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The Global Economy

Balancing Risk Taking and Financial Regulation

The Challenges

Many observers blame excessive risk taking and inadequate regulation as the core causes of the current global financial crisis that we have been witnessing.

Consequently, in the aftermath of the massive efforts by governments to rescue financial firms that were hard hit by the global crisis, the re-regulation of global finance has surfaced in many of the comments or policy proposals made by policymakers, the academic as well as business communities.

While such sort of reaction is to be expected, it raises several questions.

1. First, how far should re-regulation of global finance go without stifling healthy risk-taking and financial innovation (e.g., securitized mortgages, securitized credits)?

2. Second, should tighter regulation be across-the-board or case by case? Should regulation be tailored to specific financial products (mortgages, credit card loans, secured vs. unsecured debt etc.) or financial industry (commercial banks, investment banks, hedge funds etc.)?

3. Third, which regulatory instruments require multilateral coordination? For example, is it sensible to have a single standard for minimum capital requirements or deposit insurance scheme for internationally active banks?

4. Fourth, how can regulators give the right incentives for bank stakeholders (investors and creditors) to be active in monitoring risk taking by banks, and thereby reducing the risks of credit defaults?

5. Finally, how should regulators push for more transparency of banks’ exposure to risk, without compromising the confidentiality of banks’ risk control strategies?
Proposed Solutions

Paul Achleitner

Member of the Board of Management, Allianz SE

Using insurance as an alternative to the bad bank

The current situation

In spite of the German Special Fund Financial Market Stabilization (SoFFin) guarantees extended to German banks to refinance them (not to mention the measures taken to increase tier 1 capital), German banks are becoming increasingly reluctant to lend money, and this reluctance, together with the downturn in the economy, is putting a great strain on the German economy.

One of the main reasons for this is that there are types of assets in banks’ nontrading portfolios (less so in their trading portfolios) that are increasingly tying up capital as ratings are lowered. “Rating migration” will continue to have a negative impact on banks’ risk-weighted assets (RWAs) and will make banks even more reluctant to lend money. This is why the German government has been discussing, for some time now, whether to establish one or several “bad banks” to which banks could shift their “problem assets.” Apart from it being difficult to manage such a solution, it would also involve cash flow and rating problems. The German government has thus decided (and to my mind, rightly so) not to “sponsor” such a solution.

The insurance alternative

The government could establish a government-owned insurance company (with guarantor liability) to solve the problem. This company would charge premia to insure banks’ problem assets against actual failure when they reach final maturity (!). That is, the problem assets would stay with the banks and continue to be managed by the banks. The actual value of an asset would be calculated not before it reaches maturity (for example, when a structured, mortgage-based asset reaches maturity) using the cash flow generated by the asset. Depending on the type of insurance a bank has chosen (asset types could be differentiated), the bank would have to absorb a deductible and pay a proportion (e.g., 10%) of the loss covered by the insurance company.

The advantage to this is that it would provide capital relief equalling the amount insured without federal funds having to be used from the outset. The banks would continue to manage their financial products, which are usually quite complex, and would be motivated by deductibles and coinsurance fees to minimize their final losses (and of course would be required to submit to audits and to account for their assets (“ring-fencing”).

The rating problem

One of the main problems in selling problem assets is the current volatility and liquidity-engendered distortion of market prices. Since the insurance alternative would not per se involve selling assets, an across-the-board solution could be used which would take into account the amount insured and which could possibly be differentiated according to asset types or ratings.

Determining the premia

Here it would be possible to be creative. The base case would be a premium amounting to x% of the insured assets, payable in advance in cash. Depending on the size of the portfolio involved and the bank’s liquidity situation, payment of premia could of course be deferred (even until final maturity). The British government, which intends to insure huge amounts of
money, is going so far as to accept newly issued tier 1 capital as premia. This will also strengthen the capital position of the banks. In order to prevent cherry picking, insurance could be offered only for complete categories of assets (e.g., leveraged buy out (LBO) loans, residential mortgage-backed securities (RMBSs)).

**Other considerations**

- Of course, there are a number of issues that would need to be dealt with before the insurance alternative could be implemented. Here are some of these issues:
- A solution of this type could also help to put an end to one of the worn-out arguments against consolidating the Landesbanks.
- Since an insurer is generally viewed according to its capital (which is relatively small because of guarantor liability) or premium volumes, it could also be possible to get away from nominal, or guaranteed, amounts that are hardly understandable for the normal person anymore (this issue would have to be discussed with budgetary law experts in order to find a solution conforming to the law).
- It is still an open question where it would be best to locate such an insurance company (at SoFFin, KfW, a new institution, etc.) and what would be the best name (failure insurance, surety insurance, capital protection insurance, relief insurance, or something-else insurance).
- While running the risk of talking the concept to death, one would like to point out that an insurer that ensures financial products against losses at maturity could of course also insure industrial companies’ assets (or loans?).

**Illustration**

Bank x has problem assets on its balance sheet amounting nominally to 100. These assets are insured against a premium of 5%, with a 15% deductible and a 10% coinsurance fee. This means that the first 15% of a loss is assumed by the bank itself, beyond that it assumes 10%.

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<tr>
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<tr>
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<td>5</td>
</tr>
<tr>
<td>90</td>
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**Josef Ackermann**

*Chairman of the Management Board and the Group Executive Committee, Deutsche Bank AG*

**Challenges**

The financial crisis has, so far, caused losses in the financial sector exceeding US-$ 1 trillion, wiped away US-$ 1.2 trillion in the market value of the top-20 financial firms alone and forced governments to provide US-$ 3.6 trillion in funds for rescue measures. It has also triggered the
deepest global recession since the end of World War II. Reform of the global financial system is needed and must provide solutions for the following questions:

- How can we resolve the incompatibility between open, integrated financial markets and the fact that financial regulation, the tools for crisis management and the ultimate resources for rescue operations are still essentially anchored at the national level?
- How can we strike the right balance between safeguarding financial stability, on the one hand, and maintaining the innovative power of financial markets, on the other?
- What is the right balance between limiting the systemic risk that individual institutions can cause, e.g., by limiting their size or the range of activities they can engage in, and exploiting the benefits that large and diversified financial institutions can provide for their clients and for financial stability?
- What is the right balance between a consumer’s individual responsibility, also with regard to their choice of financial products, and the need to protect unsophisticated consumers from unsuitable selling activities and products that are too risky for them?
- How can we phase in tougher rules for the financial industry so that it does not stifle the impending recovery?
- What are the right exit strategies for the current, massive government assistance measures?

**Solutions**

1. **Macro-prudential supervision must become a central pillar of the supervisory system**
   In all large financial markets, chiefly in the EU and the U.S., there are plans to appoint systemic risk supervisors. They must have the authority to identify all threats to financial stability, irrespective of their source, and to recommend remedies. A stringent follow-up on these recommendations on an “act or explain” basis must be ensured.

2. **The financial system must become less cyclical**
   Financial systems have always been prone to boom-and-bust cycles. Arguably, this tendency has been aggravated by the transition to a more markets-based financial system. Regulatory changes such as more risk-sensitive capital requirements, fair value accounting and performance-related pay have accentuated this tendency. Changes must be made in these areas as well as in macroeconomic policies, especially monetary policy, to reduce cyclicality.

3. **Banks’ risk management needs upgrading**
   Room for improvement exists in almost all areas of risk management. These comprise, to name only the most important ones, the institutional structures for risk management, the methodologies used for risk modelling including the routines for reassessing these methodologies at regular intervals, the vetting of new products, liquidity management, funding structures and risk aspects of compensation practices. Global banks, working together in the Institute of International Finance (IIF), have presented a comprehensive catalogue of measures, which are now being implemented.

4. **The regime for capital requirements must be revised**
   Banks individually and the financial system collectively will need to hold more capital of higher quality in response to pressure from investors, depositors, rating agencies and supervisors. Capital increases should not be across the board, however, but geared to those areas where deficiencies have been revealed. Specifically, this will entail higher capital requirements for securitizations and the trading book. The crisis has also revealed the need for major conceptual changes in the design of capital requirements. In particular, the current VaR-based calculation for trading book assets underestimates risk after a long period of benign market conditions. Finally, measures are needed to make the capital
regime less procyclical. The building of capital buffers in good times, which can then be drawn down in bad times, appears to be one promising option for this.

5. **Liquidity risk requires more attention**
   Supervisors as well as market participants have falsely assumed that liquidity in financial markets would always be ensured and available. Higher liquidity reserves and better liquidity management are therefore urgently warranted. New rules must not create trapped pools of liquidity within individual jurisdictions, as this would raise, rather than reduce systemic risk.

6. **Supervision needs to be comprehensive and extend to all systemically relevant market participants and structures**
   Over recent decades, many new actors emerged outside of the banking system. These new players provided diversity and helped boost liquidity. But many of them operated not just outside of the banking system, but outside of the regulatory system, as well – and this has now come to be known as the "shadow banking system". The existence of such a system is not acceptable. Supervisors must have the right to designate institutions as systemically important and subject them to supervision. A risk-based approach should be pursued here.

7. **Stronger market infrastructure to bolster the resilience of the global financial system**
   The financial infrastructure must be able to function as a shock absorber, enabling it to withstand the failure of major market participants. The use of central counterparties is one example of how to insulate the financial system from the fallout of failed institutions.

8. **New financial products require an adequate market infrastructure to support a stable market development**
   Many market participants in innovative market segments such as securitizations and derivatives lacked the ability to properly price and assess these instruments – which forced them to rely excessively on the judgement of rating agencies. There was also a severe lack of transparency in some of these markets. The markets for these products will only recover if reliable price signals and a robust pricing infrastructure can be established. For this to happen, we need to have a pooling of information on transaction volumes and prices.

9. **Remuneration schemes in the financial sector must be restructured to improve the alignment of individual incentives with the objectives of sustainable profitability and stability**
   Compensation schemes are already being reformed. The changes being implemented emphasize a risk-adjusted measurement of performance as well as a longer-term horizon for assessing profitability.

10. **We need mechanisms – at the national and international levels – to deal with the failure of systemically important institutions**
    Failure, even of large institutions, must be possible in order to maintain the necessary market discipline. An internationally consistent intervention and resolution scheme must be developed for complex global financial institutions to enable an orderly winding-down of their operations.

11. **Exit strategies**
    Central banks must develop strategies to drain money from the system once the recovery is on a firm footing in order to prevent inflationary expectations. The sale of government stakes in financial institutions must be coordinated to avoid competitive distortions.
Solvency-convertible bonds and Financial Vigilance Agency (FVA)

Require that the debt issued by systemically relevant financial institutions be “solvency-convertible,” so that if such an institution becomes insolvent, the debt would automatically be converted into equity.

The size of the debt-for-equity swap should be such as to return the institution to solvency and restore its capital adequacy ratio to the minimum required level. What debt is converted and the terms of the conversion would depend on the seniority of the tranches.

This simple measure could ensure that all financial institutions that are “too large to fail” in fact don’t fail. Because as soon as insolvency threatens, enough debt would be converted into equity for solvency to be restored. The institutions may shrink in size, but they couldn’t go under. Through solvency-convertible debt, these institutions would in effect have a solvency guarantee. But unlike the current bailouts, this guarantee would not be financed by the taxpayers, but rather by the stockholders of these institutions. Maximizing shareholder value would then mean avoiding excessive risk. (The bondholders would not be affected, since they would demand a risk-premium that covers their risk of loss through possible debt-for-equity swaps.) This proposal would help prevent the insolvency of systemically relevant financial institutions without requiring tax-financed bailouts.

Establish a Financial Vigilance Agency (FVA) to assess whether new financial products generate systemic risks that the originator does not pay for.

The purpose of the FVA is to assess, detect and prevent adverse economic effects of financial products. These tasks could be conducted in an existing or new establishment. The originators of new financial products would be required to submit the relevant information about expected benefits and adverse side-effects, of new financial products and these products could be launched only with FVA approval. The FVA would collect information about these products, analyze the systemic risks that they may generate, and submit the systemically relevant institutions that offer these products to the relevant stress tests.

The onus of proof concerning the safety of a new financial product would lie with the originator. In these respects, the FVA would serve an analogous function to the American Food and Drug Administration and the European Medicines Agency working with the national competent medicines authorities. In short, the activities of the FVA are meant to ensure that new financial products are not toxic and do not have perverse effects on the economy. With the benefit of this work, the solvency of systemically relevant financial institutions should become straightforward to assess. In this area, this work would effectively replace that of the rating agencies.

Clearly, the practical success of the FVA would depend on its ability to find an appropriate path between the dangers of allowing excessively risky projects and of preventing useful financial innovation. Inevitably, the FVA will make both Type I errors (rejecting new financial products that generate a net gain to society) and Type II errors (accepting new financial products that generate a net loss to society). The important policy decision is to define the rules of the FVA so that the size of each of these errors is minimized and the balance between them is clearly in the public interest.
There is no doubt that the current global financial crisis is a result of excessive risk taking in financial markets. Banks took much risk and investors were led to buy complex financial products, whose riskiness was not well understood. Existing regulatory and supervisory institutions have failed to keep pace with the growth of financial engineering that lead to complex products. Moreover, credit rating agencies have failed to detect financial excesses that first appeared in the US sub-prime mortgage market in 2007 and later spread to global markets. It was perplexing that many highly rated mortgage bonds plummeted in value precipitating the financial crisis.

Thus it is no wonder that the crisis has triggered calls from all corners for more financial regulation. However, excessive financial regulation has its own downside, namely, by stifling entrepreneurial innovation and reducing efficient risk allocation.

The challenge is therefore to find the right middle ground, where society allows healthy individual risk-taking but makes sure that individual risk does not turn into dangerous systemic risk. The solution should lie on having better regulation, not necessarily more regulation, based on effective supervisory institutions as well as transparency in financial market contracts. The solutions presented below deal with the most pressing issues.

- **Capital requirement for banks.** There is already regulation in place on banks' capital (as in the risk sensitive bank capital proposed under Basel II). However, the existing rules strictly enforce capital requirements, irrespective of economic conditions (the business cycle). This can be counterproductive because it induces bank lending to be pro-cyclical (banks are forced adjust lending in order to maintain their capital base). A solution could be to allow orderly adjustment of bank assets and liabilities when realized losses reduce their equity capital. This solution also prevents fire sales of bank assets, an action that could lead to higher risks of insolvency, especially when many banks try to recapitalize simultaneously. There would still be a role for supervisory intervention before the onset of insolvency and bankruptcy. Finally, capital adequacy ratios should not be based solely on internal bank models, as is the case currently. Judgments about reasonable level of capital should be related in part to market benchmarks (best practices).

- **Strengthening of credit ratings.** Credit ratings are influential in investors' portfolio decisions. Under current practices, a rating agency is paid by the debt issuer, rather than debt buyers, and this raises a possible conflict of interest since the rating agency is typically paid only if the debt is successfully issued. Due to the free rider problem debt buyers have no incentive to monitor the agencies. This means that regulators must ensure proper monitoring of the conflicts of interest inherent in the current rating practice. For instance, supervisory bodies could require rating agencies to give more information about their rating methods. Rating agencies should provide just ratings, not any other products or services, including financial advice.

- **Stock trading.** Short-selling based on economic fundamentals can be useful for correcting overvalued stocks. However, at times short selling may be a destabilizing force by driving down stocks of otherwise healthy companies. One solution is to reinstate rules that regulate short-selling of stocks (such as the up tick rule in the US, which was abolished in 2007). The up tick rule allows short sales only when the last sale price was higher than the previous price. Another solution is disclosure of short selling positions so as to properly uncover possible illegal market manipulation or speculative elements in these transactions.

- **Regulating hedge funds.** The hedge fund industry has become an important player in financial markets, including securities, currencies and derivatives. However, the industry...
has so far been subject to minor or no regulation. To begin with, therefore, hedge funds should be registered and disclose regular and timely information about both their asset positions (especially their asset concentration) and leverage levels. Such information is needed to assess systemic risks posed by complex financial transactions. Prudent regulation of banks could also curb any excesses in hedge funds risk taking, as banks usually provide hedge funds subsidized financing through mechanisms such as prime brokerage.

- **Transparency and confidentiality.** The current financial crisis raises the question of transparency and confidentiality in the financial markets regarding different financial institutions. More transparency is needed in terms of explaining what risks are to what extend involved and does the taking of those risks potentially harm the regular – in the sense of basic – banking sector. Here one has to distinguish between the well-established “basic” banking transactions and modern strategies based on financial innovation, which are mostly extremely difficult to understand and difficult to regulate at all. Another approach to establish better transparency would be that banks and other financial corporations report directly to the public instead of to their regulators. The public and the banks themselves could then distinguish between good and bad and banks which are exposed to financial disturbances. Moreover, the onus of transparency would induce managements of financial corporations to behave more cautiously. This leads to another important issue that has to be accounted for, namely the distinction between commercial and the investment banking sector.

- **Commercial vs. investment banking.** One solution to overcome inefficiencies of over-regulation in the banking sector goes back to the Glass-Steagall Act of 1933 which was adopted by President Roosevelt but repealed by the US congress in 1999. The idea is to split commercial and investment banks into a two sector banking system and impose different regulatory laws. A kind of two-tier financial system could be established. Commercial Banks are then restricted to operate in “normal” banking business such as taking bank deposits and issuing loans. These banks would be highly regulated in order to prevent that financial shocks spill over to the normal lending and deposit business of the real economy. Investment banks would have the freedom to take more risk and conduct trading relatively free of regulation. The solution would allow commercial banks to continue to underwrite securities and provide merger advice, activities historically handed by investment banks.

**Axel Weber**

*President, Central Bank of Germany*

The root of the current global financial crisis has been excessive risk-taking. A significant underpricing of risk and rising financial leverage made the financial system vulnerable. A general loss of confidence ultimately led to its collapse. The factors that contributed to the global financial crisis are manifold, ranging from microeconomic aspects – in particular, skewed incentives, regulatory weaknesses and an underestimation of risk – to macroeconomic aspects, such as global current account imbalances and a blind belief in the persistence of the “Goldilocks economy.”

**Initiating reforms now**

To balance risk-taking and, thus, to enhance the financial system’s resilience it is vital to tackle all of these issues. Strengthening financial regulation will cover many of them and, consequently, is usually found at the top of the international agenda. It goes without saying that even the most cleverly designed regulation cannot prevent short spells of financial instability. In globalised financial markets, where financial innovation is, in principle, to be welcomed because it brings economic progress, occasional excesses are bound to happen. However, reforms can considerably improve the resilience of the global financial system. Such
reforms have to be initiated now that awareness of the immense costs of financial instability has created a window of opportunity for a redesign of the global financial architecture. That window will not remain open for ever.

**Safeguarding a level playing field**

The starting point for a comprehensive financial stability framework is to safeguard a level playing field. Therefore, in April 2009, the G20 agreed to extend regulation and oversight to all systemically important financial institutions, instruments and markets. The objective must be to find and close regulatory loopholes such as those exploited by the shadow banking system. Hedge funds are a case in point. Although they have not been at the centre of the financial turmoil, they have been greatly affected by the crisis. The rapid unwinding of their highly leveraged positions tended to exacerbate the turbulence and, hence, posed an indirect risk to the financial system. Therefore, hedge funds should be registered at the international level and hedge funds whose transactions might have implications for systemic stability should, in addition, be subject to direct supervision.

**Reforming banking supervision**

In spite of an ongoing worldwide trend towards disintermediation, the financial crisis has also shown that banks remain the primary link between the financial system and the real economy. It is therefore essential to further improve banks’ risk management and to review their capital and liquidity requirements. Banks’ own resources have to return to being an effective first line of defence against financial pressures. Furthermore, in the course of the financial crisis, banking supervisors have been stepping up international coordination and cooperation. This is particularly true of Europe, not least owing to the ongoing integration of euro-area financial markets. Nonetheless, we have to keep in mind that supervisory competence and responsibility lie, for the time being, with the national authorities. Cross-border cooperation should evolve in line with market developments, not run ahead of it.

**Strengthening market discipline**

Even though it is key to reform financial regulation and make it more proactive, market discipline has to be strengthened as well. Of course, financial markets cannot be trusted to regulate themselves, but improved disclosure requirements concerning banks’ exposures, risk profiles and valuation approaches will still help to improve risk assessment among financial market participants. In the short run, this will also help to rebuild confidence. In addition, readjusting incentives for market participants, financial sector employees and credit rating agencies is vital. Above all, once the crisis is over, governments must find ways of dissuading markets from relying too strongly on banks being too big or too interconnected to fail.

**Guarding against systemic risk**

However, important all of these measures are, supervision has to be taken one step further if we want to address fully the causes of the current financial crisis. The entire financial system is more than the sum of its parts. Therefore, it is not sufficient to safeguard the stability of each individual bank; instead, systemic risk has to be identified and guarded against. There are numerous issues to be addressed: How to restrain the build-up of risk taking during boom periods? How to reconcile the risk-sensitive approach of Basel II with the pro-cyclicality of lending? How to prevent a renewed build-up of global current account imbalances? Central banks are at the forefront of financial stability analysis. They take a strong and natural interest in it because of the interdependence between monetary policy and the financial system. Moreover, as the majority of central banks, at least in the euro area, have supervisory responsibilities or are strongly involved in banking supervision, generating information-related
synergies between supervision and monetary policy as well as deploying central banks’ technical expertise will surely contribute to promoting financial stability.
The Global Economy

Fighting Against Poverty in the Crisis Aftermath 2009

The Challenges

Poverty reduction has become the central objective of development policy, as evidenced for example by the formulation of the UN Millennium Development Goals (MDGs). While economic growth is regarded as an important ingredient to achieve sustainable poverty reduction, the emerging consensus is that growth has to be pro-poor in order to reach ambitious targets such as those laid out in the MDGs.

Even with pro-poor growth, the poorest regions, in particular Sub-Saharan Africa, are unlikely to cut poverty in half between 1990 and 2015 as required by MDG1 (see figure). The ongoing financial and economic crisis makes matters worse by reducing growth prospects all over the developing world.

The policy agenda for achieving pro-poor growth includes a number of fairly uncontroversial measures such as universal primary education or the provision of social funds for the poor.

There is much less consensus about interventions to address inequality within developing countries, even though they might directly contribute to poverty reduction, especially in very unequal societies. Should a poverty strategy have a growth bias or instead mainly concentrate on empowering the poor to benefit from growth? Does lowering inequality promote or hinder economic growth? And how does the level of initial inequality affect the impact of growth on poverty reduction? The lack of consensus is arguably due to the fact that measures tackling inequality tend to involve larger trade-offs between equity and efficiency. Inequality-reducing policies may target household assets or household income, gender discrimination or discrimination of ethnic minorities, and backward regions. Should land reforms, for example, be strictly market-based or can they involve partial confiscation of land? To which extent can the tax and expenditure system be used for explicitly redistributive purposes? What is the scope for relying on progressive income taxation in developing countries?

The session aims to provide a clearer understanding of how the trade-offs operate and how they might be resolved. This would then possibly allow coming up with a more definite answer to the question of whether, and under which circumstances, inequality-reducing measures should be part of pro-poor growth strategies.

Required % changes in poverty rates for MDG1

Proposed Solutions

Francis Appiah
Executive Secretary, National African Peer Review, Governing Council, Ghana

In the context of Africa, I shall precede solutions to the fight against by dispelling two critical myths.

Myth 1
To get rid of poverty pump in more money (reduction of poverty to the absence of economic or monetary injection). A look at Somalia or Darfur is suggestive.

Solutions to Myth 1:

• Poverty cannot be overcome in the absence of peace, security and stability.
• It is in an atmosphere of the rule of law, respect for human rights, freedom and liberty that the fight against poverty can yield sustainable results.

Myth 2
The fight against poverty is best waged through centralized economic planning, a one-party state or authoritarianism.

Solutions to Myth 2:

• States that have chosen the path of democracy, multiparty rule and liberal economic policies have demonstrated capacity to fight poverty
• Entrepreneurship, free enterprise and having the private sector as the engine of growth have proven to be sustainable in the fight against poverty than state enterprises and political and bureaucratic centralized economic planning. This of course does not discount the critical role of the state.

Other GES solutions
It may be added that these solutions have not offered in any order of priority.

• Governments must ensure that, education, education, education is extended to the whole population particularly to girls and women. Literacy is not enough, vocational education also matters.
• Encourage access to the use of simple modern technology like mobile phones and FM Radio Stations.
• Extend micro-credit to the poor not on political basis but business improvement.
• Government must aggressively adopt pro-poor policies like health insurance, school feeding, free education, ethnic and regional development balance, etc.
• Look beyond the traditional nation state to seek inter-county solutions to say water, electricity, roads, trade, etc.
• The deepening of poverty through the negative effect of the financial crisis calls for compensation to poor countries that played no role yet had to bear the brunt.
• Improve and modernize agricultural practices particularly in the rural areas.
• Developed countries must make good pledges to cancel debts to foster poverty alleviation.
• Pursue economic policies that not only add-value to primary products but aim to transform economy from agrarian to industrial.
• Actively tap the potential of the population in the diaspora to contribute in the fight against poverty.
• Developed countries need to open up trade and market access to that of developing countries.
• There is need for a change in mentality in poor countries that they have the primary responsibility and have to take their destiny into their own hands instead of looking up to foreign aid and external assistance as panacea to the fight against poverty.

Aart De Geus
Deputy Secretary-General, OECD

Global context
Poverty is one of the biggest problems in developing countries. Many have no work, no job. Many work in the informal labour market. Many have very low wages. Many are very, very poor. In OECD countries we see, and in this crisis very visibly, the problem of relative poverty – defined as having an income below half of the median income. This concerns on average 10% of the citizens in OECD countries (5% in the Nordics, 18% in Mexico and Turkey). The recent OECD report Growing Unequal? (2008) finds that relative poverty has increased in two out of three OECD countries since 1990.

Police responses in OECD countries
In OECD countries poverty risks changed most between age groups. Older people now have a lower risk of being poor while the risk has increased for children and young adults. Single-parent households are three times as likely to be poor as the average family. The main dividing line, however, is work. Six times as many jobless families are below the poverty line than working families, and the ratio is even higher in Northern America. Among all family constellations, access to paid work reduces poverty risks quite significantly. For social policies in OECD countries this means that active employment policies need to be complemented with welfare-in-work policies which encourage people to work and supplement the income of working families. Better training and education measures should aim to equip people with the skills they need in tomorrow’s labour market, thus creating greater equality of opportunities.

The crisis hit developing countries
The current financial crisis is a “third wave” seriously affecting low income countries, after the food and fuel price crises in 2008. Unlike in OECD countries, the employment consequences are difficult to assess due to the scale of the informal economy. But some recent reports highlight examples of the impact: China – 20 million out of work and India – 500,000 jobs lost in 3 months in export sectors.

Responding to the crisis: reinforce ODA
To respond to the challenges raised by the financial crisis, it is most urgent that Donors deliver on their ODA commitments, and adopt and implement aid effectiveness principles. This means using existing channels to deliver results, rather than creating new ones. This may also involve a fundamental rethink about who does what at both country level and sometimes across countries.

Given its counter cyclical nature, ODA can help poor people cope with the recession and contribute to aggregate demand (via spending on consumption and infrastructure) by supporting a combination of social protection (conditional cash transfers) and employment (workfare programmes). The policy statement recently endorsed by OECD-DAC Ministers encourages
donors to make productive employment and decent work a key objective of development co-
operation and to provide adequate, long-term and predictable financial assistance to underpin
developing countries’ efforts to build social protection systems.

Putting more and better employment centre-stage
In developing countries, 55% of non-agricultural jobs and the great majority of agricultural jobs
in developing countries are informal, so that 1.8 billion people – roughly 60% of the global
work force – works informally. A recent study by the OECD Development Centre – *Is Informal
Normal?* – has clearly shown that this share has grown in many developing countries, in-
cluding fast-growing emerging drivers China and India (up from 76 to 83% over the past de-
de cade). Post-crisis, the lesson is hence that the creation of more jobs is not good enough, but
that we need more and better jobs. In the longer term, policies to *increase job quality* are
critical not only for growth to benefit the poor, but also for the poor to be able to contribute to
growth. To this end, a “progressive formalization agenda” is needed.

Empowerment of women
Both during and after the crisis, women’s labour force participation and labour market out-
comes deserve particular attention and specific policies, as they continue to hold the worst-
paid and most vulnerable jobs. Gender equality as an explicit objective of education policies, in
access to land and credit, and in childcare, will help level the playing field. The Gender,
Institutions and Development Data-Base of the OECD measures discrimination based on
social practices and norms in more than 120 countries, providing a useful starting point for a
discussion in which areas to focus policy action.

Gaining from migration
International migration can help reduce poverty. Remittances and the effects of return
migration are both playing a pivotal role. The world-wide flow of remittances is estimated to
have exceed three times the volume of official development assistance (ODA), reaching
approx. US-$20 billion in Africa in 2008. Reducing transaction costs for remittances is a first
policy levy and is part of the program set up by the Global Remittances Working Group,
initiated by the Italian G8 Presidency and the World Bank.

Rainer Thiele
*Kiel Institute for the World Economy*

Manfred Wiebelt
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While the exact scope of inequality-reducing policies ultimately depends on country charac-
teristics, such as the capacity of administrations to execute them and the initial level of in-
equality, at least some of these policies are likely to play a role in any poverty reduction
strategy.

As concerns *asset inequality*, public investment in basic education and primary health care is
almost unanimously accepted as an instrument for attenuating disparities in human capital
formation. Yet even here some unresolved issues remain, e.g., whether user fees should play
a role in financing the services. In addition, there appears to be a widespread consensus that
governments should facilitate the poor’s access to financial assets (e.g., by subsidizing micro-
finance institutions) or infrastructure (e.g., by financing electricity hook-ups). Market-based land
reforms, where the poor receive subsidies to buy land from willing sellers, also command
broad support, but they usually have only a minor redistributive impact. Other forms of asset
redistribution such as land taxes and, in particular, partially confiscatory land reforms are more
contentious. While progressive land taxes could be an effective and comparatively non-distortionary means of redistributing assets, they are demanding in terms of administrative requirements. Confiscatory land reforms tend to be highly disruptive for the economies involved, even though there are some notable success stories in Asia.

In dealing with *income inequality*, a considerable degree of redistribution in favour of the poor can be achieved via targeted expenditure policies. This is exemplified by the success of large-scale conditional cash transfer programmes in Mexico (Progresa) and Brazil (Bolsa Escola). The scope for a progressive tax system, which would have to rely strongly on income taxation, is much more limited, especially in countries where subsistence agriculture and the informal sector account for a large share of economic activities.

Regarding policies to reduce *gender and ethnic discrimination*, areas of agreement are that improved access for girls and children from ethnic minorities to education as well as the removal of restrictions on the control of assets such as land and material inputs are of critical importance. More intrusive measures such as affirmative action policies for females or ethnic minorities in the labour market are controversial.

*Regional disparities*, in particular the rural-urban divide that is typical of many developing countries, can be mitigated through regionally targeted transfers and an emphasis on infrastructure development in remote areas, e.g., the construction of roads which connect farmers to local markets. It is less clear whether governments should pursue active regional policies by supporting specific industries, or encourage people to move away from backward regions to other areas where they can more easily be provided with basic services.

**Amir Ullah Khan**

*Director, India Development Foundation*

**Rural health insurance**

There exists a disparity in the cost and quality of health services in rural areas as compared to urban areas – the rural people have to spend a larger proportion of their incomes on health services as compared to urban people. In India, as per the estimates of the National Commission on Macro-economics and Health (2005), the proportion of total outpatient expenditure in total household expenditure is 4.72 per cent in rural areas as compared to 3.62 per cent in urban areas. Also, the proportion of total inpatient and outpatient expenditure in total household expenditure is 6.09 per cent for rural areas as compared to 5.06 per cent in urban areas. Thus, despite the ‘supposed’ government subsidies on rural healthcare, the rural people spend a larger proportion of their household incomes on medical expenses as compared to the urban people. The relatively widespread presence of private clinics and private doctors (at times even quacks) as compared to public healthcare services like primary health centres have led to serious cost (and quality) implications for the rural people, especially the poor.

A number of schemes have been launched by provincial governments aimed at supply of free health care at private facilities for the very poor. They seem to have reaped great political dividend from such measures. The federal government has launched a rural health insurance scheme for the poor that it bank rolls totally. It is too early to judge its success, but it does seem to be a solution to the abject quality of public health care in rural India.

**Alternatives to crop insurance**

Why does crop insurance not work? In a theoretical framework, insurance indeed is the best means to achieving full risk cover. However, despite high levels of insurance premiums, we have seen few takers for crop or weather insurance in India. A major obstacle to the com-
Commercialization of the small farmer is the increased uncertainty of the market place, compared to subsistence farming. The problem is exacerbated by the fact that they have very little ability to absorb the risk of loss. Such risks are high as market volatility is an integral part of the world agricultural produce market. This is especially true for plantation farmers as close to 80 per cent of their produce is exported. High volatility, in turn, makes insurance an unworkable solution, as the premium rates, which depend on the probability of loss, to cover these risks appear to be too high. Insurance is an extremely good tool for covering low probability events but fails when the risk of loss is significantly higher. The India Development Foundation is now working on a pilot scheme with the Price Stabilisation Fund Trust of the Ministry of Commerce to show how an alternative to insurance is desirable and workable.

Now consider an agency that sells contingent claims on behalf of the household. Each claim promises to pay INR 1 if the farmer has a good crop and nothing if it is a bad year. This is like an IOU sold by the farmer to any one who wants to buy it. The major change from the insurance mechanism brought about by this proposed alternative is the sequence of cash transfers. In insurance, the farmer pays first, and the company pays the farmer later and only if the farmer suffers a loss. Since premiums are high, this raises the problem of farmer liquidity or the inability to pay large premiums before the harvest when the farmer is cash-strapped. In the proposed solution, the farmer pays only when the going is good or, the farmer has the ability to pay. This is brought about by simply making the buyer of the IOUs pay first and having the farmer pay after the good state has happened.

**Cash transfers and affordable food**

One of the most significant policy initiatives in India in the recent times reforming food policy was the introduction of the targeted public distribution system (TPDS) in 1997. In the TPDS, subsidies are restricted to below poverty line (BPL) households. Critics of TPDS, however, believe that identification is a difficult process and would lead to large exclusion errors. Moreover, by shrinking the public distribution system (PDS) to serve the poor, they fear that it would affect the economic viability of the PDS retail outlets. A feature of India’s food subsidy programme is the deep involvement of the government and its agencies in physically handling the grain. The government buys the grain, stores it in its warehouses, transports it to different depots in the country and distributes it to authorised retail outlets. Agencies of the central and state governments carry out this operation.

An alternative to such an arrangement is the system of food stamps. In this scheme, the purchase, storage, movement and distribution of grain is performed by the private sector. A food stamp is a cash voucher, which can be exchanged by the recipient for only food. It is usual to restrict the list of foods by excluding alcoholic beverages, snack foods and other processed food. Here consider food stamps that can be only used to purchase foodgrains. Could this be superior to the existing PDS?
The Global Economy

New Knowledge Creation Regimes 2009

The Challenges

To promote the creation and dissemination of knowledge in a globalizing world, public finance of R&D and the patent system must be helped work together. The traditional public finance provision of knowledge is often inhibited by financial restrictions. The traditional patent system, on the other hand, may restrict the flow of knowledge and thereby impede economic growth in developed and less developed countries.

In this context, intermediate institutional regimes – such as open source technology, general public licenses, soft patents, public private partnerships and private philanthropy – have come to play an increasingly important role.

What is the appropriate legal and institutional environment to generate the most productive and equitable combinations of these regimes?

What set of concerted international regulations is likely to create enough room for country and sector specific solutions, while giving special attention to the needs of SMEs and less developed countries?

What is the desirable division of labor between basic research funded by governments and applied research funded by business? How can private philanthropy be strengthened, in order to bridge gaps between needs and capacities for research and development? Should the width and duration of patents be restricted? What is the desirable role of guarantee funds (like AMC) equipped by governments or by sponsors, that frame well-defined research objectives, and guarantee for the future returns to it? Should compulsory licensing of patented productions, in matters of life and death, be introduced to allow free access for poor countries?
Proposed Solutions

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New knowledge creation regimes: issues concerning “the rules of the game,” “the play of the game” and the market place for knowledge based assets

Focusing on the “rules of the game” embedded in the new knowledge creation regimes (mostly based upon IPR law and IPR enforcement) and the “play of the game” of firms and individuals within the alternative (proprietary and non-proprietary) institutions of knowledge creation (or Intellectual Property (IP) governance), this entry aims to contribute to the critical debate on the performance of our knowledge creation regimes at various levels (nations, sectors, firms, etc.). The importance of a high quality IP market place to reach both societal and corporate benefits is also highlighted to be a matter of concern for wealth creation.

(1) The era of the knowledge economy and inequality: How knowledge capitalism sets “the rules of the game” for our knowledge creation regimes

Knowledge creation regimes in the era of the knowledge economy are based upon an increasing privatization of knowledge based asset, in terms of strong IPR protection. Thus, IPR regimes have been tightened world wide, e.g., via the TRIPS agreement and other IPR rules.

Based upon mainstream theories or models which have informed the belief systems regarding the operation as well as the predicted social and economic effects of IPR systems, this increased privatization of knowledge based assets is believed to solve a range of economic problems. The originally intended objectives of IPR systems include

- stimulating incentives to invest in invention and innovation;
- stimulating innovation-based competition;
- facilitating spill-over and expansion of knowledge based ideas and creative expressions of ideas;
- rewarding inventiveness and creativity throughout the economic system; and
- facilitating sustainable development of firms, industries, and societies world-wide.

In this context, IPR systems are also expected to close income and technology gabs across firms, sectors and nations. However, mainstream beliefs arguing all the perceived benefits of IPR rights should be treated with caution due it its theoretical underpinning in the form of unrealistic assumptions such as the non-existence of various factors as: technological inter-dependence, a social origin of invention and innovation, strategic interaction inside or outside the IPR market place, knowledge and institutional capability asymmetries, power asymmetries (e.g., in IPR related bargaining situations), and more. Also, mainstream beliefs do not take into account the specifications or practical applications of IPR system which have a huge impact on the performance of the knowledge creation regime. Thus, there is an increased concern within academia that the IPR system generates different performance results and varying potential for growth across the firms, sectors and nations participating in the IPR system and that the IPR system does not seem to close technology and income gabs.

Furthermore, the economic debate on capitalism is now also taking place in a political context. Economists who believe that the spirit of capitalism, or free private enterprise and free market economies, is the key to sustained technological progress and knowledge creation and that it is weakened by socialist economic policies seem to carry more conviction that they use to do. However, capitalism’s apparent emphasis on individual and corporate self-interest over community, on hedonism over charity, and on expansion or growth over equality remains a bitter
pills for many to swallow. Especially, the increased commoditization of knowledge-based assets and symbolic material, and the departure of central ownership or command of such assets, which has led to a decrease of the public domain, should be a subject of concern. The new face of contemporary knowledge capitalism is also reflected in the new knowledge creation regimes (of stronger IPR systems) and there are critical (and sometimes unfavourable) consequences in the context of innovation, competition, markets, globalization, fair trade, protection of traditional knowledge, access to medicine and education, role of universities, corporate dominance, and other.

Towards a solution:

- Policy makers need to recognize that IPR systems do not work automatic as in textbook economics and they have limitations even if we get the best organization in place. Also, IPR systems create their own problems.
- When designing knowledge creation regimes, policy makers should recognize the asymmetric ability of the IPR system in meeting its originally intended objectives, and that this knowledge creating regime may therefore not be able close income and technology gaps or generate wealth to all societies in all regions of the world.
- What really matters for performance is not the assumptions underpinning the belief systems of IPR regimes, but it is the nature of the play of the game (or stakeholder interaction for value creation).

(2) Value creation, strategic benefits from Intellectual Property (IP) and alternative appropriation models: Understanding “the play of the game” of firms and individuals within alternative knowledge creation regimes

It seems paradoxical that while micro-electronics and the new information and communication technology support the dynamics of sharing information, knowledge, ideas and (cultural) expressions in new more “open innovation” spheres, this is made more difficult, and sometimes impossible, by the IPR legislation in its current form of providing very exclusive and strong protection (e.g., via broader patents, increased period of protection of patents and copyrights, lower requirement of “inventive step,” new areas of protection, increased enforcement worldwide, etc.).

It is also a paradox that, while government has made IPRs more exclusive and stronger the way in which IPRs have been managed by firms and industry in “open innovation” systems has made them less exclusive and less strong (see, e.g. EU 6th Framework Project, U-KNOW, 2005–2009 that studies the sectors of software, pharmaceuticals, and the university sector) That is, a movement towards using the IPR system in support of “open innovation” has been led by the very nature of the “play of the game” (reflected in strategic interaction) by firms and industries, rather than the “rules of the game” (reflected in IPR legislation) set up by government policy. The crucial factor is the way firms and industries govern IPRs, in both proprietary and non-proprietary appropriation models, in their efforts to foster innovation and to increase value creation from their innovations.

A related concern is that the very exclusive and strong IP rights stimulate anti-competitive behaviour and abuse of IP rights. Basically, the “rules of the game” can encourage efforts to secure as large a share of the knowledge creation and innovation value-pie as possible rather than behaviour that contribute to increasing the size of the value-pie creative by the collective. In other words, it can encourage (or outbalance) rentseeking rather than welfare enhancing behaviour.

The growth, widespread use, and establishment of alternative (e.g., open source, non-protected technology) knowledge creation and appropriation models raise the intriguing possibility that innovation and other strategic benefits from knowledge creation might successfully be incubated under far more open conditions, often associated with non-proprietary IP. Thus, the use of an open source development methodology for knowledge creation has raised in profile,
and the use of General Public License (GPL), Creative Commons license, other licensing forms and non-IPR protected technology are not unfamiliar alternatives to the use of exclusive IPRs. Especially the software sector has experimented with such alternatives, but it is increasing adopted in other sectors.

Thus, firms use various types of IP non-exclusively and their choice of protection is related to the strategic benefits they are seeking and the operational aspects of their knowledge creation processes (including the characteristics of the firms and sectors in question). These aspects include:

- **Innovation processes**: being able to use the best inventions, innovations, creative expressions; Innovation methodology for developing better technology or creative expressions; Benefiting from user or supplier involvement as a development strategy (e.g., through learning and feedback); Setting common standards / making or using compatible technology or creative expressions.
- **Building networks, corporate relationships and the community**: increasing ability to enter collaborative agreements (e.g., joint ventures, strategic alliances, etc.); building informal relationships with industry networks; giving something to the community.
- **Market positioning**: increasing market share (e.g., building broader user base or securing market protection); professional recognition or brand recognition; competitive signalling.
- **Finance**: direct income from market transactions (e.g., to cover R&D or for profit); increasing ability to raise venture capital; and cost cutting.

It should be noted that open innovation processes does not by default mean the use of non-proprietary IP, as such open appropriation processes or more open knowledge creation regimes can be led by both proprietary and non-proprietary IP. Basically, IPRs (conventionally associated with monopolistic market structures) and “open innovation” are not knowledge creation regimes which are necessarily contradictory in terms. Rather, the movement towards “open Innovation” can be (and has been in many cases) supported and even underpinned by the IPR system in many different ways, using both proprietary and non-proprietary strategies regarding IPR protection and associated innovation management. However, this does not imply that IPRs cannot be (or are not sometimes) used as a weapon to destroy an “open innovation” process, so appropriate policy and management is essential.

Towards a solution:

- **Policy and management** should be concerned with the actual interaction between the design and implementation of the “rules of the game” and the “play of the game”.
- **There is a need for knowledge creation policy and regulation** to move beyond the conventional assumption that patents are always best placed to reach strategic aims of firms. Indeed, most firms use a mixture of proprietary and non-proprietary IP approaches.
- **The increasing use of non-proprietary IP by firms and sectors** indicate that knowledge creation regimes are not necessarily better for firms and sectors the more exclusive or rival they are. (This is in addition to the failure of IPR systems in closing income and technology gabs at the level of nations and societies, as discussed above). We need a knowledge creation infrastructure with softer IP, which support the use of non-proprietary IP, as well as more flexible proprietary systems by, e.g., introducing compulsory licensing.

(3) **The quality of the Intellectual Property (IP) market place: An ignored institution in the heart of our knowledge creation regimes**

It is widely accepted that knowledge creation and innovation processes is a social process to which we all contribute so firms, sectors and societies have become inter-dependent in their knowledge bases. Thus, the functioning and efficiency of the IP market place in which knowledge based ideas and creative expressions are exchanged is key to the performance of any knowledge creation regime. Furthermore, as various IP market places are enforced by different institutional infrastructures, norms and bargaining forms, the performance or
efficiency of IP markets depends on the nature of stakeholder interaction and other qualities in the market place.

However, several institutional problems, or market obstacles, are not uncommonly experienced when trading IP in the market place (evidence from EU funded 6th framework project UKNOW 2005–2009). E.g., in the case of patents, they are related to

- search problems: difficulty in locating the owners of the IP; difficulty in locating the users of the IP; difficulty in finding the best IP; the description or drawing in the patent document is not clear;
- IP assessment/transparency problems: difficulty in assessing the degree of novelty/originality of the IP; difficulty in assessing the economic value of the IP;
- contract and enforcement problems: difficulty in negotiating a price for the IP; difficulty in negotiating the terms (not related to price) of the contract; excessive cost of enforcing the contract; problems (not related to cost) with enforcing the contract; trust issues (e.g., opportunistic behaviour, free-riding, or similar);
- regulation and practices: regulations allow too exclusive rights; international IP regulations do not fit the needs of different local markets; differences in practices of firms.

Similar, there are problems related to the functioning of markets for open source solutions, non-patented technology and copyright. These obstacles faced in the IP market place and which may inhibit firms, sectors and societies to reach their strategic aims are important to minimize in order to facilitate knowledge creation processes.

Towards a solution:

- IP markets (as any other market) cannot be reduced to simple institutions where supply and demand meet, but they need to be properly enforced and regulated. If policy makers do not recognize that there are conflicts embedded in social relations within IP market places and other market obstacles, this may inhibit the effectiveness of the functioning of these markets, and therefore reduce the wealth produced by our knowledge creation regimes.

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The general task is to find the appropriate rules of the game in order to bring about the best combinations of various knowledge appropriation systems: the traditional antagonistic systems of public financing of R&D and of the patent system as well as the more recent, intermediate systems, such as open source technology, general public licenses, soft (or weak) patents, public private partnerships and private philanthropy. Creating an internationally recognized regulatory regime that allows a greater variety of knowledge appropriation systems to coexist might prove to be a positive-sum game promoting innovation and growth.

Appropriate policy action regulating these knowledge appropriation systems requires meeting some general conditions: It should build on concerted international regulations, with enough room for country and sector specific solutions, and with special attention to the needs of SMEs and less developed countries. More specifically, possible solutions might include (following suggestions made by Stiglitz and others):

- restrictions to the patent regime, in particular regarding the width and duration of patents, as well as the exploitation of traditional knowledge,
- guarantee funds (like AMC) equipped by governments or by sponsors, that frame well-defined research objectives, and guarantee for the future returns to it,
• compulsory licensing of patented productions, in matters of life and death, and to allow for free-riding of less-developed countries,

• continuation of providing basic research as a public good by public research,

• strengthening of private philanthropy (e.g., by respective international legislation and guarantee systems), in order to bridge gaps between needs and capacities of public research.

One starting point could be the existing TRIPs agreement (Trade-Related Aspects of Intellectual Property Rights) from 1995. It should, however, be put under the reign of the World Intellectual Property Organization (WIPO), which should in turn be made more influential, and it should be modified significantly to better meet the above requirements.

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Extending open source to commercial biology

Forty years ago, many publicly-financed R&D programs required grant recipients to immediately deposit their discoveries in the public domain. This amounted to a judgment that grant support was already sufficient – i.e., that the inventors’ patent rights should have zero breadth and zero duration. Today, on the other hand, policymakers have gone to the other extreme by reflexively encouraging researchers to seek full-width, full-duration patents. But why limit ourselves to this all-or-nothing choice? Full breath/duration rights are surely necessary where R&D is expensive or the expected social benefits are very large. But there are other instances where more moderate rights would suffice while yielding greater access. In principle, then, policymakers should tailor breadth/duration to each individual R&D project. Legally, this is straightforward: Authorities would simply tell grant recipients to waive some or all of their patent rights as a condition of receiving support. The problem is information. Policymakers hardly ever know how much reward inventors “need” to develop an invention. And while the inventors clearly do know, they have every incentive to lie. Why admit that moderate width and duration provide sufficient incentives when bigger rewards are there for the asking?

But if legal solutions won’t work, perhaps there is another way. Can we design institutions that moderate patent duration/width automatically? Surprisingly, at least one such institution already exists in an obscure branch of open source called “Embedded LINUX.” (Embedded LINUX is a kind of software typically found in DVD players, cell phones, and other consumer electronics.) While the legal details are complex, the bottom line is that “Embedded LINUX” licenses let firms keep their code secret for 18 months or so. This limits access much more than the usual zero-duration open source license, but also far less than, say, the full 20 year envisaged by patent law. Even better, surveys show that most contributors voluntarily divulge about 50 percent their code before the license requires them too. The reason: Shared code is often cheaper and faster to develop.

Of course, Embedded LINUX is hardly more than a footnote in the global economy. On the other hand, similar schemes should make economic sense wherever shared development matters. And this includes the biggest public/private research topic of all: Biology. Consider the case of stem cells: If you are going to use a cell line, you want one that has already been widely described in the published literature and for which commercial support products exist. So even though there are now more than a thousand cell lines in the world, most of today’s front-running products are based on the first six lines that James Thompson isolated in 1997. Thompson, of course, was allowed to patent the lines and will receive massive royalties for any products made from them. On the other hand, many companies complain that these same licenses have driven them from the market. At least in hindsight, consumers might have gotten a better deal by demanding Embedded-LINUX style sharing of lines.
Similar cell line stories exist throughout biology. In terms of economic importance, however, one example towers over the rest. Tomorrow’s genetic engineering (“synthetic biology”) will almost certainly depend on assembling designer organisms from uniform DNA sequences called “standard biological parts.” Ten years from now synthetic biologists will probably be making everything from drug compounds to carbon-neutral jet fuels from these parts. And that will be very good news for the owners. But will those owners be grant recipients or taxpayers?

Like any reform, not everyone will like the open parts idea. If you ask them, there are many groups in favor – consumers, companies using parts to make therapies, and commercial DNA providers to name a few. But these groups will not be at the table when government decides what patent breadth/duration grant recipients should receive. And the grant recipients themselves will always be able to make more money by demanding full breadth and duration. The open parts idea won’t go anywhere unless government funding agencies are prepared to stand up for it.
The Global Economy

The Post-Crisis Global Division of Labor 2009

The Challenges

Recent changes in how different stages of the production chain are dispersed across the globe have led to the notion of a new global division of labour.

It will have far-reaching consequences for the skills required from the workforce, their jobs, and the economy as whole; both in developed and developing countries.

During the 80s and 90s, the global division of labour implied that unskilled jobs were done in low-wage countries, while skilled jobs were done in the developed economies.

At the same time, the situation of unskilled workers in many developed countries deteriorated drastically and inequalities started to rise.

Recent technological developments such as the internet have made it possible to efficiently relocate more and more tasks of the production chain abroad, including high-skilled jobs. Entirely new and unpredictable patterns of inequalities could thus emerge, possibly along with dwindling support for economic globalisation. Yet, for both the developed and the developing world, the new global division of labour may entail a lot of potential to be explored. So what should be done to prevent potential unwanted consequences?

The unpredictable nature of the new global division of labour may entail that job contents change completely and that people are likely to work in more than one occupation throughout their working life. It has been argued that workers need strong competences in social skills, problem-solving skills, and versatility to cope with such challenges. Are these the skills that are needed to create and preserve employment in good jobs and to sustain current welfare levels? Will education systems and curricula have to change in order to produce a workforce with such skills? How can the welfare state support workers in such a changing environment? Which skills do workers in developing countries need in order to benefit most from the new global division of labour? Is the new global division of labour finally the chance to close the huge education gap between developed and developing nations?

Annual cost of employing a chip design engineer: 2002, in percent of US cost

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<th>Country</th>
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<td>Canada</td>
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Proposed Solutions

Filip Abraham

Vice-President for the Humanities and Social Sciences, Katholieke Universiteit Leuven

Some further thoughts about the future of employment

I agree with many of the comments I have read. The following points should be seen as complimentary with the other statements.

1. The current crisis does not change the structural drivers of employment but potentially introduces a period of unemployment levels exceeding the natural rate of unemployment. If so, expansionary macro-economic policy may have a role to play in particular since there is no clear inflationary threat at this moment.

2. Educational systems and structural labor market policy must focus on promoting flexible adjustment to changing economic conditions. In today’s global world, people are likely to switch jobs during their careers. Current policies are spending too much attention in preserving what exists instead of switching to what is new.

3. It is often argued that employment in the non-traded sector of developed should be expanded as those sectors are shielded from global competition. This is true to some extent as the aging of population, the outsourcing of many personal services by higher income professionals, and the increased demand for art, culture, media... services creates new employment opportunities.

Nevertheless, one should recognize the limits of this employment expansion. First, several of those non-traded jobs are or may become exposed to international competition. Second, the expansion of non-profit employment is dependent on the profitability of the rest of the economy. This balance between the development of personal services and international competitiveness of the economy is a matter that will continue to be important in particular in European economies.

4. What are the necessary skills for professionals of the future? The book on the Flat World by T. Friedman devotes some readable chapters to this question. What matters is a skill that allows a professional to differentiate himself. This can be a specific expertise, creativity, an ability to make people work together in a team, an ability to synthesize ideas, to communicate difficult ideas in a transparent way, to filter the core out of a flood of information.

5. Will the winner take it all (or most) in a global economy as is something claimed in the literature? According to this theory, globalization polarizes the inequality between normal workers and the superstars? While this effect may be present in some occupations, recent research shows that it does only contribute marginally to a widening of income inequality.

Hans-Paul Buerkner

President and CEO, The Boston Consulting Group

The weight of the global economy will continue to move from West to East. Asia offers the largest growth pools in most industries. The next billion people will become an active part of the global economy. With continued growth over the next several decades, we will see a growing standard of living across the world, even though some countries or regions may benefit less because of a lack of stable structures.

While one can observe a shift from agriculture and mining, over manufacturing to services in most economies as they mature, this does not mean that the Western developed markets will
focus entirely on services. China will be the factory of the world and Africa and other emerging markets provide the necessary commodities.

The global division of labor will be determined by the value added chains of companies around the world: from sales and marketing over manufacturing to R&D and general administration. Where are the customers located, where are the necessary skill sets, where are acceptable cost structures? In general, more services will be outsourced, more manufacturing will move to the high growth markets, and more R&D will move to the places that dominate consumer taste and also offer the necessary skill sets.

Industry by industry, product line by product line and company by company, the answers may look very different. And major changes in the political and economic environment may lead to different answers going forward:

- How stable and secure is the political and legal framework?
- Can I protect my physical assets and my intellectual property?
- Do bottlenecks in the infrastructure make my logistics unpredictable?
- Does transportation become prohibitively expensive because of high energy costs?
- Do I lose my resource base and therefore have to give up production?
- Do I lose my people base and skill set because of demographics?
- Do the expansions or even existing operations become impossible because of increasing regulations or even wholehearted rejection by the people in the neighborhood?
- Does a society accept change?

The widening growth differentials between most emerging markets and most developed markets will accelerate the movement from West to East, and potentially from North to South. As it enables hundred of millions of people to actively participate in the global economy, it will benefit most if not all, provided we are willing to adjust and not to try to preserve the status quo.

Jean-Philippe Cotis
Lead Director General, National Institute for Statistics and Economic Studies

Areas of agreement with the briefing notes

I read very carefully the GES briefing note about the “post-crisis global division of labor” and found it very interesting. I certainly agree that “public support for globalisation might be severely harmed and the risk of protectionism will rise” and that, as well, we might see a surge in political extremism. I also agree that “less globalisation and more redistribution is not the right option.” Although more globalisation might call for more redistribution.

I finally share the overall editorial line that “ad-hoc” remedial policies, specifically targeting the losers will not, alone, do the trick and that broad policies aimed at fundamentals will add a lot (i.e., policies such as teaching the right cognitive skills to cope with change from early childhood as well as policies keeping the workforce employable on a continuous basis). I also fully share the commitment to trade liberalisation as an engine for growth worldwide.

From an analytical perspective, I also very much appreciated the insightful discussion of shifting frontiers between traded and non traded sectors, in a context where NITC’s are quickly spreading to the services sectors.

Areas where more emphasis should be put

That said, I found surprisingly little material, in this overview, linking the ongoing world economic crisis to labour market issues. In my view, issues such as the long-term impact of
the world economic crisis on labour market policies, institutions and outcomes deserve a lot more attention.

The first-order risk with the current depression is that a long-lasting, protracted world economic crisis ends up permanently derailing labour market, trade and other structural policies ... with dire consequences for unemployment, globalisation, and workers well-being.

Elaborating a bit further on these issues, it appears, that falling aggregate demand worldwide may entail large collateral supply side losses. Given deflationary pressures, many structural reforms have been kept on hold, with possible negative consequences for long-term productivity and investment. As well, prolonged Keynesian unemployment, initially associated with insufficient aggregate demand, may progressively turn into structural unemployment, in a context where many unemployed people finally lose contact with labour markets (i.e., hysteresis effects).

