Searching for Strategies to Restore Global Economic Stability and Growth

Sally Blount, Martin Eichenbaum, Charles L. Evans, Michael H. Moskow, and Raghuram Rajan, *Cochairs*

CONFERENCE REPORT AND EXPERT PAPERS

May 2-4, 2012

PRESENTED BY

THE CHICAGO COUNCIL ON GLOBAL AFFAIRS

IN PARTNERSHIP WITH

bruegel

CIM CENTER FOR INTERNATIONAL MACROECONOMICS NORTHWESTERN UNIVERSITY

CHICAGO BOOTH The Initiative on Global Markets

FEDERAL RESERVE BANK OF CHICAGO

FUNDAÇÃO GETULIO VARGAS IBRE Instituto Brasileiro de Economia

ICRIER

JEF Japan Economic Foundation

Kellogg School of Management

北京大学国家发展研究院 National School of Development

Searching for Strategies to Restore Global Economic Stability and Growth

Sally Blount, Martin Eichenbaum, Charles L. Evans,
Michael H. Moskow, and Raghuram Rajan, *Cochairs*

Conference Report and Expert Papers

May 2-4, 2012, Chicago, Illinois

Presented by The Chicago Council on Global Affairs

In partnership with:

Brazilian Institute of Economics (IBRE) of the Fundação Getulio Vargas
Bruegel Institute
Center for International Macroeconomics at Northwestern University
Federal Reserve Bank of Chicago
Indian Council for Research on International Economic Relations (ICRIER)
The Initiative on Global Markets at The University of Chicago Booth School of Business
Japan Economic Foundation
Kellogg School of Management at Northwestern University
National School of Development at Peking University

The Council received generous support from the John D. and
Catherine T. MacArthur Foundation, the Cooper Family Foundation,
lead corporate sponsors JPMorgan Chase & Co. and Hyatt Hotels Corporation,
and supporting corporate sponsors ManpowerGroup and Northern Trust Corporation.

The Chicago Council on Global Affairs is a leading independent, nonpartisan organization committed to influencing the discourse on global issues through contributions to opinion and policy formation, leadership dialogue, and public learning.

The Chicago Council provides members, specialized groups, and the general public with a forum for the consideration of significant international issues and their bearing on American foreign policy. In addition to remaining the premier platform in the Midwest for international leaders in foreign policy, The Chicago Council strives to take the lead in gaining recognition for Chicago as an international business center for the corporate community and to broaden and deepen The Chicago Council's role in the community.

For further information about The Chicago Council or this project, please write to The Chicago Council on Global Affairs, 332 South Michigan Avenue, Suite 1100, Chicago, IL, 60604. Visit The Chicago Council's Web site at thechicagocouncil.org.

Printed in the United States of America

Table of Contents

Foreword

Future generations will study the global financial crisis of 2008-09 as a pivotal moment in economic history. The events of the last few years have served to highlight crucial flaws in the existing global financial architecture and forced many nations to reassess long-standing assumptions. Many developed economies found themselves ill-equipped to put their economic houses in order, while emerging economies appeared all the stronger, perhaps becoming an integral part of the solution rather than the problem.

The G8 summit held in May 2012 in the United States and the June G20 summit in Los Cabos, Mexico, have come at a crucial juncture in global economic affairs. As the leaders of international institutions and national governments scramble to adapt to this new situation—one that requires that an ever-greater number of perspectives and priorities be taken into account—there is an opportunity to reassess changing power dynamics, agree on necessary compromises, and chart a new path toward stability and renewed growth.

With this opportunity in mind, The Chicago Council on Global Affairs collaborated with several Chicago-based and international partners to convene in Chicago a group of leading economists, policymakers, and commentators from both the developed world and key emerging economies to discuss the most pressing issues confronting the global economy. The conference on "Searching for Strategies to Restore Global Economic Stability and Growth" was held at the Federal Reserve Bank of Chicago from May 2 to 4, 2012.

During two-and-a-half days of keynote addresses, expert panels, and breakout sessions, conference participants explored and assessed challenges such as the structural impediments facing leading economies, the heightened importance of emerging nations to global stability, underlying threats to social compacts between governments and their citizens, eurozone instability, U.S. government paralysis, and the suitability of existing international financial institutions and regulatory bodies.

Keynote presentations by the Honorable Jean-Pierre Landau, former deputy governor of the Banque de France; the Honorable Henry Paulson, former secretary of the U.S. Department of the Treasury; the Honorable Y.V. Reddy, former head of the Reserve Bank of India; and the Honorable Jesús Silva-Herzog, former minister of finance for Mexico and Mexican ambassador to the United States, informed the general discussion by offering first-hand practitioner perspectives as to the goals, pressures, and limitations affecting the institutions most relevant to expediting long-term economic growth.

The conference aimed to both enhance participants' understanding of these challenges and to help identify possible short- and medium-term solutions prior to the June G20 summit in Mexico.

To organize the conference, The Chicago Council on Global Affairs joined with four institutions: the Center for International Macroeconomics at Northwestern University, the Federal Reserve Bank of Chicago, the Initiative on Global Markets at the University of Chicago's Booth School of Business, and the Kellogg School of Management at Northwestern University.

The Council also partnered with five international institutions: the Brazilian Institute of Economics (IBRE) of the Fundação Getulio Vargas, the Europe-based Bruegel Institute, the Chinese National School of Development at Peking University, the Indian Council for Research on International Economic Relations (ICRIER), and the Japan Economic Foundation (JEF), all of which put together top-level delegations able to share their unique experiences and particular areas of expertise.

I am grateful to the cochairs of the conference, who provided invaluable guidance in shaping the event: Sally Blount, dean of the Kellogg School of Management at Northwestern University; Martin Eichenbaum, Ethel and John Lindgren Professor of Economics and codirector of the Center for International Macroeconomics at Northwestern University; Charles L. Evans, president and chief executive officer of the Federal Reserve Bank of Chicago; Michael H. Moskow, vice chairman and senior fellow on the global economy at The Chicago Council on Global Affairs; and Raghuram Rajan, Eric J. Gleacher Distinguished Service Professor of Finance at the Booth School of Business at the University of Chicago.

The Council received generous support from the John D. and Catherine T. MacArthur Foundation, the Cooper Family Foundation, lead corporate sponsors JPMorgan Chase & Co. and Hyatt Hotels Corporation, and supporting corporate sponsors ManpowerGroup and Northern Trust Corporation.

The conference and report would not have been possible without the dedication and hard work of The Chicago Council's staff. I would like to thank Rachel Bronson, vice president of studies, for her leadership and vision on this project. Daniel Lansberg-Rodriguez, a graduate student at the University of Chicago Law School and our consultant on the global economy, helped organize the conference and served as the rapporteur of the conference and writer of the conference report. Juliana Kerr Viohl, director of Global Chicago/Global Midwest, managed the report production and dissemination. I also want to thank January Zell, executive director of leadership travel and special events; Carrie McAlpin, senior officer of special events; and Elizabeth Lulla, manager of event logistics, for their planning and execution of every detail related to this conference. Catherine Hug, the Council's editor, once again contributed significantly to this final report.

Chicago is an economic engine for the United States, rich in influential financial, business, and academic institutions. It has long been my belief that it is a natural location for the kind of high-level discourse among analysts and practitioners on global economic issues. With the support of our local and international partners, we convened an exceptional group that outlined the challenges ahead and the responsibility to direct and shape the future. This report is the summary of their deliberations.

Marshall M. Bouton
President
The Chicago Council on Global Affairs
June 2012

Conference Report

Introduction

In May 2012 the G8 summit was held in the United States for the first time since the 2008-09 financial crisis. As expected, the interrelated issues of slow growth, high unemployment, foreign debt, and mounting social unrest took center stage alongside pressing security concerns such as Iran and North Korea. While an all-out global depression may have been averted, recession in Europe and economic malaise seem likely for the foreseeable future as the recovery remains protracted at best. This has left global leaders hanging onto a "desperate optimism," as Christine Lagarde, managing director of the International Monetary Fund (IMF), once described it.

In anticipation of the spring 2012 G8 and G20 meetings, The Chicago Council and its partners brought together approximately sixty leading national and international experts over a two-and-a-half-day period in early May to begin taking stock of the current crisis, consider medium-term economic and political challenges to recovery, and identify policy options for moving forward.

Taking stock of the current crisis

For many conference participants, instability in the eurozone was the most pressing economic concern. The combination of increasingly unmanageable levels of bad debt, fiscal deficits, limited access to credit, and low growth has reduced confidence in the long-term viability of the European project. To date European governments have largely averted calamity and restored a modicum of faith in the system through the following:

1. The creation of a well-capitalized rescue fund for future crises and a new budgetary framework for EU members

2. Pressure on national governments in Italy, Portugal, and Spain to implement austerity measures with an understanding that other countries may soon have to follow suit

3. Incentives and pressure on the government of Greece to acquiesce to difficult debt restructuring

The European Central Bank has significantly reduced interest rates, giving $1.2 trillion (€1 trillion) in emergency loans to banks, and bought $266 billion (€210 billion) in bad debt from crisis-stricken member states through bond purchases, including €55 trillion from Greece.

Despite these large-scale attempts at stabilization, many conference participants remained concerned that current austerity measures might smother economic growth and prolong recession as reduced public-sector spending causes unem-

Nearly sixty participants from eleven countries attended the conference held at the Federal Reserve Bank of Chicago.

ployment to go up and wages and domestic consumption to go down. Some participants felt that insufficient political will and leadership made the European strategy of restoring growth through austerity unlikely to succeed, particularly if such cuts produce severe economic contractions on the periphery.

Some participants felt that, given time, Europe would be able to introduce the necessary fiscal cuts, citing Latin America's success during its regional debt crisis. Indeed, the cuts required to stabilize the eurozone, less than 10 percent, are far smaller than those undertaken by countries such as Mexico, which cut their deficits by as much as 50 percent. Even so, the political—and economic—viability of such cuts, given the problem of enforceability and political backlash from voters, remains in question. Several participants thought that Germany, as the strongest eurozone economy and a prime beneficiary of the common currency through its export market, would likely have to continue propping up the weaker economies for the foreseeable future.

One European speaker cautioned, however, that the current scheme of ad hoc, eleventh-hour rescues is the worst possible system for sustaining the euro in the long term, as it neither ensures responsible fiscal policies by member states (as would a strict "no bailout" policy) nor lessens investor concerns about the certainty of such rescues. Sustaining the eurozone will thus likely require fundamental changes to the monetary union. Better crisis management mechanisms are also needed to reassure international markets as to the solvency of debtor nations, while disincentivizing fiscal irresponsibility.

Slow growth in developed economies

Economic recovery in the United States, while steady, has been undermined by stubbornly high levels of unemployment, unpredictable equity markets, and a lingering malaise in real estate and housing. One participant noted that growth (at an average of 2.5 percent annually) had been markedly slower than during any American economic recovery since the end of the Second World War. While some of this sluggishness may be a natural consequence of eurozone-based market uncertainty, external shocks such as the tsunami in Japan, and high oil and commodity prices, conference participants repeatedly cited government paralysis and partisanship as the gravest threat to U.S. economic recovery.

Several speakers expressed hope that the American government would eventually reach a compromise on fiscal policy, debt reduction, and the Bush-era tax cuts set to expire at the end of 2012. There was considerable agreement, however, that such compromises were unlikely until after the November 2012 presidential election. Nevertheless, with Republicans steadfastly opposed to raising taxes and Democrats equally reluctant to reduce

entitlements, the political will to solve looming problems appears absent and has greatly reduced investor confidence in the medium-term prospects of the U.S. economy.

Japan, whose economy was struggling even prior to the financial crisis, has seen a strong decrease in demand for exports due to the crisis and the effects of the 2011 tsunami and subsequent nuclear meltdown at Fukushima Daiichi. While domestic demand has increased due to the necessity of rebuilding, much work remains to be done to balance the Japanese economy. The Japanese banking crisis of the 1990s resulted in the nationalization of several large private banks and an extended period of low interest rates, both of which have been detrimental to economic growth.

Uncharacteristically for a Japanese government, there has been a significant increase in public-sector debt following the 2008-09 crisis, and the country recorded a current account deficit in January 2012. There is some hope, however, that increasingly high levels of corporate saving might offset the public-sector debt in terms of Japan's current account moving forward, which would itself represent an important step towards global rebalancing. Japan may face considerable challenges in maintaining such a balance in the future. Faced with an aging population, Japan has introduced severe austerity measures while seeking to harness its national strengths in innovation and productivity to create new economic growth. If such efforts are successful, Japan may become a good economic model for other developed countries.

The Honorable Mukta Tomar, Consul General of India to Chicago, speaks with Marshall M. Bouton, president of The Chicago Council on Global Affairs.

The Honorable Austan Goolsbee, Robert P. Gwinn Professor of Economics at the University of Chicago Booth School of Business, delivers remarks during the first panel. Sally Blount, dean of the Kellogg School of Management at Northwestern University and conference cochair, moderates the session.

Emerging markets increase regulation

China remains the world's second largest economy, its primary exporter, and the holder of the world's largest foreign exchange reserves. The first quarter of 2012 saw its exports decrease by 1 percent, however, as austerity measures in the eurozone—one of China's principal export markets—have begun to take effect. As a result, China's GDP growth slowed to 8.1 percent, its lowest level since the height of the financial crisis and nearly 10 percent below its previous quarter growth. Meanwhile, growing inequality, an aging population, high unemployment, and increased public discontent have increased the risk of political destabilization and further economic troubles. As was articulated by one panelist, the question of whether "China would grow rich before it grows old" remains unanswered and will have a significant impact on global growth and stability.

India has also continued growing, albeit at a slower pace (7 percent) and with a higher degree of regional variance, compounding already-high levels of inequality. High relative levels of government consumption as a percentage of total GDP have become increasingly untenable, and attempts to increase taxes—for example by making retroactive claims on overseas corporate deals—have come under fire from international investors.

Brazil has seen its economic growth slow to less than 3 percent over the last year, 25 percent below the forecast by the central bank and less than half the rate seen during the country's 2010 postrecessionary boom. Government attempts to contain the appreciation of the real, cut taxes, and lessen interest rates have thus far met with uneven results.

Outside of the BRIC countries (Brazil, Russia, India, and China), most emerging markets are still experiencing healthy growth. Yet as efforts to mitigate the effects of the financial crisis have become more localized and less coordinated, economic policies undertaken independently in one country are having negative effects on the economies of other countries. As explained by Dr. Y.V. Reddy, former governor of the Reserve Bank of India, advanced countries have become increasingly interventionist as they attempt to protect their economies through rapid spending decreases and quantitative easing. Such measures, however, often have unintended consequences in emerging economies. In addition, deleveraging by private banks in advanced countries is impacting the general availability of credit worldwide. As central banks in emerging countries attempt to find "safe assets," global demand for such assets has greatly outpaced supply. Rising levels of uncertainty have left ever fewer asset classes seemingly safe.

