is more important than setting maximum leverage ratios, which is very problematic. In particular, no financial institution should ever be allowed to grow too large to fail. As for existing too-large-to-fail institutions we should subject them to a special regulatory regime with a view to breaking them up into smaller units. Concretely, we could require a financial institution not to accumulate assets beyond a certain threshold of the host country’s annual GDP.

4. The single most appropriate measure to increase transparency in the credit markets is to introduce a global credit register, which is technically possible, as long as the main OECD countries co-operate.

This would give central banks and regulators real-time information about systemic credit risks, and the ability to intervene much earlier.

5. Finally, here is one, and only one, proposal for a specific micro-regulatory change, concerning the regulation of rating agencies. On this issue I would follow the advice of Charles Goodhart’s roundtable of financial economists.

4. Strengthening the Global Financial System

- A. Make the rating agencies' mathematical models transparent.
- B. Governments, central banks, and other public sector institutions should refrain from using rating agencies in an official capacity (central bank should not value collateral on the basis of ratings, for example).
- C. In the rating of securitized products, ratings agencies should publish a margin of error depending on leverage of the securitized structure.

Those five rules could be a useful start for much more robust financial framework. The basic principle one should follow is not to over-regulate, but to change the economic incentives of the participants in the financial markets.

What is to be done – and by whom? Five separate initiatives*

by Avinash Persaud, *Chairman, Intelligence Capital Limited*

There are five separate initiatives the authorities need to follow to contain the crisis, reverse some of its effects, and prevent it from happening again. National authorities are best positioned to respond quickly to contain the crisis, international initiatives are required to avoid repetition, and some combination of the two is best suited to reversing its effects. National authorities can best contain the crisis through two measures.

First, as Willem Buiter has argued, they must revive interbank markets by providing a temporary guarantee for short-term unsecured lending between regulated institutions. Central bank disintermediation of interbank markets is more costly and less sustainable.

Second, national authorities should also inject preference share capital to institutions that need it on condition of a partial swap of "old" debt for equity. Such involvement by government is best carried out at arms length – in Europe's case, the European Investment Bank may be a good vehicle.

A critical part of the current crisis is that write-downs of asset prices have so depleted bank capital that many banks are close to insolvency on a mark-to-market basis. These write-downs are caused by the distress prices obtained when selling instruments today that the market cannot easily value because of their complexity and uncertainty over their rating. This leads to the next necessary initiative.

*This piece first appeared on VoxEU.org on Oct. 9, 2008. <http://VoxEU.org>

4. Strengthening the Global Financial System

The third thing the authorities should do is to support a more immediate reversal of this process by facilitating the creation of long-term liquidity pools to purchase assets – rather like John Pierpont Morgan’s 1907 money trusts. These pools are best managed by those with long-term liabilities like insurance companies and funds with investor lock ups, but the authorities could capitalize these liquidity pools by issuing ten-year government bonds. Under existing rules, these pools would not mark-to-market, and it is better that long-term investors, not governments, buy assets on a strictly commercial basis. These liquidity pools need to operate internationally and therefore need to be capitalized and organized internationally. The IMF may perform this co-ordination role.

Looking ahead to the next crisis

This is the seventh international financial crisis I have lived through. At the end of each, the focus on avoiding the next one has always been the same trinity: more transparency, more disclosure, and more risk management. This is an inadequate response to systemic crises. At the heart of new, internationally coordinated regulatory initiative, there must be counter-cyclical capital charges. Crises do not occur randomly; they always follow booms. That is my fourth policy initiative.

But there also needs to be a shift in the focus of regulation, away from sensitivity to the market price of risk and notions of equal treatment for all institutions to a greater sensitivity to risk capacity and a better appreciation that diversity is the key to liquidity. This is the fifth step.

Systemic resilience requires different risks being held in places where there is a natural capacity for that type of risk. In the name of risk-sensitivity and equal treatment we ended up with institutions that had no liquidity holding liquidity risk and those with little capacity to hedge or diversify it owning credit risk.

Capitalise on the crisis: How to move forward*

by **Richard Portes**, *Professor of Economics, London Business School, and Founder and President of the Centre for Economic Policy Research (CEPR)*

The financial crisis offers opportunities for reform. The IMF and Financial Stability Forum should be refocused and beefed up, the G7 scrapped, the G20 reshuffled, and group memberships suited to the issues. Leaders should agree on principles, rather than getting bogged down in details, and explain their reforms to the public.

It is no help to say “if you want to get there, you shouldn’t start from here”. We are where we are. And crises offer opportunities, not only to clever investors, but to reform-minded politicians. Political leaders can seize the day and lead the reforms, with academics providing ideas. A “New Bretton Woods” is an evocative but misleading shorthand for the task and the opportunities ahead. Even in the medium run, no new institutions should or will emerge, no global macroeconomic structure or exchange rate system will be devised. Nor will a single country be able to impose its vision. That makes the task harder. Real progress on some of the major issues will require a “grand bargain”, whose outlines I shall sketch. But there are other areas where all should realise they could be better off even without difficult tradeoffs. In a crisis, nothing is impossible. We have already seen policy initiatives that were unimaginable only a few months ago. But those who advocate massive state intervention will be disappointed. This is not a crisis of capitalism nor the market economy, unless bad policies make it so.

*This piece first appeared on VoxEU.org on Nov. 12, 2008. <http://VoxEU.org>



4. Strengthening the Global Financial System

Don't get bogged down in details

Expectations for the G20 meeting on 15 November may be excessive. It will not agree on changes to the institutions of global governance, nor will it come up with an “n-point plan” for dealing with the crisis. Its primary objective should be to bolster confidence by convincing the public and market participants that the leaders understand the issues and have a clear process for confronting them with a reasonable timetable. Commentators should not say afterwards, “Fine principles, but where are the details?” The leaders should convince us that this is a mistaken demand, that their demonstration of unity on the principles and the process goes side-by-side with the short-run measures they are already taking. And if, for example, wide-ranging fiscal stimulus is necessary (as I believe it is), governments are learning that already and need not act explicitly in concert.

They face a new configuration: greater interdependence in both trade and finance, higher global risks, more links among global issues, all in a context of huge disruption to international finance. No decoupling, only deleveraging. Some of the problems are not fully understood. It would be unwise to seek agreement now on specific reforms. Rewriting rules should be the job of technocrats, not politicians – if only because the politicians are understandably inclined to find scapegoats, shoot (or guillotine) the speculators, and shut down markets. But political leadership must set out the principles and how officials should proceed in implementing them.

Principles for the agenda

Some of the desirable principles are broad. The leaders must state their consensus that they will not retreat into protectionism nor try to turn back globalisation, and that they are conscious of the dangers of overregulation. They should indicate that they want strategies to exit in due course from the extraordinary degree of new direct government involvement in financial institutions and markets. International financial integration and domestic financial development, going hand in hand, promote economic growth. So they should take a stand against financial repression and repression of finance. They should explicitly recognise the macroeconomic roots of the crisis in global imbalances, rather than just blaming it on unbridled greed. They should acknowledge that the international institutions are unrepresentative and therefore lack legitimacy and that they are poorly coordinated and in some respects ill suited to deal with key problems.

They could be more specific. The agenda should include finding ways to cut the vicious circles that have made the crisis so grave – the interactions among inappropriate accounting practices, opaque derivative markets, credit ratings, and deleveraging. Financial regulation must be better designed, more comprehensive, more harmonised across countries, and indeed more multilateral. It should focus on incentives as well as on rules. Enforcing greater transparency is also a legitimate and important function of regulation. And the major countries, in particular the U.S. and the U.K., must recognise the dangers of regulatory competition and arbitrage.

4. Strengthening the Global Financial System

A new regulatory framework should be based on the principle that financial institutions no longer fall into distinct categories – commercial banks, investment banks, insurance companies, hedge funds, and other financial firms all now overlap. And all require at least regulatory oversight, with varying degrees of intrusive regulation. Those with global or regional systemic importance require global regulation that goes beyond national regulatory authorities and incorporates burden-sharing rules to deal with failures. Outsourcing regulation – as, for example, by “hard-wiring” the ratings agencies into the regulatory framework – should be abandoned, eliminating the “regulatory license” that the agencies now have. Self-regulation should be re-examined with considerable scepticism. Often greater transparency will enforce regulation, so regulators should require it, e.g., by bringing over-the-counter derivatives trading (in particular, the CDS market) onto exchanges.

Officials should ask economists and lawyers who specialise in contracts, incentives and mechanism design to put forward proposals for regulating executive compensation, refocusing managers on longer-term performance, and reducing conflicts of interest. Principles should relate micro to macro, e.g., acknowledging the procyclicality of the Basel II structure (which would not be cured by substituting leverage ratios for capital adequacy ratios). And on the macro side, the leaders should come down against global capital controls but agree that individual countries may reasonably turn to capital account measures in appropriate circumstances (with IMF assistance rather than opposition), while not reversing financial market reforms. They should not seek exchange rate target zones, grids, or reference rates. They should recognise, however, that exchange-rate movements have often been excessive, sometimes abrupt, with frequent prolonged misalignments, so that exchange-rate management is often warranted (in which sterilised intervention can be effective).

Institutional reform

The central institutions for implementing these principles are the International Monetary Fund and the Financial Stability Forum. The latter should not be subsumed into the former. The structure and governance of the IMF, its universality, are inappropriate to regulate the international financial system, in which only a small number of countries are important and no financial resources are required. Instead, the FSF should take on many of the multilateral regulatory activities suggested above, with executive authority and a broader membership. It should include all the countries that are now important in the global financial system. The leaders could now state that this is their intention. The FSF should be responsible for the Financial Sector Assessment Programs that the IMF now administers – and they should be mandatory for all countries, even the largest.

Where would that leave the IMF? It cannot be an international lender of last resort, in the strict sense, nor should it be a ratings agency (for sovereigns), nor prescribe “equilibrium” exchange rates. The Fund should conduct surveillance of macroeconomic policies and current accounts, and henceforth perform explicit capital account surveillance as well. One short-run measure to which the leaders should agree is to increase the resources available to the Fund to deal with the crisis-induced needs of many emerging market countries running large current account deficits or facing major capital outflows.

The IMF must be prodded to come up with new ideas and revive some of the old ones. The Fund has manuals on how to restructure distressed banking systems – where are they? What are the Fund’s ideas on the key macro issues? For example, the Fund should be examining the carry trade: why was it so

4. Strengthening the Global Financial System

profitable for so long, how did it affect the capital accounts and exchange rates of “target” countries (most of which are now on the IMF rescue list), and how is it related to the foreign exchange swap market? Most importantly, perhaps, the Fund must fully take on the role of “relentless truth telling” that Keynes expected of it.

What about the G7, and indeed the G20 itself? The former is an anachronism and should simply be abandoned. It cannot discuss decoupling and recoupling, global imbalances, exchange-rate adjustment, or the obligations of surplus countries. A smaller group (with the euro zone having a single representative) should deal with global imbalances and the like, and larger, appropriately constituted groups with other issues highlighted above. Most of the relevant players are in the G20, but some in the G20 are not always relevant. In principle, the memberships should be suited to the issues – a kind of variable geometry.

What they must do

But the key to progress on most of these issues lies in the willingness of major countries to accept some basic propositions. Germany must achieve a deeper understanding of the issues at stake, rather than focusing on whether other countries are just trying to get Germany to bail them out. France has played a more constructive role, but it is still inclined to blame “neoliberalism” and press for policies that will surely be unacceptable to the U.K. and the U.S.. The U.K.

has to accept that its primary objective should not be to protect the City of London, which will not lose its central role in international finance even if there is more multilateral regulation. China must take on the full responsibilities of a country with \$2 trillion in international reserves and some of the largest banks in the world. Japan should play a much more active and positive role in these discussions than it has so far. And most importantly, the U.S. must accept that we are long past Bretton Woods, and it cannot maintain sole leadership and veto power in the international financial system.

In the medium run, this could lead to a grand bargain, in which the central players would be the U.S. and China, but with a key role for the EU (in particular, the euro zone). China and other major reserve holders would use their excess reserves to recapitalize the major financial institutions and would change their domestic policies to reduce their excess savings and hence their current account surpluses. The U.S. would stop China-bashing on both trade and exchange rates. The U.S. and EU would agree on bringing China into the FSF and raising its weight in the IMF. The EU would recognize that it would have more influence in the Fund if it would act jointly, so it would concede that as a set of countries it is currently over-represented and that at least the euro zone should have only a single representative. And the U.S. would give up its veto.

So what is feasible? To agree on principles, though not in the full detail set out above and to set up working groups with fixed but different timetables. The working groups should cover the structure of financial regulation, issues in



4. Strengthening the Global Financial System

financial regulation, issues in market structure and the transparency of markets and financial instruments, the roles of the IMF and FSF. Governance of the Fund should be left for later, although giving the International Monetary and Financial Committee of the IMF executive powers should be considered now, as should increasing IMF funding for new facilities and rapid action.

We have no time for the doctrine of unripe time – and if there ever was a moment for wide-ranging reform, this is it. But the political leaders must put great effort on selling all this to a fearful and sceptical public.

What remains to be done to overcome the financial crisis^{*}

by **Dennis J. Snower**, *President, Kiel Institute for the World Economy, Professor, Christian-Albrechts-University Kiel*

To gain perspective on where the solutions to the financial crisis lie, we need a clear picture of what mistakes led us into the crisis, how they could be overcome, and which of them have not yet been tackled. Here, in broad brush strokes, is my list of mistakes that policy-makers have not yet addressed – problems that need to be solved quickly if the financial nightmare is to be put to rest.

Excessive taxpayer sacrifice: the authorities in all the troubled economies have responded in roughly the same way to the crisis – namely, by providing capital to threatened financial institutions in return for an equity stake. Unfortunately, nobody seems to have thought deeply about how the burden of the bailout is to be shared among the taxpayers, stockholders and bondholders.

Clearly, we should have burden sharing. If taxpayers should carry the entire burden, reckless financial practices would be rewarded, encouraging even more reckless activity in the future. If stock- and bondholders were to carry the burden alone, the banks would not be sufficiently capitalized to fuel an economic revival.

^{*}*This piece first appeared as “A Long Way to Go – The mistake that policy makers must address soon to end the financial nightmare” in the Wall Street Journal on Nov. 12, 2008.*

4. Strengthening the Global Financial System



Ideally, governments should decide how to share the burden and then implement the decision by combining their equity purchases of financial institutions with the imposition of debt-for-equity swaps on the bondholders. Taxpayers would contribute to the bailout by funding the governments' equity purchases, bondholders would pay via the swaps, and stockholders would contribute through the dilution of their equity.

What has actually happened is that governments have offered eye-popping amounts of capital to the financial institutions without demanding any simultaneous contribution from the stock- and bondholders through debt-for-equity swaps. This policy is misguided: investors worry that the promised capital injections by the government may be insufficient to save the financial institutions; taxpayers worry about their exposure; and the stock- and bondholders aren't required to shoulder their fair share of the risks. Debt-for-equity swaps should become a central pillar of the financial bailout.

Such swaps are nothing new. When creditors give bankrupt firms a second chance by forgoing some of their claims in return for equity, they are effectively engaged in debt-for-equity swaps. Of course, governments may in fact wish to make the stock- and bondholders contribute in the future. But the current absence of a transparent, well-defined plan generates needless uncertainty and thereby prolongs the weakness of our financial system.

The missing exit strategy: having purchased shares in troubled financial institutions, governments need to specify how they intend to return this equity to the private sector. This is important, because governments are generally less capable of running banks than bankers are, particularly once appropriate regulation is in place. Financial markets are likely to suffer if the partial nationalization of banks is open-ended.

So governments should turn their equity over to trust companies which are given the task of selling the acquired shares over a limited period – say, 10 years – with the sole objective of maximizing profit. Thereby the taxpayers' potential loss would be minimized. Yet so far, this has not happened.

Deficient regulation and supervision: financial regulation and supervision remains essentially national. Policy-makers – and voters – need to recognize that this practice is unacceptable. One reason why we have fallen into the financial crisis is that financial transactions were undertaken where the regulation was weakest. This “regulatory arbitrage” allowed financial institutions to take risks without paying for them. The only way to avoid this danger in the future is through international harmonization of regulation and supervision.

To increase the chance of agreement, it is worth setting modest goals. At a bare minimum, we need international coordination of capital requirements. These requirements must depend on the degree of transparency and simplicity of the underlying financial products. For instance, they must be higher for complex structured credit products such as collateralized debt obligations of asset-backed securities than for simple products with few counterparties. In our globalized financial system, we need equal regulation for equal risks – not only in the banking sector, but also in the shadow-banking sector: money-market funds, hedge funds, investment funds, private-equity firms, etc. Anything short of this leads us back into the quagmire of regulatory arbitrage and reckless risk-taking.



4. Strengthening the Global Financial System

The failure to tackle the solvency problem: the crux of the current financial crisis is a solvency problem. At rock-bottom asset prices, many financial institutions run the risk that their assets will fall short of their liabilities, making them insolvent. Bailing out institutions on a case-by-case basis, as they begin to fail, is a disastrous policy since it spreads fear and mistrust throughout the financial system, which contributes to the failure of yet other institutions.