Despite sluggish supply, underlying inflation is still on a downward trend in a context of extreme aggregate demand weakness. In such a context, the risk of moving into a deflationary regime worldwide should be taken seriously. Such a deflationary regime would impede world trade growth as it did during the 1930's. What is needed to avert such a threat is more than a short-lived technical recovery. Should we fail in restarting the global economy, the post-crisis division of labour may differ substantially from original expectations.

In such a context, I found the assertion that “structural change...might be accelerated strongly due to the crisis” a bit daring. In particular, one should no infer too much from past experience in small open economies such as Nordic countries, Australia or Canada which “took advantage” of economic and fiscal crisis to undertake wholesale reforms with great success. These reforms were very successful in raising potential supply and growth, in a context where the world economy provided ample aggregate demand to match what remained a tiny increase in the supply of goods and services at the global level. Compared to these case studies today's circumstances are vastly different: persistent GDP weakness and falling knowledge investment may be the order of the day rather than Schumpeterian breakthroughs. Indeed, recent, empirical research (cf. OECD) suggests that good macroeconomic conditions rather than crisis are supportive of innovation.

So to put it in a nutshell, I find the position paper is certainly underplaying the negative structural consequences that a prolonged slump may entail. “Creative destruction” is fine ... provided a number of basic economic mechanisms are still at play, which may not be the case currently.

I finally have a few remarks to make about the role of the welfare state in helping people cope with structural change. I certainly agree that structural change, nowadays, may involve all types of workers regardless of skill levels and that welfare policies need to reach them all, through mechanisms such as welfare accounts or benefit transfers.

That said it should be added that welfare policies are not just about adjusting to change. There is also a need for welfare policies to concentrate on the poor and unskilled on a more permanent basis. It is well known, for instance, that even in the United States, poverty and estrangement from labor markets are very persistent.

I guess, in hindsight, that what my remarks amount to is that it is not possible anymore, in a context of crisis, to neatly separate macro economic and structural policies. Without macro economic success, structural policies may stall or, even worse go the wrong way (reversal to protectionism, etc). In this context, an important part of our structural policy agenda should also be devoted to “policies to be avoided”.

At the current stage, the position paper is somewhat abstracting from these macro-structural interactions. In my view, it makes the discussion a bit disconnected from what current policy making debates are about.
John Feldmann
Member of the Board of Executive Directors, BASF

Opening Remarks
The removal of trade restrictions and the emergence of new markets in many parts of the world have created a wealth of opportunities – and risks. However, the assessment of these opportunities and risks differs greatly from sector to sector and from industry to industry, especially with regard to implications for labor.

The chemical industry, for example, is capital- and resource intensive, and investments are generally long term. Access to competitive raw materials and energy play a decisive role, as do proximity to end-consumer markets and solutions tailored to fulfill specific customer needs. Highly qualified, motivated and dedicated employees are absolutely critical. The relative importance of labor as a cost factor is subordinate to factors such as raw material and energy costs.

Over the last few years, the competitive environment in the chemical industry has undergone major changes. Large international corporations like Sabic in the Middle East or Sinopec in China are challenging the traditional image of the chemical industry and its competitive environment. In the last decade, financial investors started to participate in the consolidation of the chemical industry. Now, the consolidation process is being accelerated by the current economic crisis. Major demand growth will stem from populous developing countries like China and India, where customer needs are very different from well-known, familiar Western standards. Adaptation to local or regional requirements paired with close-to-customer production will be essential, not only to provide the right solutions to these markets, but also to avoid purely export-led growth.

The other source of organic growth opportunities in the chemical industry is its contribution to energy and resource efficiency. A study for BASF, for example, has shown that the use of the company’s products saves three times more CO2 than is produced over their entire lifecycle.

Any analysis of “division of labor” must therefore always be made against the background of a specific industry or service segment. There are no general rules or solutions that apply equally to all economic participants.

Background
1) General labor market trends – demography is the key for the future division of labor
The high degree of inequality between nations was caused by an uneven spread of capitalism that segmented the international division of labor from the mid-1800s through the mid-1900s. However, since the beginning of the 1960s, the world economy has experienced a new international division of labor in the form of a shift of manufacturing from developed to developing countries and an increase in the volume of international trade. This shift has been accelerated and enhanced through technological advances and an increasing level of skill in developing countries. These new opportunities provide incentives for higher education in these countries, enabling the existing education gap between developed and developing nations to be closed eventually. This would, of course, be a desirable development, as a higher educational standard would be an essential step in reducing the inequality between developed and developing countries, since as it would allow developing countries to participate in production stages that have previously been unavailable to them.

Increasing economic globalization is forcing human resources functions in many industrial and service companies to adapt and to change their traditional structures: They need to take account of factors such as off-shoring and the fragmentation of value chains, and revise their management policies accordingly. As activities decentralize, an effective organizational design involving international standards and global teams is essential to ensure that business units
are able to communicate and collaborate efficiently. In addition, the possible impact of supra-national organizations, e.g., EU regulation, on HR action fields must be constantly monitored.

With populations shrinking in Europe, the United States and Japan, demographic change is leading to an aging workforce and a decline in the number of young talents available. This will cause dramatic changes for economies and companies that are unique in newer industrial history. Companies need to gain transparency and conduct a demographic risk assessment process, which can then from the basis for strategies to ensure productivity and success in shrinking and aging domestic labor markets. Moreover, aging labor markets also mean that companies will have to face the loss of knowledge due to the retirement of a relatively large share proportion of the workforce each year after year.

At the same time, cooperation of universities and other educational institutions are increasing around the globe. We are seeing worldwide growth in education levels, enrolment in higher education is increasing, and more capital is being spent on the secondary sector.

Due to global trading, employees compete with each other beyond national borders. Currently, post-industrial nations still benefit from a growing number of highly skilled migrants, but this is likely to change as living standards increase in emerging countries.

As shown by a recent BCG study on worldwide HR challenges, companies will, however, continue to become global organizations. While the recession may have temporarily dampened these ambitions and fanned protectionist fires, the reasons for companies to pursue global growth endure.

It is crucial that protectionist measures in response to the financial and economic crisis are avoided at all cost. Such measures will harm all globally active companies, which in turn will have damaging effects at the national and even local level. There needs to be a common understanding that global and local activities are not mutually exclusive. The benefits of socially responsible globalization therefore far outweigh the anticipated advantages of protectionism.

2) The chemical industry – sustainable growth and the need for a highly skilled workforce

The chemical industry is a capital- and resource-intensive industry. Access to competitive raw materials and energy are important investment decision criteria. Investment cycles are generally based on long-term considerations. The last decade was characterized by consolidation and the impact of new competitors such as Sabic and Sinopec. The struggle for economic success in the face of ever fiercer global competition requires sustainable processes, products and solutions – even more so in the post-crisis world. We are observing the growing importance of Corporate Social Responsibility, as well as environmental awareness and responsibility.

Besides shifting production and reducing production costs for low-skilled tasks in some areas of manufacturing, recent discussions about the international division of labor often revolve around the possibilities of offshoring in service industries, where medium- to high-skilled knowledge tasks can be transferred to regions with a highly educated local workforce. Thanks to growing access to and the performance of information and communication technology, the potential cost savings offered by such relocations is considered to be significant.

However, while shifting production for cost reasons might be conceivable for service providers or in parts of the manufacturing industry, the picture is, however, quite different for companies in resource- and capital-intensive industries.

Unlike the relocation possibilities in the service industry, whose restrictions lie mainly in technical requirements for service provision, companies like BASF are not as free in the choice of site locations. The proximity to resources and customers is a critical success factor. Employment is not shifted from one country to another for cost reasons; new capacities are created in certain locations to best fulfill market needs.
BASF is also dependent on a highly-skilled and well-trained workforce at all of its sites worldwide, regardless of whether they are in developed or developing countries.

The shortage of qualified labor that will face most Western economies shows the opportunities offered by rising education levels in developing countries. In Germany especially, there will be a high demand for service workers in the healthcare sector and a significant need for engineers by 2020. Also, even if the world population grows significantly overall, Europe’s population will decrease by 1.15% between 2010 and 2020. In view of the correlation between population and GDP, this does not bode well for economic growth in Europe. In Western Europe, Germany and Italy will be hit hardest: Germany’s population will decrease by 1.4% per year between 2000 and 2020, dropping to 81.16 million by the end of this period.

BASF has never believed that the opportunities of globalization would simply involve the transfer of low-skilled tasks to developing countries, with only high-skilled tasks being retained in developed nations. Instead, we have established our worldwide locations in an effort to strengthen our economic presence in relevant markets. Our presence in Ludwigshafen, Germany, and our presence in Nanjing, China, are in no way mutually exclusive, as both sites deliver essential tasks within our worldwide “Verbund.”

**Solutions**

1) Key success factors for workforce competitiveness

a) Level of education and social competencies are the key to success

The workforce around the world needs to be able to cope not only with globalized markets but also with regionalized or even globalized labor markets. On the one hand, companies need to follow appropriate labor and social standards. On the other hand, it is important that employees are prepared ready and willing to act in a globalized economy and to participate in its benefits. In developed countries especially, the fear of globalization needs to be overcome by achieving a broader understanding of global markets, by pointing out how society benefits from global markets, and by providing examples of global organizations that act in alignment with relevant standards.

Preparing for globalization also means ensuring that our own educational system meets the highest international standards and that we foster from an early age the social and emotional competencies needed to cope in a rapidly changing world. Higher education must prepare students for the world they will face once they join the workforce. This means that greater emphasis has to be placed on the importance of working in teams, the ability to cope with differing views, raising and responding to new ideas, and finding solutions to problems.

b) Mobility and cross-cultural competencies as the basis for being part of a regional or even global labor market

In order to remain competitive, the workforce also needs to become more mobile. The faster pace at which global markets are evolving requires companies and their workforce to adjust at the same speed in order to remain key central market players in their markets. However, this mobility is not possible without preparation and support, especially in those parts of the workforce less familiar with globalization. Therefore, education must not only meet the highest international standards, but must also provide students with international experience. This includes the including and integration of appropriate global content in all educational fields, providing input from international experts, as well as encouraging students to gain experience abroad. All of these factors are not only central components in creating a highly mobile workforce, but also help to develop cross-cultural competencies. Without awareness of and familiarity with a variety of behaviors, conventions and opinions from different cultures, workforce mobility cannot evolve at the international level.

2) Key success factors for companies’ competitiveness
a) New culture of diversity: a corporate culture that encourages diversity and inclusion

Global companies need to address the diversity of their workforce. In addition to demographic characteristics like age, gender, race, religion or education, diversity also relates to less tangible differentiating factors like personal skills, values and experiences. These ‘invisible’ differences can have a very tangible and immediate effect on a company’s performance and results. Diversity requires inclusion as the basis of a corporate culture shaped by respect, openness and mutual esteem that improves a team’s performance. The combination of diversity and inclusion in corporate culture creates a welcoming working environment in which all employees may are able to introduce their own views, experiences and ideas. This is the basis of creativity and innovation – the decisive factors for lasting business success.

b) Companies have to establish a strong employer brand to attract and retain talents

Besides the traditional focus on education, global companies should use their worldwide presence to locate and develop talents all over the world. BASF has started a number of such initiatives based on its strategic guideline “Form the best team in industry,” BASF has started a number of such initiatives. They help us to recruit more employees in the regions in which we operate on the basis of uniform criteria throughout the BASF Group, and they help us to develop employees in a focused manner. One of our current projects is the implementation of a standardized recruiting approach for Europe. In many countries, BASF works to establish close relationships with local universities and vocational training institutes through various channels such as career talks, graduate recruitment, internship programs and research projects. In order to be effective, the recruiting organization has to be adapted to the specific labor market in each region and has to be backed by an appropriate talent management and development program. BASF has therefore also started an initiative to intensify its global efforts in career development efforts.

Companies will also have to find ways to help employees to cope with demographic challenges. Our program Generations@work analyzes the various implications of demographic change and provides solutions. For example, the program examines the shifting of gender roles and new lifestyles that require additional measures and solutions to help balancing career and family, for example by ensuring care for children and/or elderly relatives. Other parts of the program deal with the need for age-specific HR strategies to foster a high-performance workforce to ensure employability, sustainable recruitment, productivity and innovativeness, for example by providing job options for employees aged 50+.

Jointly, we hope that these projects will strengthen our position as a preferred employer and help us to act globally to attract talents in regional labor markets.

c) Successful post-crisis entrepreneurship is based on sustainable development

Post-crisis competitiveness will be based on the ability to cope with global structures of both companies and employees. Market growth is likely to be limited; competition is intensifying, and global megatrends are demanding solutions. Now, more than ever, global companies are obliged to adopt a responsible position toward the environment and society. The current financial and economic crisis is a major challenge to most of the world’s economies, and its ultimate consequences are still unclear.

The relocation of work to developing nations might seem tempting when looked at only from the perspective of cost-efficiency. But this is a highly simplified view of complex and dynamic world markets which are driven by the availability of resources as well as requirements dictated by customer needs. BASF’s past and present focus on sustainable development at the global level is based on the firm belief that the benefits of globalization will only manifest themselves when all actors adhere to set standards of responsible and sustainable behavior. The financial and economic crisis has shown us quite plainly how quickly the upward spiral of higher returns and lower production costs can come to an end. We should therefore be less generic when looking at worldwide developments and instead evaluate them on an industry-
specific basis. In order to have access to future markets and remain competitive, we must assume responsibility for our shareholders as well as for our employees, for the environment, and for society as a whole. Sustainability is integrated strategically and organizationally at BASF. We believe that it provides us with a competitive advantage and minimizes risks.

Dennis Goerlich
Kiel Institute for the World Economy

Background
What are the benefits of a new global division of labour? Possibilities for relocation of production stages to low-wage countries imply huge cost savings and productivity gains for firms. The manufacturing industries have long profited from these savings, but in the service industries off shoring is not yet a very common strategy. In general, back office services in all sectors of the economy have hardly ever been off shored. Service off shoring, which might importantly include the off shoring of medium- to high-skilled tasks, is only made possible by new ways of communication and storage (internet), which allows the fast and secure transmission and delivery of codifiable output that does not have to be delivered in person. Potential cost savings are sizeable: for example, one article claims that a call centre in India incurs only a quarter of the cost of a similar centre in the US.

The new global division of labour also allows developing countries to participate in production stages that have formerly been unavailable to them. Such new opportunities might change the incentive structure of educational investment in these countries, so that the existing education gap between developed and developing nations might finally be closed. In this respect, also western economies have an incentive to cooperate on education questions because the more skilled the foreign labour force is, the more attractive it becomes as an offshoring location.

On the one hand, it, thus, appears that a new global division of labour is generally a desirable development. On the other hand, it brings with it a number of uncertainties and consequences, which may present a big challenge to society and politics. In particular, the new global division of labour is likely to affect people that have not formerly been exposed to the forces of globalisation, namely those workers with skilled jobs. These workers suddenly become vulnerable, might slip into unemployment, or might see their wages fall relative to those of others. Entirely new patterns of inequalities might emerge. Mixed with the current financial crisis and the looming recession, public support for globalisation might be severely threatened, the risk of protectionism rises, and ultimately even a surge in political extremism is thinkable.

Solutions
Unwanted consequences of the new global division of labour need to be prevented.

(a) The population will have to be enabled to cope with the new challenges ahead of them. The current financial and economic crisis adds even more urgency to this point, as the crisis is very likely to completely reshuffle the world’s labour markets. It is yet unclear how firms react to contemporary critical situations, but structural change which usually takes a long time to unfold might be accelerated strongly due to the crisis.

(b) Yet, throughout the crisis, support for globalisation will have to be held up and protectionist tendencies need to be prevented for the benefits of globalisation to be reaped.

(c) Also the welfare state will have to react to the changing surroundings.

(d) While a good and modern welfare state will play its part in keeping the workforce employable, teaching the (future) workforce the right skills to cope with rapid change is elementary.
Prevent protectionism.

Less globalization and more redistribution would be an intuitive though misleading response to the perceived increase in inequality, for two reasons. One is that the increased international mobility of goods, financial assets, people, and ideas is most likely to create income gains and hence is worth having. What seems to matter for changes in inequality is technological change, or possibly the combination of globalization with technological change. Thus reducing globalization by taxing the winners to compensate the losers is a solution that will not help, because it will mean foregoing income gains without necessarily affecting rising inequality.

We need clarification which new patterns of inequalities might emerge and who becomes vulnerable.

Many researchers suggest that it will turn out to be wrong to look solely at educational skills only when considering emerging inequalities. Instead, job content in terms of tasks will matter more (routine vs. non-routine, personal vs. non-personal tasks). Only jobs consisting of internationally contestable tasks will be threatened by the new global division of labour. Technological change might play an important part in continuously altering the spectrum of contestable tasks. Hence, inequalities will be determined along these dimensions in the future, whereas they were clearly determined along educational differences in the past. Hence, economic policy might promote and strengthen the learning of personal, non-routine, cognitive tasks as these are the tasks that make a job a good job in the future. Research in this area should be strengthened to make clear where inequalities emerge and where action should be taken.

We have to teach the right skills for people to become and remain successful when the nature of work is becoming more heterogeneous.

Rapid changes of job contents, individualised employment biographies, and the blurring occupational borders will make work very heterogeneous. Consequently, workers will have to stay adaptable. It has been argued that workers need strong competences in social and emotional competences, problem-solving skills, and versatility to cope with such challenges. Teaching social and emotional competences (so-called non-cognitive skills) cannot start early enough, possibly even with children at pre-school age (Nobel Laureate James Heckman is a prominent proponent of this idea). At school and university, lessons have to strictly convey problem-solving capacities by designing instruction in a participative and activating manner. Such capacity will also foster versatility, which is urgently needed to stay successful in a world with rapid organizational change.

Instructional methods at school and university have to change radically.

Reports and videos from class rooms show a very limited number of varieties of instructional methods: the teacher speaks for most of the time and student involvement is limited. Yet, in order to obtain problem-solving skills and versatility, this is not sufficient. Instead, lessons should involve the study of real-life problems, should emphasize team work and cooperative learning, encourage students to produce own new ideas, and train social and organising abilities. Students should be able to autonomously analyse an issue, structure information, work in a team, conduct and chair discussions, and to present own ideas to an audience. Learning should occur by actively going out and finding the information the students need. Previous knowledge should be evoked, learning objectives should be transparent to the students, and the individual learning process should be closely monitored. Finally, also instructional quality is important. Educational research stresses three elements necessary for high-quality instruction: high cognitive activation, good classroom management, and personal and emotional support and respect of the student. Incentives for educators to adhere to these goals have to be improved.
The welfare state needs to consistently focus on policies that enable people to adapt to their individual new situation.

The welfare state will have to part from the current strategy of income support and helping particularly the low-skilled, low-paid workers in vulnerable sectors. For example, it is no longer appropriate to train people from losing sectors for jobs in apparently winning sectors. Instead, welfare state policies should enable all workers affected by the new global division of labour to adapt to their new situation, and hence account for the diversity (in terms of skills and sectors) of the affected. Welfare accounts and benefit transfers are two such measures: Welfare accounts transfer property rights to people so that they can use their accounts of e.g. unemployment benefit according to their needs. Benefit transfers focus on changing the incentives to take on employment or participate in training programmes by transforming part of the benefit into vouchers.

Developing countries should take the chance to participate in the global market place and work on improving educational levels in their countries.

Recently emerging possibilities for services off shoring opens up new fields in which developing countries can participate in the global market place. Previously, only unskilled tasks were shifted abroad, but now also medium- and even high-skilled tasks might be done in developing countries. This entirely changes the incentives for a developing country citizen to obtain education. The argument here is similar to the brain gain idea from migration studies: the pure prospect of working in a skilled job abroad later in his life (perhaps a current migrant in the family has already made respective contacts) provides an incentive to get education today. Under a new global division of labour, this may be similar, except for the fact that one does not have to migrate. The new global division might thus help to close the education gap between developed and developing countries. The financial and economic crisis makes developing countries especially vulnerable. Consequently it will be important to continue the integration of poorer countries into the new global division of labour.

Kris Gopalakrishnan
CEO and Managing Director, Infosys Technologies Ltd.

Leverage technology, compile country/industry specific data, facilitate immigration/migration and increase dialogue

There is a mismatch in the demand for talent versus the supply and this is bound to become worse in the future.

The demand for talent will see a rise in emerging fields like biotechnology, genetic technology, green technology, renewable energy and other environment-related fields. Currently, there is a mismatch between what is needed and what is available, not only in terms of the quantity but also the quality of talent.

Some of the prominent trends are:

The knowledge content of jobs today is increasing and competencies run the risk of becoming obsolete sooner than they did earlier. Factories for instance are becoming robotic and this calls for familiarization with latest developments in production technology

Country and regional demographics are playing a key role in developmental plans. While few countries are grappling with the problems of an ageing workforce, others are coping with the pressures of creating employment for a large number of young and talented job seekers.

Trends like these are changing the way we do business, the way we define talent and the way we interact with a global workforce.

However, there will always be jobs for the right people.
To bridge the existent gaps and also to increase employability options of the global workforce, various measures are needed.

*Firstly, at the core of every reform initiative should be technology* – to maximize its scale, scope and impact.

*Secondly, immigration and migration policies need to favor an osmotic global workforce.*

*Next, there should be conscious efforts to have accurate data on workforce by country/industry, etc.* This will facilitate a clear understanding of the scale and scope of the gaps and facilitate effective, focused responses to the same.

*Finally, dialogue between nations should be encouraged to aid a consensus on the need for a collective long-term response to tackle the challenges.*
The Global Economy

The Psychology of Financial Crises 2009

The Challenges

The mainstream economists’ account of financial crises – based on rational expectations, maximization of stable utility functions, information shocks – is currently called into question as it failed to predict the present global crisis ex ante and even to explain certain relevant aspects of it ex post. A new approach to understand the mechanisms of financial crises is based on recent research in psychology and neuroscience.

This research portrays people’s financial decisions as the outcome of emotional reactions to ambiguity and uncertainty, swings of confidence and trust due to “animal spirits”, herd behaviour and other social interactions, shifts in moral responsibility due to changes in social norms, and other mental, social and anthropological forces. What are the circumstances under which the economic or psychological approaches are likely to be dominant? How should policy makers, bankers and investors be made aware of these circumstances?

What are the implications of the psychological approach, alongside the traditional economic one, for investment strategies, financial practices, and financial regulation? What are the implications for risk-management practices by business? How should our financial instruments and institutions be redesigned on the basis of these insights?

The Dot-com Bubble: NASDAQ Composite Index 1994-2004

Proposed Solutions

Erdem Başçı
Deputy Governor, Central Bank of Turkey

Dealing with multiple equilibria under psychological shocks

Large price fluctuations observed in financial markets are sometimes seen as deviations from a fundamental economic equilibrium. This panel is about the role of psychological factors that may contribute to such deviations.

I would like to approach the same problem from a slightly different angle. There is an often ignored possibility of having more than one stable equilibrium in a financial market. Then the observed large price fluctuations may also be attributed to the market price travelling from one economic equilibrium to the other.

To have multiple equilibria in a Walrasian general equilibrium model would not be surprising. In fact, with heterogeneous agents and low substitutability among some commodities, uniqueness of a market equilibrium is an exception rather than the norm.

The paper by Basci and Saglam (2008) “On roots of housing bubbles” shows that having three equilibrium rental price rather than one is quite likely in the market for housing services. Two of these three prices are stable and one is unstable. Therefore, in face of a large shock, there is a possibility for the system to move from a high price equilibrium to a low price equilibrium and vice versa.

Dynamic rational expectations models are also very much prone to multiple equilibria. The possibility of rational bubbles is one example.

The presence of more than one equilibria in an economy makes the role of psychological factors like “animal spirits”, “beliefs” and “sunspots” more interesting. Since such behavioral shocks could indeed determine and change where the economy would eventually settle down.

Likewise policy and institutional analysis becomes more interesting in economies prone to multiple equilibria. What policies could take us away from the undesired equilibria? Which institutional changes would eliminate multiplicity of equilibria and make the desired outcome the only stable equilibrium?

A better understanding of the interactions between occasional irrational actions of economic agents and the resulting movement between different rational equilibrium points is essential in designing, communicating and implementing institutions and policies.

Gregory Berns
Professor of Neuroeconomics, Emory University; Director of the Center for Neuropolicy

Psychological biases originate in the brain

Financial crises are caused by the way in which individuals’ brains react to information. Because the brain is an information machine that runs on a biological platform, we can understand where psychological biases originate and create tools to counteract the most financially damaging ones. In particular, three types of biases have been described from a brain-perspective that may contribute to financial crises.

Temporal myopia
Every animal, from insects to humans, places disproportionate importance on short-term gains over long-term ones. This hyperbolic discounting leads to a preference for immediate profits
over long-term investment as well as preference reversals. Neuroimaging has shown that the brain contains at least two decision making systems with vastly different time constants: an immediate gratification system based in dopamine, and a long-range system based in the frontal lobe. Simple solutions to promote long-range investment include tools that allow the frontal lobes to guide decision-making, such as framing information to draw attention to longer timescales and deemphasizing quarterly earnings.

**Diminishing marginal returns and risk aversion**

Everything that is perceived in the brain is a result of an electrochemical reaction. Basic laws of chemistry tell us that every chemical reaction has a maximal rate. Although financial value can be calculated in many different ways, ultimately our perception of value is governed by its conversion into neurotransmitter release. This chemical reaction is fundamentally why utility functions are concave over gains and consequently why most individuals tend to be risk averse.

**Social influence**

Recent neuroimaging data has shown that the opinions of other people very quickly alter internal valuation and perception systems of the brain. For markets to operate efficiently, individuals should aggregate information and make individual judgments. Neurodata suggests that the brain incorporates other people’s opinions as if it were its own. This leads to conditions in which markets may lead to either panic buying or selling. Tools to insulate individual valuations from market valuations may avoid the conflation of the individual with the herd and avert panics.

**Claas Prelle**

*Kiel Institute for the World Economy*

**Impose stronger regulation on financial markets**

Although the benefits of capitalism are undeniable, the widespread belief that the government should intervene as few as possible into the development of markets might be misleading. While such a kind of policy might be optimal for a theoretical economy with fully rational people who act only on the basis of economic motives, it neglects the massive “irrational” swings of markets due to psychological effects. The necessity of setting strict rules can be of special importance for the trading of complex financial instruments, the impact of which on financial markets can hardly be overseen by anyone.

**Expand credit flows to the level that would prevail at full employment**

One of the main problems during a financial crisis is the loss of confidence of investors which can easily lead to a downward spiral and especially to a credit crunch, as lenders do not trust that they will be paid back. The government should have the goal to lift credit flows to the level that would have prevailed without a crisis instead of just ensuring the solvency of the systemic relevant agents. This is necessary to restore both the confidence of investors and the smooth functioning of the financial market which is required in order to make other policy measures work properly.

**Establish indices for the extent of irrationality in financial markets**

This “extent of irrationality” could be published in form of one or several indices, which should include sentiment data (raised by questionnaires) as well as measures calculated indirectly from market data (for example prices relative to fundamental data). Explicitly providing such
indices and caring for their public awareness could help to give investors a more realistic background on the state of the economy and thus dampen fluctuations on financial markets.

**Establish more sustainable incentive schemes**

A direct approach which could reduce the extent of irrational decisions by bankers is to establish more sustainable incentive schemes. For example, when a price bubble arises, even a reasonable banker who is sure that a certain asset is overvalued, might feel forced to invest into it, because he will lose his job or at least ruin his bonus if his relative performance falls below the average even in the short-run. More long-term oriented incentive schemes could also prevent mistakes that result from decision taking of bankers under panic.

**Build more heterogeneous groups for (investment) decisions**

In a homogeneous group, feelings like exuberance or fear which bias the decisions in a certain direction, are more likely to dominate. This effect is even magnified by the fact, that the opinion of a group after debating is usually more extreme than the average opinion of its members, which is widely recognized in behavioural science. In particular, it is often claimed that there should be more women in responsible positions, as women tend to be more cautious than men and thus could contribute to more balanced decisions. However, this argument does not only apply to the sex but can be generalized to other factors like age, cultural or scientific background, etc.

Robert Shiller  
*Professor of Economy, Yale University*

**Subprime solution: How today’s global financial crisis happened and what to do about it**

**Democratize finance**


- Develop a new information infrastructure
  - comprehensive financial advice
  - new financial watchdog
  - default-option financial planning
  - improved financial disclosure
  - improved financial databases
  - new system of economic units of measurement
- Fundamentally expand financial markets to cover more risks that really matter
  - real estate risk markets
  - long-term claims on incomes
  - GDP and trills
- Develop new retail financial products
  - continuous workout mortgages
  - home equity insurance
  - livelihood insurance
David Tuckett  
Professor of Psychoanalysis, University College London

The solutions proposed for discussion below rest on a set of theories collectively termed “emotional finance” which views the current crisis as a complex outcome of human engineered developments in the financial system which have increased co-ordination and collective action problems to make it inherently unstable. Emotional finance finds unhelpful the utilitarian distinction between rational and irrational; arguing like Adam Smith that sentiments determine goals and like Herbert Simon that most decisions we want to study are necessarily boundedly rational within the context of the cognitive, emotional and social-political situations in which they take place. Emotional finance agents are considered to use their imagination, gut feelings and various available heuristics to take actions rationally but with less than fully anticipated consequences, depending on several aspects of context. One factor impacting how fully consequences are imagined when what appear exceptional opportunities are presented is the capacity an agent has “really” to anticipate experiences like disappointment and so to be willing to forego short term excitement for fear of longer term pain – bearing in mind that imagined and actual experience appear to produce similar brain chemistry events when studied using magnetic resonance imaging techniques. From the viewpoint of emotional finance changing the context in which decisions are made alters the subjective experience of time and the emotional meaning of thoughts with significant consequences. Finally, many behaviours in financial markets (quarterly reporting, concrete applications of risk formulae, tracking error as a basis for mandates, daily checking of fund performance, etc.) are conceived as frequently driven by attempts to remove inherently irremovable conflicts produced by emotional responses to uncertainty.

1. Create a new system of prudential regulation built on an initial process of collective recognition about what has happened in every major institution.

A significant problem in asset price bubbles is (1) the excitement and satisfactions to be had from the short-term gains from participating and (2) the reluctance of institutions and individuals to be left out and so to suffer (pain) by comparison with rivals – both powerfully underwritten by neurobiological as well as psychological processes. No one wants to leave the dance and those who wait it out often lose their jobs. When the dance is over, those who led it are sacked (or merged or bankrupted) and the risk is the responsibility goes with them. Both during the boom and after there is a collective action problem in which feeling responsible and the willingness to say “not now” or “no” is “split off” somewhere else. Those who try are ignored, mocked or shunned. Future regulation will not work if it repeats a “Tom and Jerry” cartoon “splitting” structure or imposes a modern version of the Versailles treaty seeking damages. Along the lines of the South African “Truth and Reconciliation” process all major institutions need to be required by current regulators to take part in the investigation of what happened and the drawing of conclusions about what to do. We need to make a major effort to produce and file written findings and to take steps to ensure the record is part of future education and governance – for trust and pension funds, asset management institutions, financial consultants, banks, regulators, treasury departments, etc. The aim is not to discover the culprits but to seek to reach a consensus about the need for collective action to maintain defined long-term financial stability at least among key institutions within the political and financial network.

2. Create a central bank (or similar) unit specifically charged with seeking out and investigating potential investment bubbles and making regular public reports about them, which could provide an empirical basis for additional powers to be given to central banks to prevent widespread asset price bubbles.

In excited markets there is often no incentive to take the painful action of saying “no” or to do the necessary research to draw the conclusion “not for us now” – if everyone else is doing it. A public and sophisticated research body mandated to discover unusual pricing activity and to make regular reports could start to counter this lack by analysing in depth and detail and
making public the basis of whatever “cover stories” about innovation are beginning to create sufficient excitement to suggest a bubble is starting – in the past these included the notion of the Internet Super Highway, the idea house prices always rise, or that new business models for banks could make them massively more profitable and safe through the securitisation of default risk. Future innovations are unknown unknowns but will include opportunities in emerging markets, etc. Asset trading data could be systematically analysed by authorities and indices (such as the Case-Shiller index for houses prices) should be developed. (Note that just as Shiller warned presciently about irrational exuberance over the Internet and then about house prices, bankers at JP Morgan did not extend the Credit Default Swap schemes they developed to the mortgage markets because (a) they did not feel there was enough past data to model the risks and (b) could not think how to deal with the problem of super senior debt. JP Morgan staff desisted and in consequence profits performed poorly against other banks who did not.)

3. **Give central banks the additional responsibility to achieve adequate financial stability and so the additional powers to demand changes in capital ratios, loan characteristics etc., during potential asset price inflations but recognising that sometimes such action will be unpopular and may stifle some innovation and so needs to start from a base of consensual support.**

Innovation is the life blood of humanity. At the same time human survival depends on early-enough adaption to painful feedback. If we accept that the past crisis shows that the market could not discipline the spread of innovation at an acceptable cost then central banks need the power to identify key weaknesses in financial networks so to have powers to obtain information and take actions whenever practices appear to be creating systemic risk or key institutions become “too big” for the system to be safe. As an additional idea perhaps central banks (or some other group) should have effective veto power over the spread beyond certain limits of certain types of financial innovation whose utility is unproven. (As occurs, for example, in the medical/pharmaceutical industry).

4. **Begin a much more active process of questioning the current basis of asset management and take active steps to question the validity of short-term relative benchmark performance data and to destroy the myth the pursuit of phantastic financial performance is a tenable basis for sound investment – especially for trustees, pension funds, etc.**

The search for exceptional performance in the banking sector was fuelled by the rising multiples paid by fund managers impressed by innovative approaches to a hitherto stagnant sector. The “league table” marketing of asset managers on the basis of their capacity to provide “exceptional” performance and then the whole incentive structure of the industry creates an ongoing risk that managers find stories which tend to over emphasise gains and underestimate risk. To address this issue the industry needs to be drawn into a discussion of collective actions to mitigate the problem – based on making all advertising much more transparent and also reviewing what is a reasonable basis for manager and asset class selection and the whole system of fiduciary responsibility. (Relative return benchmarking should be restricted; or at least different performance evaluation monies mandated – for example, by trustees.) The incentive for the industry is that past disgrace has weakened their client base.

5. **Make fundamental changes in economics.**

The neoclassical economic paradigm has had interesting things to tell us about how markets might work but is clearly misleading as regards how financial markets do work – particularly in regard to the influence of the subjective impact of time on agent decisions, oversimplified notions of rationality and agency as well as of social or group effects. With the notable exception of some colleagues it is still unclear how far the paradigm is accepted as flawed – for financial markets. Certainly, significant efforts need to be taken by stakeholders to tackle vested interests in economic research and intellectual institutions and to prioritise developing a new genuinely interdisciplinary paradigm for the economics of financial markets which makes
sense to those who work in them in all the different structural positions they inhabit. We need to update the core education and professional training of investment professionals to take account of how markets actually work (Business Schools and CFA Institute exams, etc.) and actually suppress the teaching of current theories except within a wider framework free of disciplinary imperialism!
The Global Economy

Managing the New Global Imbalances 2009

The Challenges

The financial crisis and the resulting global downturn have unwound some of the old global imbalances. For example, US household consumption as a proportion of income has fallen; Chinese government spending relative to GDP has increased. Nevertheless, the economic turmoil may give rise to new patterns of global imbalances.

Governments’ ability and need to provide bank bailouts and fiscal stimulus have often depended on the size of their financial industry and the size of the national debt, rather than on the magnitude of previous global imbalances that required to be corrected. The severity of national recessions, along with the associated changes in trade flows and capital movements have depended in part on countries’ different degrees of export dependence, energy production capacities and their past financial regulations.

These differences may generate new imbalances between countries with relatively large and relatively small financial sectors, raw-material-producing and raw-material-consuming countries, and relatively open and closed economies.

In the absence of proactive policy responses, what are the new global imbalances likely to be? How should monetary, fiscal, trade, structural and welfare policies of countries around the world respond to the prospect of new imbalances? What exchange rate regimes would be useful to prevent the new imbalances from arising?
Proposed Solutions

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During the ongoing financial crisis global imbalances as the current account deficit of the United States already has been reduced to some extent. Nevertheless, there are good reasons to believe that when the financial crisis has passed the new global imbalances will be first of all the old ones. In East-Asian countries like China underdeveloped financial markets and precautionary saving will play further an important role in the medium term and may reinforce the "saving glut." Oil exporting countries are likely to be net savers in the future as well. In contrary, countries that have run large current account deficits so far, excessive consumption may switch from the private to the governmental sector for several years.

At this point it may worthwhile to stress that global imbalances are not bad in general. Indeed they are reflection of capital flows among regions and help to employ capital where it is most productive. Thus, future policy measures should not seek to prevent imbalances per se. However, imbalances that reflect unsustainable economic developments should be prevented in future by appropriate institutional frameworks.

First of all structural policies in countries that have run excessive surpluses or deficits can help to hold global imbalances at a sustainable level. An improvement of financial markets and the social security system in East-Asian countries will decrease private savings in this region. Obviously such structural changes take time and will not be a short-run solution. In those countries that have run large deficits due to overconsumption as a result of a housing boom country-specific regulation of the financial market may help to prevent the reoccurrence of such bubbles.

In this regard global regulation of financial markets and financial markets participants may play an important role, too. Apparently financial institutions took on too much risk. There is some reason to believe that the same underlying faults that led to financial crises also supported global imbalances to rise. One example may be the excessive mortgage supply for non-creditworthy homebuyers in the United States that were financed via structured securities internationally. Therefore an institutional framework that stabilizes financial markets at a global level could be one cornerstone in preventing unsustainable global imbalances in the future.

Frequently it is argued that the exchange rates play an important role for the emergence of global imbalances. The systematic intervention on the exchange rate market of some Asian countries to avoid appreciation of their currencies and strengthen exports – from time to time called Bretton Woods II – was the main driver of the past imbalances and may trigger imbalances also in the future. If so, then policy should concentrate to receive binding commitments from all countries to allow exchange rates in future to float more freely and to do not intervene at those markets. However, many studies point toward a minor role of exchange rates in determining the trade balance of a country. Furthermore there may be good reasons for countries to stabilize their exchange rate that do not aim exclusively on the trade sector. One example may be to increase the attractiveness for foreign investors.
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**A simpler way to solve the “dollar problem” and avoid a new inflationary cycle**

When China’s Premier Wen Jiabao recently expressed concerns about the future of the US dollar, the currency in which most of his country’s official reserves are denominated, his remarks provoked contrasting reactions among US economists.

Some, like Fred Bergsten of the Institute of International Economics, exhorted the US government to take Mr. Wen’s concerns seriously and listen to Beijing’s suggestion to create a substitution account in the IMF, which would allow Fund members to exchange unwanted US dollar balances for SDRs, as part of a gradual process to replace the dollar with a supranational reserve currency over the long run (Mr. Bergsten was particularly enthusiastic about the substitution account idea since it matched a similar proposal he had made in 2007, see Fred Bergsten, “We should listen to Beijing’s currency idea,” FT April 8, 2009, and “How to solve the problem of the dollar,” FT December 11, 2007).

Other US economists, including last year’s Nobel laureate Paul Krugman, were less enthusiastic. According to Mr. Krugman (Paul Krugman, “China’s dollar trap,” New York Times, April 2, 2009), China had fallen into a trap of its own making due to its reluctance to adopt a more flexible exchange rate policy in the past. Since any attempt by China or any other country to diversify away from the US dollar too much or too quickly would be self-defeating, there was no immediate threat to US or world financial stability, hence no need for the US government or the IMF to intervene on China’s behalf.

In our opinion, Mr. Krugman’s view is very simplistic for it fails to take into consideration the effect that a large amount of unwanted dollars and dollar assets will have on inflation once recession fears dissipate. It is possible that Mr. Krugman believes that some increase in inflation is a good thing, as it could help cure the “dollar overhang.” If so, he is not alone. Kenneth Rogoff, the former chief economist of the IMF, has recently written that “a sudden burst of inflation would be extremely helpful in unwinding today’s epic debt morass” (Kenneth Rogoff, “Embracing inflation,” The Guardian, UK, December 2, 2008). Put in other words, by increasing inflation, the US would “solve” two problems at once. On the one hand, it would debase the value of its national debt, hence preventing it from growing too much relative to GDP. On the other, it would reduce the real value of the debt (unsecured and secured) of financial institutions and other US corporations, hence diminishing the need for explicit haircuts or public bailouts.

The problem with this “solution,” aside from the reputational problems it creates for the US government, is that once the inflation genie is out of the bottle, it will be very difficult to put it back in. As for the solution proposed by the Chinese central bank and Mr. Bergsten, there are, unfortunately, several problems. First, the plan requires a complex multilateral negotiation, including a change in the IMF’s Articles of Agreements, which is unlikely to be supported by the US, if anything because the SDR will compete with the dollar as a reserve currency unit. Second, the proposal restricts the menu of potential dollar substitutes to the SDR, itself a basket of currencies with a predominant dollar share. Third, a substitution account in the IMF makes the IMF rather than the US government liable for losses resulting from the depreciation of the dollar vis-à-vis the SDR, a condition likely to be opposed by other Fund members.

However, the most important drawback of the China/Bergsten proposal is that it does not really protect US official creditors from a persistent fall in the dollar. This is because in the event of a protracted dollar depreciation, it is highly unlikely that the central banks of Europe, Japan, and the UK will stay put and let their currencies appreciate. More likely, these countries...
will resist appreciation by engaging in a process of competitive devaluations, the end result of which will be an increase in global inflation. If so, the reserves of China and other emerging markets will lose real value whether they are in dollars or SDRs. More importantly, inflation will be high everywhere in the world, and it will take years of high real interest rates and low growth to bring it down.

Fortunately, there is an easier and better way to protect the value of emerging market reserves while reducing the risk of a resurgence in world inflation. This is to reduce the incentive of the US government to “inflate its way out of debt.” For this to happen, all US creditors need to do is demand that the US government swap nominal US Treasury bills, notes, and bonds for inflation-adjusted instruments (TIPS) on demand. Since, at present, the supply of TIPS is very small in relation to the rest of the US national debt, bilateral coordination would be necessary to avoid distorting their value.

One of the advantages of this idea is its simplicity. For starters, it can be executed bilaterally rather than multilaterally. This not only makes it easy to implement, but also gives the US government leverage to extract concessions from the other governments. For example, in the case of China, it would be possible for the US to negotiate a quid-pro-quo, whereby China commits to reforms geared to reducing its structural current account surplus – including, but not limited to, a more flexible exchange rate policy. For this reason, it would be preferable that the swap proposal comes from the US rather than from its creditors.

But, more important than the practical advantages are the beneficial long term effects of such a policy, particularly in averting the specter of global inflation. By substituting TIPS for nominal bonds, the US government would be sending a strong signal that it does not plan to “inflate its way out of debt,” as disingenuously suggested by Mr. Rogoff but, to the contrary, will commit itself to adopting a more disciplined monetary and fiscal policy going forward.

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Back to the future: Reinventing financial stability role of central banking

Global imbalances have played a dominant role in the manifestation of the ongoing financial crisis. High savings rate and low investment spending have led to large current account surpluses in emerging market economies (especially in South East Asia). This surplus was matched with large current account deficits in developed economies (in the US in particular) resulting in capital flows from the former to the latter. In theory, the adjustment of these imbalances would take place through either exchange rates or interest rates or both. However, this was not happened for at least two reasons.

First, emerging economies built up huge foreign exchange reserves to fight against appreciation of their currencies. This was, in part, a response to 1997 Asia crisis, when sudden capital outflows caused massive depreciation in currencies of many Asian countries. These reserves were recycled back to the US, which kept US dollar strong and interest rates low, leading to further decline in savings rate and fueling the consumption boom.

Second, a fear of deflation following the 2001 recession led policymakers to keep short-term real interest rates low for an extended period. Since many fixed or quasi-fixed exchange regimes used the US dollar as a reference currency, they imported the monetary policy of the Federal Reserve as well. The marginal productivity of capital was higher in emerging market economies. Therefore, the price of capital should also have been higher. Search for higher yields also changed the risk taking behavior of the financial institutions and led to acceleration of financial innovation. The natural consequence of accommodative monetary policies in major economies (both developed and emerging) was unprecedented economic growth worldwide coupled with double-digit annual growth in asset and commodity prices.
There is a fierce dispute about who is responsible for the current crisis? Fed critics blame the accommodative monetary policies that kept policy rates too low for too long. Others argue that it is the excessive reserve accumulation of China and other Asian countries that prevented the functioning of the international monetary system. The Triffin Dilemma is once again at the center of this debate. In 1960 Robert Triffin, an American economist, stated that the use of a national currency as global reserve currency leads to a tension between national monetary policy and global monetary policy. In retrospect, the policy rates in the US in early 2000 might be too low for the global economy, but the mandate of the Federal Reserve was to reach price stability and full employment in the US, not all around the world.

We should also question the mandate of central banks, which is typically restricted to sustaining stability in the prices of goods and services. It was not always so. In fact, if we go back to the early days of central banking in England, the United States and the continental Europe, we would notice that central banks were founded by political authorities or local businessmen to act as a lender of last resort to the banking sector during times of financial crisis, not to maintain price stability. Other responsibilities were of secondary importance. During 1970s, in response to high and persistent inflation, central banks gained the reputation of inflation fighters, which reached its peak when Paul Volcker became the chairman of the Federal Reserve. In 1990s, the popularity of inflation targeting has drawn more attention to price stability objective, overshadowing the original obligation of all central banks: financial stability.

Today, many people debate the need for a new global reserve currency, creation of an international clearing system, and establishment of a supra-national body to safeguard global economic and financial system. These discussions are necessary and maybe overdue.

A global reserve currency might be needed to solve the Triffin Dilemma. Creating an international clearing agency between trade partner countries may be useful to reduce the need for accumulating foreign exchange reserves. A supra-national body may be the only solution for the externality problem in the Bretton Woods system and its successor, so called, the Bretton Woods II: i.e., the economic and regulatory policies adopted by reserve currency issuers do not match the needs of the global financial system. Countries are affected by decisions over which they have no control, and policy makers take decisions ignoring their effect on other countries. In fact one reason for the devastating effect of the crisis and the speed of its propagation was that it originated in the reserve currency issuer. A supra-national body may overcome this externality problem.

However, all these efforts, even if they reach a satisfactory conclusion, may still be incomplete, if the main responsibilities of central banks are not redefined. Maintaining price stability should remain the primary objective, but that must comprise of asset prices as well. It may be challenging to determine what asset prices to target or how to identify bubbles in asset prices. Part of the challenge comes from the fact that central bankers have overlooked the excesses in asset prices for a long time. Maintaining that ignorance, however, may be too dear, as witnessed by the current crisis. It may also be challenging to convince the public about the necessity of raising policy rates at a time when economy is booming but the prices of goods and services are stable. Again, the recent crisis has demonstrated that central banks may ignore imbalances in financial markets at their own peril. It is time for central banks to go back to their roots.
The global crisis: The role of policies and the international monetary system

1. Global imbalances and the financial crisis: A macro view

Both, the trigger of the global financial turmoil that started in the summer of 2007 and its proximate causes were essentially financial in nature, and originated in a specific segment of US financial markets. Distorted incentives, inadequate risk management and lax supervision encouraged the financial sector to take increasingly large, poorly understood risk exposures, financed through high leverage and a growing reliance on wholesale short-term funding. However, it is unlikely that all this would have developed to the same extent had the macro-economic environment not been characterised for a long time by low interest rates, rising asset prices and large saving-investment imbalances in the United States and, with opposite sign, in Asia and the oil producing countries. All this was reflected in growing worldwide external imbalances and created enormous stress for a US and global financial system in which financial innovation and regulatory failures had progressively introduced serious structural flaws. Moreover, the complacency on the part of risk managers and financial supervisors that allowed the resulting vulnerabilities to grow unchecked owed much to the climate of general optimism that those macro conditions supported.

The lack of sufficiently decisive policy reactions to the external imbalances that began to expand rapidly from the second half of the 1990s was crucial. Essentially these disequilibria reflected rapid and sustained growth in final demand, especially consumption demand, in the leading economic region of the planet, financed by over-borrowing, primarily from abroad. Growth, in short, has occurred without household savings in the United States and with excess savings in other major economies. If the United States has served as a sort of “consumer of last resort,” other large advanced and emerging economies have implicitly or explicitly followed an export-led growth strategy, which is difficult to maintain indefinitely but also difficult to abandon.

So far, the global recession has not righted the fundamental macroeconomic imbalances that lay at the root of the crisis. At present, the rise in US private sector saving and the sharp fall in investment, partly offset by a larger public sector deficit, appear to have narrowed the US current account deficit. However, much of the reduction is due to cyclical factors. The counterpart of a smaller US deficit has been a reduced surplus of oil exporting countries, while China’s surplus has further increased, but at a reduced pace. Furthermore, the US international investment position deteriorated significantly in 2008, as the valuation effects – which until 2007 had largely offset the cumulated current account deficits – turned unfavourable as a result of the US dollar’s appreciation and the large fall in equity prices. As the world economy comes out of the crisis, we face two alternatives: if US domestic demand growth is sluggish (as households repair their financial position), and if this is not offset by a more dynamic demand growth in other major economies (Europe, Japan, China), the world economy as a whole will face a slow recovery; on the other hand, if the recovery were once again driven by US demand, imbalances will widen again, and the risk of a “sudden stop” in their financing will reappear.

For a while, since the beginning of the financial turmoil, exchange rates have not generally been moving in a direction that favours the correction of imbalances. The US dollar has appreciated as the turmoil engendered demand for dollar liquidity and large capital flows out of emerging markets sought a safe haven in US Treasury securities. Those flows were partly reversed in the most recent months as investors’ flight to safety abated and the financial situation started to normalise. Given the considerable uncertainty that exists on what will be the speed and the driving forces of the economic recovery in the main economic regions, it is difficult to predict, at this stage, whether the dollar will resume the trend of gradual de-
preciation that prevailed from 2002 to mid-2008. An added element of uncertainty is connected
to the large increase in US public debt, a large share of which is held abroad. Market concerns
about its sustainability could potentially also trigger disorderly exchange rate movements.

This could pose a difficult challenge to countries that have accumulated large quantities of US
dollar reserves. However, continuing to peg their currencies might only postpone the day of
reckoning, while increasing the potential capital losses. This dilemma is exacerbated by the
fact that no country can act in isolation, as the present and potential effects on trade flows
obviously need to be taken into consideration. Indeed, this is a classic case in which collective
action, if feasible, would be welfare-improving. It might take the form of a cooperative agree-
ment among surplus countries for some kind of joint "managed currency appreciation" vis-à-vis
the US dollar. The appreciation and the boost to domestic demand would have to be large
enough to ensure a significant correction of imbalances.

But is such collective action feasible? Several practical problems would need to be overcome.
Even confining the discussion to Asia, the countries that would have to take part in it differ in
many ways: current exchange rate regimes (hard peg, crawling peg, managed floating); de-
gree of capital account liberalisation; stage of financial development; trade specialisation and
position in the vertically integrated Asian manufacturing industry. These differences make the
determination of how best to achieve the desired result extremely tricky: how large should the
appreciation be, and should it be uniform across surplus countries? Is it better to implement it
gradually or through one large initial exchange rate realignment? And after that, should ex-
change rates be managed or allowed to float, to let the market determine the final size of the
adjustment? These are difficult questions, to which there are no obvious answers.

2. The role of policies

In order to reduce the risk that again in the future a combination of macroeconomic im-
balances and distortions in the financial system may lead to large and destructive financial
crises, it is essential to address the policy failures that made the current crisis possible.
Important changes in the regulation of financial markets and banking institutions are already
being introduced. However, macroeconomic policies also bear their part of responsibility. Two
areas where a rethinking is needed are most likely monetary policy frameworks and the inter-
national monetary system.

It has been argued, convincingly, that as a result of the success achieved by macro-
stabilisation policies and of structural changes in the responsiveness of aggregate supply (also
as a result of globalisation), inflation expectations are now much better anchored, and
episodes of excess creation of liquidity and credit tend to be reflected primarily in asset price
bubbles, rather than in increased consumer price inflation. However, the task of monetary
policy in this context is not necessarily easier. Because asset price cycles tend to be as-
associated with large changes in indebtedness and add to financial vulnerabilities, they can pose
significant risks to financial stability. This brings us to the time-honoured question of whether
and how monetary policy should react to asset price misalignments and financial imbalances,
or more generally whether central banks must (flexibly) target, with just a single policy
instrument, more than just consumer price inflation.

It has been suggested that, to take into account the effects of asset price movements in the
context of a flexible inflation-targeting framework, central banks may need to look further into
the future than it is usual. This might work in "normal" times. However, since the precision of
forecasts can only decline as we move to more distant time horizons, it is debatable whether
trade-offs that depend on forecasts of the distant future and are by their very nature rather
uncertain can be stable enough to provide reliable guidance for current policy decisions.
Furthermore, one may ask whether this may be too general a framework to provide actual
guidance to monetary policy. If allowed to develop, asset price bubbles and the financial
instability that usually accompanies them can eventually destabilise expectations about future
monetary policy and inflation, especially if the practice is followed by always intervening to “clean up” after the bubble has burst, easing policy by as much as it is required to offset the effects on the economy. The difficult question of how much restriction would be needed in the face of rising asset prices calls for more study and experimentation, including, of course, that of recurring to other instruments within what is now called “macro-prudential” policy. But, as it has been aptly suggested, it hardly calls for “benign neglect.”

A key element that allowed the US monetary expansion and China’s exchange rate pegging to be maintained for so long was the fact that they were mutually reinforcing. In a nutshell, demand from US consumers helped sustain China’s (and others countries’) export growth. At the same time, an elastic supply of cheap imports from Asia helped keep inflation low in the United States (and also, by the way, in the other advanced countries), encouraging the Fed to maintain an easy monetary stance. And the investment of emerging economies’ official reserves in US Treasuries contributed to compress long-term yields both in the United States and globally. All this fed global liquidity and rising asset prices.

The countries that pegged their currencies to the US dollar effectively imported US monetary policy regardless of whether it was appropriate for domestic conditions. This fuelled liquidity and credit expansion, also because of difficulties in sterilizing the effects of the accumulation of official reserves, and tended to feed booms in domestic asset prices and investment. But the high growth experienced by these countries effectively rested on the ultimate support coming from US consumers. This became evident most recently: when it was clear that the financial crisis might involve a massive credit crunch and would require a protracted re-balancing on the part of US households, the fall in demand and world trade was highly synchronised in all advanced and emerging economies. Other surplus countries also had a responsibility in allowing the imbalances to grow. In Japan, long delays in facing up to the structural problems of the financial sector caused a prolonged stagnation of demand. Also European countries introduced some structural reforms to the labour market in recent years, but these, in the absence of equally forceful reforms in product markets, have largely translated into stagnating wages and weak domestic demand.

The fact that imbalances that were not sustainable persisted for so long shows that no mechanism – market-based or activated by multilateral surveillance – operated effectively to induce a correction. Two closely connected features of the international monetary system seem to have effectively switched off market-based alarm bells: first, by pegging their currencies to the US dollar, surplus countries managed to avoid pressure to adjust; second, the role of the US dollar as the international reserve currency implied that the United States could finance persistent current account deficits without coming under market pressure, as long as the surplus countries were willing to accumulate dollar assets. For the United States, an added benefit of financing deficits in its own currency was that dollar depreciations generated favourable valuation gains on its international investment position.

Underlying all this is the fact that the international monetary system that emerged after the demise of Bretton Woods is a non-system, driven by the revealed exchange rate preferences of the individual countries, with a very weak multilateral surveillance, despite recent attempts to strengthen it. Although it is clear that the international monetary system has not been performing some of its essential functions, it is by no means clear what could replace it. If the key source of its shortcomings is the US dollar standard, it is difficult at this stage to identify a realistic alternative. All those that have been mentioned – a supranational currency like the SDR; a tripolar system based on the dollar, the euro and an Asian currency – face very substantial difficulties. Whatever the final goal, mechanisms to counter disorderly adjustments in exchange rates, as well as the establishment of an SDR-denominated substitution account for existing stocks of official reserves, as recently suggested, may be worth of further consideration as means to smooth the transition.
Global imbalances have a long history. The US current account deficit has been persisting for the last five decades with its most visible counterpart shifting from Germany to Japan and now to China. This history leads us to a presumption that imbalances will not easily go away. One possible scenario could be for the US public sector to run a substantial budget deficit even as macro economy normalizes, thus replacing excessive household spending as the main source of domestic saving deficiency. The “twin deficits” will likely be financed partly by improved domestic savings but have to rely on capital inflow as well. Under this scenario, the US external deficit would be largely policy-driven and therefore contingent on successful exiting of macro economic policies inter alia fiscal policy.

A related question is how global imbalances manifests itself as a major source of risk. Historically it was mainly discussed as various forms of dollar crisis, involving substantial fall in the dollar’s value leading to turbulence of international monetary system. However, in the last two years, we have seen deep crisis of international financial systems, but not a classic dollar crisis. In fact, the resilience of the US dollar has been notable given the near melt down of the US financial system as well as the deepest recession since the thirties. Interdependence through trade and financial linkages appears to have produced an environment in which the US dollar may play a role of safe haven currency even when the US happened to be an epicenter of crisis as has been the case. Accepting that, the US dollar could still be sold and depreciate in the event the US authorities failed to make a successful exiting, as such policy performance would be seen as inviting higher inflation pressure relative to other major currency areas (especially Euro area).