The medium-term outlook

While the immediate challenges facing the global economy may seem daunting, most participants viewed the medium-term outlook with cautious optimism. Coordinated global responses implemented at the height of the crisis were largely seen as having been successful in avoiding a complete freeze on global liquidity and the collapse of systemically important banks. As pointed out by one participant, however, since then the most robust attempts at mitigating the ongoing effects of the crisis have taken place primarily at the national or regional level.

In the view of several participants, inconsistent national and regional responses—in addition to creating myriad opportunities for regulatory arbitrage—have done much to limit the implementation and effectiveness of international economic collaboration. Increased global awareness of inequality—both between individuals and between nations—has likewise led to a considerable strengthening of nationalist sentiment, particularly in Europe. One speaker noted that given these factors, the only surprise was that national governments had not become more protectionist than they are.

Rachel Bronson, vice president of studies at The Chicago Council on Global Affairs, talks with Martin Eichenbaum, codirector of the Center for International Macroeconomics at Northwestern University and conference cochair.

Increasing revenues and decreasing expenditures

Most participants did not foresee a resolution to the current partisan deadlock in the United States on debt reduction and taxation until after the November election. If no compromise is reached, the cessation of the Bush tax cuts at year's end coupled with automatic, across-the-board spending cuts approved for 2013 would likely push the U.S. economy into deep and prolonged recession. Whoever is victorious in the election would almost immediately face a U.S. economy on the edge of calamity. Political compromises are often reached in such circumstances. Several participants felt that an eventual compromise would have to include a combination of entitlement cuts and revenue creation, with the latter possibly taking the form of a value-added tax (VAT). Were these fiscal imbalances to be successfully addressed, the robustness of the private sector—in terms of production,

innovation, and the increasing competitiveness of American manufacturing—could then, in the opinion of one panelist, "bring us back."

Jesús Silva-Herzog, the former Mexican Minister of Finance, shared his experiences at the helm of the Mexican economy during its default in 1982. On August 20 of that year, with $158 million remaining in the nation's foreign reserves and $426 million coming due the following Monday, he recalled a meeting at the New York Federal Reserve in which he was forced to announce his country's inability to honor its existing obligations, at the same time asking for a new $4 billion loan. "It was an easy decision," he explained, "as there were no other options." Within a year Mexico had cut its social spending by 50 percent and began to successfully chart a new path toward stable economic development.

Prior to this crisis, Mexican growth had been negligible, and the troubled country faced a public-sector deficit equal to 17 percent of GDP and an inflation rate upwards of 100 percent in real terms. These are significantly weaker economic metrics than the United States or even the most troubled countries in the eurozone face today. In Silva-Herzog's view, if Latin American nations, far poorer in terms of GDP per capita and with significantly less developed economies, were able to achieve strong financial growth through fiscal responsibility (at present Mexico's public-sector deficit is less than 1 percent of GDP), Europe should be able to do the same, particularly since the needed spending cuts would in most cases be less than 10 percent. He also argued that austerity versus stimulus is a false dilemma because "we don't want austerity without growth; what is needed is growth with stability."

Meanwhile, the Chinese economy is moving toward the creation of increasingly sophisticated, capital-intensive goods over the medium term. As wages continue to rise, baser, assembly-driven manufacturing models will likely become less important to the Chinese economy. Raghuram Rajan, a University of Chicago professor and one of the conference cochairs, noted that a strong potential opportunity for China might be through "frugal engineering." Because Western engineers and scientists, working under a paradigm that greatly values innovation, are often unwilling or unmotivated to create cheaper and more functional versions of existing products, there may be an as yet unmet global demand for low-end, capital-intensive goods that could be filled by China or even India.

Poorly aligned national interests

While OECD countries continue to move towards austerity and away from stimulus spending, the question of whether private demand might fill the consumption vacuum loomed large for many conference participants. Prior to the 2008-09 crisis, the main engine of global economic growth was the combination of high-spending advanced economies, particularly the United States, and fast-

Jean Pisani-Ferry, director of the Bruegel Institute, delivers remarks during the second panel.

Armando Castelar Pinheiro, coordinator of applied economic research at the Brazilian Institute of Economics, speaks with the Honorable Jesús Silva-Herzog, former Mexican Secretary of Finance.

growing emerging economies such as the BRICs. As the ability of the advanced economies to fulfill their vital roles has been undermined, some speakers thought it would increasingly fall to the large emerging markets, particularly China, to do so.

In general, many participants questioned whether the BRIC economies would be able to rise to this challenge and shift away from domestic saving towards external consumption. In the view of one panelist, China, likely the best-positioned BRIC to fuel new consumption, would be hindered from undertaking such a shift due to government inertia. "Shifts in Chinese policy tend to move in very small, incremental steps," he explained.

The future of the U.S. dollar

There were also discussions about whether the U.S. dollar would remain the global reserve currency for much longer given recent drops in the dollar's value, unsustainable current account and budget deficits, and the quantitative easing policies of the U.S. Treasury. While participants believed that the dollar would continue to decline in value, the lack of an alternative makes the dollar unlikely to be replaced in the foreseeable future.

One speaker pointed out that the euro is currently less safe than the dollar and that having any other single currency as a reserve would eventually create the same problems the dollar faces now. Using a basket of currencies would also be too problematic and unwieldy given the intricacy with which modern currencies play off one another. The IMF's special drawing rights (SDR) is also not a viable substitute, as it is not a readily useable currency and the need to convert it essentially guarantees a loss of value. While there may eventually be a need to replace the dollar with some form of global currency, the political challenges to doing so will likely allow the dollar to continue its slow decline for some time.

Global imbalances—How much do they matter?

The importance of global imbalances—the sharp and protracted asymmetries in the savings rates, financial sophistication, and debt holdings of various economies—were an important theme of the conference. The interplay between advanced economies with high absorption capacities but low savings rates and high debt, and emerging economies with extremely low debt, high savings, and limited absorption capacities, has created a vicious cycle that threatens the long-term health of the global economy. Participants largely agreed that these imbalances—between fully independent economies such as the United States and China and between eurozone nations and even intra-national states—are a problem. Yet opinions varied considerably on the immediacy of the threat and on the sacrifices that should be made to expedite rebalancing.

Jean-Pierre Landau, former deputy governor of the Banque de France and a high-ranking IMF official, proposed that global imbalances, particularly within the current account, might be safely phased out over time, but that doing so should be a gradual process. The key to maintaining the system in the meantime would be to implement structural reforms in the current financial architecture, including better and more cohesive financial regulation and an increase in the availability of safe assets put forth by the financial sectors of the advanced economies.

Reforming the financial architecture

There was considerable agreement on the regulatory reforms needed to properly shape and sustain the global economy. Increasingly, countries will have to find ways to balance their own interests in maintaining national sovereignty with the growing need for international regulatory institutions and norms required to facilitate and track cross-border financial flows and liquidity. Thus far, the G20 has already taken important steps in this direction by strengthening the financial stability board (FSB) and increasing national oversight of systemically important financial institutions (SIFs). Moving forward, the international community will have to work together to tighten the regulation of shadow banking and agree upon and implement global accounting standards, while facilitating convergence in national regulatory practice to limit the risk of regulatory arbitrage.

Capital requirements instituted recently under BASEL II and BASEL III will also play a crucial role in mitigating the risk of excessive leveraging by commercial banks. Several participants warned against overcompensating, however, stressing the importance of finding a workable balance that allows banks enough leverage to provide adequate liquidity for economic growth while still protecting against overleverage.

As mentioned earlier, one result of prolonged instability in the eurozone and the near de facto default of the United States in 2011 has been scarcity of safe assets just when they are most needed for the global economic recovery. The creation of new vehicles in which to safely invest was, to one presenter, at present the most crucial responsibility of the OECD private sector —both to meet its own needs in terms of safe assets and to anchor value—and, increasingly, of public entities worldwide, which rely on these vehicles as a way of accumulating and maintaining their foreign exchange reserves. One participant suggested that, given the private sector's current challenges in meeting these demands as a result of reduced public trust and greater government regulation in the postcrisis world, public authorities might themselves take an active role in creating such instruments, possibly by basing them on real assets such as land or by creating an amalgamated vehicle based on diversified sovereign risk.

Can the eurozone survive?

The consensus among many participants was that the euro would probably survive, although only through patchwork solutions that would not necessarily address the underlying problems of monetary union. Several participants felt that securing the health of the eurozone in the medium term might require the creation of a European equivalent to the FDIC or a single supranational system for bank supervision. There was also considerable support for having the European Central Bank reverse one of its stated missions and deliberately aim for higher inflationary targets. Participants for the most part agreed that inflation of somewhere between 3 and 5 percent would allow peripheral countries—by undergoing comparatively weaker inflationary adjustments (i.e., nominal wage increases) than wealthier eurozone countries—to achieve necessary real wage reductions without the need for politically unpopular measures. This higher rate of inflation would also reduce the real value of outstanding debts, facilitating debt reduction in the medium term.

Austan Goolsbee, a University of Chicago professor who formerly served as chairman of the U.S. Council of Economic Advisers, was less sanguine

Stephen Pickford, Her Majesty's Treasury (1993-2010) and associate fellow at the Chatham House in London, poses a question to the panel.

Conference participants included economists, policymakers, commentators, and business leaders.

about the monetary union's future. He explained that monetary union in highly asymmetric regions could work, but only with a social willingness to tolerate subsidies, unrestricted labor mobility, and high levels of regional inequality. In cases where such mergers have been successful—such as the union of North and South Italy and of East and West Germany—this was achieved through the natural solidarity among citizens of a single nation. This level of social cohesion and understanding is currently absent in Europe as a whole. While Goolsbee outlined four strategies for successfully remedying the current situation, he also outlined the challenges he believed would fatally undermine their implementation.

1. **Establishing regular wealth transfers from dynamic European nations such as Germany and Austria to more profligate and debt-laden peripheral countries such as Greece.** Such transfers regularly take place within the United States, where wealthy states like Connecticut or Maryland redistribute their federal taxes to states with weaker economies. There would likely be insuperable political obstacles to instituting this in Europe, however, given the popular backlash against such subsidies and recriminatory feelings among many populations towards fellow Europeans across the rich/poor divide.

2. **Facilitating migration among eurozone countries to even out imbalances.** This would also prompt a powerful backlash in wealthier countries concerned with preserving their national identities. Furthermore, linguistic, cultural, and geographic barriers would be powerful disincentives for would-be immigrants from poorer economies.

3. **Empowering the ECB to "grind down" real wages through targeted inflation.** This would also prove immensely challenging, as Europeans, particularly Germans, maintain strong and visceral historical aversions to inflation. Likewise, structural reforms can take years to actually raise productivity growth rates, and wage cuts are often socially palatable only after painful and extended bouts of high unemployment, which is not the case in Europe's most problematic member states at present. Attempting to devalue in real terms within just some states of the monetary union so as to make countries like Greece internationally competitive, while maintaining or increasing real values in more successful countries like Germany, would also entail a high risk of unintended consequences, as there is, at present, no comparable historical precedent with which to guide the process.

4. **Break up the union** either through wholesale dismemberment or by unilaterally releas-

ing certain high-risk peripheral countries such as Greece.

Despite these challenges, many participants, particularly Europeans, said that far too much political, economic, and social capital had already been invested in the European experiment for it to be readily abandoned. Since Europe has no internal authority to coerce members to exit the monetary union, it is unlikely that any nation would willingly leave. Wealthy countries enjoy myriad benefits through their export markets and problem states would face extreme costs and protracted recessions should they exit. Furthermore, despite negative growth in many European countries, Germany remains very strong economically. Current low levels of unemployment and the national sense of empowerment gained through leadership of the monetary union might be enough for the German population to accept difficult but necessary sacrifices to preserve it.

One panelist suggested that to survive, Europe must clearly define itself. It is presently caught between simply being a collection of sovereignly operating countries and true monetary union. For the union to be sustained it may well become necessary for member states to accept higher levels of European involvement in their fiscal and budgetary affairs. It will be up to them to weigh the costs and benefits of doing so.

Threatened social compacts and political responses

There was concern throughout the conference proceedings about the disintegration of existing social compacts. Rising inequality combined with the loss of secure housing, employment (even in the public sector), and access to credit have raised questions about the relationship between governments and their people. Social safety nets such as pensions and social security programs have also been called into question as looming demographic crises and unsustainable debt burdens remain unaddressed. Domestic instability is on the rise everywhere, as evidenced by the Arab Spring, turmoil in Europe, and the Occupy Wall Street movement in the United States. This adds to the overall level of global uncertainty, further undermining global growth and recovery.

According to Ignazio Angeloni, advisor to the European Central Bank's executive board, it is important to differentiate between legitimate and sustainable social compacts (such as those promoting competitiveness, growth, and employment) and more questionable ones (such as early retirements and ever-shorter working schedules). He compared the social compacts prevailing in the richer European countries, which he believed were predicated on strengthening national and regional roles in the global economy, to those in some countries on the periphery, where a debt-fuelled consumption boom created a de facto social compact that is inherently unsustainable.

Many sitting governments, particularly in Europe, that implemented necessary but unpopular austerity measures, tax hikes, or wealth transfers have been expelled. Governments thus ousted are all too often replaced with populist successors who rode into power on shortsighted and irresponsible promises and clear mandates to eschew such sacrifices. In Angeloni's view, for austerity to become politically palatable it needs to be both fairly distributed and presented to the public as a collective project that can be easily understood and whose goals will benefit all, including future generations. Austerity alone will never generate consensus, let

Richard H. Cooper, founder of the General Welfare Group, LLC and conference sponsor, speaks with Yang Yao, professor at the National School of Development at Peking University, during a break.

alone enthusiasm, but austerity can be accepted once its meaning and purpose is understood.

The rise of popular dissent

Popular discontent has also become increasingly common in emerging economies such as China and India. Dali Yang, faculty director for the University of Chicago Center in Beijing, expressed particular concern that China's fraying social compact belied its impressive economic position. China recently overtook the United States in terms of its GINI coefficient, a measure of inequality, and labor's share of national GDP dropped from 51.4 percent at the millennium to less than 40 percent in 2011. Unemployment, even among the college educated, has also increased substantially. These widening divides within China, particularly between urban and rural populations, have led the latter to demand a greater share of the returns from national economic growth. Dr. Yang estimated that over the last twenty years, protests and riots have increased tenfold, though no official figures have been released. Heavy-handed government attempts to contain dissent have in many cases further exacerbated its underlying causes. Whereas over 80 percent of Chinese citizens defined themselves as "happy" five years ago, that figure is now 50 percent. As Dr. Yang stated, "When growth was over 10 percent, these problems were manageable. When it's not, who knows?"