To solve this problem, finance ministries should become “buyers of last resort” for systemically important financial institutions – that is, institutions that are too large and contagious to be allowed to fail. Specifically, finance ministries should give these institutions a solvency guarantee and, in return, impose special regulatory requirements. The solvency guarantee would be implemented through a combination of a government capital infusion and debt-for-equity swaps. This means the systemically relevant financial institutions would have a clear choice: either they accept the solvency guarantee and the associated regulation, or they restructure their business so that they do not potentially pose a systemic threat.

Again, to avoid regulatory arbitrage, some international coordination will be necessary. The criteria for evaluating assets and liabilities would need to be harmonized. Cross-border burden-sharing agreements for multinational institutions should be made in advance. For if they are made after an institution becomes insolvent, governments are unlikely to provide sufficient capital since they will have national, rather than transnational, interests at heart.

Buyers of last resort would effectively eliminate the possibility that large, contagious financial institutions become insolvent. Once the financial market players realized this, the deadly mistrust would disappear, banks would start lending to one another, asset values would recover, and the risks of contagion would fall. The crisis would be over.

Thus far governments have formulated no transparent rules about which institutions are to be saved and it appears that their proposed bailouts fall far short of solvency guarantees. Thus uncertainty lingers.

In short, we still have a long way to go in tackling the root causes of the current financial crisis. Many of the mistakes that got us into this mess continue to prevail. In building a vision for a new Bretton Woods agreement, governments would do well to focus to pursue the straightforward solutions to the four problems above.

4. Strengthening the Global Financial System

Balance sheets and income statements: breaking the downward spiral*

by **Michael Spence**, *Nobel Laureate, Professor Emeritus of Management, Stanford University*

The crisis we are now in globally had its origins in an asset bubble fuelled by the interaction of excessive leverage and a widespread underestimation of the endogenously rising systemic risk – roughly the degree to which individual risks were becoming highly correlated via balance sheet linkages. The potential seriousness went unnoticed or not fully understood (by market participants, regulators and commentators) for several years.

That is no longer the case. It has been known for some time that leverage had to be reduced, asset values reset down and consumption levels reduced for a period of time, at least in the developed economies. I believe that we underestimated the extent of the potential damage to the real economy that would result from the feedback loops connecting balance sheets and the decisions that underlie the income statements (consumption, employment and investment) throughout the economy, in the financial, business and household sectors. These interactions are at the centre of the current downward spiral.

But it is now worse than this dynamic might have implied. The declines in asset prices and real economic activity are in danger of going well beyond any reasonable assessment of what would have been required to restore the

advanced economies to a more balanced configuration. More seriously, it is not clear where the natural stopping point is – and that is creating fear, feeding back into investment and operating behavior.

Value investors are largely sidelined. That is understandable in part, because jumping in too early, particularly in the financial sector, produced losses; and now the asset deflation has spread to all sectors, reflecting the corresponding damage on the economy side, why take the risk? But much more importantly, in this high speed downward spiral, with the balance sheets adversely impacting the income statements and vice versa, it isn't clear what the intrinsic values are. They are endogenous to the system as are investor expectations. Increasingly both will be determined by what governments do.

One would not want to use the term equilibrium in this kind of volatile situation, but whatever the correct term, the dynamics appear to be such that there are multiple places to bottom out, more or less rank orderable by either the extent of asset deflation or the reduction in economic activity.

The channels underpinning the dynamics are clearer. One is an inability to intermediate credit that threatens business viability and aspects of household consumption. This has largely been dealt with on an emergency basis, as has the deposit risk associated with bank failures. The second one is still operating and has a first order impact. It runs from reduced asset values combined with extreme uncertainty about the extent of future declines, to the real economy via consumption and with a short lag on employment, investment and expected profits.

*This piece first appeared in the *Financial Times* on Nov. 24, 2008.

4. Strengthening the Global Financial System



There are few natural circuit breakers that interrupt these channels. The capital adequacy vacuum in the developed countries spread rapidly to the developing world in the form of emergency capital outflows, creating negative exchange rate dynamics and credit issues that had little to do with conditions in these economies. The potential damage has been partially reduced by a reversal of these capital outflows by the IMF, by the use of reserves and by dollar swap facilities from the Federal Reserve.

The global system has become highly interconnected and non-compartmentalized, and hence quite fragile. It makes the dynamics more vicious as few parts of the global economy seem to be sheltered.

Preventing a serious overshoot in the balance sheet–income statement downward plunge is a co-ordination problem. Intrinsic value and hence investor behavior is determined in part by consumer and business behavior and vice versa. The co-ordination problem in breaking the cycle and the need for simultaneous action is in part understood: the G20 summit was right to focus on protectionism and coordinated fiscal stimulus to avoid beggar-thy-neighbor and free-rider problems.

Government is the only entity that has the capacity to intervene in a coordinated way to shift the dynamics by weakening the reinforcing two-way linkages, with the goal being to cause a deceleration in the rate of decline and ultimately to limit the negative overshoot in assets and economic activity. Not only are governments (including central banks) the only natural candidates for this function, they have also become major players in the system. It is crucial that their future behavior becomes predictable. Because one is dealing with expectations on the asset side especially, communication and credibility are important as well as action.

To address the interacting deflationary effects, we need not just a significant stimulus package (global if possible, credible, and announced in advance) but a larger and much more systematic program of buying assets. Housing and mortgages would be a good place to start. Without such a systematic program, asset deflation will very likely for an extended but unknown period of time undo some of the beneficial effects of a stimulus package and vice versa. Further, asset values are driven (except for some of the technical factors operating now) by expectations. These adjust very quickly and hence can cause damage quickly.

Addressing the asset deflation side of the challenge is crucial. It is also very hard. In these circumstances, intrinsic values are endogenous variables. The point of the intervention is not so much to guess at them accurately but rather to affect them positively. Trying to change an “equilibrium” outcome is much more complex than assessing asset values in a fairly stable environment. There are not many market price signals to use as reference points, leaving the public sector as investor open to a wide variety of critiques. And perhaps fortunately, they and we don’t get much chance to practice beforehand.

4. Strengthening the Global Financial System

Retirement saving and the payout phase: how to get there and how to get the most out of it*

by **Ignazio Visco**, Deputy Director General, member of the Governing Board, Banca d'Italia

Times are changing for pension funds

The financial crisis reinforces the need to develop effective ways of protecting retirement saving. But it may make it harder to adopt appropriate instruments to hedge the risks that may in the long term affect the payout of pension benefits.

The severity of recent financial market developments certainly justifies the tendency to concentrate on the short term. The crisis is especially costly for senior workers, whose pension wealth, both inside and outside pension plans, has been dented by the sharp decrease in asset prices. As in previous financial markets downturns, some of these workers may react by postponing retirement. In certain cases this might not be enough, and an argument could be made for public intervention (for instance, in the case of workers near to retirement whose pension benefits would mostly derive from mandatory private pension schemes). This situation also calls, however, for measures to improve the future working of pension systems. The current crisis has only highlighted the urgent need for better-functioning markets and better retirement products, if future retirees are to be guaranteed adequate living standards.

*This piece first appeared as the Keynote speech to the roundtable on "The impact of the payout phase on financial markets" at the OECD conference "The payout phase of pensions, annuities and financial markets" in Paris on Nov. 12, 2008.

We cannot regard the current events as just one more protracted period of high financial market volatility, to be followed sooner or later by a return of investors' expectations and risk premia to more comfortable levels. The financial crisis has already proved to be a watershed for the international financial system and it is changing the attitude of public authorities towards banking and capital market regulation. It might also deeply affect the propensity of private investors to take risks. It will not be business as usual anymore.

The global banking crisis that still engulfs intermediaries and markets threatens to cast a shadow on the very notion that financial markets could be a reliable source of retirement income. More than the never-ending dispute of the pros and cons of equities versus bonds, the focus is increasingly on the ability of financial markets to assure workers a sufficient level of retirement income even over long-term investment periods. Beyond the unresolved issue of aggregate longevity risk, we need to think whether workers should be left alone to deal with financial markets tail risks (that is, the fact that extreme losses tend to be more frequent than it would be by chance in normal conditions).

Even the decision to join a pension fund (where private pension plans are not mandatory) is likely to be seriously affected by the crisis. Investors' confidence in the soundness of financial intermediaries and markets has been shaken and this may well spread disaffection among workers, notably with respect to pension funds' defined contribution (DC) schemes. Workers may feel less able than in the past to make difficult decisions about the appropriate level of contributions and dependable asset allocation.



4. Strengthening the Global Financial System

Retirement saving should increase further

The present crisis creates problems for defined-benefit (DB) pension plan sponsors (which are the residual risk bearers of the plan) as falling asset prices reduce asset/liability ratios and might ultimately require higher contributions. Partial relief is provided by the increase in yields on corporate bonds, which are used in several countries to discount pension fund liabilities.

Even more importantly, the crisis may make defined-contribution (DC) plan members less confident about taking complex decisions. DC plans require workers to make a number of difficult choices, such as whether or not to enroll, how much money to contribute, how to invest it and when to rebalance the portfolio. A serious risk that DC plan members face is not saving enough for their old age. Contributions to DC plans tend to be low.

Two widely used instruments to increase pension fund enrolments and contributions are fiscal incentives and employer-matching contributions. Both are effective means of boosting pension fund returns and greatly increase the convenience of joining a funded retirement scheme. Both have drawbacks, however. Fiscal incentives are usually expensive, regressive, and possibly prone to time inconsistency, especially when tax advantages apply to the payout phase. Employers' contributions might be offset by a reduction in net wages and not necessarily produce an increase in the worker's total wealth. Moreover, as they are typically the result of agreements between employers and trade unions, their portability across different retirement schemes may be far from seamless. In any case, workers seem to exploit fiscal incentives and employers' contributions only partially.

A factor discouraging workers from increasing pension fund contributions is the relative illiquidity of their net equity in pension funds. DC pension schemes usually grant workers the possibility to withdraw their balances some time before they retire only under special circumstances. Any option to grant higher flexibility of early withdrawals (maybe to those categories of workers, such as young and low-paid workers, that are more likely to be liquidity-constrained) has to be carefully weighted against the risk that short-sighted and time-inconsistent workers might withdraw too much too early, against their own long-term interest.

This naturally leads us to underline the importance of providing DC plan members with good investment returns, as this would be the main way to alleviate the relative illiquidity of investments in pension funds and improve the trade-off between liquidity and pension fund returns. In this respect, it is essential to keep total costs to savers low.

Cost reductions can come not only from increasing the volume of assets under management, with consequent economies of scale, but also from stimulating competition among pension schemes. This may call for several measures including educating consumers about the effect of charges on pension fund returns; assuring a high degree of transparency and comparability of charges between different schemes; easing the transferability of employer contributions across different schemes, especially for people with term jobs and interrupted careers; and intensifying competition among intermediaries offering pension fund asset management services.

Moreover, in all countries public authorities have a powerful (and relatively

4. Strengthening the Global Financial System

inexpensive) instrument for boosting pension fund contributions – namely, the provision of information. The better workers are informed, the quicker they revise their expectations and adjust their saving patterns. Workers should be given systematic, timely and clear information to help them make reliable estimates of replacement ratios, taking into account both mandatory retirement programs and supplementary pension plans.

Another powerful instrument in the hands of both employers and policymakers is the design of retirement plans in terms of enrolment, contribution, investment and withdrawal options. In defining default options, there seems to be consensus on a few general criteria such as avoiding opt-in clauses (which imply that the worker is not enrolled unless he or she asks) and relying instead on opt-out clauses or some kind of more active decision-making; offering only a small number of basic investment choices, while being ready to offer a wider choice to those workers that ask for it; and setting employee contribution rates that rise slowly over time. All these solutions are meant to encourage long-lasting changes in behavior and to overcome inconsistencies in individual decision-making arising due to short-sightedness, inertia, procrastination or lack of willpower.

Should we move from unprotected to protected DC schemes?

Basing asset allocation on the past properties of asset returns may leave the investor considerably exposed to investment risk, for at least two reasons:

- First, past realizations may come from different underlying economic regimes or conceal structural breaks, so that care should be taken when using observed returns to estimate expected returns.
- Second, even if expected returns on equities are higher than those on bonds in the long term, actual returns on equities may turn out to be sharply negative.

The investment risk can be dealt with, to some extent, by relying on market-based instruments. DC plan members could invest a large share of their funds in risky assets at the beginning of their accumulation period and gradually increase the percentage of cash and government bonds as they approach retirement. This could be done by accumulation schemes that automatically adjust risk as an investor ages (“life-cycle funds”). This kind of solution has been increasingly adopted for DC pension plans in a number of countries.

Financial markets also offer strategies that drastically reduce the exposure to investment risk. One possibility is to restrict portfolio choices to fixed-income instruments, especially index-linked bonds, or to use options. Then there is recourse to rate-of-return guarantees provided by third parties (an insurance company, the sponsor or a central reserve fund). A DC pension fund may also maintain a reserve to smooth returns over time: in good investment years part of the fund’s returns are placed in the reserve, which can be drawn on when they fall below a certain threshold.



4. Strengthening the Global Financial System

While financial markets offer different ways of introducing minimum return guarantees, it is clear that the hedging of financial market risks does not come without cost. A higher incidence of fixed-income instruments may take its toll on portfolio returns; the use of derivatives or third-parties guarantees implies the payment of fees. With intertemporal smoothing of returns, good investment years subsidize bad investment periods, with a potential redistribution of investment income across plan members. Therefore, all these forms of protection from investment risks may result in lower net-of-fees returns. If these are not offset by higher contributions during the accumulation phase, they lead to a lower pension during the decumulation stage – that is, lower returns imply lower consumption, either during working age or in retirement or both.

More importantly, market-based solutions cannot protect investors from strong aggregate shocks hitting several asset classes and economic sectors at the same time. In such an event, aggregate wealth is not only redistributed across individuals and sectors, but it is also destroyed.

One might argue that in such exceptional circumstances there is a straightforward solution: a public rescue of pension funds by the government (especially when enrolment is mandatory rather than voluntary). A bail-out of pension fund members would always be an available policy option, but should always remain the last option for two well-known reasons: it is costly to taxpayers and it may encourage opportunistic behavior by pension funds in the future.

One possibility is a more active role of the state in providing insurance against grave systemic risks. Tail risk in financial markets is similar to what is called aggregate longevity risk, that is, the risk of a whole cohort living longer than expected. Of course, providing insurance against catastrophic events destroying financial wealth was the reason why PAYG social security systems were introduced, most of them in the aftermath of the Great Depression and of the hyper-inflation following WWII. However, social security systems came under strain in most developed countries for several well-known reasons. In particular, the sizeable (and largely unexpected) increases in longevity, coupled with a substantial fall in fertility rates, put the financial sustainability of traditional PAYG schemes under question in many countries, unless substantial cuts in benefits and increases in payroll contributions were introduced (and the effective retirement age increased).

Yet, there are other ways to provide workers with a collective protection against financial market risks. One example, is the plan put forward by Franco Modigliani and co-authors. The proposal is to introduce a single funded DC pension scheme, which would enter in a swap arrangement with the Treasury each year so that the risky pension fund returns are exchanged with a guaranteed rate of return.

One merit of the Modigliani proposal is that workers with similar characteristics would be granted similar rates of return on their savings. The scheme would put the burden of aggregate financial risks due to events that cannot be hedged at a cohort level within a truly intergenerational exchange framework. Obviously, this would call for the introduction of measures to limit the burden on future generations caused by high and rising levels of public debt.

4. Strengthening the Global Financial System

We need cheaper and safer pay-out products

An adequate level of pension wealth at retirement is necessary but not sufficient to guarantee adequate living standards during the retirement years. Indeed, it is important to ensure that such wealth is properly decumulated. Therefore, the most important choice is the extent of annuitization.

It is difficult not to agree that annuitization of a significant fraction of private pension wealth is highly advisable. It is indeed advisable both for the individual and for the government.

At the moment, annuity markets around the world are rather thin, except in a handful of countries in which private pensions are more developed (such as in the UK, Switzerland and Chile). However, in a few years' time the number of pensioners for which annuities or annuity-like products will provide a significant fraction of retirement income is most likely to increase. This is due both to the increased importance of private pensions and to the fact that, in many countries, the law now mandates that a minimum portion of a worker's pension fund capital should be annuitized at retirement (or it provides strong tax incentives to do so).

As the demand for annuity products takes off, an efficient and well-functioning annuity market will become soon a policy priority. Policy action in this field should target two broad goals. First, in order to reduce annuity prices, three main determinants should be addressed: adverse selection costs, which are quite significant according to most existing studies; the premium for the aggregate longevity risk; and a possibly insufficient degree of competition. Second, payout products that protect at least in part against the risks that materialize during the

decumulation phase should be made more widely available. At the moment, for example, in most countries annuity payments are not indexed to prices.

To keep the price of annuities as low as possible, governments and regulators should first of all promote the timely release of accurate mortality tables, as this would help to reduce the aggregate longevity risk.

Furthermore, in order to foster competition and keep profit margins low, product prices and characteristics should be as transparent and comparable as possible. To guarantee a higher degree of transparency, both about prices and about product characteristics, it would be advisable to follow the path of countries such as the U.K., where the Financial Services Authority hosts a web platform in which the different products are compared, or Chile, which has recently adopted a similar system.