Thus, over the next few years, exiting strategy and performance of the US (and other key economies) seem to matter very much to how global imbalances and the US dollar may evolve. In the process, central bank independence and price stability objective should be firmly adhered to, as monetary policy may often be exposed to political pressure to accommodate large public sector borrowing needs.

Is it feasible to radically change macro economic balances of key surplus countries, i.e. enhance domestic demand (particularly consumption) and reduce net savings? The Japanese experience does not offer an encouraging example: policy efforts to strengthen domestic demand either failed or ended up with financial bubbles. It may well be a demographic change that is finally delivering much lower savings rate and moderate current account surplus. China also is endeavouring to enhance consumption rate with less than desirable results. China’s development is also unique in that business sector has significantly increased net savings balance while investment has expanded at explosive rates. Without some substantial demand switching, triggered by exchange rate adjustment, it is difficult to envision China with much reduced surplus. The past and current experiences of Asian economies suggest that it is still uncertain how best to treat external balance within the context of a nation’s macro economic management. In this situation, it is important not to politicize the imbalances as such moves can easily shift to protectionism.

Finally exchange rates still matter in moderating imbalances. Obviously countries cannot always agree on the appropriate levels of rates. But close consultation and sometimes concerted actions in the market has been conducted among the G7, and it has been helpful to maintain orderly market conditions. The same efforts are now being called for involving some key emerging market players. G20 appears too big to conduct effective dialogue on delicate matters. A new G5 (?) framework to talk informally about macro and market issues a la G7 is desirable.
The Global Society

The New Wave of Social Entrepreneurship – 2009

The Challenges

In the aftermath of the collapse of the western financial system, many observers agree that neither unfettered financial markets nor invasive regulation are able to ensure that financial and business leaders will necessarily act in the public interest.

While governments are pondering how to provide a legal and political framework that better aligns the needs of businesspeople and society at large, a new class of economic agents has emerged that aim to give explicit consideration to both social and economic gains.

These agents are the social entrepreneurs. Armed with the tools of commerce and markets, they use their creativity, skill, cunning and hard work to found social enterprises which deploy the methodology of capitalism for outcomes of a social nature.

Social businesses have been developed and are prospering which effectively create, in different measure, financial and social returns. They harness capital from a new breed of socially minded investors, whose returns horizons have broadened from a focus purely on financial return and risk, to one which also addresses the social element of returns. Such investors have moved on from the Socially Responsible Investment (SRI) concept of the 1980s to become more proactive and positive in their investment. Two asset classes from the social investment arena have already entered the traditional investment mainstream (Cleantech and Microfinance) which has greatly increased capital flows to these sectors.

Which global problems can and should be addressed most effectively by social entrepreneurship and social investment? In which asset classes will it prove particularly effective in the future, and how can we increase their importance in these classes? How can governments provide an institutional and legal setting to enhance the power of social entrepreneurship to address problems such as poverty, inadequate infrastructure, health problems, education and training, welfare provision? How can social entrepreneurs interact with international organizations and NGOs to promote the global public interest? To what extent will government intervention or interaction with NGOs undermine the credibility and long term effectiveness of social entrepreneurship?
Proposed Solutions

Nejira Nalić
Executive Director, Micro Credit Foundation MI-BOSPO Tuzla

Why would it be a good option to ensure existence of a microcredit organization as a socially responsible business?

Microcredit has found a new market – as a financial service. It has recognized effort of low income people to work towards their own solutions in finding economic potentials in their communities. Credit helps maintain and sometimes even grow these potentials.

Microcredit organizations in Bosnia and Herzegovina ensured interest in serving low income people – competition was/is high and people were ensured access to this financial service. Interest rates were going down. Financial offer became a visible, respected and criticized, too.

There are 12 organizations in the country, serving some 370,000 clients with EUR500 million. Most of them are financially sustainable and have high return on equity. Interest rate dropped, since 1996, by 10% and with some bigger organizations, even by 15%. It is important to understand that outreach made it possible but also competition.

It was important to grow, offer credit to as many economically active low income people as possible and ensure efficient delivery channels. This is what is different from the banks, so even in B&H market, even once one can see that banks are accessible, clients were turned to microcredit organizations due to this particular service and offering.

Demand was high and there was a high optimism in society about providing loans – believing that organizations are able to make a decision about loan based on their strict methodologies and believing that clients will not take more loans than they can repay. Both sides built trust and understanding and there was a lack of critical view in looking in the future of liability management.

Precondition for having a healthy offering and clients protection is financial education. In some ways this has been a missing step – once sector started its inevitable growth. It is to be discussed if financial education could have prevented some cases of over indebtedness in B&H market, but it is important that these services are offered hand in hand with credit.

So, even if microcredit organizations were established for clients – mission driven, financed by socially responsible lenders, it is important to ensure that high principles of social responsibility are questioned and that client’s protection is not seen as given.

Alex Nicholls
University Lecturer in Social Entrepreneurship, Oxford University

Institutional reform is the key

Currently we find ourselves in uncharted territory with respect to the future of capital markets. Whilst the prospect of an imminent meltdown in global markets appears to have receded, the likely long-term impacts of the global recession are still difficult to discern. Keynesians may have regained significant ground but the neo-liberal rearguard reaction has also been strong and concerted – so much so that the Economist (21.8.09) is now recasting the recession as an opportunity to reduce rather than increase the size of government going forward. However, what seems plain is that financial business as usual will not be an option despite the concerted efforts of the big institutions. So what are the alternatives? There is a growing consensus that reembedding capital markets in their proper social and environmental context – something
traceable right back to Smith’s other great work “The Theory of Moral Sentiments” – will represent an important element in building sustainable capital markets going forward. Such a process will recast risk and return calculations, draw new boundaries between value creation and value appropriation, and will capture – and exploit – externalities in new and creative ways. All of these innovations offer potentially positive outcomes for investors and investees alike, as well as society at large. So how will these changes come about? And how will we know that transformation is underway?

History tells us that the development of financial markets has typically been the product of the – at times fractious – interplay of four main interest groups: investors (as suppliers of capital), investees (as providers of deals), financial institutions (as intermediaries), and government (as regulator representing the public good). As we look to move towards the new markets and institutional structures of the future all four players will need to change. But who will drive the change?

Two candidates stand out. First, will be the providers of capital. Here the emergence of more “social” investors seeking Blended Value outcomes will be critical – happily this is already evident. Second, will be government. Whilst it may be unfashionable to recognise how critical government is to the proper functioning of society, the evidence is unquestionable. It is also plain that government – as the lawmaker and financial regulator – can have an enormous influence on the shape and functioning of capital markets. The influence of government policy on capital markets 2.0 must, therefore, be seen as the other important piece alongside investor preference. There are signs too that this is already happening – though the response of some countries (notably the UK) has been frustratingly timid thus far. So this leaves the question of how will we know if change is underway?

Mulgan (in prospect this year) proposed a number of key indicators of the evolution of a new capitalism. These included: greater volumes of capital committed to social investment; radical changes in work patterns; the continued rise of ethical consumption (Fair Trade, organic, green products etc); and greater attention to externalities and the value of public goods. I would add to these that we need to pay close attention to the growth of social entrepreneurship already evident across the world – from Benetech in California to Honey Care in Africa and Aravind Eye Hospitals in India. These ventures are the pathfinders for new business models that go far beyond the superficial attractiveness of many “Bottom of the Pyramid” examples. What unites them is a performance-driven market orientation that combines an aggressive focus on improvement and growth with a keen sense of the need for accountability and legitimacy. Learning from social entrepreneurship tells us that the next wave of capital markets need to be not only to be performance driven, but also more accountable and transparent to a much broader range of stakeholders if they are to be successful in the new global economy.

Rodney Schwartz
CEO, ClearlySo

We assert that social business, enterprise, commerce and investment should and could form a larger part of economic activity in the future. We also believe it will take place. What is unlikely, in the current fiscal predicament, is that such a process will be greatly aided by governmental funding. In our opinion this could also undermine both the credibility and the long term effectiveness of this trend. In addition to possible interference by political interests with an agenda, any meaningful state subsidy will delay rather than accelerate the point where the sector becomes self-sustaining. In the accompanying documents we all have listed a set of solutions, each of which are meant to stand on their own. There has been NO attempt to integrate these at this stage into a policy recommendation and the author of each is listed at the end of each solution.
The fiscal code needs to be more "tilted"

Tax laws in most countries fail to fully adjust for the negative externalities caused by economic agents. Polluters are increasingly paying for their damage, but few observers believe they are charged their full marginal cost to society for the harm they cause. That is simply borne by existing and future generations of taxpayers. In the banking system, we have learned that the state bore the explicit guarantee of the system, at a cost of trillions of Euros. This is a negative externality which, in few of the proposals we have seen, will earn back such sums. The same is true of polluting industries and others – but tax codes are becoming more tilted to such externalities – a carbon tax will accelerate this, for example. We would urge that this process is greatly accelerated. Moreover, why not also reward those firms which generate positive externalities? Why not provide a credit for a portion of the savings of the state for expenditure which otherwise would have been incurred? We would urge the speedy adoption of a move in this direction.

Greater understanding of this new area, especially in financial services

Regulators are rightly feeling a bit “gun-shy” about innovation in financial markets – especially around investment vehicles. The explosion of many of the newest asset classes has left both regulators and investors with declining risk appetites. The fact that social entrepreneurs and many of the socially minded investors behind them are not solely interested in financial returns at all costs makes them unusual—and in our view, well-suited to the New Economy. However, by definition that means that existing financial instruments are also not suitable. The social mission of the enterprise is very ruthlessly protected and not subject to the “market for control.” Thus equity investment, in particular, needs to be re-defined or reformed in order to suit this sector. This and other financial innovation can have a strong social element and needs to be encouraged rather than stifled by investment regulators.

More emphasis on intermediary structures

Mainstream entrepreneurs have an entire infrastructure which is designed to assist them to be successful. It includes bankers, lawyers, accountants, analysts, the venture capital community, advisors, consultants and others who, in varying quality, help entrepreneurs to succeed. Social entrepreneurs have no such infrastructure. We recommend it be developed. Private companies and foundations as well as governments and NGOs all over the world are beginning to put this infrastructure into place. Mainstream players in these markets would be well-advised to consider entry thereby leveraging their expertise and skill set, but need to be conscious of the multi-faceted objective sets of social entrepreneurs.

Far greater focus on the “supply” side

New funds are created easily with the stroke of a pen and the transfer from a bank account. On the other hand, great enterprises take a decade or more to bring into existence. We urge that all parties address this problem through more strenuous effort to build businesses and a simultaneous de-emphasis on new funds. In the absence of sufficiently attractive social business propositions increased funding will only dampen returns, obviously. The services which will increase supply include “investor readiness” services, which assist social entrepreneurs by turning their projects into “backable” projects. A greater emphasis on mentoring of entrepreneurs and building top-flight Boards will assist in this regard.

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Bill Young
President, Social Capital Partners

“Reverse engineering” existing businesses to have a social dimension

The easiest way to explain this idea is by using the example of how our strategy has evolved at Social Capital Partners. We began by funding and working with social enterprises which we defined as businesses where at least half the employees were disadvantaged. Over our first five years we financed and worked with a handful of these companies to help them grow, achieve profitability and attain a sustainable livelihood for the people that were employed.

On the one hand we were very pleased with the results. The social enterprises in our portfolio from this phase are terrific companies that have proven beyond the shadow of a doubt that you can make both the financial and the social dimensions of a social enterprise work. We couldn’t be prouder of being associated with them.

On the other hand it took us more than 5 years to help develop these businesses to provide a few hundred jobs. We knew that a few hundred jobs wasn’t much in the global scheme of things and as Rod mentioned we knew that it can take the better part of 10 years or more to scale companies when you are starting from scratch. That’s when we asked ourselves: Could we take already scaled businesses and somehow turn them into social enterprises without calling them that?

So we developed a loan product that effectively offers attractive subordinate debt financing to growing private sector companies in return for them committing to using our social hiring program. We actually tie our interest rates to the number of social hires they make so that their financing costs come down as they become more committed to our social purpose. In effect we turn them into social enterprises without having to build from scratch.

That is a micro example of this idea but I believe there are potentially numerous ways to apply it. While the example above is based on building a “product” that accomplishes the goal there is probably much more leverage by mobilizing demand or consumer buying power to bring a social dimension to an existing company. One only needs to look at the Fair Trade movement and how it has created change at such large companies like Starbucks to see the power consumers have to create social good.

The real point is that I think too often those of us who are part of the social entrepreneurship sector look for “purpose built” solutions as opposed to “reverse engineering” solutions. My belief is that sometimes it’s easier to create social entrepreneurs by taking conventional commercial entrepreneurs and give them a reason to become social ones consciously or unconsciously and we should apply more of our creative thinking to figuring out how to do so.

New capital for social investment

There is an obvious source of significant new capital that governments could create for social investment without having to put the money up themselves or issue any new tax credits (which given the world’s current economic challenges new funding and additional tax credits are hard to come by). That source is in private foundations.

The current way most private foundations are organized and regulated in developed countries is they are required to donate or grant only somewhere between 3 and 6% of their assets in any given year to charities. The other 94 to 97% of their assets are generally handed over to
investment management companies who invest that money in very traditional investment instruments that have no social purpose whatsoever and are not linked in any way to the mission of the foundation.

This makes no sense to me from a couple of different perspectives. First of all if the purpose of foundations is to do good how can any foundation live up to their potential if they only harness 5% of their assets to further their mission? Try and think of any other organization in the world that only uses 5% of its assets in pursuit of their goals. I can’t think of any.

Second, I think this current way of operating is a terrible deal for taxpayers and governments. In many cases governments give up to a 50 cent on the dollar tax credit for an individual to start a foundation and only require that 5 cents on the dollar be put back on an annual basis to do societal good. That seems like a pretty poor return on a taxpayer dollar to me.

A simple solution would be for governments to require that foundations invest at least 10 percent of their assets in social investments. Obviously some thought has to be put into what constitutes a social investment (it doesn’t mean an ethically screened conventional investment) but I don’t think that would be very difficult. Frankly I believe the number should be higher than 10 percent but that’s a good starting point. That requirement alone would create a capital pool of tens of billions of dollars which could be dedicated to affordable housing, microfinance, social enterprise, green energy, etc. And most importantly it would not cost the governments any money.
The Global Society

Content and Limits of Corporate Social Responsibility 2009

The Challenges

Corporate Social Responsibility (CSR) represents a company’s voluntary commitment to address the ethical, social and environmental factors associated with its operations. Despite its potential for furthering social needs CSR activities may come under severe pressure in an era of increased global competition and during business cycle downturns.

The role of governments in facilitating and supporting CSR still remains unclear.

Do we need joint action of firms and governments to agree on common CSR standards to prevent a race to the bottom where firms that engage in CSR are at a cost disadvantage vis-à-vis their competitors? Should governments help to sustain CSR-activities during business cycles downturns, and if so, how should they do that? Should a company only be responsible for its own activities or should it also take responsibility for eventual actions by their suppliers and customers and, if so, how to make a company’s commitment to CSR enforceable against potential misbehaviour by suppliers and customers? How to prevent politicians to neglect their original responsibilities and treat CSR as a substitute for good government policy?

Corruption Remains a Serious Problem for Companies in Most Parts of the World and across Industries

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<th>Countries Particularly Prone to Corruption</th>
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<td>• Bank</td>
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<td>• Mining</td>
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<td>• Agriculture (5.9)</td>
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Note: The map is based on Transparency International’s 2007 Corruption Perceptions Index. The scores relate to perceptions of the degree of corruption, ranging between 10 (highly clean) and 0 (highly corrupt). The industry ranking is drawn from Transparency International’s 2002 Slime Payers Index. The scores, similarly from 0 to 10, reflect the propensity of companies in different sectors to pay bribes.


Proposed Solutions

Lord Browne of Madingley
Managing Director and Managing Partner (Europe), Riverstone Holdings

“Corporate social responsibility” is the means by which businesses structure their interaction with society. This means more than simply being a good corporate citizen – it is about investing in society as an integral part of a business. The creation of genuine shareholder value requires business to remain in the game for the long-term and not being solely focused on generating short-run returns on capital. A business’ licence to operate depends on making itself useful to society and that is why CSR is so important.

Keeping a business in touch with society’s values is something which is best provided by good managers – people who can interpret a plan, set targets to meet the plan, measure performance and take action if those targets are not being met. Such people can inspire their employees, set the right tone for the business and make people feel they are fully included in the organisation. Ultimately, they are the kind of people who have long experience with how to actually get things done.

The key quality is leadership. Business leaders must understand the nature and purpose of their companies beyond what is expected at the next quarterly filing. They need to understand that only business transactions based on mutual advantage and radical openness are truly sustainable in the long-term. And they need to recognise that markets are products of government regulation, designed to create socially-useful outcomes from the uncoordinated actions of multiple parties.

Bearing these points in mind we can propose a number of practical solutions which should ensure greater compatibility between what businesses see as their core purpose and the values of society.

Solution 1

Businesses should, where possible, be encouraged to create independent scrutiny panels to assess their impact on society. The reports and the company’s responses to them should be made publicly available at regular intervals.

Experience shows that independently appointed advisory boards are crucial to gaining trust in new areas of operation or – particularly salient at the present time – in regaining trust where it has been lost. BP made good use of independent panels to report on its activities in Tangguh, Indonesia and in the Caspian Basin. These groups had a public presence and ensured that projects were completed without unfair consequences for, or mistreatment of, the local communities involved. With lines of report stretching right to the senior executive team, BP ensured that the scrutiny panels had a bite as well as a bark.

Solution 2

Governments and NGOs should work together with businesses to create common international standards by which whole industries can be held to account.

A number of such standards already exist – for example, the Extractive Industries Transparency Initiative and the Voluntary Principles on Security and Human Rights – but industry-wide international agreements remain rare. In many cases there are conflicting sets of rules and unclear messages about what businesses should be doing. Yet there is an obvious need for such standards. They provide a benchmark to which companies must aspire, while at the same time helping businesses to deflect undue criticism. Third-party mediation from national governments, large NGOs or transnational intergovernmental groupings can facilitate the creation of new standards with broad support and legitimacy.
Solution 3

Provide an operating model for a socially responsible business.

Every business has a different impact on society and therefore has different responsibilities with regard to mitigating that impact and improving lives. However, there are general business practices which can be adopted by any business to enable it to more easily achieve its CSR goals. Focused CSR leadership can be brought about through the appointment of specialised senior executives (for example, in charge of diversity or environmental impact) or through the linking of executive pay with meeting specific CSR targets. Employees can be made to feel included with CSR policy through regular classes and workshops which enable them to understand the company’s policy and their place within it.

Where something is shown to have worked, best practice needs to be transferred and developed upon. Once again, third-party NGOs and governments can play a constructive role in facilitating dialogue between companies, allowing them to learn from each other.

Paul Bulcke
CEO, Nestlé SA

Our proposed solution to broaden the scope of Corporate Social Responsibility (CSR) and overcome its limits starts with three premises:

1. A long-term approach in all our thinking and actions.
2. Fully integrating a clear and constructive understanding of our role in society into the mainstream activities of day-to-day business.
3. An awareness of the diversity of local situations and, as a result, the complexity of the international business environment, as well as the will to act accordingly. Nestlé, for instance, runs its own business organisations in more than 140 countries, with over 450 factories in more than 80 countries all over the world – about half of them in developing economies (from Argentina to Zimbabwe, from Israel to Syria and Iran, from China to Vietnam, to mention but a few of the host countries). We are producing locally for local consumption in increasingly diversified markets. Typically, our factories are far from major cities, often in communities or in rural areas close to farms which supply critically important raw materials. In other words, the chances of finding standard situations within the Nestlé-Group are probably less than in any other sector or company. What we are confronted with, instead, is a very wide array of diverse challenges to which we must respond.

With this in mind, we are focusing on the concept of shared value (we no longer use the word and concept of CSR). It’s a fundamental approach to business that says that if you want to have long-term business success, you have to create value for society. It’s not an image-building exercise or philanthropy, but a way of viewing business development by simultaneously reviewing the needs of both shareholders and society. And, as just outlined, the needs of the community in question vary significantly, depending on when and where you are operating.

It is relatively easy to do a few more projects (i.e., be a philanthropist – in the case of a publicly-listed company, with somebody else’s money) and to hire a PR agency to publicise it. It is much harder, especially in today’s environment, to help people understand the concept of and the need for Creating Shared Value, and about the positive overall impact (also for society) from continuously increasing the value that business contributes to society. All this needs to be done keeping in mind a long-term perspective and going beyond existing legal norms and standards. But at Nestlé, we are convinced that, in the long term, this is the better and more sustainable way.
Creating Shared Value and meeting the needs of society include:

- value shared with consumers (it may be nutritional value, but also pleasure and convenience; as well as value for money, i.e., products and services at a lower price, thanks to an efficient industrial structure),
- value shared with suppliers (for example, approximately 600,000 farmers supplying us directly with milk and other products in many developing countries, as also thousands of SMEs all over the world),
- value shared with employees and their families,
- value shared with business partners upstream and downstream,
- value shared with research organisations (within our open-innovation approach), but also voluntary and involuntary spillovers of all types of knowledge from the Nestlé knowledge pool, and
- last but not least, the value created for the wider communities where Nestlé is active for our business, taking into particular account also the natural environment.

We are at the same time ambitious in what we want to achieve, and modest in what we are actually able to do. No company, no organisation, should believe or give the impression that they can do everything everywhere. Nestlé, therefore, concentrates on three priority areas for further strengthening the creation of shared value:

- water,
- rural development, and
- nutrition.

For strengthening our efforts, we require partners and networks – and wherever possible, local networks. We also need to demonstrate results locally that, in the very first place, convince our local stakeholders and local partners. Global reporting of Creating Shared Value may help in spreading best practices and learning from others; however, if the reporting becomes excessive and mandatory, it will end up at best as a box-ticking exercise and, at worst, as a flood of paper and information where the cost of collection and circulation will be higher than the actual impact of what is being described.

In order to achieve meaningful results, the principles underpinning the creation of shared value must be fully embedded in corporate culture and strategy and, ultimately, in the minds of the people – and not in regulations (it is not possible to regulate either “thinking” or “ethics”). And if you do it right, you do not need protection vis-à-vis competitors by worldwide globalised standards, for if you manage your business efficiently both for the benefit of shareholders and society, you will actually run a growth model that is extremely powerful and robust (i.e., sustainable) over time, both in periods of prosperity as well as during an economic recession. In this sense, Creating Shared Value is not a “voluntary or desirable commitment”, but indeed a part of strategic orientation. Nestlé’s 140 years of successful company history seems to be a solid indication that this approach actually works.

**Raymond Fisman**

*Professor of Social Enterprise, Columbia University*

I recently heard a prominent social enterprise consultant say that social responsibility is as basic to business as double-entry accounting. If only it were so. It’s certainly possible to do some good for the world and make money (or at least break even) at the same time.

We need to move beyond the recognition that responsible, sustainable enterprises can exist to understanding the trade-offs that do exist in the world of social enterprise practice. (In serving low income customers, for example, there is a very obvious trade-off in deciding how low to
set prices.) How, given economic constraints, can we maximize impact on society and in the marketplace?

Unfortunately, much of this conversation takes place in an informational vacuum – we really know so little about the impact of corporate citizenship on employee productivity, customer loyalty, or any other outcome that may feed into profitability. Much of the difficulty in finding answers stems from the fact that – in contrast to double-entry accounting – corporate social responsibility usually isn’t part of the DNA of a corporation. In large companies, corporate citizenship groups are usually separate departments (often within marketing). This both limits their ability to evaluate their impact, and also leaves them with a sense of insecurity of what they might find – if corporate responsibility can’t be shown to contribute to the bottom line, how long will it be until the axe falls?

Companies can and should behave responsibly even if there isn’t a positive impact on the bottom line. Companies need to work to ensure that they are making the right trade-offs – maximizing social impact and assessing the net effect – positive or negative – on profitability.

Only armed with deeper knowledge about what works and what doesn’t at the intersection of business and social needs can we develop more effective models of CSR.

Edward Lazear
Professor of Human Resources, Management and Economics, Stanford University

Corporate social responsibility is defined as a company’s voluntary commitment to address the ethical, social, and environmental factors associated with all aspects of its operations. The key word is “voluntary,” which means that firms choose to do this of their own volition.

What is the problem that we are trying to address? In general, it is that the incentives of the firm, embodied in its managers, workers, shareholders, and creditors, may differ from those of society as a whole. The two most apparent manifestations of conflicting incentives are outright malfeasance, e.g., fraud, and undertaking actions that create systemic risk for the economy. The latter is generally a function of firm size, but business strategy also affects the likelihood of harm to the system as a whole.

The financial crisis has provided a number of examples of firms that have engaged in practices that create systemic risk to an economy, but the issue is not confined to the financial sector. Automobile companies today and the airlines in the aftermath of 9/11 were deemed to be sufficiently strategic to warrant special attention by the US government.

Society’s desired actions may differ from those undertaken by the firm primarily for one of two reasons. First, socially undesirable actions that benefit firms may be difficult to observe by outsiders. Second, even if the actions are observed, the punishment associated with those actions may be insufficient to deter the firm from taking them.

When observability is an issue, economic theory tells us that the punishment must be scaled up, to a first approximation, by the reciprocal of the probability of detection. But punishments this severe may be difficult to implement, and governments may find it difficult to commit to such punishments. The market has no problem with commitment, but this requires that the action that the firm has taken not only hurts society, but affects the profitability of the firm. Excessive risk taking provides an example. When firms have created systemic problems and they are discovered, the firms suffer major consequences (witness Bear Stearns and Lehman Bros.) But the market can only be counted on to redress these problems when the there is little difference between social and private incentives, which negates the whole problem, or when the firm loses profits as a result of government induced punishment, which brings us back to the first issue: How do we get the government to see infractions and to commit credibly to punishing the violators?
To elaborate, suppose that we want firms to internalize the harm that they do to others from taking an action. For example, consider a firm that advertises inaccurate information about its competitor. That information has a social cost, but the market would reward the firm for a successful, albeit fraudulent, ad campaign as long as the firm is not found out. When the firm is caught, the market will punish the shareholders of the firm to the extent that the new estimate of product quality affects profits, but the market punishment will not blow up the losses to the firm by the reciprocal of the probability of detection, which is necessary for optimal deterrence. Indeed, there may be no punishment relative to announcing the accurate quality of the firm’s output at the start, because then the present value of discounted earnings would be the same as the ex post estimate.

In other cases, it is necessary to have government imposed penalties that exceed the actual cost to society of the action because the probability of detection is less than one. In the US, Constitutional restrictions on cruel and unusual punishment may limit the ability to do this effectively. The same restrictions, sometimes implicit, prevent deterring punishments from being levied in other countries. Indeed, conflicting goals manifested in limited liability firms, may work against this. The desire to facilitate the formation and transfer of capital may prevent doling out optimal punishments.

If the market does not provide the appropriate punishment to deter inappropriate action when detection is imperfect, and if government cannot be relied on to levy sufficient fines to provide optimal deterrence, then is the situation hopeless? I believe not. An additional penalty might be borne by the firm to the extent that firm credibility has suffered, and this penalty may be substantial. In some businesses, this may be a very powerful deterrent. For example, the accounting firm Arthur Andersen, which saw its demise as a result of its auditing treatment of Enron, would likely have behaved differently had it accurately forecast the realization of damage to its shareholders from faulty auditing.

The market may act as a source of leverage for increasing punishments as investors become more wary of firms that have received government scrutiny in the past and as consumers shy away from products of firms with uncertain futures. In addition to the Arthur Andersen example, the auto industry is a case in point, where consumers become reluctant to buy the products of firms that have uncertain futures.

So what should we do?

First, just as some governments commit credibly to refrain from negotiating with terrorists, governments must also commit to be ruthless in punishing legal infractions by firms. It is better to have few regulations that are enforced to the letter than to have a myriad of regulations that are rarely enforced. Bailouts, which undermine the market in disciplining firms, should be avoided and, for the most part, they have been. Government bailouts are extremely rare, given the number of bankruptcies that occur. Firms should not be able to count on government help for support. Even the auto industry, which received a bailout, suffered huge losses in the process and surely would not have chosen that path voluntarily. Again, the key is to pass limited regulation that addresses the central issues and to enforce the regulation without exception.

Second, the market should be allowed to operate. Government impediments to the well-functioning of punishment strategies should be avoided. For example, preventing short-selling reduces the effectiveness of the market in dealing with firms that have deviated from their private and social mission and limits the transmission of information.

Third, to the extent possible, ethical values should be instilled in individuals before they reach the business world. This is easier said than done. Furthermore, there is substantial danger in encouraging the state to play an active role in moral education. Governments change and can be captured too easily, even if only temporarily. History provides horrifying examples of state conducted persecutions justified on moral grounds. Traditionally, the production of a moral society has been in the purview of the family and the church. Although clearly imperfect,
competition among religions and beliefs is more likely to lead to beneficial value creation than that of a monolithic state. Furthermore, the diversification provided by having families rather than the state in charge of moral education reduces volatility in what is defined as socially appropriate, and works against the establishment of socially detrimental values that may reflect the agenda of a few.

James P. Leape  
Director General, WWF

In its early years, Corporate Social Responsibility was seen by many as essentially charitable – comprising voluntary commitments to contribute to local communities or to adopt better practices than required by law. There is a growing recognition, however, that corporate responsibility should be thought of in much broader terms.

In the area of environmental sustainability, there are clear drivers of this expansion. WWF estimates that humanity’s global footprint already exceeds the Earth’s capacity to regenerate by about 30%. And we are seeing the early signs of resource constraints that will dominate this century, including increasing demand (and thus prices) for oil and other commodities; water scarcity; impending limits on carbon emissions. Those challenges will be compounded by the upheavals caused by climate change – exacerbating water shortages, disrupting agriculture, and displacing millions.

To meet these challenges, we’re going to need leadership from the private sector, in particular, the unmatched capability of the private sector to innovate and to adapt. There are huge new opportunities – including new markets for carbon and other waste products, and the new products and services that will be the building blocks in a global shift to a greener, lower-carbon economy. There is also greater responsibility.

A broader concept of “good business”

Thought of as charity, CSR has limited potential. But many companies now see that an expansive vision of corporate responsibility is good business in many different ways. Commitments to environmental sustainability can offer direct returns to the bottom line – reducing costs by driving efficiencies, for example, or leading to new products and new markets. They can also lead to more fundamental rewards. CEOs of major global companies report that a leadership commitment to action on sustainability is central to the overall perception of their companies, to the recruitment and retention of staff, and, in some cases, to their social license to operate.

A broader understanding of a company’s impacts

On environmental performance, corporate responsibility efforts have naturally focused first on the impacts of a company’s own operations. That’s a good start. But leading companies increasingly recognize that often their biggest impacts are at other points of the value chain. The greatest “water footprint” of a litre of cola is not the 3–4 litres used in the bottling plant, but the 200 litres used to grow the sugar. The biggest carbon impact of a mobile phone is not in the manufacturing, or even often in use, but in the constant draw on power of chargers left plugged in. A “responsible” company looks at all these impacts, and thinks creatively about how it can help drive sustainability across its value chain.

A broader vision of potential roles

Thinking more broadly about impacts helps a company think more creatively about the roles it can play in supporting sustainability. Companies have huge opportunities to engage their consumers – educating them about sustainability or offering lower-impact products (such as
cold-water detergents). They can also engage their suppliers – helping to develop and promote less water-intensive agriculture, for example, shift to certified forest management, or reduce energy use. Companies who have taken on these issues have found they can also have broader influence in their sectors, either by enlisting other companies directly, as has happened on water issues or by setting an example that prompts others to step up.

**Broader thinking about the possibilities for collaborations**

As companies take a more expansive view of corporate responsibility, partnerships with NGOs can help in many ways. NGO engagement can give credibility to a company’s efforts. NGOs may have technical expertise that helps to identify issues and solutions, and they can challenge internal thinking. More generally, NGOs bring complementary strengths and capabilities – to educate consumers, to identify sustainable suppliers, to engage policymakers. For a company serious about making a difference, a partnership with an NGO can offer new possibilities.

**Arun Maira**
*Member of the Planning Commission, Government of India*

**“CSR” in search of a new paradigm**

We should have realized by now that we cannot carry on with business as usual. We acknowledge that the climate is changing due to human activity, and that unless we change the pattern of our activities very quickly, the Earth will soon become a very unpleasant place for all human beings. As Einstein said, we cannot solve the problems we face with the same thinking that brought us the problems: we need new models and new paradigms. We need new models to grow economies in ways that put far less pressure on the environment than have the models that brought the rich nations their prosperity. The adoption of the ambitious Millennium Development Goals at the turn of the century was also a call to change our course. The prevalent models of economic development and growth, the Commission on Growth and Development pointed out, do not meet the requirements of equity that humanity has begun to aspire to in recent times with ideas of human rights and democracy that are gathering strength. Therefore we need new models of economies that are not only more sustainable, but also inclusive of all people.

Market economies have brought the rich countries their prosperity, and these models of market economies are what the rapidly developing countries are emulating. Business is the engine of growth in these market economies. Therefore while rethinking prevalent models of economies to ensure sustainability and inclusion, prevalent paradigms of business must be re-examined too. The re-examination must begin with a fundamental question: What is the responsibility of business corporations to society? In other words, what should be the content of “corporate social responsibility”?

The prevalent paradigm of corporate social responsibility (CSR) is that CSR is something that corporations do on the side; something for which they set aside some portion of their profits; something in which their employees are allowed some time to participate. (Hence a current concern – in this Summit as well – with how the economic down-turn which has affected business’ profits will affect their CSR activities.) No doubt corporations make some contribution to improvements in communities and to restoration of the environment by such CSR activities on the side. They are good; but they are grossly insufficient to meet the urgent needs that climate change and demands for more rapid inclusion of all peoples are imposing on our societies.

The truth is that business corporations affect the environment and communities by the products they produce and the processes they use to produce revenues and profits. Indeed, it may be their own products and processes (or products and processes of other corporations) that have inadvertently caused the harm that they then wish to ameliorate by their CSR...
activities. CSR with a small fraction of their profits cannot have the same impact on communities and the environment that the processes of producing the revenues (of which the profits are a fraction) can have. Hence the prevalent approach to CSR is like rearranging the deck chairs on the Titanic, whereas it is the course of the Titanic itself that must change to avoid disaster and take humanity towards a more sustainable future.

The conclusion we come to is that the discharge of a business' responsibility to society cannot be measured by assessing its CSR activities. Business responsibility must be measured by the contribution the business makes by its products and processes, not merely to its investors and owners, but to the environment and the community also. This fundamental change in the definition and content of business responsibility is essential for the survival of the earth and human society. It requires changes within business corporations and the institutions that surround them.

Business corporations operate within frameworks of regulations imposed on them by governments as well as the norms and expectations of the societies in which they operate. Thus they work within a system and cannot go too far in autonomously changing themselves even if they have the intention. Because they must be in synch with what society expects of them, what they are measured by, and what they are rewarded and punished for. Therefore the norms and practices of other institutions that surround business corporations must change too. Hence the seven ‘solutions’ I propose to accelerate the change in the paradigm of business responsibility and make it sustainable are changes in the larger eco-system of business-related institutions.

1. Expand reporting frameworks

The financial performance of business corporations is subjected to great scrutiny to ensure that financial investors get the information they need. Financial reporting requirements are mandated. Financial accounts must be audited by independent professionals. Business analysts pore over these accounts, and the financial performance of companies is publicly and authoritatively dissected in the business media.

If business corporations must be held accountable for their impact on the environment and the community also, then they must be required to report their performance against a ‘triple bottom line’: impacts not just on profits, but the planet and people too. Some corporations have begun to do this voluntarily. However, for the reports to have value they should conform to agreed standards – so that the performance of corporations can be compared as with financial reports. And for the information they provide to be trustworthy, it should be independently audited as with financial reports.

It is unlikely that standards will develop and compliance come about through voluntarily action by a few corporations, or even by the actions of voluntary associations of businesses of which there are several already. Indeed the competition amongst these associations for recognition of their versions of standards results in more noise and less useful signals for concerned citizens to rely on. Therefore there is need for a process of convergence in which governments will have to play some role for the sake of providing citizens with reliable and comparable information.

2. Develop analysts and “valuers”

The demand for better reports will create a need for professionals to help corporations prepare the reports. It will also create a demand for analysts to scrutinize these reports and make evaluations to guide the public. The media can propagate this information.

The development and engagement of professionals (and analyses in the media) need not be only a response to the demand from the public. Professionals and the media can stimulate the demand too. Thus a movement can be accelerated towards business responsibility in 21st century terms, rather than the old paradigm of “CSR” and philanthropy.
3. Build pressure from the investor community

Business corporations that do not anticipate the changing needs and norms of society run great risks. What was acceptable once can become no longer acceptable. Asbestos, cigarettes, polluters of water and air, users of child labor...Corporate reputations have been ruined; licenses to operate have been withdrawn; financial value has been destroyed.

Corporations that track the changing needs of multiple stakeholders outside the investment community and respond to them, ultimately protect the interests of their investors. Therefore investors should value corporations that demonstrate strong capabilities for responding to demands for sustainability and inclusion, and that measure their performance on a triple bottom line. Indeed enlightened investors are pro-actively demanding that managers build these capabilities. Demand from investors is always a good reason for managers to change their behavior, especially those whose philosophy is that the prime purpose of a business is to produce results for its investors.

There are a few investors who, for ethical reasons, have focused their investments on socially and environmental businesses for many years. However such investors were very few and they could not influence wide changes in corporate behavior. Recently movements have stirred within the mainstream investor community recognizing the demands from society for sustainability and inclusion and the risks from these for their investments. Investment managers overseeing several trillion dollars of investments have come together to develop norms for responsible investments, such as the Equator Principles, and the Principles of Responsible Investment.

4. Strengthen consumer movements

Managers who subscribe to the philosophy that the business of business must be only business may not see the need to respond to the needs of the community. But they do know they must deliver the needs of their investors. They also know that they must deliver what customers want or they will be out of business. Therefore, strong consumer movements that demand that a company's products are good for the environment and society, and that rate companies on their performance against these requirements, can broaden managers' attention beyond the narrow focus on the financial bottom line.

While such movements can and have arisen autonomously within civil society, and can sometimes become very powerful, the question is how they can be supported and given more strength, and by whom, so that the movement towards more responsibility across all businesses can be accelerated. This is a solution with great potential that requires more examination.

5. Rethink business and management teaching

The first four solutions – in the arenas of reporting requirements, analysts and media, investors, and customers – are demand-side solutions for business responsibility. The fifth is a supply side solution.

Many managers within businesses including those at the top of their firms, many managers within investment firms, most consultants who advise businesses, as well as many business analysts, are all products of business schools. Many have got degrees from these schools, and many others have been to the school’s executive development programs. Thus concepts that business schools teach are pervasive in the business world. Therefore any paradigm shift in the concept of business responsibility can be reinforced or retarded by what business schools teach.

Recently there has been much debate about the responsibility of business schools for the financial crisis that has shaken the world. And there have been suggestions about what they should teach to improve the world. Courses in ethics are often mentioned. These may do some good but they will not make much difference if the core curriculum of the schools remains wedded to the prevalent theory of the responsibility of businesses viz. the business of
business is only business. Teaching ethics on the side while the core of business teaching is unchanged has the same limitation as the prevalent paradigm of CSR – something done on the side while the main thrust of business is unaltered. The damage or the good to the world is done by the core concepts on which the schools’ courses are founded.

The philosopher Karl Weick said there is nothing as practical as a good theory. Business schools need a new theory of management to enable the change that has now become imperative in the pattern of human activity. The prevalent theory guiding business practices is based on two premises: that a business manager’s prime, and perhaps only responsibility is to produce better returns for investors; and that human beings are motivated mostly or entirely by material incentives. Management teaching and practice must be informed by new theories that reflect the nature of humans more accurately as well the systemic nature of the world in which each part is embedded. In this interconnected world, those who wish to lead – and often claim they are the leaders – must be responsible for the condition of the whole and for the consequences of their actions on the whole system. This must be the ethics of business leaders and theories and practices in business must be consonant with this ethics.

6. Create networks
While the best business schools admit the need for change, they say that they are part of a larger system, and that they must respond to what their best customers, principally corporate recruiters, want and are willing to pay for. The question then is who must change first: the schools or businesses. The same question of who first can be asked in the relationship between businesses and their investors, and between businesses and customers. There is inter-dependency amongst all of them.

Outside Pune in India, visitors experience the power of working together at a Sufi shrine. There is a large boulder in its courtyard which even a huge man cannot lift alone. But ten visitors, whether young or old, men or women, can lift it by putting one finger each on to it and breathing and lifting together. Similarly, change in the pattern of human activity, and in the impact business corporations have on the world, will come about by many institutions working together.

Networks are forming, seeded by the UN Global Compact, the World Business Council of Sustainable Development, and others. Into these networks many organizations are plugged. They include those developing reporting standards such as the Global Reporting Initiative; networks of investors (such as the Principles of Responsible Investment); and networks of business schools pursuing change (such as the Principles of Responsible Management Education). Each is independent, but working together they may accomplish what none will alone.

7. Finally, new leadership
Who will initiate the change? And who will wait for others? Leaders are those who move first: followers wait. Leaders are those who take the first steps towards that which they deeply care about and in ways that others then wish to follow. Thus they initiate a movement of change, all the time mindful of interdependencies, and within which they are changed too, but never losing their own aspiration for a better world for everyone.

We live in a networked world with great interdependencies which we ignore at our collective peril. This is the most profound realization that the threat of climate change, and the need and desire for inclusion of all in the benefits of economic progress, has brought us. We must work together. Therefore we need new paradigms of leadership to bring about cooperation. Cooperation cannot be imposed by a leader: the imposition will itself beget lack of cooperation. (Recall the unhappy consequences of ‘If you are not with us, you are against us.’) Cooperation has to be enlisted and inspired. Gandhi’s “Be the change you want to see in the world” may be a more appropriate model of leadership.
In the corporate world too, we must rethink the paradigm of leadership that we teach and celebrate. The model of the strong CEO presented in many business cases, which has also been much celebrated in the media recently – a leader who is high above the rest, whose writ prevails, and to whom is attributed the success of the corporation, and for which she or he is rewarded outlandishly – is not the solution the world needs. Indeed, it may have contributed to the selfishness and fragmentation of the world that must now be changed.

The seven solutions reinforce each other. It is tempting to analyze which is primary and could be a stimulus for all others. Perhaps reporting frameworks may induce change in the rest; or demands of investors, or customers, will do it; or changes in the concepts and theories of management. If one must yield to this analytical temptation, then change in the paradigm of leadership may be the most central and pervasive requirement. Leaders who see the big picture, and who can work collaboratively and less egotistically with others, are required in all communities – business, academia, government, and civil society to together shape a better world for all.

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1. **Governments and organizations of the “third (i.e., not-for-profit non-governmental) sector”** should work together with companies to identify the need for CSR-activities, to motivate the development of CSR strategies and to help realizing these strategies.

In essence, CSR means corporate self-regulation integrated into a business model whereby business commits to adhere to social norms and international standards that are not subject of regulation by law. Although at first sight it may seem that CSR is only a matter of business companies, in fact it will only be sustainable in the long run (and especially during times of economic crisis) if it is understood as a concept of improved cooperation between business companies, governments and organisations from the “third sector”, all taking specific responsibilities within a broader CSR strategy: (i) Companies have to develop a wider sense about what constitutes their core business while taking into account the effects of their activities on society. They have to develop and implement their individual CSR-strategies. (ii) Participants from the third sector have to identify urgent social problems and fields for action while helping corporations to generate more social worth. In doing so they should see themselves as partners, not as opponents, to the business sector. (iii) Also governments have to act in a sense of partnership: They have to motivate, stimulate and help business companies to build appropriate CSR-networks.

2. **Make corporations becoming aware of the benefits they can reap from CSR activities.**

CSR activities may in many ways generate benefits for companies that devote resources to adhere to ethical norms beyond law and to serve social needs beyond their core businesses. The benefits to be reaped may include the reputation of caring about social needs which, in an era of increased public awareness and sensitivity for social needs, may help to get access to untapped markets, to generate competitive advantages on sales markets and to get better acceptance for their core business models by stakeholders. It may also be an aid to recruitment and to increased identification of employees with the company they work for. Other benefits may stem from less taxation and/or regulation by law which may transform into substantial cost savings to firms. The more companies treat CSR activities as a rational investment and part of their business strategies the more sustainable CSR activities will be.
3. Governments and third sector organizations should help corporations to communicate their CSR activities to the broader public by taking responsibility for fostering transparency in the field of CSR.

The reaping of private benefits by corporations from CSR activities depends on the awareness of such activities by stakeholders and the broader public. Public transparency of CSR strategies and actions is a precondition for public awareness. Especially, transparency helps stakeholders and the broader public to identify those firms that commit themselves to ethical norms and social standards and, thus, may help to avoid a race to the CSR-bottom (where firms which are not engaged in CSR may benefit from a cost advantage vis-à-vis competitors that do).

Governments and third sector organizations should take responsibility for fostering transparency: Governments should make CSR reporting mandatory by companies. Governments should also develop and provide CSR reporting guidelines which help companies to identify key indicators to which they can align and manage their CSR activities. The business companies as well as organizations of the third sector should help the government in partnership to develop such guidelines and to act as watchdogs against unduly restraints on reporting. In addition, in order to help corporations to communicate their CSR activities to the public, NGO’s and governments should develop appropriate rankings and promote honours for outstanding CSR activities. Both would help the public to compare CSR activities and to generate public awareness to outstanding devotion to CSR. This will help to create a win-win-situation for corporations which actively participate into CSR on the one side and the social environment within which they operate on the other.

Background

CSR is nothing new but has a long tradition. However, in an era of rapid globalization and of the crisis of traditional welfare state models CSR may have some potential to compensate for the loss of national governments’ scope of action in balancing conflicting interests and in sustaining a reasonable reconciliation of interests within their own societies. Furthermore, CSR may help to define and implement a set of rules that may govern transnational relationships between firms and stakeholders. The growing importance of CSR not only on a national, but also on a global level recently found its expression in two transnational initiatives: Within the UN “Global Impact Initiative” about 4,500 business participants committed themselves to align their operations to ten universally accepted principles in the areas of human rights, labor and, environment and anti-corruption. Within the “Extractive Industry Transparency Initiative” major companies of 24 states worldwide committed to fight against corruption by establishing transparency for royalties to be paid to countries that export natural resources.

At the national level governments of different countries treat CSR differently. While some actively support CSR-activities (e.g., the Netherlands, Sweden and the UK), others are rather passive in this respect. Support ranges from awarding honors to corporations that engage in CSR (e.g., Belgium), making CSR activities mandatory for firms that bid for public procurement contracts (e.g., Italy), the financing of private CSR networks or even think tanks (e.g., Denmark), to the explicit appointment of a Minister for CSR (UK). However, it still remains unclear how to best allocate responsibilities between the governments, the third sector, and corporations.
The Global Society

Making Migration Work after the Crisis – 2009

The Challenges

International labor migration promotes economic development in sending countries and can help overcome skill shortages and demographic problems in host countries. Nevertheless, many of these potential benefits are not realized because immigration policies are often too restrictive and not harmonized between host and sending countries.

Two aspects appear to be crucial in making migration more beneficial for both sides. First, host countries should take more responsibility for economically and socially integrating immigrants in their societies. Second, host and sending countries should cooperate to provide migrants with more flexible migration opportunities and incentives to return.

What are benchmarks for successful policies for the economic integration and social inclusion of immigrants? Specifically, what is the relative importance of flexible labor markets vs. activist government policies in fields like community development, schooling, language skills, and training in cultural awareness?

What is the role of civil society and the business community in promoting migrants’ labor market integration and eliminating discrimination against migrants? Should temporary migration schemes be promoted? Should immigrants have differential access to the welfare state? How can social security contributions and benefits be made portable across countries? How can Diasporas contribute more effectively to economic and social development in their home countries?
Proposed Solutions

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1. **Expand temporary work programs for low-to-medium skilled workers.**
   Such programs could be targeted to occupations or labor market segments where immigrants will compete less intensely with host country residents. Migrants would be obliged to return home after a set period; therefore, their access to host country social transfers could be limited and their social security contributions (except for health insurance) could be channeled to home country social security systems. Temporary work programs would typically be based on bilateral agreements between home and host countries. While such programs have not been trouble-free in the past, they would expand legal migration without running into the sort of political resistance that permanent immigration faces, especially during a pronounced economic downturn.

2. **Improve integration of immigrants in all spheres of host countries’ societies.**
   In many host country labor markets, immigrants still face outright discrimination and school achievements for immigrant children also lag behind natives. As a result, many immigrant children are growing up in relative deprivation and without positive role models of adults who are economically successful and socially integrated. Better integration of immigrants in labor markets and education systems would reduce the fiscal cost of immigration in terms of current and future social transfers. Efforts by a wide variety of actors would be helpful, from business associations promoting equal-opportunity hiring practices to NGOs facilitating migrants’ access to public healthcare and schools offering language training to ensure that migrant children are literate in both their native and host country languages. At the same time, it is appropriate for host countries to require new immigrants to make an up-front effort towards integration, for example by learning the language of the host country.

3. **Offer continuous regularization for long-term irregular immigrants.**
   Some host countries have long tolerated a large amount of illegal immigration, to the point where irregular migrants have access to public services like health care and schooling without fear of deportation. While this approach is admirable on humanitarian grounds, such irregular immigrants are still unable to obtain legal employment and are thus susceptible to exploitative work practices and de-facto travel restrictions which make it difficult for them to maintain contact with their families at home. Where irregular migration is widely tolerated, the current practice of large, but infrequent and politically controversial regularization campaigns should be replaced with a continuous regularization process for long-term irregular immigrants with clean criminal records and employment histories.

4. **Manage high-skilled migration.**
   Many high-income countries allow permanent immigration by high-skilled workers from anywhere in the world, based on a minimum salary to be guaranteed by the prospective employer, previous study at a host country university, or a points system that takes into account a large number of skills and family characteristics. Such transparent provisions should be encouraged and extended. High-skilled immigrants may increase the productivity of resident workers while creating only limited distributional conflicts and can improve the net impact of immigration on the skill level of the host country labor force. At the same time, however, selective immigration policies may lead to brain drain in some emigration countries. To cushion these adverse effects, an international and flexible code of conduct should be invoked to control the active
international recruitment of skilled workers in critical sectors such as health care. In addition, social security contributions in the host countries should be made portable so that high-skilled emigrants are not discouraged to take up economic opportunities in their home countries.

5. Systematically integrate Diasporas in the development process of their home countries.

Many migrants maintain close links to their home countries by sending remittances, travelling, voting in elections, etc. These links should be supported and harnessed for home countries’ economic development. Such policies are especially relevant for (temporary) migrants who reside in the host countries for economic reasons, but ultimately plan to return to their home countries. For example, existing social investment funds demonstrate how migrants can be encouraged to contribute to communal development at home, with funds from the government or donors matching the contributions of migrants.

Background

International labor migration tends to benefit primarily the migrants themselves, who can often multiply their labor incomes, to a lesser extent their home countries (mostly through remittances) and the host countries’ resident population. However, it is host countries’ voters who have the largest say on how much regular migration is permitted and how extensively irregular migration is repressed. Therefore, a two-pronged approach is needed to design politically feasible immigration policies that seek to enhance global welfare by permitting more migration: (i) immigration and redistribution policies should be calibrated so that overall economic benefits for the host country are maximized and more evenly distributed; (ii) immigration policies should also respond to considerations beyond narrow economic benefits such as concern for the welfare of individuals in lower-income countries – similar to development assistance by high-income countries – or equity concerns: Individuals should not be discriminated against based on nationality, any more than based on gender, skin color, or handicap.

Demetrios Papademetriou

President and Board Member, Migration Policy Institute

Comments on possible solutions

While focusing on “after the crisis” is terribly important, there are many things that governments and societies can do about immigration during the crisis. Among them, three seem particularly important.

(A) They must redouble their efforts on immigrant integration. There are at least two components to this. The first one may be that the crisis will reduce receiving countries’ commitment to investing on the education and training of non-citizens and immigrant origin populations with special needs. This concern is most relevant in places where financing for such initiatives is most uncertain and categorical distinctions on the basis of legal and citizenship status are both allowed and are fairly routine. The United States is the most common example in this regard (US states and localities make the decisions on such matters and use mostly their own funds to implement these decisions – and federal laws allow distinctions). But cash-starved governments anywhere may feel tempted to cut back on additional/targeted services for these populations, status aside. Such decisions will have a totally predictable effect. Immigrants and immigrant stock persons, who are already very much behind other groups in most socioeconomic measures will fall further behind still. And the cause of greater equality for all will suffer accordingly, as will the economic growth and competitiveness priorities of affected countries and, in the case of the EU, the aims of the Lisbon Agenda.
The second component is related to the first and may be even more insidious. Already troubling societal divisions based on immigrant status and ethnicity will become more pronounced and we may see other “beggar thy neighbor” policies emerge – on broader social investments in other measures of broader well-being, such as investments in health and physical infrastructure in poorly served (and often immigrant- and ethnic minority-dense areas) areas.

**Recommendation**: Governments must resist any such temptations and, if anything, redouble their efforts to close these gaps – which affect both economic justice and longer terms social cohesion and economic growth and productivity goals.

(B) Governments and societies should use the recession as a “learning moment” and review their immigration policies for what has worked well and what has not. The objective here would be to make such policies in the future more consonant with the other policy domains which have often seemed to have received short shrift as countries have rushed to enter the international migration “sweepstakes.” Among them are education and workforce development policies, building the necessary infrastructure to manage large (or much larger) flows (and funding the resulting efforts accordingly), and thinking through the implications of much greater openings to immigration for their development and related foreign policy objectives. And for countries that have found it necessary to contract their foreign born populations dramatically during the recession (as have the UK, Ireland, Spain, and, in many ways the US), an appropriate lesson might be that too much exuberance about immigration is not any better counsel on this issue that “denial” of the importance of immigration is for those countries that continue to pursue zero or very little immigration – however, rhetorical such pursuits may be in fact.

**Recommendation**: Openings to immigration must be measured, the legislative and administrative framework for both the management of the flow and of its implications for communities appropriate (including making the necessary funds available), and educating the public about immigration and its effects must be made not only a priority but a routine responsibility of government officials at all levels.

(C) Governments and societies in the advanced industrial democratic west must avoid taking extreme measures of any sort that may soil their reputations and make their return to relying on immigration after the crisis unnecessarily complicated (such measures are more common in other parts of the world.) Yet, if the unemployment and other human costs associated with the crisis become deeper than most may suspect today, the pressure for what The Economist recently called “people protectionism” will only intensify – and will require wisdom that has not been a common feature among many states when it comes to immigration.

**Recommendation**: The recommendation that flows out of this concern is simply to be measured in any responses to immigration and its effects.

In conclusion, we must also all recognize that solutions are simple to imagine but may be difficult to implement politically – and they will be costly at a time when budgets are severely constrained and governments face many unhappy choices. Nonetheless, they are no less essential!
The Global Society

Overcoming Inequality through Education – 2009

The Challenges

According to the ILO, income inequality has increased in about two-third of the countries of the world since 1990s. The current global financial crisis and the accompanying worldwide economic recession are expected to further widen the gap between the rich and the poor (ILO 2008).

Different qualifications and skills are widely accepted as one of the major factors behind different income levels of individuals. Education is usually taken as the main way in which individuals can learn more skills and qualify themselves to increase their potential of employability and of high income in the future.

Despite other potential influential factors behind the increasing income inequality worldwide, improving education quality is expected to make a substantial contribution to mitigating both interpersonal and, at the end of the road, even international income inequality.

What are effective (and efficient) means for improving education quality? Can education quality be effectively improved solely by providing more financial support for education affairs in general? How could incentives of students and teachers be enhanced? What is an appropriate division of work between government and the private sector in education? Are successful education policies in a country idiosyncratic or can they be blueprints of education policies being applied in the other countries?

**Proposed Solutions**

Richard Ernst  
*Nobel Laureate, Swiss Federal Institute of Technology, Zurich*

**The present situation and urgent remedies**

Education plays an enormous role in the formation of creative personalities and of adapted members of human society. By education and learning we have brought our genetic inheritance to blossom. Human history and human culture are the products of millennia of learning and teaching. We can not overestimate the importance of education for the past and the future of mankind.

Education is by far the most important measure (1) to warrant self-fulfilment of individuals and, at the same time, (2) to warrant a well functional society. The more developed and entangled a gregarious human group, community, State or the international society is, the more will it depend on intense educational efforts to warrant functionality and peaceful cooperation. We know that up to twenty years of personal education are needed, being followed by never ending life-long-learning.

From these few remarks, it becomes evident that education is indeed a primary measure for overcoming inequality within and between societal groups and States. It becomes also obvious that education is a fundamental responsibility of each community and each State. It might even be identified as the most important of all public and governmental tasks.

For enabling the self-fulfilment of individuals, who can freely develop all their genetic gifts, there is no alternative to education. However for achieving a functional society at large, two possible measures are conceivable: (2a) education and (2a) law-enforcement. Both have to act side by side. However, the emphasis should be focused as much as possible on education in view of spontaneous responsible behavior. Law-enforcement is only a last resort’s measure when education towards responsibility has failed.