Dali L. Yang, faculty director of the University of Chicago Center in Beijing, speaks on the third panel moderated by Raghuram Rajan, Eric J. Gleacher Distinguished Service Professor of Finance at the University of Chicago Booth School of Business and conference cochair.

India, where growth has remained somewhat more stable, also faces major challenges as regards inequality and unemployment. Its situation is exacerbated by a vocal and growing population of college-educated professionals unable to find jobs. One participant suggested that in an attempt to increase college attainment, insufficient attention had been paid to educational standards and that employers had increasingly begun to view such degrees as inadequate.

Meanwhile, despite high commodity prices, Brazil has continued to struggle with comparatively slow growth and persistent challenges in combating poverty and inequality. While considerable progress has been made in the last ten years in creating a more safe, equal, and wealthy society—and unemployment has so far remained stable—the tenability of these gains is a pressing concern should growth remain sluggish.

Addressing unemployment and skills

Unemployment and education crises are also affecting many advanced economies, with unemployment at more than 25 percent in some countries such as Spain. Many of the unemployed are young people who would otherwise be starting their professional careers. In part, this trend is the result of recession, the mechanization of manufacturing, and increased outsourcing. Yet many participants believed that a widening disconnect between national education systems and the needs of employers was to blame. Because labor is readily available and training fresh graduates takes time and resources, employers have been squeezing ever-more productivity from their existing workforces and, where necessary, hiring only experienced workers who can hit the ground running.

There was agreement among conference participants that youth unemployment should be made a priority. Jeff Joerres, the chairman and chief executive officer of ManpowerGroup and chairperson for the G20's current task force on employment for the upcoming summit in Mexico, suggested the following strategies for tackling unemployment:

1. **Facilitating infrastructure investments that contribute to long-term competitiveness, job creation, and sustainable development.** By funding preproject feasibility and assembly studies, the speed with which crucial infrastructure projects could be planned, financed, and implemented would increase.

2. **Reforming labor markets and policies to enhance access, competitiveness, and productivity while maintaining social protection systems.** By linking labor market reforms with general regulatory reforms that support economic growth and investment, a foundation for further employment can be laid. Reforms would include strengthening legal institutions, enhancing property rights, and streamlining processes for doing business such as starting a business, registering property, trading across borders, and paying taxes. Increasing the ability of firms to manage cyclical downturns while limiting layoffs would also be important. This could be done through government compensation for retained labor and reduced work-hour schemes, thus lowering the burden on social security systems and avoiding skill atrophy.

3. **Providing financing, training, mentoring, and innovation support to organizations with the desire and potential for growth, including small and medium enterprises (SMEs), entrepreneurs, cooperatives, and social enterprises.** Financing could include loan guarantees, seed investment capital pools, and tax incentives for investors in young and small enterprises. Improving and streamlining the regulatory environment would further spur business growth and job creation, as would supporting entrepreneurship education in schools and universities, physical and virtual networks of young entrepreneurs, business plan competitions, and entrepreneurship fairs.

4. **Assisting companies, educational systems, and education providers to collaborate effectively on "postcrisis" curricula, targeted skill development, and skills matching.** Total investment in practical skill development, particularly vocational training, could be increased through various financing mechanisms such as student loans. Research into the skills and competencies needed by businesses today and in the future, along with better linkages between education ministries and departments and the business sector, would increase job opportunities and productivity.

Ignazio Angeloni, visiting fellow at the Bruegel Institute and adviser to the executive board of the European Central Bank, and Jeff Joerres, chairman and chief executive officer of ManpowerGroup, deliver presentations during the third panel.

5. **Upgrading local programs and increasing the number, quality, and image of internships and apprenticeships for young people who are making the school-to-work transition and for experienced workers who are making career transitions.** This could be done by working with training providers, accrediting bodies, education departments, and businesses on the design of apprenticeships and by expanding student loan programs to cover funding for vocational training and apprenticeships.

In advanced economies, where higher education has, according to one participant, focused more on self-actualization than on marketable skills, efforts could be made to prioritize the attainment of specific skills valued by employers. There was some disagreement however, on whether such steps might dampen creativity and weaken generalist skills, which have historically contributed greatly to innovation in OECD countries, particularly the United States.

Are new economic political models required?

Charles L. Evans, president and chief executive officer of the Chicago Federal Reserve Bank, chaired a lively discussion on whether new economic and political models might be necessary, given the current global challenges of political stasis, economic stagnation, and inequality.

Effective government models

The comparative success of many emerging economies in weathering the effects of the financial crisis has led some to question the long-term costs and benefits of specific capitalist models. In the United States, minimal regulation over the private sector has led to greater financial efficiency, higher salaries, stronger reputational benefits, and unparalleled innovation. By contrast, in major emerging markets such as China, India, and Brazil, the state has taken a far more active role in economic life. In China, for example, the government controls over 25 percent of national GDP and over 50 percent if corrected for land sales and indirect incomes. While this model increases stability and facilitates government intervention in the postcrisis economy, China's 50 percent savings rate, low social spending, and limited consumption among its population exacerbate global economic imbalances and stifle innovation and domestic welfare.

Dr. Yang Yao, director of the China Center for Economic Research at Peking University who presented at an earlier panel, argued that while the U.S. model had "succeeded in creating great wealth," it had likewise "created great wealth effects wherein people and companies spend too much and stability is compromised." In Dr. Yao's view, both this model and the state capitalist alternative will be increasingly inadequate over time, and a move toward a more centrist capitalist model such as found in Germany or Japan would be preferable for both the United States and China. The United States would increase regulation over its financial and manufacturing industries, take a more interventionist approach to sustaining important national institutions, and provide greater guidance to companies on labor relations and licensing. Meanwhile, countries like China would increase social spending, tone down interventionist policies such as capital controls and strict licensing regimens, and reduce government ownership of the economy. Doing so might, he argued, dampen innovation in the short term, but would increase stability, improve cooperation between governments, and increase global growth and human welfare worldwide.

Barry Eichengreen, George C. Pardee and Helen N. Pardee Professor of Economics and Political Science. Department of Economics at the University of California, Berkeley, speaks on a panel moderated by Charles L. Evans, president and chief executive officer of the Federal Reserve Bank of Chicago and conference cochair.

Some participants during the discussion chaired by Dr. Evans remained unconvinced, believing that such a convergence would be politically infeasible and that the German model might be difficult to copy, particularly if every country attempted to do so simultaneously. In the words of one panelist, "We can't all be Germany."

Dr. Barry Eichengreen, professor of economics and political science at the University of California at Berkeley, expressed a strong conviction that the creation of entirely new models is required, as the current system has failed to produce financial stability, reasonable equality, sufficient employment opportunities, sustainable social services, and adequate consumption. It will be necessary to create more efficient models that rely less on finance as the principle engine of growth, provide less socially divisive political institutions, support a more equitable distribution of economic gains, and better educate students to secure employ-

ment and increase productivity. Dr. Eichengreen outlined some of the steps currently taken at the University of California at Berkeley in this direction, while admitting that much work remains to be done. While he believes the end goals are clear and for the most part universally agreed upon, strong ideological differences about how to achieve these goals make him pessimistic as to whether substantial changes could realistically be made.

The role of international institutions

International financial institutions such as the IMF, the World Bank, and the G8 continue to play a crucial role in helping countries institute better policies, providing resources in response to crises, and coordinating macroeconomic policies on a global scale. Yet the ability of these institutions to fulfill their responsibilities is being called into question. Do they have adequate financial resources to support multiple countries during a deep, concurrent, and possibly prolonged economic downturn? If so, do their lending practices and macroeconomic assumptions reflect current global realities? And, most importantly, can they be legitimate and count on the support of their members when their governance structures do not reflect the current global economic order?

The crisis of legitimacy is perhaps strongest in the G8. To many, the current membership, which excludes major emerging economies such as Brazil, China, India, Indonesia, South Korea, and Mexico, is a relic of the post-World War II economy and does not reflect current economic circumstances. While the G7 countries together would have accounted for about 60 percent of total global domestic product in 1976, they accounted for less than 50 percent in 2011.

Meanwhile the G20—comprised of the G8, the major emerging economies listed above, Argentina, Australia, Saudi Arabia, South Africa, and Turkey—has taken a more active role following the crisis and so far has produced strong, if limited, results. While more inclusive than the G8 in terms GDP (80 percent) and population (65 percent), its ability to solve current economic challenges remains uncertain, due to its lack of structure, organization, and opaqueness.

Noboru Hatakeyama, chairman and chief executive officer of the Japan Economic Foundation, proposed that the G20 be slimmed down to a G10 and that an objective standard for membership be put in place to replace the GDP-based metric on which the G7 was based. He argued this metric was abandoned anyway in 1994 with the addition of Russia. Hatakeyama proposed a measure equally weighted between population and share of world GDP. A G10 set up on this basis would, in his view, have greater legitimacy than the current G8 and would avoid the ineffectiveness and informality of the too-large G20.

The International Monetary Fund has been at the forefront of global efforts to deal with the eurozone crisis. Working in conjunction with the European Commission and the European Central Bank, it has recently provided much-needed capital and liquidity to Greece, Ireland, Poland, and Portugal. There is concern, however, that countries such as Spain and Italy might also need to turn to the IMF for financial assistance in the range of hundreds of billions of dollars. The IMF has sought to secure financial resources sufficient for the task. Several G20 countries recently committed nearly $500 billion via bilateral loans and note purchases.

Tellingly, none was donated by the United States and less than half of it came from the eurozone. The majority came from developing countries, signaling a possible shift in international leadership. According to Stephen Pickford, associate fellow at Chatham House and former U.K. rep-

The Honorable Kenneth Dam, Max Pam Professor Emeritus of American and Foreign Law and senior lecturer at the University of Chicago, with the Honorable Noboru Hatakeyama, chairman and chief executive officer of the Japan Economic Foundation.

The Honorable Henry M. Paulson, Jr., chairman of The Paulson Institute at the University of Chicago, presents at the concluding luncheon in conversation with Michael H. Moskow, vice chairman and senior fellow on the global economy of The Chicago Council on Global Affairs, and conference cochair.

resentative to the IMF and World Bank boards, this money was invested on the condition that future support would require fundamental changes in the internal governance structures of the IMF, giving fast-growing economies of the developing world greater influence. While important changes were already agreed upon in theory at the 2010 G20 summit in Seoul—including a comprehensive review of quotas for emerging markets, two fewer European seats, and an all-elected board—pressures for greater parity have continued to pick up steam.

While the World Bank currently has sufficient financial resources in most scenarios to fulfill its mission of providing technical and financial assistance to developing countries, it faces many of the same legitimacy and operational questions as the IMF. The World Bank recently began implementing changes to give greater voting authority to developing and transitional nations. Serious doubts remain, however, about the representativeness of top-level appointees, who are informally nominated by the United States. Furthermore, after decades of operating under a neoliberal paradigm exemplified by the "Washington Consensus," the rise of state capitalist models in major emerging markets and the apparent success of previously disparaged protectionist measures such as currency controls and government limitations on capital flows have increasingly called many assumptions of the current paradigm into question.

Conclusion

The conference served as a platform for economists and practitioners to assess where they think the world is now, where they think it could be, and how to begin charting a path to get there. Naturally, participants did not all agree on the solutions, but the spirited and thorough debate enriched their understanding of the issues. Having so many countries represented helped participants think through the many variables that impact decisions and outcomes locally and internationally. There are no easy solutions to these challenges, but the participants who attended this conference were committed to doing everything they could to better understand them. It was their hope that this report could be helpful to policymakers and others seeking to navigate this terrain.

High Capitalism and Its Alternatives

Yang Yao

Professor, China Center for Economic Research, National School of Development, Peking University

When we rethink capitalism, we need to keep in mind that there are many varieties of capitalism: the Anglo-Saxon model, the German-Japanese model, the Nordic model, the Southern European model, the Chinese model, and many more. Even within the Anglo-Saxon model, one can easily distinguish the American model from the British model. The American model represents a version of "high capitalism," i.e., a capitalism characterized by high innovation, high returns, high salaries, and above all, "winner takes all." It has led to American success, but has also had large costs, including those inflicted by the current financial crisis.

High capitalism is highly efficient. Thanks to the seamless working of the market, especially the financial market, the United States has achieved tremendously in almost every aspect of economic life. In particular, it has been the global technological leader for the last one-and-a-half centuries. The "American dream" is essentially a conviction that everyone can become "number one." It is a powerful dream because it puts the highest value on a human life. The American success is founded on the hard work of the people who keep this dream alive in their daily lives.

But high innovation comes with high costs. American high capitalism has to periodically replenish its physical and human capital in order to keep up its pace of innovation. When companies decide to give up an old product and start the research of a new product, a whole team of scientists is often fired. Even those in their early fifties have to find new jobs that have nothing to do with what they have done in their whole career life. To many observers, this is the necessary cost of creative destruction. But for the unfortunate bunch who are part of the cost, the destruction is devastating.

The financial sector is the jewel of high capitalism. Through a strong financial sector, the United States projects its economic influence to every corner of the world. However, the financial sector has become increasingly detached from the real economy. With highly leveraged trading, people in the sector are basically betting on shaky future income. For that, the financial sector serves as one of the major causes of persistent U.S. current account deficits. In a sense, the result is a curse of efficiency. Wall Street is so efficient that everyone in the world wants to send money to its brokers in the hope of high returns. As a result, asset prices grow, and people feel richer than they should be. This does not stop in Wall Street. The majority of Americans feel the same because most of them hold assets directly or indirectly managed by Wall Street. As a result, they move future consumption to today.

Because of the dominant role of the American financial sector in the global economy, global rebalancing requires that the United States tone down its high capitalism. But what is the alternative?

State capitalism is often thought of as the capitalism practiced in China. Because China has

been successful in managing the financial crisis, it is believed by some people that state capitalism is one of the alternatives to high capitalism. This, however, has also triggered a reverse movement of the defenders of the "free market." The current debate has thus often been framed as one between American free capitalism and Chinese state capitalism. In the discourse of the free market defenders, Chinese state capitalism brings tentative gains to the society, but poses a great threat to economic liberty and political freedom. In Ian Bremmer's words when he was interviewed by Nouriel Roubini for his book *The End of Free Market:*

> "The sun has set on that world. The country that has emerged strongest and fastest from the global slowdown is one that does not accept the idea that a regulated free market economy is crucial for sustainable economic growth. China's success has persuaded authoritarians around the world that they really can have explosive growth without undermining their monopoly hold on domestic political power. China has enjoyed double-digit growth for thirty years without freedom of speech, without well-established economic rules of the road, without judges that can ignore political pressure, without credible property rights—without democracy. And the events of the past eighteen months have made China more important than ever for the future of global economic growth. This is a big change with enormous implications that we had better start thinking through."[1]

To any person who knows a bit about China, Bremmer's summary of China's economic success must be something near nonsense. What matters here, though, is not his ignorance about China, but the contrast that he makes between so-called "free capitalism" and "state capitalism." This contrast is a fiction and grossly narrows the set of choices that countries of the world face. By doing so, two negative consequences ensue.