With reference to the inadequate range of available instruments, governments should first of all remove the obstacles that prevent companies from offering inflation-indexed annuity products. In particular, they could consider providing more inflation-indexed and ultra long-term bonds.

The market for reverse mortgages should also be promoted. Reverse mortgages and similar products transform into an annuitized stream of payments a component of the wealth of elderly people which is already significant in many countries where private pension wealth is still small. There is a risk that the crisis, and the sharp drop in house prices, will give a hard blow to these products, which grew significantly in the years of the housing boom. Better-designed arrangements, in which the risk is shared more equally between the homeowner and the intermediary will also help.



4. Strengthening the Global Financial System

The main reason why there is an inadequate supply of instruments for hedging against the risks incurred in annuity provision (longevity risk, inflation risk, financial market risk) is of course the lack of natural issuers, at least in the private sector. Due to their extended time-horizon, governments are a natural candidate to reinsure these risks.

But it is not clear to what extent they could take those risks onto their balance sheets. After all, social security systems are being reformed mainly to spare future workers at least part of the expected costs of population ageing (a concern that is also behind the introduction in several countries of the so-called notional defined contribution schemes for public pensions). One might argue, however, in favor of some limited form of guarantee to annuity providers, to cover only the risk of a “catastrophic” tail event. The use of public resources to provide an insurance against the collective component of longevity risk should then be matched by a more balanced composition of pension pillars that would limit the exposure of the government to the idiosyncratic component of this risk and encourage financial markets, to play a larger role for its insurance, even if with a possible smoothing role by the state along the lines discussed in the previous section.

The state could even intervene directly as an annuity provider. This would be likely to reduce administrative costs (thanks to economies of scale) and adverse selection costs (due to a wider pool of clients), and correspondingly reduce prices (mainly because profit mark-ups could be kept to zero).

5. Globalization, Growth and Inclusiveness



5. Globalization, Growth and Inclusiveness



Challenge

Entire countries as well as certain socio-economic groups within countries have been excluded from the benefits of globalization. The rise of “modern” economic activities typically benefits a limited number of people, thereby producing considerable inequality. This pattern may not prove sustainable if it does not become more inclusive.

How can the benefits from globalization be shared more equally within countries? How can we generate sustainable growth? In sum, how can we make growth more inclusive?

GESolution 1

To make growth inclusive, especially in poor countries, put emphasis on providing the legal and institutional framework to enable people to engage in commerce and entrepreneurship. This can take many forms, such as giving people secure property rights, microfinance and mesofinance.

One important way of improving employment creation is by providing access to business infrastructure as well as guaranteeing a legal and institutional framework for strengthening and enhancing entrepreneurial activities. It is especially important to encourage the development of legal and financial institutions that serve the poor.

At a very microeconomic level, access to the legal system, property rights and services such as savings channels and finance services (which collectively determine the ability of people, especially poorer people, to engage in commerce and carry out entrepreneurial ventures) is crucial for making growth more inclusive.

5. Globalization, Growth and Inclusiveness



GESolution 2

Remove obstacles to labor force participation by counteracting discrimination and investing in education across the entire population. Such education investment should aim to promote equality of opportunity; it can be financed through redistributive taxation, thereby promoting income equality. Women should be given equal access to schooling and subsequent employment through government transfers, access to finance and other support.

The priority for achieving a more inclusive pattern of growth is to ensure “equality of opportunity”. This includes the absence of explicit exclusionary provisions in law or society and access to education and job opportunities. While some income inequality might be inevitably linked to high and sustained growth rates, it is vital to counter the long-run exclusion of certain segments of society.

GESolution 3

To spread growth across regions, remove obstacles to labor mobility, such as through widespread education and the creation of special economic zones, with less employment regulation than in the formal

sector. Where there are natural limits to labor mobility, provide public goods that support regional development, financed through redistributive taxation.

Growth will not occur uniformly over regions. But some combination of mobility (where people move to employment opportunities) and public investment at the regional level to increase growth and compensate for less than complete aspects of mobility are important. Improving regional and local government effectiveness is a key ingredient for successful sustained growth.

GESolution 4

Protect people in transition between jobs through training, income support and access to essential basic services like education. Do not try to protect people by protecting companies and jobs.

Protection in transitions created by the turbulence of the competitive process and the dynamics of structural transformation might be important for smoothing periods of adaptation. Protection might include income support and rock solid access to basic services like education and health rather than protecting companies or jobs.

5. Globalization, Growth and Inclusiveness



Background

Globalization has been the engine of growth and prosperity in many countries in the past 30 years. Yet some of the poorest countries in the world have made little progress or even experienced economic decline. Even within many successful countries, the gains from increased integration have not been broadly shared. Almost universally, the process of globalization has led to increasing inequalities. Some of these dynamics are inevitable, others amenable to policy interventions.

Inclusiveness is crucial for sustainable long-run growth, and deserves to be a priority in growth strategies and policies. The Commission on Growth and Development noted that all the known cases of sustained high growth have large amounts of incremental productive employment as a prominent feature and thus have great potential for reducing poverty.

Despite this fact, there is both rising resistance to globalization and rising income inequality in much of the advanced and developing world. Not all or even most of the rising inequality is attributable to globalization at least in advanced countries. Nevertheless, globalization is often identified as the culprit.

Regardless of the origins of rising income inequality, failure to deal with equity and inclusiveness is a policy mistake in both developed and developing countries. An open global economy is the fundamental underpinning of the sustained high growth and poverty reduction that has occurred in the past 30 years and more generally in the post-war period.

Panelists



Danuta Hübner
European Commissioner for Regional Policy



Danny Leipziger
Vice President, Poverty Reduction and Economic Management Network, The World Bank



Arun Maira
Senior Advisor, Boston Consulting Group India



Moderator: Michael Spence
Nobel Laureate; Professor Emeritus of Management, Stanford University

2. The Global Society

Overcoming Fragmentation

1. Tackling Social Fragmentation
2. Inequality and Globalization
3. Tackling the Ageing Syndrome
4. Financing Health Care for the Poor
5. Designing Immigration Policy

1. The Global Economy

1. Skills for the New Wave of Globalization
2. Creating Employment
3. Enabling Poor Countries to Share Knowledge
4. Strengthening the Global Financial System
5. Globalization, Growth and Inclusiveness

GES | Solutions
2008/09

3. The Global Polity

1. Dealing with Terrorism
2. Empowering the World's Poor Countries
3. Fighting Corruption in Developing Countries
4. How Globalization Transforms the Welfare State
5. Reconsidering the International Trading System

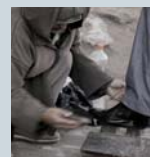
4. The Global Environment

1. Global Policy Responses to Climate Change
2. Food versus Fuel
3. Energy versus Climate Change
4. Securing Access to Energy
5. Preventing Food Prices from Creating Poverty and Malnutrition
6. The Crisis of Water Management

Content



1. Tackling Social Fragmentation	136
Challenge	138
GESolutions	139
Background	145



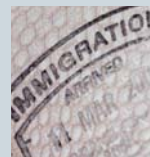
2. Inequality and Globalization	148
Challenge	150
GESolutions	151
Background	155



3. Tackling the Ageing Syndrome	158
Challenge	160
GESolutions	161
Background	166



4. Financing Health Care for the Poor	168
Challenge	170
GESolutions	171
Background	176



5. Designing Immigration Policy	178
Challenge	180
GESolutions	181
Background	187

1. Tackling Social Fragmentation



1. Tackling Social Fragmentation



Challenge

Globalization and social fragmentation are the two controversial issues that will determine the future world order. Globalization promises to yield substantial benefits for all participating countries, but not necessarily for each individual or each group within countries in the short term. Groups of people may suffer, especially in emerging markets where social security nets cannot provide for compensation and smooth the growing gap between rich and poor. But is it high time to tame the markets to stop social fragmentation? Or quite the contrary, do we need more market liberalization to overcome conflicts that have their seeds in a vicious circle of poverty and oppression?

Globalization makes small countries economically viable. As a result, globalization represents an opportunity for small countries to develop and become autonomous. Therefore, an immediate consequence of globalization could be claims for political separatism of small regions. Hence the peaceful disintegration of large states becomes a challenge in the globalization process.

Could the reduction of centralization, especially of large states, be a channel for coping with the challenges of globalization in social fragmented countries, allowing ethnic groups to achieve their desired autonomy without the consequences of violence?

GESolution 1

Support the creation of institutions that enable poor countries to benefit from globalization by strengthening global institutions that facilitate economic integration and debt relief, and granting poor countries access to developed countries' markets, especially in agriculture.

Global institutions – primarily the WTO, the International Monetary Fund, the World Bank and the United Nations – have to be strengthened again. These institutions should support developing countries by encouraging their integration into world markets and by brokering a debt relief program to facilitate new cooperation without the burdens of the past. The developed countries should grant developing countries access to their markets, especially the agricultural markets, and the OECD countries should expand international development partnerships.

Governments should resist running away from the distributional consequences of globalization by hiding behind protectionist walls. The detrimental effects of such an approach on national income levels would be tremendous, and labor markets would be affected by rising unemployment, which would add further to social fragmentation. Quite the contrary, openness to globalization can be expected to generate the private and public revenues required to mitigate social fragmentation. An important incentive to open up to the globalization process is the prospect of integration into a prosperous community of states such as the EU, serving as an anchor for internal and external stability.



1. Tackling Social Fragmentation

GESolution 2

Through aid and political process, help poor countries help themselves by encouraging them to invest in social security and education systems.

The developing countries have to make a contribution of their own to tackling social fragmentation. A precondition for poor countries benefiting from globalization is building up stable democratic institutions and sufficient social security systems as well as investing in education at the different skill levels.

Poor countries should not shield themselves from globalization but open up and develop a suitable business climate that will attract investments, bringing in new technologies. In the course of growing prosperity, these countries would become able to develop a suitable social environment, thus gaining internal stability and establishing a balance of interests.

GESolution 3

Consider successful models of federalism, supported by the principle of subsidiarity, as blueprints to contain social fragmentation.

Successful models of federalism, such as the U.S. and Switzerland, should be considered as political blueprints to achieve a balance of interests between ethnic, social or religious groups within large and heterogeneous countries. The principle of subsidiarity should rule domestic governance and serve as the key for achieving internal stability and successfully building supranational communities.

For example, in the U.S. of the 19th century, there was a clash of interests between different religious and ethnic groups, especially along the differences of Protestant, Catholic and Jewish communities. These divisions gradually eroded both economically and socially. This coming together occurred because the religious groups shared work and schools as well as identification with a common community – that of the U.S. nation.



1. Tackling Social Fragmentation

GESolution 4

Accept some redistribution of globalization profits to finance a social security net.

In the long run, new thinking based on the insight of comprehensive global responsibility is desirable. It would mean sacrifices in favor of the poor members of the global society, comprising the interests of socially deprived groups as well as future generations in the development of global networks of cooperation and the establishment of mutual trust.

As one consequence, globalization profits should be partly redistributed to finance a social security net. The indispensable tax burden has to be accepted as an insurance premium for political stability.

GESolution 5

Use educational institutions, notably universities not just to develop marketable skills, but also to create awareness of our comprehensive responsibility to overcome social fragmentation through the acknowledgement at our common destiny.

To introduce new thinking about global society, educational institutions may serve to spread the idea of comprehensive responsibility. Most of the future leaders in politics and economy are passing through university courses. At this critical moment in their development, they can be impressed indelibly by role models that mirror global responsibility.

The idea of comprehensive responsibility is a vision that will need much time to take shape. A time horizon of at least three generations appears to be realistic. A generation dedicated to the solution of fundamental environmental problems might become a driving force for the implementation of this idea.

1. Tackling Social Fragmentation



GESolution 6

Promote political and social tolerance for the peaceful disintegration of large states and reintegration of regions.

In a world of global markets, large centralized nation-states will be increasingly threatened from below by regional separatism and from above by the growth of “supranational” institutions akin to the EU that try to capture economic advantages of scale. Therefore, the peaceful disintegration of large states is a further challenge in the globalization process.

Allowing the disintegration of states and the creation of new nations will be the natural consequence of an increase in economic autonomy. The creation of small homogenous nations as members of large areas of “imperial size,” which provides public goods such as defense, security, trade agreements, communication networks and common currencies, could be an option to ensure that the globalization process does not cause violence.

Background

Globalization is considered to be a “trigger” for social fragmentation and conflict, but it is not an underlying cause. Public institutions that can ensure social security nets and the participation of all members of society in the benefits of globalization are key to tackling social fragmentation.

In particular, well-established democratic institutions are crucial. The higher the level of political rights and civil liberties in a country, the higher are the costs of social conflicts and the less prone the country is to social conflicts. In multi-ethnic societies, proportional democracies that provide a higher level of political inclusiveness turn out to have a lower probability of social conflicts than majoritarian democracies. But if ethnic groups are geographically concentrated, the political institutional framework is more efficient if democratic institutions are organized as federal bodies that avoid the exclusion of any relevant communities.

Furthermore, the opening of a country and its integration into global or regional communities promotes consolidation of democratic institutions, thus alleviating the social pains of globalization. Openness ensures economic recovery and democratic institutions.

To bring about a sustainable change in the world’s value system in favor of a comprehensive global responsibility, the values of a global society should be developed from childhood, as traditional social values and cultural norms are difficult to change.

1. Tackling Social Fragmentation



Panelists



George A. Akerlof
Nobel Laureate; Professor of Economics,
University of California, Berkeley



Richard Ernst
Nobel Laureate; Swiss Federal
Institute of Technology Zurich



Mehmet Şimşek
Minister of State for Economy, Turkey



Marta Reynal-Querol
Associate Professor, Universitat Pompeu Fabra

2. Inequality and Globalization



2. Inequality and Globalization



Challenge

Inequality has long been a problem in developed and developing countries, but the continuing technological changes at the workplace may be creating a new dimension of inequality. Information technology is likely to have a bigger impact on the productivity of the talented and thus on their income. New technological equipment for knowledge workers and communications innovations tend to reduce the need for “helpers” and, at the same time, have increased the intensity of competition for mundane tasks and standardized products, in some cases on a global scale.

What are the implications of these developments for the fight against poverty and inequality? Are we moving towards an income distribution with great rewards for talent and otherwise stagnating incomes? Do we need new forms of insurance against income loss, new forms of redistribution? Can governments mitigate inequality in a self-adjusting way?

GESolution 1

Change educational systems to emphasize analytical thinking and problem solving instead of rote learning.

Our current educational systems have evolved in response to the needs of a strong manufacturing sector; future educational systems may evolve as a response to the needs of a strong “neurofacturing” sector. Neurofacturing is creative work that used to be done with pencil and paper, but is now done with knowledge equipment that greatly amplifies the productivity of the talented. Capabilities like getting to work on time and learning to follow orders, which are emphasized in the present school curricula, appear to be less helpful for neurofacturing. Thus, if school curricula do not change, we will probably continue to see an inadequate match between people’s skill and the aptitudes demanded by globalization, as well as an associated rise in income inequality.

A photograph showing a person's hands working on a shoe, possibly a shoemaker or a craftsman, using a tool on a wooden block.

2. Inequality and Globalization

GESolution 2

Encourage educational systems to celebrate students' idiosyncratic abilities.

For example, educational systems should allow for multiple tracks towards creative craft jobs of all varieties and at different levels of complexity in order to enable people readily to find a niche in the global economy. Such jobs will often share physical and mental components. Talent and intellectual ability are highly multi-dimensional, and a one-size-fits-all educational system is not going to suit the abilities of most students that will be needed in neurofacturing.

GESolution 3

In developed economies, do not compensate the losers from globalization through protectionist measures, but rather through compensatory education and progressive taxation.

By laying an infrastructure and education foundation that is supportive of neurofacturing, an economy may move towards a specialization of production with little overlap with low-wage countries. Importing goods and services that are no longer produced within a country will not affect its domestic degree of inequality. To achieve such a favorable pattern of specialization, positive attitudes towards lifelong learning have to be internalized.

Rising inequality does not appear to be a problem of globalization; rather, it reflects the willingness or capability of governments to react. First of all, governments should not blame international trade or immigration as the prime cause of increasing inequality. Because technological change and not globalization lies at the heart of the problem, governments should not attempt to compensate the losers by protectionist measures but rather by educating and retraining the disadvantaged and taxing the income of the winners.



2. Inequality and Globalization

GESolution 4

Embrace a new yardstick for measuring wellbeing, putting less emphasis on material goods and more on personal relationships and social achievement.

A post-industrial economic system that heavily relies on neurofacturing seems destined to move towards a more unequal income distribution, notwithstanding any successful compensatory education and progressive income taxation. Both measures are not likely to be enough to offset the disappointment from the low wages that may result for a large number of workers from the transition from industrial to post-industrial economies.

A new yardstick for wellbeing would place less emphasis on material criteria such as our labor income or the speed and size of the car we drive. Instead, it would count, for example, the number of real friends we have and the social good that we do.