Education itself has numerous facets. The most efficient learning happens not in class-room teaching but in the form of trial-and-error self-learning processes by doing and experiencing nature and natural or human-inflicted constraints. Class-room teaching is cheap and easy, but it is also the least effective form of learning. It should be abandoned wherever possible and replaced by a well-prepared learning environment with facilities for performing experiments and learning by doing. At universities, already beginning students should be integrated in active research groups. This implies that adequate experimental research facilities belong to all establishments of higher learning. Obviously, for this reason research should never be separated from teaching and is best performed in universities and not within stand-alone research institutions. The research organization in the US can serve as a positive role model in this respect. Clearly, for developing countries it is an expensive approach that needs financial support from the developed partner States.

It is important to realize that in English the term “education” has two connotations that are distinct but often misinterpreted for linguistic reasons. In German, however, the two terms “Ausbildung” and “Bildung” are clearly distinguishable, and both translate into “education”. All too often, schools in developed and in developing countries concentrate almost exclusively on “Ausbildung,” on instructions for providing skills, vocational and social skills, skills that often lead to specialization and specialized professions. Learning languages, natural sciences, and mathematics, as well as the manual trade skills, all belong to the teaching contents of education in the sense of “Ausbildung.” They allow one to find a particular job and they are important for the training of numerous specialists that are needed in the societal interplay.
“Ausbildung” has yet little to do with becoming a balanced, full-fledged human being, combining wisdom and compassion. In this context, the term “Bildung” becomes relevant. “Bildung” has no English equivalent but may be translated by a number of paraphrasing terms, such as “comprehensive formation,” “personality formation,” “character formation,” and “creating human values.” Let me abbreviate this set by “humanistic formation” and contrast it with the term “education” used for providing merely vocational skills. It is obvious that humanistic formation, only, leads to mature personalities with reflected opinions and foresight who we need so urgently in our short-sighted time, in contrast to the narrow-minded functionaries that often are being produced by vocational training alone, for example in our business schools.

Humanistic formation has been promoted vigorously by Alexander von Humboldt (1769–1859) and corresponds to the idealistic and humanist approach of the period of Enlightenment. Its goals request not only broad “knowledge” but even more so “understanding” based on wisdom and empathy. Ethics and ethical considerations also play a central role in humanistic formation. Today, such an approach is needed more than ever before, being faced with a very difficult economical situation and a future as uncertain as ever. Humanistic formation provides ultimate flexibility in adjusting to a difficult and unpredictable future. Educating specialists, on the other hand, often leads to inflexibility and potential unemployment.

It can hardly be questioned that much of the catastrophic problems of today’s ill-guided business system, which became so utterly apparent last year, are rooting in the glaring absence of wisdom-, ethics-, and empathy-guided understanding among the main actors. It was purely animalistic money-mindedness in abysmal contrast to humanistic ideals that was driving the world economy into a situation that punishes once again primarily the weak and innocent members of the global society. The presently still prevailing profit-oriented ideology must inevitably lead to a series of future aggravating catastrophic situations the nearer we come to the global limits of growth.

What can we learn from these observations and what can we propose to do?

- **Education in the sense of humanistic and ethical formation shall be stressed by all means in all countries and at all levels of the global population, and particularly in business schools.** Governments shall be made responsible for enabling free humanistic formation. Special pression shall be exerted on totalitarian States that might feel endangered by allowing for free humanistic formation.

- **All efforts to overcome inequality through education of deprived or developing populations are in vain unless the ruling populations in developed countries are motivated or forced to behave according to ethical and humanistic principles.** In this sense the humanistic and ethical formation of our leaders in business and politics is a most urgent pre-requisite for progress towards equality.

- **A novel understanding of humanistic values based on ethics shall be promoted. Short-term monetary incentives shall be replaced by foresight and by ethical responsibility towards the global society.** We urgently need lasting values that have almost entirely been lost within today’s commercial community (Sales promotion is in fact a negative value!).

- **The old-fashioned class-room teaching methods, still prevailing today, shall be replaced by “learning by doing,” using “trial-and-error approaches” in realistic experimental situations.** Motivation is the key word in teaching! A motivated student is learning by himself or by herself.
Laura Liswood
Secretary-General, Council of Women World Leaders; Senior Advisor, Goldman Sachs

**Girls education**

A key and essential component of the challenge of education is the access to all levels of education for girls. The World Economic Forum Gender Gap report reflects on the gaps between girls education and boys education for over 110 countries. In many countries, the gap is greater than 50% starting from primary education levels.

The World Bank has clearly found that girls education has a direct positive correlation with health of a family and reduction of family size. It also continues generational to the next generation of girls.

Overcoming inequality in this area is not just a matter of providing more dollars, aid or government attention, although those are necessary. They are just not sufficient. Culture and its corollary, religion, often plays a dramatically powerful role in determining whether girls will have access to education. Prime example of that would be the Taliban’s prohibition against girls education.

Other gatekeepers for girls to go to school are economic. The family may not be able to afford the fees for school and only the boy child or children get to go. The girl may be pulled from school to help the mother fetch water or firewood, an all day event in some places harshly hit with environmental degradation. Girls may be sold by their fathers and sent to the city for human trafficking or other.

No access to toilet facilities can prevent teenage girls from continuing education.

Governments particularly must play a strong local role in resolving both the cultural and resource constraints. Incentives such as those put in place by the Government of Rajasthan in India are examples—the family gets a bike if the girl stays in primary school and a motorbike if she stays through secondary school. This does not get to the heart of the basic devaluation of the girl child but the end result is she gets educated.

Quality of education is essential too as in many schools boys are given the clear message that girls and women are not equal to them and can be treated with fewer human rights or even violence.

It is not enough to just focus on education when we know that this is a different issue when viewed through the lens of girls.

Wan-Hsin Liu
Kiel Institute for the World Economy

1. **Dismiss the belief in the one-to-one relationship between equal education resources and equal education outcomes.**

Before designing an effective policy package, it is important to recognise that equal education resources such as equal expenditure on students and equal facilities are empirically found not to result in equal outcomes. Empirical evidence suggests that extra resources are required for supporting disadvantaged students to realise more equal employability opportunity of these students in the future.
2. Centralise performance standard determination, provide external performance tests for students but delegate autonomy to local governments and schools to make more appropriate educational decisions.

Because of the multidimensionality and the extremely high relevance of education for the sustainable development of every country, it is expected to be efficient, if the central government can determine education goals in terms of clearly defined performance standards. Based on these standards, external controls such as external performance tests for students can be implemented. Moreover, sufficient autonomy should be delegated to the local players such as local governments and schools who know the local-specific needs and resources much better than the central government.

External controls, accompanied with appropriate reward and sanction mechanisms, are expected to exert additional but healthy pressure on the local players to optimise the allocation of scarce resources. Such controls are also expected to promote a healthy competition between schools, between teachers as well as between students.

3. Enhance the incentives of teachers.

In addition to external controls and the accompanying reward and sanction mechanisms, some more policy measures aiming at enhancing teachers’ incentives are required to promote effective teaching and efficient learning. This does not mean that teachers should generally be better paid than now. What seems more appropriate though, is to introduce, at least partly, a performance related payment system: only teachers who, for example, voluntarily undertake additional assignments and carry them out excellently should be better rewarded. Additionally, teachers may be granted more autonomy to discuss with their students to arrange the most appropriate learning plans on their own, taking the relative strength among different students into account.

4. Keep a long breath.

Studies show that it takes quite a long time to effectively improve the education quality and students’ skills and performance. In other words, success won’t be easy and swift even after determining clear education goals and applying appropriate education policies. Hence, long-term and stable education policies, continuous education investments and above all a long breath of all agents involved are required.

Background

Pertinent differences in the amount and the quality of human capital, related to inequality in educational attainment and education quality are often considered to be at the roots of interpersonal and international income inequality. Empirical studies find that education inequality measured in Education GINI coefficients has been mitigated and education attainment in years has been extended in many countries in the world (Thomas, Wang and Fan 2002) – from this one would expect a decrease in income inequality in the long run. However, many countries suffer from even higher income inequality over the last decades. This seeming contradiction may be an indication that there is no easy road from mainly extending education attainment towards altering the opportunity structure and, moreover, that it may not be appropriate to define equal opportunity in terms of equality of outcome.

There is increasing empirical evidence that only education policies which indeed improve education quality and help enhance students’ cognitive skills and learning performance are likely to make substantial and positive contributions to mitigating interpersonal and international unequal income distribution and on economic growth (Hanushek and Woessmann 2008). The positive effects of improved education quality and cognitive skills of students on income equality are harnessed in a more productive institutional environment for markets and legal systems (e.g., protection of property rights, openness to international trade). Both, the level of
cognitive skills and the quality of the institutional environment are important for and reinforce each other in fostering economic development.

Heather Munroe-Blum  
*Principal, Vice-Chancellor and Professor in Medicine, McGill University*

The global economic downturn has caused serious pain to individuals across the world and threatens to widen significantly further the gap between haves and have-nots, in developed and developing societies alike. The crisis, however, has also forced governments, organizations and individuals to step back and fundamentally re-examine their practices and values. This year served as a reminder that collectively we need to balance financial profit with long-term sustainability, individual gain with social justice, and progress with prudence.

Education – primary, secondary and tertiary – is perhaps the most critical means of improving the welfare of disadvantaged populations, particularly as more and more of the world enters into the global knowledge society. It is a cornerstone for improving both social justice and economic productivity. Education, however, should be viewed as inextricably linked to the health, social, economic and security status of individuals and societies. As such, education is not the responsibility of governments and the education sector alone, but is better positioned as a core concern of the entire community, including families, business and other organizations. The old adage, “It takes a village to raise a child,” is never more true than in the educational arena. To reduce the gap between the haves and the have-nots, we need to embrace broad access to quality education as our strongest social value.

The topic of overcoming inequality through education is extensive, and includes all levels of education in both developed and developing societies. As someone trained in epidemiology, I am a firm believer in early childhood intervention as a means of improving early literacy and ultimately educational and health outcomes for disadvantaged populations. In my discussion, however, I will focus on my current area of responsibility and expertise: mechanisms for fostering quality, and ensuring access for disadvantaged populations in higher or post-secondary education in North America.

**Quality**

In the global knowledge society, universities play perhaps the most critical role in helping a country improve its economic productivity and social quality of life. Universities educate the skilled, internationally engaged and creative individuals needed as entrepreneurs and leaders for businesses to compete effectively; they create the research, scholarship and knowledge that underlie the development of value-added products and processes and the innovative applications that bring these into broader societal access. They provide a hub for high-level international networks and partnerships. As such, it is vital that the higher education sector focuses on performance and quality, as well as accessibility, to ensure that society reaps maximum value from its investment.

A stable funding base is of course key to quality. But with this as a given, two key factors underlie quality in higher education:

- Understanding the importance of differentiated mission amongst institutions in a system, and understanding who you serve. A differentiated higher education sector, in which universities, government, business and society clearly understand, and fund appropriately, a broad range of university missions, in geographically distributed universities and colleges;
- A commitment to ongoing institutional accountability and transparency in measurement of performance against appropriate criteria, with concrete indicators, against both the institution’s past performance and peers.
Understanding your mission and your stakeholders

In education, as with clothing, one size should not fit all. Perhaps the most dramatic change in education over the last decades has been the so-called “massification” of higher education, in which a larger and larger segment of the population is now participating in some form of post-secondary education. Higher education today fills a huge array of societal needs, including but not limited to:

- vocational training for trades and professions (including the credentialing of immigrants and refugees);
- the development of knowledge and skilled workers focused on the needs of individual regions;
- advanced education, including the development of ethical leadership, entrepreneurship, high impact research and scholarship, and creative skills, to create the highly skilled workers needed for countries to compete in the national and global knowledge economies;
- and the creation of strategic partnerships for the production of internationally competitive research and scholarship, ideally with knowledge users, such as business, the healthcare system, government and non-profit organizations.

Community colleges, regional universities and research-intensive universities can all make profound contributions to society – as long as they embrace and live a meaningful institutional mission. A corollary of understanding mission is also understanding who it is you serve. For some institutions, this may be primarily a local community, and particularly governments and businesses with a need for workers with specific vocational skills. For others, the key stakeholders may be local, national and international. Simply put, the foundation of excellence is knowing who you are and what you are trying to do. Only then can universities and colleges develop and implement the strategies needed to thrive for maximum contribution and impact on both social equality and economic terms. Governments, too, require mechanisms that recognize and fund institutions of higher education based on these differential missions and contributions.

A focus on performance: Another trend in recent years has been an increased emphasis on measuring performance in the higher education sector, as demonstrated in part by the proliferation of national and international rankings. As universities become more and more crucial to a region or country’s performance in the global knowledge economy, governments and societies are demanding accountability for their investment.

A commitment to measuring performance and researching and implementing best practices, within the context of an institution’s individual mission, is vital to fostering quality. Finding indicators that truly capture performance in higher education can be difficult, as many vital contributions, such as the knowledge transferred to business and organizations through employment of recent graduates, are difficult to measure. There is a lively ongoing debate as to whether too much emphasis has been put on patents and licences, for example, as a measure of knowledge transfer. Universities and governments need to continue work to develop optimal indicators. The process is, and needs to be, profoundly iterative, one that changes as a society’s needs and context changes.

The key here, as with mission, is differentiation. A community college will have a different set of indicators and peer institutions, than a regional or a research-intensive institution, but should have no less of an emphasis on performance. Institutions of higher education can look to like-missioned institutions to measure performance and share best practices. To improve quality, this process must weave itself throughout the daily work of an institution and be embraced by its members, with continual research, implementation, evaluation and adaptation based on this iterative cycle of evaluation. National and regional culture and character can play a role, but I strongly believe that best practices between institutions with similar missions can be shared effectively (sometimes more easily) across borders.
Inclusion, access and funding

Increasing access to higher education for socio-economically disadvantaged populations is a challenge, largely due to the multiple factors involved. For example, the economic development status of a nation can predict which mechanisms will best serve this goal, and the mechanisms will be different in more economically developed nations. As well, family context and commitment to education, education and income levels of parents, geographical factors, quality of primary and tertiary education and support provided to disadvantaged populations (both before and after entry into university), access to information on the benefits of higher education all play a role. Due to the complexity of the problem, no one sector, whether government, universities, business or non-profit, can provide solutions, but need to work in partnership.

In working to address a range of complex scientific, scholarly, professional practice and social issues, universities as institutions benefit greatly from increased accessibility, where exposure to the perspectives of individuals from diverse backgrounds and circumstances, and who identify with different segments of the broader community enrich the learning experience. As the world globalizes and shrinks, integrating together students, professors and staff with a wide variety of backgrounds – socio-economic, cultural, and geographic – can be an indispensable part of providing a stimulating and high performing academic environment. Both for our own health and the health of society around us, universities need to continue to reach out to engage those who have the potential to succeed as members of a university or college community, but who lack the means to participate with special measures. The factors that universities can most directly influence are reducing financial barriers, providing bridging mentorship and support for disadvantaged populations, and access to information and role models demonstrating the long-term life benefits of university.

Regarding financial barriers, our experience in developed countries is that lower or no tuition does not lead to greater university completion rates. In Canada, for example, Quebec has the lowest university tuition of any province, but this policy has not promoted greater access. Quebec has the third-lowest graduation rate (from undergraduate degrees) of Canada’s ten provinces. Nova Scotia, on the other hand, has the highest tuition, but also the highest university graduation rate. Instead, moderate tuition rates can ensure that those who are able to pay a greater share of the full costs of education do so. This then allows us to reinvest a portion of tuition revenue into financial aid for economically disadvantaged students, thus increasing access. Tuition fees plus an institutional commitment to growing student aid, plus incenting philanthropy, can increase participation more than free tuition.

Contributions to the cost of education by families and students who can afford it also increase the perceived value of education and the long-term stability of the university funding base. Again, the responsibility for funding higher education works best as a partnership among government, students, families, business, alumni and philanthropists. When there is an overreliance on one of these groups, unexpected events such as a change in government or a precipitous stock market decline can wreak havoc on a university’s ability to plan for the long-term, thus hindering quality.

Sanjit Bunker Roy
Founder, Barefoot College

The Barefoot College

The Barefoot College was established over 38 years ago in the deserts of Rajasthan in India. The sole objective was to improve the quality of life of the very poor, the impoverished, the economically and socially marginalised and the physically challenged living on less than $1/day and empower them with the skills and the knowledge to stand on their own two feet.
It’s the only College in India built by the poor and only for the poor. Mahatma Gandhi’s thoughts live in the lifestyle and work style of the College. Living conditions are simple so that the poor feel comfortable. Everyone sits, eats and works on the floor. Everyone takes a living wage instead of a market wage.

There is a spiritual dimension in the College because working relationship depends totally on mutual trust, tolerance, patience, compassion, equality and generosity. The idea is to apply the knowledge and skills the poor, the deprived, the semiliterate and the impoverished rural poor already possess for their own development thus making them independent and let them live with self respect and dignity.

No one comes to work for the money, power, position or security. However long you stay no one can get more than US-$150/month. The difference between the highest and lowest paid is not more than 1:2. There have been no written contracts for 30 years. Very few people leave because in spite of their incredible skills they are “unemployable” in the eyes of the world. We are so paranoid and misguided about degrees and qualifications supposed to certify capacity and competence.

It has been shown that if the learning and re-learning environment is relaxed, non-structured and informal the rural men and women are capable of wonders. By understanding, respecting and applying traditional skills needed to provide basic needs (drinking water, lighting, education, health, employment, housing) semiliterate and very poor rural men and women have shown they can not only improve their quality of life but also free themselves from exploitation, injustice, discrimination and fear.

The College believes the very poor have every right to have access to, control, manage and own the most sophisticated of technologies to improve their own lives. Just because they cannot read and write there is no reason why the very poor and illiterate men and women cannot be water and solar engineers, designers, communicators, midwives, architects and rural social entrepreneurs. They have shown the impossible is possible and confirmed what Mark Twain said, “Never Let School interfere with your Education.”

The Gandhian message through the Barefoot College has spread to 13 States all over India and by 2009 will have spread to more than 17 of the Least Developed Countries in Africa.

Innovation in design: Solutions

The Barefoot College believes one of the keys to minimizing of human suffering is in the hands of the impoverished rural women strong enough and confident enough to shape their own destiny. Over the last 15 years hundreds of illiterate and semi-literate rural women have been trained in non-traditional occupations changing the lifestyle and mindset of village India in several States all over the country. They have been trained as barefoot solar engineers, hand pump mechanics, designers, architects, masons (for rainwater harvesting), teachers, doctors, weavers, computer programmers and political leaders fighting for their rights for minimum wages.

When the ideas, knowledge and skills of the marginalised poor are used their own development and up liftment that’s the first step towards confidence building (against capacity building) developing self esteem and reducing the dependency on long term hand outs from outside. Eventually the dream is one day they stand on their own feet and face the world as human beings.

What is innovative is that the Barefoot College has given priority to the ideas and thoughts as the rural poor see as important-and respect their wishes. For instance the poor see very little value and relevance to paper degree and qualifications from formal Colleges and Universities. The importance and respect they give to their own traditional knowledge, skills and practical wisdom and keeping the oral tradition alive from father to son is deep rooted and cannot be replaced. Much of the focus of the Barefoot College has been to “educate” men, women and
children living in remote villages all over India to be aware of this precious resource so that eventually they stay in their villages and not migrate to cities living in slums.

It is also the main reason why the College gives no importance to “urban” experts with paper degrees and qualifications. In fact it is disqualification if the person with a degree wants to come and work in the College!

What is yet another innovation the Barefoot College has demonstrated in practice is building the confidence and competence of very poor people – the barefoot educators, not just teachers – by training them to provide a service to their own community thus making them as self reliant rural possible. Over the last 30 years several thousand poor young unemployed and unemployable rural youth, both men and women, have been trained as barefoot professionals.

Thus barefoot educators-doctors, night school teachers, solar engineers, water drillers, architects, designers, midwives masons, communicators, hand pump mechanics, computer programmes and accountants by the thousands have passed through the College. They have demonstrated that “experts” with paper qualifications are really not required to alleviate human suffering in villages if the goal is to make them self sufficient and sustainable.

“First they ignore you, then they laugh at you, then they fight you and then you win.” (Mahatma Gandhi)

Carlos Ivan Simonsen Leal
President, Fundação Getúlio Vargas

The demographic window
The level of schooling attained by the economically active population (EAP) of a country has strong connections to its productive and innovative capacity. Many emerging countries are going through major shifts in the structure of their age pyramids. In Brazil, projections for the next decades point toward a far greater participation of the EAP in the total population, as the birth rate declines and today’s children and adolescents join the workforce. This represents a demographic window, or an opportunity to ensure that better income distribution will be achieved, provided there is enough investment in education and, at the same time, that this investment is correctly focused. If the necessary actions are not taken now, the window will be progressively closed as the falling birth rate makes it more difficult to educate the EAP.

The distribution of education
National school systems often incorporate policies aimed at promoting universal access to education, as well as incentives targeted at specific groups or subjects (in the form of competitions, awards and scholarships). Furthermore, many countries have implemented policies that are explicitly targeted at affecting the distribution of education among social and ethnic groups. This raises the issue of how to evaluate these policies, not only in the technical sense of how to assess outcomes, but also in the political-philosophical sense of what is considered a desirable outcome (the so-called Social Choice Theory).

There are many different schools of thought regarding social choice (Stiglitz 2000, and Sen 1999). Among the most notable of these are utilitarianism and Rawlsianism. In the utilitarian perspective, an outcome is considered desirable as long as it propitiates a positive shift in average individual welfare, even if it leaves some individuals worse off. On the other hand, for Rawlsians, social welfare should be measured exclusively as a function of the worst-off individual, and outcomes are desirable only as long as they improve that individual’s well-being.

It is a trait of many social choice theories that an outcome can be considered acceptable even if it increases inequality. For instance, for utilitarianism, a policy that increased the educational
level of the richest, while holding constant the education provided to other groups, would be considered acceptable. Some theories attempt to incorporate “social justice” by postulating an explicit link between social welfare and inequality (as measured, e.g., by the Gini index of the welfare distribution).

Thus, social choice admits many different mutually-exclusive definitions, which lead to contradictory evaluations of outcomes as “desirable” or not. Furthermore, no theory is demonstrably “correct,” as in the final analysis they are all based on personal moral judgments.

One must acknowledge though, that there may be a situation in which a change in the characteristic of educational policy will benefit from increasing both the worse-off and the average individuals at the same time.

There is ample literature on the technical issue of how to evaluate outcomes, but the various conclusions must be put into perspective by the continual development in methodological approaches for measurement and analysis. One particularly clear-cut conclusion, however, is that economic returns to schooling are unequally distributed among the population. Therefore, in an environment with limited resources, it is advisable for government policies aimed at expanding public access to education to focus on those sectors of the population that have the highest potential gain. For Brazil, returns to schooling for different groups were estimated by Simonsen Leal and Werlang (1991). Nevertheless, it seems advisable also to ponder the duality between maximizing the aggregate return of investing in education and reducing social inequality. Moreover, it seems plausible that a situation can exist in which a change in the characteristics of the educational system will benefit from the possibility of improving both at the same time (inside the production possibility frontier, or PPF). As will be argued below, information and communication technologies (ICTs) may contribute to weaken or even circumvent this duality.

New information and communication technologies

The digital inclusion of more disadvantaged sectors of the population, as well as the incorporation of new ICTs into schools, may result in significant shifts in economic outcomes, although these have not yet been fully assessed. Some results of pilot programs in Brazil are available (World Economic Forum 2005).

From the individual point of view, familiarity and competence with ICTs represent entry to the ever-growing range of job positions requiring this kind of know-how, in all sectors of the economy. Thus, closing the digital gap is a fundamental part in making the job market open to all sectors of the population. It is interesting to note that competence with ICTs may represent either a complementary or substitute good to traditional (school) education.

The potential benefits of introducing ICTs into schools include allowing more (and more diversified) content to be delivered to students at greater speed, providing the basis for new teaching and student-interaction formats, and, in some cases, reducing the costs usually incurred by schools in distant locations, such as isolated communities (e.g., in the Brazilian Amazon Forest). In this sense, ICTs may be able to shift the production possibility frontier of education (average versus worst-off) of a given country upwards.

Assessing the quality of education

The level of formal education, as represented by years of schooling, is not an accurate measure of the effective cognitive ability of an individual. Assessing the quality of education is essential to understand its economic effects.

The quality of education can be evaluated at three levels:

- In terms of the **cognitive ability** with which it endows students. This can be measured through tests such as the PISA.
In terms of to what extent it provides training to students, thus producing workers that satisfy the demands of the job market. This can be measured directly through surveys with companies and employment agencies, or indirectly through such measures as salaries and number of job openings.

In terms of the increases in productivity that it brings to the economy. Arguably, endowing students with the ability to think creatively and to innovate is the ultimate goal of the educational system. It is a near-consensus in growth economics that these abilities, along with technological advance, form the basis of productivity growth. However, isolating the contribution of education to the economic development of a country is a difficult task.

These three levels of evaluation are not mutually exclusive, but rather represent different proxies or correlates by which to assess the quality of education received by students.

**The incentive structure in education**

To ensure that access to education translates into social and economic benefits, it is necessary to alter the incentive structure associated with the school system. This involves providing incentives not only to teachers and school managers, but also to students and their families (through exams such as the National High School Exam, or ENEM). The appropriate incentives can be achieved only through performance evaluation and compensation.

**The dangers of short-term policy decisions**

The deepening and prolongation of the economic crisis, especially in developing countries, may reduce the flow of resources to education and divert these investments toward social programs that have more short-term results.

The long-run implications related to these decisions are not always clear for policymakers. This is especially true in cultures where government leaders are not used to the concept of intellectual capital, and where education is all too often viewed as a current expenditure, not as an investment.

To ensure that decisions in this area are taken in a consistent manner, based in sound economic principles and in an accurate evaluation of the long-term costs and benefits of different policies, requires the development of a strategic plan to serve as a guideline and decision-making framework. Fundação Getúlio Vargas has a long tradition of aiding public and private sector institutions in strategic planning.
The Global Society

Dealing with the New Social Divides 2009

The Challenges

Around the world – from the US to Europe, from Latin America to the Far East – people are losing their jobs in the aftermath of the financial crisis and the consequent economic downturn. In Europe and the US, many of them are joining the ranks of the unemployed; in China, many are returning to the rural areas from which they came. In developing countries millions and millions of workers are being pushed into extreme poverty.

At the same time, as a result of decreasing asset prices, millions of families over the world have lost significant parts of their wealth and life-time savings, and many lost their homes through repossession. The resulting negative consequences could last a lot longer than the crisis itself.

The immediate reduction of income and wealth could generate additional adverse long-term effects, notably through reduced investments in the education of children compounding their vulnerability in the future. Also, there are fears around the world that the crisis may lead to rising protectionism and even social unrest.

While the current financial and economic crisis is global in nature, it is likely to have heterogeneous welfare impacts, with some countries, and some people, more vulnerable than others. The downturn may lead to profound changes in countries’ growth strategies and international trade patterns with potentially far-reaching consequences for certain population groups. Against this background the challenge for national governments and international organizations is to find responses in order to mitigate the longer term social divides created.
Proposed Solutions

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1. Provide short-run assistance against income shocks, in particular for the poorest and most vulnerable segments of society, while protecting human capital investments and facilitating economic adjustment.

Due to the crisis many people are experiencing unemployment and are facing substantially reduced earnings as well as other income, e.g., from remittances. As a consequence malnutrition is spreading, particularly in poor countries, and people are less likely to seek medical treatment in case they are sick. In addition, people tend to reduce investments in human capital as children are forced to drop out from school either to supplement household income or because their parents can no longer afford school fees or travel. In this situation, poverty alleviating policies should be key priority. However, scope to undertake such kind of policies will often be severely limited due to a deterioration of macroeconomic positions (fiscal and current account balances) and many countries’ vulnerability to shocks such as sudden stops in private capital inflows, domestic financial system stress or adverse developments in primary commodity prices. Tight financial constraints require refocusing of government expenditures to safeguard education, health and nutrition outcomes. In addition, for countries with particularly bad situation additional external financing from official sources and non-governmental organizations will be needed. When designing programs for immediate relief, policy makers should be aware of potentially adverse effects on recipient behavior that may be detrimental to long-term poverty reduction and human development.

2. Use the crisis as an opportunity to introduce and improve on social safety nets.

Policy response should be generally pro-poor, not only because of obvious ethical reasons but also because stimulus that favors the poor is likely to have a stronger impact on aggregate demand. In the developed world, although to a different extent across countries, there is generally a social safety net in operation which works as an automatic stabilizer in the economy. In the current crisis, welfare programs designed to protect the poor and the vulnerable should be reappraised; often it may be necessary to expand them, but there may also be scope for significant efficiency gains within the existing social safety nets. The principle of co-responsibility with a strong activation focus to minimize work disincentives should be strengthened when adjusting the welfare system and raising current levels of spending on social safety nets to meet needs in times of crisis. In the medium term more far-reaching reforms could be considered to provide more flexible forms of social insurance, such as individual “welfare accounts” (e.g., unemployment accounts, skill accounts and retirement accounts) or “benefit transfers”, which transform parts of people’s welfare benefits into vouchers. Reforms along these lines would improve people’s opportunities and incentives and help them adjust to changing market conditions.

In the developing world, social safety nets are less prevalent. Here the current crisis should be taken as an opportunity to create pro-poor stabilizers of sufficient dimensions. These should also be designed along the lines of co-responsibility – i.e., helping people to escape poverty now while also pushing them to take actions that reduce dependency on welfare in the long run. An important element in these welfare programs could be Conditional Cash Transfers, which give cash directly to poor people in case they agree to an action such as enrolling children in school or taking them to health clinics regularly. Another promising policy is setting up workfare schemes, which aim to support poor people in rural areas by providing them with unskilled manual labor at low wages on demand; they can be a timely and flexible way to
provide assistance. If well designed, with such kind of programs it is possible to protect a significant number of poor people in a crisis, without damaging their longer-term prospects of escaping poverty. They will have to be complemented by a set of transfers in cash or food targeted to specific groups who either cannot work (due to physical incapacity, including poor nutritional status) or should not be taken out of other activities (notably school) to join relief work. The budgetary cost of such a permanent safety net need not be very high, although it may be highly variable over time, and it may well bring longer-term efficiency gains to the economy.

3. Assure that the population, and especially the part that is poor and vulnerable, has access to essential social services such as health and education.

The potential impacts of the crisis on health and education outcomes will work through both the demand and supply sides of education and health service systems because household incomes and fiscal resources will be negatively affected at the same time. While the demand side effect can be cushioned by providing a sufficient social safety net as described above, it is paramount that social spending on health and education does not fall victim to increased fiscal pressures, as has often been the case in previous crises. If cuts in total public expenditures cannot be avoided, governments should be selective and protect those services that are essential to the welfare and long term prosperity of the poor. On the health system side, health expenditures should be protected in real terms, particularly for those services and programs utilized by poor and most vulnerable populations. Securing the supply of essential drugs and supplies is key; a special focus should be on maintaining (or even expanding) access to HIV treatment and prevention, as HIV treatment interruptions come at a high social cost. With respect to the education system it is more important to pay teachers in time and assure that they are in classrooms than invest in physical assets and school buildings. Cost savings should sought to be realized by improving the efficiency of education and public health systems and improved targeting of health expenditures to those most in need. This would be in contrast to past crises, when governments often failed to maintain poor people’s access to essential social services and ended up helping better-off groups in society instead. International organizations and donor organizations may attempt to help implementing a set of pro-poor expenditures policies through loan and credit agreements.

4. Use active labor market programs such as public works or job and skills to spur employment during the crisis and in the aftermath.

One major achievement in labor policy reforms over the past decade has been the increased implementation of mutual obligation strategies. In developed economies, active labor market policies combine effective re-employment services and public work and training schemes with strong job-search incentives enforced by partially conditioning unemployment income support on recipients’ active participation in the re-employment process. Given the steep fall in labor demand in the private sector associated with the current crisis, expanding effective employment programs will be important to maintain high activation levels. These programs should include well-designed education and training programs to give workers skills that will be needed as labor markets recover, but may also involve direct job creation in the public sector as a temporary backstop option for the most hard-to-place benefit recipients. In addition measures should be considered to promote labor demand and reduce socially costly layoffs by firms facing significant, but temporary decline of demand and credit constraints. In this context well-designed short-time working subsidies or temporary reductions in payroll taxes could be justified. In developing countries, “workfare” (or “relief work”) programs have proved to be an appropriate form of a mutual obligation program. To deal with the current employment crisis developing countries should consider implementing workfare programs that ideally would guarantee low wage work in labor intensive public works projects. They may also consider projects that include training in useful labor market skills, such as basic literacy and numeracy.
5. Design labor market policies to pay particular attention to groups that are the most vulnerable to worsening labor market conditions.

Past recessions have shown that young people, older workers, the low skilled, and migrant workers tend to be particularly vulnerable to worsening labor market conditions and run the greatest risk of becoming long-term unemployed and disconnected from the labor market. Activating labor market policies should therefore pay particular attention to these groups. Long-lasting negative effects have in particular been found for young unemployed, which may also be more prone to crime or causing social unrest. Therefore key priority should be to help the youth in their transition from school to work and to minimize the number of youth trapped in unemployment by targeting a range of effective education, training and work options to the young unemployed. Adequate re-employment services and skills training should also be provided to migrant workers as well as older workers. Stigmatization and discrimination of migrant workers should be countered; pressures to ease older worker unemployment by promoting early retirement or disability benefits should be resisted. Reducing the labor supply is not the right way to ease unemployment pressures.

6. Increase resilience of pension systems to macroeconomic shocks and reduce the exposure of individuals to short term financial risks in funded systems.

The global financial and economic crisis has had a major impact on pension fund assets around the world, although losses vary significantly between countries. At the same time the global recession will also impose additional pressures on public pension schemes financed on a pay-as-you-go basis, which add to the sustainability problems they face due to ageing populations. Consequently, private pensions still have a major role to play in maintaining balanced sources of retirement income, and governments should avoid imprudent reversals of past pension reforms, which had been designed to strengthen the funded pillar of the pension systems. In the light of the current crisis, however, increasing attention should be paid to reducing the exposure of individuals to the financial risks associated with funded arrangements. Pension fund risk management and supervision needs to be improved to reduce exposure to unduly risky investments (or assets not fully understood). Rules that reinforce selling in depressed markets should be reviewed. Among the individuals with a large reliance on funded pension schemes those most affected by short-term declines in asset price are those who have to retire in the midst of the crisis, particularly if they are mandated to transform their accumulated savings into an annuity. Measures that should be explored to limit the impact of financial volatility should, thus, include the introduction of life-cycle portfolios, which require workers to shift part of their balances to less risky assets as they get closer to retirement, as well as increasing flexibility in the timing of buying an annuity (phased or deferred annuitization). This would permit people near retirement to avoid locking in losses (liquidating their assets when markets are down and buying an annuity when interest rates are low). Overregulation, however, should be avoided. Regulations relating to private pensions need to be considered in light of the pensions system as a whole. When public pensions already provide a minimum adequate level of retirement income, regulators may allow individuals more flexibility in their choice of investments than when private pensions are the dominant source of retirement income.

**Background**

The current economic crisis threatens to escalate to a full-blown economic and social crisis. Global output is set to decline this year for the first time since the Second World War, and any subsequent recovery is projected to be sluggish given the nature of the downturn. As a result, employment will decline massively in the developed countries with unemployment in the OECD countries estimated to rise from less than 6 percent to more than 10 percent. In developing countries, labor market adjustment in times of economic crisis historically has occurred predominantly through pronounced real wage declines and shifts from the formal sector into the informal sector and subsistence agriculture, rather than sharp reductions of total employment. Which type of adjustment predominates is important for defining the adequate policy
response and depends on the specific structure of the economy in general and the labor market in particular.

Evidence from past financial and economic crises in low- and middle income countries shows that reduced income as a result of downward pressure on wages and employment as well as falling migrant remittances from abroad may lead households to take actions to cope with the immediate crisis that prove to be harmful in the longer term. Absent assistance, households may be forced into the sale of the assets their livelihoods depend on, withdrawal of their children from school, inadequate use of health care, inadequate diets and resulting malnutrition. At the same time, public expenditure in social sectors tends to be pro-cyclical in many developing countries rather than working as an automatic stabilizer, and, even worse, historical experience suggests that it is the poor that are disproportionately affected by aggregate cuts in social programs.

In the developed countries, past – generally comparatively mild recessions – have shown that worsening labor market conditions can have longer term adverse effects particularly for the most disadvantaged labor market groups, which include young people, older workers, the low skilled and migrant workers. They are often the first to lose their job and face serious difficulty in finding a new job, running the risk of becoming long term unemployed or discouraged. Several studies have found that youth unemployment in particular leads to a persistent disadvantage in the labor market that can take years to overcome. This may be socially harmful also because unemployed youth tends to be more prone to crime or causing social unrest.

The international financial crisis has severely affected the value of pension fund assets worldwide. While losses have generally been considerable, there has been a wide variation across countries (ranging from 8 to 50 percent at some point in autumn 2008 in a selection of countries, according to World Bank figures). The impact of the crisis on individuals in funded, defined contribution schemes depends on four main factors: (i) changes in asset prices and the potential recovery over the medium term; (ii) the proportion of pension wealth that is supported by funded individual account assets; (iii) the requirement and framework for mandatory annuitization of the accumulated balance at retirement; and (iv) the presence of minimum social pensions or guarantees that are integrated into the pension system; and. Workers most severely affected in the short term are those with a high reliance on funded accounts who have to retire in the midst of the crisis, particularly if they are mandated to transform their accumulated retirement savings into an annuity. The number of these workers is fortunately currently relatively small since most countries with mandatory funded systems have established these in relatively recent years and the participation rate of older workers is generally not very high.

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Reconsider generosity of state pension programs and actively regulate investment options in funded schemes

Countries reliant on minimal first tier social security benefits (e.g., UK, Australia, US) and substantial reliance on voluntary or mandatory funded tier two schemes (normally defined contribution plans) may need to reconsider the level of generosity of these first tier programs and/or more actively regulate and supervise how second tier assets are invested.

The current financial crisis has revealed some of the vulnerabilities of current approaches to retirement saving and social insurance schemes. Households in countries with more generous social insurance systems (high replacement rates, with public defined benefit plans) were
largely insulated from the effects of the crisis. Households in countries heavily reliant on funded defined contribution schemes have seen the assets in their portfolio drop sharply in value, exposing the degree to which retirement risks in such countries have been largely shifted to the household.

In the latter group of countries, governments can continue to limit their fiscal exposure by maintaining current benefit levels, but they then create the potential of a significant social divide between those dependent on minimal state benefits and little private assets and those who have accumulated adequate private financial assets. Those households in the former group would then require even more active government efforts to facilitate job creation for the elderly. Governments may also find that they will be drawn heavily into social safety net outlays – one of the reasons that motivated the UK to reexamine its state pension system (indexed only to prices) several years ago. Also in this case, governments will need to do more to introduce regulations that limit the extent of risks that households can take in the investment of their defined contribution portfolios. This may entail proscribing too risky an investment position or one that is too heavily imbalanced as between equities and fixed income securities.

In these countries, governments may seek to augment the generosity of their first tier benefits (and the associated payroll tax contributions) in order to achieve a better balance in the distribution of risks as between the individual and the taxpayer.

In those emerging market and developing countries that have not yet begun to implement a social security system for the bulk of their population, the issue of the appropriate balance between the first and second tiers of retirement income saving will be a critical policy issue. Such countries must be aware of the fiscal sustainability burdens that have characterized the former set of countries and the elderly poverty issues that may be associated with too lean a social security system in the latter set.

**Strengthen policy initiatives to foster the employment of the elderly**

Strengthened policy initiatives are needed to foster the employment of the elderly. These include efforts at job training and skill enhancement; promoting labor market search initiatives; revised social security benefit rules incentivizing work to work beyond retirement; promotion of flexible wage structures that are less seniority-focused as well as potential for part-time employment of elderly; elimination of mandatory retirement ages; banning age discrimination in employment.

In a number of countries, the recent financial crisis has highlighted the extent to which many workers are recognizing that their financial assets, coupled with any social security benefits, will be insufficient to allow full retirement at the early ages that have become the norm in many industrial countries. In particular, the impact of volatile equity and real estate markets has sharply cut – often by at least 25%, financial and home asset values. Increasing longevity and better health have both increased the required pool of assets required for an adequate replacement rate and enhanced the capacity of the elderly to continue working beyond the point of eligibility for retirement benefits. Governments themselves will be adding to these pressures as the mounting cost of social security benefits encourage policies to push back the age of eligibility for retirement benefits, even beyond the age of 67 (which is itself above the age of eligibility in many countries).

But the ability of the elderly to find or retain jobs is stifled by a number of constraints in the labor market and from government policies. Some relate to current social insurance rules that tax wage incomes received at the same time as social security benefits are received. Others relate to business doubts as to the profitability of employing elderly workers. Others derive from forced retirement rules in many spheres. Elderly workers also may need to accumulate new skills in order to be able to function competitively in today’s labor market.
Develop resettlement plans for countries at risk of substantial climate change

For countries at risk to significant adverse climate change impacts, particularly with regard to flooding and sea level rise, governments should proactively develop plans for resettlement of major population groups.

There is little doubt that there will be, figuratively speaking, “more Hurricane Katrinas” in the future that will require resettlement of significant population groups. In some cases, this may be considered as temporary, as with Katrina, arising from the impact of extreme weather events that cause massive flooding of river valleys or coastal regions. But with rising sea level emerging as a major threat in coming decades, one can see a number of coastal areas that may become simply nonviable for settlement. This will be certainly true for a number of developing countries (Bangladesh, Egypt’s Nile Delta). Other areas may continue to be viable for habitation, but will require major restructuring of the focus of economic activity as climate change undercuts the viability of the previous economy.

A “new” form of social divide may thus arise, deriving from the forced resettlement of large groups of the population and their relative impoverishment due to the loss in the value of their assets (particularly real property). Since much of the impacts of climate change in coming decades are now readily recognized, governments should begin to anticipate what policies of adaptation and of resettlement may be necessary to address the social consequences of climate change and the new social divides that may arise. Complementary to such policies, there will be a need to strengthen infrastructure in exposed coastal regions in order to limit the potential economic losses associated with extreme weather events (a la Katrina) even if they are not likely to require the permanent evacuation of an area.

Emerging market and low income countries should elaborate systems of unemployment insurance and pensions

Emerging market and low-income countries should attach a high priority to developing or elaborating systems of social insurance – particularly in the spheres of unemployment insurance and pensions.

One lesson that can be drawn from the current financial crisis has been the efficacy of social security institutions as a means for implementing not only social safety nets but countercyclical fiscal policy. Countries that had well-functioning social security systems found them a convenient institutional vehicle for policy implementation. Unlike public investments for infrastructure, which can take time to plan and implement, social security and unemployment insurance payments can be made with little delay to targeted groups that are likely to have a high propensity to consume rather than invest. For many countries, the crisis has allowed policy makers to innovate in using social security systems to achieve policy goals, extending benefits and implementing labor market programs that have gone considerably beyond what had been the traditional scope of these systems before the crisis.

Reviewing what many countries have done, policy interventions have included the provision of additional social benefits to vulnerable groups (e.g., dependent children, female-headed households, the long-term unemployed); increases in the level of unemployment benefits; exceptional unemployment allocations to previously excluded groups; extension of the permissible duration of unemployment insurance benefits as well as an easing of qualifying conditions for unemployment insurance; extending existing work-sharing agreements; provision of training programs for the unemployed; financial incentives for employers to hire the unemployed (particularly among the older segments of the work force); programs dedicated to the creation of jobs for the young; a strengthening of employment search mechanisms for the unemployed; and extension of health insurance benefits to the unemployed.

The crisis has also illustrated that social security systems are a valuable institutional mechanism for the formulation and implementation of social safety net policies. Where such
systems exist, they occupy a special niche within governments. They provide cash and services to much of the population – retirees, survivors, disabled, unemployed, and families or children who are poor and vulnerable. Their proximity to their client base enables them to be an ideal vehicle for providing information and other kinds of services. They employ considerable human resources. Their databases can help policy makers in the formulation of policy, letting them know what is possible. And, as noted, social security institutions are often charged with implementing enhanced government transfer policies. In effect, such institutions end up determining whether the policy that is actually implemented is as intended or different. This also suggests the importance of governments relying more on social security institutions in the formulation of policies during a crisis.

**Develop prioritized list of public investment projects**

Governments should move to develop a prioritized program of public infrastructure projects as well as a detailed agenda and timetable for maintenance and rehabilitation spending on existing public infrastructure.

The potential importance of public investment as a tool for countercyclical fiscal policy and social safety nets in the event of an economic downturn has once again been recognized in the current financial crisis. But that recognition has come too late for most countries in terms of using the tool very effectively or substantially in the near term. What approaches are available to governments in addressing the obstacles of an absence of “shovel-ready” projects? An obvious starting point is the development of an asset registry of government infrastructure that specifies an appropriate schedule for maintenance and rehabilitation. Such a registry would not only facilitate guiding ongoing government spending on maintenance of public infrastructure assets but also be available for an accelerated program of rehabilitation and maintenance when there is a need for an active countercyclical policy. Next in priority would be for governments to adopt the approach recently pursued by Australia and China and move proactively to develop a portfolio of appraised, acceptable, and prioritized infrastructure projects, with a categorization of those projects that can be implemented relatively quickly. The Australian initiative also is a model of how governments can develop a public investment program that is responsive to the challenge of enhancing growth. Though not necessarily as productive, some consideration could be given to labor-intensive public works schemes, similar to those adopted by India in recent years, which might provide a form of social safety net for underemployed low-income workers.

**Strengthen government fiscal positions after the crisis**

Once the current crisis has passed, governments will need to move expeditiously to reduce government debt ratios and address anticipated threats to fiscal sustainability.

The current financial crisis has highlighted that the capacity of governments to find the “fiscal space” necessary to pursue appropriate countercyclical fiscal policies – including active social safety net policies—in response to an economic downturn is enhanced when the government’s initial fiscal position is strong. China’s capacity to move swiftly in implementing a countercyclical fiscal policy package contrasts with the concerns and constraints faced by many industrial country governments with higher levels of outstanding debt. A number of industrial countries now face the prospect that they have built up substantial levels of public debt in responding to the current crisis at a time but are also now exposed to the challenge of funding the looming costs from the retirement of the baby boom population. The obvious concern is that when and if the next economic crisis arises, governments will have dramatically reduced their degrees of freedom for an appropriate countercyclical fiscal policy response, including the use of social safety net policies.
The management approach makes the difference

A growing uncertainty is one of the main results of the global crisis and of the modern economy for almost everyone. To restore a feeling of security for employees throughout the world we need in our companies managers who care. When we cannot trust in trends and numbers anymore, the only source of trust and security in a company can be the management. And only companies (esp. transnational companies) that are led by managers with a conscience for social needs can help cushioning the severity of the crisis – and help avoiding a widening of divides between the developed and developing world. The economist Martin Hilb put the characteristics of a good manager into short words that are nevertheless spot on: Managers need “a cool head, a warm heart and working hands.” A cool head to deal successfully with the uncertainty of today’s business environment. A warm heart to reach out to the people they work with and whose support they have to win for the ongoing change process; only those, who like people, can lead them. And working hands because managers have to show commitment of their own, if they ask their employees to do their best.

The European management model fits better to the post-crisis requirements than the Anglo-Saxon model that failed because of its short-term perspective, its wrong definition of shareholder value, and its strong “hire and fire” mentality, to name only a few characteristics. We know that many developing countries, especially China, consider alternative models for their economy. They should turn to the European one with long-term orientation, a broader understanding of success, a higher valuation of their employees and strong roots in the community.

The management approach is a key requisite in a globalized economy that helps the developing world as much as the developed world, thus minimizing the tensions between the both.

Strengthen the real economy

The current global crisis shows how important the real economy is. The virtual advantages of the financial economy were an illusion. The result of this learning process are high costs in money and in social terms and, currently, it puts a strain on the development of the whole world economy. It is also a chance though. If we learn to concentrate our resources on the real economy, there will be opportunities for the greater part of the working population not only in the industrialized countries but as well in the developing countries. So we have to define new mechanisms to make it more favorable to put the vast global monetary resources, that still exist, into better use. The proposals of G20 for a better (and stricter) regulation of capital markets point into the right direction.

Counter new social divides through growth

We have to secure wealth in the developed world to secure the creation of new wealth in the developing world, thus to counter the emergence of deeper New Social Divides. Because stabilizing the situation of the middle class in advanced economies – through instruments like flexible job schemes, guarantees for bank deposits, and an intelligent tax regime – is vital to keep the most important economic pillar of any modern economy in a sound condition. Without the mass demand of middle class consumers in the developed world the developing world will lose one of the main drivers of growth – the main generator of wealth for larger parts of the society and for the emergence of an own middle class in the developing countries. We have to remember that hundreds of million people in China alone have left poverty thanks to growth, and that was helped by the demand for Chinese products throughout the world. There is no better instrument to fight poverty than economic growth. Everything that is done to get the
advanced economies growing again, with the effect of consumers with renewed confidence, will help to mitigate the negative effect of the current economic crisis in developing economies. That is why one major instrument to counter the New Divides could be and should be fighting protectionism. Every protectionist measure will only prolong the crisis – and weigh heavily on the potential of future growth and wealth. Free Markets are not a the heart of the current crisis, but poor regulation of the markets, people, who took advantage of some intransparent markets, and limited access to the global market for many people, especially in the developing world.
The Global Polity

Fixing Failed Multilateralism

The Challenges

Globalization has made the world interconnected as it has never been heretofore. The dangers of this interconnectedness are becoming increasingly obvious in the face of the financial crisis of 2008, the dangers of climate change, the breakdown of the Doha Round on international trade, the threat of nuclear proliferation, the multifaceted risks of terrorism, the looming ethnic and religious conflicts, and more.

Nevertheless, most policy decisions in these areas continue to be made on a national level. How can the world community break out of this trap of failed multilateralism? To what degree does the interrelatedness of the global problems require interrelated governance institutions? What new international institutions are required to rectify the existing world governance gaps? What changes in existing institutions are called for? How can global governance structures be accommodated to the new geopolitical realities? How can these governance structures be reconciled with national sovereignty? What general policy guide lines are useful for the reform of national and international governance, so that the major global challenges can be addressed efficiently and fairly? What is the role of business and civil society organizations in this process of policy reform?

![Multilateral Governance - How Big To Fail?](image)

Proposed Solutions

Aart De Geus

Deputy Secretary-General, OECD

Global context

In my intervention I would like to depart partly from the emphasis on the willingness to implement the UN reforms such as Security Council membership reform, ECOSOC reform, or a rationalization of overlapping UN agency mandates. These are all important subjects, and others are more qualified to me to comment on them. From my privileged position at the OECD, I would like to explore the important contribution that informal networks like G8 and G20 make to improve global governance and to find common ground that helps in tackling global challenges. In particular I would like to explain our role at the OECD in supporting the Heiligendamm Aquila Process between the G8 and the G5 countries.

G20

The success of the G20 since it first met at leaders’ level in Washington last November strongly suggests that the current financial and economic crisis is accentuating the need for what scholars termed “multilateralism light.” Informal governance brings together leaders who can change things, and it offers a fast way of incorporating emerging powers such as India and China into global governance.

G8

The G6/7/8 has been the quintessential informal governance body since 1975, an annual opportunity for the heads of state or government of the major industrial democracies to meet to deal with the major economic and political issues facing their domestic societies and the international community as a whole. These yearly Summits have developed the MDGs, the HIPC and the Global Funds.

In the 1997 Denver Summit marked full Russian participation in all but financial and certain economic discussions. The birth of the G8 was at the 1998 Birmingham Summit. In recent years it became clear that the G8 should work closely with emerging economies.

Heiligendamm Process

The Heads of State and Government of the G8 and the G5 (Brazil, China, India, Mexico, and South Africa) launched the Heiligendamm Process at the German Summit in Heiligendamm 2007 in order to discuss crucial challenges of the world economy, in particular in the following four fields:

- development, with a special focus on Africa;
- promoting cross-border investment to mutual benefit;
- promoting research and innovation, including intellectual property rights (IPRs);
- energy, with special focus on energy efficiency.

The HDP is a space for political dialogue, its aim is to build trust among the dialogue partners and develop common understanding on issues of global importance. In the HDP Concluding Report at the recent L’Aquila Summit, partners have committed to share responsibility and to take a lead in tackling global challenges of the world economy. In 2007 the OECD was asked to serve as a platform and support the process in a special secretarial unit in OECD.
**G8 2009**

In L’Aquila July 2009 it was decided to continue the Process as the Heiligendamm L’Aquila Process (HAP). As the OECD Secretary-General Angel Gurría said at the Summit, “closer and stronger ties between the G8 and G5 countries are critical for tackling the increasingly complex global challenges facing our countries, and never more so than in the current economic crisis.” We at the OECD stand ready to continue serving the HAP partners in addressing pressing global challenges and cross-cutting issues which have an impact on global development efforts.

**Edward de Bono**  
*Author and Consultant*

**FICS = Functional Internal Currencies**

A few years ago, there was inflation in Ireland. As Ireland was part of the Eurozone the government were unable to raise interest rates as these were set by the Central bank in Germany. With increasing globalisation a country has fewer and fewer ways of controlling the local economy. Functional Internal Currencies (FICS) may become necessary. There could be a spending currency directly to stimulate spending with a favourable exchange against the normal currency. There might also be saving currencies and investing currencies. The exchange rates could be set weekly.

It might even be necessary to have a property currency to reduce violent fluctuations in property prices. All these are ways of reducing the positive feedback effects which cause cyclic changes in the economy. There is a need to dampen these feedback loops.

**Jeffry Frieden**  
*Professor, Department of Government, Harvard University*

It is first of all important to establish what the problem is which requires “fixing,” and what has “failed” that needs to be corrected. Certainly there has been something of a decay in commitments to universalist multilateral institutions, but we need to analyze the roots of this in order to try to formulate a response.

International institutions arise in order to facilitate governments’ attempts to manage their interactions. They cannot “solve” problems in and of themselves, only facilitate the solving of problems by their principals, typically nation states. Government support the creation or expansion of international institutions when they perceive some net benefit to the investment of time, energy, and resources in the institutional initiative.

In the area of international economic institutions, it is common to observe that there is a functional need for some form of governance structure that is consistent with the extent of the externalities that economic activity can create. As financial markets have gone from national to global, so have their effects; and yet there is no global financial regulator to deal with the internalization of these externalities. There is thus a strong normative case for such a global institution, which would require multilateral agreement on its creation and operation.

However, such normative arguments – strong as they may be – will go nowhere unless there are governments with both the interests and the power to put these ideas into effect. Multilateral agreements cannot be imposed, and must be voluntary. This means that realistic proposals to extend and expand multilateral initiatives require a clear-headed sense of government motivations, and of the realm of the possible.
In this context, it would be counter-productive to be rigid about abstract principles or pre-conditions for attempts to improve cooperation among governments. Insistence on acceptance of open multilateralism, or on rejection of regional initiatives, are likely to impede forward movement. Governments facing severe domestic political constraints will find it impossible to make sacrifices on behalf or an intangible payoff.

Partial multilateral cooperation is better than no cooperation at all. This means that it can be productive to pursue regional cooperative ventures, especially where there are political processes in place to facilitate them or where the regional externalities are particularly prominent. It may also be productive for governments to structure limited agreements in issue areas in which there is agreement, even if there remain grave differences on other dimensions – such as on aspects of financial market reforms rather than a full-blown global regulatory arrangement.

In all of this, especially in today’s trying times, it is important not to let the best be the enemy of the good. Truly multilateral agreements and institutions are best, and highly desirable; but in their absence, we should be prepared to settle for what governments find feasible in their current circumstances.

Rainer Schweickert
Kiel Institute for the World Economy

1. Define variable geometries according to the problem at hand, thereby allowing principal actors to adopt responsibility for suggesting and implementing solutions to world-wide problems.

Taking into account the new geopolitical realities, sub-groupings of or groupings including G20 countries may provide the core of countries for initiating and implementing quick and practical responses to world wide problems. Principal actors among industrialized and developing countries have to adopt responsibility for most targets like financial stability, climate change, and free trade. Standards, e.g., for financial regulation, set by this group, should provide strong incentives for other to join in order not to be excluded from globalization.

In the same vein, the only promising option for more efficient in peacekeeping, conflict prevention, and post-conflict reconstruction efforts, is NATO in cooperation with the US and well-functioning regional organizations like the EU. NATO, e.g., with different layers of regional cooperation could form the basis of a multilayered, multilateral security order that might be a useful supplement to an apparently defunct UN system of collective security. In addition to the Europe-Atlantic Partnership Council and the NATO-Russia Council, one can easily envision a NATO-Asia Council or a NATO-Middle East Council.

2. Integrate the UN system of open multilateralism by acknowledging the de-facto system of closed multilateralism in order to provide a higher degree of legitimacy and acceptance for intergovernmental decisions.

Reforming the UN does not lack concepts but willingness to implement. Momentum has to be created for pushing reforms such as Security Council membership reform, ECOSOC reform, or a rationalization of overlapping UN agency mandates. At the same time, the current crisis exemplifies the limited role of open multilateralism.

The role of the UN may have to change towards the coordination of initiatives designed and implemented by other multilateral organizations. With respect to international security, NATO already acts on behalf of the Security Council. So far, ECOSOC does not play a corresponding role while proposals for upgrading ECOSOC to a UN Council for Economic and Social Security Council already suggest to include a group of countries similar to G20. A second council of eye’s level with and jointly meeting with the Security Council would indeed be more inclusive allowing (1) to consider economic but also population weights, (2) to integrate governance
over WTO, World Bank, IMF, and UN specialized agencies, and (3) be based on regional representation with the EU as a role model for other regional cooperation schemes like ASEAN or MERCOSUR.