First, the dichotomy between "free capitalism" and "state capitalism" has obscured the problems of high capitalism itself. In American public discourse there is a false sense of competition between "free capitalism" and "state capitalism." Worse than that, this competition is depicted as one between two opposing value systems, one of freedom and the other of oppression. "State capitalism" is clearly a vice that countries should avoid. This inevitably leads to self-justification of American high capitalism. The truth, however, is that China's economic success is not one benefiting from state capitalism, but one converging with the free market. Contrasting the American free market to Chinese state capitalism will only hinder the reform of high capitalism in the United States.

Second, the dichotomy has excluded models practiced in Germany, Japan, and Nordic countries. Those models may give us clues for reforming capitalism. These models can be roughly grouped together and called "low capitalism," i.e., a type of capitalism that combines innovations with moderate profits, harmonious labor relations, and a stable financial system. Low capitalism may not be able to compete with high capitalism in innovation, but it can do a better job than high capitalism in other areas. Because it does not need to stay at the frontier of innovation, low capitalism does not need to force out old human capital. As such, it is more likely to work with medium-range technologies than with cutting-edge technologies. Its upside, however, is that it is able to keep manufacturing inside the country. The society has a different social contract than the one found in American high capitalism. Instead of confrontation, consultation prevails in making rules and dealing with disputes. As a result, the society is much more equal than under high capitalism. Consistent with all the above, the financial sector is not more privileged than other sectors and thus is much less fluid than under high capitalism. In summary, low capitalism trades high innovation for a more stable economy and a more harmonious society.

1. http://www.amazon.com/The-End-Free-Market-Corporations/dp/1591844401/ref=sr_1_3?s=books&ie=UTF8&qid=1334801801&sr=1-3.

Despite its drawbacks, however, high capitalism will still be admired by people around the world. In a sense, Chinese state capitalism is an outcome of this admiration. The aspiration to become world "number one" runs high inside the country. But to compete with other powers in the world—some Chinese elites would reckon—China has to concentrate resources in the hands of the government or a few government-sponsored companies. But this strategy has a high risk of failure. Success in innovation is almost a random event that follows the law of large numbers. A market-based approach allows for a large number of tries, so is more likely to succeed, whereas a concentrated approach only allows for a few tries and therefore does not allow the law of large numbers to work.

In summary, rethinking capitalism is to rethink high capitalism. The distinction between free market and state capitalism has obscured the real issues that should confront the rethinking of capitalism. To cure global imbalances and devastating crises, the United States has to considerably tone down its high capitalism. On the other hand, for countries that are still in the process of building capitalism such as China, Brazil, India, and other emerging countries, low capitalism can be a better model than high capitalism.

Brazil's New Development Model: Accomplishments, Threats, and Policy Lessons

Armando Castelar Pinheiro

Coordinator, Applied Economic Research, Instituto Brasileiro de Economia, Fundação Getúlio Varga

Regis Bonelli[1]

Senior Researcher, Applied Economic Research, Instituto Brasileiro de Economia, Fundação Getúlio Varga

Introduction

Brazil has embarked on a period of great optimism since the mid-2000s, with improvements in its economic performance and, consequently, its global status. Social indicators have also improved considerably, with major declines in unemployment, poverty, and inequality. A new middle class with greater access to credit has emerged, leading the boom in consumption that has caught the interest of foreign investors and attracted large capital inflows. High domestic interest rates, low levels of government debt, a budget under control, and large gains in the terms of trade have also helped attract foreign capital, with the undesirable result of an overvalued currency—which, nonetheless, helped Brazilians to feel better off.[2] The country has also become a model of best practices in a number of areas, from financial regulation to conditional income transfer programs, and has become more assertive in global politics, with its international status bolstered by its active participation in the G20.

This situation contrasts sharply with that of the previous two-and-a-half decades, when growth was low and unstable. Brazil seemed forever doomed to slow growth due to its failure to adopt a more radical program of market reforms. Three questions arise from this dramatic change. First, what has caused such change in the country's economic performance? In particular, what has been the role of domestic policies and external forces such as Chinese demand for Brazil's exports? Second, how sustainable is the recent growth? And third, what lessons, if any, can be drawn from the Brazilian experience?

The paper addresses these questions in looking for a stylized Latin American development model. We see the Brazilian story as a glass half full. While there is much to celebrate, there are also threats. More specifically, we argue that in the long term, the ability to sustain good performance depends on new reforms, as in other countries in the region.

1. The authors thank Samuel Pessôa for helpful comments to an earlier version of this paper, exempting him from any remaining lapses.

2. Still, the Brazilian government has been partially successful in insulating the economy from the effects of these flows through the accumulation of foreign exchange reserves and controls on capital inflows. In the absence of this the currency's appreciation might have been even more significant. There has also been, as of late, an effort to increase the primary surplus, thus fostering a better policy mix that will weaken its side effects on the exchange rate.

The macro determinants of growth

After five decades of especially good performance, Brazil's gross domestic product (GDP) growth rates plunged in the early 1980s, failing to return to their previous levels in the following decades (except for a few atypical years). From 1981 to 2003, beginning with the foreign debt crisis and its aftermath, GDP growth became both slower and more irregular, with GDP per capita expanding at a modest 0.7 percent per year, on average. Starting in the mid-2000s, growth accelerated, with a ten-year moving average staying around 4 percent since 2007. Furthermore, with the rapid decline in demographic growth rates, GDP per capita has grown at a relatively healthy 3 percent per year, not far from the 4 percent registered from 1950 to 1980. Still, Brazilians aspire to a better performance.

Major policy change took place in 2005, when Brazil's fiscal, monetary, and public credit policies became more expansionist. This led to a boom in domestic demand in the ensuing years. From 2006 to 2011 domestic demand grew on average 5.6 percent per annum, whereas GDP expanded at a more modest 4.2 percent. This strong expansion in domestic demand stemmed from higher public spending and, what was more peculiar to this period, mutually reinforcing developments in the monetary, product, and labor markets. Looser monetary policy, a substantial increase in lending by public banks (accentuated after the 2008 crisis) and a large influx of foreign capital led to a major boost in credit, notably to consumers.[3] This, in turn, caused an expansion in investment and hiring, improving labor market indicators.

While it is not hard to understand what caused the relatively strong recent growth of the Brazilian economy, it is more difficult to say why it did not cause a major acceleration in inflation and an external financing crisis, as often happened in the past. We believe that this resulted from a combination of three main factors: (1) idle resources, in a broad sense, available in the economy; (2) gains in terms of trade stemming from the boom in demand for Brazilian exports and the recession in the global market for manufactured goods; and (3) the large inflow of foreign capital in the period, part of it resulting from the extraordinary monetary expansion in Europe and the United States.

The first half of the last decade was a time of adjustment. From 2001 to 2005 GDP expanded at an annual average of 2.8 percent, while domestic demand grew just 1.6 percent per annum. This resulted in high rates of unemployment and idle capacity in the manufacturing sector. Thus, production could be expanded without major pressures on factor prices. Also critical was that the current account balance went from a deficit to a surplus. When demand started to grow faster than output, total supply could be expanded by raising imports, while still leaving the external accounts in good shape.

In particular, fears surrounding the ascendency of President Lula da Silva and the Workers' Party to power led to a major currency devaluation in 2002 that lasted almost three years. When inflation pressures stemming from its weak currency, the real, were controlled, Brazil was left with a very competitive exchange rate. Thus, it had plenty of room to allow for an appreciation of the real, which capped the rise in the price of tradables.[4]

The second reason for the lack of significant inflation was the rise in export prices that started in late 2002, more than doubling in terms of U.S. dollars over the following decade. Import prices also rose, but not as much. This improved the terms of trade, especially in the second half of the decade. In 2011 terms of trade were 35 percent above their 2005 level. Moreover, because Brazil has run a trade surplus, the simultaneous rise in export and import prices also boosted the trade balance. The rise in the price of exports also helped foster investment in export-oriented projects, notably in mining, agriculture, and related activities.

These gains in the terms of trade were essential in allowing for a greater expansion in domestic

3. From 2003 to 2011 credit to consumers grew 21.8 percent per annum, i.e., four times the growth in payroll, causing a huge expansion in consumption. Retail sales expanded at an average 7.8 percent per annum between 2003 and 2011.

4. From 2003 to 2011 the real gained 50 percent in value, controlling for inflation, against a basket of currencies of Brazil's main export markets.

demand than in domestic supply without running dangerous current account deficits. Thus, from 2006 to 2011 imports of goods and nonfactor services rose 14.5 percent per annum, whereas exports expanded at 2.9 percent per annum, characterizing the "negative contribution" of external demand to output growth. Had export and import prices risen in tandem with U.S. consumer prices (at 2.5 percent per annum) the trade account in 2011 would have posted a deficit of US$25 billion rather than the actual surplus of US$30 billion. All else equal, this would have led to a current account deficit of more than one hundred billion dollars, twice the actual $52.6 billion.

Despite running current account deficits (2.5 percent of GDP in 2011), Brazil boosted its foreign external reserves from 2006 to 2011 due to the large capital inflows recorded over that period. Indeed, Giambiagi and Pinheiro (2012) estimate that in that period total net capital inflows were approximately 15 percent of GDP higher than what was needed to finance the current account deficits. Only part of these extra funds was sterilized, with the rest helping to boost bank deposits and financing in capital markets. These funds helped generate the boom in credit and stock markets. Moreover, they were important to sustain the appreciation of the real, which, in turn, was instrumental in capping inflation in tradable goods.

Finally, the rapid rise in domestic demand was accommodated through greater tolerance of inflation. The first sign that the economy was overheating was the rise of inflation in 2008, when the international financial crisis hit Brazil, lowering growth and inflation pressures through the later part of the year and most of 2009. Yet, already in late 2009 inflationary pressures were back. Overall, annual consumer price inflation averaged 5.6 percent in 2008 to 2011, above the target of 4.5 percent. This has influenced expectations: median market forecasts for inflation in 2012 and 2013 are presently at 5.3 percent and 5 percent, respectively.

A Solow-type decomposition can be used to identify what moved Brazil's GDP on the supply side in the long term,[5] separating out typical policy and performance phases: 1951-80, the golden age of high and relatively stable growth; 1981-94, the high-inflation period, ranging from the foreign debt crisis to the launching of the Real Plan; and the period after price stabilization and the market-friendly reforms of the 1990s.

Both rising employment and a substantial increase in labor productivity contributed to the high growth rates from 1951 to 1980. In turn, roughly two-thirds of the rise in productivity stemmed from the substantial increment in the economy's capital/labor ratio, with the remaining third stemming from total factor productivity (TFP) growth. Remarkably, the accumulation of human capital contributed virtually nothing to the expansion from 1951 to 1980.

The growth slowdown from 1981 to 1994 resulted mostly from a sharp decline in labor productivity growth, which actually turned negative. Employment also expanded more slowly, but this played only a secondary role in reducing GDP growth. The significant decline in TFP, resulting from the inefficiencies generated by high inflation and excessive regulation and state intervention, was the most critical factor behind the fall in labor productivity. Also important, though, was the much slower pace of capital accumulation. The only compensating factor was the more rapid expansion in human capital.

In the postreform period (1995 to 2011), GDP growth accelerated to 3.1 percent per year. The rise in employment remained the main source of output growth, but the improvement vis-à-vis the lost decade resulted from higher growth in labor productivity. This, in turn, was due to a small but positive change in TFP, while the rise in human capital stayed constant and the accumulation of capital decelerated. A noteworthy fact in this period was the significant slowdown in population growth, with a more pronounced demographic bonus that

5. We assume a Cobb-Douglas function and, like Pinheiro, Bonelli, and Pessoa (2007), adopt a Mincerian formulation of human capital, following Bils and Klenow (2000), in which human capital depends on labor force schooling.

allowed per-capita GDP to grow 0.7 percentage points more than labor productivity.

Overall, the rise in employment (2.5 percentage points) and labor productivity (2.3 percentage points) contributed in approximately equal shares to annual average GDP growth over those six decades. Going forward growth will need to become more reliant on greater TFP growth and/or faster capital accumulation.

Risks and missing growth pillars

Although it is likely that Brazil will sustain relatively good growth performance throughout the current decade, there are reforms that the country must undertake if it wishes to overcome bottlenecks and avoid the most serious risks to growth. In recent years, demand growth has outpaced supply expansion, and this cannot continue indefinitely. Going forward, the country must place greater emphasis on expanding productive capacity. For that, Brazil needs to increase its investment rate and improve its productivity growth as idle capacity has narrowed and the labor supply will expand more slowly in the future.

Growth acceleration in the second half of last decade has come with a number of imbalances. Currency appreciation has compromised the competitiveness of manufacturing, while causing nontradable sectors to expand ahead of the rest of the economy. This is illustrated by the contrasting performance of retail sales and industrial production. Between 2003 and 2011 the former grew by 7.8 percent annually, while the latter expanded at 3.2 percent per year. Between 2005 and 2011, when this discrepancy became more pronounced, the annual average expansion of retail sales was 8.1 percent, compared to 2.4 percent for industrial output. A similar contrast can be seen in the sector breakdown of GDP. The acceleration of GDP in the second half of last decade was due mostly to nontradable sectors such as construction, financial intermediation, commerce, and transportation, whereas manufacturing underwent a significant deceleration.

This unbalanced growth pattern has put pressure on the price of services—and, thus, on inflation—while enlarging the current account deficit. These trends should become more pronounced in the future as the labor market tightens further,[6] already accounting for the slowdown in growth in recent years. From 2009 to 2011 GDP grew an average 3.3 percent per annum as the government tried to keep inflation from spiraling out of control.

Furthermore, the current account deficit will likely continue to expand, although at a rate that will not bring any major risk to the country's ability to finance it, unless interest rates in developed countries go back to "normal" levels. The main risk is that commodity prices fall from their current record level, which highlights Brazil's growing dependence on the performance of the Chinese economy.[7]

A way to show how relevant the external environment has been to Brazil's recent economic performance—and, thus, to its sustainability—is to look at what happened in the rest of Latin America. Countries that also rely on commodity exports and access to cheap and abundant foreign financing but that pursued policies quite different from Brazil's recorded basically the same progress as Brazil in the later part of last decade:

- The average growth of Latin America's GDP rose from 2.1 percent per annum from 1995 to 2002 to 4.1 percent from 2003 to 2010, exactly the same acceleration as in Brazil.