Background

Rising income inequality in many countries around the world has raised concerns about globalization as its primary cause. The reason is that the overall welfare gains and the distributional effects of globalization appear to be two sides of the same coin. New offshoring and outsourcing activities of multinational enterprises in various services sectors have further contributed to the impression that global competition may be the driving force behind stagnating wages and reduced employment opportunities in general, and especially of low-skilled workers.

But there is very little empirical evidence that the outsourcing and offshoring of standardized services by multinational enterprises have led to significant aggregate effects on domestic wages. The direct effects of globalization on wages for workers with different skill levels would come about by a change in the terms of trade, which is not taking place as yet. Hence the problem of rising inequality appears to be mainly driven by technological change, not by globalization as such.

2. Inequality and Globalization



This means that rising inequality would probably prevail even without the outsourcing and offshoring of impersonally delivered services. This is not to deny that closer global economic integration can strengthen competitive pressures in some parts of the economy (see “Skills for the New Wave of Globalization”).

Nevertheless, protectionism is not a solution for the problem of rising inequality, as emphasized in the section on “Tackling social fragmentation”, which also highlights the need for a new yardstick of wellbeing that emphasizes personal relationships and public service instead of individualistic materialism.

Panelists



Edward E. Leamer

Professor of Management, Economics, and Statistics,
and Director of the UCLA/ Anderson Business Forecast Project



Daniel L. McFadden

Nobel Laureate; Professor of Economics,
University of California, Berkeley



Michael Spence

Nobel Laureate; Professor Emeritus of Management,
Stanford University



Moderator: Prannoy Roy

President, New Delhi Television

3. Tackling the Ageing Syndrome



3. Tackling the Ageing Syndrome



Challenge

As populations age in many countries, there will be fewer prime-aged people to care for the growing numbers of the elderly. Increasing pension and medical care expenditures will raise governments' or families' financial burden. Higher taxation on earned income to cope with the increased financial burden runs the risk of impairing people's incentives to work and acquire education throughout their lives.

Policy-makers face a three-pronged ageing syndrome: pension systems, health care, and employment for all. We cannot design a pension system without reference to the health care costs and to overall employment conditions. Nor can we design a health care system or labor market regulations without taking account of their influence on pension finance.

Which joint reforms of pension, health and employment systems would enable ageing societies to maintain (or even increase) the living standards of all? Should these systems encourage the elderly to prolong their working lives and how should they do it?

GESolution 1

Give "working longer than before" the highest priority in reform packages to cope with the challenges of population ageing.

The most important measure is to remove the early retirement schemes in both public and private pension arrangements, which reduce the work incentives of older workers. An incremental increase in the eligibility age for pensions (with consideration of the physical and mental health development of the elderly over time) is probably of high relevance, but very difficult to implement politically.

In addition, further reductions in working hours should be avoided. Instead, it seems appropriate in some countries to increase weekly working hours again. In several countries, it is desirable to accompany this approach with policies to raise women's labor market participation, particularly by reducing their burden of care for children and the very old.

3. Tackling the Ageing Syndrome



GESolution 2

Encourage employers to retain their workers as they get older, such as by retraining, creating flexible working conditions, and granting tax subsidies.

Employers should recognize the advantages of keeping workers when they are getting older because of their valuable experience, know-how and “know-who”. They should also note the broad variety of instruments available to sustain the productivity of older workers at their disposal, for example, creating an appropriate working environment, more flexible working conditions such as part-time work, and the provision of further education for updating the capabilities and the knowledge of the older workers. Such arrangements can help older workers coordinate the working lives and private lives more easily, taking account of their health condition.

Tax subsidies are an option for enhancing the incentives for employers to keep their ageing workers. The magnitude of these subsidies should be related to opportunity cost of supporting older workers in retirement.

GESolution 3

Promote further health care reform to enhance the productive use of older manpower, emphasizing not only physical health problems but mental health problems as well.

Health expenditures are an investment for a longer healthy life – both for a longer working life (which should encourage employers to invest more in the health of their workers) and a healthier retirement (which should encourage workers to invest more in their own health).

Health care reform is crucial. Although health care costs tend to increase substantially with technological progress, the extended productive use of older manpower may mitigate the increase in costs. It is also essential to improve the efficiency of health care management.

Health care reform should also go beyond research on new medicines for physical health problems, paying more attention to the mental health problems that have become more prevalent in the 21st century.

3. Tackling the Ageing Syndrome



GESolution 4

Complement public pension systems with private insurance to raise opportunities for retirement saving and offer individuals more alternatives in health care.

The burden on future working generations is likely to increase as old-age dependency ratios rise substantially. If saving for retirement is increased, some positive effect on output per capita may result from the higher capital/labor ratios that result from higher savings, and the social conflict inherent in “pay as you go” systems may be reduced.

Within a dual system, more innovative financial products will extend individuals’ ability to design their own financial plans and accumulate their pension wealth according to their own interests. The provision of a stable, functional and innovative financial system is a first-order public assignment to cope with challenges of population ageing (see “Strengthening the Global Financial System”).

GESolution 5

Correct popular misconceptions about ageing through dissemination of information and research.

Informed discussions may help to combat widely held misconceptions about ageing. For example, it is a fallacy that keeping older workers will squeeze out jobs for younger workers: there is empirical evidence that keeping older workers actually encourages the creation of more jobs for younger workers.

Misconceptions about ageing may be more prevalent in economically backward regions or countries. To help these places cope with ageing problems, more developed regions or countries should share their knowledge. Researchers have an important role to play in translating results and giving policy advice to the general public as well as to politicians.

3. Tackling the Ageing Syndrome



Background

Population ageing is becoming a pervasive phenomenon not only in the developed world but also in many developing societies. The old-age dependency ratio in the more developed regions will roughly double to 33% between 2005 and 2025; in less developed regions, it will reach 13%.

Under current pension systems and with no changes in present work and retirement patterns, population ageing would dramatically increase the pressure on public finances. This will, in turn, translate into raising the financial burden on younger workers, and hence impair their work incentives, severely aggravating the financial problems of current pension systems and amplifying potential social instability.

Many countries favor policies to raise fertility or to encourage immigration to mitigate labor shortages. A more comprehensive institutional reform package would be to bring individual incentives in line with the requirements for effectively and efficiently tackling the ageing syndrome. But given differences between countries, there is no one-size-fits-all solution.

Because of the significant and long-lasting effects of population ageing on economic growth and social stability, there is an urgent need for political leaders to forge a common consensus between governments, companies and individuals across generations to keep potential for conflict at bay.

Panelists



Axel Boersch-Supan

Director, The Mannheim Research Institute for the Economics of Ageing



Anders Borg

Minister of Finance, Sweden



John J. Haley

Relations
President, CEO and Chairman of the Board,
Watson Wyatt Worldwide



Ignazio Visco

Deputy Director-General, Member of the Government Board, Banca d'Italia



David A. Wise

Professor of Political Economy, John F. Kennedy School of Government,
Harvard University



Moderator: Declan Curry

CEO, Wintershall Holding AG

4. Financing Health Care for the Poor



4. Financing Health Care for the Poor



Challenge

Across the world, 1.3 billion people have no access to effective and affordable health care. Low and middle-income countries bear 93% of the world's disease burden, yet account for only 18% of world income and 11% of global health spending.

What systems of infrastructure, education and training are required in poor countries to support a well-functioning health care system? What governance structures are necessary to encourage the right mix of public and private health care provision? What regulatory framework is needed to induce businesses to provide insurance, provision and finance for health in poor countries? How can the fruits of medical knowledge and technologies be shared among rich and poor countries without destroying incentives to generate more knowledge? What forms of international cooperation are conducive to the financing of health systems in developing countries? What international institutions are required to make health care for the poor an attractive opportunity for business?

GESolution 1

Broaden the medical base, especially in developing countries, by creating a “doctor of the practice” degree, whereby individuals can become rural medical practitioners by apprenticing with a physician, but without the extensive medical training. Help hospitals in developed countries to donate their old equipment to a central organization that will redistribute it.

With this lower barrier to the profession, there will be more practitioners in the field at a lower cost. Local knowledge consistent with domestic culture – and sustained by the local communities and civil society – could be incorporated.

GESolution 2

For routine check-ups and basic health care, provide free clinics with limited scope of treatments and services at a controlled cost.

They would not have the capabilities to conduct procedures or operations. The idea here is to create a standard for care that can be delivered at a predictably limited cost.

4. Financing Health Care for the Poor



GESolution 3

Keep a well-defined role for the public sector in financing and provision of parts of health care.

The public sector's role can be augmented with NGOs, which have supplied effective delivery models in a variety of successful cases.

GESolution 4

Make improving preventative health care a pre-condition for obtaining more advanced forms of health care.

Ideally, this would make the need for preventative health care more salient, promote the idea that people have personal responsibility for their own health, encourage them to take action on their own, and reduce the overall cost of health care.

GESolution 5

Soften intellectual property rights, at least with respect to life-saving drugs, while maintaining the safeguards that preserve incentives to innovate.

In this field, price discrimination models in favor of poor countries as well as subsidies for the latter are worth considering, provided however that safeguards against grey market transactions and arbitrage can be made effective. In addition, "advance market commitments," which combine free access for poor countries with third-party provision of research incentives, could be promoted (see "Enabling Poor Countries to Share Knowledge").



4. Financing Health Care for the Poor

GESolution 6

Establish an international health fund to support a public-private health partnership for developing countries.

The enormous mortality and morbidity burden in the poorest developing countries can only be addressed by improving access to health care via a concerted, partnership-oriented strategy that is supported globally with financial resources as well as know-how about good practices, and with national and community efforts to increase poor people's access to essential health services. To promote efficiency, priorities for the fund's tasks should be clearly defined, for example, with respect to preventative care, control of diseases or providing prime treatment.

GESolution 7

Foster non-government, community-based health care insurance.

Community-based health insurance is established through small local initiatives with voluntary membership. Programs have either been initiated by health care providers (for example, hospitals), NGOs or local associations. Schemes are generally limited to a specific region and insurance packages only offer limited coverage for certain medical treatments.

Community-based health insurance has the potential to integrate a large part of the rural population that would otherwise be left with no or very little health care. Besides offering moderate premia to their clients, such schemes can generally adapt better to the specific needs of their clientele than large government programs.

4. Financing Health Care for the Poor



Background

Health care issues have to be balanced in a complex field of tension between the human right to health, personal responsibility, scarce financial funds and commercial viability. In reforming health care for the poor, there are no universal solutions, matching the problems of all poor countries equally. Nor can immediate solutions be expected in the short term.

The provision of health care is a challenging task of combining areas of substantial economies of scale – for example, in the fields of diagnostics or medical technology – with a dispersed variety of differentiated local wisdom. So while the proposals all contribute to a global strategy to improve the access of poor countries' populations to health care, each one has to be adjusted to the case in question.

Panelists



Daniel Ariely
Professor of Behavioral Economics, Duke University;
Visiting Professor, MIT Media Lab



Harvey E. Bale Jr.
Former Director General, International Federation
of Pharmaceutical Manufactures & Associations



Hany El Banna
Founder and President, Humanitarian Forum;
Co-Founder and President, Islamic Relief



Daniel L. McFadden
Nobel Laureate; Professor of Economics, University of California, Berkeley



Frederik Paulsen
Chairman, Ferring Pharmaceuticals



Moderator: John Stopford
Dean, The Murmann School of Global Management and Economics

5. Designing Immigration Policy



5. Designing Immigration Policy

Challenge

The world is becoming more integrated through cheaper transport and communications. Yet large income differences persist between rich and poor countries. As a result, there continues to be considerable pressure for people to migrate from poor to rich countries, pressure that will only be exacerbated by the current economic crisis.

Migration between different developed countries and between different developing countries is also on the rise. There are potential conflicts of interest between the migrants and the population of the host country. The interests of migrants and the source population may also diverge.

Which policies in high-income immigration countries would help to ensure that international labor migration contributes to prosperity and equality of opportunity in both the host and source countries? How is high-skilled immigration to be managed? How should governments deal with irregular immigrants?

GESolution 1

Make immigration policies for high-skilled immigrants much more open, such as by introducing a “blue card” for immigrants to the EU. Don’t allow concerns about a possible brain drain to stop the opening of labor markets for high-skilled immigrants.

The success of hot spots of the knowledge economy such as Silicon Valley or the City of London relies heavily on high-skilled immigration and illustrates that high-skilled immigration can create jobs for natives and have a positive impact on public finances. Efforts to introduce a “blue card” that grant high-skilled immigrants access to the entire EU labor market are welcome.

In an EU-wide system designed to attract high-skilled immigrants, some EU countries will be more attractive than others. Therefore the national labor markets effects of a blue card system are difficult to predict. In fact, the proposed blue card system is more of a general “human capital accretion” mechanism rather than a system for filling high-skilled positions.

In countries that have such programs, such as Canada, there is evidence of substantial under-employment and underuse of skills by points tested high-skilled immigrants. This can be expected to be repeated in the EU unless a concerted effort to verify and recognize credentials and qualifications is undertaken in tandem with the launch of a blue card program. As a result, any future blue card system should be regarded as simply complementary to existing national programs for high-skilled immigration. Not all countries have a significant pool

5. Designing Immigration Policy

of potential migrants outside of their borders who speak the national language. This fact limits the potential effectiveness of the European blue card.

In some countries, there is a case for speeding up processing procedures for work and residence permits.

The impact of high-skilled emigration on source countries is ambiguous. In countries with extensive post-secondary education capacity, the potential for better earning opportunities abroad may act as an incentive to acquire more skills and may thus improve the overall skill level even of the non-migrant population.

Furthermore, labor markets in many developing countries do not provide productive employment opportunities for many bright young graduates. Nevertheless, aid aimed at increasing the supply of skilled workers in critical (high demand and high social value) occupations is desirable and should be coordinated among both developed and developing countries.

GESolution 2

Implement high-skilled immigration programs that rely on broad-based notions of skill, rather than the traditional notion of short-run “skill shortages.”

The narrow notion of “skill shortages” often used by immigration policies rests on somewhat shaky economic foundations and is excessively focused on labor market conditions in the short run. Forward-looking immigration policies – such as the Australian and Canadian points systems – based on multi-dimensional definitions of skill and a job offer promise better economic outcomes in the long run.

Present systems based on an employer guarantee for a sufficiently high salary as in Germany and the Netherlands are readily incorporated into such a points system by awarding high numbers of points for high salary guarantees.

The notion of “broad-based skill” needs further attention for it to fulfill its potential in practice. It must rest firmly on an understanding of the opportunities for labor substitution. For example, when there is a shortage of chemical engineers, it is not helpful to attract civil engineers, since the latter cannot be substituted for the former. Many high-skilled labor shortages are showing up in regulated professions, where the qualification requirements are very precise.

5. Designing Immigration Policy

GESolution 3

Redesign low-skill immigration policies through a combination of implementable restrictions and feasible border enforcement. Thereby channel illegal migration into legal employment.

Workable restrictions on low-skilled immigration and effective border enforcement are a political prerequisite for low-skill immigration policies. These are meant to ensure that low-skilled migration is redirected into legal channels.

Immigration problems that channel illegal migration into legal employment must recognize the reality of labor market needs, ensure that there are sufficient work permits to meet them, develop efficient recruitment methods, introduce means for employers to verify the legal status of job applicants and have enough workplace enforcement to ensure employer buy-in. Immigrants arrive not only because they can enter the country (legally or not), but because they can find jobs. The latter fact has been insufficiently addressed by policies.

GESolution 4

Create a standing commission on immigration and to adjust immigration levels flexibly in response to changing market and institutional conditions.

Market conditions relevant to immigration may change due to shifts in labor market institutions and in welfare state provisions, as well as business cycle movement and demographic variations. Furthermore, even when countries are very similar regarding their desired level of low-skilled immigration, their mix of irregular immigration, family-based migration and legal economic migration may be very different.

To adjust immigration policy in a timely manner when any of these relevant parameters change, each country should establish a standing commission on labor markets and immigration to facilitate the flexible adjustment of immigration policy to changing conditions. The standing commission should make recommendations to the government every two years.

5. Designing Immigration Policy



GESolution 5

Give irregular immigrants the opportunity and incentives to integrate through continuous “earned regularization” leading to naturalization.

Even with tighter controls and more deportations, developed countries will continue to be confronted with a substantial inflow and the resulting stock of irregular immigrants, most of whom are there to stay. The denial of this fact risks the accumulation of a massive integration problem just like the denial that the “guest workers” were there to stay. To address this problem, earned regularization programs leading to opportunities for naturalization of those irregular migrants who rapidly acquire language skills and display other characteristics conducive to labor market success and rapid integration are preferable both to the haphazard mass regularizations that have repeatedly occurred in some EU countries and to unrealistic and ultimately irresponsible political declarations about mass removals.

This would involve introducing additional conditions over and above those that need to be met by immigrants arriving through legal channels.

It is worth acknowledging that irregular immigrants have often jumped the queue ahead of those who were following the rules. Thus such immigrants need to satisfy additional conditions before being regularized, including the acquisition of language skills and other characteristics conducive to rapid integration.