3. **Provide a balanced representation of civil society and business voices on global issues.**

Closed multilateralism lacks legitimization and even a reformed UN remains an intergovernmental event where centralized power is controlled by an oligarchy of few governments. However, the upgrading of ECOSOC would also upgrade the voice of civil society organizations in the UN. Currently, participation is informally ruled by the Arria Formula concerning the Security Council and an accreditation scheme concerning ECOSOC. In addition, Global Compact provides a platform for business initiatives on issues such as climate change, corruption, and human rights. What would be necessary to match any upgrading is more transparency of civil society and business participation and a more balanced representation of North and South organizations.
The Global Polity

Toward Global Trade under Global Rules

The Challenges

Global trade flourishes, while rule making on global trade stagnates. This is a serious problem, since without rule setting, monitoring and enforcement, we risk a return of protectionism and economic fragmentation.

Especially in times of economic turbulence and recession, unilateral actions against trading partners could trigger a spiral of retaliatory measures with grave economic consequences for all.

There are two major reasons for the widening gap between trade growth and trade governance:

- an increasing number of heterogeneous agents at the level of governments, the business sector and civic society, and
- an increasing number of conflicting targets that trade rules are expected to address.

What policy approaches encouraging a broad-based commitment to global trade rules, while permitting the formation of groups with similar interests? How can the problem of heterogeneity of issues be addressed through non-discrimination at border level (market access) and behind-border level (national treatment)?

Should the principle of “one target, one instrument” guide global trade rules and, if so, how can it be implemented? Should negotiation mandates be allocated to individual agents on a temporary basis? How can the stakeholders from the private sector and civic society be included in negotiations that have hitherto been a public monopoly?
Proposed Solutions

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

Apart from a rash of hereto modest crisis-link murky protectionism (Baldwin and Evenett 2009), trade liberalisation is as popular as ever among policymakers. The new century has seen massive liberalisation of trade in goods and services – much of it by nations that disparaged trade liberalisation for decades. But unlike last century, almost none of this has occurred under the WTO’s aegis.

The world trade system under threat from the erosion of WTO centricity

There are two key elements driving the erosion:

Many emerging nations have cut their tariffs, opened their services sectors, and embraced foreign investment unilaterally or in bilateral trade agreements.

Table 1 shows one aspect of this, the gap between “bound” tariffs and applied tariffs. All tariff liberalisation in the GATT/WTO concerns “bound” tariff rates, i.e. the tariffs ceilings that members agree to in multilateral trade negotiations such as the Uruguay Round. Nations are, however, perfectly free to lower their tariffs below these ceilings; the actual rates in effect are called “applied” rates. As the table shows, there are two distinct groups of nations when it comes to tariff liberalisation. The first eight nations have cut their tariffs primary in the context of GATT/WTO negotiations and thus find the bound and applied rates coincide very closely. The second group – which includes the new leaders of world trade flows India, Brazil and the ASEAN as well as several G20 members – has done most of their tariff cutting unilaterally. Many of them have also done a great deal of tariff regionally.

Table 1: Multilateral and unilateral liberalisers (MFN non-agricultural tariffs, %)

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<tr>
<th>Multilateral liberalisers</th>
<th>Bound</th>
<th>Applied</th>
<th>Unilateralism Index (Bound – Applied)</th>
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</tr>
<tr>
<td>US</td>
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</tr>
<tr>
<td>China</td>
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<td>9</td>
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<tr>
<td>EU</td>
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<td>0</td>
</tr>
<tr>
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<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Switzerland</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Canada</td>
<td>5</td>
<td>4</td>
<td>2</td>
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<tr>
<td>Korea</td>
<td>10</td>
<td>7</td>
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<tr>
<th>Unilateral liberalisers</th>
<th>Bound</th>
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<tr>
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<td>7</td>
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<tr>
<td>India</td>
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<td>12</td>
<td>25</td>
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<td>Mexico</td>
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<tr>
<td>Argentina</td>
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</tr>
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<tr>
<td>Malaysia</td>
<td>15</td>
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<td>7</td>
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</tbody>
</table>

China and Taiwan are listed at multilateralists but this is an illusion. There tariffs where cut and bound as part of their recent accessions to the WTO. In China at least, this was not viewed as an example of how wonderful the WTO multilateral tariff cutting process works. China viewed the demands of the rich nations that it slash its tariffs upon accession as exploitation. After all, they had already been enjoying low duties on their exports to the rich nations without having to lower their own tariffs. This exercise produced quite a different feeling concerning the WTO as a vehicle for tariff liberalisation than it did in the Europe, the US, Japan and Canada where the WTO tariff cutting was done in tandem and progressively over four decades. Traders in these nations view the WTO as a two-way bargain; they cut their own tariffs in exchange for getting foreigners to cut theirs. China was a free-rider on these reciprocal tariff cuts by the rich nations, so the demands made during their accession talks seem unbalanced and uncompensated.

Of course there is nothing wrong with unilateral tariff cutting from a national perspective. It is, by contrast, a worrying sign when it comes to WTO centricity. For most of the post-war period, the GATT multilateral tariff liberalisation was the key driver of trade liberalisation.

Rich nations have relied on regional trade deals to achieve their market-opening goals.

The deals signed this century are not commercially important, but this will change if the US-Korea deal comes into force and the EU's Asian negotiations succeed – especially if the US feels compelled to follow suit. The emerging trade powers – China, India, and Brazil – have had worryingly favourable experiences with unilateralism and regionalism in the new century while their commitment to multilateralism is relatively untested. The one part of the WTO system that works well – the dispute settlement mechanism – is increasingly used as a substitute for negotiated liberalisation with the result that de facto compliance by the United States, European Union and others is eroding.

**Challenges or threats**

To date, these changes seem more like challenges than threats. The key players believe the world trade system will continue to be anchored by the WTO’s shared values, such as reciprocity, transparency, non-discrimination, and the rule of law. WTO-anchorage allows each member to view its own policies as minor derogations. Yet, at some point derogations become the new norm. The steady erosion of the WTO's centricity will sooner or later bring the world to a tipping point – a point beyond which expectations become unmoored and nations feel justified in ignoring WTO norms since everyone else does.

**A polycentric trading system?**

No one knows what happens beyond the tipping point.

My guess is that trade would continue to grow and the system would continue to function – but not equally well for all nations. Before the GATT was set up in 1947, the Great Powers settled trade disputes by gunboats or diplomats depending upon the parties involved. Only the naïve thought market access should be reciprocal or fair. A return to this “Belle Époque” extreme is unlikely, but a new Great Powers trade system is likely to emerge. Its core will be the US and EU networks of bilateral trade deals.

Domestic special-interest groups, newly freed from WTO constraints, would push the EU and US templates in divergent directions. Regional arrangements of the new trade powers and Russia could diverge even more markedly, since WTO norms have never fully been internalised by their domestic special-interest groups. This would be a world of “spheres of influence” and bare-knuckle bargaining.

All would lose in this post-tipping point world but not equally. The US, EU, Japan, China, and India have enough market leverage to defend their interests. Small nation would suffer much more as they benefit the most from the WTO’s consensus-based rules and negotiations.
Worse yet, moving towards a might-makes-right trade system would be extremely corrosive to global cooperation on the new century’s greatest governance challenges – climate change, pandemics, water scarcity, and the Millennium Development Goals.

What is to be done?
Finishing the Doha Round this year would be a good start. Failing that, leaders must ensure it slips into a quiet coma rather than noisy death throes. But this would not be enough. We must figure out why nations find it so attractive to liberalise outside of the WTO and then change the WTO in ways that restore its central role in trade liberalisation and rule making. The GATT has faced several such historical moments in the past, and GATT members reacted by adopting the necessary reforms. The time has come again for such an effort. Once the old norms are gone, it will be exceedingly difficult to agree to new ones; much better to adapt the WTO’s current norms to address the new century’s realities.

A solution: “multilateralizing regionalism”
The WTO should engage in the massive proliferation of regional trade agreements. Before turning to some ideas on what to do, I present the argument that the WTO should engage.

Three facts and an implication
Fact 1. The world trade system is marked by a motley assortment of discriminatory trade agreements known as the “spaghetti bowl” for reasons that Figure ES1 makes clear.

Fact 2. Regionalism is here to stay. Even if the Doha Round finishes tomorrow, free trade agreements will continue to proliferate and the motley assortment will continue to get even more motley.

Fact 3. This tangle of trade deals is a bad way to organise world trade.

The discrimination inherent in regionalism is economically inefficient but its costs are rising rapidly as manufacturing becomes ever more internationalised. Stages of manufacturing that used to be performed in a single nation are now often geographically unbundled in an effort to boost efficiency. Supply chains spread across many borders. Unbundling, which accelerated since the 1990s, is the most important new element in the regionalism debate. It is the reason why business is pushing so many nations to “tame the tangle.”

Regionalism is also unfair. While the spaghetti bowl is a problem for firms in big nations, it is much more of a problem for firms in poor nations. Rich nations have the resources and the negotiating leverage to navigate the tangle’s worse effects. The governments of small and poor nations do not. The spaghetti bowl falls much harder on the heads of the world’s small and poor nations.

Implication. As the spaghetti bowl’s inefficiencies are increasingly magnified by unbundling and the rich/poor asymmetry, the world must find a solution. Since regionalism is here to stay, the solution must work with existing regionalism, not against it. The solution must multilateralise regionalism.

WTO’s choice
The WTO has been an “innocent bystander” in the rise of regionalism. Now the WTO faces a choice. What that means is that the WTO membership faces a choice.

Should the WTO remain as an innocent bystander, or should it engage constructively and creatively in making regionalism as multilateral-friendly as possible?

Innocence or engagements are the choices. The problem will not go away on its own.

The innocence option poses many difficulties and pitfalls. Regionalism is so pervasive that some political leaders view it as an alternative to multilateralism – Plan B for the world trading
system. Starting from this situation, the continued and uncoordinated proliferation of regionalism might kill the proverbial gold-laying goose – the multilateral trade system that brought post-war prosperity to today’s rich nations and helped to lift billions out of subsistence agriculture.

Engagement is also difficult. WTO members have shown little appetite for cooperating on regionalism. Recent progress on the Transparency Mechanism shows that they recognise the problem, but negotiating a WTO Action Plan on Regionalism would be difficult.

**Ideas for a “WTO Action Plan on Regionalism”**

I have elsewhere explored possibilities in depth (Baldwin and Thornton 2008). Multilateralising Regionalism. Here are the outlines of a few of the ideas.

Negotiate voluntary best-practice guidelines for new RTAs and modifications of existing RTAs. Nations around the world recognise the spaghetti-bowl’s threat. Not surprisingly, some have sought to tame the tangle by negotiating voluntary guidelines on RTAs (e.g., those of APEC and ASEAN). What is surprising is that the WTO has had zero involvement in these efforts. The spaghetti bowl is a global problem, so why should the guidelines be regional?

Negotiate a hierarchy of best-practice guidelines for North-North, North-South and South-South RTAs. The hope is that WTO guidelines would have some ‘soft law’ benefit if they are appropriate enough to actually be used. A more ambitious idea would negotiate more comprehensive disciplines for rapidly developing WTO members. One explanation for the embrace of regionalism by so many industrialising nations is that RTAs – especially North-South RTAs – provide anchorage for competitiveness-boosting reforms. Traditionally anchorage was a key role for the GATT/WTO, but WTO members have shied away from declaring themselves developed nations and embracing the WTO’s full disciplines. This suggests the need for more creative thinking on how the WTO can provide reform-anchorage.

Negotiate a level of RTA discipline that was in-between that of Article XXIV and the Enabling Clause. Nations would declare themselves and all of their RTAs as subject to this anchorage-building discipline. The benefit of self-declaration would be the signal it provided to potential investors that the nation was permanently committed to pro-market reforms. If the disciplines were well crafted, they could serve as a seal of good governance that would boost a nation’s locational competitiveness just as Bilateral Investment Treaties do now, but on a more comprehensive basis. Note that many rapidly developing nations have already committed themselves to deeper discipline, but they have done it bilaterally where they have minimal negotiating power.

**Taming the rules-of-origin tangle**

Much of the spaghetti bowl’s complexity arises from highly technical provisions of RTAs called “rules of origin.” To win duty-free status under an RTA, these rules typically require that a good contain a minimum share of parts and components produced in one of the partner nations. Because of this, overlapping and intersecting rules of origin pose big problems for businesses trying to set up competitive, international supply networks. It is difficult to have one supply network meet the requirements of several rules of origin. In this way, the rules balkanise supply chains and hinder industrialisation.

In reaction to business pressure, various nations have harmonised or are trying to harmonise rules of origin. The WTO has not been involved, but it should be since regional harmonization has spillover effects on third nations. To address this, the WTO Action Plan could:

- encourage nations to harmonise their rules of origin on a regional basis, but involve the WTO to ensure the harmonization is as multilateral-friendly as possible,
- make regionalism more development friendly.
Bilateral agreements are difficult to design, negotiate and implement, even for rich nations. For poor nations, negotiating multiple RTAs can overwhelm resources and result in poor policy choices. These problems are faced by developing nations all across the world, so a WTO Action Plan on Regionalism should set up a

- WTO advisory services and/or a Centre on RTAs for developing nations. This advisory centre would provide subsidised economic, legal and negotiation services and training to developing nations. The proposed centre’s role and practical details could take inspiration from the Advisory Centre on WTO Law. To avoid waste, it should link up with the efforts of regional banks (Inter-American Development Bank, Asian Development Bank, etc.).

The rules of origin and rules of cumulation in many trade agreements have an anti-development bias. Since small developing nations need to import many of the parts and components to produce competitive exports, rules-of-origin calculations that limit the scope of international supply chains have a larger negative effect on poor/small nations.

The point has been recognised by some WTO members. The EU’s bilateral with South Africa, for example, encourages South African firms to outsource some industrial activity to ACP nations by allowing both parties to count all imports from ACP nations in the minimum share calculation. The EU does not, however, allow cumulation in all of its deals. The WTO Action Plan could

- encourage nations to expand the cumulation zone of their RTAs to include as many developing country partners as possible.

**Why the WTO must act**

These ideas need more work, and they may not be the perfect answer as to what the WTO should do, but the wrong answer is “do nothing.” If the WTO does nothing to adjust to the new realities of regionalism, it risks an erosion of its relevance.

The GATT/WTO survived and flourished during its half-century’s existence since it adapted to new realities. When the colonies became countries, the GATT expanded from a cosy club of two-dozen members to a global organisation. When the distinct trade needs of developing nations were recognised, the GATT responded with the Enabling Clause. When non-tariff barriers began to replace tariff barriers, the GATT expanded its negotiating agenda. When the need for greater institutional stability became clear, the GATT was embedded in the WTO. For 50 years, the GATT/WTO has survived because it adapted to new realities.

Today’s new reality is regionalism. If the WTO is to survive and flourish, it must adapt because regionalism is here to stay. Embarking on a “WTO Action Plan on Regionalism” would be an important move towards keeping global trade under global rules.

**Jeffry Frieden**

*Professor, Department of Government, Harvard University*

The overall state of international trade politics and policies has been the cause of concern for a while. There is a general perception that forward motion has stalled, along with the Doha Round, and that the proliferation of regional agreements may threaten the fabric of multilateralism.

Yet while these concerns may be valid, I think that we currently face much graver problems in international trade. The aftermath of the current crisis will involve a substantial adjustment to new realities in many countries, and will involve the alteration of international trade patterns in ways that will be politically controversial. This is the most immediate challenge we face in the international trade arena.
The ultimate cause of the current crisis was the global macroeconomic imbalances that accumulated over the course of a decade and more. The United States, along with several other countries, ran major current account deficits and built up large external debts. This led, as is typical in the case of capital inflows, to an acceleration of economic activity, including a rise in the local relative price of nontradables; in particular, it led to a boom in financial and housing markets. External debt financing created consumption-led expansions, then booms, then bubbles, which eventually burst.

As the previous deficit countries adjust, they will have to compress consumption, investment and government spending, and they will have to increase output, savings, and government revenue. They will need to restrain wages. They will also, perforce, have to reduce or reverse their current account deficits. They will thus be under substantial pressure to reduce imports and increase exports.

These adjustment requirements are mirrored in the surplus countries. The run-up to the crisis was enabled by the policies of countries that had come to depend on substantial trade surpluses as their engines of growth, many of which pursued explicit macroeconomic policies to encourage trade surpluses (such as keeping their currencies artificially weak). Now that this pattern is no longer sustainable, they will have to reorient their economic activities, relying more on domestic markets and less on exports.

Both kinds of adjustment efforts, in deficit and surplus countries, will be difficult. Economic agents in the deficit countries, accustomed to easy credit and booming consumption, face austerity. Those in surplus countries, accustomed to easy exports and little trade competition, face much less openness to their products.

In this context, there will be substantial domestic and international tensions over trade policy. In former deficit countries, there will be protectionist pressures to try to reduce imports, and pressures to open foreign markets to increase exports. In former surplus countries, there will be pressures from previously economically and politically dominant exporters to maintain government support for them in the face of external hostility. In all instances, the potential costs of adjusting to new economic conditions will create demands for government support.

These domestic pressures will inevitably lead to inter-state disagreements over trade. Over the next decade, the principal challenge will be to manage these disagreements.

This implies that attempts to extend or expand the rule-making features of the WTO or other elements of the international trading system, while well-meaning and laudable, are likely to be irrelevant at best, harmful at worst. In an environment in which governments face powerful pressures to support their exporters and import competitors, simply insisting on adherence to the rules is of little or no avail.

Adjustment to the aftermath of the crisis, and to the unwinding of the global macroeconomic imbalances, will require first and foremost flexibility in responding to these pressures. While international legal or normative economic considerations might always insist on the notional first best, in the real world of political economy, insistence on the first best can be a formula for disaster. Success in responding flexibly to powerful protectionist pressures – whether at the national or regional level – is better than failure at opposing them rigidly.

So I think that the most productive way forward is likely to be to encourage imaginative and flexible policies on the part of major trading partners and international institutions. This means accommodating the needs of countries facing substantial payments difficulties as they attempt to reduce their current account deficits. It also means adapting to the concerns of previously strongly export-oriented countries being asked to open their markets more fully. In both instances, the goal should be to achieve forward motion – or at least avoid going backwards – while recognizing legitimate concerns about domestic social and political cohesion.

One area in which further cooperation should be strongly encouraged is currency policy. The powerful impact of monetary relations on international trade is widely recognized; the ability of
countries’ monetary policies to impose (commercial) externalities on others is clear. In this context, there is a need for the major international institutions to attempt to work toward a common understanding of how to deal with currency misalignments in a way that does not exacerbate underlying trade disputes.

I have no explicit solutions to offer, other than to suggest that unyielding attempts to insist on legalistic rules and normative benchmarks will almost certainly be counter-productive. The world is going through an extremely difficult re-balancing, with major economic, social, and political implications for almost all major nations. In these circumstances, it would be a terrible mistake to allow the best to be the enemy of the good.

Rajiv Kumar
Director and CEO, Indian Council for Research on International Economic Relations

Global trade under global rules: No alternative to strengthening the WTO

The Doha Round has been comatose since July 2008. This is despite the exhortations from successive G-20 summits. I realize that a successful outcome from the Doha Development Round (DDR) is seen as an increasingly remote possibility. And some of us have started to talk of “multilateralizing regionalism” which honestly I find to be a trifle inconsistent. And practical wisdom may demand that we simply accept a failed DDR as a fait accompli and start to look for second best options (if there are any which avoid an inevitable slide in to protectionism). However, in my view, it is dangerous at this time when unemployment in advanced economies is still rising and the recovery looks at best to be fragile and could take a while to take hold to give out signals that even faintly reflect a move away from multilateralism and the WTO members commitment to further strengthening it. Moreover, I think emerging economies will and should find it difficult to accept such a pessimistic prognosis. Therefore, emerging economies should work towards trying to ensure that the DDR, even if with a lower ambition level is successfully concluded.

But the fact is that chief negotiators have not met as a group in Geneva since December 2008. The US chief negotiator based in Geneva has just left his post to join the private sector and key positions in the US administration responsible for trade negotiations remain unfilled. After eight years of trying, there is expectedly a negotiating fatigue and in the absence of any real push for concluding the Round from the industrial and private sector in any major member country, even the functionaries in the William Rappard house are beginning to accept long hiatus in negotiations as a given and do not appear to be keen to push the Round forward. This situation could easily result in a near complete breakdown of conversation and lack of constructive engagement. This often results in an erosion of trust and confidence between capitals. This is to be avoided at all costs because this can be the beginning of the end of coordinated response to global events which so far has been key in preventing the current recession from being deeper and more prolonged. A stalemated DDR will inevitably result in a weakened and less credible WTO. This would surely be less than desirable at a time murky protectionism is already evident and when there are clear signs that governments across the world are already under tremendous pressure to take protectionist measures to save jobs. I hope therefore that there is general agreement among GES participants that a successful conclusion of the Doha Round will be an important structural safeguard in support of globalization and against any reversal from continued liberalization.

It is in this context that the Indian initiative to hold a mini-ministerial conference in Delhi (on 5–6th of September) is welcome. It is also heartening to note that most major economies have agreed to send their trade ministers including those from the US, China, Brazil, EU. The participation in this purely informal get together will hopefully be fully representative of the entire range of interests and constituencies within the WTO. This is important as in the absence of such a broad based representation, the mini-ministerial could well be criticized as
being exclusionary in nature and focusing only on issues of interest to advanced and large emerging economies. This also points towards the need to change the negotiating modalities in the WTO such that all 150 members feel included and the process is seen as transparent and not one in which deals are reached behind closed doors by a handful of countries and others are simply asked to accept the outcome. This will inevitably require a much more active communications stance by the major negotiating countries, the so called New Quad and also the formation of “issue-based negotiating groups” which could reflect fluid negotiating geometries and coalitions. With an enlarged membership, likely to expand even further, WTO has to figure out modalities to ensure that not only the outcomes but the negotiating processes are also inclusionary, equitable and transparent. Thus, it may be useful at this stage for the WTO secretariat to give more attention to these issues while negotiators try and find the common ground for successfully concluding the Round.

The most important change that has happened in the WTO negotiating modalities and practices since the ending of the Uruguay Round is the emergence of three or four large emerging economies like Brazil, China, India and South Africa which have had to be included among the small core group of negotiators. The emergence of the New Quad (US, EU India and Brazil with China and South Africa ) marks a major transition in global trade negotiating architecture and necessitates a building up of trust and confidence amongst the major negotiators. The best means to build this trust and confidence is to try and achieve some collective success on issues which may require least degree of compromise on all sides. This would also lend support to accepting a less ambitious outcome if that is what is needed for a the successful conclusion of the DDR.

The other transition being attempted in this Round is to bring Agriculture within the ambit of the multilateral trade regime from which it has so far been excluded. This is a historical undertaking much more strategic in its implications than was for example the inclusion of textiles within the multilateral regime which itself took very long and required tremendous efforts and compromises. Agriculture is seen as a strategic sector in the context of food security. This gives extraordinary and disproportionate clout to domestic agriculture lobbies which have been therefore successful in thwarting any move towards a multilateral trading regime in this sector. Therefore, a necessary condition for bringing in agriculture into the multilateral fold would be for WTO members to agree to an international convention on food security that would essentially disallow food being used as a strategic instrument against any member country. This would also include protocols for banning export restrictions and against food cartels and hoarding and empower the WTO, backed with the force of a legally binding international treaty to enforce this.

In the meantime, we may agree to move forward on the basis of the understandings that were reached in July 2008 which apparently gave sufficient protection to emerging economies about their concerns for the livelihood of small and marginal farmers and cut agriculture related subsidies in advanced economies to levels that these governments could get past their domestic constituencies. In the NAMA too, there is broad agreement on the quantum of coefficients to be applied by advanced and emerging economies. It is best to go forward with these and not at this stage open up new issues on either sectoral agreements or applying these to the applied rates . It is time also to bring Services back on the table as the Hong Kong mandate of reaching an agreement on modalities to be followed in agriculture and NAMA can be seen to be broadly achieved with what has already been agreed. It is clear that without a substantive agreement on services, the DDR can hardly be concluded. It is therefore important to follow up on the outcomes of the signaling conference that was held in August 2008 and firm up the understandings so that a comprehensive package can be put on the table for negotiators to seek political endorsement.

Any argument that a possible package that essentially includes agreement on the three principal sectors as discussed above does not provide sufficient incentive for any major WTO member to mobilize domestic support is really not a convincing one. US as the leading
economic power has to take the lead in making the shift towards achieving an outcome that may be less ambitious than originally envisaged but which lays the foundation for successfully achieving two major and indeed historical transitions – the emergence and establishment of a new trade negotiating architecture which is more globally representative and bringing agriculture within the ambit of a multilateral trading regime.

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Limit issues under negotiations to the core tasks of the WTO, that is ensuring non-discrimination and alleviating market access.

Excessive heterogeneity of issues under negotiations in the WTO has proven to be a strong stumbling bloc against consistency and transparency of old rules and decision-making on new rules. Rules for trade-related issues such as development, balance of payments restrictions, competition, investment or environment should be in the hands of other stand-alone organizations such as the World Bank or the IMF. The latter should have the right to veto trade restrictions which are legitimised with these trade-related issues. Promising elements of such multilateral organizations already exist within the framework of the UN, the OECD and the Bretton Woods organizations. They should be given more enforcement powers.

Limit the number of negotiating countries to those which can serve as anchors or speakers for other WTO member states based on temporary mandates for negotiations.

Rising WTO membership comes at the price of rising divergence between interests in trade rules among WTO members. Interests comprise the defence of privileged treatment, financial transfers and vested interests in specific sectors. To contain the spread, groups should be formed which represent actors with similar interests. Within such groups, negotiation mandates could be allocated to individual “speakers” on a temporary basis. Groups should include representatives of the business sector and the civic society as these groups are important stakeholders in rule making.

Concentrate more on strengthening discipline and transparency of the rule-making process rather than on trade liberalization.

In recent years, the discussion on global rules for trade had a bias towards further liberalization and against the strengthening of the rule-making process. While this bias reflects both the “sunny days” period of unilateral market opening in recent years and the targets of the ongoing Doha Round,, it did not contribute to more discipline and transparency in multilateral rules. Just the latter, however, is now needed in the “rainy days” of world trade following the word financial and economic crisis. This need should be met by calling upon each member to abstain from further unilateral steps. At best, a standstill agreement would be instrumental first to freeze the gap between unilateral and multilateral concessions and in a second step to reduce it.
The Global Polity

The Future of Global Financial Governance

The Challenges

In their “Declaration on Strengthening the Financial System” the leaders of the G20 Summit which was held in London on April 2, 2009, have provided the foundations for a reform of the Global Financial System.

Important elements are the expansion of the Financial Stability Forum to a Financial Stability Board with a stronger institutional base and enhanced capacities, and the strengthening of the role of the IMF.

Important fields for reform that are identified in the declaration include international cooperation of supervisory institutions and a strengthening of the international frameworks for prudential regulation, the scope of financial regulation, the inclusion of principles on compensation in the supervisory process, the setting of accounting standards and the regulation of credit rating agencies.

While there is widespread agreement on the importance of reforms in these areas, there is still a substantial need for concrete solutions to the problems involved. This in particular concerns the issues of global supervision processes.
Proposed Solutions

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1. In a multinational college of regulators/supervisors, the host country regulator/supervisor should have the final say.

The national or supranational regulators that remain must work together closely to avoid being arbitraged and played against each other by the private financial players. The Colleges of national regulators/supervisors will be ineffective if they are based on the principle that the home-country regulator (the regulator of the country where the parent bank is registered) takes the lead and is the dominant player in the College for any given crossborder bank. The pain of financial distress is felt primarily in the host country, where the branch or the subsidiary operates. Control has to be located where the pain is felt.

2. Establish a single EU-wide regulator for crossborder banks, and for other systemically important crossborder financial activities or institutions.

To avoid that the private financial actors play off one regulator against another, the number of regulators should be reduced as far as possible. While it is politically not feasible at the present moment to establish a single worldwide regulator, there should be at least a single European regulator for crossborder financial institutions.

3. A supranational EU fiscal authority is required to provide proper fiscal backup for the ECB/Eurosystem and for recapitalizing systemically important crossborder financial institutions.

A striking international dimension of the crisis has been the failure of cooperation between national fiscal authorities in recapitalising crossborder banks and the importance of fiscal back-up for the central bank. In this second area, the ECB and the Eurosystem appear vulnerable. If the ECB/Eurosystem were to suffer a serious financial loss in its monetary and liquidity operations, its ability to perform effectively in the pursuit of its price stability mandate and as a source of essential liquidity for the Euro Area banking system would be impaired. Ultimately, some or all of the shareholders of the ECB/Eurosystem (the national central banks of the 27 EU member states) would have to go to their fiscal authorities to get the resources for a non-inflationary recapitalisation of the ECB. It is essential that there be a clearly worked-out fiscal burden-sharing agreement for recapitalising the ECB/Eurosystem that can be invoked with little or no delay. If a supranational European fiscal authority with independent revenue-raising powers and associated borrowing powers is politically not feasible, the next-best alternative would be the creation of an EU fund from which the ECB/Eurosystem could be recapitalised at short notice. If even this is beyond the reach of the EU member states, there should be binding ex-ante agreements on fiscal burden sharing among the 16 or 27 fiscal authorities of the Euro Area or the EU, respectively.

4. Reduce the systemic problems which result from the existence of too large and complex financial institutions by a bundle of measures.

- Legally and institutionally, unbundle narrow banking and investment banking.
- Legally and institutionally prevent both narrow banks and investment banks from engaging in activities that present manifest potential conflicts of interest.
- Limit the size of all banks by making regulatory capital ratios an increasing function of bank size.
- Enforce competition policy aggressively in the banking sector.
It is essential that the authorities be able to insulate the systemically important parts of the financial system from the rest. The list of systemically important arrangements and institutions includes the retail payment system, the retail clearing and settlement system and deposit banking. The wholesale payment, clearing and settlement system is part of it. So are the securities clearing and settlement system and the provision of custodial services intimately connected with the securities clearing and settlement process. These functions can be performed by “narrow banking institutions” which are tightly regulated.

All other activities currently undertaken by the banking sector and the shadow banking sector will be called investment banking activities. Narrow banks and investment banks should be clearly separated to avoid conflicts of interest. It might seem that, since the products, services and instruments created exclusively by the investment banking sector are not systemically important, these investment banks could be left to play by the normal rules of the market game, with little if any regulation. This is not the case because of a well-known problem: the “too large to fail,” “too interconnected to fail,” “too complex to fail” and “too international” to fail problem.

The main issue is size. Even if a financial business is highly interconnected, it can still be allowed to fail if the total amounts involved are small. A complex but small business is no threat to systemic stability; neither is a highly international but small business. Size is the core of the problem; the other dimensions (interconnectedness, complexity and international linkages) only matter if the institution in question is big. This suggests to adopt measures which prevent financial institutions to become too large to fail, such as strict competition policy or introducing capital requirements that are progressive in the size of the business.

5. Create a special resolution regime with structured early intervention and prompt corrective action for all systemically important financial institutions.

Every systemically important bank or other financial institution should be subject to a special resolution regime (SRR) with structured early intervention (SEI) and if that fails to resolve the problems, prompt corrective action (PCA). An SRR is a preventive or anticipatory insolvency regime – a Chapter 11 “lite.” Under the SRR a bank can be put into conservatorship by the regulator before it has become balance-sheet insolvent or liquidity-insolvent. So there is a third form of insolvency for systemically important financial institutions: regulatory insolvency. The conservator appointed by the regulator has full executive authority. He can ring-fence business units, financial instruments and activities. For instance, for a prime broker or broker-dealer, he can ring-fence the securities clearing, settlement and custodial activities, including the systemically important counterparty role of prime brokers in the tripartite repo markets. He can transfer the deposits of the bank to another bank, sell assets, mandate a partial or complete debt-for-equity swap, break up the institution or order its liquidation. To facilitate a regulatory insolvency, systemically important financial institutions should be required to develop a bankruptcy contingency plan that would lay out how they would resolve themselves quickly and efficiently. Such a “shelf bankruptcy” plan would require banks to track and document their exposures much more carefully than they do now and in a timely manner.

Background

In recent years the global community has witnessed an extraordinary development of the global financial system with highly increasing international integration, soaring complexity of products, and lavish rating agencies. Additionally, a transformation has taken place away from the traditional banking model towards an “originate and distribute” banking model, i.e., banks repackage loans and sell them to financial institutions to relay the risks involved.

During recent years in the United States, low interest rates and inclining housing prices had led to a sizeable increase in house ownership and a large decrease in lending standards. Consequently, a change in the clientele of banks took place, e.g., even NINJA (no income, no
job or assets) were suddenly eligible for loans on houses. This led to a substantial increase in the overall risk of bailout and was creating a steadily growing housing bubble.

Investment bankers on their “search for yield” hushed these risks in the ever-increasing complexity of financial products, unable to monitor or track risks even for experts. Rating agencies supported this “originate and distribute” strategy with doubtful rating procedures, blurring risks even further. Consumer’s and businesses’ confidence plummeted and the financial system in its contemporary form had become unsustainable.

As a consequence, the 2007 financial turmoil which started with subprime mortgage defaults in the US has developed into a global financial crisis of unforeseen dimension.

Governments and central banks have reacted to the crisis by providing enormous rescue packages for the financial system as well as the real economic sector on a national and frequently also internationally coordinated basis.

The measures that were taken up to now resulted from decisions under extreme time pressure. There was no opportunity for a thorough analysis of the long run ramifications as well as the suitability of these measures for a new system of global financial governance after the crisis.

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Background

Traditional values in Financial Services (FS) encompassing capital strength, high levels of liquidity and a sustainable funding base are making a rapid comeback. The FS industry is a global, dynamic and fragile eco-system where mistakes are prone to chain reactions and low system-wide transparency could lead to additional vulnerabilities as issues intensify when they travel through the system. Overall, there seems to be agreement that a number of measures need to be taken (e.g., the macro prudential approach suggested by the UK FSA and G20) to strengthen the global financial services industry. An effective minimum requirements financial services industry “risk” management framework should address key characteristics/ issues to improve the stability of the global financial services industry and proactively identify future risks and threats to the global financial system.

Hypothesis to Ensure Proper Global Financial Services Governance

Level and Purpose of Oversight

The global nature of financial markets requires oversight and regulation to take place in various local/national jurisdictions, complemented by international regulation, to ensure holistic and transparent oversight of a global industry and thus avoid the possibility for regulatory arbitrage and gaps in regulatory coverage between home and host jurisdictions.

H1. There is a need for oversight/governance and regulation at local and international levels with a requirement for an all-encompassing, globally consistent regulatory framework with clear accountabilities between regulators that covers all industry players.

In addition, recent events have shown that the roles and responsibilities between finance ministries and regulators need to be reevaluated to ensure accountabilities and areas of collaboration are clearly defined.

H2. Effective regulation and governance rests on the ability to monitor the stability of the global financial services system in “real time” to determine the overall health of the system and assess responses that reduce the risks of chain reactions and system wide failures. Identified
risks need to be mitigated in an efficient and effective manner across all affected players and jurisdictions.

At the same time, the financial services industry is already one of the most regulated industries, and more regulation is on the horizon, which may have a detrimental impact on innovation and on other financial services-dependent industries. To build stability and create the required transparency in the global financial services industry, lessons learnt from other industries should be taken into account.

Given the importance of the financial services industry for the overall economy, a part of the industry could become a highly regulated low risk utility that provides basic financial services such as deposit taking.

H3. An "optimal" level of regulation and risk oversight should ensure overall macro-economic stability of global financial markets while avoiding an overly restrictive system that does not curtail economic purposeful innovation. A clear message from financial and economic history is that "incentives" that trigger the right behaviors are generally more effective and thus often better suited than pure regulation, or should at least complement regulation where possible.

H4. In the absence of a strong risk culture or the presence of a significant amount of organizational risk DNA that guides and informs the "right" behaviors, a regulatory framework is unlikely to achieve the desired financial services stability effect and thus will fall short of achieving the desired macro-economic stability effect.

A complementary measure to regulating FIs is to regulate complex products more systematically. For example, product regulation could be mandatory for all products exceeding certain thresholds. In addition, high risk products could be routed through global clearing facilities which would further reduce systemic risks. This in turn would promote the creation of standardized products, increased transparency and thus further reduce liquidity and counterparty risks.

Capital Requirements and Risks Need to Be Fully Aligned

The capital requirements need to be assessed in the context of who would ultimately bail out a Financial Institution (FI) should that be required. (Recent history seems to indicate that this is done by national governments and ultimately the tax payers.) The ability of a sovereign to bail out a FI will influence the optimal/ maximum size of an FI (e.g., if the size of a potential bailout is too large then the FI would be too big and needs to be downsized to make a bailout “palatable” for national tax payers).

H5. Capital buffers should be build in a counter-cyclical manner; overall capital requirements need to be in line with the business model and the risks inherent in the business.

According to common belief, banks should be required to hold more capital – more capital for credit, market, liquidity, investment and operational risk – in short for any kind of risk that exists. However, just increasing overall capital requirements is not a panacea for the problems that caused the current credit crisis because they fail to take into account the different types of risk and the differences among FIs. Moreover, higher capital requirements in their own right may even exacerbate the problem in that they raise the barrier to entry for smaller banks, leaving the playing field largely to FIs that are deemed “too big to fail (TBTF)” and may thus require a significant capital injection.

H6. Most proposals that address the “TBTF” problem rest on regulating complex FIs more tightly. An alternative is to address the root cause in the first place – namely to prevent FIs from becoming TBTF. Options include antitrust/ anticompetitive measures and levying capital charges on institutions in proportion to the level of systemic risk they pose – in effect charging these institutions a market price for the TBTF guarantee. In addition, a split between basic utility and more risky activities could be achieve through a "revised" Glass Steagall Act.
However, if a FI ends up being nationalized, the role of the state as a significant shareholder needs to be understood to avoid potential conflicts of interest (e.g., the use of FIs to drive policy). Likewise, the state needs to determine how it wants to manage the potentially conflicting objectives of its portfolio companies – i.e., support the economy, promote lending and/or make a modest return on its investments on behalf of its shareholders (the tax payers).

In addition, increased capital requirements need to be aligned with an organization’s risk taking and its risk capacity. Modern regulation (often erroneously) assumes that risks are a precisely quantifiable property of an asset. Apart from the fact that risks come in many facets (e.g., credit, market, liquidity risk), different parts of the financial system have different capacities to hedge risk. Accordingly, risk has as much to do with what the asset is as with who is holding the asset – the popular notion of “safe” instruments that should be promoted at the expense of “risky” ones that should be banned needs to be re-evaluated in that context. Consequently, capital requirements should be considered in the context of an organization’s ability to hedge the types of risks it takes (e.g., bank deposits and liquidity risk). Banks, for example, should be able to hedge effectively against credit risk by diversifying their lending and proactively using the information that they have on potential borrowers.

It is debatable whether “significant” regulation actually makes FIs safer. During the present crisis, markets, not regulators, first identified and acted on the problems. The “true” riskiness of FIs and financial activities/transactions can best be determined closest to the source of risk buildup – proposals for different types of FIs need to take into account their different risk profiles. This asymmetry of information and the lack of transparency are thus likely to lead to a level of regulation above the optimal level of regulation.

H7. The inherent stability of a financial system would be increased in an environment where the various types of risks flow to those FIs that have the best ability to hedge them (i.e., in the case of credit risk, modern regulation encouraged the opposite by requiring banks to set aside more capital for credit risk than for non-FIs and thus encouraged banks to shift their credit risk to whose who wanted a higher yield but had very limited ability to hedge this type of risk).

Therefore, the objective of financial regulation should not be to identify and reduce risk, per se, but rather to ensure that the risks are dealt with appropriately by those FIs that are best equipped to handle them.

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A simpler way to solve the “dollar problem” and avoid a new inflationary cycle

When China’s Premier Wen Jiabao recently expressed concerns about the future of the US dollar, the currency in which most of his country’s official reserves are denominated, his remarks provoked contrasting reactions among US economists.

Some, like Fred Bergsten of the Institute of International Economics, exhorted the US government to take Mr. Wen’s concerns seriously and listen to Beijing’s suggestion to create a substitution account in the IMF, which would allow Fund members to exchange unwanted dollar balances for SDRs, as part of a gradual process to replace the dollar with a supra-national reserve currency over the long run (Mr. Bergsten was particularly enthusiastic about the substitution account idea since it matched a similar proposal he had made in 2007, see Fred Bergsten, “We should listen to Beijing’s currency idea,” FT April 8, 2009, and “How to solve the problem of the dollar,” FT December 11, 2007).
Other US economists, including last year’s Nobel laureate Paul Krugman, were less enthusiastic. According to Mr. Krugman (Paul Krugman, “China’s dollar trap,” New York Times, April 2, 2009), China had fallen into a trap of its own making due to its reluctance to adopt a more flexible exchange rate policy in the past. Since any attempt by China or any other country to diversify away from the dollar too much or too quickly would be self defeating, there was no immediate threat to US or world financial stability, hence no need for the US government or the IMF to intervene on China’s behalf.

In our opinion, Mr. Krugman’s view is very simplistic for it fails to take into consideration the effect that a large amount of unwanted dollars and dollar assets will have on inflation once recession fears dissipate. It is possible that Mr. Krugman believes that some increase in inflation is a good thing, as it could help cure the “dollar overhang.” If so, he is not alone. Kenneth Rogoff, the former chief economist of the IMF, has recently written that “a sudden burst of inflation would be extremely helpful in unwinding today’s epic debt morass” (Kenneth Rogoff, “Embracing inflation,” The Guardian, UK, December 2, 2008). Put in other words, by increasing inflation, the US would “solve” two problems at once. On the one hand, it would debase the value of its national debt, hence preventing it from growing too much relative to GDP. On the other, it would reduce the real value of the debt (unsecured and secured) of financial institutions and other US corporations, hence diminishing the need for explicit haircuts or public bailouts.

The problem with this “solution,” aside from the reputational problems it creates for the US government, is that once the inflation genie is out of the bottle, it will be very difficult to put it back in. As for the solution proposed by the Chinese central bank and Mr. Bergsten, there are, unfortunately, several problems. First, the plan requires a complex multilateral negotiation, including a change in the IMF’s Articles of Agreements, which is unlikely to be supported by the US, if anything because the SDR will compete with the dollar as a reserve currency unit. Second, the proposal restricts the menu of potential dollar substitutes to the SDR, itself a basket of currencies with a predominant dollar share. Third, a substitution account in the IMF makes the IMF rather than the US government liable for losses resulting from the depreciation of the dollar vis-à-vis the SDR, a condition likely to be opposed by other Fund members.

However, the most important drawback of the China/Bergsten proposal is that it does not really protect US official creditors from a persistent fall in the dollar. This is because in the event of a protracted dollar depreciation, it is highly unlikely that the central banks of Europe, Japan, and the UK will stay put and let their currencies appreciate. More likely, these countries will resist appreciation by engaging in a process of competitive devaluations, the end result of which will be an increase in global inflation. If so, the reserves of China and other emerging markets will lose real value whether they are in dollars or SDRs. More importantly, inflation will be high everywhere in the world, and it will take years of high real interest rates and low growth to bring it down.

Fortunately, there is an easier and better way to protect the value of emerging market reserves while reducing the risk of a resurgence in world inflation. This is to reduce the incentive of the US government to “inflate its way out of debt.” For this to happen, all US creditors need to do is demand that the US government swap nominal US Treasury bills, notes, and bonds for inflation-adjusted instruments (TIPS) on demand. Since, at present, the supply of TIPS is very small in relation to the rest of the US national debt, bilateral coordination would be necessary to avoid distorting their value.

One of the advantages of this idea is its simplicity. For starters, it can be executed bilaterally rather than multilaterally. This not only makes it easy to implement, but also gives the US government leverage to extract concessions from the other governments. For example, in the case of China, it would be possible for the US to negotiate a quid-pro-quo, whereby China commits to reforms geared to reducing its structural current account surplus – including, but not limited to, a more flexible exchange rate policy. For this reason, it would be preferable that the swap proposal comes from the US rather than from its creditors.
But, more important than the practical advantages are the beneficial long term effects of such a policy, particularly in averting the specter of global inflation. By substituting TIPS for nominal bonds, the US government would be sending a strong signal that it does not plan to “inflate its way out of debt,” as disingenuously suggested by Mr. Rogoff but, to the contrary, will commit itself to adopting a more disciplined monetary and fiscal policy going forward.

**Jeffry Frieden**

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While regulatory aspects of global financial governance are extremely important – and widely recognized – it is usually the underlying macroeconomic realities, and policies, that are at the root of problems that arise and require attention. For example, in the current crisis, it was the massive inflow of funds to the United States (and other deficit countries, such as the UK, Spain, and Ireland) that drove a classic capital flow cycle. As is often the case with a capital flow cycle of this type, the inflow created an economic expansion, then a boom, then a bubble. As is also typical, it was concentrated in the nontradables sectors, especially finance, insurance, and real estate. It was the capital inflows that created the conditions for the financial melt-down that ensued; while adequate and appropriate regulation could have softened the impact of the crisis, it probably could not have avoided serious consequences in any circumstance.

This is not to underestimate the importance of responsible financial regulation and the national level, and of consistent international cooperation among regulatory authorities – up to and including harmonization, and even a global regulatory regime. But in discussions of these issues, I think it is equally important to deal with the macroeconomic trends that typically are the root causes of major financial crises – whether in Latin America after 1981, East Asia after 1996, or the United States after 2007. For in most instances, these sorts of serious financial difficulties are the result of serious macroeconomic imbalances – whether in exchange rates, monetary and fiscal policies, or capital flows.

In this context, there is scope for international cooperation to monitor such imbalances, and to attempt to encourage their amelioration. There are dozens, even hundreds, of examples of national governments that delay adjustment until it is too late and that face a financial crisis as a result. Typically, domestic political pressures are put forward as the reason adjustment could not be undertaken in time. But this is not a purely domestic or national problem, for financial crises are often transmitted across borders, and almost always impose serious externalities on other nations.

There is a strong normative case for focusing international attention on governments whose macroeconomic policies risk causing financial difficulties, especially when (as is almost always the case) the consequences spill across borders. Such international attention, and even pressure, might help clarify the situation, reduce domestic resistance to adjustment, and encourage appropriate policy changes. Some international institution – such as the IMF, which already has the embryo of a surveillance function – could serve as the focal point for global attention to national policies that risk a potentially contagious financial crisis.
The Global Polity

Exit Strategies from the Financial Crisis

The Challenges

In response to the worldwide financial crisis, governments have bailed out their large banks and some of their large companies, thereby earning equity stakes in these enterprises.

In the process, these governments have accumulated massive deficits.

Several central banks no longer just provide short-term credit to commercial banks against highly rated collateral, but have also bought bank assets of dubious long-term value as well as distressed corporate bonds.

As governments have shored up local industry with loans and subsidies, often in the name of the numerous fiscal-stimulus packages, they have generated new forms of protectionism.

None of these developments is sustainable in the longer run. What are socially desirable exit strategies from these policy traps? How and when should governments return the financial industry to private sector hands? How can governments prevent their deficits from rising relentlessly relative to GDP over the business cycle? How can central banks ultimately divest themselves of problematic assets? How can they avoid the danger of inflation once the current downturn is over? How can governments avoid supporting new forms of protectionism that may be difficult to undo in better times?
Proposed Solutions

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Central bank exit strategies: the return to normalcy

Introduction
In this short paper I discuss possible exit strategies of central banks concerning their recent balance sheet policies. After reviewing these policies during the recent financial crisis, I will first present the problems involved with exit strategies of central banks in terms of reversing their “quantitative” as well as “qualitative” easing. After understanding the problem involved with reversing these positions I present several possible solutions. The quickest and most optimal solution to inject stability into the banking system is to reclassify bank creditors from secured positions to equity shareholders, thus allowing for bad assets to be revalued at market prices without exacerbating the liquidity constraints.

The origin of the problem
A strong central bank balance sheet is essential for the quality of a currency and the stability of a financial system. The financial crisis has seen substantial changes in the balance sheets of the world’s major central banks. Besides the much discussed quantitative easing, there have been substantial amounts of “qualitative easing” – which is understood to be those balance sheet policies that deteriorate the average quality of central bank assets in opposition to the more typical “quantitative easing,” understood as an expansion of a central bank’s balance sheet. Using this definition quantitative easing may imply qualitative easing if the new assets on the balance sheet are of lower quality than the average existing quality as of the assets held.

During the financial crisis several major central banks engaged massively in qualitative easing. The Federal Reserve, until September 2008, engaged in qualitative easing with an almost constant balance sheet total (i.e., a limited quantitative expansion). The Federal Reserve swapped liquid and low-risk assets against relatively more illiquid and riskier ones held by the banking system. New credit programs appeared while US Treasury bonds were sold, supporting a faltering banking system faced with a destabilizing liquidity constraint. Thus, the granting of credits to the troubled banking system did not expand the balance sheet total but was sterilized by the sale of Treasury bonds. As a consequence, banks’ balance sheets improved and the central bank’s balance sheet commensurately deteriorated. The Federal Reserve System had become a certain type of “bad bank” that they were themselves trying to rescue.

The average quality of the assets backing the dollar (the assets held by the Fed) deteriorated at an even faster pace after September 2008. There was a substantial expansion of the balance sheet through an increase in the monetary base. The increase in emergency credit programs was financed mainly by (excess) bank reserves and by accounts of the Treasury held at the Fed. A new stage in quantitative easing was reached when in the spring of 2009 the Fed started buying government bonds, agency debts and mortgage backed securities directly.

While the Fed’s balance sheet policies certainly have been substantial, the Eurosystem’s changes are no less so, even though they may appear so at first sight if concentration is focused solely on the apparent (and oft examined) quantitative expansion of the balance sheet. The changes in the balance sheet policies of the Eurosystem are more subtle by maintaining the established programs and softening collateral rules. Thus, the ECB has also
engaged in substantial qualitative easing, although a lack of full transparency has, to a large extent, hidden the methods used to enact these policies. The central banks’ balance sheet policies of changing the balance sheets’ composition and totals were conducted in order to support a struggling financial system.

The problems of exit strategies

Undoing the qualitative and quantitative easing by reversing the balance sheet policies is easy only from a technical point of view as, for instance, Ben Bernanke has pointed out.

In order to reduce the size of their balance sheets, central banks could simply sell the government bonds, mortgage backed securities, end emerging programs, increase collateral standards again and discontinue the roll-over or renewal of loans to the banking system. In fact, the demand for these emergency programs will likely shrink as the economic situation improves.

The problem, however, is that the reduction of the balance sheet would undo policies enacted in order to support the financial system. By selling securities, central banks would reduce the amount of bank reserves and thereby reduce liquidity in the interbank loan market. By not renewing loans to the banking system, a liquidity constraint could reemerge. By increasing collateral standards banks might not have sufficiently high quality assets in order to sustain the level of credit they currently maintain. In sum, the quantitative tightening would decrease interbank and overall liquidity and could lead to a stronger, deflationary credit tightening. The financial crisis could become aggravated again with destabilizing effects.

However, there is another way to reverse part of the qualitative easing without reducing the balance sheet total or current levels of bank reserves. Central banks could simply undo the swap of liquid and low-risk assets against relatively more illiquid and riskier ones. The Fed, for instance, could end some of the emergency lending programs where collateral of low quality is accepted, thereby decreasing excess bank reserves. As compensation the Fed could buy government securities, thus increasing bank reserves. This would increase the average quality of the assets backing the monetary base, while the balance sheet and bank reserve totals would remain constant. However, the loans collateralized by risky and illiquid assets would be removed from the Fed’s balance sheet while government securities are increased. In turn, government securities would disappear from banking system’s balance sheets while the low quality assets formerly used as collateral would no longer be used to guarantee central bank loans.

Yet, when these low quality assets are fully integrated in bank balance sheets without the possibility of using them as collateral for central bank loans, the interbank lending market may seize up again. The risks regarding the value of these assets, which valued at market prices would probably endanger the solvency of many banks, would slacken the desire to lend to other banks. As the solvency of counter-party banks is unclear due to the bad assets on their balance sheets, interbank liquidity would be reduced and banks may restrict the extension of credit in order to restore their liquidity and solvency. This lack of liquidity would place negative pressure on many financial institutions, further reducing confidence in counter-parties and the system at a whole. A downward spiral of evaporating liquidity, credit contraction and bankruptcies might lead in the extreme to the collapse of the financial system.

In fact, the financial crisis has been caused by solvency problems that led to a liquidity constraint. Central banks tried to fight this by increasing liquidity availability and buying or loaning against the same bad assets that caused the solvency problems. If central banks sell those assets again or stop accepting them as collateral as loans, the same solvency problems will reemerge, along with the preexisting liquidity issues.

Paradoxically, the central banks by buying and accepting bad assets did not solve the solvency problem; they merely delayed the inevitable. The bad loans did not turn “good” by changing hands or being accepted as collateral by central banks. Hence, the problem remains
and exit strategies can only be successful if the quality of these assets change or their quality is acknowledged and banks are recapitalized accordingly. Therefore, we are faced with two possible solutions for exit.

**On the solvency of central banks**

Before turning to these solutions let me first address another problem related to the solvency of central banks. Central banks may be forced to realize losses when reversing qualitative and quantitative easing policies by selling assets. When banks start to use their excess reserves and expand credits, central banks might increase interest rates putting pressure on prices of mortgages backed securities and government bonds. The central banks in this situation might want to sell these assets in order to reduce liquidity. In other words, there may be losses when these assets are sold to restrain liquidity.

Do these losses pose a problem for the solvency of central banks? First of all, provided central banks do not have substantial foreign liabilities, as has been the case of Iceland, they will never face insolvency in the sense that they can pay their liabilities simply by creating money. In fact, base money of central banks’ might not be considered as “true” liabilities as they do not imply any obligation to pay in the present or the future. However, central banks can become insolvent in the sense that the capital on their balance sheet is consumed by losses. In fact, both the Fed and the Eurosystem have very low equity ratios of 2 and 4 percent respectively. Small losses of their assets could easily consume these central banks’ capital. In this case, there are several possibilities. The first consists in using hidden reserves in the balance sheets to recapitalize. Thus, the Fed could revalue its gold reserves at market value and the Eurosystem could use its position “revaluation account” to boost its capital. In this case, both equity ratios would increase to approximately 13 percent.

Yet, even the increased capital might be consumed by potential losses. In this case, as a solution there remains a recapitalization by the government, which would be easier in the case of the Fed and pose political problems for the Eurosystem as independent European governments would have to agree how to share the considerably burden. Another possibility would be to post a negative capital on the balance sheet. Central banks can have a negative capital and be technically “insolvent” without being “economically” insolvent, i.e., being unable to fulfill their obligations. Yet, the negative capital would be detrimental for the quality of the currency and market participants might lose confidence in the currency. In this case, market participants might regard a central bank with negative capital as not being able to defend the value of the currency externally and maintain its value internally. The negative capital would be a signal that the assets backing the currency have lost in value and that the net worth of the central bank that is installed to inspire confidence in the banking system and the currency has become negative.

**Solution number one: asset price inflation**

The first solution to the exit problem consists in simply waiting for the bad assets to become good assets. Yet, there is no reason why the majority of these assets will turn good except that nominal prices (housing prices, etc.) re-inflated again to their pre-bust levels. Therefore, the central bank can actively try to improve the quality of their assets and accepted collateral by increasing the money supply causing prices to rise. Moreover, price inflation causes the real debt burden of the loans to decrease, thereby increasing the possibility of an improvement in the performance of bad loans. Thus, central banks can pursue a policy of increasing the money supply in order to inflate (for example, housing) prices again. Central banks could also buy directly troubled assets to bid their prices up (the Fed has already commenced this policy when it started to buy mortgage backed securities). When housing prices increase, the value of mortgage backed securities will also increase improving the solvency of the banking system. Thus, a solution for the reversion of the qualitative easing and the increase in the quality of the central banks’ assets is price inflation.
Yet, this solution has several disadvantages. First, it is only a partial exit strategy. It is true that it can undo the compositional changes of qualitative easing. For instance, central banks could buy good assets thus increasing the money supply and causing prices to rise sufficiently. Thus, central banks could not undo the quantitative easing as an exit strategy but would have to engage in significant additional quantitative easing to rectify the newly created problems. In other words, one cost of quantitative easing is that central banks may reverse the previous episodes of qualitative easing. By reversing the qualitative easing central banks would create an even bigger exit problem for the quantitative easing that this would imply.

The new quantitative easing would only be reversible with a significant credit contraction. This credit contraction, however, would cause marginal companies and investments depending on the existing volume of credit to suffer liquidity difficulties. These bankruptcies would aggravate problems for the financial system developing a downward spiral of credit contraction, bankruptcies and falling prices. Thus, the quantitative easing as a solution to the qualitative easing could not be reversed without risking the collapse of the financial system.

Another salient problem consists in the danger of hyperinflation. When central banks increase the money supply to the extent that housing prices increase back to their pre-bust levels, people may lose confidence in their currency’s long-term stability. Relative housing prices must adjust and fall relative to other prices. Increasing them nominally to their pre-bust levels (and possibly higher) would require a substantial increase in the money supply. This substantial monetary inflation could lead to a loss of confidence and possibly hyperinflation. A further problem consists in the question of proportionality. If the central bank fails to increase the money supply sufficiently, bad assets will remain bad leading to solvency problems. If the central bank increases the money supply excessively, a hyperinflation becomes probable.