- Unemployment also plummeted in most Latin American countries, in some cases even more than in Brazil. For instance, between 2003 and 2010 the unemployment rate fell by 10.1 percentage points in Uruguay, 9.5 percentage points in

6. Unemployment in the main metropolitan areas, at 5.7 percent of the labor force in early 2012, is at an unprecedented low level.

7. It is noteworthy that Brazilian exports to China, which in 1999 hardly exceeded US$500 million, totaled almost US$45 billion in 2011, with China currently rivaling the United States as Brazil's main trade partner.

Argentina and Venezuela, and 7.2 percentage points in Panama.

The risks facing Brazil may also constitute threats to other countries in the region. Among them are the following (to different degrees of importance among countries): falling commodity prices; capital flight—either due to higher interest rates in developed countries or increased populism, investor insecurity, and ensuing political fears; tight labor markets; public accounts deficits; and rising inflation.

As for Brazil, with the fast demographic transition still under way and unemployment at a record low, employment will contribute less to growth in the future. This will make Brazil's growth more dependent on increases in labor productivity. One alternative is for Brazil to accept another major influx of migrants, as it did one century ago. On the other hand, lower demographic growth will mean that Brazil will be able to improve living standards with a lower rate of GDP growth.

Substantial rises in investment will be necessary to generate the rates of output growth that Brazil desires, on the order of 5 percent per annum. These would require a major increase in savings as well as significant improvements in the business and investment environment. During Brazil's heyday of growth from 1950 to 1980, the country recorded the highest rates of savings and investment in its documented history, especially in the public sector. Since the second half of 1980, however, the investment rate has fallen to an average level of 17 percent of GDP, just once, in 1994, surpassing 20 percent.

This drop in investment seriously harmed infrastructure. Thus, while in the 1970s Brazil invested 5 percent of GDP in infrastructure, this rate has fallen to slightly over 2 percent since the 1990s. Privatization has had a mixed impact on the sector's performance. It was successful in improving efficiency and, to some extent, in attracting new investment in sectors such as telecommunications, railways, and ports. Still, because large chunks of infrastructure remain under government ownership and private investment has been mostly focused on rehabilitation and marginal expansions, infrastructure services in Brazil lack quality and are expensive.

Brazil invests little, to a large extent, because it is a low savings country. This implies that when investment rates rise, so does the current account deficit. After some time, these deficits and the accumulated external liabilities they generate trigger an external financing crisis that interrupts growth and brings investment down, turning the deficits into surpluses. A breakdown of domestic savings in Brazil shows that the main problem lies with the large negative savings of the public sector. Yet, household savings declined in the second half of last decade as well, not surprisingly at the same time that credit to consumers expanded substantially.

Low savings is, however, only part of the explanation.[8] Brazil's low rate of investment also results from a combination of low public investment and an adverse business environment. The latter is due to the size, complexity, and inefficiency of the tax burden; the poor quality and instability of economic, environmental, and administrative regulation; the high legal uncertainty; and the lack of proper infrastructure, among other issues.

Surveys with Brazilian firms such as the ones carried out by the World Economic Forum show that the main barriers to doing business in Brazil are not related to a lack of funding, but to the poor quality of the institutions: high taxes, complex and restrictive labor and tax regulations, inefficient public bureaucracy. Together with the rise in unit labor costs in recent years—26 percent higher in 2011 than in 2005, considering a basket of currencies—these factors hinder the competitiveness of Brazilian firms and discourage investment as well as TFP growth. These results highlight the limitations of Brazil's current policy model, based on simultaneous increases in tax revenues and current spending as well as on increasing state intervention in economic activity.

8. Indeed, between 2003 and 2006 Brazil was a net savings exporter and, given the willingness of foreign investors to undertake or finance projects in Brazil, it is hard to argue that lack of (external) financing has been a relevant constraint to investment.

The government's reaction to this set of challenges has been to try to substitute greater intervention and, in particular, public credit for better institutions. Thus, over the past fifteen years BNDES, Brazil's National Development Bank, greatly increased the availability of low-cost financing. Disbursements have increased from 1 percent of GDP in 1995 to a peak of 5 percent of GDP in 2010. At the same time, in 2010-11 the bank's base interest rates, the TJLP, remained slightly negative in real terms, highlighting that large firms had access to plenty and cheap financing. The impact on investment, however, has been modest. In 2010 the investment rate (19.5 percent of GDP) was only slightly above that of 1995 (18.3 percent of GDP). Thus, the result of this policy was just to quadruple the ratio of BNDES's disbursements to aggregate investment, from 6 percent in 1995 to 26 percent in 2010.[9]

On the other hand, the expansion in public credit—other state-owned banks such as Caixa Econômica Federal were also engaged in this strategy, although with smaller funds—had a negative impact on the health and transparency of public accounts. Most of the rise in BNDES's disbursements over this period was financed by loans provided by the National Treasury. These loans carried a lower interest rate than that paid by the Treasury to tap funds in the market, so they involved a significant subsidy. Part of these loans remained in BNDES's balance sheet, generating interest revenues that boosted the bank's profit, and were later transferred back to the government as dividends. Because these are counted as part of the primary surplus for which the government follows much-watched targets but the subsidy provided to BNDES is not, this has reduced the transparency of fiscal policy.

9. This strategy failed for two main reasons. First, a large part of BNDES funds were used not to boost investment, but (1) to save failed companies from bankruptcy, (2) to finance mergers, or (3) to finance the expansion of local producers abroad. Second, a large part of investment financing went to companies that were not financially constrained—that is, that could have found finance in capital markets.

Lessons and final remarks

There is more than one interpretation for the recent acceleration in Brazil's GDP growth. The more traditional view ascribes it to the various reforms undertaken since the 1990s, a process that has been remarkable in depth and breadth. Price stabilization in 1994 was the most noteworthy reform, but several others are also worth mentioning such as significant privatization and trade liberalization in the 1990s. In the late 1990s and early 2000s, the reform process, which previously had focused more on microeconomic structure and incentives, shifted to improving macroeconomic institutions. These improvements included the adoption of the Fiscal Responsibility Law, extensive restructuring of the banking sector, and the greater operational independence of the Central Bank, with the implementation of an inflation target regime, among other changes. This process continued under President Lula's first term (2003 to 2006), with a greater focus on institutional reform in the financial sector. But the enthusiasm for reform dwindled continuously in his second term (2007 to 2010). President Dilma's government (2011 to 2014) has not shown much willingness to embark on major reform projects so far.[10]

Brazil's reforms had only a moderate impact on growth, all of it by means of higher TFP growth. Investment rates, in particular, did not increase. Possible explanations for this lackluster result are the unfavorable external environment, marked by several international crises until 2001 and, again, after 2008; the failure to cope with the investment climate variables such as judicial uncertainty and a high and complex tax system; and the time needed for these deep reforms to fully impact the economy.

An alternative view is that economic policy was too "conservative" and failed to provide the required demand-side stimulus. Indeed, there have been plenty such stimuli in the second half of last decade by way of increased public spending, lower

10. The only major exception that has been implemented (i.e., approved by the Brazilian congress) is that of a social security fund for federal public employees in early 2012. But since the fund deals only with new entrants to public service, its impact will only be felt in the long run.

real interest rates, and a major expansion in credit, including subsidized credit by government banks. Of late, there has also been a greater willingness to accommodate a higher rate of inflation.

This shift in policy has coincided with the acceleration of GDP growth, but it is not possible to isolate its effect from the favorable external conditions that have prevailed since then. These conditions include rising export prices—and the associated increased presence of China in world demand—and plenty and cheap external financing. It is unlikely that Brazil would have been able to expand domestic demand so fast had it not been able to rely on a substantial increase in imports as a means to expand supply. Moreover, the fact that other Latin American countries, with different policy models, also improved their economic performance in the same period suggests that external factors played a central role in this process.

In our view, Brazil's growth performance from 2006 to 2011 cannot be replicated without reforms that foster a rapid rise in labor productivity—through higher investment, a greater emphasis on quality education, and more rapid TFP growth. The limits of the current model are already being tested by the need to bring inflation down, which will tend to keep the economy growing around a more modest 3.5 percent per annum in the near future. A crisis in China or a return of world liquidity conditions to precrisis levels could prove rather challenging to Brazil.

Fiscal consolidation is critical so as to create room to increase government investment, limit the rise in the tax burden, and allow for a noninflationary cut in interest rates. This will become increasingly important in this decade as the demographic transition puts upward pressure on social security and health spending and downward pressure on the savings rate.

Infrastructure is another critical area in which policies need to change. Privatization and public-private partnerships are the best ways to move forward. The government seems to have recognized this, as signaled by the privatization of Brazil's largest airports. But the government generally has acted too little and too late. Moreover, the reforms of the 1990s taught us that privatization without accompanying reforms in regulation, access to financing, and the overall investment climate may have only limited and localized impact on investment. This lesson does not seem to have been learned by government officials.

We fret that the Brazilian government has an insufficient understanding of the imbalances that characterize Brazil's recent growth and of the obstacles the country will face in correcting them while sustaining the desired rate of output expansion. While, as usual, not all signals point in the same direction, the strategy the government has adopted favors increasing state intervention as the means to eliminate growth bottlenecks. These include giving a more prominent role to state-owned enterprises and interfering more directly in the business decisions of private firms, either using the lever of subsidized credit or through moral suasion, as in the substitution of Vale's chief executive officer in 2011. Needless to say, this has also been the practice in other countries of Latin America.

Another risk that has received insufficient attention is that the fast rise in household indebtedness may compromise the health of the banking sector if growth decelerates more sharply and for longer than in 2009. Household debt rose from 20.2 percent of disposable income in 2005 to 41.3 percent in 2011. This rise has been accommodated by the decline in interest rates and the extension of maturities, which translates into a less significant increase in the share of income committed to serving these debts. But will these borrowing conditions continue to improve if labor market conditions deteriorate and the inflow of foreign capital contracts? A related threat is credit default, as shown by the recent rise in household debt payment delays.

There is also much concern about the loss of Brazilian manufacturing competitiveness, with the view that Brazil may be undergoing a severe deindustrialization process. This stems from three factors: the significant appreciation of the real, which was instrumental in helping to control inflation but caused unit labor costs to rise substantially; the poor business environment in Brazil; and the aggressive commercial strategy of China in its

attempt to compensate for the decline in exports to Europe and the United States with greater exports to emerging economies.

Brazil's government has reacted by using two instruments. First, it has tried to prevent the real from strengthening too much by aggressively buying foreign currencies in the domestic market and changing regulations concerning exchange rate derivatives. Second, it has applied countervailing duties on some imports, notably—but not only—from China. To some extent, the reluctance of the Central Bank to raise interest rates to bring inflation down reflects, in addition to concerns with growth, the fear that this would further attract foreign capital inflows. Obviously, this does not explain why fiscal policy has also been so expansionist. Another accompanying feature is increased protectionism, often disguised under the cover of industrial policies, to defend manufacturing from the overvalued real exchange rate.

We fear that some wrong lessons may be drawn from Brazil's recent growth experience. The importance of the 1990s market reforms and macroeconomic discipline for a more sound economy has been downplayed more and more. The trend towards greater state intervention, or state capitalism, and the reinstatement of trade barriers are evident signs of this. So is the greater tolerance of inflation and the erosion of the transparency of fiscal accounts. Although Brazil has not gone as far in reversing the reforms of the 1990s as some of its neighbors did, nor do we think it will, the direction of change is similar. A related threat is the reemergence of populism in the region, a development that often comes with increased state intervention in the economic realm.

References

Barro, Robert and Jong-Wha Lee. "A New Data Set of Educational Attainment in the World, 1950-2010." NBER Working Paper No. 15902, April 2010.

Bils, Mark and Peter Klenow. "Does Schooling Cause Growth?" *American Economic Review* 90, no. 5, December 2000.

Giambiagi, Fabio and Armando Castelar Pinheiro. *Além da Euforia: Riscos e Lacunas do Modelo de Desenvolvimento Brasileiro* (Elsevier, 2012).

Pinheiro, Armando Castelar, Regis Bonelli, and Samuel Pessôa. "Pro- and Anti-Market Reforms in Democratic Brazil." In L. Rojas-Suarez (ed.), *Growing Pains in Latin America,* Centre for Global Development.

World Economic Forum, *Global Competitiveness Report 2011-2012,* 2011.

Macroeconomic Coordination: What Has the G20 Achieved?

Jean Pisani-Ferry[1]
Director, Bruegel Institute

G20 macroeconomic coordination went through three successive phases. In the first phase, from the Washington summit in 2008 to Pittsburgh in 2009, the focus was on stimulating the global economy across the board. All countries were requested to contribute, to the extent permitted by the domestic fiscal situation. In the second phase, from the Toronto summit in 2010 to Cannes in 2011, the focus shifted towards a more complex set of objectives, with the aim of combining continued support for growth, budgetary consolidation, and the prevention of imbalances. In the third phase, from Cannes onwards, the focus has been on the European crisis and potential contributions to a solution from the rest of the world.

This paper provides a broad-brush assessment of the priorities and achievements of the three phases and offers some conclusions on the overall performance of the G20.

Saving the world: 2008-2009

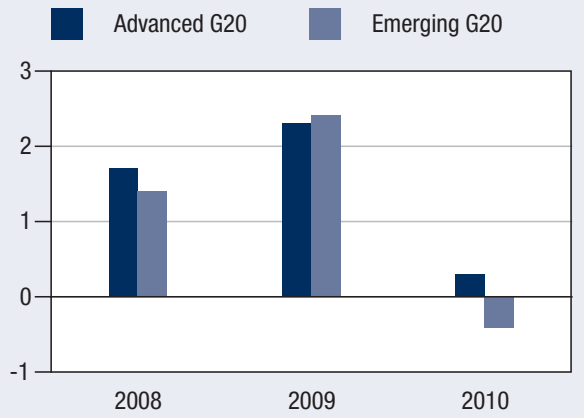
The G20 was created in extraordinary times. Its initial focus was on coordinating a global stimulus to ward off depression, equipping the International Monetary Fund (IMF) with sufficient resources to cope with potential requests, and beefing up global liquidity through an exceptional allocation of special drawing rights (SDRs). The intellectual case for global action was made forcefully by the IMF (see, for example, Spilimbergo, Simansky, Blanchard, and Cottarelli 2008) and it was—at the time, at least—relatively consensual, at least among economists and policymakers. If there had ever been a time for a global Keynesian stimulus, it was 2009.