Background

International labor migration increases world output and welfare by using available resources more efficiently. But the benefits are distributed unevenly and the main beneficiaries are not necessarily the voters who can influence the formulation immigration policies. It is important to attempt to resolve the underlying conflict of interests between the principal beneficiaries – migrants themselves and their home countries – and the decision-makers – host country natives whose gains from immigration are marginal.

If migration is successful, migrants themselves benefit substantially from higher wages, and recipients of remittances enjoy higher disposable incomes. Other source country households may benefit indirectly, for example, through higher government spending financed from higher tax revenue on growing financial flows. On the downside, skilled emigration might, but need not necessarily, lead to a brain drain that impedes economic development.

The benefits of immigration to host country natives is less clear. National income will increase, but the additional income will be earned mostly by the migrants themselves. Net benefits are likely if immigrants possess scarce skills that are complementary to natives’ skills or perform work that natives are unwilling or unable to do. At the same time, if immigrants compete with particular groups of natives in the labor market, the relative incomes of these latter groups may suffer.

5. Designing Immigration Policy

Since immigration policies are decided by elected politicians, viable reforms need to win majority political support among host country voters. How does this limit policy-makers' options? Are positive net gains to natives, combined with the absence of significant income losses for any organized social group, a necessary political condition for reform?

Although these requirements appear plausible, they may be too stringent. There are examples of policies without short-term benefits to native voters that are nevertheless tolerated. Much current immigration is based on legal (often constitutional) rights of family unification and attracts low-skilled individuals who will face foreseeable difficulties integrating into the host country labor market and society. Similarly, aid to poor countries may not be universally popular among donor country voters, but nevertheless it happens.

To bring the benefits to migrants and home countries into the host country policy-maker's calculus, could forward-looking policy-makers argue for greater coherence between immigration policy and foreign policy, including aid? Arguably, remittances by migrant workers are more effective, globally, in improving livelihoods than most aid.

Panelists



Aart De Geus
Deputy Secretary-General, OECD



David Frost
Director General, British Chamber of Commerce



Demetrios Papademetriou
President, Migration Policy Institute



Hillel Rapoport
Senior Lecturer of Economics, Bar-Ilan University;
EQUIPPE, University of Lille



Moderator: Jakob von Weizsaecker
Research Fellow, Bruegel

1. The Global Economy

1. Skills for the New Wave of Globalization
2. Creating Employment
3. Enabling Poor Countries to Share Knowledge
4. Strengthening the Global Financial System
5. Globalization, Growth and Inclusiveness

2. The Global Society

1. Tackling Social Fragmentation
2. Inequality and Globalization
3. Tackling the Ageing Syndrome
4. Financing Health Care for the Poor
5. Designing Immigration Policy

GES | Solutions
2008/09

3. The Global Polity

Creating Prosperity and Security

1. Dealing with Terrorism
2. Empowering the World's Poor Countries
3. Fighting Corruption in Developing Countries
4. How Globalization Transforms the Welfare State
5. Reconsidering the International Trading System

4. The Global Environment

1. Global Policy Responses to Climate Change
2. Food versus Fuel
3. Energy versus Climate Change
4. Securing Access to Energy
5. Preventing Food Prices from Creating Poverty and Malnutrition
6. The Crisis of Water Management

Content



1. Dealing with Terrorism	192
Challenge	194
GESolutions	195
Background	203
Qualifications	204



2. Empowering the World's Poor Countries	206
Challenge	208
GESolutions	209
Background	213



3. Fighting Corruption in Developing Countries	216
Challenge	218
GESolutions	219
Background	224



4. How Globalization Transforms the Welfare State	228
Challenge	230
GESolutions	231
Background	234
Qualifications	236



5. Reconsidering the International Trading System	238
Challenge	240
GESolutions	241
Background	244

1. Dealing with Terrorism





1. Dealing with Terrorism

Challenge

The manifestations of terrorism are as diverse as its causes. Some terrorist movements are rooted in nationalistic attempts to gain independence, while others are founded in religious fundamentalism. Still others seek to destroy political and economic systems of governance to overcome “imperialism” and exploitation of one social group (or culture) by another.

Terrorist groups either reject the option of seeking integration into the society in which they live or have concluded that this option is denied them. These groups develop codes of social conduct that are often in conflict with established social structures. This makes terrorist groups internally coherent and difficult to penetrate and disrupt. But the success of terrorist groups depends significantly on their being embedded in society.

Although effective intelligence-sharing and global policy coordination is needed to prevent and to minimize the damage to our societies from terrorist attacks, a strategy that focuses only on combating terrorist groups and fails to address society’s perceptions of their motivation and legitimacy and of the anti-terror policies undertaken by the governments is bound to fail. Just as terrorists rely on the support of the communities in which they operate and from which they recruit, effective anti-terror strategies must succeed in denying them that support.

GESolution 1

In dealing with terrorism, place emphasis on the state’s capacity to protect the public, permit the exercise of its freedoms, and maintain public services.

Revolutionary groups that use terrorist tactics seek to undermine the legitimacy of the governments they oppose, as a prelude to their overthrow. Terrorist attacks are intended to show that the government cannot protect the citizens, and that the victory of the revolutionaries is inevitable. As these attacks are directed at public infrastructure and take their toll on innocent victims, the terrorists come to be feared by many.

For revolutionary terrorist groups to succeed, however, governments must fail. In modern society, governments are expected to exercise a monopoly of violence allowing them to maintain public order, deliver public goods and enable the exercise of individual and communal freedoms. The aim of the terrorist group is to prevent this.

1. Dealing with Terrorism



GESolution 2

If the government succeeds in protecting the public and maintaining public services, then publicize the impact of terrorist violence on innocent civilians, in order to weaken the legitimacy of terrorist groups. At the same time, avoid overreaction.

By using this tactic in the 1970s, European governments progressively isolated German and Italian terrorists from those who might have supported them ideologically, and these groups were eventually defeated. As security has been restored in Iraqi neighborhoods and some public services provided, communities have begun to oppose al-Qa'ida's tactics and its violent attacks on civilians have become counterproductive. Many reports on acts of terrorism at present, however, focus on the impact they have had on the targets chosen by the terrorist groups. This builds credibility for the revolutionaries by publicizing their objectives and the results they are achieving.

Public perceptions of the risk that jihadist terrorism poses to societies in the West overestimate the present danger because few grasp the asymmetry in the capacities of al-Qa'ida and Western counterterrorism agencies. Meanwhile, statements that Western societies are at "war with terror" strengthen terrorist groups rather than weakening them. They reward al-Qa'ida in particular by building its reputation. The main risk to Western society at this point is not the harm that terrorists can inflict, but the harm that we may do to the values that define us, by over-reacting. What "over-reacting" means depends on a society's underlying values. Any reaction that implies a clear breach of these values can be considered an over-reaction.

GESolution 3

Govern through inclusive, legitimized political institutions, avoiding instrumental justification of violence.

If we are to persuade others to repudiate terrorism as a tactic, we must demonstrate first, that it is unnecessary, and second, that it is morally reprehensible and legally criminal. To achieve agreement on the second principle, we must act consistently on the first, ensuring that our actions match our rhetoric.

Ethnic, racial or religious diversity does not necessarily cause conflict. Claims by individuals and groups to political access and economic opportunity can be pursued through political institutions and mediated by civil society. When sharp political or economic disparities cause acute social uncertainty, when the political system is exclusive and civil society institutions fail, however, these cleavages can become major fault-lines and invite violence.

We must ensure and encourage the emergence and maintenance of inclusive, well-functioning political institutions. If we succeed in this, the instrumental justification for violent insurrection falls away, and it is easier to promote a moral and normative consensus proscribing it.

Terrorist attacks must be classified as reprehensible criminal acts, not acts of war. People who employ violence against civilians to induce terror, are criminals, not a special class of military combatants. They should be prosecuted as criminals under the criminal justice system, just as we prosecute leaders of organized crime syndicates who employ violence as a tactic.



1. Dealing with Terrorism

We must maintain the democratic principles and the rule of law on which our societies are founded. Sacrificing these principles on tactical grounds is dangerous and strategically counterproductive. We will not convince communities with sympathy for al-Qa'ida that we are acting morally if we abandon the fundamental principles that define our societies.

GESolution 4

Initiate a comprehensive international initiative to prevent weapons of mass destruction falling into terrorist hands.

The one exception to the proposition that Western societies overestimate the risk of jihadist terrorism at present, is the risk that diffusion of scientific knowledge and technologies may enable terrorist groups to deploy nuclear or biological weapons. The use of such weapons could cause unprecedented devastation and threaten international cooperation and global growth. All efforts must therefore be made to minimize this risk and international cooperation should be further strengthened to achieve this (see "Securing Access to Energy"). As a first step this could involve initiating an explicit club of nations with this aim, prioritizing the various weapons of mass destruction, taking into account the weapons that are particularly susceptible to terrorists use.

GESolution 5

Strengthen our ability to manage the financial risks of terrorism through a combination of public and private instruments: terrorism catastrophe bonds, mutual insurance pools, and government insurance support.

A more sophisticated allocation of roles between private and public sectors will help mitigate the financial effects of major terrorist events. Different approaches will be appropriate for different situations. But all should include self-insurance of a large part of the risk; reducing insurers' and reinsurers' costs of holding capital to strengthen their capacity to insure losses; dispersal of the risk through the use of terrorism catastrophe bonds; and mutual insurance pools in combination with government backstops.



1. Dealing with Terrorism

GESolution 6

Avoid policies and pronouncements that feed grievance. In pluralistic societies, pursue policies that integrate immigrants, rather than just providing passive welfare support.

Terrorist groups are only successful if they enjoy sympathy for their causes. Sympathizers perceive the injustice that such groups claim as justifying their struggle as real and demanding a response. Claims by al-Qa'ida that Muslims have an obligation to rise in a defensive jihad against Western political, economic and social dominance, and corrupt, irreligious Western mores. Broadcasts and websites couch the call in terms that require devout Muslims to respond, claiming that Islam, Muslims and Islamic lands are under attack by the U.S. and its allies. Jihad is said to be imperative "to repulse tyranny and restore justice and rights." The West needs to reflect on its own pronouncements and policy to ensure that it does not inadvertently feed these distorted claims.

Some actions taken in Iraq and Afghanistan and more recently in Pakistan and Syria have led those trapped in the crossfire between insurgents and counterterrorist forces to believe that the suffering of innocent victims is seen as mere collateral damage, justified by the West's concept of a

"war on terror." This strengthens terrorist groups, rather than weakening them. More sophisticated strategies, counterinsurgency tactics and communication are needed.

Systemic conditions in their societies have made some Muslims susceptible to these messages. The reasons differ from one region to another – Muslims in Europe, Saudi Arabia, Indonesia and Afghanistan are not all similarly motivated – but many who identify with jihadist causes experience alienation from their secular environments and a sense of hopelessness, and are attracted by the prospect of glory and religious salvation. Prospects for young, poorly educated Afghans, Syrians or Palestinians in the occupied territories have been poor in past decades, and anger and intense frustration can be channeled into radical utopian causes if life holds no promise.

Social and economic development of these communities will create opportunities and reduce the pool of potential recruits. At the same time, many European countries need urgently to develop strategies to integrate their Muslim immigrants more effectively into viable pluralistic societies.



1. Dealing with Terrorism

GESolution 7

Initiate a regional security regime for all the states of the Gulf and the Levant, aimed at mutual diplomatic recognition, gradual withdrawal of foreign forces, and nuclear nonproliferation.

The conflicts in Afghanistan, Iraq, Israel-Palestine, Lebanon, Syria and Iran are now entwined. The Quartet responsible for the Middle East peace process (comprising the US, the EU, Russia and the United Nations) should prompt the states of the region to initiate a regional security regime, incorporating all the states of the Gulf and the Levant, and eventually extending to Afghanistan. This should address:

- A comprehensive peace between Israel and all Arab states, premised on the birth of a politically and economically viable Palestinian state, recognition by all parties of Lebanon's independence and territorial integrity, and diplomatic recognition of the state of Israel by all Arab states.
- Stabilization of the situation in Iraq to allow for the withdrawal of the occupation forces and the transfer of full power and authority to a government representing all Iraqis.
- Averting a nuclear arms race in the region and moving towards the goal of a nuclear free, broader Middle East.

Background

Terrorism is as old as human history. But the globalization of terrorism is a recent phenomenon. Many governments are at a loss as to how to combat it. Despite massive counterterrorist activities, terrorist attacks in weak states such as Afghanistan and Iraq have continued and the threat of occasional attacks in developed countries remains high.

But the public perception of the threat of jihadist terrorism to Western societies seems to overstate the real damage it has caused in the Western world while understating the damage suffered in developing countries. After 9/11, there were only two significant jihadist attacks in the West: those in Madrid in 2004 and London in 2005. Many plots were uncovered and foiled, inter alia in Canada, Germany and the U.K., all of which reflected excellent intelligence and police work.

But the number of Muslim victims of terrorism rose sharply in Afghanistan, Iraq, Pakistan and elsewhere in the Muslim world, without governments being toppled. As a consequence, al-Qa'ida has lost support. Public opinion has turned: opinion polls in Afghanistan and Iraq show that large majorities are opposed to the "slaughter of the innocent."

1. Dealing with Terrorism



Qualifications

One panelist argues that terrorism is not caused by political or social distress or by economic grievances. Instead, terrorists are fighting for public recognition and their best reward is media attention. He suggests that the grievances alleged by terrorist groups as justification for their activities are simply successful marketing strategies that achieve extraordinary levels of recognition for some terrorist groups. The solution is to deny them this recognition.

Panelists



Mathew J. Burrows
Counselor, National Intelligence Council



Sean Cleary
Chairman, Strategic Concepts



Bruno Frey
Professor of Economics, Institute for Empirical Research in Economics, Zurich



Louise Richardson
Executive Dean of the Radcliffe Institute
for Advanced Study,
Harvard University



Moderator: Josef Joffe
Publisher-Editor, DIE ZEIT

2. Empowering the World's Poor Countries





2. Empowering the World's Poor Countries

Challenge

Roughly a fifth of the developing world's population lives on less than \$1 a day. Most of these people live in countries with large inflows of aid and sometimes even larger revenues from natural resources. Yet poor governance structures have prevented effective use of these funds. Dealing with these problems involves a combination of a variety of strategies involving local governments, civil society, the private sector and the international community.

What are the largest obstacles to development and how can they be tackled? What are the most effective ways to "make poverty history?" How can governments be transformed to be held more accountable? How should public services be provided? What combination of development strategies is required to make a decisive step in reducing global poverty?

GESolution 1

Create good governance by strengthening peer review, establishing international agreements on state and business transparency, and monitoring through the recipients of aid.

Good governance is crucial for all aspects of development. Bad governance, corruption and rent-seeking are still widespread and lie at the core of the development failure of some countries. Creating a vigilant civil society is an essential step to hold governments in the world's poor countries more accountable, as the fight against bad governance must be initiated jointly by local governments and civil society.

The African peer review mechanism, a voluntary self-monitoring initiative by several African countries, is a promising example of a people-centered initiative. To manage the peer review and inculcate the spirit of accountability, private thinktanks should be set up to gather information from government and civil society. In addition, international agreements on state and business transparency are required to hold all involved accountable.

In a similar vein, if aid is to be effective, those to whom aid is given should be doing the monitoring. Aid presently goes directly to government, which becomes the player and referee in its own match. This needs to change by empowering civil society to have a far more critical role in the monitoring of how aid is allocated and spent.



2. Empowering the World's Poor Countries

GESolution 2

Scrutinize and monitor the spending of commodity revenue with the aim of promoting transparency and accountability.

For many developing countries, commodity revenues are a much bigger income source than aid. Currently, these revenues lie solely in the hands of governments. This makes the creation of good governance and the inclusion of civil society even more urgent and important. Only then can countries and their societies take full advantage of the commodity boom.

The Extractive Industries Transparency Initiative, introduced by Transparency International, could be used as a model for other industries and countries. The aim is to promote transparency, accountability, good governance and sustainable economic growth. Through the initiative, the use of funds earned from oil and natural resources are monitored and scrutinized.

GESolution 3

In countries with low governance standards, handle public services through an independent service authority, jointly managed by government authorities, civil society and donors.

In countries with low administrative capacities and bad governance, the provision of public services should not exclusively be done through public agencies. It is important that revenues from taxes, commodities and aid are spent effectively, but a system modeled on institutions in developed countries may not work. Rather, planning, allocation and delivery of public services should be handled by an independent service authority. Such an authority would be jointly managed by government authorities, civil society and donors, selecting the best provider of basic services from public and private companies, NGOs and churches.



2. Empowering the World's Poor Countries

GESolution 4

Invest in connectivity by creating a global marketplace for trade in tasks, along the lines of Ebay.

Poor countries can benefit from the global economy through offshoring and should not base their development on internal growth. But small firms in small countries do not know about opportunities from abroad and the rest of the world does not know about these firms.

A centralized global market place similar to Ebay could be created to facilitate trade in tasks. To this end, investment in internet connectivity is essential, so that small and medium-sized enterprises have a lifeline with businesses abroad to trade and invest.