**Solution number 2: exit and recapitalization of the banking system**

The second and only viable solution consists in a consequent exit from the qualitative and quantitative easing and thoroughly addressing the problems involved. Central banks would return to balance sheets similar to that before the crisis broke out which is technically not difficult to achieve, as has been stressed by Ben Bernanke and a multitude of fellow central bankers. Bad loans and assets would be returned to banks’ balance sheets. Valued at market prices this would result in the insolvency of at least some main financial institutions. While this might be considered as problematic and harmful, it is the best and only viable option at hand. The alternative would be to continue the existing policies with the danger of an enduring recession, not unlike Japan has experienced.

The insolvency of a large part of the banking system would only acknowledge a fact that has been concealed and whose consequences have been delayed causing important moral hazard problems. Banks knowing they are too big to fail will have a tendency to behave more recklessly. The real challenge to this exit strategy is a way to orderly solve the insolvency problems of banking institutions without causing, or exacerbating, future moral hazard problems.

There are several solutions to the looming insolvency problem of banks. First is recapitalization by the market. Banks would compete to receive new capital on the market. This solution will probably result in limited success as its success depends on finding investors willing to fund insolvent companies.

Second is a recapitalization by the government. The disadvantage of this option is that scarce resources are shifted to help the banking system at the expense of other areas of the economy. As these resources are needed in other places in order to restructure the economy the situation in other industries could consequently worsen, leading to more bad loans and additional problems for the banking system. Moreover, the recapitalization by the government would instigate further moral hazard problems to be bred.
Third, the most radical solution would be a conventional insolvency process for the banks (i.e., bankruptcy filings in court). This bankruptcy process – during which creditors would take over the assets of the banks – would, however, likely take a long time to implement via the conventional legal channels. Hence, even though a takeover of the banks by their creditors in a regular bankruptcy process would solve the present problems and enable a reversal of the current balance sheet policies, it would entail some transaction costs due to lengthy legal proceedings.

Fourth, the better solution might be to turn bank creditors directly into equity holders by legal decree circumventing the legal system. More specifically, the real value of the assets of many banks is currently lower than their outstanding liabilities giving rise to the insolvency problem that triggered the financial crisis. The qualitative and quantitative easing has not solved the problem but only delayed the solution. It will only be possible to reverse the previous easing when the insolvency problems are solved. This can be done by acknowledging the real value of the assets on the books of the banks and turning creditors of the banks into shareholders pro rata. Depending on the speed at which a reclassification of stakeholders can be achieved, this option will likely be the much swifter than an ordinary bankruptcy filing. Banks could start operating and trusting each other immediately and the easing could be undone accordingly. Existing shareholders will lose via a dilution of their current holdings through new share issuances, while secured creditors and liabilities will be reduced accordingly.

Conclusion

The root of the problem of the current financial crisis has been an artificially induced boom in the real economy and asset price markets that subsequently turned to bust. The bust led to a reduction in the values of many assets owned by banks. Thus, the banking sector found itself crippled by insolvency problems consequently causing liquidity problems. The readjustment of the economy and relative asset prices cannot be solved by increasing the quantity of money or shifting bad assets from banks' balance sheets to central banks' balance sheets. The problem is only solved by acknowledging and assuming it. Turning bank creditors into equity holders would solve the banks’ solvency problems and would increase confidence in the financial sector, thus, also improving the liquidity situation. If this is done, the balance sheet policies of quantitative and qualitative easing can be reversed by selling the bad assets, buying back the goods assets and refusing to roll-over emergency loans. Otherwise, the policies cannot be undone without instigating the breakdown of the financial system or a possible hyperinflation.

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A simpler way to solve the “dollar problem” and avoid a new inflationary cycle

When China’s Premier Wen Jiabao recently expressed concerns about the future of the US dollar, the currency in which most of his country’s official reserves are denominated, his remarks provoked contrasting reactions among US economists.

Some, like Fred Bergsten of the Institute of International Economics, exhorted the US government to take Mr. Wen’s concerns seriously and listen to Beijing’s suggestion to create a substitution account in the IMF, which would allow Fund members to exchange unwanted dollar balances for SDRs, as part of a gradual process to replace the dollar with a supra-national reserve currency over the long run (Mr. Bergsten was particularly enthusiastic about the substitution account idea since it matched a similar proposal he had made in 2007, see Fred
Bergsten, “We should listen to Beijing’s currency idea,” FT April 8, 2009, and “How to solve the problem of the dollar,” FT December 11, 2007).

Other US economists, including last year’s Nobel laureate Paul Krugman, were less enthusiastic. According to Mr. Krugman (Paul Krugman, “China’s Dollar Trap,” New York Times, April 2, 2009), China had fallen into a trap of its own making due to its reluctance to adopt a more flexible exchange rate policy in the past. Since any attempt by China or any other country to diversify away from the dollar too much or too quickly would be self defeating, there was no immediate threat to US or world financial stability, hence no need for the US government or the IMF to intervene on China’s behalf.

In our opinion, Mr. Krugman’s view is very simplistic for it fails to take into consideration the effect that a large amount of unwanted dollars and dollar assets will have on inflation once recession fears dissipate. It is possible that Mr. Krugman believes that some increase in inflation is a good thing, as it could help cure the “dollar overhang.” If so, he is not alone. Kenneth Rogoff, the former chief economist of the IMF, has recently written that “a sudden burst of inflation would be extremely helpful in unwinding today’s epic debt morass” (Kenneth Rogoff, “Embracing inflation,” The Guardian, UK, December 2, 2008). Put in other words, by increasing inflation, the US would “solve” two problems at once. On the one hand, it would debase the value of its national debt, hence preventing it from growing too much relative to GDP. On the other, it would reduce the real value of the debt (unsecured and secured) of financial institutions and other US corporations, hence diminishing the need for explicit haircuts or public bailouts.

The problem with this “solution,” aside from the reputational problems it creates for the US government, is that once the inflation genie is out of the bottle, it will be very difficult to put it back in. As for the solution proposed by the Chinese central bank and Mr. Bergsten, there are, unfortunately, several problems. First, the plan requires a complex multilateral negotiation, including a change in the IMF’s Articles of Agreements, which is unlikely to be supported by the US, if anything because the SDR will compete with the dollar as a reserve currency unit. Second, the proposal restricts the menu of potential dollar substitutes to the SDR, itself a basket of currencies with a predominant dollar share. Third, a substitution account in the IMF makes the IMF rather than the US government liable for losses resulting from the depreciation of the dollar vis-à-vis the SDR, a condition likely to be opposed by other Fund members.

However, the most important drawback of the China/Bergsten proposal is that it does not really protect US official creditors from a persistent fall in the dollar. This is because in the event of a protracted dollar depreciation, it is highly unlikely that the central banks of Europe, Japan, and the UK will stay put and let their currencies appreciate. More likely, these countries will resist appreciation by engaging in a process of competitive devaluations, the end result of which will be an increase in global inflation. If so, the reserves of China and other emerging markets will lose real value whether they are in dollars or SDRs. More importantly, inflation will be high everywhere in the world, and it will take years of high real interest rates and low growth to bring it down.

Fortunately, there is an easier and better way to protect the value of emerging market reserves while reducing the risk of a resurgence in world inflation. This is to reduce the incentive of the US government to “inflate its way out of debt.” For this to happen, all US creditors need to do is demand that the US government swap nominal US Treasury bills, notes, and bonds for inflation-adjusted instruments (TIPS) on demand. Since, at present, the supply of TIPS is very small in relation to the rest of the US national debt, bilateral coordination would be necessary to avoid distorting their value.

One of the advantages of this idea is its simplicity. For starters, it can be executed bilaterally rather than multilaterally. This not only makes it easy to implement, but also gives the US government leverage to extract concessions from the other governments. For example, in the case of China, it would be possible for the US to negotiate a quid-pro-quo, whereby China
commits to reforms geared to reducing its structural current account surplus – including, but not limited to, a more flexible exchange rate policy. For this reason, it would be preferable that the swap proposal comes from the US rather than from its creditors.

But, more important than the practical advantages are the beneficial long term effects of such a policy, particularly in averting the specter of global inflation. By substituting TIPS for nominal bonds, the US government would be sending a strong signal that it does not plan to “inflate its way out of debt,” as disingenuously suggested by Mr. Rogoff but, to the contrary, will commit itself to adopting a more disciplined monetary and fiscal policy going forward.

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I. Introduction
The global financial crisis has involved unprecedented government actions in several regions around the world, but most notably in the advanced economies. Such actions have been aimed at stabilizing financial markets and restoring bank confidence, as well as at mitigating the effects of the crisis on the real economy. Responding to the challenges posed by the global turmoil, governments have displayed a wide array of traditional as well as new monetary, fiscal, and banking policy actions. As the global financial crisis starts to subside, new challenges will be faced by policymakers as regards the unwinding of the emergency measures and the management of the longer-term consequences of the crisis as well as of the governments’ response to it.

In what follows, we deal briefly with exit strategies in the areas of monetary, banking, and fiscal policy.

II. Exit Strategies: Proposed Solutions
As regards monetary policy, the exceptional measures adopted by central banks in the advanced economies have resulted in a significant expansion of their balance sheets. In the US case, for instance, two aspects are worth noting. First, the expansion on the asset side of the balance sheet has been associated with a significant acquisition by the Fed of mortgage-backed securities and other lower-credit-quality assets. Second, on the liability side of the balance sheet, the commensurate expansion in the monetary base was reflected in a build up of financial institutions’ deposits at the Fed. The latter characteristic also applies to other advanced economies, such as the Euro area, the UK, and Switzerland. In the Fed’s case, there has been also a significant increase of Treasury deposits at the Fed.

In this context, unwinding of the exceptional monetary measures entails two different (but possibly interrelated) problems: 1) how to respond to an upcoming reduction in the demand for monetary base (which would reflect a decrease of deposits held at the central bank), and 2) how to dispose of the stock troubled assets owned by the central bank.

In our view, the unwinding of the monetary expansion should in principle be carried out with open market operation using government bonds. Alternatively, central banks could impose (transitory) reserve requirements that would be gradually reduced over time, so as to ensure that the reduction in the demand for base money does not compromise price stability. In addition, the unwinding of rediscounts and central-bank emergency lending to banks will be automatic, and poses no significant risks.
As regards the second problem, we propose that the disposal of (potentially) troubled assets be undertaken at a much more gradual pace. In this respect, we do not favor using acquired private-sector assets in monetary sterilization operations. Emphasis should be placed on ensuring the return to normality in the valuation of such assets. Asset disposal at distressed valuations would only undermine the recovery of markets and result in unnecessary losses to the central bank.

In addition to the expansion of their balance sheets, central banks have adopted a number of measures that affect bank behavior. These include the provision of guarantees to bond issues, the sale of tail-risk insurance on certain segments of bank assets, and the provision of capital injections. As markets return to normality, central banks should place the highest priority on ending measures that distort incentives and the pricing of risk at financial institutions.

Although unwinding the monetary expansion entails only moderate risks in our view, challenges in the fiscal area will be major, and carry the highest risks over the medium term. Current estimates of post-crisis public-debt levels place most of the advanced economies with ratios of public-debt-to-GDP close or in excess of 100% (with Japan exceeding 200%).

In our view, emphasis placed on fiscal stimulus has been excessive, compared to the emphasis placed on actions directed at resolving banking problems more directly. While we do not expect significant inflationary pressures from the unwinding of the monetary expansion, for which central banks dispose of adequate instruments, inflationary risks may well arise in connection with increasing uncertainty about debt sustainability.

Historical experiences show that inflation has played a significant role in reducing large public debts, even in the advanced economies. The crucial variable to watch will be the interest rate paid by advanced-economies’ governments on their debts issues. Recent IMF projections on debt sustainability and required fiscal adjustments are in our view too optimistic, as interest rates on government paper could rise significantly as debt burdens climb.

In this regard, we propose that serious consideration be given to unwinding fiscal stimulus packages much sooner than later. Current views suggesting that additional stimulus in some countries may still be required appear to us as counterproductive, as fiscal risks may turn out to be seriously underestimated.

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In the financial sector, the main problem is not that of illiquidity among banks. Central banks have flooded the markets with ample liquidity. Instead, the potential insolvency of systemically relevant financial institutions has become the main challenge. Just as central banks act as “lender of last resort” in the case of illiquidity, governments should act as “buyer of last resort” in the case of insolvency, when there are no willing private buyers. In turn, bailed-out institutions need to accept tighter regulation and supervision.

Once the rescued financial institution regains strength to operate on its own, one possible exit strategy for the government is to hand over the acquired equity to a trust company. The trust company has the task of selling the shares within a given period (e.g., ten years) with the sole objective of maximizing the profit and, thereby, minimizing the taxpayers’ burden.
Bondholders and shareholders of the bailed-out financial institutions or companies need to share the losses as well. Whereas the shareholders contribute automatically by putting up with the dilution of their equity, bondholders could take part in the burden sharing by compulsively accepting a debt-to-equity swap, where their bonds are converted into shares.

In the long run, improvements in financial regulation will have to take the lessons from these new experiences into account. Since modern banks cross international boundaries, improved financial regulation will entail a number of things. First of all, international policymakers will have to coordinate ways in which to let banks fail without taking economies down with them, in a manner similar to bankruptcy reorganization. This may require setting up an international deposit insurance fund for those banks which are large relative to their countries (such as those in Austria), modeled on the FDIC, or it may require breaking large banks into smaller pieces, each of which is not too big to fail.

International regulators could also increase capital requirements (thus reducing the risk of future insolvency) once the economic situation has improved. They can increase transparency by moving derivatives trades such as that in CDSs onto a centralized exchange to be cleared, as is done for futures and options. At the local level, individual countries or states could increase the (so far lax) requirements on the origination of loans, particularly subprime residential mortgages. However, caution is also needed when it comes to political decision making. Policymakers need to be careful to focus on creditworthiness in deciding on public loan allocations or new regulations, not on benefits to specific political constituencies.

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Exit and prepare for new crisis
A discussion on exit strategies should cover three major areas:

- How to phase out government support and government ownership in banks and of assets.
- How to minimize risk for and effects of future systemic financial crisis.
- How to prepare for the next crisis.

Most support schemes have an end date. If not, a date with ample time to adjust should be set when confidence returns to market. Government ownership in banks should be phased out by privatisation when market conditions so allow (a political decision which is very difficult to hand over to a trust or a subordinated organization) in order to recover all or as much as possible of the original stake. Acquired assets should be put in special asset management corporations (bad banks) with a long term perspective in order to recover as much as possible of the original value.

The best way to handle a financial crisis is to avoid it. Measures must be taken nationally and internationally to minimize risk for asset-bubbles and reckless lending. Macroeconomic stability and prudent fiscal policy are prerequisites. Asset prices could be a parameter in forming monetary policy. Regulation must be improved, not necessarily increased. There is an obvious risk for over-regulation instead of more efficient regulation. Capital adequacy rules must be tightened. Approval by Financial Regulators of renumeration schemes in at least systemically important financial institutions should be considered.

Even with precautionary actions taken future crisis in the financial sector will occur. This is an unavoidable part of market economy (a negative factor outweighed by its superiority as an economic system) so organisational and legislative preparations are necessary.

Government intervention is unavoidable in systemic financial crises. Roles for involved institutions should be defined in advance. The role of central banks should be to maintain liquidity in
the financial markets and to be a lender of last resort for solvent financial institutions. Governments or institutions under Government should handle other matters of crisis management.

When confidence in financial markets is lost it must be restored as soon as possible. Depositors and other creditors in systemically important institutions must be protected, but of course not shareholders. Crisis management must be transparent. Important institutions should undergo stress tests. These tests should be open. The capital base for lending must be restored to minimize credit crunch effects. Should it not be possible to raise capital needed from the private sector Governments has to contribute? To minimize moral hazard and taxpayer cost Government capital injections must be coupled with corresponding Government ownership.
The Global Polity

Repairing Failed States

The Challenges

In a number of territories primarily situated in the poorer parts of the world, the state no longer performs its basic security and development functions. Beyond causing hardship for their own citizens, failed states provide breeding grounds of organized crime and terrorism.

The “failed states list” of 2008 of the Fund for Peace and Foreign Policy is topped by Somalia, Sudan, Zimbabwe, Chad, and Iraq (in this order). These states have failed for different reasons, for example a foreign intervention in Iraq or the presence of a stationary bandit in Zimbabwe, but there are often similarities in the mechanisms that lead to state failure, for example the availability of natural resources.

State failure causes massive movements of refugees and internally displaced peoples, severe economic decline, and the spread of violence and crime. 9/11 has made the world realize that the effects of state failures do not stop at national borders. (Re-)Establishing state authority in these territories is one of the most challenging tasks of our time. In particular in light of the experiences in Iraq and Afghanistan, pessimism is dominating today’s discourse. This pessimism should be motivation for searching for innovative approaches to state-building in such difficult circumstances. “Repairing failed states” requires solutions that are ultimately driven by the citizens of the respective country. Yet, the global community – governments, international organizations and multinational corporations – can (and sometimes must) assist the citizens in getting into the driver’s seat. From this perspective, this session discusses the following questions:

- How to transform disenfranchised populations into stakeholders of a process of state-building? Which are specific mechanisms to reach different groups of these internal stakeholders (political elites, business elites, “ordinary citizens”)?
- What is the role of external stakeholders? Do we need a new approach to “development aid”, as its current mode of delivery in weak states hampers state-building? How to improve the interplay between military interventions, humanitarian relief, and development assistance? What is the role of international business in state-building processes? Do we need special supervisory mechanisms for international investors in weak states, such as the Extractive Industries Transparency Initiative.
- Can we identify general lessons to be learnt from successes and failures of fixing failed states, for example from Iraq, Afghanistan or former Yugoslavia? Where to put priorities in re-establishing state-functions and how to sequence interventions and policies (security, infrastructure, basic service delivery)? Or are these situations too country-specific for any generalizations?
Proposed Solutions

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A framework for fixing fragile states: leveraging social cohesion and local institutions

The roots of fragility

The illegitimacy and poor governance that debilitate fragile states can be traced to many factors – such as colonialism – that have combined to detach states from their environments, governments from their societies, and elites from their citizens. Whereas a robust state uses local identities, local capacities, and local institutions to promote its development, a fragile state’s formal governing structures undermine all of these indigenous assets. As a consequence, a weak state cannot leverage its people’s histories and customs to construct effective formal institutions with wide legitimacy; nor can it draw on the social capital embedded in cohesive groups to facilitate economic, political, and social intercourse; and nor is it able to employ the traditional governing capacities of its citizens to run the affairs of state. The sociopolitical, geographical, and economic problems that typically lie at the root of state dysfunction are usually systemic in nature and complicate all efforts to reform governments and economies.

The political identity fragmentation that is a hallmark of fragile states directly impinges on their ability to foster the positive institutional environment necessary to encourage productive economic, political, and social behavior. In the early stages of development, when formal governing institutions are typically feeble, states must depend on the resilience of their societies to police members’ behavior, to lower the cost of various transactions between members, and to encourage the security of property. Whereas many cohesive groups of people with long common histories have developed sophisticated political, economic, and societal systems that maintain stability and foster economic progress, divided populations have no such mechanisms. Such societies suffer from severe shortages of trust – a prerequisite for any economic and political development. Democratic systems cannot function without trust; where there is little trust, there is, for instance, little incentive to accept the results of elections. Prosperous economies likewise depend upon a certain level of trust, which is a key ingredient in all but the briefest of commercial transactions.

The state in fragile countries is so weak because its societal roots are extremely shallow. Imported state structures and laws have little relevance for populations whose own institutions, norms, and systems of governance are deeply embedded in centuries of common history and intricate social relationships. A state that ignores indigenous capacities for institution building undermines the ability of its citizens to manage their own affairs – and reinforces a dependency on outsiders.

The very nature of the formal state in many fragile states frequently exacerbates their problems. Overly Westernized legal, governance, and education systems preclude local communities from taking advantage of their own resources, capacities, and social networks and create unnecessary conflict between formal and informal institutions. Highly centralized governing structures in countries where formal state bodies remain ineffective and where alternative sources of income remain few forces groups to compete for scarce state resources, accentuating political identity fragmentation in the process. Society in such environments becomes obsessed by this conflict, not with generating wealth or increasing national prestige.

The deadly combination of weak social cohesion and feeble state institutions (in some cases complicated by difficult political geographies and a lack of a necessary critical mass of human
resources and market size) creates problems that are not amenable to the types of solutions – such as more aid, competitive elections, and economic reform – typically advocated by the international community. Sprawling countries with diverse populations, such as the Democratic Republic of the Congo (DRC) and Sudan, are unlikely to ever produce stable regimes unless they decentralize far more authority to their regions and find a way to take advantage of local populations’ indigenous capacity for institution building. These countries’ national leaders have little incentive to serve distant areas populated by disparate groups because the leaders view these groups more as competitors for state power than as compatriots. The inability of central governments to project authority much beyond their capital cities – due to thin road networks, limited administrative resources, and weak nationwide societal bonds – further reduces the capacity of centralized states in large countries to serve their populations. But even in more compact countries there is a need to find ways to take advantage of indigenous capacities – and narrow the gap between informal and formal institutions.

Rethinking international assistance

Most Western policymakers and practitioners today pay lip service to the idea that states will not prosper unless they are built by local people using local resources, but the great majority of development projects continue to be implemented with inadequate attention to the local social, cultural, and institutional context. By not seeking to better integrate indigenous institutions into the formal state – and thereby precluding the evolution of any organic process of reform led by local communities and driven by local resources – the imported, generic model of state-building has in fact perpetuated the most artificial aspects of postcolonial states, preventing them from developing real ties to their own citizens. Such an approach exacerbates existing ethnic, religious, and tribal divisions; encourages an unhealthy dependency on foreign aid; undermines whatever governing capacities local peoples have developed on their own; and torpedoes the chances of fragile states ever becoming self-sufficient.

States cannot be made to work from the outside. International assistance may be necessary but it is never sufficient to fix fragile states. Instead of seeking to impose a Western-style blueprint unsuitable for local conditions, international action should be first and foremost about encouraging the creation of governing institutions that better leverage or help form the cohesive societies necessary to promote development on their own. States work effectively when they are a logical reflection of their underlying sociopolitical, historical, geographical, human resource, and economic environments, and when they are deeply integrated with the societies they purport to represent, able to harness the informal institutions and loyalties of their citizens.

Indeed, it is not coincidence that the most successful countries in Africa and the Middle East – Botswana, Somaliland, the United Arab Emirates, and Kuwait – are all built upon traditional identities and institutions accepted by the great majority of their citizens. (Cohesive societies, it may be noted, are also able to escape the “resource curse” that seems to afflict all other developing countries.) In contrast, countries whose governments are the least dependent on their indigenous social structures – such as Nigeria, the DRC, Somalia, and Syria – are much more likely to have corrupt officials, illegitimate states, and ineffective systems of governance.

The key to fixing fragile states is, therefore, to deeply enmesh government within society. People in Africa, the Middle East, Latin America, Central Asia, and elsewhere have enormous political, socioeconomic, and cultural resources built up over centuries that can serve as the foundation for political, economic, and social development. What these people and these countries need are state models and structures that can be adapted to take advantage of those resources. Foreign assistance needs to complement and reinforce local capacities and institutions and be disciplined enough to avoid undermining or warping locally driven arrangements, which is all too common today, especially with the tendency of so many international programs to focus on financial aid targets, poverty reduction targets, and the importation of generic and typically centralized state models.
Such an approach would emphasize institutional changes that foster more decentralization, greater integration of traditional norms into state institutions, a stronger focus on security, greater accountability and the rule of law, and a stronger sense of unity.

Building unity among disparate peoples at both the national and local levels needs to be a major focus of development. Ghana, one of the more cohesive countries in Africa, has actively promoted national integration by investing in infrastructure, education, and health in the poorer northern areas; by supporting the study, teaching, and use in television and radio of all major indigenous languages; by prohibiting the formation of political parties based on ethnicity, religion or region; and by maintaining the ethnoregional balance in the political sphere. Burundi’s The kind of consociational government introduced in Burundi offers a variety of opportunities to build coalitions and to reduce tensions by lessening or eliminating real or perceived imbalances in representation in cabinets, civil services, legislatures, and the military (Kenya was urged to take similar steps in the wake of its 2007-08 election turmoil). Similarly, apportioning the profits from natural resources in a fair and transparent manner, ensuring that social spending is impartially distributed (something the international community rarely considers even if it is the source of the funds), and reducing economic inequities between rival groups would dispel some of the potential for friction in divided polities.

The international community should also promote and fund programs that create stronger social and cultural bonds across groups, that institutionalize cooperation, and that promote reconciliation where there has been a history of intergroup hostility. Fostering strong “we” feelings through various educational, sports, and cultural programs can foster complementary or multiple cultural identities that strengthen national bonds, diminishing intergroup frictions in the process. South Africa, for example, has creatively used sports since the end of the apartheid era to unite its fissiparous peoples. Programs designed to reconcile long-festering intergroup wounds, such as South Africa’s Truth and Reconciliation Commission and reconciliation programs in Burundi, have proved valuable in many countries.

In order to better integrate the state with the societies it purports to represent, far more emphasis must be placed on seeking locally appropriate solutions for problems of governance, land and resource management, and knowledge transfer if development is ever going to become locally propelled and thus sustainable. Certainly, no community that has successfully developed has depended as heavily on foreign resources, foreign political models, foreign languages, and foreign laws as fragile states typically do today.

States will work better if they are structured around cohesive population groups able to capitalize on their common interests and affinities. In some cases, government (and its authority, financial resources, and systems of accountability) should be decentralized around cohesive identity groups, such as the Kurds in Iraq, the Isaaq in Somaliland, and the Aymara in Bolivia. In large, sprawling countries such as the DRC and Sudan, locally driven models of development are more likely to succeed than state-based models, especially if gains within local arenas are extended over time both horizontally to other localities and vertically to higher-level government bodies. A locally based model would emphasize the construction of a series of competent city-based provincial bureaucracies built around relatively cohesive populations and based upon locally accepted institutions rather than trying to build a robust national government. It would also ensure that local communities were not held hostage to the dysfunctions of a national government. Focusing aid on these “pockets of opportunity,” would be more effective in the short-term – and encourage other areas to improve through competition in the medium term.

Where states are unable on their own to create and sustain some of the capacities necessary for them to promote stability and development, outside assistance might be more helpful if it was directed at supplementing capacity rather than providing more cash or technical assistance. Greatly strengthened regional organizations, foreign states, and even corporations all have a role to play here.
Multinational companies (MNCs) have been at the forefront of efforts to combat AIDS, reduce the incidence of malaria, and raise educational standards in many developing countries. This role could be extended further by mandating some MNCs to provide security and education, health, and infrastructure improvements to local citizens in areas where those companies prospect for natural resources if a weak state is unable to do so. In such cases, contracts would ensure a steady flow of royalties to the government while directing corporations – which typically have much greater administrative capacity than most fragile states – to tame the lawless areas around major mining sites and to ensure that people living nearby reap the benefits of their geography. In these cases, large firms with excellent labor and community relations reputations would be invited to participate in public, transparent bidding processes, and the winning firms would then be monitored by domestic and international oversight committees to make sure it did not abuse its position.

Dramatic change – including abrupt moves to fully competitive elections – can be highly explosive in fragile states, leading to instability that severely undermines the whole reform agenda. The example of Iraq springs readily to mind, but it is by no mean the only instance of an overhasty and ill-considered reform strategy. Many internationally mandated reform efforts, especially those that emphasize economic reform with little regard for the political consequences, have inadvertently undermined social cohesion and security. Therefore, instead of trying to sequence reforms in a specific order, efforts to tackle state fragility should introduce reforms gradually and incrementally, in a way that does not threaten a society’s fragile social bonds. The aim should be to create an iterative and self-sustaining process of change that seeps through a system, affecting society and the state on many levels and transforming their relationship over time. Such an approach would root the state more firmly in society and hold elites more accountable to their populations. Democracy is far more likely to take hold where it is introduced steadily and advances on many fronts; hasty efforts to introduce elections on tight schedules, even when generously funded by the international community (as in the DRC in 2008), are more likely to tear a fragile society apart than to dramatically improve governance, especially in the short term.

Initiatives that improve the fiscal relationship between governments and their peoples – such as increasing the transparency and conduct of budget-making procedures (e.g., the Extractive Industries Transparency Initiative), bolstering the capacity of watchdog NGOs, boosting the proportion of revenues coming from taxes – all promise to make leaders more attentive to their citizens.

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Liberia: rebuilding for growth and development

Liberia is a case study both of Africa’s terrible tragedy and for the recent emergence of hope. For the past two decades, the world came to know Liberia as a land of political comedy, widespread corruption and unimaginable brutality. Liberia became the strange footage that flickered on television screens with terrible images of savagery. The Liberian people became refugees and fled to all corners of the globe for shelter. It was a period of darkness and insanity. But fortunately, things have finally begun to change.

Conflict and recovery

The origins of the Liberian conflict can be traced back to various forms of exclusion and marginalization which have characterized the country for most of its existence. The founding constitution was designed for the needs of the settler population, which subjugated the indigenous people for over a century. Land and property rights of the majority of Liberians were severely limited. Political power was concentrated essentially in the capital city of
Monrovia and primarily at the Presidency, with few checks and balances and little accountability. Most infrastructure and basic services were concentrated in Monrovia and a few other cities fuelling uneven development, a dualistic economy, and a major dichotomy between urban and rural areas. The political and economic elite controlled the country’s resources for their own use and to consolidate their power. These factors led to wide gaps in the distribution of the nation’s wealth and fuelled ethnic and class animosities and rivalries. These realities and the dependence of the nation on a small range of natural resources eventually sowed the seeds for the 1980 coup d'état and the subsequent 14-year violent conflict that began in 1989.

The economy began to unravel in the 1970s with the combination of the sharp increase in fuel prices and the decline in the prices of key export commodities. By the latter part of the decade all indicators pointed to a looming crisis. Unemployment, consumer prices, and food prices in particular all rose at alarming rates. The lack of a long term vision and the absence of an effective short term response to the onset of the economic stagnation coincided with political repression, social exclusion and corruption in high places, thus accelerated the gathering storm of crises that were to engulf the nation.

The April 1980 coup marked the beginning of Liberia’s steep descent into crisis. A decade of gross mismanagement and dictatorship led to the outbreak of civil war and fourteen years of chaos, plunder, and violence, which did not end until international peacekeepers finally ousted the government in 2003 and established the basis for stability, peaceful elections, and the beginning of recovery.

Liberia was decimated by the war. More than 270,000 people were killed, and 500,000 more were forced to flee their homes as either internally displaced persons or refugees in neighboring countries. Families were shattered; entire communities were uprooted; and social, political, economic, and governance systems were destroyed. Commercial and productive activities collapsed as warlords looted and vandalized the country. Economic output declined precipitously, with GDP per capita falling more than 85 percent between 1980 and 2003. Poverty increased sharply, and more than 75 percent of Liberians now live below the poverty line of $1 per day. The decline was across the board: agricultural production dropped as people fled their farms and the supporting infrastructures collapsed, mining and timber activities shut down, rubber plantations closed, manufacturing essentially stopped, and services ground to a halt.

Basic infrastructure was left in ruins. Roads were destroyed, and there was no electricity or piped water anywhere in the country for 15 years. Schools, hospitals, and clinics are badly damaged, and most government buildings are in shambles. There are less than 50 Liberian physicians to cover the nation’s public health needs, one for every 60,000 Liberians. Government finances collapsed in tandem with the economy. Total annual government revenues fell to less than US-$85 million a year between 2000 and 2005, translating into public spending per capita of only about US-$25, one of the lowest levels in the world. At the same time, years of mismanagement left a huge external debt burden, mostly as a result of large borrowing (and imprudent lending by the creditors) in the 1980s and steady accumulation of arrears since then. Liberia’s total debt is estimated at about US-$4.5 billion, equivalent to an astonishing 800 percent of GDP and 3,000 percent of exports.

The economy finally stabilized and began to rebound in 2004 after the ouster of the previous government and the signing of the Accra Peace Accords. Following the elections in late 2005 and the inauguration of the new government, the pace of economic recovery accelerated. The signs of recovery are clear: storefronts are newly painted, restocked, and open for business; families are repairing homes; trucks are lining up at building supply stores for cement, gravel, and tools; road and port traffic have increased markedly; and construction projects are sprouting throughout the country. Liberia is on the rebound.
The reconstruction and development framework

The new government of President Ellen Johnson Sirleaf faced the daunting task of rebuilding Liberia from the ashes of the war. It recognized that to be successful, it would need to implement policies aimed at both political stability and economic recovery that were mutually reinforcing, and that to sustain development over time, it would have to rebuild institutions and invest in human capacity.

Crucially, for Liberia to be successful it cannot simply recreate the economic and political structures of the past that led to widespread income disparities, economic and political marginalization, and deep social cleavages. It must create much greater economic and political opportunities for all Liberians, not just for a small elite class, and ensure that the benefits from growth are spread much more equitably throughout the population. It must decentralize political structures, provide more political power to the regions and districts, build transparency and accountability into government decision-making, and create stronger systems of checks and balances across all three branches of government.

Dr. Amos Sawyer, a former interim President of Liberia and one of the country’s leading political analysts, makes the argument this way:

“Democracy [and development] have seldom flourished without evolving through processes of contestation [and cooperation] among a people themselves. Even when imposed from outside, [they] must be sustained by empowered citizens. Empowerment of those who have not had opportunities or cannot imagine being in control of their own destiny is the greatest challenge – but the surest path to success – in the quest for democracy and development in Liberia...A major question for Africans generally and Liberians in particular is how to establish governance [political, economic, social] arrangements that build on the capabilities of local people and advance their prospects of working together to build democracy and attain development from the bottom up.”

Thus, Liberia’s basic economic challenge has three dimensions. It must (1) quickly restore rapid growth, (2) achieve a much better distribution of the benefits from growth to overcome the disparities of the past, and (3) make equitable growth sustainable over time. It has designed its strategy to achieve these goals around a framework of four basic pillars.

1. Expanding peace and security. Without peace and security, there will be little new investment, economic rebound, or job creation, which in turn will undermine stability and threaten a return to conflict. Since the ouster of the previous regime in 2003, a force of approximately 15,000 UN peacekeepers – the second largest such force in the world – have done an outstanding job of maintaining peace, supporting two rounds of successful elections, and helping establish the foundation for Liberia’s recovery. Going forward, the government is building new security and police forces that are sufficiently strong to maintain peace and security, but that remain firmly under democratic civilian control. It has deactivated 17,000 members of the old security forces, disarmed more than 75,000 ex-combatants and placed them in reintegration programs, and initiated the process of recruiting and training new professional security forces.

2. Revitalizing economic activity. The government has begun to put its financial house in order by strengthening both government budget operations and central bank functions. It balanced its budget in just four months, and moved to a cash-based budget in which all expenditures are approved by a cash management committee. It pushed hard to improved tax compliance, especially on import tariffs. Partly as a result, government revenues have doubled in just 18 months.

In terms of productive sectors, a central aim is to quickly restore agricultural production, where the majority of Liberians are employed. To jump-start agriculture from years of neglect, the government distributed large amounts of seeds, tools, and fertilizer, and re-established research and extension institutions. In addition, it will be critical to reinvigorate the natural
resource-based activities that were once the engines of Liberia’s economy – rubber, timber, mining and cash crops – and ensure that the gains are much more equitably distributed. The keys will be negotiating fair concession agreements; ensuring the financial flows are transparent; and using the gains to build infrastructures, create economic opportunities in areas surrounding the concessions, and deliver more effective health and education services throughout the country. The government negotiated a US-$1.5 billion iron ore concession agreement with Arcelor Mittal Steel; re-negotiating its agreement with Firestone Rubber Company; negotiated a US-$2.6 billion iron ore concession with China Union; concluded a US-$112 million energy contract with Buchanan Renewable Energy; and is initiating negotiations on a variety of other concession agreements. Over the medium term, by opening the economy to trade and reducing barriers to investment, the government hopes to attract new investments in manufacturing and services so that Liberia can export labor-intensive products to the region and the world.

3. Strengthening governance and the rule of law. Liberia’s institutions were left in ruins by the war, and they must be rebuilt nearly from scratch. The government is in the process of building a more professional and better paid civil service. It has introduced a variety of systems to guard against corruption and to ensure transparency and accountability, including the cash management system, a new procurement and concessions commission, and a requirement that all Cabinet Ministers and other senior officials of government declare their assets. It quickly dropped 17,000 ghost workers from the payroll, and is in the process of rebuilding a smaller, more professional, and better compensated civil service. It is strengthening both parliament and the judiciary to move away from the system of supreme powers in the executive as in the past. It also is beginning to build capacity at the county and district levels to move over time to a more decentralized power structure.

4. Rebuilding infrastructure and providing basic services. The war brought widespread destruction of roads, bridges, power supplies, water, schools, clinics, and government buildings throughout the country. Rebuilding these infrastructures is central to Liberia’s recovery. Roads in particular are essential to supporting peace, reinvigorating agriculture and natural resource based industries, creating jobs, ensuring access to health and education services, strengthening local and district governments, and creating economic opportunities for those left out in the past. The government has started to rehabilitate some key roads with the support of the donor community, but the process is difficult. Donors moved away from road projects in the early 1990s, so finding adequate financing for these purposes has been a particular challenge. Nevertheless with donor support the government was able to turn on electric power and piped water to parts of Monrovia for the first time in 15 years. Health and education services need to be rebuilt for their immediate benefits to the people, but also as the foundation for sustained growth and development over time. Schools and clinics are being rebuilt. The government eliminated school fees, and partly as a result primary school enrollment rates shot up by 50 percent in one year.

Importantly, actions in each of these four pillars are mutually reinforcing. National security is a pre-requisite for economic progress with substantial impact on poverty. At the same time, peace and national security will be severely threatened if chronic poverty continues to rise. Sustainable peace will largely depend upon the ability to deliver basic social services throughout the country. Similarly, without basic infrastructure the private investments needed to fuel growth will not be forthcoming. Governance and the rule of law provide the institutional base for strong economic performance and poverty alleviation, and the justice that is needed to ensure that grievances are settled through dialogue within the political system, as opposed to violence.

The initial signs of Liberia’s recovery are encouraging. Economic growth for 2006 reached 7.8 percent, and growth accelerated beyond 9 percent in 2007, before declining to approximately 6% in 2008 due to the economic meltdown. Infrastructures are being rebuilt, jobs are being
created, kids are back in school, and clinics are being reopened. There is a long way to go, but Liberia is finally on the path to recovery, accountability, and development.

Consolidating the progress across Africa

The recent changes in Liberia and other countries in Sub-Saharan Africa are a welcome reversal of the near universal bad news from the past, and provide hope for a brighter future. The fact that the changes are rooted in important historical and structural changes, and not simply high commodity prices, gives reason to believe that they can be sustained, at least in many countries, and that other countries across the continent can join in the progress.

But the emerging success over the last decade by no means guarantees future success. There is considerable risk that these countries might slide back, sparked by violence, opposition from the small elite minority that lose from these changes, or adverse economic shocks. There is no room for complacency. The governments of these countries and the international community must both take steps to consolidate the progress to date, sustain it going forward, ensure the economic gains are more equitably distributed, and spread the beginnings of progress to other countries in the region.

The key responsibility lies with the leadership and the citizens of African countries themselves. Governments must establish much more transparent and accountable systems of governance, with timely, open, and audited financial accounts; strong judicial systems; a free press with open public discourse; a full embrace of the Extractive Industries Transparency Initiative and similar instruments; and a responsible, professional, and well-compensated civil service. They must also take bold steps to diversify their economies and create new economic opportunities for the poor, including removing unnecessary regulations and red tape, building infrastructure that provides opportunities for rural development, and facilitating the development of competitive labor-intensive manufacturers. In Paul Collier's language, these countries should aggressively take all possible steps to escape the governance and natural resource dependence traps.

The international community can support these countries in several ways. The industrialized countries can and should open their borders to much greater trade from low income countries. If for political reasons they cannot reduce trade barriers to all developing countries, they should begin by focusing first on the countries that are taking major steps to escape poverty and have a chance to stimulate labor-intensive exports. Foreign assistance should be focused primarily on countries that have moved to more accountable and transparent governance and implemented strong economic policies. Many of these countries can absorb much larger aid flows, for example through building basic infrastructures to support private sector growth. And in countries with stronger governance systems, the donors should give the recipients much greater authority over where the funds are spent.

Finally, for low-income countries recently emerging from conflict, maintaining security is a top concern. The international community should support a standing, professionally trained African military force that can be called in on short notice when necessary rather than the current approach as assembling ad-hoc international forces when the need arises.

The good news out of Africa is that many countries across the continent are finally beginning to emerge after thirty years of misrule and economic stagnation. Democracy, stronger economic management, and growth are slowly replacing dictatorship, mismanagement and decline. This is the best opportunity in many years for these countries to escape poverty. But continued progress is far from assured. African governments and the international community must seize this opportunity to accelerate the process towards stronger, more accountable governments and economic revival. The people of Africa want and deserve nothing less.
There is of course no universally applicable formula how to turn disenfranchised populations into stakeholders of a process of state-building. A natural first step is that such a process should start from the identification of the main obstacles to state-building, such as outstanding legal settlements of past conflicts or ethnic and religious tensions. Then, country-specific processes addressing the main obstacles need to be designed and implemented. In general, these processes need to ensure that internal stakeholders acknowledge each other’s claims within a framework of politics and the rule of law rather than violence, for instance in the form of institutional arrangements that are moderated by the United Nations.

Obviously, sequencing of activities is crucial. Even before the above steps can be taken, (some) state authority needs to be established. This is a decisive step and wrong decisions at this stage are very difficult to be corrected later in the process. In these circumstances, donor governments or intervening external military forces typically play a central role. In fragile states, there is no legitimate partner for reconciliation negotiations to begin with. Rather, this partner (partly) is being legitimized by becoming the partner of external stakeholders. The sequencing of (1) establishing an interim authority, (2) holding a general assembly with the participation of all internal groups, (3) the subsequent ratification of a new constitution, and (4) the first democratic elections has been tried in Afghanistan but still has to prove its effectiveness in establishing a sovereign state.

On top of their very influential role in the initial phase of state-building, donors should later prioritize activities targeted at state-building such as the provision of an effective public service, police, and military forces, instead of mainly delivering humanitarian assistance or development projects. While ownership is important in delivering development assistance in general, it is even more so in fragile states, where building up “ownership” in a much wider sense (rather than ownership of a single project) is required.

With regard to the private sector, much more action is needed to encourage private firms to stabilize fragile environments. This holds in particular for activities in the resource sector, where a lack of legitimized government authority can easily sustain corrupt regimes and hence undermine state-building. Possibly, the establishment of a supra-national agency or institution with a special mandate to focus on the role of private companies particularly in fragile environments would give such efforts the needed impetus. Alternatively, the International Court of Justice could be provided with the resources to examine this role. Existing initiatives, such as EITI, the OECD code of conduct for multinational companies or single UN enquiries so far appear to remain too patchy to have a real impact on business activities in fragile state environments.
Democracy and Development

The Challenges

Rich countries tend to be more democratic than poor countries. Understanding the link between democracy and development could be crucial for policy making at the national and international level. In addition to giving citizens more political freedoms, democracies are on average less likely to be at war with each other than dictatorships.

A lack of democratic governance structures could be an obstacle to sustainable development. Conversely, persistent poverty and a lack of economic development could hamper the establishment of democracy.

For policy purposes, it is important to understand the direction of causality between democracy and development. Does development lead to democracy, as envisaged by various multilateral development organizations?

Or does democracy lead to development, as implied in the economic transition plans of Eastern and Central Europe? Or does causality run both ways? What are the implications for foreign aid, foreign direct investment, international trade negotiations, business strategies, the role of NGOs, and international institution-building?

What sort of democratic institutions are conducive to economic development and political freedom? How should the will of the majority be balanced by protection of minority rights? How should the activities of special interest groups be channeled through the political process so as to promote an adequate balance between political freedom and diversity?

Is there a general strategy for policy makers that would help promote peace and prosperity on a global scale? What is the role of business in this context? Does international investment and trade promote democratic change or does it stabilize dictatorial regimes? Is development cooperation with local NGOs an alternative strategy to undermine non-democratic regimes or does it lead to dictatorial backlash?
Proposed Solutions

Sean Cleary
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Democracy and development: attempt at solutions

1. Clarify development

Democracy is defined in the Oxford English Dictionary as “government by the people; that form of government in which the sovereign power resides in the people and is exercised either directly by them or by officers elected by them.” Abraham Lincoln famously described it as “government of the people, for the people, by the people.”

Development is defined by the OECD as “gradual unfolding, fuller working out; growth, evolution; well grown state, state of advancement; product; more elaborate form...” The essence of this definition is thus “evolution to a more advanced state.”

When we move beyond the abstract, problems arise. The concept of development is employed, in the technical literature and by institutions charged to advance it, in a wholly imprecise way. We cannot claim to have a coherent theory of development, let alone successfully to have implemented it. So what is the development we are considering?

Economic development: For many years development was thought of as economic development. Many would still consider the concepts equivalent. “Sustained increase in the economic standard of living of a country’s population, normally accomplished by increasing its stocks of physical and human capital and improving its technology” (Deardorff’s Glossary of International Economics).

A developed country is “[a] country whose per capita income is high by world standards;” and a developing country is “[a] country whose per capita income is low by world standards; same as less developed country. As usually used, it does not necessarily connote that the country’s income is rising.” (Deardorff)

Human development: But economic advancement is not the only meaning of the word development: For the purposes of its Human Development Index, the United Nations Development Programme defines and assesses three aspects of human development: life expectancy and health; knowledge; and standard of living.

Poverty reduction: The World Bank group – whose World Development Reports are comprehensive essays on global development – describes itself as “a vital source of financial and technical assistance to developing countries...[through]...two unique development institutions... – the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA)” – both of which aim to reduce poverty, (i) the IBRD “by promoting sustainable development through loans, guarantees, risk management products, and analytical and advisory services in middle-income and creditworthy poorer countries; and (ii) the IDA “by providing interest-free credits and grants for programs that boost economic growth, reduce inequalities and improve people’s living conditions” in those still poorer, or less creditworthy. The Bank’s current developmental focus is therefore on poverty reduction based on national Poverty Reduction Strategy Papers.

Where to? Wealth cannot be the sole measure of development! Measures of economic performance based on GDP are inadequate in an inter-dependent world. The relevance of GDP as a measure of societal well-being, or of economic, environmental and social sustainability, is also questionable. In 2008, French Prime Minister Nicholas Sarkozy created a Commission on the Measurement of Economic Performance and Social Progress, which includes Nobel laureates Amartya Sen and Joseph Stiglitz. Professor Sen also contributed to
the 2004 report *Human Security Now* and has prepared a set of indicators to complement GDP.

2. Eradicate absolute poverty

The *United Nations Millennium Declaration* was adopted in September 2000. In it, UN member states asserted shared values of freedom, equality, solidarity, tolerance, respect for nature, and shared responsibility, and committed to a global partnership to reduce extreme poverty by 2015 through the *Millennium Development Goals (MDGs)*:

- To halve the proportion of the world’s people whose income is less than US-$1/day and the proportion of people who suffer from hunger and, to halve the proportion of people who are unable to reach or to afford safe drinking water.
- To ensure that children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and that girls and boys will have equal access to all levels of education.
- To have reduced maternal mortality by three quarters, and under-five child mortality by two thirds, of their current rates.
- To have halted, and begun to reverse, the spread of HIV/AIDS, the scourge of malaria and other major diseases that afflict humanity.
- To provide special assistance to children orphaned by HIV/AIDS.

By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers as proposed in the “Cities Without Slums” initiative.

In 2005, Jeffrey Sachs argued that the aim of the MDG’s was (Jeffrey D. Sachs, *The end of poverty: economic possibilities for our time*, Penguin, 2005):

*To transfer all the world’s extreme poor (1.1 billion people living below US-$1.08/day – with an average income of US-$0.77/day) to an income level sufficient to meet their basic needs.*

Sachs proposed a simple approach:

- Identify the *basic needs*.
- Identify the needs that are currently not met, by country.
- Calculate the cost of meeting these needs through investment, with provision for population growth.
- Calculate the portion of the investment that can be financed by each less-developed country.
- Calculate the financing gap.
- Assess what contributions each donor country can make on the basis of its national income and allocate accordingly.

Donor contributions would need to be large enough to be effective; sustainable and predictable over 2005–2015, and harmonised with the national *Poverty Reduction Strategies* of the recipients. His team had concluded that the net ODA needs were: US-$135 billion (0.44% of GDP) in 2006; US-$152 billion (0.46% of GDP) in 2010; and US-$195 billion (0.54% of GDP) in 2015. This meant an increase in ODA of US-$70 billion in 2006, US-$87 billion in 2010, and US-$130 billion in 2015. (At the Conference on Financing for Development, Monterrey, Mexico, 18–22 March 2002, the Developed Countries committed, in what has become known as the Monterrey Consensus, to increase their ODA to LDCs to 0.7 per cent of GDP).

3. Don’t seek for panaceas; understand the role of incentives

Bill Easterly has argued that most development economics paradigms since 1945 were based on a search for *panaceas* or “silver bullets” and accordingly misplaced.
Easterly debunks (i) the Harrod-Domar model: “[T]here is no stable short-run link between investment and growth” (William Easterly, The elusive quest for growth: economists’ adventures and misadventures in the tropics, MIT Press, 2002, p. 44); (ii) the emphasis on education: “the growth in output per worker [despite an explosion in education] was 3% in the 1960s, 2.5% in the 1970s; –0.5% in the 1980s, and 0% in the 1990s” (Easterly, 2002, p. 74); (iii) a focus on population control: “there is no association… between success at slowing population growth and success at raising per capita growth” (Easterly, 2002, p. 92), (iv) “adjustment with growth” programmes: despite some successes, “[a]djustment lending did not create the right incentives for either the lenders or the recipients” (Easterly, 2002, p. 103); “[t]here was too little adjustment, too little growth and too little scrutiny of the results.” (Easterly 2002, p. 115); and (v) debt forgiveness: “…two decades of debt relief failed to prevent negative growth in [most] HIPCs” (Easterly, 2002, p. 129); “Debt relief is futile for countries with unchanged government behaviour…to avoid the incentive to borrow more, the debt relief programme has to attempt to establish a credible policy that debt relief will never again be offered.” (Easterly, 2002, pp. 136–137).

He suggests that aid policies are, in part, accountable for this failure.

“As countries’ incomes rise because of their favourable policies for economic growth, aid should increase in matching fashion. This is the opposite of what happens in actuality…giving a negative incentive against getting richer” (Easterly, 2002, p. 119).

Easterly’s core contribution is his emphasis on the importance of incentives! Governments can frustrate growth: Inflation, high taxes, supply-side controls and regulations inhibiting trade and investment restrictions all inhibit citizens’ ability to better themselves. Political regulation of the economy promotes privilege and corruption. Politically-connected people become wealthier and society becomes poorer.

- Effective institutions must promote market-based incentives to foster savings, honesty, trust, industry, creativity and responsibility.
- Education is optimized when students see future income possibilities from the knowledge and skills they acquire.
- The acquisition, generation and dissemination of knowledge enables increasing returns to capital invested, as technological adoption translates into higher productivity, enabling sustained growth.

Drawing on Schumpeter’s concept of creative destruction, he also emphasizes the importance of innovation.

Replacing existing means with new ones is necessary to achieve rising standards of living, although some will always be negatively affected in the short run, by changes in the competitive landscape.

Growth flows directly from the adoption of new technologies and the postponement of consumption which is needed to introduce them.

4. Enable institutional (and human) capacity

If less-developed countries are to advance on a sustainable path to economic and social development, they need much better domestic institutional capacity.

If government is to place its country on a sustainable path to economic and social development, it needs the institutional capacity to (i) ensure the safety of its citizens and foreign investors, (ii) manage a growing economy, and (iii) deliver the social services needed both to promote domestic social equity and build a globally competitive workforce.

Political, macro-economic, monetary (and corporate) governance frame the context within which development takes place; effective public health care and education build the human capital to sustain it; efficient water, power, transport and ICT infrastructures underpin economic growth; and governments must create environments that facilitate domestic and
foreign investment, and appropriate public-private partnerships to enable it. None of this is possible unless the country has, and continues to improve, the [appropriate] institutional capacity."

The East Asian economic miracle (World Bank, The East Asian miracle, 1993) was achieved without much by way of civil liberties or political freedoms. Significant investment in social opportunities and economic facilities was at the heart of the strategy. There were four components:

- Macroeconomic stability, ensured by moderate inflation and high savings
- Prudent social investment in basic housing, universal access to primary and then secondary education and training, and effective primary health care
- Structural reforms, focused on encouraging business development and entrepreneurship in conditions of market discipline, facilitated by financial sector liberalization in the context of what was seen to be effective regulation; and
- Export orientation, supported by information-sharing facilitated by government agencies, to identify lucrative export niches and effect cooperation within industry clusters, to strengthen export competitiveness (cf. Michael E. Porter, The competitive advantage of nations, The Free Press, 1990).

Government capacity was essential for, and lay at the heart of, all these actions.

5. Level the playing field

Less-developed countries do not enjoy level playing fields! Agricultural subsidies and tariffs and non-tariff trade barriers frustrate their integration into the global economy. High – and in some cases, unsustainable – levels of debt and debt-service, despite the HIPC debt-retirement programme, divert scarce savings and fiscal revenues from investment in economic and social infrastructure. The volatility of global short-term portfolio capital flows plays havoc with exchange rates and causes imbalances on the Balance of Payments of well-run LDCs. The financial crisis and global economic contraction of 2008–2009 is having a devastating impact, pushing growth rates below the rate of population increase.

Those countries with superior human capital and well developed institutional capacity can find ways around these challenges. The least developed countries cannot do this.

6. Create freedom if development is to be sustainable

Amartya Sen argues that five freedoms – political freedoms (political and civil rights), economic facilities (the use of economic resources for consumption, production and exchange), social opportunities (education and health care), transparency guarantees (including the right to disclosure); and protective security (social safety nets) – are central to the achievement of development:

Although he defines development as freedom and argues for the intrinsic, instrumental and constructive virtues of democracy (Sen, 1999, p. 153), he concludes that there is no causal relation (or conflict) between political freedoms and economic performance, “[s]ystematic empirical studies give no real support to the claim that there is a general conflict between political freedoms and economic performance. … On balance the hypothesis that there is no relation between them in either direction is hard to reject” (Sen, 1999, p. 150).

Rodrik (2006) concludes that particular institutional design features are not causally linked to growth: “[T]he cross-national literature has been unable to establish a strong causal link between any particular design feature of institutions and economic growth. We know that growth happens when investors feel secure, but we have no idea what specific institutional blueprints will make them feel more secure in a given context. The literature gives us no hint as to what the right levers are (Rodrik, 2006, p. 11).
More robustly, Glaeser et al. (Edward L. Glaeser, Rafael La Porta, Florencio Lopez-de-Silane, and Andrei Shleifer, Do institutions cause growth? NBER working paper no. 10568, June, 2004) conclude that “economic growth and human capital accumulation cause institutional improvement, rather than the other way around.” “[I]nstitutions have only a second order effect on economic performance. The first order effect comes from human and social capital, which shape both institutional and productive capacities of a society.”

They note that while countries with high human capital in 1960 grew faster than countries with low human capital, constitutional rules, judicial independence and proportional representation do not predict the growth of income per capita, and argue that the economic success of East Asia “has been a consequence of good-for-growth dictators, not of institutions constraining them.”

The important insight emerges, however, from their two key conclusions: “…countries that emerge from poverty accumulate human and physical capital under dictatorships, and then, once they become richer, are increasingly likely to improve their institutions.”

Economic growth and social development cannot be sustained in an integrated, global knowledge-based economy in the absence of the freedoms that are prized by educated, skilled humans. If they are unable to express themselves at home, they vote with their feet.

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Acknowledging the immense diversity of countries with regard to historical, economic, political, and cultural factors, it is almost self-evident that there will be no one-size-fits-all solution for policy makers that would help promote peace and prosperity on a global scale, “anytime and anywhere, under any circumstances” (Jeanne Kirkpatrick).

But despite ongoing controversial academic debates, it is probably fair to say that a consensus view would emphasize that the degree of democracy in a particular country is shaped by its institutional framework and by its economic performance. This is not to deny that there may also be reverse causality, but the first order effects appear to run from institutions and economic performance to democracy. So these are the two principal avenues that policy makers could use to increase the degree of democracy.

If history is any guide, the evidence appears to suggests that counties which have achieved the status of a full democracy are (very) unlikely to revert to an autocratic regime. But according to the same logic, democracy is unlikely to last in poor countries which have not developed a set of deep institutions that are conducive for sustained growth. The focus of international policy makers should be on middle income countries, where the degree of democracy appears to be rather volatile, sometimes even in the presence of strong economic growth.

Placing effective constraints on executive authority appears to be the number one strategy if democracy is to consolidate and prosper in fragile middle income countries. This is not to deny that there are many open questions on the details and on the implementation of such a strategy, which may require country-specific answers. It would be essential to identify which parts of an institutional framework would matter most for a given country, conditional on the historical, political, cultural, and economic context.