On the fiscal front, data confirm that a stimulus was engineered not only in the advanced G20 group, but also—and to a broadly similar extent—in the emerging group (figure 1). Russia, India, and China were among the countries where the 2008-09 stimulus effort was the largest. The full participation of the emerging group in the concerted stimulus was nevertheless a remarkable achievement. Emerging countries were traditionally viewed as passive players in a global macroeconomic coordination game dominated by members of the G7. The fact that they fully took part in the stimulus was indicative of their new global role and was an ex post facto vindication of the creation of the G20.

To what degree was action undertaken at the national level triggered by G20 coordination? The policy prescription for the shortfall in global demand, high risk aversion, and partial paralysis of financial markets was very much the same everywhere. It is likely, however, that the G20 helped focus policymakers' attention on a well-defined policy package, facilitated domestic consensus, and helped overcome free-rider attitudes. It made

1. This paper draws significantly on Angeloni and Pisani-Ferry (2012).

Figure 1 – Fiscal Impulse in the G20, 2008-2010



Note: Fiscal impulse is measured by the change in the cyclically adjusted primary balance.
Source: Authors' calculations with data from IMF's Spring 2011 Fiscal Monitor.

each and every government more secure that it would not act in isolation.

In hindsight, whether or not the IMF was right to call for a uniform response is a matter for discussion. Whereas Italy assessed its own fiscal situation as too precarious to participate in the stimulus, Spain took part fully, but soon realized that it had overestimated its fiscal space. The IMF, in this respect, lacked caution (Pisani-Ferry, Sapir, and Wolff 2011). However, it was probably still wise to advocate an across-the-board stimulus rather than a tailor-made solution that would have taken precious time to prepare and would have opened the door to endless disputes.

There was more heterogeneity on the monetary front because circumstances differed markedly. In Europe and the United States, central banks had to resort to enhanced credit or liquidity support, but no such action was taken in Japan or the emerging world. Even after the Lehman shock, access to domestic currency liquidity remained much less problematic in the emerging world and in Japan than in the United States and Europe.

A particularly important event was the provision of U.S. dollar liquidity by the U.S. Federal Reserve. Dollar liquidity was a global concern, and the Federal Reserve played its role as the provider of the international currency through exceptional swap agreements with selected partner central banks across the globe. This was done, however, in a discretionary way, with selected partners only and without any institutional involvement of the G20.

The London summit also resulted in a $500 billion increase in IMF resources and on a special allocation of SDRs. The increase in IMF resources was enacted swiftly and made possible a large increase in lending through standard programs as well as the granting of credit lines to selected countries through two new facilities, the Flexible Credit Line (FCL) and the Precautionary Credit Line (PCL).

Angeloni and Pisani-Ferry (2012) find that without the replenishment of resources at the time of the London summit, the commitment capacity of the IMF would have been severely constrained already in 2009. In hindsight, the increase in IMF resources seems to have been of the right magnitude, at least taking into account the size of the subsequent assistance programs. Other initiatives were less successful. By the end of 2011 only three countries—Colombia, Mexico, and Poland—had access to the FCL and only one—the FYROM (Macedonia)—had access to the PCL. None had drawn on these facilities. As to the exceptional $250 SDR allocation, subsequent data suggest that effective use of SDRs by IMF members was limited and restricted mainly to small countries. It seems unlikely on this basis that the allocation contributed significantly to the revival of global demand and growth.

Summing up, this first period can be considered a high point of international macroeconomic coordination, and the G20 played a significant role in fostering coordinated responses to the global crisis. For a group of rather heterogeneous countries with little tradition of dialogue and joint action, this must be considered a significant achievement.

Addressing imbalances: 2010-2011

Whereas warding off depression was conceptually simple, the aftermath was more complicated because it involved differential treatment of participating countries. The intellectual background was the fear that the recovery would leave preexisting international imbalances largely untouched.

Writing at the end of 2009, Blanchard and Milesi-Ferretti (2009) warned:

> "One of the three central adjustments emphasized in the earlier multilateral consultations has taken place, namely the increase in U.S. private saving. Two remain to be implemented, lower fiscal deficits in the U.S., and lower current account surpluses in China and a number of other emerging market countries. If these do not take place, there is a high risk that the recovery will be weak and unbalanced. Staying in midstream is dangerous."

Against this background, the goal, to quote from the Pittsburgh declaration, was to develop "a forward-looking analysis of whether policies pursued by individual G20 countries are collectively consistent with more sustainable and balanced trajectories for the global economy." This analysis would feed into the leaders' discussions and help them decide on joint action. This was the purpose of the "Mutual Assessment Process" (MAP), whose aim was to make all participating governments more conscious of the international spillover effects of their actions and, through peer pressure, to lead them to change policy course in case of global inconsistency.

This was a difficult endeavour. Previous attempts at global discussions on imbalances—through the so-called multilateral consultations on global imbalances initiated in 2006 by the IMF—had failed. The G20 itself had experienced difficulties with the topic, as indicated by the absence of the issue in the Washington summit declaration of 2008 (apart from an oblique allusion to "unfavourable macroeconomic outcomes").

The initial strategy for making coordination work was to ask each country to submit medium-term policy frameworks and plans. The IMF staff was entrusted with the task of checking consistency of national assumptions and policy directions, providing feedback to G20 members, and evaluating policy alternatives. This was intended to be a multistage, iterative process involving (1) initial submissions by G20 governments, (2) aggregation and multilateral consistency review by the IMF, (3) evaluation of alternative policy paths by the IMF, and (4) discussions on policy adjustments among G20 members.

As conducted for the Toronto and Seoul summit meetings, the MAP was a cumbersome exercise technically, and it resulted in projections of uncertain accuracy. Discrepancies between MAP and World Economic Outlook (WEO) projections were supposed to signal biases in the evaluation by G20 countries of the likely global outlook. For example, in its report for the Cannes summit, the IMF staff (2011) assessed national projections underlying the MAP outlook as "too sanguine." But the discrepancies could also indicate forecast errors by IMF staff. The coexistence of two sets of projections, both of which emanated from the IMF, was also confusing for observers and policymakers. Furthermore, the MAP was not indispensable input to policy simulations, which could equally be carried out on the basis of WEO projections. Its value was probably more in the bottom-up process leading to the diagnosis. More than in a top-down exercise, this may have facilitated "ownership" of the results and genuine discussions on the challenges facing the world economy.

At the Seoul meeting agreement was reached to "enhance" the MAP by outlining "concrete policy commitments" for each of the members and by assessing "the nature and root causes of impediments to adjustment" behind "persistently large external imbalances." The agreement opened the way to a more ambitious attempt at multilateral surveillance. A set of indicators and guidelines intended to help tackle global imbalances through policy adjustment in the key countries was adopted in April 2011 at the G20 ministerial in Washington, D.C. These indicators were in turn used by the IMF staff to identify seven key countries experiencing imbalances to provide a broad-brush assessment of their underlying causes and to make corresponding recommendations (IMF 2011). The IMF essentially indicated that imbalances had been driven by saving behavior, and it recommended fiscal consolidation for some (France, Japan, the United Kingdom,

Indicators and guidelines for identification of required policy action

The G20 finance ministers in February and April 2011 agreed on:

- A *process* leading to the identification of countries whose policies deserve closer examination and discussion.
- A set of *indicators* to monitor. These are (1) internal imbalance indicators (public debt and fiscal deficits, private savings rate, and private debt) (2) external imbalance indicators (current account balances, though they are not named because of Chinese reluctance to have them explicitly included in the list). External imbalance assessment is to take "due consideration of exchange rate, fiscal, monetary, and other policies."
- Indicative *guidelines* against which each of these indicators is to be assessed. It is stated that "while not policy targets, these guidelines establish reference values for each available indicator allowing for identification of countries for the second step in-depth assessment."
- Four *approaches to assess individual country positions*. These are (1) a "structural approach," presumably inspired by the IMF's Consultative Group on Exchange Rate Issue CGER methodology for the assessment of equilibrium exchange rates (IMF 2006); (2) a statistical approach that benchmarks G20 countries on the basis of their national historical trends; (3) a statistical approach that benchmarks G20 countries' historical indicators against groups of countries at similar stages in their development; (4) a statistical approach that draws on data benchmarking G20 countries' indicators against the full G20. The three statistical approaches are primarily based on data for the 1990-2004 period, and they are expected to be based on simple methodologies. In all cases, forecasts for 2013-2015 are to be assessed against the four guidelines.
- A *categorization of countries* into two groups: seven systemic countries and the rest of the G20. Selection criteria will be stricter for the second group so they will only be selected for review if they depart significantly from benchmarks. The goal is to help the process focus on the most important countries, presumably, again, the United States and China.

the United States, and India), the removal of distortions keeping Chinese savings artificially high, and measures to lower corporate savings in Japan and Germany. These recommendations were adopted in part through the Cannes G20 Action Plan. There was agreement on differentiated budgetary consolidation strategies, including through letting automatic stabilizers work in Australia, Brazil, Canada, China, Germany, Indonesia, and Korea (without excluding further discretionary stimulus if needed). This was a nonnegligible achievement, but the agreement, obviously, does not guarantee implementation.

Whether the MAP will have lasting traction and help fruitfully change the policy conversation in the main participating countries also remains to be seen. The process faces three difficulties.

First, the model of international interdependence underlying the MAP may not capture the relevant channels of transmission of shocks. Standard international macroeconomics puts emphasis on interdependence through flows (of goods and services, capital and, in some cases, labor) and prices. It provides the intellectual framework for the MAP assessment and simulations. At the same time, however, empirical research, notably the evaluations provided by the IMF (2011b) in the context of its spillover reports, emphasizes other channels of interdependence through cross-border stock holdings. Neither the open economy models à la Mundell-Fleming of the 1980s nor those à la Obstfeld-Rogoff that were developed in the 1990s offer much insight into the type and extent of interdependence documented in these reports. Empirical research undertaken by the IMF highlights that interdependence through traditional channels can be dwarfed by that arising from gross holdings of financial assets and the bellwether role of U.S. capital markets. Except for countries like Canada, Mexico, China, and Saudi Arabia, for which the United States is primarily an export market, asset price links are significantly more important than traditional links, and taking them into account typically multiplies the spillover effects of U.S. shocks by a factor between two and five or even more. Furthermore, these linkages are asym-

metric, as U.S. developments affect the rest of the world much more than vice versa. These phenomena, which constitute the bread and butter of policy discussions at global level, are often assumed away in standard models like those underpinning the MAP process.

Second, the whole exercise is predicated on the assumption that global imbalances remain a serious concern for the world economy going forward. Indicators, guidelines, and processes may serve coordination well if this assumption proves correct. Should other problems—say, public debt risks in the advanced countries or global inflation—become a major cause for concern, they may rather prove to be a distraction. There is a difficult tradeoff here. To keep focusing on the same issue helps narrow down differences through the development of common concepts, indicators, and guideposts. As indicated by the European experience, this process takes time, and for the outcome of this process to influence national policies, even more time is needed. The same requirement applies even more to coordination within a large group whose participants are not used to speaking openly to the others about their policy choices. But keeping the focus on a particular set of issues involves the risk of focusing policymakers' attention on a certain set of problems at the expense of others. Again, Europe provides a clear case of attention distraction. Its focus on making its fiscal pact operational has distracted policymakers' attention from the build-up of large imbalances in the private sector.

Third, it is not clear which of the participating countries is ready to trade a change in its own policy for a change in its partner's policy. Would, for example, a Chinese exchange-rate adjustment facilitate a U.S. budget agreement? The political economy of international horse trading is highly uncertain.

On the whole, this second period was clearly less successful than the first one. A significant process of assessment and dialogue was launched, and it went much beyond what had been achieved in the precrisis context. Nevertheless, policy achievements are few, and doubts remain on the adequacy of the process.

Assisting Europe: 2011-2012

The Cannes summit was meant to be devoted to global discussions, not least about reforming the international monetary system, but it was largely hijacked by the euro crisis. In the months that followed, the international discussion was again largely dominated by the European crisis, the responses to it, and the potential contribution of the rest of the world through increasing IMF resources.

Decisions announced at the 2012 IMF/World Bank Spring Meetings in Washington resulted in pledges to increase IMF resources by $430 billion. Contributions were committed by Euro-area countries (€150 billion or about $200 billion); other European countries, including the UK (about $60 billion); Japan ($60 billion); Korea ($15 billion); Australia ($7 billion); Saudi Arabia ($15 billion); as well as by emerging countries such as China, India, Brazil, and Russia. Neither the United States nor Canada, however, took part.[2] Although these resources are not earmarked for any particular country, they are widely regarded as motivated by the precarious state of the euro area and some countries within it.

The G20 as an institution, however, failed to provide the "premier forum for international economic cooperation" it had intended to be. First, two major members broke ranks with the consensus on increasing IMF resources. Second, disagreements on the policy prescription and in particular on the nature of the appropriate fiscal response could not be resolved. In a context of serious concerns about the pace of the recovery in part of the world economy, the communiqués of Mexico (February) and Washington, D.C., (April) did not go beyond usual platitudes.

There are probably two reasons for this disappointing result. First, Europe is difficult because of its internal coordination process. It takes time for the Europeans to agree among themselves, and when they have reached an agreement they are not ready to reopen it in the context of G20 discussions.

2. Source: Statement by Madame Christine Lagarde on April 20, 2012.

Two-level coordination is inherently difficult, and this applies to Europe.

Second, the problem at stake is highly asymmetric. The rest of the world expects Europe to sort out its problems, and while it has shown willingness to extend a helping hand, this inevitably comes with strings attached in the form of a faster rebalancing of power within the international organizations. This is not the easiest of all sorts of dialogue.

Conclusions

The picture this paper has presented is one of diminishing returns. The effectiveness of the G20 in macroeconomic coordination seems to have declined from one phase to the next. To what extent is this due to the nature of the problems on the agenda and to what extent to the evolution of the dialogue and the participants' commitment to the process? There is no easy answer to this question. There is enough in what has been done since 2008 to claim that the G20 has delivered and enough also to build on for the future years. But the evolution is not impressive enough to claim that the future is bright.

References

Angeloni, Ignazio, and Jean Pisani-Ferry. 2012. "The G-20: Characters in Search of an Author." Bruegel Working Paper 2012/04 (March).

Blanchard, Olivier, and Gian Maria Milesi-Ferretti. 2009. "Global Imbalances: In Midstream?" IMF Staff Position Note 09/29 (December).

International Monetary Fund. 2011. *IMF Staff Reports for the G-20 Mutual Assessment Process*. Prepared for the Cannes summit.

International Monetary Fund. 2011a. *Consolidated Spillover Report: Implications from the Analysis of the Systemic-5*. July.