Background

Empowering the world's poor countries requires a combination of self-help and external help. To benefit maximally from income sources such as commodity and tax revenues and foreign aid, good governance is crucial. Accountability is the key factor of good governance when it comes to spending these funds wisely. By empowering civil society and fostering bottom-up accountability to citizens, decision-makers face better incentives to act in accordance with the needs of citizens and businesses. Information flows from the bottom to the top enable governments to allocate scarce resources better and come up with innovative solutions.

Another important aspect of empowerment is integration into the international trading system. International trade has been identified as a deep causal factor of economic growth. In some of the world's poor countries, domestic demand alone cannot spur sustainable economic growth. It is therefore essential to integrate these economies into the world economy.



2. Empowering the World's Poor Countries

Panelists



Francis Appiah
Executive Secretary, Ghana National APRM Governing Council



Paul Collier
Professor of Economics, Oxford University



Peter Eigen
Founder and Chair of the Advisory Council,
Transparency International



Moderator: Kim Cloete
Parliamentary Editor, South African Broadcasting Corporation

3. Fighting Corruption in Developing Countries





3. Fighting Corruption in Developing Countries

Challenge

Poorer countries tend to be measurably more corrupt than richer countries. But the debate about causality is still open. Is corruption the single most important reason why many sensible reforms essential for economic development fail in developing economies, or does economic development raise demand for fighting corruption?

At a given level of development, what are the costs of corruption and the most promising means of removing corruption from institutions – in government administration, security forces and business? Does encouraging whistle-blowing produce desired outcomes? How can exit opportunities be provided for petty offenders? Are fostering transparency, advising citizens on how to make complaints and establishing institutions to handle the resulting cases promising solutions in practice? Are monetary incentives effective? Does cultural heritage render attempts to improve governance a futile effort? Is ethical training possible? What is the role of business in encouraging good public and private governance?

GESolution 1

Empower civil society – at the global, national and local level – to build coalitions against corruption. Use a holistic approach to fighting corruption, including an integrity system with elements such as whistle-blower protection and exit opportunities for offenders.

Coalitions between government, private enterprise and civil society organizations are required. Solutions have to come from inside countries by empowering civil society, by creating an anti-corruption culture and by creating governance structures that work.

A holistic approach to fighting corruption requires not only criminal sanctions but other elements of an “integrity system.” The most effective elements of a concrete integrity system will have to be tailored to the needs and opportunities of the society it is designed to protect. They may include whistle-blower protection and exit opportunities for offenders and other solutions suggested by the organizers.



3. Fighting Corruption in Developing Countries

GESolution 2

Stop global companies from bribing decision-makers in developing countries.

To avoid getting compromised morally, external organizations have to prove that they fight corruption themselves – that is, in their own countries and with respect to their own enterprises acting in developing countries.

GESolution 3

Gain experience in measuring the costs of corruption at the micro level. Define good practice by improved indicators of corruption.

We need international support to create experiments to gather data to study the causes and consequences of corruption. To measure the costs of corruption and to define meaningful ways to make institutions less corrupt, it is essential to know, first, how corrupt buyers and sellers match, second, how they make and enforce their implicit contracts, third, what footprints their illicit transactions create, and fourth, what steps they take to cover them up.

Raising consciousness about the existence and harm from corruption is an essential precondition for fighting corruption. Indicators that allow countries to know where they stand in international comparisons have to be improved on a permanent basis. This information should be disseminated on a broad basis.



3. Fighting Corruption in Developing Countries

GESolution 4

Use checks and balances within government to fight systemic corruption.

The potential of transparency and defining good practice will not be sufficient for cases where corruption is systemic (where corruption has become the norm, so that political will cannot be counted on). In this case, potential drivers of anti-corruption policies have to be detected and supported.

A public counterpart – a congressional committee, a supreme audit authority, independent government agencies – can act as a catalyst. Even within an initially corrupted agency, good knowledge about the costs of corruption, improved transparency on the level of corruption, information on good practice, and support for bottom-up demand could create a dynamic public debate for less corruption.

GESolution 5

Do not restrict the fight against corruption to prosecution of senior officials involved in graft; instead fight corruption at all relevant levels. Deal with corruption politically and head-on, rather than through the finance of political competition.

Making the “frying of big fish” the ultimate measure of success in the fight against corruption strategically sets up the campaign to fail from the start. The prosecution of senior officials (especially top politicians) involved in graft has been rare even in developed democracies and, when achieved, it is at considerable political costs, which are mitigated by mature governance institutions. For Africa, we need to set new benchmarks of what success looks like in the fight against corruption.

Mobilization of resources to finance political competition has proved problematic and has had the effect of corrupting important political processes. Political campaign finance is a challenge even in mature democracies. In nascent democracies, it can become a crisis because sometimes egregious corruption finances politics. We need to address this head on – politically first.



3. Fighting Corruption in Developing Countries

Background

Corruption – the misuse of office for private gain – covers a wide array of illicit behaviors, including bribery, extortion, fraud, nepotism, graft, speed money, embezzlement, falsification of records, kickbacks and influence-peddling. Hence, researchers still encounter difficulties in estimating the costs of this phenomenon at the micro level. Creating experiments to gather data to study the causes and consequences of corruption is an area in which one can make a plausible call for action.

Raising consciousness about the existence and harms of corruption is an essential precondition for fighting corruption. Indicators that allow countries to know where they stand in international comparison have to be improved on a permanent basis. In combination with complementary information on other bottlenecks of economic development, good knowledge about corruption should stimulate and guide public debate.

In addition to quantitative information, good news should be spread. For even the most daunting problems, relative progress exists and success stories can be found. This information should be disseminated on a broad basis to break skepticism about potential reform efforts.

Although knowledge and transparency may be incomplete, this is no excuse for not acting on corruption where it clearly leads to welfare losses. But in cases where corruption is systematic and has become the norm, political will to implement solutions cannot be counted on. In this case, potential drivers of anti-corruption policies have to be detected and supported.

The list of potential participants for each of these stages is long: citizens' groups, the press, religious groups, business groups benefiting from anti-corruption measures, and international organizations. While this can be thought to strengthen bottom-up demand for less corrupt institutions from the private sector, a public counterpart can act as a catalyst.

External incentives (such as conditionality and penalties) are uncertain if not unlikely to help. Solutions have to come from inside countries by empowering civil society, by creating an anti-corruption culture, and by creating governance structures that work.

3. Fighting Corruption in Developing Countries

Panelists



Stefan Draeger
Executive Board, Draegerwerk AG & Co KGaA



Peter Eigen
Founder and Chair of the Advisory Council, Transparency International



Raymond Fisman
Professor of Economics, Columbia University



John Githongo
Vice President, Policy and Advocacy, World Vision International



Moderator: Daniel Schwammenthal
Editorial Page Writer, The Wall Street Journal Europe

4. How Globalization Transforms the Welfare State



4. How Globalization Transforms the Welfare State



Challenge

What are the implications for welfare state reform? What constellation of welfare state policies enables us to compensate the losers from globalization without harming incentives to work and acquire skills? What are the appropriate roles of the state, firms, households and civic organizations in the provision of welfare services? The current phase of globalization along with the associated technological advances has led to the geographic decomposition of businesses' value chain and far-reaching changes in the organization of production and work. These changes, along with other demographic and social changes, have called the effectiveness of the traditional welfare state into question. New demands are made of welfare services and new segments of the population have become vulnerable. The need to transform the welfare state is becoming progressively more urgent.

GESolution 1

Do not help the losers from globalization by protecting specific jobs or industries. Instead, use hiring and training vouchers to subsidize hiring or retraining of workers within firms.

Some workers may lose their jobs because of globalization, as their sector shrinks or is closed down. This process is necessary to guarantee an efficient allocation of resources.

Hiring and training vouchers provide incentives for firms to hire and retrain less productive or unemployed workers. This avoids the erosion of workers' skills; indeed, they acquire knowledge and improve their productivity. Training within a firm also strengthens the probability of a long-term relationship between worker and firm following the training program.

The potential success of this policy lies in the administrative details. Retraining is already offered by many government agencies, and this may lead to a high degree of misalignment and political economy problems.

4. How Globalization Transforms the Welfare State



GESolution 2

Encourage research to clarify the attributes of efficient and active labor market policies, including “individual welfare accounts.”

It is widely accepted that active labor market policies have a role in fostering labor market flexibility. But hitherto these policies have not been very well conceived or properly designed and have failed to achieve the necessary flexibility. Efforts to develop better designs for active labor market policies are worth promoting.

Like hiring and training vouchers, individual welfare accounts constitutes another policy that appears promising, though further evidence is needed to find the appropriate design. Again, the potential for success lies in the administrative details, which have to be set out very carefully. Personal accounts have been tested reasonably successfully in Austria, Malaysia and Singapore.

GESolution 3

Make increased use of value-added taxes, property taxes and carbon taxes to finance the welfare state without giving incentives for a brain drain of high-income workers.

A shift in the structure of taxes reduce disincentives to work and address existing externalities.

4. How Globalization Transforms the Welfare State



Background

Hiring and training vouchers targeted at the long-term unemployed and the unskilled unemployed can promote people's "employability", both by helping them become integrated into the workforce and enhancing their skills through "learning-by-doing". The provision of good quality education is important to enable people to seize new job opportunities more effectively in a changing economic environment. This policy may also enable those who are most hurt by globalization to find alternative employment opportunities through their own efforts.

Welfare accounts with redistributive provisions can improve people's adaptability, enabling the losers from globalization to turn themselves into winners. This process can be expedited through "individual welfare accounts": specifically an unemployment account (covering unemployment support), a skill account (covering public post-school education and training) and a retirement account (covering state pensions).

When people become unemployed, they would make withdrawals from their unemployment account instead of receiving unemployment benefits; when they acquire skills, withdrawals from their skill account would substitute for current government expenditures on post-school education and training; and when they retire, withdrawals from their retirement account would substitute for their current state pensions.

On retirement, positive balances on the unemployment and skill accounts could be transferred to the retirement account. People with negative account balances on retirement would receive no refund and pay no penalty.

To reduce inequality, the accounts of the rich could be taxed and the accounts of the poor could be subsidized. The increased mobility of individuals across countries increases the usefulness of international portability" of welfare-state entitlements, especially pensions and health care. In addition to current EU efforts to increase such portability, increased reliance on individual welfare accounts would be helpful.

4. How Globalization Transforms the Welfare State



Qualifications

The central disagreement concerns the need for compensating transfers to be made to those groups that lose when globalization undermines their value or destroys their jobs. Some panelists feel that the right response is to find ways of protecting people from losses. Others feel that this undermines the benefits of globalization and diminishes incentives to be flexible in response to competition.

For the latter view, there is nevertheless recognition that there needs to be a basic social safety net mechanism, one that includes a combination of a means-tested welfare and vigorous efforts in job retraining and placement to limit support for protectionist policies.

Panelists



Joaquín Almunia
Commissioner for Economic and Monetary Affairs, European Commission



Belmiro De Azevedo
Chairman, Sonae Group;
Chairman, Sonae Indústrias;
Chairman and CEO, Sonae Capital



Peter S. Heller
Professor of Economics,
Johns Hopkins University



Assar Lindbeck
Professor of International Economics,
University of Stockholm



Adam Posen
Deputy Director, Peterson Institute



Moderator: Evan Davis
Presenter, BBC's Radio 4's Today Programme

5. Reconsidering the International Trading System





5. Reconsidering the International Trading System

Challenge

The international trading system faces three interconnected developments: increasing heterogeneity of its more than 150 members; conflicting targets between non-discrimination and distributional fairness; and the inability to conclude agreements.

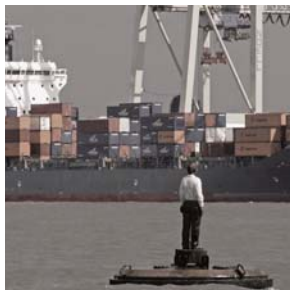
It is important to restore the reputation of the international trading system as the only global regulatory order that defends non-discrimination and less powerful member states against the pressure of vested interest groups and more powerful member states. How can the system be brought back onto its past successful track? How can the system be strengthened against emerging threats of protectionism? What is the right balance between regionalism and multilateralism?

GESolution 1

Focus the international trading system on the core task of facilitating market access in industrial goods, services and agriculture through lowering border barriers.

This can be done through a combination of traditional reciprocal concessions, long transition periods to alleviate adjustment and compensation measures, if necessary financial compensation. Simplifying the negotiating agenda by including only issues directly related to trade in goods and services – possibly focusing only on market access issues to start with – might be one way to facilitate negotiations. A step-by-step approach could be considered, since initial reactions to a market-access-only approach might not be attractive across the board.

5. Reconsidering the International Trading System



GESolution 2

Contain the mushrooming of regional and bilateral trade agreements by stricter rules for compliance with non-discrimination principles.

Free trade agreements should have a uniform percentage value added rule of origin while also having a clause enabling any other country willing to accept the terms of the agreement to join.

GESolution 3

Raise the thresholds required for implementing contingent protectionist measures (such as safeguard measures, dumping and subsidies), as well as quantifying the costs to consumers (for example, through a public benefit clause).

Contingent protection measures have become a major battlefield of protectionist interventions and create much damage to traders. Given the rapid growth in world trade and the rise of market penetration through imports (including trade in intermediates) in recent years, it is appropriate to raise the level of incurred damage to local producers through imports that are seen as “negligible.”

Furthermore, national cost-benefit tests should be extended to safeguard measures and should explicitly measure and consider the losses of private households and buyers of intermediates that would be incurred because of contingent protection measures.

GESolution 4

Sharpen the WTO’s dispute settlement mechanism through introducing options of cash compensation and rights of class actions.

The dispute settlement mechanism (DSM) has become an important asset of the WTO. But the party who is entitled to retaliate often suffers from deliberate delay strategies of the party who was found violating rules. This can be changed by options of cash compensation to aggrieved member states where compliance with DSM decisions is found unjustifiably delayed and by introducing rights of class actions (groups of countries can invoke the DSM).

5. Reconsidering the International Trading System

Background

The multilateral trading system faces considerable challenges in dealing with the issues of 153 members with diverse interests. But in these uncertain times, the multilateral system's rules and disciplines offer a needed sense of stability and predictability. Against this background, the merits of 60 years of multilateralism cannot be taken for granted; rather, multilateralism should be given the priority it deserves and policy-makers should endeavor to build on and improve the system.

This is why solutions leading out of the current highly unsatisfactory situation of the system must not address technicalities but fundamentals. This means more focus on essential issues of negotiations, more discipline against the flood of exceptions from most-favored nation treatment, containment of "grey area" measures, which raise transaction costs and risk premia for both exporters and importers and, finally, improving the authority of the WTO as the protector of the weaker partners against the abuse of economic power through dispute settlement.

The common thrust of the solutions is not necessarily for further liberalization, but for discipline, non-discrimination and transparency.

Panelists



Anne O. Krueger
Professor of International Economics,
School of Advanced International Studies,
Johns Hopkins University



Patrick A. Messerlin
Professor of Economics, Institut d' Etudes Politiques de Paris



Supachai Panitchpakdi
Secretary-General, UNCTAD



Werner Marnette
Minister of Science, Economic Affairs and
Transport of the Bundesland Schleswig-Holstein



Moderator: Dieter Pommerening
Special Counsellor of the Executive Committee, GES

1. The Global Economy

1. Skills for the New Wave of Globalization
2. Creating Employment
3. Enabling Poor Countries to Share Knowledge
4. Strengthening the Global Financial System
5. Globalization, Growth and Inclusiveness

2. The Global Society

1. Tackling Social Fragmentation
2. Inequality and Globalization
3. Tackling the Ageing Syndrome
4. Financing Health Care for the Poor
5. Designing Immigration Policy

GES | Solutions
2008/09

3. The Global Polity

1. Dealing with Terrorism
2. Empowering the World's Poor Countries
3. Fighting Corruption in Developing Countries
4. How Globalization Transforms the Welfare State
5. Reconsidering the International Trading System

4. The Global Environment

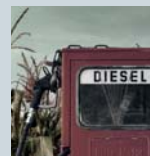
Dealing with Climate, Energy and Food Problems

1. Global Policy Responses to Climate Change
2. Food versus Fuel
3. Energy versus Climate Change
4. Securing Access to Energy
5. Preventing Food Prices from Creating Poverty and Malnutrition
6. The Crisis of Water Management

Content



1. Global Policy Responses to Climate Change	248
Challenge	250
GESolutions	251
Background	255



2. Food versus Fuel	258
Challenge	260
GESolutions	261
Background	267
Qualifications	268



3. Energy versus Climate Change	272
Challenge	274
GESolutions	275
Background	278



4. Securing Access to Energy	282
Challenge	284
GESolutions	285
Background	289



5. Preventing Food Prices from Creating Poverty and Malnutrition	292
Challenge	294
GESolutions	295
Background	299



6. The Crisis of Water Management	302
Challenge	304
GESolutions	305
Background	309

1. Global Policy Responses to Climate Change





1. Global Policy Responses to Climate Change

Challenge

Dealing with climate change requires global cooperation since the social costs of greenhouse gas emissions are independent of where the emissions occur. It is difficult to achieve broad participation in a global cooperative initiative to reduce emissions because of large economic and environmental asymmetries among world regions and the incentives to freeride in environmental negotiations.