A successful strategy will also have to redistribute political and economic power. This problem is acute in deeply divided societies, where ethnic fragmentation and the extraction of resource rents may dominate the political and economic decision making of the elites. Strong economic growth is probably necessary but not sufficient to overcome the institutional status quo, which may be the very reason for the absence of a sustainable path of development in the first place.
While it is fairly obvious that the prevailing type of institutions matter for the success of democracy, the type of economic growth may also matter. Pro-poor growth is much more likely to gather support for democracy compared to a growth regime where most benefits go into a few pockets only. This channel should be kept in mind by international policy makers when deciding on foreign aid. However, it would be important to recognize that (domestic) politics will greatly matter for economic outcomes, so both areas should never be considered in isolation.

Support for democracy by the international community will also depend on the geopolitical situation. Democracies that developed after the demise of the Former Soviet Union apparently had a much better start than democracies that emerged during the Cold War. It is an open question for debate whether the ongoing financial crisis will rebalance contemporary world politics towards a model of authoritarian capitalism, or whether economic forces will finally generate a change towards democracy in fast-growing authoritarian societies.

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The dichotomy between democracy and development is a false one. Far from being discrete phenomena, the democratization of a society and the development of an economy are in fact two facets of a much larger transformative process: modernization.

By “modernization” I mean a process that transfigures not just the political and economic life of a country but also familial, commercial, technological, intellectual, and cultural values, behaviors, and relationships. Modernization is a long – multigenerational – process that rarely occurs in an orderly, bloodless fashion. Progress on different fronts (economic, political, cultural, and so forth) is uneven, bedeviled by setbacks, and difficult to measure. Yet, once started, progress is hard to arrest if a country possesses the requisite degree of cohesion among its elite and within its broader population. Such cohesion, however, is often lacking in developing countries today – a deficiency that explains much of their stagnation and instability.

The politics and economics of modernization

Modernization can take many forms, but typically politics plays a far greater role in the key take-off stages as a society lurches between competing agendas, ideologies, and concepts of the state. Economics comes to the forefront once a country reaches a consensus on the kind of state it wants to build and the core institutions and identity that will nurture and regulate that state. The development of a state, therefore, is crucially tied to its citizens’ ability to cooperate – both among themselves and in partnership with the state – in increasingly sophisticated ways. It needs to be firmly rooted in communities that possess strong social networks, durable shared loyalties, widely accepted institutions, and deep reservoirs of social capital.

The important role played by social cohesion in forging the national consensus necessary at early stages of this process explain why the non-Western countries that have modernized most successfully – Japan, China, Taiwan, and Korea – have all been built on the strong bonds that thousands of years of common social, economic, and political evolution have bequeathed them. These robust nations all have high levels of social capital, well-established informal mechanisms for working together, and deep reserves of group affinity that could be funneled toward national modernization missions. These have, in turn, produced increasingly prosperous and increasingly democratic societies and states. Democratization has not, of course, roared in like a spring tide; its advance has been halting and unsteady and has provoked strong resistance from entrenched regimes. But even China, with its highly authoritarian traditions and political system, has been forced to become far freer as its economy has advanced, its government more accountable to the demands of an increasingly autonomous society with rising expectations.
Outside Northeast Asia, the countries that have achieved the most progress have likewise been able to depend on the social cohesion and social capital of people with common backgrounds. The most successful countries in Africa, the Middle East, and Latin America – Botswana, Somaliland, Turkey, Kuwait, Chile, and Costa Rica – are all built upon common identities and institutions accepted by the great majority of their citizens. In contrast, countries with the most socially divisive populations – such as Nigeria, the Democratic Republic of the Congo (DRC), Somalia, Syria, Lebanon, Bolivia, and Guatemala – are much more likely to have corrupt officials, illegitimate states, and struggling economies with great income inequities. These latter states have made little progress toward building the kind of institutions that foster democratization and development.

Once a consensus on institutions and a shared mission has been forged, economics begins to play the dominant role in the modernization process, with businesses leading a process of market-driven change that eventually reaches every aspect of a country’s life. This process usually occurs slowly, with change seeping through a society gradually, often fueled by the demands of expanding companies and new taxpayers. Competition plays an important – and underappreciated – role here. When people try to meet customer needs and raise productivity, they change their outlooks on how to manage time, assess information, and judge their leaders. Growth feeds rising incomes and expectations, which in turn generate increasing demands on private firms and public service providers. Where a government must depend on taxes from local businesses and citizens, it, in turn, becomes more accountable and responsive to a population’s needs. The cycle feeds upon itself: progress generating confidence, profits yielding more investment, rising expectations forcing reform upon one sector after another. As Adam Smith wrote in The Wealth of Nations, “commerce and manufacturers gradually introduced order and good government and, with them, the liberty and security of individuals among the inhabitants of the country who had before lived . . . in a state of servile dependency upon their superiors.” The more compact the entity or region, the faster the transformation; in larger populations, such as in China and India, the ripples of development and democratization naturally take longer to spread.

**How to spur modernization**

Modernization – of which democratization and development are components – is a process of social change that needs to be strongly rooted in socially cohesive groups of people with common institutions. International efforts to spur development and democratization should thus focus on actions that are likely to reshape broad societal patterns rather than – as at present – on overly narrow goals such as competitive elections and economic policy reform and on rather crude instruments such as election monitoring and IMF loans.

**Unify disparate peoples**

As a start, international actors should emphasize measures that unify disparate peoples in divided states. This is especially important in countries where multiple identity groups are not geographically concentrated but are spread throughout the country, making it pointless to introduce federalism and other territorially based institutional arrangements. In such countries, programs should be adopted that create stronger social and cultural bonds across groups, that institutionalize cooperation, and that promote reconciliation where there has been a history of intergroup hostility.

Some states have found a unifying force – such as Swahili in Tanzania, a unique Islamic heritage in Senegal, a state-backed ideology in Syria, and a charismatic leader (Félix Houphouët-Boigny) in Côte d’Ivoire – to bridge their geographical, historical, and identity divides. But the unity based on such forces can prove fleeting, whereas the process of institutionalizing a sense of common identity and common formal structures can take generations. Thus, for instance, despite Houphouët-Boigny’s popularity in his day, Côte d’Ivoire descended into civil war in the years after his demise.
In states such as Syria containing combustible mixes of identity groups living side by side, formal bodies should be designed to institutionalize cross-group cooperation and to minimize the potential for ethnic, religious, tribal, or clan divisions sparking verbal or violent conflict that undermines the state. Instead of introducing the kinds of sweeping political and economic changes that many in the West claim to be the keys to improving the wellbeing of populations, divided countries need to create a secure and unified environment before introducing significant change. Iraq shows what can happen when cross-group trust completely breaks down; Bolivia, Pakistan, Azerbaijan, and Lebanon also stand as cautionary tales.

**Use local state models**

Building state institutions around local histories, values, and worldviews will catalyze the political consensus necessary to launch the modernization process. At present, however, the international community tends to recommend and support impersonal governing bodies in capital cities often distant – physically, culturally, and politically – from the great majority of the citizens they are meant to serve.

Countries need to look inward for their resources and institutional models and adopt political structures and processes that reflect the history, complexity, and particularity of their peoples and environment. Far too many postcolonial regimes have looked outward for their governance models and resources, becoming dependent on foreign aid and effectively guaranteeing that their domestic roots will always be too shallow to support them. Robust states and formal institutions can develop only when political and economic systems are constructed according to indigenous governance models, patterns of behavior, needs, realities, and resources.

This does not mean that conventional, Western political models have no relevance to non-Western societies, but it does mean that those models need to be adapted to accommodate local political, economic, and societal customs and conditions. Outside assistance should not focus on building centralized states with Western-style laws and a democracy defined solely in terms of regular elections, but on the promotion of capable, inclusive, participatory, responsive, and accountable governments no matter what form they take. Somaliland, Botswana, and the Arab emirate-states, for example, have sought to root their political systems within a traditional paradigm that leverages widely accepted norms of governance.

Far more emphasis must be placed on seeking locally appropriate solutions for problems of governance, land and resource management, and knowledge transfer if development and democratization are ever going to become locally propelled and thus sustainable. No society that has developed successfully developed has depended as heavily on foreign resources, foreign political models, foreign languages, and foreign laws as many developing countries typically do today.

**Construct states bottom-up**

In many cases, the best chance to promote the political consensus necessary for modernization will be to focus on building up local governments and tying them as closely as possible to their local communities. While in some cases (especially in rural areas and small cities) this may mean leveraging traditional identities and institutions, in the case of many large cities whose populations are diverse and increasingly divorced from their traditional roots, the best way to introduce accountability into state organs and take advantage of the communal social capital necessary to promote investment will be to structure governments around greatly empowered urban administrations.

While central governments (or, in some case, regional organizations) have important roles to play in ensuring a stable currency, promoting an extensive market for goods, constructing intercity transportation links, and setting basic banking, legal, health, and education standards, most state services that affect families and small companies are provided by local or district governments. They provide, for example, most education, health, and road construction
services, and may even play a major role in judicial, police, real estate, and corporate regulation and oversight.

Given that many developing countries are riven by identity, cultural, and linguistic differences, and that their different parts are weakly connected because of poor infrastructure, disadvantageous political geographies, and feeble administrative systems, locally driven models of government are more likely to succeed than top-down models. A locally based model would emphasize the construction of a series of competent city-based provincial bureaucracies built around relatively cohesive populations and based upon locally accepted institutions rather than trying to build a robust national government, especially in large countries such as the DRC and Sudan.

Establishing various forms of iterative accountability loops and decentralized democratic bodies such as oversight committees, deliberative forms of public participation, and traditional forms of consultation, can institutionalize processes whereby the state is tied more closely to society, thereby making it more legitimate, more accountable, more reflective of people’s needs, and more effective in the delivery of public services. Focusing on the iterative relationship on multiple fronts will strengthen civil society and the state-society relationship, making both democratization and development more likely.

**Introduce change gradually**

Seeing modernization as an organic, gradual, society-wide process of change instead of a series of discrete events and policy choices reveals myriad opportunities to render diplomatic and foreign assistance in more effective forms. For example, in states where elections and rapid economic restructuring may be detrimental to stability (such as in some post-conflict situations) or may be obstructed by elites (such as in many authoritarian countries), international policies could seek to foster broad social processes that will over time create a more democratic and developed entity. Promoting broad coalitions across disparate groups, integrating informal institutions into the formal governing mechanisms of the state, and decentralizing government so that it can better leverage local capacities for self-government will all help to create more legitimate states with stronger pro-modernization leaderships.

For too long, policymakers have analyzed the problems facing underdeveloped countries through the overly narrow, and thus distorting, lenses of “democratization” and “development.” One result has been a series of policies that do not address the greatest problems these states face. Another consequence has been the creation of artificial and counterproductive institutional divisions within the international aid community, with some organizations focusing on development, others on democratization – and all too few taking the kind of holistic approach that can actually foster the process of modernization.

A better understanding of the fundamental drivers of social change in developing countries is a prerequisite to formulating effective policies. To be sure, making political leaders more accountable and economic climates healthier are worthwhile goals, but those goals will remain elusive until the international community can help underdeveloped states develop cohesive polities, appropriate institutions, and stronger state-society ties.
Managing Marine Resources

The Challenges

Three quarters of the global marine fish stock are deemed fully exploited or overfished.

Consequently, fish stocks are declining worldwide and several fish stocks have already collapsed, further stocks will do the same in the near future.

Declining or collapsing fish stocks do not just imply the lost of economic benefits but imply the lost of livelihood for many people in developing countries.

Consequently, the global challenge is to come up with management approaches to sustain the global fish stock in the future without withdrawing the basic food for developing countries in the present.

Overfishing is driven by mismanagement. Approaches to overcome the common property problem are still rare. Consequently, the joined effort of the academic sector, the policy sector and the business sector is needed to challenge this problem. The academic sector has to come up with solutions regarding the allocation and design of property rights system, which have to be fitted to the various fish stocks. The policy sector has to come up with solutions regarding the introduction of such systems within their economic zones and with global agreements regarding the fish stocks in the open oceans. The business sector has to come up with solutions regarding the business opportunities of labeling sustainable fishing and of including sustainable farming of non-predatory fish within the global food provision.

Quelle: Froese and Pauly, ICES 2002
Proposed Solutions

Peter Dill

CEO, Deutsche See

I agree with the “Preliminary Solutions” proposed in your outline. In addition, I would like to add the following issues to the list.

1. Stop “discard”

Discarding already “caught fish” is one of the most urgent issues that needs to be addressed. About 25–30% of all catch is discarded according to estimates of various sources. This is especially relevant in EU waters and much less so for well managed fisheries like in Norway and Iceland where “Discard” is prohibited. Various methods can be applied, e.g., more selective fishing gear, change of the current EU quota system, a mandate to land all caught fish, etc.

2. Setting adequate quota oriented at long term sustainability, improving control mechanisms and apply appropriate sanctions.

The current quota setting procedure, especially within the EU, is more of a “political process” than oriented towards sustainably managing marine resources. In addition, the current control mechanisms are neither technologically up-to-date nor are sufficient resources applied. This also includes appropriate sanctions in case of violations. Sanctions are irrelevant if the related cost are not substantially higher than the market price of overfishing.

Rainer Froese

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Additions to the preliminary solutions

About 40% of global catches are not used for human consumption but rather reduced to fishmeal for animal feed, with typically poor protein-protein conversion-ratios. A solution is to reduce the overall amount of reduction fisheries and divert an increasing proportion to direct human consumption.

Reduction fisheries include many species that can be consumed directly by humans, such as sardines, anchovies, sprats, and mackerels, and which are a traditional protein source for poor people in developing countries. Other species, such as sandeel, can also be processed into healthy products for direct consumption, such as the crab-meat surrogate surimi.

Thus, global fisheries can easily increase their role as source of high quality low-cost protein by diverting reduction fisheries to human consumption.

Give quotas in numbers

There is a recurring call for new ideas to solve the fisheries crisis, although most of the ‘old’ ideas have never been fully implemented. Anyway, here is a new idea: Most of the fish we eat are babies, i.e., they had no chance to reproduce before being caught. This stems from the fact that intensive fishing reduces the likelihood of fish reaching an old age and corresponding large size. Minimum landing sizes and net-properties are typically set such that they catch fish as soon as they can be caught, well below the size of first maturity.

In quota-regulated fisheries, fishers (or their boats) get permission to land a certain weight of fish in a given year. Here I propose to express this quota rather in number of individual fish that a fisher can catch. A cod of 38 cm, the current minimum length in the Baltic, weighs about half a kilo. A cod of 80 cm length weighs about 5 kilo. Since ex-vessel income is by weight,
fishers, thus, have a strong incentive to target adult fish and spare juveniles. It has been formally shown that a fishery that lets all fish spawn can not be overfished.

Ichiro Nomura  
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The Challenges

Fish is vital for world food security. One and a half billion people rely on fish for a fifth of their animal protein intake. Fish makes up at least 15% of that protein intake for 3 billion people. Yet, capture fisheries are under threat. Up to eighty percent of the world fish stocks are already fully exploited or even overexploited. Access to fisheries must be restricted if they are to continue to feed the world’s population, to generate wealth and to help alleviate poverty. Effective and efficient management of the world’s fisheries is crucial.

The world financial crisis, and fluctuations in food and energy prices, combined with the effects of climate change, are recasting the global landscape. The complex social and economic impacts pose unprecedented challenges. For fisheries and aquaculture, this requires strategies to take advantage of new opportunities and to minimize threats. Ensuring responsible and sustainable fisheries and aquaculture is the key to overcoming those multifaceted challenges. Some preliminary solutions have already been identified.

Preliminary Solutions

1. Reconcile fisheries utilization and conservation so that responsible and sustainable fisheries and aquaculture coexists with sound environmental management and protection of ecosystems

A policy framework already exists to ensure sustainable fisheries utilization, the conservation of biodiversity, and ecosystem integrity. That framework includes a suite of legally binding and non-binding instruments. The FAO Code of Conduct for Responsible Fisheries (CCRF) and the respective International Plans of Action (IPOAs) for reducing the incidental catch of seabirds by fishers, for better managing sharks, for managing fishing capacity, and for combating illegal, unreported and unregulated (IUU) fishing are some of the main thrusts toward responsible and sustainable fisheries. The problem is that these instruments and the overall policy framework are still not being adequately applied across the globe. The challenge is to effectively direct political will to achieve the dual goals of sustainable fisheries utilization and the conservation of aquatic resources and ecosystems.

The Ecosystem Approach to Fisheries (EAF) was addressed by the 2001 Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem, and the 2002 World Summit on Sustainable Development (WSSD) Plan of Implementation. These both reflected a desire to see the impact of fishing in a broader context than simply focusing on fishers and their target species. The challenge for the future will be to develop and use:

- reliable, robust and cost-effective means of assessing and monitoring the status of ecosystems and their resources, and
- rapid means for detecting any undesirable and excessive impacts, from whatever source, that threaten sustainable fisheries use.

This information can be used to determine and implement suitable and effective fisheries management as well as to identify the effects of climate change and to strengthen the resilience to it.
2. Establish robust and effective management systems for responsible and sustainable fisheries and aquaculture

A lack of good governance and perverse incentives for stakeholders are key factors in the overexploitation of fisheries. The key principles underpinning good governance in any management system are openness, participation, accountability, effectiveness and coherence. Effective participation of all stakeholders in fisheries is especially important. Ensuring appropriate representation and input from the fishing industry as well as interest groups, while ensuring that broader societal goals are met, are fundamental components of responsible fisheries management. Effective participation ensures that decision-making is a learning and adaptive process. Moving forward requires governments and stakeholders to work together to ensure that their institutional and legal frameworks are able to incentivise effective fisheries management and that the human and other resources required to effect policy decisions and to ensure ongoing good governance are available.

Right-based management approaches could provide effective incentives for fishers to participate in responsible management systems. Contrary to media coverage of the use of property rights in fisheries management, rights-based fisheries systems are not limited to individual transferable quota (ITQ) systems. In reality all fisheries management systems are based on some sort of “user rights.” There is not one style of rights-based system to fit all fisheries. Rights-based management systems need to be purpose built; designed to reflect and build upon the norms and governance structures that the participants and their communities consider legitimate and acceptable. Moreover, when rights-based systems are applied to fisheries where there is overcapacity (too many fishers and/or fishing vessels operating) and overfishing, the impacts of transitioning to rationalized fisheries need to be addressed. That means dealing with impacts on livelihoods, on employment and on the economies of local fishing communities. The ultimate goal is for fishers and their communities to sustainably generate the wealth that fisheries have to offer, both now and in the future.

3. Link fisheries management with trade and marketing standards to ensure responsible and sustainable fisheries and aquaculture

Over the past decade, eco-labels have become a feature of international trade and marketing of fish and fish products. Eco-labels are a market-based mechanisms designed to provide incentives for more sustainable fisheries management by encouraging buyers, from large scale retailers to individual consumers, to only purchase fish and seafood certified as having come from a sustainable fishery. Commitments to sustainable fish sourcing have become increasingly common in the procurement strategies and corporate social responsibility strategies of large-scale retailers and commercial brand owners.

The challenge is to ensure that the pressure and momentum generated by this market-based instrument can be harnessed to complement public measures for sustainable and responsible fisheries management. This means aligning the various incentives so that the private sector, NGOs and governments, both at the national level and internationally, can work together towards the mutual goal of sustainable fisheries management. Eco-labels provide a nexus between product marketing and resource management and are an increasingly important part of the fisheries sustainability equation.

FAO brought the world’s attention to fisheries subsidies as a potential stimulus to overcapacity and overfishing. There is broad agreement in the international fishing community that in the absence of effective fisheries management, certain forms of fisheries subsidies incentivise overcapacity and over-fishing and consequently threaten the continued well-being of wild fish stocks.

The responsibility for fisheries subsidies rests ultimately with national governments. But the impacts can have international consequences for fish stocks and international fish trade. Governments are currently negotiating new disciplines governing the use of subsidies in the fisheries sector in the framework of the World Trade Organization’s (WTO) Negotiating Group
on Rules. That group was set up under the Ministerial mandate from the WTO’s meeting in Hong Kong (2005) which directed the group to “strengthen disciplines on subsidies in the fisheries sector, including through the prohibition of certain forms of fisheries subsidies that contribute to overcapacity and over-fishing” and, to establish “appropriate and effective special and differential treatment for developing and least-developed Members”. As part of the current negotiations, FAO has been mandated by its member countries to provide technical expertise and cooperation to complement the work of the WTO Negotiating Group on Rules.

4. Ensure responsible and sustainable aquaculture development

Aquaculture is a fast growing food production sector, providing income and employment as well as contributing to global food security. Aquaculture now accounts for almost half of fish for food supply. Farmed fish can offer a safe and wholesome alternative to wild-capture fish. However, where aquaculture is not properly managed, it has caused some negative social, economic and environmental impacts, raising concerns about the overall sustainability of the sector.

Irresponsible use of chemicals and antibiotics in aquaculture has caused public health threats and raised concerns about the impacts on biodiversity. In some areas the industry is not subject to adequate regulation. FAO is working with its Members to promote the responsible use of chemicals and antibiotics in aquaculture through better management of aquatic biosecurity. Efforts are also being made to address relevant environmental concerns through capacity building (including skills development for both fish farmers and authorities) and developing technical guidelines including those on aquaculture certification. The sector needs more effective mechanisms for environmental management, including the application of environmental risk assessment, and an ecosystem approach to management.

FAO is also working with other international fora to promote implementation of the CCRF, which includes specific reference to aquaculture (Article 9). FAO is organizing a Global Conference on Aquaculture on 9-12 June 2010 in Bangkok to address the social, economical and political challenges facing the sustainable management and development of the sector over the coming decade.

5. Enhancing the engagement of developing countries in responsible and sustainable fisheries and aquaculture

The need for legal and institutional reforms to ensure improved fisheries management is well recognized in developing countries. Yet some have struggled to keep up with the fisheries management requirements of the CCRF and related instruments while trying to redirect their policy focus away from “productivism” (increasing volumes of production) in favour of increasing the value of catches within sustainable production limits. This shift in focus requires:

- strong national political will to support responsible fisheries and aquaculture management;
- international cooperation to help developing countries develop the means and know-how to implement collaborative and sustainable fisheries and aquaculture management; and
- international cooperation to further engage developing countries in international decision-making fora and to expand regional cooperation for fisheries and aquaculture management.

FAO is working with developing countries on all of these fronts.
Jonathan Peacey  
*National Manager Fisheries Operations, Ministry of Fisheries, New Zealand*

**Accountability, incentives, risk and value**

**Improve fishery manager accountability**

Those responsible for managing fisheries – whether national or local governments, regional fisheries management organisations, or stakeholders – must be held accountable for their performance in managing fisheries. For too long fishery managers have managed fisheries badly without any official sanction. It has mostly been left to non-government parties to highlight poor fisheries management performance.

Recent moves to review the performance of regional fisheries management organisations are positive although it is unclear how much this will improve their fisheries management performance. The performance of most fisheries managers – including national governments – is not officially reviewed. An improved system of accountability is required, initially focusing on measuring and reporting fisheries management performance – including against strong environmental and sustainable utilisation standards – and then requiring improved performance.

**Improve incentives for fishers**

Fishers respond to incentives and, therefore, fisheries managers must ensure bad incentives are reduced and eliminated and good incentives established and enhanced.

**Examples of bad incentives:**

- **Open access** encourages too many fishers to enter a fishery and results in excess fishing capacity.
- **Subsidies** encourage fishers to continue fishing despite their fishing operations being uneconomic, put additional stress on fisheries management systems, and result in overfishing and increased environmental impacts.
- **Competitive catch limits** encourage fishers to invest in too much fishing capacity and fish in ways that reduce the value of their catch and compromise safety.

**Examples of good incentives:**

- **Secure long-term fishing rights** encourage fishers to fish in a responsible manner because they can be confident that they will receive future benefits from their stewardship. Where practicable, individual transferable catch entitlements provide a strong fishing right and can encourage stewardship.
- **Providing relevant information** enables fishers to adopt good fishing practices.
- **Environmental certification** can increase the value obtained by fishers operating in well-managed fisheries and encourage them to support good fisheries management practices.
- **An appropriate compliance programme**, including both encouraging voluntary compliance through support and respect for the fisheries management system, and creating effective deterrence through enforcement action.

**Focus on managing risk and value**

For many fisheries in developed and developing countries there is insufficient information to support current management within an acceptable level of risk – both to fish stocks and the marine environment. Common responses are to undertake more research or maintain current management with insufficient information. However, fisheries research is often expensive and the cost of obtaining the information necessary to support current management may not be justified by the value of the fishery – however value is measured. Maintaining current manage-
ment with insufficient information presents an unacceptable risk to fish stocks and the marine environment.

An alternative is to adjust management measures to reduce risks to an acceptable level. Adjustments could include reducing fishing mortality, maintaining fish stocks at higher biomass levels, and establishing non-fishing areas. The key change is to view both fisheries management measures and investment in research as variables to be manipulated to achieve acceptable levels of risk. This approach encourages levels of investment in research appropriate for the value of the fishery.

Wilfried Rickels
Kiel Institute for the World Economy

1. Adjust and reduce subsidies for the fishery industry

Governments and in particular the EU have to adjust and reduce subsidies so that the fishing fleets become efficient with respect to the total costs (e.g., marine diesel).

The worldwide fishing fleets are too large. Even with stable fish stocks, the annually technological development of fishing equipment would require to scrap boats in order to obtain a sustainable industry. However, the opposite takes place. Subsidies, and in particular subsidies for marine diesel, has sponsored the usage of better engines, improved hull designs, more efficient nets and electronic gadgets, which leads the today's fishing fleet straight and much faster to the fish. And it results in a lock-in effect for the fishermen. Decades of falling catches have induced them to travel farther to fill their holds whereby the availability of subsidies allowed them to equip their boats for the run on the remaining fishes and did prevent the consolidation of this industry.

2. Increase the share of ITQs and sustainable management system in worldwide fisheries

Overcome the common property right by allocating individual property rights so that the incentives change and the fishermen become stewards and policemen of the resource.

Today, only 121 of the world's 10,000 fisheries contain ITQs. The study by Costello, Gaines and Lynham (2008) shows that the introduction of ITQs halted the collapse of fisheries and halves the chances of a collapsing. Increasing the share of ITQs requires the development of appropriate mechanisms for the initial allocation of ITQs which should be done by independent allocation panels. Additionally, other sustainable allocations of property rights should be used, like a spatial approach which allocates fishing spots to fishermen. The best choice of the management system has to rely on the value and the underlying biology of the fishery.

3. Prohibition of fishing in international waters by appropriately changes of the law of the sea

Due to incentive problems within management systems for international waters, fishing should be completely prohibited here.

Management systems and in particular ICQs systems are hard to implement in international waters because it is to easy to cheat. However, regarding the fact, that 90% of the world’s fish are caught in national waters, this action might not be as hard as it sounds.
4. Direct demand towards sustainable caught fish

Include the consumers and retailers by labelling sustainable caught fish.

Overfishing is not just characterized by an overall too large amount of landed fish, but as well by catching too small fishes (baby fishes) and catching without sufficient consideration of bycatch. Consequently, increasing the information and by that the awareness of the problem at the consumer and retailer side, does not just allow to direct demand towards fish species which stocks are not yet overexploited but it also allows to direct demand towards sustainable caught fish with a minimum size. Consequently, labelling sustainable caught fish (e.g., MSC label) is key element of an information strategy for the consumer and retailer side.

5. Extend sustainable farming of non-predatory fish

Extending farming of fish is controversially because the feeding of predatory fish with fish meal does not solve the problem of overfishing. Additionally, the use of antibiotic and hormone residues is a problem for consumer healthiness and for the marine ecology around the farms. However, regarding the increasing worldwide increase demand for food and in particular for high-protein food with low-carbon emissions in production requires the inclusion of fish in the world wide menu. Consequently, sustainable farming of non-predatory fish should be extended, including labelling with respect to food safety and with respect to the marine ecology.

Ussif Rashid Sumaila
Associate Professor and Director, Fisheries Centre, University of British Columbia

Reduce poverty in fishing communities to sustain marine resources

In many developing coastal communities poverty is a big problem. Research has shown that high levels of poverty, everything being equal, results in high levels of impatience and, therefore, high private discount rates. This means that for poor people, conserving marine resources is simply a luxury as they are hard pressed to “fill the stomach” now.

A key solution to this problem is to educate, train and provide alternative means of livelihoods for poor fishers. The benefits of doing this will be immense given that virtually all developing economies and even developed ones need trained people in many sectors of their economies (e.g., health, technical and educational services). Hence, educating poor people in fishing communities will not only increase our ability to manage marine resources sustainability, it will help us provide the needed human resources to grow developing economies for healthy and sustainable living.

A beneficial way to partly fund this solution is to divert current harmful fisheries subsidies that run in the tens of billions annually and which only undermines the fish and fishers, to educate, train and equip fishers for alternative, more benign, livelihoods.
The Global Environment

Establishing a Global Climate Regime

The Challenges

There is no doubt that a global climate regime on the basis of international co-operation is needed to prevent some of the disastrous consequences of climate change.

Its challenge is that it must include the commitment of developed countries such as the US and the EU as well as the commitment of large developing countries that have fast growing economies and a rapid increase in emissions such as China and India.

This is difficult because it raises questions of global climate justice, historic liability and equal rights, i.e., whether developing countries should enjoy the same right to economic growth based on fossil fuels as the industrialized countries have experienced over the past century.

In addition to the different levels of historic liability, there is also a large gap between regions what concerns environmental consequences of climate change – some countries face enormous challenges whilst others could even potentially benefit from climate change. Hence, an equitable cost-sharing globally for mitigation and adaption to climate change is one of the greatest challenges of our time.

So far, global responses have materialized in the United Nations Framework Convention on Climate Change in 1992, and its principal update of 1997, the Kyoto Protocol. Even if it introduces for the first time mandatory emission limits, it has large shortcomings: It only mandates minor GHG reductions by the industrial countries, major emitters of the developed countries like the US, Canada and Australia did not sign the agreement and fast developing economies like China and India do not face binding caps. Moreover, the Kyoto Protocol does not include the right of sanctions against non-complying members or against non signatories. Therefore a more efficient climate regime must be developed, and in the light of the forthcoming negotiations in Copenhagen in 2009 it must be discussed if any of the following solutions should be part of an international global climate regime.

Regional Distribution of Fossil Fuel Emissions

[Diagram showing regional distribution of fossil fuel emissions]
Proposed Solutions

Nadine Heitmann  
*Kiel Institute for the World Economy*

Setareh Khalilian  
*Kiel Institute for the World Economy*

*A clear commitment by the international community is needed which sets climate change mitigation as a priority despite the financial crisis*

Developed and developing countries must come to an agreement on international emissions reduction before it is too late for mitigation – no member of the international community can be exempt from reducing emissions.

Global climate justice and historic liability must be taken into account, as well as a per capita emission rights, but this may not lead to a leeway for further increase of emissions in some countries. Targets must be at radically low levels, demanding that all countries engage in emission reduction schemes.

**Equitable burden sharing**

A global transfer fund by developed countries for developing countries is required to help them provide the technological requirements of climate change mitigation, and to transfer clean technology, as well as to provide funding for climate change adaptation policies. Further liberalization of trade in environmental goods and services is also needed.

Oxfam has made a suggestion for how adaptation to climate change should be funded: nations should pay according to the amount of carbon they produce per capita, coupled with their position on the human development index. On this basis, the US would supply more than 40% of the money and the European Union over 30%, with Japan, Canada, Australia and Korea making up the balance.

**A deterring sanction system against free-riders**

Unlike the Kyoto Protocol, the next global climate regime needs effective means of enforcement and sanctions against non-complying treaty members and against free-riders (non-members to the treaty) in the international community.

Options include trade sanctions to prevent “carbon leakage” (border carbon tax) or restrictions on trade following the example of the Montreal Protocol – its compatibility with the WTO needs careful revision, possibly the issue must be discussed in upcoming WTO negotiations as well.

**An international environmental organization**

Establishing an international environmental organization with the power to oversee the interrelated issues of climate change mitigation and adaptation, trade liberalization, climate change induced migration and equity issues between developed and developing countries. The organization must conduct a global cost-sharing for mitigation and adaption to the consequences of climate change, and administer a global mitigation and adaptation fund.

**A global carbon price should be established**

This can be done through a carbon tax or through tradable permits, whereby other GHGs are converted into CO2-equivalents.

Currently, a wide variety of policy instruments is used to reduce GHG emissions: quantitative restrictions, biofuel targets, technological specifications, voluntary restraints, etc. Optimally, all
such instruments should be replaced by a single international carbon price. All policies are to be avoided that do not induce decision makers to pay the appropriate global price of carbon.

James P. Leape  
_Director General, WWF_

The latest scientific research tells us that climate change is faster and worse than scientists predicted even a few years ago. It is heartening that the G8 has now agreed that we must find a way to keep global average temperatures from increasing more than 2 degrees Celsius. But there is still little progress toward a global deal that would secure that result.

The Abatement Cost Curve developed by McKinsey and Company frames the challenge. It tells us that we have the solutions we need to meet the 2 degree goal, and that the costs are manageable. It also tells us that we can only succeed if we find a way to capture all available reductions, in all sectors of the economy and in all regions of the world, and to move quickly. To do that, we need a global deal that includes the following five elements.

**Aggressive emission reductions by industrialized countries**

It is agreed that industrialized countries must step up to make big reductions in their own emissions – by 2050, emissions should be 95% below 1990 levels. And to get on to that path, industrialized countries should commit to a target of 40% below 1990 levels by 2020, with at least 30–35% reduction in their own emissions.

**Major funding**

Global action on the scale required will only be possible if industrialized countries commit to reliable and very substantial financing – on the order of US-$160 billion a year. That financing is required to support diffusion of low-carbon energy technologies, to compensate countries for reducing emissions from deforestation, and to support the measures required to adapt to climate change. Funding on this scale can come through dedication of a share of revenues from auctioning emission permits in industrialized countries, and perhaps also a global levy on bunker fuels.

**Technology cooperation and transfer**

Success will also require a big investment in technology, and in making technologies available to developing countries. Targeted five-year Technology Action Programmes could help deliver on key technology objectives, aiming to increase cooperation on innovation for environmentally and socially sustainable solutions.

**Slower emissions growth in emerging economies**

Between now and 2020, emissions in emerging economies will have to increase, as they continue to develop their economies. But with the commitment of industrialized countries to the emission reduction, financing, and technology measures outlined above, a global deal will need to also include a commitment by emerging economies to decouple emissions from development, to achieve emission levels that are 30% lower than “business-as-usual” projections.

**Monitoring**

Ultimately, a global climate regime will succeed only if all parties have confidence that the commitments made – to emission reductions and also to financing – are honoured. So strong mechanisms to measure, monitor, report and verify emissions cuts and financial flows are essential. A new Copenhagen Climate Facility, reflecting a democratic decision-making structure with equitable and balanced regional representation, would make such a system credible.
The Global Environment

The Energy Crisis and Climate Change

The Challenges

The future global economy is likely to consume ever more energy, especially due to the rising energy demand of developing countries such as China and India. At the same time, the tremendous risk of climate change associated with the use of fossil fuels makes supplying this energy increasingly difficult.

According to IEA projections, a larger size of the world population and the world economy would result in an increase of the world’s primary energy demand by 45% by 2030 without any climate policy (Here and in the following, data are based on the IEA World Energy Outlook 2008). However, significant welfare consequences of climate change require us to take strong policy on carbon dioxide emissions, possibly to stabilize the atmospheric carbon dioxide concentrations as low as at 450ppm in the long-run. This necessitates us to limit the total use of energy to some degree. (In IEA’s projection, the world primary energy use is 15% less with a 450ppm stabilization target in the year 2030 than in the case without climate policy).

Still, we need to dramatically expand the use of clean, renewable energy sources, while continuing the exploitation of conventional energy sources to a substantial degree. Regionally, the challenge will be more acute in the developing world. The IEA estimates that China and India alone will account for half the energy demand increase in the next quarter century. As for other regions, the population in Africa will increase by more than 60% from now to 2030 and could become an important factor for the global energy demand. The remaining large income gaps between the developing and developed economies would justify the former’s increasing energy use to achieve better standards of living.

The problem can hardly be solved by single local solutions; rather, it requires an interconnected global portfolio of energy sources that matches regional characteristics and that can satisfy the global energy demand as efficient and carbon-free as possible. While many developing regions are abundant in potential energy sources such as coal, solar power, wind and water, state-of-the-art energy technologies are mainly developed in the industrialized countries, at least so far.
As the development of these technologies moves forward, it is important to know what future energy markets will look like. What are the future business strategies for international investment in the energy sector? In how far does the current financial crisis prevent or enhance domestic and international investment in energy saving technologies? What will be the dominant energy sources in different regions? In which fields of technology and locations will political action be necessary? Will action be taken by a global institution or on a regional level? In which form and time frame? Herein, an important step is the introduction of a CO2 emission price (tax or cap and trade system). In addition, the development, diffusion and application of new energy solutions may be fostered through all channels of international cooperation. The main actors would be multinational companies and investors. For example, they might invest in large-scale solar energy projects in African deserts, in large-scale offshore wind parks in Europe, or in CCS-equipped power plants in China. Policy makers should set a sound legal framework to give the right incentives to business initiatives, possibly via specifying energy efficiency standards on products. Where an efficient allocation fails, scientific advisors should identify policy strategies to promote international private investment and technology diffusion, for example via sorting out institutional barriers in implementing energy saving technologies. They should also provide guidance on effective public investment in R&D and foreign aid. Given the increasing demand for energy in developing countries, a particular focus should fall on efforts to transfer technologies to these countries.

Proposed Solutions

Shumeet Banerji
CEO, Booz & Company

The energy shift and its impact on global climate change

The unprecedented volatility in energy prices of the last few years, and the policy imperative to reduce greenhouse gas emissions, have produced deep uncertainty about the future of energy, and especially about the future of fossil fuels. A broad shift toward lower-carbon alternatives is now well under way, but on its current path, is happening too slowly to achieve the reductions in emissions that scientists consider essential to slow the pace of global warming.

Energy prices will continue to be volatile, due to the inherent lags in bringing new capacity on line in a time of sharp shifts in demand, as well as to concerns about long-term energy availability and security and the impact of climate change legislation on the costs of using different fuels. The pressure to shift away from coal, despite its low cost and abundant supplies, will continue. Natural gas, on the other hand, will be favored due to its relatively low greenhouse gas emissions (roughly half that of coal) and sharply rising estimates of potential reserves. Slowing the growth in energy demand will require a significant focus on energy conservation. Many low cost opportunities are available, such as improvements in insulation, better maintenance of heating systems, and smart thermostats (see www.businessfuture.com; for more: Spiegel, Eric, and Neil McArthur, with Rob Norton, Energy shift: Game-changing options for fueling the future, Booz & Company and McGraw-Hill, 2009).

While much of the popular debate about controlling emissions centers around transportation solutions, most of the reductions in the short to intermediate term will need to come from the power generation sector. Both sectors face significant uncertainties.
Transportation

The long-term trend in transportation will be towards alternative power trains, and, thus, five key themes are likely to drive the shape and pace of change.

- Conventional diesel will likely gain share both in Europe and other regions like the US.
- Biofuels will increase in production volume but overall market penetration will be slow outside of specific nations and regions, such as Brazil and the Midwestern US.
- Conventional hybrids will likely gain market share in the short term, particularly among environmentally conscious consumers.
- Long term options are likely to focus on all-electric and hydrogen vehicles, although both face significant uncertainty – hydrogen more-so than electric.

Power generation

The mix of fuels used to generate the electricity will have to change significantly. Producers will have to make decisions surrounding which fuel to “bet on” for future electricity generation.

Coal is currently not a feasible option for investment in most developed countries, due to the high costs of carbon capture and sequestration (CCS) using today’s technology. While this may change, CCS is not expected to have a major impact over the next decade or more.

Natural gas will play a key role. Estimates of reserves have risen significantly in the last few years, particularly in North America, due to the expansion of unconventional sources. Increasing gas supplies, in the form of liquefied natural gas, which is a globally traded commodity, will likely set the price for CO₂ in the US as a cap and trade system is implemented.

Nuclear energy will emerge as an economic alternative if greenhouse gas restrictions are implemented and natural gas prices remain high, despite concerns related to safety and security. Its viability, however, will depend on government backing and commitment.

Renewables are potentially important suppliers of world energy in the long term, but remain cost-uncompetitive in the current environment. Their future role will thus be determined by the extent of governmental support and technology improvements, especially for solar.

Policy

Policy responses to lower greenhouse gas emissions have been modest to date. Most national and regional goals established in earlier years for reducing greenhouse gas emissions have not been met, and recent developments have been discouraging. The energy legislation currently under consideration in the ., for example, seems likely to result in a compromise with modest goals for emissions reductions. On the international front, the greenhouse-gas reductions agreed at the G8 summit in July represented a retreat from goals that many nations had set in earlier years. Moreover, the fact that China and India – two nations where energy use and greenhouse gas emissions are growing rapidly – opted out of the agreement suggests that its effect will be limited.

As the shift to lower carbon fuels unfolds over the next several years, two possible scenarios seem possible: one is a “scramble” scenario where companies and countries rush to secure energy resources, fearing that energy security is a zero-sum game, and efforts to contain global warming falter. The other is a “blueprint” scenario, in which challenges surrounding energy security, supply and environment are anticipated and tackled through global policy agreement and increased public-private coalitions. The latter scenario would result in a much more stable and predictable business and regulatory climate.

To speed the shift towards less carbon-intensive energy sources and to create conditions in which private sector companies can plan effectively for the future, policymakers should pursue three overarching goals:
National and international authorities must resolve uncertainties around carbon pricing and a common global set of regulations and targets are needed, at least among the major economies, or the backsliding will continue.

The concept of energy security must be raised to a global level (not at national levels) or the world will sub-optimize its efforts to abate greenhouse gases.

Governments should focus on technologies with the most promise of delivering large-scale, low-carbon energy, rather than allowing politics to drive investment to low-priority or high-cost areas, as is often the case today.

Lord Browne of Madingley

Managing Director and Managing Partner (Europe), Riverstone Holdings

The term “energy crisis” is used quite loosely so it pays to be clear about what’s under discussion. Broadly speaking the term poses three distinct questions:

**Will we run out of energy?**

We rely on coal, oil and gas (the fossil fuels) for over 80% of our current energy needs – a situation which shows little sign of changing over the medium-term without drastic policy changes. On top of this energy demand is expected to grow by almost half over the next two decades. Understandably this is causing some fear that our energy resources are starting to run out, with devastating consequences for the global economy and global quality of life.

The potential for crisis if we run out of energy is very real but there is still time before that occurs. In the past two decades proven gas reserves have increased by 70% and proven oil reserves by 40%. At expected rates of demand growth we have enough for thirty years supply. Moreover, better technology means that new oil and gas fields are being discovered all the time while enhanced recovery techniques are opening up a potentially huge array of unconventional sources, including tar sands, shale gas and ultra-deepwater. Ultimately, the near-unlimited supply potential of renewable energy sources should ensure that the world does not fall short of its energy needs.

**How secure is our access to energy?**

The security of global energy supplies continues to be problematic. Today, oil and gas reserves are in the hands of a small group of nations, several of which are considered political unstable or have testy relationships with large consuming countries. Eighty per cent of the world’s proven oil reserves are located in just three regions: Africa; Russia and the Caspian Basin; and the Persian Gulf. And more than half of the world’s remaining proven gas reserves exist in just three countries: Russia, Iran, and Qatar.

Concerns over energy security prompt policymakers to seek independence from foreign sources of energy. In Europe, new coal-fired power stations are back on the political agenda, partly because Russia is no longer seen as a reliable supplier of gas. In the US, home-grown biofuels have been promoted by successive administrations as an alternative to Middle Eastern oil imports, despite being more expensive. These reactions are a natural consequence. The more governments can extract themselves from the dependence on foreign energy resources, the more secure they feel.

**How does climate change affect the energy we use?**

Emissions of carbon dioxide into the Earth’s atmosphere – primarily as a result of burning fossil fuels for energy – are thought to be the cause of rising global temperatures. The scientific evidence to support this assertion has become increasingly compelling in recent years, suggesting a need for urgent and concerted action by all nations to prevent ecological degradation on a massive scale.
For the first time in history we face an energy crisis not because we might run out of energy, but because we are using it in the wrong way. Up to now the energy industry was judged by two metrics: its contribution to energy security and the cost of energy delivered to the consumer. To this we must now add a third: its success in reducing the emission of greenhouse gases, chiefly carbon dioxide, into the atmosphere.

Fortunately, finding solutions to these differing energy crises demands a broadly similar response:

**Solution 1**

Reduce growing energy demand through improved energy efficiency and conservation.

The first step to reducing global emissions is to arrest the growth in energy demand with an aim to eventually setting it on a downward trend. The key for continued economic progress is to learn how to create more wealth with less energy. This has additional benefits in improving energy security, preserving precious natural resources and saving money for businesses and the ordinary consumer.

However, unlocking the potential savings from improved energy efficiency will be very difficult without government coordination to change consumer behaviour. This will involve stricter product regulations as well as public education programmes to encourage people to think differently about energy. Governments should also address the issue of financing, providing cheap loans to households and small businesses with which they can carry out the necessary improvement works.

**Solution 2**

Research, develop and deploy a broad range of energy sources, both domestic and international, to work with properly functioning global markets to help meet future energy demands.

We need to look at both the short-term and long-term. In the short-term we can push existing technologies to help reduce carbon emissions. Fortunately we already have many technologies at our disposal: from wind, wave, solar and biomass for heat and power, to liquid biofuels, biogas and electric motors for transport. In the long-term, evolutionary technologies need to be further developed and research into revolutionary ones pursued.

A crucially important technology will be carbon capture and storage (CCS) which allows for the continued use of fossil fuels in the future energy mix. Coal is widely used to generate electricity in many of the world’s largest economies (especially the USA, China and India) and without CCS technology there is little chance that their energy demands can be met whilst at the same time reducing greenhouse gas emissions.

**Solution 3**

The so-called “developed countries” along with large developing countries such as China, India, Russia and Brazil, should agree and adopt a common position on climate change, focused on reducing greenhouse gas emissions through an effective cross-border market and technology transfer mechanism.

Put simply, we cannot hope to avoid the dangerous consequences of climate change unless global emissions are halved from current levels by 2050. At current rates of population growth and with current technologies this will be impossible without a global agreement to limit and disperse the negative consequences. Developed countries must shoulder the initial burden with an agreement for immediate emissions cuts. In return, the largest developing countries must agree to cut their own emissions in the future, but only after having achieved some recognisable level of economic development.

All countries must agree to, and participate in, a carbon market framework with the aim of reducing emissions where it is most efficient and least costly. Whatever its design, the carbon
market must create and defend a long-term price for carbon which is stable enough for businesses to factor it in to their forward planning. Where the flow of finance through the carbon market is insufficient to make the necessary reductions in emissions, additional funds should be made available. These should be used to allow non-OECD countries to develop alternative energy sources and help their citizens adapt to global warming. The OECD nations should seek to create a US-$100 billion fund for this purpose.

Michael Huebler  
*Kiel Institute for the World Economy*  

Thomas Lontzek  
*Kiel Institute for the World Economy*  

Daiju Narita  
*Kiel Institute for the World Economy*

A solution for the future global energy problem should be based on the hard reality that global energy demand is likely to be expanded substantially in the short- to medium-term future due to population and economic growth. Only a mix of different means, rather than a single formula, would solve the problem, and the solutions should reflect regional conditions.

**Renewable energies**

Renewable energies are a key element in this solution portfolio. Wind power is already being installed at a growing rate globally and has a large potential in places such as China, India and the US, as well as in Europe. Together, the use of wind power could be expanded tenfold by 2030 with an increasing share of offshore instalments. Wind power may become the second most important renewable energy for electricity generation after hydropower. Tidal and geothermal power would play a role in some countries, such as China, Russia, the US, and a part of Europe. The use of hydropower, including the one from large-scale dams, should be doubled by 2030. Installations in non-OECD Asia would be important given its increasing energy needs. Concentrating solar thermal power is an opportunity for sunny developing countries near the equator. While concentrating solar thermal power has been tested in Europe, Australia and the USA so far, projects in China, Iran, Jordan and Malta are planned. The role of solar photovoltaics would still be small but could have some importance in remote sunny regions, particularly for specific purposes such as air-conditioning. Renewable heating (solar, geothermal, biomass) could be harnessed in a large scale at low costs in China.

**Non-renewable energies**

Nuclear energy capacities could be doubled by 2030. Also, we would need to continue using coal power generation by a large scale, allowing non-OECD countries to keep the size of production at least at the current level. In parallel, coal power generation should be downsized in the developed regions, and remaining facilities should be scrapped even before the end of lifetime and be rebuilt with CCS equipment.

**Energy infrastructure**

Based on this energy portfolio, the solution for the energy problem at second depends on energy transport and storage solutions such as hydrogen. They would be a crucial step towards a globally connected energy system matching energy supply and demand over space and time.
Such a shift of energy infrastructure requires a great amount of investment, a majority of which should take place in developing countries (The IEA estimates the amount of investment should be US-$1.2 trillion globally by 2030, which is on an annual basis (around US-$50 billion) about half the size of world’s total official foreign aid (approximately US-$100 billion)). Pricing schemes of emissions, such as tax, cap-and-trade systems, or a combination of these, are basic instruments to achieve this goal. Herein, the current financial crisis offers an opportunity to direct private and public investment into energy efficiency improvements, for instance within stimulus packages. Given the increasing demand for energy in developing countries, a particular focus should fall on efforts to transfer technologies to these countries, as the infrastructure built in these countries now will help define the energy mix in these countries for the next 30–40 years. In particular, mechanisms allowing flexibility on cross-region burden sharing such as CDM should be strengthened. As a supplement, additional public financing schemes, such as the World Bank technology fund, can play an important role. When applied in countries with weak legal institutions, they would reduce business risks of energy-related foreign direct investment, which is likely to lead to a faster transfer of energy-efficient technologies. At the same time, the enforcement of intellectual property rights may be relaxed internationally to promote the diffusion of emission-saving technologies. Finally, substantial public R&D would also be needed since some promising energy technologies are still in infancy.

Gerhard Koenig
Member of the Board of Executive Directors, Wintershall Holding AG

Climate protection without blinkers: an intelligent mix of fossil and renewable energies

Energy research must abstain from pigeonholing energies as fundamentally good or bad, from saying “renewable energies are automatically good and fossil energies are bad”. That is a dead-end street in which we cannot afford to linger. We need a candid review of climate and energy policy – without blinkers and illusions.

Real sustainability requires a balance between economic and ecological considerations, not an ecological fantasy world. In order to reconcile the interests of climate protection, supply security and market competition, we need an intelligent mix of renewable and fossil energies – and a global strategy which can be adapted to the specific energy landscape of the different regions. Fossil fuels are not part of the problem; they are part of the solution. For renewable energies can only secure the global energy supply and protect the climate in combination with fossil fuels.

In its 2008 World Energy Outlook the International Energy Agency (IEA) projected an increase in global primary energy consumption by a third by 2030 – even assuming very favorable climate policy conditions. According to its projections, fossil fuels will cover three quarters of energy requirements, and global natural gas consumption will increase significantly, owing primarily to economic growth in China and India. But Europe needs more gas too: according to our calculations, we could be facing a supply gap of over 100 billion cubic meters of gas as soon as 2020. Without investing in a reliable link to new gas reserves, supply security for Europe is unimaginable.

In order to reduce CO₂ emissions and at the same time ensure the global energy supply, there are, in my opinion, five key areas of action:

- increasing energy efficiency,
- expanding the use of renewable energies,
- substituting high CO₂ fuels with low CO₂ fossil fuels,
- an energy-efficient combination of fossil and renewable energies and
- developing the climate-friendly generation of energy from fossil fuels.
Improving **energy efficiency** is absolutely essential for climate policy. Studies show that the insulation of buildings offers the greatest potential to save energy. Vehicles with enhanced energy efficiency are another area, as are natural gas condensing boilers in the home. The latter reach efficiency rates of up to 98% by using the heat that is usually discharged to the atmosphere. In the power plant sector, highly-efficient CCGT plants, i.e., combined cycle gas turbine power plants, show the way forward. Together with combined heat and power they reach efficiency levels of up to 90%.

It is certainly helpful for the state to take action to steer things in the right direction in order to increase energy efficiency – and to promote innovation with targeted measures. International institutions such as the World Bank also play an important role in supporting the transfer of energy-efficient technologies from OECD countries to the emerging and developing countries. A scenario developed by the IEA shows just how important this transfer is. According to the IEA, if global climate policy doesn’t change radically, global CO₂ emissions will increase by 45% by 2030. 97% of these additional emissions would be caused in non-OECD countries – around three-quarters of them by China, India and the Middle East alone!

It is hoped that **renewable energies** will play an important role in meeting the world’s future demand for energy. But they have to be commercially viable too in order to be truly sustainable and fit for the future. Saying yes to climate protection does not necessarily mean saying yes to costly subsidies for energy carriers that are not economical. Furthermore, the social impact has to be taken into account. A high ecological and social price was paid for many hydro-electric power stations. And the production of biogas can hit developing countries hard if food prices are forced up.

Since renewable energies will only cover about 25% of global energy demand in 2030 – even according to optimistic forecasts – and they can only ensure supply together with fossil energy sources, we should focus on the **fossil energy source that has the best ecological balance sheet**. And that just happens to be natural gas. Gas has the highest level of hydrogen and the lowest amount of carbon out of all the fossil fuels. As such it emits much less CO₂ when used as fuel. In addition, natural gas contains no aromatics and much less sulfur. It is mostly dust-free.

The gas used in Germany releases 25% fewer greenhouse gases during combustion than oil, 30% less than hard coal and 35% less than brown coal. This has been confirmed by the German Institute for International and Security Affairs (Stiftung fuer Wissenschaft und Politik), which advocated “More natural gas for climate protection” in a recent study. It also outlines the advantages of natural gas engines in road traffic. The institute estimates that natural gas vehicles, assuming further efficiency improvements, even emit 15% less CO₂ than diesel engines. If a quarter of the cars in Europe were to convert to natural gas, 39 Mt of CO₂ could be saved. Hence, natural gas can play a key role in the transition to a more renewables-oriented energy sector.

**Combining renewable and fossil energies directly** also offers great opportunities. For example, the combination of solar installations with modern condensing boiler technology – an energy mix which is used in Germany, for instance, for heating water. The solar technology heats the water by harnessing solar irradiation, and natural gas steps in when the weather is bad. For while solar energy can cover up to 70 to 100 percent of the warm water requirements of a one-family house in summer in Germany, it can only provide 20 percent in winter. Modern natural gas technology can be used in the same way as a back-up for wind energy.

“**Fossil, but new and different**” – research: herein lies the fifth key area of action for achieving an ecologically sound energy supply. Innovative solutions based on fossil energy carriers can serve climate protection worldwide.

Let me give you one example. Together with the Leibniz Institute of Marine Sciences in Kiel, we are researching how gas hydrates that lie under the seabed can be harnessed for clean combustible methane gas. Time is short for this project, as many scientists fear that because
of climate change large methane ice deposits could be released into the atmosphere unburned – which would be extremely harmful to the climate. Another project, entitled “SUGAR,” is focusing on the storage of CO₂. While normal CCS (Carbon Capture and Storage) projects merely aim to store the CO₂ in former gas reservoirs, with SUGAR it is injected into the sub-marine methane gas deposits in order to force out the gas hydrates. This way large quantities of climate-friendly energy can be gained and the CO₂ can also be stored securely since CO₂ hydrates are much more stable in terms of temperature and pressure than methane hydrates.

Further **investments** are needed in all the fields mentioned: either for expanding the infrastructure, for public or private-sector research or for modernizing the world in which we live and work in an energy-efficient way. However, current calculations by the IEA show that global investments in the supply of oil and gas have decreased by 21% compared to 2008. Yet the financial crisis also offers opportunities – for example when state-funded economic stimulus programs serve to improve energy efficiency. But overall what we need in Europe is not billions of additional taxpayers’ money, but the political will to pave the way for the energy sector to strengthen the economy through its own investments. This requires decisions that create reliable transit routes, investment certainty and more competition.

The non-OECD countries already overtook the OECD countries in terms of energy consumption in 2005 – and the hunger for energy in **China, India and the Middle East** continues to climb rapidly. Thus, in order to ensure climate protection and energy security, the emerging and developing countries need to get actively involved. But the OECD countries also have a special responsibility. They have to foster the transfer of technology and the increase in energy efficiency in other countries and support a political framework that allows private-sector companies to make the investments in the first place.

But in the long term energy solutions have to be worthwhile for all countries – and above all: they have to be financially viable.

**Richard A. Muller**

*Professor of Physics, Faculty Senior Scientist, Lawrence Berkeley Laboratory, University of California, Berkeley*

**Cheap clean**

Expensive technology, even if it yields clean energy, cannot solve the challenge of global warming. Any solution, to be viable, must be low enough in cost that the world can afford to implement it widely. Indeed, it is likely that the only technologies that are sustainable are those that are beyond cheap – those that are profitable.

The reason for this conclusion is a key fact that underlies the IPCC projections of global warming: the predicted rise in temperature is tightly linked to the end of poverty in the developing world.

Economic progress in the developing world has been amazing and exciting. Growth of the GDP of China and India has set a pace of 6% to 12% per year, an improvement that is cheered by every caring person. But that growth has been accompanied by a matching increase in energy use. The correlation is not accidental; wealth is tightly linked to energy. To find the GDP of any country, take the yearly total energy use per capita in kilowatt-hours (all energy, not just electricity) and divide by 3. That gives the GDP per capita in US-$, within a factor of two, for virtually all the countries in the world.