International Monetary Fund. 2011b. *United States: 2011 Spillover Report—Selected Issues*. July.

Joint Debt Management Policy: A Novel Strategy to Stabilize Government Bond and Foreign Exchange Markets

Keiichiro Kobayashi
Professor, Institute of Economic Research
Hitotsubashi University

Jun Kurihara
Senior Fellow, Ash Center for Democratic Governance and Innovation
Kennedy School of Government, Harvard University

Wanted: New strategies and decisive actions

There has been a plethora of documents and studies regarding the fiscal imbalances of Japan and the United States. A glimpse at these analyses gives the impression that the two countries have common difficulties in devising debt management policies despite their varying levels of public debt to GDP. This paper, therefore, suggests a new strategy for debt management policy to secure smooth and stable public financing besides traditional policy mixes (i.e., curtailments in outlays and tax hikes) to restore fiscal discipline. These traditional policy mixes have long been proposed by experts in both Japan and the United States. Nevertheless, an undeniable absence of strong political leadership, combined with complex and time-consuming political logrolling within the National Diet (Japan's parliament) and Congress, has rendered the two countries unable to implement public deficit reduction measures in a swift and bold fashion.

To make matters worse, the current fragile global economic condition has rendered policymakers unable to adopt unpopular measures to reduce public debt and left a sizable amount of public debt untouched. At the same time, a rapidly aging society in Japan and to a lesser extent in the United States will raise the level of expenditures for the elderly. This aging problem makes both fiscal and monetary policies more difficult to maneuver.[1]

Under these circumstances, the new strategy attempts to mitigate the expected inflation costs caused by soaring and volatile government yields and exchange rate fluctuations with the help of a conceptual framework of the fiscal theory of the price level (FTPL) that has emerged since the 1990s, though some seminal works had already appeared in the early 1980s.[2] This novel strategy is not a pan-

1. See, for example, Eric M. Leeper and Todd B. Walker, "Fiscal Limits in Advanced Economies," NBER Working Paper No. 16819, February 2011.

2. There have been various theoretical and empirical studies regarding the FTPL. See, for example, Thomas J. Sargent and Neil Wallace "Some Unpleasant Monetarist Arithmetic," *Quarterly Journal*, no. 531 (Fall 1981), Federal Reserve Bank of Minneapolis, http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=151; Eric M. Leeper, "Equilibria under 'Active' and 'Passive' Monetary and Fiscal Policies," *Journal of Monetary Economics* 27, no. 1 (February 1991): 129-147; John H. Cochrane, "Long-Term Debt and Optimal Policy in the Fiscal Theory of the Price Level," *Econometrica* 69, no. 1 (January 2001): 69-116; Gaetano Bloise and Pietro Reichlin, "Long-Term Public Debt and the Fiscal Theory of the Price Level," CEPR Discussion Papers DP5479, January 2006; Jerome Creel et al., "Using Structural Balance Data to Test the Fiscal Theory of the Price Level: Some International Evidence," *Journal of Macroeconomics* 28, no. 2 (June 2006): 338-360; Burcu Berke, "The Fiscal Theory of the Price Level in European Union: Evidence from Panel Data," *International Journal of Economic*

acea that could lead automatically to fiscal consolidation and a marked lessening of inflationary pressures. Nonetheless, this innovative strategy would be an important a temporary measure given the current unavoidable political gridlock.

The theoretical framework for the strategy is one in which policymakers of two countries can reduce expected inflation costs substantially by developing a debt management scheme where each agrees to purchase the other's government bonds. This joint debt management scheme is, in essence, the same as foreign exchange market interventions by financial authorities in view of changes in their balance sheets. However, while foreign exchange market interventions aim at short-term stability in foreign exchange rates, the joint debt management policy tries to achieve long-term stability in expected inflation in all countries participating in the joint debt management framework.

A novel and collaborative strategy: Toward a joint debt management policy

Purposes of the novel strategy

This section provides a brief explanation and a tentative evaluation of this novel strategy, which was developed with a simple conceptual framework. A more detailed theoretical explanation is provided in the Appendix. The model assumes an economy comprising two countries where analytical comparisons are made at two different points in time—present ($t = 0$) and future ($t = 1$). Each country (Japan and the United States) issues government bonds to purchase bonds issued by the other country. Let h denote Japan's probability of successful fiscal consolidation ($0 \leq h \leq 1$) and h^*, that of the United States.[3] In addition, let g denote Japan's purchasing portion of bonds issued by the United States government in order to engage in a joint debt management policy ($0 \leq g < 1$), and g^*, that of the United States.[4] Each government is concerned about inflationary pressures caused by the plummeting of bond prices and volatile movements of foreign exchange rates, though the governments eventually set the price of government bonds by maneuvering monetary policy. Under these circumstances, each government tries to minimize expected inflation in the country by purchasing a certain portion of the bonds issued for the joint debt management policy by the other country.

This conceptual framework analyzes (1) the government decision to determine the price of government bonds and the purchase amounts of the foreign government bonds, and (2) the price levels of each country. According to the fiscal theory of price level (FTPL), the price level is determined by government debt and present and future tax and spending plans, with no direct reference to monetary policy.[5]

This theoretical framework has the following implications. First, Japan and the United States can reduce their expected inflation costs by implementing a joint debt management policy even at the time of sovereign debt crises facing both countries. Second, in order to purchase the other country's government bonds, the government should also issue its own bonds. But our theoretical framework denies the possibility that such issuance could change the value of government bonds or invite inflationary pressures on the domestic economy.

Perspectives 3, no. 4 (May 2009): 223-247; and Oscar Bajo-Rubio et al., "Deficit Sustainability and Inflation in EMU: An Analysis from the Fiscal Theory of the Price Level," *European Journal of Political Economy* 25, no. 4 (December 2009): 525-539.

3. In this model, the probabilities of successful financial consolidation (h and h^*) are assumed as parameters that are constant and will not change, irrespective of the transactions of government bonds conducted by this joint debt management policy. However, there should be arguments that both h and h^* change according to the joint debt management policy conducted by the governments and market expectations in response to the government behavior. Therefore, further sophistication of this model is needed in this regard.

4. The model tells us that at the time of $g = g^* = 1$, the amount of bonds issued in each country will be infinite.

5. See, for example, Marco Bassetto, "Fiscal Theory of the Price Level," in *The New Palgrave Dictionary of Economics*, 2nd ed., ed. Steven N. Durlauf and Lawrence E. Blume (London: Palgrave, 2008). In an open economy, the FTPL does not automatically demonstrate its theoretical validity, according to Bill Dupor, "Exchange Rates and the Fiscal Theory of the Price Level," *Journal of Monetary Economics* 45, no. 3 (June 2000): 613-630. However, when there are transversality conditions imposed on all the governments concerned in a model, the FTPL retains its validity.

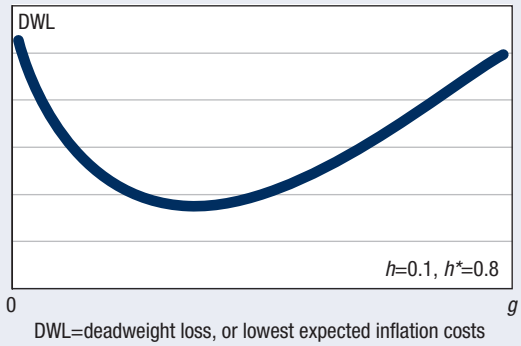
Evaluation of the novel strategy and future tasks for model sophistication

Based on the theoretical model, numerical calculations were conducted to evaluate the effectiveness and practicability of a joint debt management policy. The following numerical analysis gives insightful information regarding the prospective joint debt management policy.

Figure 1 shows Japan's varying levels of the expected inflation costs—labeled as deadweight loss (DWL) in the figure—according to the level of Japan's purchasing portion of government bonds issued by the United States (g), given the fixed levels of successful fiscal consolidation (h = 0.1 and h^* = 0.8). Japan has little hope of successful fiscal consolidation (h = 0.1) while the United States embraces high hopes (h^* = 0.8). Under these circumstances, the Japanese government can decide the level of g that could lead to the lowest expected inflation costs (DWL), though market sentiment might raise a question—what if the United States is dragged into a fiscal debacle at the time of Japan's fiscal fiasco? The rationale of U.S. authorities' joint debt management policy is that the United States can reduce its expected inflation costs (DWL*) by doing so, as shown below in figure 2, according to the FTPL model devised by the authors.

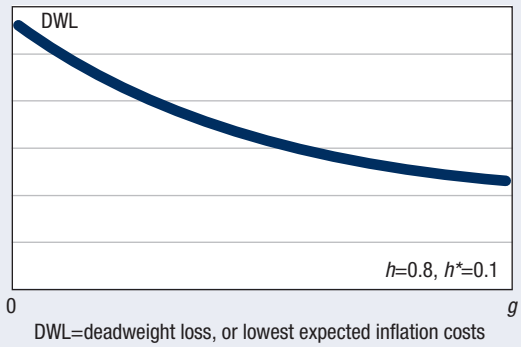
Figure 2 shows an opposite case to the one shown in figure 1, where Japan has ample prospects for successful fiscal consolidation (h = 0.8) while the United States is on the verge of sovereign debt crisis (h^* = 0.1). The more U.S. government bonds Japan purchases (g), the lower the expected inflation costs (DWL). This time, figure 2 indicates that Japan should purchase almost all of the government bonds issued by the United States to achieve the lowest expected inflation costs (DWL) (g is close to 1.0). There might be a fear-stricken market where investors think Japan might be hard hit at the time of U.S. fiscal fiasco. But, the rational of Japan's joint debt management policy is that Japan can reduce its expected inflation costs (DWL) by doing so, as our FTPL model suggests. The idea is simply that the uncertainty in the value of government bonds is small if the country is going to default with a very high probability. Buying those bonds reduces the uncertainty and thereby the inflation costs of the purchasing country.

Figure 1 – Numerical Analysis (1)



Source: Author's calculations.

Figure 2 – Numerical Analysis (2)



Source: Author's calculations.

Some readers might be concerned that the Japanese government would lose the sense of fiscal discipline and could take advantage of this policy by asking a financially unhealthy foreign government to collude in the market and raise a moral hazard question between the two countries. Therefore, there should be further contemplations over legal and institutional frameworks prior to the elaboration of the joint debt management policy.

The aforementioned numerical analysis is still in a state of rudimentary development and further sophistication is needed. At the same time, as briefly explained above, prior to the development of this joint debt management policy, there

should be active discussions among practitioners and academics regarding legal and institutional frameworks existing in the two countries. Despite such problems within this simple FTPL model, it is important to contemplate novel and collaborative strategies given the politico-economic cul-de-sac in the developed nations.

Conclusion

This short paper has discussed a novel and collaborative strategies for policymakers in the G20. The journey to the implementation of this joint debt management policy is still long and uncertain. Despite the rudimentary level of sophistication of the model, our approach offers something worth contemplating. A process of working out innovative and collaborative strategies for the countries requires constructive discussions among a wide variety of participants and audiences in G20 countries. Such active discussions themselves strengthen the G20.

Reference

Keiichiro Kobayashi (2012). "Public Debt Management and Exchange Rate Policy in the Open Economy." Hitotsubashi University Paper.

Appendix

See next two pages.

Appendix: Simplified FTPL model to understand the mechanism of joint debt management policy

Model Setup

The economy consists of two countries: Home and Foreign. The economy continues for two periods: $t = 0$ and $t = 1$. Consumers (both in Home country and in Foreign country) are endowed by the Nature with y_0 at $t = 0$ and y_1 at $t = 1$. At the beginning of $t = 0$, there exists the outstanding government debt $\overline{B}$ for Home government and $\overline{B}^*$ for Foreign government.

Uncertainty in fiscal consolidation

There is no government revenue at $t = 0$. At $t = 1$, the Home (Foreign) government obtain a lump-sum tax T_H (T_H^*) with probability h (h^*) and T_L (T_L^*) with probability $1 - h$ $(1 - h^*)$, where $T_H > T_L$ $(T_H^* > T_L^*)$.

Government actions

At $t = 0$, the Home government purchases g fraction of the Foreign bond and the Foreign government can hold g^* fraction of the Home bond. The Home (Foreign) government chooses q_0 (q_0^*), the price of the home (foreign) government bond.

Consumers' Problem:

$$\max_{k_0, b_0, b_0^*} c_0 + E_0[c_1],$$

subject to

$$c_0 + k_0 + \frac{q_0}{P_0} b_0 + \frac{q_0^*}{P_0^*} b_0^* \leq \frac{\overline{B}}{P_0} + y_0,$$

$$c(s) \leq k_0 + \frac{b_0}{P(s)} + \frac{b_0^*}{P^*(s)} - T(s) + y_1,$$

where P_0 (P_0^*) is the home (foreign) price level at $t = 0$, s is the state at $t = 1$, and $P(s)$ $(P^*(s))$ is the home (foreign) price level at s.

Home Government's Problem: Given (q_0^*, g^*),

$$\min_{q_0, g} E_0 \left[\left(\frac{P_1}{P_0} - 1 \right)^2 \right],$$

subject to

$$\overline{B} + \frac{P_0}{P_0^*} q_0^* B_0^* g \leq q_0 B_0.$$

Foreign Government's Problem: Given $(q_0,\, g)$,

$$\min_{q_0^*, g^*} E_0 \left[\left(\frac{P_1^*}{P_0^*} - 1 \right)^2 \right],$$

subject to

$$\overline{B}^* + \frac{P_0^*}{P_0} q_0 B_0 g^* \leq q_0^* B_0^*.$$

Fiscal Theory of Price Level:

$$B_0 = P(s) \left[T(s) + g \frac{B_0^*}{P^*(s)} \right], \quad \text{for } s \in S$$
$$B_0^* = P^*(s) \left[T^*(s) + g^* \frac{B_0}{P(s)} \right], \quad \text{for } s \in S$$

Solution: Given the policies $(q_0,\, g)$ and $(q_0^*,\, g^*)$, the equilibrium is determined by the following equations.

$$P_0 = \frac{\overline{B}}{\sum_{s \in S} \gamma(s) T(s)},$$
$$P_0^* = \frac{\overline{B}^*}{\sum_{s \in S} \gamma(s) T^*(s)},$$

$$\frac{P(\tilde{s})}{P_0} = \frac{1}{q_0} \frac{\sum_{s \in S} \gamma(s) \{T(s) + g T^*(s)\}}{T(\tilde{s}) + g T^*(\tilde{s})},$$

$$\frac{P^*(\tilde{s})}{P_0^*} = \frac{1}{q_0^*} \frac{\sum_{s \in S} \gamma(s) \{T^*(s) + g^* T(s)\}}{T^*(\tilde{s}) + g^* T(\tilde{s})},$$

where $\gamma(s)$ is the probability of realization of the state $s \in S$ at $t = 1$. The governments choose their strategies, $(q_0,\, g)$ and $(q_0^*,\, g^*)$, to solve their optimization problems respectively.