How can the people of the world be induced to take account of the costs of their emissions? How can they best be encouraged to control their emissions and adapt to climate change? How can incentives for technological innovation and diffusion be created? How should the costs of policy collaboration be distributed among developing and developed countries?

GESolution 1

In the medium run, establish a global price of carbon, reflecting the environmental cost.

It is very important to move rapidly towards policies that induce decision-makers to pay the appropriate global price of carbon. This can be done through a carbon tax or a system of tradable permits, with revenues preferably used for climate protection. The price should apply to all emissions.

A wide variety of policy instruments are currently used to reduce emissions, including quantitative restrictions, biofuel targets, technological specifications and voluntary restraints. This solution implies that whenever such instruments fail to induce decision-makers to pay the appropriate global price of carbon, they are questionable and, at best, only stepping stones towards a better policy.

1. Global Policy Responses to Climate Change



GESolution 2

In the short run, include all countries responsible for substantial greenhouse gas emissions in an international agreement to reduce them; then make steady progress towards a globally inclusive agreement.

The core group must encompass at least 10-20 countries, including the European Union (EU), the U.S. and all the non-OECD countries responsible for major emissions, such as Brazil, China, India and Russia.

Developing countries do not currently face binding targets for emissions reductions. But for equity reasons, participation by non-OECD countries should not necessarily require large emission reductions in these countries, at least for the next decade. Alternatively, these countries could receive financial help in meeting their target commitments.

Policies must lead to an actual reduction of emissions globally at any time during the process. They must not induce relocation of industrial production from participating countries with modern, efficient production plants to non-participating countries with less efficient production.

Policies must not disadvantage producers in participating countries that use state-of-the-art production technology vis-à-vis producers in non-participating countries or laggard producers in participating countries that use less efficient production technologies.

GESolution 3

Give developing countries support in adaptation and adoption of best practice technologies.

A system with emission rights that converges towards equal per capita emissions would give substantial leeway for emissions to the developing countries. It would also incorporate a substantial financial transfer from the developed countries to the developing countries. Emissions from industrial production must be allocated to the place where the products are used.

It has been suggested that the developed countries should create a sufficiently large global fund to help developing countries meet their obligations. If this course were pursued, it would be necessary to ensure that efficient criteria for allocating funds were agreed in advance to avoid the dangers of needless bureaucracy and misuse of funds. The EU's Joint Implementation and the Clean Development Mechanism are a cost-efficient way to reduce emissions and encourage technology transfer and cooperation in a market-oriented context.



1. Global Policy Responses to Climate Change

GESolution 4

Support research and development and eliminate barriers to technology transfer.

Policies that encourage the development and deployment of innovative technologies should be implemented. Barriers to technology transfer should be removed. And replication of environmentally friendly technologies should be encouraged, for example, through domestic R&D policies.

There are currently large barriers to efficient technology transfer. For example, intellectual property rights are missing in many developing countries, and there are high investment risks and transaction costs in developed countries.

Background

The United Nations Framework Convention on Climate Change, agreed in 1992, lies at the heart of global efforts to prevent dangerous anthropogenic interference with the climate system. Much better known is the principal update, the Kyoto Protocol, which was agreed in 1997 and which introduced mandatory emission limits for the first time.

Countries' obligations under the Kyoto Protocol remain far behind the necessary actions to prevent climate change. The agreement only mandates minor reductions in emissions by the developed countries; the U.S. did not sign it; and fast developing economies like China and India do not face binding caps. More effective climate regimes must be developed for the post-Kyoto era after 2012.

A future international climate policy system must be both efficient (not wasteful) and equitable (fair). Efficiency implies meeting given environmental targets at minimum cost. Equity is concerned with the fair distribution of income and wealth.

1. Global Policy Responses to Climate Change



In the long run, every emitter must pay the same cost for each ton of greenhouse gas emissions. This requirement is necessary for efficiency reasons, for the simple reason that every ton of emissions has the same social cost, regardless of where the emissions occur.

Satisfying the efficiency requirement implies the long-run goal of a truly global agreement, with equal costs of equal emissions. The agreement must be inclusive in terms of countries (including developed and developing countries) and sectors (including agriculture, industry and services).

Panelists



Richard Evans
CEO, Rio Tinto Alcan



John Feldmann
Member of the Executive Board, BASF



Frank E. Loy
Member of the Boards of Directors,
The Nature Conservancy,
The Pew Center for Global Climate Change,
Environmental Defense Fund, and Resources for the Future



Thomas Sterner
Professor of Environmental Economics,
Gothenburg University;
President, EAERE



Moderator: Carlo Carraro
Chairman of the Department of Economics,
Professor of Econometrics and Environmental
Economics, University of Venice; Director of
Research, FEEM

2. Food versus Fuel



2. Food versus Fuel



Challenge

Partially replacing gasoline and diesel with biofuels requires agricultural products that compete with food production for the world's scarce resources of fertile land. A range of factors, including the growing world population and rising incomes in emerging economies, have led to the sharp rise in agricultural prices over the past few years (recently interrupted by the global financial crisis but not obviated in the longer run). But price rises have also been driven by the expansion of biofuels. To some degree therefore, the aim of protecting the climate is in conflict with the aim of combating hunger. But it also should be noted that in some cases, policy support for biofuels appears to have been driven more by the demands of special interest groups than by the need to preserve the climate.

How can we avoid the conflict between food and fuel? What is the right balance between food and fuel in the allocation of land? How can the burden of higher food prices on people in developing countries be alleviated? What is the appropriate role of technology (such as second-generation biofuels), taxes and subsidies and government regulation in dealing with this problem?

GESolution 1

Increase the efficiency of bio-energy production in poor countries by switching from traditional bio-energy use to modern bio-energy sources, thereby releasing more land for food production and providing inexpensive sources of electricity and from transport for economic development.

The potential for productivity improvements in food production outside the developed countries is huge. But there is a dilemma. The investment necessary for such improvements can only be financed if stable and sufficiently high prices make these investments profitable. Yet high prices are detrimental to the fight against hunger unless it is possible to raise the incomes of the poor.

Currently, many poor countries rely to a large degree on traditional bio-energy services in their overall energy consumption. It is not uncommon that in some countries more than 50 and up to 90 percent of the overall energy consumption originates from collected fuelwood and other traditional sources such as agricultural residues. Since in many remote areas modern fossil energy is unaffordable due to high prices and unavailable due to a lack of logistics, traditional energy is currently the only alternative, although a very inefficient one in terms of energy services and in terms of land requirements. In fact, land is often used in a combination of extensive animal grazing with the collection of traditional bio-energy. This requires a large share of the available land and leaves little room for food production.

2. Food versus Fuel



A switch from traditional bio-energy use towards modern bio-energy sources combined with advanced agricultural farming practices could increase bio-energy services significantly without requiring more land area. Modern techniques of bio-energy use rely on modern farming techniques such as advanced and less extensive cattle farming or modern tropical agriculture that combines food production with the maintenance of a forest cover thus both producing food and bio-energy on the same land area. Local distilleries for biofuels and more efficient appliances for producing heat and electricity can provide the opportunity the development of rural areas. Access to fuels is prerequisite for the access of rural communities to larger markets. The availability of electricity is also helps in improving the knowledge about modern farming techniques and the implementation of such techniques. Thus, the development of modern bio-energy uses in rural areas has the chance to improve agricultural productivity by both making more land available for food production and by providing inexpensive sources of electricity and transport fuel necessary for the economic development of remote rural areas in many parts of the world.

GESolution 2

Expand agricultural production on “degraded land” so as to increase the supply of food and bioenergy without compromising on biodiversity or carbon sinks.

The potential for increasing the area under cultivation conflicts with the preservation of biological resources and conservation of carbon that exists in the biomass and soils. These carbon pools could be destabilized through land use changes and could further increase greenhouse gas emissions.

But there are significant areas of what is known as “degraded land”, on which an expansion of agricultural production for bio-energy as well as food could take place without threatening biodiversity or destabilizing carbon stocks. Especially the above mentioned modern farming techniques and the opportunity for introducing irrigation due to a better access to energy services could convert so far unproductive and “degraded” land into a productive resource.

How many areas would be suitable and what proportions could be used in an economically sound way remains uncertain. The identification of these areas is a prerequisite for an expansion of bio-energy production that is not in conflict with the demands on land for food production and the preservation of biodiversity.



2. Food versus Fuel

GESolution 3

For poor countries, support improved access to energy, agricultural technology transfer, and improved management of strategic reserves.

The improvement of supply-side conditions for agricultural production in poor areas through the combination of improved agricultural technologies and a more efficient use of biomass for producing energy services could bring about a dynamic push for rural development. This would contribute to eradicating hunger and to providing non-fossil energy sources. The stabilization of world commodity prices through better management of strategic reserves could also improve supply-side conditions for local farmers and prevent the kind of social unrest that happened following recent price hikes in grain markets.

GESolution 4

Ensure that food and biofuel production are allotted their climate costs.

Reconsider government interventions in biofuels, and focus instead on the emissions reductions they can actually achieve; at the same time, ensure that food production is allotted its “climate costs.” Subsidies for biofuels should be determined as part of an integrated global policy to control concentrations of greenhouse gases in the atmosphere. In such a policy, all emissions should be treated in the same way, which means that any land use activity – food production or bio-energy production – should be subject to the same regulation of its emissions. This first requires a complete greenhouse gas balance of each activity, including cases where there are negative emissions because the activity increases carbon stocks in the land.

In principle, the cost of biofuels should reflect the social cost of the emissions they generate plus any other costs and benefits, for example, their impact on biodiversity. But this also needs to be done for food and fodder products, which have climate effects of similar size to bio-energy production.



2. Food versus Fuel

Carbon prices (through emissions taxes or a tradable permit system) are good instruments for adding the cost of emissions to the market price of biomass (food as well as bio-energy). They bring equal conditions to all land use activities but they also put the costs of climate protection through bio-energy in perspective relative to those of other mitigation activities.

R&D for second-generation biofuels (from cellulosic sources) should be supported on an equal basis as for other innovations to reduce emissions (for example, solar energy generation, hydrogen fuel cells, and carbon capture and sequestration).

Background

Biofuel production has been responsible for a significant part of the increase in feedstock demand in recent years. More than half of the increase in demand for grain and vegetable oil over the period 2005–07 was due to biofuels. Feedstock demand from the biofuels sector is potentially a permanent driver of future agricultural commodity prices. Projections show that with biofuel production kept constant at its 2007 level, wheat prices would be around 6%, maize around 12% and vegetable oil prices around 15% lower in 2017 than in the baseline projection, which assumes a doubling of biofuel production over the next 10 years.

One way out of this potential “food versus fuel” dilemma is the use of abandoned agricultural land to grow biomass. The available abandoned land worldwide on which biomass could be grown is estimated at 385–472 million hectares, which would account for 7–8% of global primary energy demand.

This potential is limited from a global perspective but not from the perspective of developing countries, where a large share of primary energy needs is already met through traditional biomass. These needs could be met more efficiently and without additional demand on land by switching to modern biomass grown on abandoned or degraded land.

2. Food versus Fuel



Qualifications

by **Robert Vierhout**, *Secretary General, European Bioethanol Fuel Association*

1. There is no causal relationship between increased biofuel production and high food prices. The present reality proves this case: Since mid 2008 prices of raw materials came down rapidly to the level of early 2007 prices whereas the global production of biofuel did further increase. And this development seems to be sustainable: Recently released material from the U.S. Congressional Budget Office (CBO) sees corn prices heading for a decade-long slump below US\$ 4 per bushel. Corn prices, according to the CBO, are expected to stay low even as total use rises by 18% by the end of next decade. This will be achieved thanks to yield increase, which is a crucial element when analyzing the food and fuel issue.
2. Biofuels can be produced without conflicting with food production or biodiversity. Former set aside land could be brought back into production as well as abandoned land and land that does release less carbon than can be saved by the biofuel. A very important measure is to increase yields, both the agricultural yield per hectare as well as the ethanol yield through the utilization of straw or corn stover and more efficient process technologies.
3. Biofuel policies around the world serve a double purpose: To increase energy security and reduce harmful GHG emissions. As long as the price of carbon is kept artificially low the support of biofuel use through government policy is the best option for society.
4. Biofuels substitute fossil fuels. In order to allow accurate calculations of the actual GHG emission saving of biofuels a realistic model to assess the emission of fossil fuels is crucial. To date we are using a fossil fuel emission benchmark provided by the oil industry. The accuracy of this data needs to be challenged. A realistic GHG emission model of fossil fuel (not only biofuels and food) is thus needed and should include all fossil fuels also the so-called unconventional ones. Once this benchmark is established the true emission saving of biofuels as well as their social costs/benefits can be assessed.

2. Food versus Fuel



Panelists



Derom Bangun

Vice President II of RSPO Round Table on Sustainable Palm Oil;
Executive Chairman, Indonesian Palm Oil Producers Association



Lester R. Brown

Founder and President,
Earth Policy Institute



Chris Field

Director Department of Global Ecology,
Carnegie Institution of Washington



Alexander Mueller

Assistant Director-General,
Natural Resources Management and
Environment Department, FAO



Stefan Tangermann

Director for Trade and Agriculture,
OECD



Rob Vierhout

Secretary General, European Bioethanol
Fuel Association



Moderator: Charles Ritterband

Correspondent, NZZ

3. Energy versus Climate Change





3. Energy versus Climate Change

Challenge

Both economic growth and climate change are associated with increasing demand for energy, which at present is mainly met by fossil fuels such as coal, oil and gas. Tackling climate change requires immediate reductions in greenhouse gas emissions. This means that we face an “energy puzzle” – how energy supply and demand can be influenced in a way that both economic growth and the prevention of dangerous climate change can be achieved.

What energy intensity and energy mixes are economically efficient now and in the future in different regions of the world? How can technological progress be accelerated and existing technologies brought to the market to reduce the cost of “decarbonizing” the world economy?

GESolution 1

Improve efficiency in energy consumption through the use of state-of-the-art technologies, including improvements in residential homes and manufacturing process.

Energy savings reduce emissions independent of the underlying energy source and enable economic growth at the same time. Only a fraction of the current global energy use would be required to provide the same energy services if the best state-of-the art technologies were used. This requires global dissemination of information and support for global technology transfers. Straightforward, well-established improvements in insulating homes could make a substantial contribution to energy efficiency and greenhouse gas emission reductions worldwide. Large gains could also be achieved through the adoption of best-practice technologies in manufacturing industries.



3. Energy versus Climate Change

GESolution 2

Provide flexible, on-going support for research and development on environmentally supportive energy use, through subsidies and bonuses for technology development and deployment.

There should be a continuous R&D process dominated by private R&D, including public-private partnerships. A combination of subsidies for promising ideas and bonuses for successful innovations could encourage new research without permanently subsidizing inefficient technologies.

GESolution 3

Support carbon capture and sequestration (CCS) to allow the extended use of fossil reserves in the transition phase to a carbon-free energy supply.

The world energy portfolio will be dominated by fossil fuels for the next 20 years. Using CCS, an increasing share of the resulting emissions could be captured and injected into geological formations and submarine sediments.

GESolution 4

Aim to “decarbonize” energy supply completely by the end of the 21st century through renewable energy and possibly fusion.

The future energy portfolio will be composed completely of renewable energy sources and possibly nuclear fusion (if it becomes feasible). The enhanced use of biomass together with CCS could even generate negative emissions.

GESolution 5

Provide support to build large-scale solar power plants.

Solar energy is likely to outperform other renewable energy sources in the long run because of its almost unlimited availability. Large-scale solar power plants in Africa could already satisfy world energy demand, if storage and transportation problems were overcome. This would necessitate large infrastructure investments.



3. Energy versus Climate Change

Background

Limiting increases in global temperatures to below 2°C requires the reduction of worldwide average per capita emissions to 0.3 tons of carbon annually, which is equal to India's current level. Such a cut in the world's emissions requires cumulative investments in energy supply infrastructure of \$22 trillion by 2030, and an increase in energy R&D relative to GDP from over 0.02 % today to about 0.08 % in 2080. These numbers indicate the dimensions of the challenge.

Investment in energy R&D and energy supply infrastructure should focus on three major fields: increasing energy efficiency; deployment of CCS; and deployment of large-scale solar energy projects.

The residential sector has huge potential for energy savings by efficiency gains. Existing buildings are responsible for over 40% of the world's total primary energy consumption and 24 % of world emissions. About 70% of energy consumption is for heating and cooling. There is also potential in the global industrial sector: 19–32 % of emissions reductions could be achieved by adopting best practice commercial technologies in manufacturing industries.

CCS has huge potential to extend the use of fossil reserves. In the Norwegian Sleipner project, carbon dioxide is separated from Sleipner West's gas production and injected into the Utsira sandstone formation (aquifer), rather than released into the air. The entire emissions from all the power stations in Europe for 600 years could be deposited in this structure.

The renewable energy source with the most promising potential is solar radiation. The solar energy that arrives each year on 1km² desert is on average 2.2 terawatt hours, yielding 80 million terawatt hours/year. This is a factor of 750 more than the fossil energy consumption of 2005, and there is still a factor of 250 if this demand were to triple by 2050. With current knowledge, it is possible to convert 15 % of solar radiation into electricity. This means that 1 % of the area of global deserts would be sufficient to produce the entire annual primary energy consumption of humankind as electrical power.