True, the developed world has been responsible for most of the observed 0.5 C global warming so far. But that is changing. China already releases more greenhouse gas each year than the US. In fact, the preponderance of the expected future warming will arise from the economic rise of the developing world. Expensive technologies that can be used by wealthy
nations to reduce emissions are not a viable option for the poorer nations, until they too are wealthy – but by then, it will likely be too late.

There is no blame in this. The developing world has the right to the same standard of living as the developed world. A leader of a developing nation may very likely be more concerned about poverty, poor nutrition and health, inadequate education and lack of opportunity, than about a few degrees temperature rise.

It is not good enough for the developed world to "set an example" if the approach is too expensive for the developing world to afford.

Not only must we reduce greenhouse emissions, we must do that in a sustainable way, a way that will continue to work during economic turndowns. The one clear way to achieve that goal is to emphasize reductions which are profitable. Sustainability and profitability are inextricably linked.

Using these observations for guidance, the possible solutions are as follows:

- Improve energy efficiency. Developing nations are extremely inefficient in their energy use. This was true for the United States in the 19th and 20th centuries, and is true of China and India now. The carbon dioxide of these nations per GDP is 3 to 5 times greater than in the US. We need to help the developing world achieve higher efficiency on a quicker time schedule.

- Improve energy conservation. As verified by the McKinsey study, using conservation to reduce carbon emissions can be profitable with remarkably short pay-back times. Heating and air conditioning can be reduced by using better insulation and IR reflecting roofs. Cooking and lighting can use much less fuel. These measures are readily adaptable in the developing world, and can yield virtually immediate economic benefits.

- Search for clean tech solutions that are cheaper than the dirty ones. The biggest challenge: provide energy cheaper than we can get from coal. In my estimation, some of the technologies that offer this possibility are wind, thin-film solar, and small-scale nuclear. Not likely in my opinion: geothermal (in most of the world); large-scale solar thermal; wave or tidal power.

- Develop technology that addresses not only clean energy, but also energy security. Energy security is highly valued in many countries, so technology that addresses this need can find a market even if it is not as cheap as, say, imported natural gas. The technologies are very location specific, and could include biofuels, wind, and solar.

- Develop carbon capture and sequestration as a back-up in case coal remains the cheapest form of energy. The technology must be such that it can be used in the developing world, perhaps subsidized by the wealthier nations.

- Electric autos in the developing world, where expectations of long driving range are not yet part of their culture. The emphasis must be on cheap batteries, since replacement costs are the greatest expense.

- In exchange for carbon reductions among the developed nations, the poorer nations must agree to allow foreign technology be used to help them reduce their own emissions. This could be everything from advanced wind turbines, better solar cells, small nuclear plants, to carbon sequestration technology. Many developing nations want to create their own technology, and may put up barriers to use of foreign methods. But if this happens, the cheap tech may never be developed. The huge markets in the developing world are the best inspiration for the huge investments that will be needed to make clean cheap.

Some people advocate cap and trade as a solution. But the real value of cap and trade is reached only if it inspires the development of inexpensive clean energy technologies. Unless clean becomes cheap, it will not be adopted by the developing world, and without that, atmospheric carbon dioxide increases are inevitable.
Expensive clean won’t work. Cheap clean is essential. To be sustainable, clean technology must be profitable. The best bets: energy efficiency and conservation.

Sanjit Bunker Roy
Founder, Barefoot College

The Barefoot College

The Barefoot College is the ONLY fully Solar Electrified College based in a village in India. 45 kws of solar panels and 5 Battery banks of 136 deep cycle batteries have been installed by semi-literate barefoot solar engineers. The solar components (invertors, charge controllers, battery boxes, stands) are all fabricated in the College itself. Provides power to run 30 computers, e-mail, 500 tube lights, 70 fans, photocopying machine, VCRs, camcorders, pathology Lab, dining hall, a 40,000 book Library, dentist chair, film editing machine, slide projectors, and battery chargers.

As of December 2008 in India 289 illiterate (213 men and 76 women) barefoot solar engineers have solar electrified 599 villages generating a total of 550 kwp electricity per day reaching 11,900 families in 14 States of India: installed 8,700 solar units in individual houses fabricated 4,100 solar lanterns for 549 night schools benefiting 10,700 families with a population of nearly 100,000 people. The barefoot solar engineers have installed 16 solar power plants of 2.5 kws each: women have fabricated 40 parabolic solar cookers: 71 solar water heaters have been fabricated and installed in the Himalayas: trained rural communities to establish 23 rural electronic workshops.

As a result the College has prevented 1.86 million tons of carbon emissions from polluting the atmosphere. Illiterate women are fabricating parabolic solar cookers water heaters. 500 kws is being generated in one day from all the solar installations all over India.

What is the barefoot approach?

A technology just dumped on rural villages from the urban areas by solar engineers has no chance of being successful. The village community has to be sensitised to manage, control and finally own the technology. Poor village communities can run solar units on their own if they are trained to fabricate the solar equipment at the village level as well as repair and maintain it. Illiterate rural women have demonstrated this is possible.

Before any non-electrified village is solar electrified anywhere in the world a Village Energy and Environment Committee (VEEC) has to be formed and the VEEC has to take two major decisions.

- How much each family is prepared to pay for the Fixed Solar Unit or Solar Lantern per month.
- Who the VEEC will select from among the poorest of the poor family in the village to be trained as a Barefoot Solar Engineer.

This approach was first tried, tested and widely applied in India in the 1990s.

Once the barefoot approach had produced a significant impact in India in the remotest villages all along the Himalayas it was decided to go global and see if it could be replicated all over the world.

GLOBAL

For the first time in the history of the Least Developed Countries (LDCs) in the UNDP Human Development Report it was decided to identify ONLY illiterate and semi-literate middle aged
village women who had never left their villages in their lives to be trained as barefoot solar engineers. This has proved to be remarkably successful.

**Afghanistan**

In 2005 a total of 150 individual houses were solar electrified by 10 semi-literate men and women who had never left their village. In the history of Afghanistan this is the first time 3 semi-literate women had solar electrified their own villages.

The 5 villages were electrified in the most backward regions of the country.

Today in 2008 with Norwegian funding the barefoot approach has been replicated in 100 villages saving over 500,000 litres of kerosene. 21 more women have been trained.

Never had any politician or engineer or bureaucrat believed it could have been possible but in June 2008: 35 very poor semi-literate women had completed the solar electrification of 504 houses in 48 villages all over the country.

**Lessons learnt**

So what are the universal lessons we have learnt from training poor illiterate rural women as solar engineers from 3 continents and 17 countries around the globe?

**Lesson 1**

Any middle aged illiterate woman from any part of the world who has never left her village can be trained in 6 months in India to be a competent and confident solar engineer.

**Lesson 2**

Prepare the community first by involving them in taking major decisions on behalf of the whole community and only then bring in the technology in the village. This will reduce the dependency on urban skills from outside. It will also give a sense of ownership.

**Lesson 3**

Keep all urban based paper qualified solar engineers away from the inaccessible non-electrified village because their top down approach is doomed to fail. They have neither the vision nor the courage nor the faith to select and train illiterate women as engineers. They also do not have the communication tools to speak as equal to poor communities.

**Lesson 4**

What makes the barefoot approach fundamentally different is that NO certificates, diplomas or degrees are issued after training to the women. The certification is done by the community they serve. The issuing of certificates is one major reason why migration takes places from the villages to the cities.

**Lesson 5**

To reach the very poor only a partnership model will work. Where providing the hardware is the responsibility of governments/donors and the repair and maintenance is the responsibility of the poor rural communities.

The “barefoot” approach has worked in 3 continents, 17 countries and over 100 villages across the globe. Between 2005–2008 the total amount spent has been close to US-$ 2 million. Less than what is being wasted on ONE Millennium Village in one country in Africa.

There is no question. The demystified decentralized approach is the only long-term solution to tackling the energy crisis and climate change in the inaccessible villages around the world.
Rainer Seele
Chairman, WINGAS GmbH & Co. KG, Member of the Board, Wintershall Holding AG

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The Global Environment

Bioenergy and Land Use in Developing Countries

The Challenges

Food security and promoting modern uses of biomass as a source of energy in developing countries: Conflicting interests impossible to reconcile or two ends of a common strategy?

Biomass is the most important source of energy in many developing countries, most notably in Sub-Saharan Africa. Although the bulk of biomass consumption comes from traditional uses of biomass such as the burning of firewood for basic household energy services, there is growing discussion on the potential to build up modern biomass energy industries in developing countries, e.g., biofuel and biogas industries.

On the one hand, biofuel production bears the danger of leading to land use competition, potentially crowding out food production and leading to higher agricultural prices that hit the world’s poorest hardest.

Thus, it might, at first sight, seem cynical to think about using agricultural goods for providing fuel. On the other hand, high prices could provide incentives for agricultural sector development. This would ultimately promote food security and provide resources for biofuel production while benefiting rural areas in developing countries. Furthermore, the environmental dimension is crucial as well: Land use change resulting in massive CO2 emissions is undesirable from a global climate point of view and could in addition aggravate problems of soil erosion and water availability. To avoid problems of food provision as well as to preserve valuable natural areas and carbon stocks it is proposed that mainly degraded land should be used to extend the agricultural area for biomass production. The development of an international certification scheme is necessary to promote a sustainable production of biofuels, including a certain greenhouse gas emission reduction target. Furthermore, south-south knowledge and technology transfer would be beneficial, given the dominant position of Brazil as an ethanol producer. In order to foster production and trade of biomass, the harmonization of technology and fuel standards is important as well as a reduction in trade barriers. Main questions to be addressed by the panel: What is the potential contribution of biomass energy to the future development of developing countries? How to prevent the adverse effects from changing land with high carbon storage value to agricultural land? How to prevent conflicts between energetic use of biomass and food security?
Proposed Solutions

Marco Ferroni
Executive Director and Board Member, of the SYNGENTA Foundation for Sustainable Agriculture

How to prevent conflicts between energetic use of biomass and food security?

12. Recognize the importance of optimizing productivity of current land in order to protect what remains of natural forests and virgin land. Agricultural intensification on existing land helps enhance food security for all, reduce the pressure on deforestation and make more land potentially available for energy crops if so required. (Apart from being a significant source of greenhouse gas emissions, deforestation of tropical rainforests due to the clearing of land for agriculture has affected local and regional climate, caused soil erosion and reduced tropical species relying on these lands and vegetation.)

13. Raise agricultural productivity. Produce more with less, raising in particular the efficiency of land and water use. Step up agricultural R&D. Pay attention to the ‘D’ dimension (product development and introduction) which often suffers from relative neglect in (public) national and international agricultural research. Upgrade efforts to extend solutions to resource-poor small farmers in developing and emerging countries.

14. Recognize that improvements in agricultural productivity call for action on multiple fronts: ‘technology’ (i.e., improved crop varieties and seed, fertilizer, tools and machinery, and crop protection); physical infrastructure and connectivity; institutions that serve the farming community; credit and insurance products; access to markets at remunerative prices; trade, price and subsidy reform. The DOHA Round should be completed, with significant reforms on products that matter to the poorest countries.

15. Recognize that with technology, agricultural intensification can and must be brought about sustainably, on existing agricultural and rehabilitated degraded land (see below), without encroachment into forests, while positively conserving water, managing soil fertility and controlling erosion. Rich importing countries practicing extensive agriculture (or growing biofuels) should take note of the implications of their stance, which may include land use change elsewhere in the world.

16. Build awareness of land use and land use change as critical issues deserving attention. Climate change and, to a degree, deforestation (a form of land use change) have surfaced as global issues of concern. Land use and the need to protect land and the quality of soils by avoiding deforestation and land degradation, material loss, process disturbance and environmental pollution have not. There is limited awareness of the increasing pressure on land owing to changing food consumption patterns. Global data on land and soil degradation are out of date: the 1991 Global Assessment of Soil Deterioration (GLASOD), which is based on data from the 1980s, needs to be updated. Furthermore, industrialization and urbanization should be regulated by zoning laws and regulations that economize land.

17. Provide incentives for the rehabilitation of degraded land for agricultural purposes in developing countries. There are many forms and sources of land degradation ranging from the reversible at some levels of investment to the irreversible. In general, research has found that farmers’ willingness to invest in soil and land improvement is closely linked to the income perspectives tied to that land. A matter, therefore, of prioritizing agriculture where it is taxed or undervalued and giving it a fair break.

18. Avoid simplistic calls for moratoria on bioenergy and biofuels. Bioenergy strategies should be closely linked with agriculture, forestry, climate change mitigation, poverty reduction and rural development strategies. The production and use of bioenergy must not put food security at risk, or undermine the goals of nature and biodiversity conservation and net GHG emissions reductions. In some developing countries, the cultivation of certain energy crops on lands not newly reclaimed from forests or wetlands can harness agricultural growth for broader rural development, raise energy security in climate-neutral ways, create
business opportunities and jobs, generate foreign exchange, and in the process enhance food security. Also, we should not in this context forget the potential of tree crops (for energy and other purposes) to restore degraded land which later could become available for food production.

**What is the potential contribution of biomass energy to the future development of developing countries?**

1. Modernize the use of traditional biomass as the main form of energy available to the poorest third of mankind. This requires a focus on rural areas to control the health hazards associated with this type of energy while raising fuel efficiency (for example, by improving cooking stoves). Small-scale installations to harness energy from biogenic waste for household needs could make possible significant improvements in comfort, the use of time, and land quality by reducing the need to gather wood.

2. Exploit the potential of biogenic waste and residues as sources of fuel in the generation of electricity (in co-generation or gasification plants). Develop the science and data needed to estimate the quantities that could be available on a sustainable basis. (According to one estimate, the total sustainable worldwide biomass energy potential amounts to about 30% of total energy consumption today. Part of this is biogenic waste and residues.)

3. Develop biochar from renewable forestry resources or biogenic waste streams. Biochar deserves attention in developing and industrialized countries alike as a form of bioenergy that could be carbon-negative, not only carbon-neutral, while possessing significant soil enrichment properties – within the limits of the quantity of biomass that is sustainably available and usable, for example, without encroaching on unmanaged forests.

4. Manage risk. The risks from uncontrolled expansion of bioenergy are four: the potential threat to food security (but, as implied earlier, there could also be complementarity over different time horizons), the threat to biodiversity, the threat to soils and water, and the climate risk associated with land use changes for the purpose of growing energy crops.

**How to prevent the adverse effects from changing land with high carbon storage value to agricultural land?**

1. Recognize that the adverse effects from changing land with high carbon storage value to agricultural land, in large measure, cannot be prevented. The challenge and the task, therefore, are to create incentives that limit conversion.

2. Accept that there is no free lunch. The goal of reducing atmospheric carbon concentrations requires us to address carbon emissions from fossil fuels, industrial practices, and also terrestrial systems. Research shows that the full integration of terrestrial systems and the use of fossil fuels in a comprehensive model to limit atmospheric carbon concentration lowers the cost of meeting environmental goals, but has implications for agriculture, causing food prices to rise through competition for land, unless technology contributes sufficiently to raising per hectare food and agricultural yields.

**Bettina Kretschmer**  
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**Mareike Lange**  
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**Sebastian Petrick**  
*Kiel Institute for the World Economy*

The Pros and Cons of bioenergy are not the same everywhere: At one end of the spectrum, countries with a large land endowment relative to the size of their population like Brazil operate
large-scale industrial bioenergy production. At the other end, traditional uses of bioenergy prevail in low income countries with a poorly developed transport and energy infrastructure (DR Congo, e.g., has a share of over 95% of traditional bioenergy use in its energy balance (cf. http://www.globalbioenergy.org/fileadmin/user_upload/gbep/docs/2007_events/press_G8/Bioenergy_Facts_and_Figures_01.pdf). Hence, solutions to the development process and the role of bioenergy need to be assessed in a differentiated manner.

**Auditing industrial bioenergy production**

In countries where land and water resources are abundant and food production can meet local demand, industrial bioenergy production may well be an option to limit dependency on fossil energy and to fight climate change if it is competitive with fossil fuel prices or if it can compete with other climate mitigation options. Nevertheless, large-scale bioenergy production also bears risks. Recent studies (cf. Fargione, Joseph, Jason Hill, David Tilman, Stephen, Polasky, and Peter Hawthorne, Land clearing and the biofuel carbon debt. Science, 319, 2008, 1235–1238) put into question whether biomass-based energy could have any potential to reduce CO2 emissions at all if virgin land is converted into cropland for biomass production. It could take over a hundred years to “pay back” the emissions debt caused by the land-use change if tropical rainforest is cleared for cultivating energy crops. Another problem is the – probably irreversible – loss of biodiversity. To avoid these direct effects a certification scheme is needed that takes into account the actual greenhouse gas savings obtained from the use of bioenergy. In order to also avoid indirect land-use effects certification schemes need to be extended to all agricultural production activities, i.e., it would need to include food and industrial biomass production as well. Such a global land use control system might well limit significantly the expansion of the world’s agricultural area devoted to bioenergy production.

**Modernizing traditional uses of bioenergy**

The situation is different in countries whose energy supply relies highly on the traditional use of bioenergy, e.g., firewood. Here, bioenergy is used in a very inefficient and unsustainable way, leading to – or aggravating – desertification-related problems and to a diminished potential for food production. These problems are especially severe in regions that are afflicted by hunger anyway since for farmers in such regions the lack of modern energy services limits agricultural productivity and low productivity limits the access to modern energy. Modernizing the small-scale use of bioenergy is a possibility to improve the quality and availability of energy services and simultaneously provide the opportunities for an improvement in agricultural productivity.

**Advancing farming techniques**

Adapting the use of bioenergy to each country’s particularities provides opportunities to develop rural areas and could open up access to larger markets. Furthermore, higher agricultural productivity resulting from the use of modern farming techniques can expand the available land area for both food and bioenergy production. Modern bioenergy production could then even contribute to higher food security on a local and global scale. The fact that agricultural prices are currently on a high level provides incentives for strengthening the agricultural sector: costly food imports could be reduced and exports become more profitable. Given this background, countries should carefully analyse whether the development of a bioenergy industry will actually yield benefits in the long run – as has been shown they are not a priori given. Necessary regulations and policy measures will highly depend on the regional conditions. From a global sustainability point of view the use of bioenergy for climate mitigation purposes is only justified if the greenhouse gas savings are accounted for, e.g., in a certification scheme for biomass.
The diligent way for bio-energy and land-use in developing countries

The challenge

Although there has been much debate recently about how biofuel production is taking away valuable farmland for food production in developing countries, this is in fact not the main issue. There is still sufficient land to produce both food and bio-energy in many developing countries – certainly in Eastern Africa. The real problem is that in these countries the current methods to produce and distribute food (and also to produce and distribute bio-energy such as charcoal and fuelwood), are grossly inefficient. In East-Africa, agriculture is a sector of predominantly very small farmers, who have little access to resources (quality seed materials, pesticides, fertilizer, machinery, technical advice etc) and often little access to markets in further areas. In fact, these farmers have very few means to do their farming with – except their labour, and the rights to their land. There is not much "unused" land either – almost always, there is someone claiming an (informal) right to it: for grazing, for access to water, for harvesting wood, for hunting – etcetera.

Western investors seeking to promote bio-energy products generally come with a different perspective on farming. They think in terms of modern, large-scale plantation style production, and need land titles to control production methods and to have collateral for investors. Such investments generate tensions on many areas. The obvious problem is how to deal with land ownership and rights to use land, particularly when such rights are hardly ever formalised, and when the legal standards to compensate the owners of such rights are still extremely low. Other aspects include labour markets and conditions; use of available water sources and infrastructure; control and supervision of environmental standards, etcetera. But the main source of conflict is one of status and culture: western investors now seek to use African farmland and labour to produce a product for their own needs, when hardly any-one cared about developing the African’ agricultural sector for the African’ needs for decades.

In theory, modern-style bio-energy production in Africa may be very beneficial to rural African economies, bringing labour, technology, economic development and so on. It is not strange, however, that African farmers mistrust the real intentions of investors, and wonder how they can benefit from it. The real challenge, therefore, is to develop biofuel projects that promote in a balanced way the interests of both the western investors and the farming communities in developing countries.

The solution

1. Bio-energy investors to work with farmers, not replacing them.

Instead of setting up plantations, investors could promote existing farmers to produce biofuel crops for them. In East-Africa, there are plenty of farmers (mostly small, but also large) very eager to access new markets for their products. While many farmers are naturally conservative about investing heavily in new crops for unproven markets, they can certainly be convinced if the potential is promising and attractive enough (and if they can’t, then perhaps the case is not good enough…). While setting up relations with existing farmers is time consuming and difficult, there is much less risk of conflicts over land.

Investors should be careful, though, not to accept every farmer as a partner. Also in developing countries, there are good farmers and weaker ones – and it’s the good farmers, those with the potential to improve production quality and efficiency in the future if given proper tools, who should be supported most.
2. **Combine bio-energy production with improvements in farming for food.**
The case for farmers to grow crops for a bio-fuel producer will become stronger if it also helps him improve his farming potential for other crops. Farmers in remote areas in East-Africa suffer from poor access to food markets, as well as from poor access to farming resources such as quality sowing material, fertilizers, pesticides and technical advice. Bio-energy producers can use the networks with farmers they establish, to provide such access to markets and resources at much lower costs than would otherwise be the case. Biofuel production and food production do not need to compete – in fact, it is more logical to expect that they support each other.

3. **Be realistic about the potential market for biofuel from developing countries in the short term, but stick to the plan for the longer term.**
It takes time, resilience, and a long-term view of investors to develop biofuel production together with existing farmers. For quite a number of years, production volumes will remain low, while production costs will remain significantly above those of “1st generation” biofuels from more established production countries. However, the potential is certainly there for the longer term, if everyone in the sector stays on focus. Over time, more farmers will enter the network, existing farmers will extend their area planted, and farmers and the distribution chains will gradually improve efficiency and quality of production. To reach that stage, this form of biofuel production which also serve the interests of developing countries may need a bit of support in these initial years, for example through preferential fiscal treatment. This could be an efficient and justified way to spend development aid. The alternative: hyped markets combined with overly optimistic investors and misinformed governments, leading to misguided investments, leading to abandoned projects, leading to ever more frustrated, marginalised and isolated farming communities in developing countries.

4. **Donor programmes to support national governments in promoting the right sort of bio-fuel investments.**
National governments often face the dilemma: to choose for foreign investors, or for the interests of their national (farmer) communities. They may be able to choose wiser if they know what their options are to serve both interests. Donor governments can play an important role in advising national governments to develop good investment frameworks – which both stimulate foreign investment and protect national interests.

5. **Western markets to impose environmental and social criteria on biofuel production through certification.**
Western markets are still not very coherent in terms of the environmental and social standards they demand for (imported) biofuels. Producers that aim for higher standards find it hard to get recognition for what they achieve for developing countries, and to get this rewarded. Transparent and obligatory certification schemes will help to reduces the advantages that befall the “free-riders” in the market.

**Background**
The company Diligent Energy Systems started in 2005 in Tanzania with an outgrower concept for Jatropha biofuel production. As of today, Diligent has supported some 5,000 farmers to grow Jatropha on some 3,500 ha of land, mainly as hedges around their farmlands, or in combination with foodcrop farming (“intercropping”). Although production volumes remain very modest, Diligent is among the first to produce Jatropha biofuel commercially (delivering, among others, to a consortium of Boeing and Air Newzealand for a test flight in January 2009). It is scaling up production volumes fast and has the ambition to grow to 10,000 ha of Jatropha planted over the next couple of years.
Questions to all panelists

- Should there be a moratorium on bio fuel subsidies / mixing quotas (“Beimischungsquoten”)?
- Is it possible to both help the people in developing countries and make profit from biofuel production?
- Should industrialized countries try to meet the rising demand for biofuels with their own agricultural production?
- Wouldn’t it make more sense to foster energy efficiency than to look to biofuels to satisfy the rising energy consumption?
- What criteria for sustainable biofuel production with low emissions would have to be included in an international certification system?
- Would the transfer of knowledge and technology, making it possible to process the biomass where it is produced, help the agricultural development of developing countries?
- Will the international financial crisis lead to less demand for biofuel plants from developing countries causing new problems for local farmers?
The Global Environment

Rethinking Agriculture

The Challenges

2008 began with rapidly rising food prices that threatened lives in poor countries and created massive pressures in rich economies; the year ended with a financial crisis that sent food prices downwards and pushed poor countries’ food problems down the policy agendas of the rich countries.

The world’s food system should not remain hostage to such short-term turbulences. Producing enough food for the world’s growing population and getting it to the people who need it requires rethinking global agriculture.

A long-term perspective requires that agricultural production and distribution look beyond the financial crisis and instead be guided by long-term considerations – political, economic and social.

The World Food Program’s funding needs are rising. Vulnerable nations have depleted their fund reserves and, hit by the financial crisis, have no resources left to manage potential future food shortages. Once the world-wide recession is over, a combination of rising population and incomes will once push food prices upwards.

Now is the time to plan for a sustainable world food system, based on international cooperation. What can governments, international organizations and civic groups do to overcome the massive political impediments to such as sustainable system – such as agricultural subsidies in developed economies, missing property rights and corruption in food-aid-receiving countries, export quotas, and the like? How can the interest groups responsible for maintaining an inefficient agricultural status quo be dealt with and the losers compensated? How can we ensure that hungry people are fed without depriving local farmers of the incentives to become self-sufficient? What role can business enterprises play to boost agricultural yields? What policy frameworks can encourage innovation, agricultural productivity and global equity simultaneously? What are the appropriate roles of free market incentives and global governance?

Three scenarios for the impact of financial crisis on cereal prices

Figure 5—The implications of a recession for cereal prices, 2005–20

Baseline: Continued economic growth and maintained productivity and investments in agriculture.
Scenario 1: Economic growth is reduced by 2 to 3 percentage points depending on the region, and wise policy choices maintain agricultural productivity and investments.
Scenario 2: Economic growth is reduced as in scenario 1, agricultural investment and productivity decline in line with the reduced economic growth – this scenario is unfortunately more likely.
Proposed Solutions

Aslihan Arslan  
*Kiel Institute for the World Economy*

*Rethinking agriculture: thought for food*

The most common responses to the crisis, namely establishment of safety nets and export bans, are only marginally effective in reaching the rural poor who are net-buyer smallholders. Agriculture must be at the center of medium-long term solutions at the national and international levels. Governments, international organizations, civic groups, and the business sector should envisage a broader perspective.

1. Make sure that initially established targeted cash transfers and safety net programs are coupled with policies to provide long term incentives and opportunities to increase agricultural productivity. Once the crisis fades, the immediate/short term programs should be closed in order to remove any perverse incentives.

2. Higher spending on agricultural R&D may help to prevent a longer-term food price crisis. Give incentives to private businesses that are sources of innovation in agriculture to invest in inputs suited to country-specific needs. This may include the development of non-food and multi-purpose crops, intercropping and other ways of combining food and fuel provision, alongside investment in renewable energy sources. A matching fund from governments or international organizations may be utilized for this purpose.

3. NGOs and other civil society organization should be mobilized to increase the awareness of what agriculture can do to reduce hunger and poverty. Political support should be mobilized to elevate agriculture in government and donor priorities. Engage in policy dialogues with stakeholders to ensure that the development of economic, regulatory and administrative policies that address the concerns of the private sector, and contribute to better functioning markets.

4. Establish an international body to create a concerted effort in order to improve the accuracy and timeliness of reporting of grain stocks from each country to minimize uncertainty about the state of supplies at any particular time. (Rice crisis particularly was caused by the uncertainty about the available world stocks and ensuing panic.)

5. Facilitate mutual assurance in maintenance of open markets in grains by inception of disciplines at the World Trade Organization (WTO) with respect to food export quotas and bans, to complement the WTO’s current focus on import restrictions.

6. Promote improved access to markets, credit, insurance and information always as the core of agricultural and rural development policies, even if the immediate responses divert attention from these pillars of development. Invest in and improve access to agricultural inputs such as locally adapted seeds, fertilizer and pesticides. Explore the systematic development of financial instruments for agriculture that deepen markets and allow for efficient intermediation of financial risk management (e.g., warehouse receipts, parametric insurance, weather-index insurance).

**Sources**


Ken Ash  
*Deputy-Director, Directorate for Trade and Agriculture, OECD*

**Alternative policy approaches**

Now is a very good time to re-think agriculture, and in particular the policy environment in which the global food and agriculture system operates. While there are important challenges to be faced, there are also considerable opportunities.

The food and agriculture sector is proving more resilient than many others in the midst of the current global economic downturn, and as recovery takes hold the prospects for competitive suppliers are bright – there is clearly a growing demand for feed, food and industrial products, in particular in developing countries. At the same time, there is greater competition for scarce resources (in particular land and water), climate change is altering production frontiers and increasing the variability of primary production, and market price volatility appears to be increasing. The challenge of feeding the world’s growing population is more clearly on the agenda of governments and international organisations.

Exploiting these opportunities and addressing these challenges would be made much easier in an operating environment in which policy instruments are explicitly and directly connected to the goals (whether they are challenges or opportunities) that are being pursued. The overall aim would be (i) to remove policy disincentives that might currently constrain competitive suppliers from responding to changing market signals, and (ii) to increase strategic public and private investments to enhance food and agriculture supply capacity, in particular in developing countries. More specifically:

- Reform of farm policy in many OECD countries, characterised by very high levels of support for the production of many traditional commodities, needs to be considerably accelerated. The current structure of farm policy support has its origins many decades ago, and even with recent reforms in many countries relatively little current farm support addresses the challenges and opportunities outlined above. Policies that better target these interests could improve policy performance both domestically and internationally, and at lower cost to governments and consumers.

- Such domestic policy reform would facilitate needed changes to trade policies in many OECD countries that currently constrain the flow of food and agriculture products. There would be few trade tensions, and little left to negotiate multilaterally, if more decoupled and targeted farm policies were in place. Export subsidies of various kinds to dispose of products surplus to domestic requirements would no longer be needed, tariffs would not be required to maintain domestic prices at higher than international levels, nor would domestic support measures that isolate producers from world prices changes be needed.

- OECD country farm policy reform does not imply moving to ‘zero support’ – it does imply shifting to alternative policy instruments. Public investments to help the sector mitigate and adapt to climate change, to encourage sustainable use of land and water resources, to manage unavoidable risks unique to the sector, to further technological progress and improve productivity growth, to ensure plant, animal and human health, etc. all warrant consideration.

- Beyond OECD country farm policies, important lessons can be learned from recent market and policy experiences: dramatic price hikes, followed by price declines and a global economic crisis, have once again highlighted the issue of access to food. Importantly, policy responses need to distinguish between the short term imperative to act in order to address the immediate needs of the hungry from the medium and long term imperatives of further agriculture development and poverty reduction in less developed economies.
Emergency relief and safety net programs (such as in-kind food assistance, cash transfers and direct income support) clearly need to be in place. Long term financing is required to maintain the activities of the World Food Programme on a predictable and planned basis, recognising the need for differentiated responses to the specific vulnerabilities of different groups in society. Provision or subsidy of basic inputs for production can be effective as part of a package of emergency responses, but their benefits might be greatly outweighed by their costs over the medium term. Credible exit strategies from input subsidy and other assistance programs should be a central part of the policy design. A greater focus on improving the functioning of input markets so that emergency measures are not needed at this level seems warranted.

Government actions to restrict exports, with the aim of diverting supply to domestic markets and lowering domestic consumer prices, should be avoided. Not only do such measures not target poor consumers, they also discourage domestic producers from increasing output in response to global demand. This is exactly the opposite impact intended, dampening agriculture expansion in the country taking such actions (and contributing to instability on global markets).

Stimulating agricultural productivity and increasing output, in particular in less developed countries, is essential. Increased investment in agricultural research, extension, market information, infrastructure and institution building are all required. In particular, there is considerable evidence that investment in agricultural research, technology development and extension has an especially high social payoff with respect to pro-poor growth. Further, many developing countries have a rich natural resource base, and there are apparent opportunities to develop globally competitive supply chains.

In many developing countries the majority of poor people are small-holder farmers, but many of them are net food buyers as well: this implies that this group needs to be targeted, but it needs to be recognised that their pathways to development are diverse. Some will remain primarily subsistence farms, others will expand and become competitive suppliers on local or international markets, while others will find better income opportunities outside of agriculture. Development strategies must recognise and support these options.

Investment in developing country agriculture is needed to improve global food security, but it is insufficient without progress on the wider political, social and economic framework that would stimulate overall development and associated income and employment opportunities. Poverty is the dominant cause of food insecurity; policies to improve the purchasing power of poor households through broad based economic development are essential. Solutions require, first and foremost, committed national governments.

As countries move out of recession many governments will confront more difficult fiscal situations. This will likely prompt a review of policies in many areas, including agriculture and food. This is a good time to do more than tinker with the details of existing farm policies and to address more forward looking challenges and opportunities for the global food and agriculture system.

Rachel Glennerster
Executive Director, Massachusetts Institute of Technology, Cambridge, Mass., Abdul Latif Jameel Poverty Action Lab

Rethinking agriculture and transforming the lives of the poor

Many of the poorest people in the world are farmers – with farming accounting for 64 percent of the labor force of sub-Saharan Africa. While small farmers in East Asia have managed to achieve high yields and improved incomes, not least through the use of new technologies like seeds and fertilizers, productivity of small farmers in Africa lags far behind. This productivity gap provides both an opportunity and a challenge. Boosting the productivity of small farmers in
sub-Saharan Africa has the potential to dramatically improve the lives of many of the poorest people in the world with better incomes, nutrition, and health. Many African countries also have the potential to move from net importers of food to net exporters. The fact that the take up of new technologies in Africa is so low means that there is substantial potential for improvements in productivity.

The challenges, however, are as substantial as the opportunities – there are reasons why African farmers have not adopted new technologies at the same rate as those in East and South Asia. The multitude of microclimates means that new crops have to be adapted to local conditions and how technologies should be used to be most profitable may vary substantially by area. Investment in new technology to meet local conditions is tiny in most African countries compared to Asia. Transportation infrastructure is very weak driving up the costs of inputs and reducing farmers’ access to markets. Access to financial instruments and information about new technologies are also major barriers to adoption.

However, there are signs that governments in Africa and donors are refocusing attention on agriculture as they recognize its central importance in the fight against poverty. Technologies to improve not only agricultural productivity of small farmers but also to reduce wastage of agricultural produce during storage and the nutritional value of produce are all likely to be part of the solution.

**Suggested solutions**

**Invest more in agricultural technologies for the poor**

Whether it is new seeds or new farming practices, research and development of new technologies to promote the productivity of poor farmers is a global public good and as a result there is too little investment. This is particularly true for technologies specifically designed for countries with weak intellectual property rights. This type of R&D should be funded directly – as the Bill & Melinda Gates Foundation, Rockefeller Foundation, and some donors are doing, or through Advanced Market Commitments (along the lines of those being undertaken to promote vaccines for diseases for developing countries).

**Cost-effective strategies to promote technology adoption by the poorest**

Many existing technologies that have the potential to improve productivity have surprisingly low adoption rates amongst poor farmers. There are many potential reasons, ranging from lack of credit, to lack of information, to distorted prices, to poor transport infrastructure that raises the price of inputs. We need cost-effective scalable solutions to help promote those agricultural technologies that can improve the lives of poor farmers particularly in Africa. These strategies to promote adoption need to be rigorously tested through randomized evaluations (just as the technologies are) so that the international community and governments around the world know which strategies are the best buy.

**Learning from psychology about how to promote technology adoption**

All of us fail to do things that are good for us (from exercising to saving). The new field of behavioral economics is studying this phenomenon rigorously and a range of studies are using insights from behavioral economics to make better policy from the Philippines to the US. Recent research suggests that behavioral economics can be used to promote technology adoption in Africa by small farmers. The study (by Duflo, Kremer, and Robinson) found that farmers make an average of 70% returns when they use inorganic fertilizer on their maize crops. Only about a quarter fraction of farmers used fertilizer even though fertilizer is readily available, farmers know it is highly profitable, and most claim they want to use it. In line with behavioral models they hypothesized that farmers plan to use fertilizer but are tempted to spend the money on other goods. By the time fertilizer is needed they do not have money left. A simple commitment savings devise with a deadline close to harvest time allows farmers to
lock in their commitment to fertilizer and dramatically increases technology adoption (about the same amount as a 50% reduction in the price of fertilizer at the time of purchase). Many have assumed that credit is the answer to promoting productive investments by poor farmers but the world is littered with failed or failing agricultural banks and microfinance with its short repayment periods is not well designed for the agricultural cycle. These results suggest that savings vehicles (that learn from psychology) may be a better answer.

Mike Mack  
*CEO and Executive Director, Syngenta International AG*

We have to grow more from less.

1. There’s less land available because of urbanization, less water available for agriculture because of competing demands. However in nearly 20 years time, by 2030, we will have 2 billion more mouths to feed. To literally feed the world, agriculture will have to double food production. More people, increasing wealth and the implications this has on diets puts daunting strains on how we produce the food we eat.

While quite challenging, we believe agriculture can meet the demands but only with the full use of technology – not just gene technology in seeds but also crop protection and seed care technology. It is about unlocking the potential of plants.

2. We need an integrated approach to energy, food and water security and this will be totally reliant on technology. First, we need to deploy existing technologies across land currently under cultivation world-wide to raise the average yield. If we apply modern crop production technology across the globe, we will realize significant yield potential within the next 3 to 10 years.

- In Russia and the Ukraine, only 10% of the land surface is farmed efficiently leaving significant increased productivity potential.
- In Asia they could achieve 20% growth in productivity in ten years time but this will not happen with only the current practices and tools available to their farmers
- I applaud the G8’s recent commitment at the L’Aquila Summit where the leaders of the world’s industrialized nations announced a new Food Security Initiative to invest 20 billion dollars in 3 years to encourage rural development in Africa. They spoke of the “longstanding underinvestment in agriculture and food security” and the “urgent need for decisive action to free humankind from hunger and poverty.” This focus on “sustainable production, productivity and rural economic growth” vs. food aid is the best path to development.

Productivity improvement is not just a case to be made for developing countries but we also need to increase the productivity of land in the *developed world*. Regardless of the type of agriculture production method – conventional or organic – it must meet three criteria: it must be safe, efficient and economic, otherwise we are not using the limited resources we have to their full potential.

Technology was at the heart of the first Green Revolution. What is needed today is no different. We must expand the use of technology. Farmers need access to the full tool box of the newest and upcoming agricultural technologies to drive yield even higher over the next 10-15 years and to kick-start a second Green Revolution. We forecast that fully applying these technologies will bring annual yield/hectare growth back to the roughly 2% p.a. that we saw as a result of the first Green Revolution. That will mean agricultural productivity will again grow faster than world population and, thus, play a central role in achieving food security worldwide.

3. Using water more efficiently will be a critical factor for agriculture.

- While there is enough water globally, many localized areas already face severe water scarcity which is limiting yields – US-$ 30 billion crop losses due to drought in 2007.
Only 17% of all cropland is irrigated but provides 30–40% of the world's food production.

Of the roughly 2,700 cubic kilometers water withdrawals, rice (~40%) and wheat (~10%) are the biggest agriculture users.

Some 60% of rainfall replenishes soil moisture; drought tolerance can increase yields especially in rain-fed agriculture.

Partnerships for water use efficiency promise the highest water savings:
- 40% of water used for irrigation is not used efficiently.
- 80% of all water is withdrawn in Asia, which has a high share of flood irrigation with low water use efficiency.
- Most parts of the developing economies have economic, not physical water scarcity – the world's water crisis is not related to the physical availability of water but to social and political management issues.

4. The key factors keeping agriculture from reaching its potential.

- Investment – there’s not enough R&D. The public sector basically shut down much of its agriculture research in the last decade. With increased regulation and the resulting increase in costs, industry has also had to rethink areas of research. Equally important is the lack of investment in infrastructure in the developing world. This needs to change. The G8’s Food Security Initiative I hope will be a good start in this direction.

- Political considerations taking precedent over scientific facts – regulators are running scared of accepting new technology and getting it into the hands of growers as quickly as possible. Take Europe for example and their disdain for biotech. This position frankly, is keeping food out of the mouths of Africans who could greatly benefit from GM technology.

- Trade barriers – farmers must be allowed to export their products to where they are needed without barriers. Markets must be allowed to operate openly.

- Consumer opinion about the safety of production agriculture – technology can be used safely, it is happening every day.

- The real issue is not about the limitations of technology or whether agriculture can produce sufficient food, feed and even biofuels. This is about decisions governments make to get technology into the hands of farmers so they can start using it and keeping markets openly available to them.

**Jerry Steiner**

*Executive Vice President, Sustainability and Corporate Affairs, Monsanto*

**Thinking outside the box when rethinking global agriculture**

Most of us agree on the challenges: The world needs to produce more food in the next 50 years than it has in the past 10,000 to meet rising demand. And it must do so in the face of climate change, more stressed water supplies and limited available new land.

To me, that means practicing agriculture differently in the future. It means using every available tool and working in unexpected partnerships in order to grow more crops while more judiciously using limited and precious natural resources. We need to double production, in a more sustainable way, on every hectare that's already bearing a harvest. How? Farmer access to technology and markets will play a key role, along with addressing the challenges of infrastructure, local capacity, public policy and political will.

It will take many players each playing a part, and the parts working together. The private sector must continue to innovate, and also do more to share its knowledge and expertise to create value for society. We rely on the public sector to enable via infrastructure, working markets, and funds for public agricultural research and economic development. Philanthropy
and civil society are often the best actors to get things started. However, to make more breakthroughs this all has to happen in a more integrated fashion. We need to think outside the box to formulate innovative solutions.

Our proposals are built on the belief that we can accomplish the most by creating visibility and being inventive to amplify the power of local action and actors. Here are some ideas to stimulate discussion and begin to address these goals:

- Establish an annual international award to recognize public-private partnerships that leverage the unique strengths of each partner to help solve agricultural challenges in the developing world. Projects must contribute to the overall goal of improving agricultural productivity and farm welfare, while reducing the per unit consumption of water, land, energy and other resources.

- Establish a publicly funded prize for the first developing country to double yield in a key staple crop while also achieving a significant environmental benefit (such as reducing use of water, energy, land; or adapting to conditions of climate change). The goal must be achieved on a sustainable basis. This should encourage partnerships.

- Establish an award for local entrepreneurship in the creation of effective new value chains for staple crops, resulting in the creation of functioning, competitive local economies. Background: As I have travelled, I have seen many places where subsidies (or vouchers) were used to increased productivity. However, once the incentive is taken away, productivity again falls. In several places, this problem was avoided by creative approaches that built in a model of using subsidies or vouchers to jump-start higher productivity, but then thoughtfully transitioning away from them and into a functioning local economy. This award would motivate organizations to place more emphasis on helping farmers make this transition. Winners would use the award money to enlarge their programs. Private companies and foundations could be encouraged to fund this Entrepreneurial Spirit Award.

- Establish more defined criteria to advance environmental sustainability in agriculture. I believe in the adage, “You can move what you can measure.” To this end, we would form partnerships across the agricultural value chain, including the private sector and NGOs, to benchmark and monitor agriculture’s environmental footprint. Create consensus around a single set of metrics for tracking progress and creating accountability in the use of land, water and energy, topsoil erosion and greenhouse gas emissions. A model for this in the US is “Field to market: the keystone alliance for sustainable agriculture;” details at http://www.fieldtomarket.org.

Joachim von Braun
Director General, International Food Policy Research Institute

Rethinking agriculture entails to use the new technological and economic opportunities of agriculture to address the current and emerging problems, especially food security, resource scarcity, climate change, and health.

The rethinking should start with redefining agriculture (traditionally understood as a farm based sector) as part of a broader “bio-economy,” i.e., the activities embracing the food value chain and its health and safety attributes, as well as the agro-raw material and biomass production and processing, and the production of regional and global public goods such as agriculture related eco-systems services.

“Rethinking” must be followed by “redoing” agriculture. That includes the actual use of the institutional and technological opportunities, not just their “thinking” in research, such as bio-technologies. “Rethinking” agriculture leads to a much more knowledge intensive agriculture.

The diverse structures of agriculture, globally characterized by about 300 million small farms and a large farm sector needs to be kept in perspective. Small-farm agriculture offers opportunities and poses constraints, which can be addressed by new technologies, incl. ICTs.
The following are proposals for sustainable and strategic solutions to overcome current and prevent future food crises, as part of the needed “rethinking” of agriculture. Action must encompass the entire world food system to mitigate the emerging challenges of the food and financial crises and build resiliency towards future risks. Sound policy actions in three priority areas are called for.

**Reduce extreme volatility in agricultural markets and facilitate open trade**

If food markets were working well also in crises, not much would be needed. But they don’t. A dual approach is recommended.

Two combined global collective actions are needed to reduce extreme volatility in agricultural markets and ensure food security. First, a small, independent physical reserve should be established, exclusively for emergency response and humanitarian assistance. Second, a coordinated virtual reserve and intervention mechanism should be created to help avoid price spikes in the future (von Braun, J., and M. Torero, Implementing physical and virtual food reserves to protect the poor and prevent market failure, Policy Brief 10, Washington, D.C.: International Food Policy Research Institute, 2009).

Facilitation of rule-based, transparent, fair, and open international trade is also needed to overcome the crises. The World Trade Organization (WTO) Doha Round should be successfully concluded. Failure of the Doha negotiations would risk a spiral toward protectionism and could result in a loss of more than US-$1 trillion in world trade, reduction of world welfare by US-$353 billion, and decrease of agricultural exports in developing countries by 11.5 percent (Bouët, A., and D. Laborde, The potential cost of a failed Doha Round, Issue Brief 56, Washington, D.C.: International Food Policy Research Institute, 2008).

**Promote agricultural growth with technology and institutional innovations**

Enhanced productivity is key for sustainable solutions.

To enhance agricultural productivity, investments should be scaled up in the areas of agricultural science and technology, rural infrastructure, rural institutions, and information monitoring and sharing. The focus must be on total factor productivity, not just on yields per hectare. If public agricultural research is doubled and targeted at the poor regions of the world – Sub-Saharan Africa and South Asia – overall agricultural output growth would increase by 1.1 percentage points a year and lift about 282 million people out of poverty by 2020 through income and consumption effects (von Braun, J., S. Fan, R. Meinzen-Dick, M. W. Rosegrant, and A. Nin Pratt, International agricultural research for food security, poverty reduction, and the environment – what to expect from scaling up CGIAR investments and “best bet” programs, Washington, D.C.: International Food Policy Research Institute, 2008).

Institutional innovations need to strengthen contract farming, cooperatives; also the inclusion of information and communications technologies that facilitate access to information of relevance on technology, services, banking etc. along the food value chain is needed. This will also facilitate the needed structural change in the small farm economies. Step by step also the small farm sector of developing countries should be facilitated to contribute to and benefit from the opportunities of the emerging “bio-economy” as defined in the introductory remarks above.

**Expand social protection and child nutrition action**

About half of the hungry and food deficient poor live on the small farms of the developing world. The hunger issue can only overcome if it is addressed as part of the agriculture and rural change strategy. Such strategic action for food security must stretch the whole value chain, and include the poor who do not have effective demand in the volatile and risky food situations.
To protect the basic nutrition of the most vulnerable and improve food security, agricultural growth and reducing market volatility must be accompanied by social protection and nutrition actions. Protective actions are needed to mitigate short-term risks. These include conditional cash transfers, pension systems, and employment programs.

Preventive health and nutrition interventions are also needed to avoid long-term negative consequences. Since good nutrition is crucial for children’s physical and cognitive development, as well as their productivity and earnings as adults, early childhood nutrition actions and school feeding programs should be strengthened and expanded to ensure universal coverage (Hoddinott, J., J.A. Maluccio, J.R. Behrman, R. Flores, R. Martorell, Effect of a nutrition intervention during early childhood on economic productivity in Guatemalan adults, *The Lancet* 2008, 371 (610): 411–416).

The global governance of agriculture and food systems is highly deficient, as also the G8 at their 2009 meeting in Italy have noted in their statement on food security. “Rethinking” agriculture must include “redesigning” the agricultural governance system, which especially at global level does not deliver the public goods it is supposed to deliver. A flexible net-work based approach is suggested that includes government to government as well as private sector players, rather than public mega-organizations. Collective action at a global scale must support the leading country level actions. That involves the participation of stakeholders including national governments, the private sector and donor agencies, and NGOs, incl. farmer organizations.
The Global Environment

Preparing for the Blue Revolution

The Challenges

Water shortages are cropping up around the world – from Australia to South Africa, from Brazil to the Sahel. Many of the world’s mightiest rivers run dry before reaching the sea. Perhaps half the world’s wetlands have been damaged or destroyed in the past century as salt water has displaced fresh water. These facts are striking, in view of the fact that the world’s population withdraws less than a tenth of the water that falls to the ground and that – unlike our fossil fuels – the world’s water supplies cannot be used up.

Although some regions suffer chronic water shortages whereas others are repeatedly flooded, water shortages are not merely a local problem to be solved locally. There are powerful world-wide forces at work that are making water a global problem. The first is climate change, which accelerates the rate at which water evaporates and falls and thereby increases our water management problems. The second is demography: in the last half century, the world’s population has grown by 2.5 billion, and it is expected to grow by another three billion in the next half century.

And the third is diet: as people around the world become wealthier, vegetarian diets are replaced by meat, requiring much more water input. To meet these challenges, we require more than local initiatives; what is called for is a “blue revolution.”

How can we reduce the flagrant waste of our water supplies? How can we discourage dry regions and countries from highly water-intensive agricultural products? How can we allocate water efficiently among our various uses – food, industry, services, personal use? How can we ensure that access to water is not inequitably distributed, amplifying the misery of the poor? What is the role of water pricing and sale of water rights in supporting a blue revolution? What role can business play in this revolution? How can the political obstacles to a reform of water management be overcome?
Proposed Solutions

Colin Chartres
Director General of the International Water Management Institute

Reforming water governance

Technological and engineering solutions to double food and feed production are the easier part of the equation to solve if we are to overcome water scarcity and the impact it will have on food production and economic development. Overcoming the social, economic and environmental impediments and obtaining the needed financial investment is the hard part. Making things harder still is the fact that institutional and governance arrangements for water in many countries were designed in the middle of the last century and based on inappropriate models in which water was viewed as an infinite resource.

Governments lack incentives to implement the reforms necessary to ensure more productive and equitable use of water. Fear of potential political repercussions for those who push reform permeate the water and agricultural sectors from top to bottom.

To develop incentives and support for reform, water has to be seen as something that can be valued, and ultimately priced. It can not continue to be treated as a “free” good. This does not mean that the human right to water is overlooked in the process. Few would argue against access to clean water for drinking and sanitation being a fundamental human right that must be protected in any wholesale change to the way water is governed and managed. However, this human right accounts for a very modest amount of total water use. The rest, probably about 90 percent, goes to beneficial uses and the environment. The biggest beneficiary is clearly agriculture.

Measures that governments can take to drive up agricultural water productivity are non-existent in many countries. Clearly the first measure has to be the development of effective water allocation policies, which can be used to reduce allocation as the total pool shrinks or when demands for water resources from other sectors increase. However, allocation policies depend on good water availability measurements, historical data and models and defined water rights.

The most critical solution is to reduce water allocations to agriculture whilst at the same time increasing agricultural productivity. This is a hard task, but by no means impossible. Reduced allocations must be accompanied by support mechanisms for farmers that can improve on-farm efficiency. Currently, if a farmer invests in improving productivity, he or she can keep the water saved and use it to increase the area irrigated. While this may increase food production, it does not solve the problem of reallocation of water to other economic sectors, or to the environment. A real challenge here is to try and develop incentives that link broader society to farmers and lead to broader society paying farmers for the improved environmental services and other benefits that result from improved on-farm water savings.

In the search for improved governance, we must examine the potential solutions that have been and are currently being developed. In parts of Australia and several other countries, a series of mechanisms are used to regulate water use and allocation that depend on seasonal available supply. In the Murray-Darling Basin of Australia, a new system of separation of water and land rights, water trading and water pricing based on supply and demand, has evolved through a combination of market and political forces. The result: water is traded from low to high value uses, which can potentially allow for a market mechanism for trade out of agriculture into urban areas. It is a model worth exploring elsewhere. So long as individual water rights and allocations can be defined, it provides farmers opportunities and incentives to sell temporarily or permanently. It also gives governments opportunities to buy out system tail-end users, improve overall system efficiency and to buy water for environmental flow purposes.
Developing appropriate market-based and other incentives is vital to reform in the water sector. Better definition of water rights and better measurement of water are needed to even contemplate better systems for valuation, pricing, and trade. Without these improvements, will be few incentives to improve productivity whether by the use of economic or regulatory instruments.

Mike Young

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**Watering the world: elements of a “blue revolution”**

**Questions**

How is the world going to feed, water, and provide energy to another 2 billion people? The challenge becomes enormous when decides to keep water clean and nurture environmental services. The challenge becomes daunting when one adds the aspirations of many to escape from poverty and others to adopt more water-intensive diets and lifestyles. Factor is some extreme water scarcity and some adverse climate change, plus increased flood risks and one could give up.

To make matters worse, a considerable proportion of the earth’s fresh water resources are over-used. In many areas, there is no more water to be had – smarter use and re-use are the only options available. As a general rule, the environment needs more not less water.

Increasing amounts of water are being used to supply energy and increasing amounts of energy are being used to produce water, clean it and move it around.

As the title to this session implies, it is time for a “blue revolution.” Access to water is one of those factors that limit economic progress. Like financial management, the cost of getting the fundamentals of water management wrong can be very high. Now is not the time for complacency.

**Good and bad news**

The good news is that the technology and institutional arrangements necessary to meet these challenges exists.

Around much of the world, water use is notoriously inefficient. It is possible to produce much more with much less water. The challenge is to get the investment signals right and empower investment. If we get the signals right and the transaction costs down, there are significant job opportunities.

Similarly, whilst global assessments of infrastructure maintenance and enhancement needs are rare, at the local level, they are well understood.

In many parts of the world, storage, distribution and treatment infrastructure is run down. A 2005 Stockholm Environment Institute assessment of the cost of meeting Millennium Development Goals for water supply and sanitation found that US$47 billion was needed between 2004 and 2015. When the Millennium Development Goals are viewed through glasses that require economic discipline, these goals become much more achievable.

As pointed out many times before, one way forward is to charge all users the full cost of getting water to them and cleaning it up after they have finished with it. The more people pay, the easier the financial challenge becomes. The more blue water can become part of the solution.

Ecosystem services come free and tend to sequester rather than emit greenhouse gases. Investing in nature is part of the solution.
The bad news is that whilst the policy prescriptions are well known governments are finding the extremely difficult to implement them. The world is littered with policy statements and policy commitments that have been only partially implemented.

Less well understood by people in the water sector are the opportunities to speed the blue revolution by freeing up agricultural trade, signalling the true cost of carbon pollution and making the costs of subsidies transparent. For a blue revolution to work, changes in each of these enabling policy arenas are necessary.

A recommendation for economic discipline

Too many water policies impede change, impede investment and impede innovation. It is time to put in place a series of transitionary arrangements that will allow markets to send proper price signals to all involved in the use of water for production, for living and for processing waste without degrading the environmental processes that sustain us.

Many will object to this full cost pricing recommendation. Many see access to water as a basic human right. But, global experience is revealing that whenever governments attempt to supply free access to water, the resultant infrastructure and supply arrangements are substandard. As a result, the poor end up paying more for water than they would have if water was supplied and made available to them at a reasonable price. It needs to be remembered that the opportunity to access potable water supplies empowers people to work more productively. An economically-disciplined blue revolution has a central role to play in the development of a new world order. Water is a basic right but this does not mean that it does not have to be paid for.

A recommendation for smarter entitlement-sharing and allocation arrangements

In order for investment and innovation to occur at the business and community level, Basin and aquifer water sharing and allocation arrangements must be robust. In fully allocated systems, for example, when one person or country is allowed to take more water, arrangements must ensure that someone else takes less.

In recent years, there has been massive investment in Integrated Water Resource Management but little investment in the development of entitlement and allocation systems that facilitate autonomous change and low cost adjustment. Well designed entitlement and allocation systems understand supply risks and encourage individuals to plan for them. As populations grow, as populations migrate, as rainfall regimes shift and as absolute scarcity limits are hit, water sharing arrangements are going to have to allow markets to have a say in the choice of place where water is consumed and how it is used. The distribution of water is too big a task and too complex a task for governments to control on their own. The use of separate policy instruments to manage equity, efficiency, environmental and social objectives enables the great use of market mechanisms to play a role in the pursuit of integrated outcomes.

A recommendation for “blue” governance

If the above is to be achieved then the prime role of central government is establish the institutional arrangements necessary to facilitate change. Transitionary arrangements are needed to allow and catalyse investment and adaptation. Well designed arrangements allow change in a way that is consistent with a well-established set of hydrological, economic and social principles nested within a set of absolute environmental constraints.

Astute blue governance – necessary for a blue revolution – is more about enabling change and less about controlling where change occurs and less about determining who gets access to water.
A recommendation for astute reform sequencing

Rather than dramatic and sudden policy shifts often advocated, a transitionary approach may be more appropriate. These transitionary pathways will need to pay careful attention to reform sequencing. Policy reforms have to occur in the right order.

- Investment needs to follow the development of robust entitlement, allocation and trading arrangements.
- Metering systems need to be put in place before prices can be set.
- Arrangements that promote investment security and reward innovation need to be in place before water suppliers, water users and communities can be expected to respond.
- Subsidies have to be made transparent before they can be phased out.