The development of CCS and solar energy is capital-intensive and requires further R&D. Unfortunately, current trends are not going in that direction. Energy-related R&D programs have declined dramatically in the OECD countries in the past decade: public investment declined from \$12 billion a year to \$8 billion, while private investment declined from \$8 billion to \$4 billion.



3. Energy versus Climate Change

Panelists



Gerhard Knies

Coordinator, Trans-Mediterranean Renewable Energy Cooperation;
Director of the Club of Rome for the DESERTEC Concept



Michael A. Levi

Senior Fellow for Energy and the Environment,
Council on Foreign Relations



Nebosja Nakicenovic

Professor of Energy Economics,
Vienna University of Technology;
Institute for Applied Systems Analysis



Reinier Zwitserloot

CEO, Wintershall Holding AG



Moderator: Kurt Lauk

Member, European Parliament

4. Securing Access to Energy



4. Securing Access to Energy



Challenge

Ensuring secure and affordable supplies of energy is a global challenge of growing importance. The challenges ahead include the depletion of oil and other fossil fuels; the reliance of most countries on foreign energy sources; global distributional conflicts arising from the rapidly growing demand for exhaustible fossil fuels; geopolitical conflicts arising from the political instability of exporter countries, from exporters using their market power for political purposes or from terrorism funded by petrodollars.

Tackling the challenges of energy security requires a sustained, globally integrated policy approach which, on the one hand, takes account of the political and economic interests of both energy-producing and energy-consuming countries and, on the other hand, helps to balance the economic, political and environmental risks in safeguarding the energy supplies.

GESolution 1

Promote competitive, open and transparent energy markets. Encourage international agreements to reduce energy subsidies.

Such markets are essential to the efficient functioning of the global energy system and to attracting the necessary investments into a sustainable global energy value chain. It is desirable to advance transparency, to deepen and spread the rule of law, and to establish and strengthen predictable, efficient fiscal and regulatory regimes.

Energy markets need to be made more transparent, particularly in countries where fuel price controls make it cheap to buy energy relative to world price levels. We should encourage international agreements that seek to reduce these subsidies much like any other subsidy that influences international trade.



4. Securing Access to Energy

GESolution 2

Improve energy efficiency and energy saving, especially in the transport sector. Support an R&D program on energy efficiency, financed from national and supranational budgets, including funds from the auctions of emission rights.

Increased energy efficiency and conservation reduce stress on infrastructure and contribute to a healthier environment through decreased emission of greenhouses gases and pollutants. Special attention should be given to the transport sector, which is responsible for the majority of world oil consumption.

An R&D program on energy should cover all types of energy technologies (supply and demand side) and it should be unbiased with respect to specific technical solutions. It should be financed through national and supranational budgets, including funds from the auctions of the EU's emissions trading scheme. The program should not interfere with the proper functioning of the internal market (for example, no special quota or pre-defined feed-in prices for demonstration projects).

GESolution 3

Encourage countries to diversify their energy mix, both materially and geographically. Clarify the vulnerabilities of the global energy network.

Material diversification – by more extensive use of renewables and development of innovative technologies – will reduce the vulnerability of energy users to shocks affecting individual energy sources. Geographical diversification – by importing energy from various countries – will reduce the vulnerability of energy users to political instability in individual countries or regions.

In addition to diversifying their energy mix, developed countries should help energy-producing countries diversify their economies, making them less dependent on high energy prices.

An international effort needs to be initiated to provide better understanding of these vulnerabilities and ways to prevent disruptions by terrorist attacks. (See also “Dealing with Terrorism”).

4. Securing Access to Energy



GESolution 4

Give more competences to supranational organizations and institutions, such as the International Energy Agency.

Energy security is essentially a global problem and it is often dealt with inadequately at national or local levels. For example, the EU is currently entitled only to set frameworks for a competitive and integrated energy market: it should also have authority on the content of energy policies.

The International Energy Agency – which is currently dominated by OECD countries – should be strengthened by bringing in all key consumers and producers to give this important institution a greater voice.

Background

Ensuring secure and affordable supplies of energy requires innovative solutions to a variety of current problems. These problems cannot be addressed by a “magic bullet,” a single, comprehensive strategy that solves all problems simultaneously.

The idea, for example, of supplying most of Europe’s energy needs from large solar energy plants in the Sahara is undoubtedly an attractive option from an environmental perspective (see “Energy versus climate change”). This concentration of energy supply on a single region may, however, run the risk of triggering serious economic and political conflicts between energy producers and consumers. It may also meet opposition from people living close to the projected lines needed for transporting and distributing the energy within Europe.

What is warranted instead is a permanent and global search for the most appropriate mix of solutions for individual problems. This requires balancing all available options in a more open-minded and less ideological way, and giving all options that emerge a fair chance by constantly and non-discriminatorily supporting R&D on new solutions.

It also requires countries to cooperate more extensively, and to accept compromises for the benefit of internationally coordinated solutions. Ensuring secure and affordable supplies of energy is a global challenge that cannot be solved effectively if all countries focus on their own backyards.

4. Securing Access to Energy

Panelists



Lester R. Brown
Founder and President,
Earth Policy Institute



Mathew J. Burrows
Counselor, National Intelligence Council



Nick Butler
Chairman, Cambridge Center for Energy Studies



Hillard Huntington
Executive Director, Energy Modeling Forum at Stanford University



Johannes Teysen
Chief Operating Officer and Vice Chairman of the
Board of Management, E.ON AG



Moderator: Christoph Keese
President Public Affairs, Axel Springer AG

5. Preventing Food Prices from Creating Poverty and Malnutrition





5. Preventing Food Prices from Creating Poverty and Malnutrition

Challenge

Whereas high food prices are certainly not the main cause of poverty and malnutrition in the world, the recent food price surge has caused acute hardship and social unrest in many countries. Even in the aftermath of the financial crisis, real food prices remain well above their levels a decade ago and they are expected to rise substantially once the world economy recovers.

The urban poor, who spend large shares of their income on food but are unable to benefit from rising food prices, are most adversely affected. Since rising food prices command a larger share of a limited budget, the poor are forced to shift their expenditures to cheaper diets with less proteins and micronutrients, to reduce their expenditures on investment goods like education and health care and to compromise on buying insurance against unemployment or on saving for retirement.

As a result, soaring food prices threaten to undo much of the progress developing countries have made in fighting chronic malnutrition and persistent poverty over the past decade. At the same time, higher food prices boost the incomes of the producers of food, providing a unique opportunity for promoting agricultural and rural development in many low-income countries.

Which policies are needed to help the most vulnerable people in the short run and to increase agricultural production in the long run? Which measures can maximize the benefits of rising food prices for smallholders in the developing world? How should agricultural trade policies and subsidy schemes be redesigned to ensure long-term global food security?

GESolution 1

Scale up social protection programs to target cash and food transfers to vulnerable groups over a transition period in the interval before a supply-side response can be expected.

Such policy interventions appear to be justified to prevent even larger future welfare losses that are likely to result from a decline in investment in education and health. For example, to reduce the devastating long-term effects of malnutrition during childhood, especially for girls, nutrition programs such as infant and school feeding should be introduced more widely.

GESolution 2

Recalibrate foreign aid to give higher priority to investment in agriculture and social protection.

More aid for agricultural investments, including rural roads, irrigation and extension services as well as R&D, will reinforce the supply response of smallholders and is a promising way to fight rural poverty.



5. Preventing Food Prices from Creating Poverty and Malnutrition

To reduce the fiscal burden and avoid the diversion of government funds for crucial investment projects, foreign aid should also become more adjustable to finance social protection programs in times of emergency. Local governments should also scale up investments for sustained agricultural growth.

GESolution 3

Eliminate policy measures that distort agricultural prices in both developed and developing countries.

Agricultural subsidies, including subsidies for biofuels, as well as other trade barriers for agricultural products in developed countries need to be eliminated. Agricultural protectionism seems to be main cause of the massive distortion in global food markets. At the same time, developing countries should avoid price controls on food products and restrictions on food exports, especially during crises.

GESolution 4

Given the prospect of increased price instability, develop innovative financial instruments – such as a virtual grain reserve bank and global credit facilities – to buffer net food-importing countries from price fluctuations in imported food.

Markets should be calmed with the use of market-oriented regulation of speculation and shared public grain stocks with a “virtual” grain reserve bank, which would operate as a futures market. Further measures worth exploring are strategic grain reserves and global credit facilities for low-income, food-deficit countries.

GESolution 5

Invest more money in the development of new crop varieties and the promotion of new technologies to set off a second “green revolution.”

There is considerable scope for much higher yields in food crops. A new generation of technologies in rice, maize and wheat has the potential to lay



5. Preventing Food Prices from Creating Poverty and Malnutrition

the foundations for a second “green revolution.” More funds will be needed to ensure rapid adoption and promote better crop management practices to reduce the gap between achieved and potential yield.

GESolution 6

Create job and income opportunities, which is a more powerful way of fighting poverty and malnutrition than reducing food prices.

Poverty and malnutrition are primarily a problem of income and market access. Thus, policies to reduce poverty and malnutrition should focus primarily on this problem. The solutions are ways to prevent food prices from disrupting people’s living standards, particularly those of the urban poor in developing countries. But they are no substitute for policies that address the root causes of poverty and malnutrition.

Background

As long as energy prices increase in parallel with agricultural prices, there is a broad problem of economic development in poor countries and hence of overcoming poverty and malnutrition.

If food prices are to be stabilized in the long run, any sustainable policy measures must aim to increase agricultural production. To do so effectively, governments must avoid policies that distort prices and hence incentives for producers of agricultural products. Prevailing agricultural protectionism in developed countries prevents specialization according to comparative advantage and thus causes global welfare losses and depressed incentives for farmers in developing countries.

In addition, in some developing countries, price controls and export restrictions discourage farmers to produce more. Liberalized food markets would send a strong signal to farmers and reinforce a big supply response to the recent hike in food prices. They would also help to make the international market larger and thus less volatile, and to promote rural development in vast parts of the developing world. Encouraging self-reliance rather than self-sufficiency is an effective response to times of extraordinary stress.

5. Preventing Food Prices from Creating Poverty and Malnutrition



Panelists



Aart De Geus
Deputy Secretary-General, OECD



Danny Leipziger
Vice President, Poverty Reduction and Economic Management Network,
The World Bank



Joachim von Braun
Director General, International Food Policy Research Institute



Robert Stewart Zeigler
Director General, International Rice Research Institute, Philippines



Moderator: Frank Vibert
Director, European Policy Forum

6. The Crisis of Water Management





6. The Crisis of Water Management

Challenge

Clean freshwater is essential to sustain life, enable development and support a healthy environment. Because of population and economic growth, water demand for household, industrial and agricultural uses is increasing, while watersheds and irrigated land are deteriorating and ground and surface water pollution is increasing. In much of the developing world, growing urban and industrial water demand will require transfers of water from agricultural uses, threatening food production and rural livelihoods.

Historically, increasing water demand has been met by developing new sources of water. But the economic and environmental costs of developing new sources make this approach unsustainable for fully meeting future growth needs. Instead, policy-makers need to work towards making existing irrigation and water supply systems more efficient, equitable and environmentally benign.

The emerging water crisis has global dimensions but solutions have to be mostly local. They need to be tailored to the specific natural, cultural, economic and political circumstances. Global strategic actions have to be locally adapted.

GESolution 1

Support infrastructure investment to increase the supply of water for farmers, households and industries, particularly in developing countries.

R&D of new technologies, such as nanotechnology-based filters and desalination technologies, should be supported. Irrigation efficiency in developing countries can often be improved through drip irrigation and precision agriculture and management changes, such as the adoption of demand-based irrigation scheduling systems. The accumulation of the underlying human and physical capital deserves support.

6. The Crisis of Water Management



GESolution 2

Provide policy support for water recycling, reuse and leak repair.

Industrial and irrigation water recycling can be a major source of water savings in many countries. Domestic water use can be made more efficient by measures ranging from leak repair in municipal systems to installation of low-flow showerheads.

Government support is also desirable to expand the safe reuse of water, particularly in agriculture, through improved drainage and water cleanup. Reuse technologies can also be applied to developing regions. For example, stand-alone satellite treatment systems can treat wastewater, and small solar-powered membrane units can treat river water (such as those used in small villages in Kenya and India).

GESolution 3

Promote the increase crop output per unit of water input, through R&D leading to better crop cultivars (including drought resistance), better farm management and better soil water storage.

Water storage can be improved through better use of groundwater, water harvesting on small plots, small irrigation schemes fed by small reservoirs and, in some cases, large dams. In tropical sub-Saharan Africa, investment in infrastructure could solve most water problems, but this is not the case in Asia, where countries are physically water-scarce.

In rain-fed areas, the full potential of agriculture could be exploited through support for investments in water harvesting technologies and crop breeding targeted to rain-fed environments.

6. The Crisis of Water Management



GESolution 4

Improve water governance worldwide, through transparent water property rights, water pricing and movement toward free agricultural trade.

All countries of the world need to have transparent water property rights, permitting all users equal access to water at the same prices. In particular, the water market should not be segmented into agriculture, drinking, environmental uses and so on. Agricultural water pricing reform that establishes water rights for users is beneficial, protecting farmers against arbitrary changes in water allocation and providing a basis for water trading among farmers and across sectors.

An international freshwater market should be developed further, with a transparent water trading system (possibly with a commodities futures market for water of standardized quality), coupled with government regulation and protection of the poor.

A water-scarce world requires concrete steps to be taken internationally to have open agricultural trade.

Background

To most people, water is a public good, like air. Yet in practice, its proper management and distribution raise inherent challenges of allocation, which is where economic principles can help. Supplying water costs money. Moreover, although water is a renewable resource, it is fragile and can be spoiled.

There are various demands made of water, from farming to industry and household consumption, which diverge between OECD and non-OECD countries.

Around 50 countries, with roughly a third of the world's population, suffer from medium or high water stress, and 17 of these extract more water annually than is recharged through their natural water cycles. The strain affects surface freshwater bodies like rivers and lakes, but it also degrades groundwater resources.

With populations growing, these stresses will intensify. Over the past 50 years, global water withdrawal has quadrupled while world population doubled. Global water withdrawal is likely to increase by 31% between 1995 and 2020. By 2015, one in five people will live in big cities, compared with one in nine today, and urban populations in developing countries will have doubled by 2025. Many urban piped water systems are unreliable and all require large investments.

6. The Crisis of Water Management



Households account for just 8% of global water abstraction. The heaviest water user globally is agriculture, which is responsible for about 69% of total freshwater abstraction (of which 45% accrues to the OECD countries). Worldwide agricultural demand for water will continue to grow, but industry is likely to be the fastest growing water user overall, particularly in developing countries. For most countries, irrigation water represents over 80% of total agricultural water use. Water use for irrigation continues to grow.

Industry accounts for 23% of global water abstraction. But demand is expected to double over the next two decades. Industrial abstraction has declined in OECD countries largely as a result of efficiency gains. The most water-intensive industries include pulp and paper, chemicals, and food and beverages.

One consequence of rising demand is scarcity. The global per capita availability of freshwater has dropped from 17,000 m³ a year in 1950 to 7,300 m³ in 1995. There are now more people in the world, of course, but there has also been a decline in available uncontaminated freshwater resources. This scarcity is not just on the surface: groundwater abstraction is beginning to exceed replenishment in some locations.

Panelists



Joachim Bitterlich
Ambassador (ret.); Executive Vice President International Affairs,
Veolia Environment



Lester R. Brown
Founder and President, Earth Policy Institute



Hany El Banna
Founder and President, Humanitarian Forum; Co-Founder and President,
Islamic Relief



Charles Gordon
President and CEO, Siemens Water Technologies



Moderator: Joachim von Braun
Director General, International Food Policy Research Institute

Organizers, Sponsors and Partners



Organizers



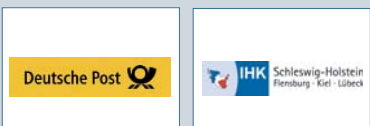
Principal Sponsors



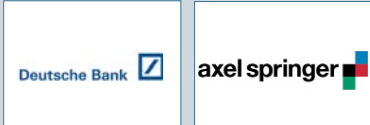
Alliance Partners



Strategic Partners



Sponsors



Supporters



Knowledge Partners



Associated Partners





Imprint

Global Economic Solutions 2008/09

Editor:

Alessio J.G. Brown and Dennis J. Snower,
in cooperation with Romesh Vaitilingam
Düsternbrooker Weg 120, D-24105 Kiel
Phone: +49(431)8814-1
Telefax: +49(431)85853
www.ifw-kiel.de
www.global-economic-symposium.org
info@global-economic-symposium.org

Copy Editor:

Ilse Büxenstein-Gaspar

Design and Layout:

www.christian-ulrich.de

© 2009 by the Kiel Institute for the World Economy

All rights reserved. Reproductions and quotations may be made if the correct attribution to this publication is made (Global Economic Solutions 2008/09, edited by Alessio J.G. Brown and Dennis J. Snower, Kiel, Germany; Kiel Institute for the World Economy).