The Role of International Financial Institutions and Financial Regulation in Strengthening the World Economy

Stephen Pickford
Associate Fellow
Chatham House, London

The latest International Monetary Fund (IMF) forecasts point to a weak and fragile recovery in most advanced economies and significant downside risks for the global economy. There are renewed concerns about the eurozone and increased political uncertainty in Europe as social unrest spreads. Although most emerging markets are still experiencing healthy growth, there is a threat that yet more advanced economies will enter a double-dip recession as they face a "triangle" of interconnected problems—high fiscal debts, low growth, and financial sector weakness.

The role of international financial institutions

Against this economic backdrop, international financial institutions (IFIs) will have an important role to play in helping countries put better policies in place and providing resources to fill financing shortfalls in the interim. At the same time, IFIs are criticized for not being representative enough of their entire memberships. In particular, large emerging market countries are seeking reforms to IFI governance structures.

The IMF and World Bank, therefore, face interrelated issues of:

- *Finance*—Do they have the financial resources required to support countries during a deep, concurrent, and possibly prolonged economic downturn?
- *Instruments*—Are their lending modalities well designed for current circumstances?
- *Legitimacy*—Do their governance structures properly reflect the changing global order so that they have the support of their memberships?

The IMF

The IMF is deeply involved in the efforts to deal with the eurozone crisis. Together with the European Commission and European Central Bank (ECB), it is supporting Extended Fund Facility (EFF) programs in Greece, Ireland, and Portugal. It has also provided a Flexible Credit Line (FCL) facility to Poland as insurance against contagion from events elsewhere.[1]

EFF programs have been jointly designed with the other troika partners (the European Commission and ECB) and cofinanced by Europe's financing mechanism, the European Financial Stability Facility (EFSF)/ European Stability Mechanism (ESM). But the arrangements have raised some fundamental questions about the

1. The FCL was created in 2009 to provide access to financing for countries with "very strong fundamentals, policies, and track records of policy implementation" when hit by shocks and contagion. FCL programs are also in place for Colombia and Mexico.

IMF's control over the design of its programs and whether it is applying the same levels of conditionality to European programs as to its programs elsewhere.[2] The programs for eurozone countries have also had to take into account the additional constraints imposed by membership in the monetary union and the sharing of control over economic policymaking among individual eurozone countries, the ECB, and the European Commission.

Also, as the eurozone crisis has deepened, concerns have been raised about whether countries such as Spain and Italy might also need to turn to the IMF for financial assistance. Since each of these countries would potentially require programs running into hundreds of billions of dollars, the IMF has sought to boost its financial capacity, initially by borrowing from its members.

At the Spring Meetings of the IMF and World Bank last month a number of G20 countries committed to providing increased resources to the IMF—amounting so far to $430 billion—through bilateral loans and note purchases. But some countries, including the United States and key emerging markets, made it clear that additional resources were dependent both on Europe boosting the size of its internal firewall (the EFSF and ESM) and on further changes to the IMF's governance.[3] The latter would include further shifts in voting power to dynamic emerging markets to reflect their growing influence in the world economy.

These demands for changes in IMF governance are part of a long-standing complaint from emerging markets that the IMF voting power and decision-making processes are dominated by advanced countries. Since the financial crisis in 2007, emerging markets have stepped up their demands for change. The G20 reached agreement at the Seoul summit (in November 2010) on:

- A shift in quota shares to dynamic emerging markets and developing countries of over 6 percent,
- A doubling in quotas to replace the temporary increases in financing through the New Arrangements to Borrow (NAB) agreed at the London G20 summit in 2009,
- A comprehensive review of the quota formula by January 2013 to better reflect countries' economic weight and completion of the next general review of quotas by January 2014,
- Greater numbers of seats on the IMF board for emerging markets and developing countries (and two fewer European seats);
- Moving to an all-elected board and reviews of the board's composition every eight years.

Issues for discussion

- Do the IMF's lending facilities and conditionality need to be adapted in situations where programs are jointly designed (and cofinanced) with regional financing arrangements (RFAs)?
- Is the increase in IMF resources through recently agreed bilateral loans sufficient to cope with likely demands for program financing?
- Will the governance changes led by the G20 agreement in 2010 shift decision making sufficiently towards rapidly growing emerging markets?

The World Bank

Despite the financial crisis and the subsequent recession in many advanced economies, most developing countries have fared rather better in recent years. The IMF's latest World Economic Outlook forecasts average growth over the next five years of over 6 percent per year for all emerg-

2. Some of the same issues would also be raised by other regional financing arrangements (RFAs). The most prominent is the Chiang Mai Initiative, which allows for pooling of foreign currency reserves between a number of Asian countries (although it has so far never been activated). Higher levels of pooling would require an IMF program. The G20 Principles for Cooperation between the IMF and RFAs agreed to at the Cannes summit in November 2011 simply say that "consistency of lending conditions should be sought to the extent possible. . . . However, some flexibility would be needed as regards adjustments to conditionality, if necessary. . . . In addition, definitive decisions about financial assistance within a joint programme should be taken by the respective institutions participating in the programme."

3. European leaders agreed in March to increase the aggregate size of the EFSF and ESM to €700 billion.

ing markets and developing countries and of over 5 percent per year in Sub-Saharan Africa.

Recent years have also seen large replenishments of concessional lending facilities, especially of the International Development Association (IDA),[4] the World Bank's concessional arm. As a result, the World Bank and other development financing agencies have relatively high levels of financial resources available for development purposes.

Also, the World Bank agreed in 2010 to a series of governance reforms designed to increase the voting power of developing and transition countries (DTCs). The reforms resulted in a shift of voting power to DTCs of 4.59 percent, and members are committed to a dynamic formula that will move towards equitable voting power between developed and developing countries over time. An extra seat for Sub-Saharan Africa was also added to the bank's executive board.

But the recent arguments over the appointment of a new World Bank president have again raised the issue of the informal "convention" by which the United States nominates the bank president and Europe nominates the IMF's managing director (as happened when Madame Christine Lagarde was appointed in July 2011). For many years countries outside Europe and the United States have argued that these appointments should be decided through international open competition rather than be restricted de facto to Europeans and Americans. And Development Committee and International Monetary and Financial Committee (IMFC) communiqués have routinely referred to the importance of "an open, merit-based, and transparent process" for selecting the World Bank president and IMF managing director.

Issues for discussion

- Does the World Bank (and other multilateral development banks) have sufficient resources for development financing?
- Is the long-term goal of parity in voting power between developed and developing countries sensible? How quickly should it be achieved?
- How can the informal "convention" on the appointment of the heads of the IMF and World Bank be changed?

Financial regulation and supervision

Since the onset of the financial crisis in 2007, banks and other financial institutions have struggled to regain their health, and governments have sought to buttress the regulatory and supervisory environment to prevent a recurrence of the problems that led to the crisis.[5]

From the outset G20 leaders have stressed the importance of reforms to the international system for financial regulation and supervision, including:

- Strengthening of the Financial Stability Board,
- Instituting a new bank capital and liquidity framework to constrain leverage and maturity mismatches, including through capital buffers and leverage ratios,
- Addressing the "too big to fail" issue through a resolution framework and more intensive supervisory oversight for systemically important financial institutions (SIFIs) as well as building a robust core financial market infrastructure,
- Instituting mandatory international recovery and resolution planning and risk assessment by international supervisory colleges in order to increase the capacity of the global systemically important financial institutions (G-SIFIs) to absorb losses.

In addition, the G20 has mandated a further program of work covering:

- International peer review of national supervisors;

4. The IDA provides interest-free loans and grants to the poorest countries. The latest IDA replenishment (IDA16) agreed to in December 2010 pledged an additional $49.3 billion for the subsequent three years, an 18 percent increase from IDA15.

5. The G20 put the blame for the financial crisis on "reckless and irresponsible risk taking by banks and other financial institutions, combined with major failures of regulation and supervision" (Seoul summit communiqué, November 2010).

- Strengthening regulation and supervision of hedge funds, over-the-counter derivatives, and credit rating agencies;

- Creating a single set of global accounting standards through convergence of the International Accounting Standards Board and the Financial Accounting Standards Board;

- Further work on macroprudential policy frameworks;

- Strengthening regulation and supervision of the shadow banking system and commodity derivatives markets.

However, as the economic recovery falters, questions are being raised as to whether the increasing capital requirements on banks in particular are causing them to further deleverage, preventing them from lending to allow firms to invest and grow.[6] The ECB recently boosted liquidity for European banks, but much of that appears to have been used by banks to invest in government debt rather than increased lending to the private sector.[7]

Issues for discussion

- Are the steps taken so far to strengthen the international system of financial regulation and supervision sufficient to prevent a recurrence of the financial turmoil seen in 2008 and 2009?

- Conversely, have increased regulatory requirements caused banks to deleverage and prevented them from increasing lending to the private sector?

6. Large banks in Europe have been required to increase their Core Tier 1 capital to 9 percent by the end of June 2012.

7. The ECB's Longer-Term Refinancing Operation (LTRO) was introduced in December 2011 and extended further in February 2012, providing loans to banks to a total of €1 trillion at a 1 percent interest rate.

Whither the Patterns of Development in China?

Dali L. Yang
Faculty Director
The University of Chicago Center in Beijing

[I am] fearful, but don't know why and of what, this is the feeling in my heart and that of many others. The powerful are fearful, so are the powerless; those who have jobs are fearful, so are the jobless; the poor are fearful, so are the rich; the elderly are fearful, so are the children. The whole society and everyone are enveloped in fear, but nobody knows why, this is the true state of the psychology and plight of today's Chinese.

—Yan Lianke, Chinese writer[1]

For more than thirty years, China has weathered a variety of internal and external crises and grave challenges to maintain stability and achieve remarkable economic growth. As is known to all, China has become the world's second largest economy and the largest exporter, with the world's largest foreign exchange reserves. While China ranks much lower in terms of per-capita GDP because of its large population, the scale of China's transformation in a generation's time is astounding.

The basic patterns of China's economic development are well known and include the following:

- **Labor**: A large and reasonably well-educated population has been the source of a disciplined labor force. Until around 2005, labor costs were low and the supply of labor for basic jobs was virtually unlimited.

- **Land**: As a legacy of the Chinese Communist Revolution, the Chinese state (local governments) is the owner of all land for commercial and industrial development in urban areas. Rural communities own their land but are not free to convert them into land for commercial and industrial usage. This has given the Chinese state unparalleled power to speed up development—whether erecting high-rises or building superhighways and high-speed railways—and to make land available, often at below-market prices, to industrial investors. Compensation was paid to relocate residents, but until recently the regulations for such compensation were designed to keep the cost of land requisitions low. There is no "Takings Clause" in China. Generally, local authorities make significant profits by auctioning off the land acquired for commercial development. These profits have been the most important source of extra-budget revenue and are used for local infrastructure investment and other forms of discretionary spending by local authorities.

- **Leadership and policy commitments**: Steadfast in maintaining its political monopoly, the leadership of the Chinese Communist Party has been

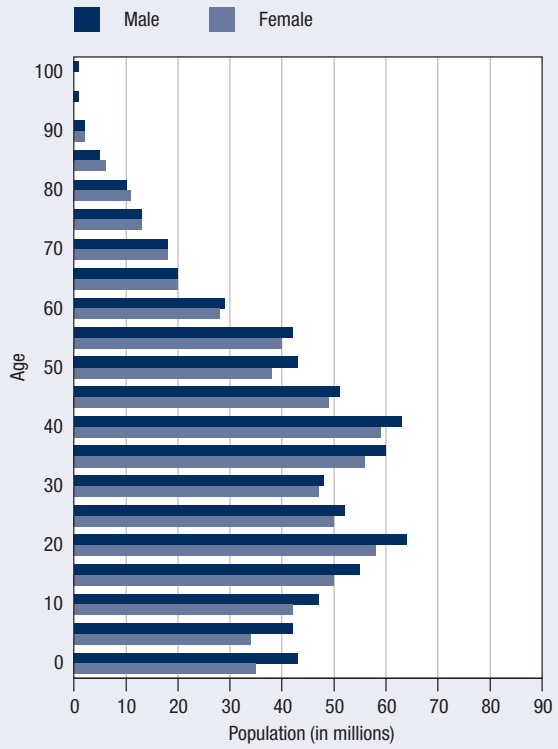
1. *阎连科, http://weibo.com/2056049087, August 18, 2011.

deeply committed to economic growth and has articulated the goal of building a "moderately well-off society" by 2020. In addition to direct government investments (especially highways, railways, and dams as well as government office buildings), the state sector (such as telecoms, oil and gas, petrochemicals, and power) has also been a major investor. Moreover, the Chinese government has generally introduced policies and institutional reforms to improve the protection of private property rights, however imperfect they are, and thereby improve the incentives for investors, both domestic and foreign.

The growth in investment has been supported by stable banking, financial, fiscal, and foreign exchange policies. Fiscal reforms adopted in 1994, buoyed by rapid growth, have put the Chinese central government on a sound fiscal footing. The banking system, dominated by state-owned giants, operates like utilities. The People's Bank of China (PBOC), the central bank, not only sets bank reserve ratios but also deposit and lending rates. The bulk of the funds taken from savers, often at negative real interest rates, is funneled into the state sector. Since the early 1990s the PBOC has also set the exchange rate of the Chinese currency at competitive levels to support its export sector.

It is now widely recognized that China's hypergrowth has come at significant costs. In most countries the shares of capital and labor in GDP tend to be relatively stable.[2] China, however, has posed a puzzle. While the Chinese political system has remained under Communist Party rule, Chinese government sources report that labor's share of GDP in China declined sharply from 51.4 percent in 2000 to 39.7 percent in 2007.[3] Arvind Subramanian of the Peterson Institute for International Economics comments that this significant redistribution of income away from workers "might

Figure 1 – Age Distribution of Population in China, 2010



Source: Travis Warner and Dali Yang, "Democratization, Marketization, and the 'Reach of the State' in Rural China," paper presented at the conference on Power in the Making in China, Oxford University, March 30-April 1, 2012.

well be the mother of all redistributions." He also notes that as a result of this large shift, the People's Republic of China "has perhaps the lowest labor share of any major country in the world."[4]

The declining labor share of GDP means that rapid GDP growth has not brought a corresponding increase in individual consumption and living standards. Household consumption, which had held relatively steady until about 2000, fell to 35.4 percent in 2007. Capital formation, including changes in inventories, rose to 40 percent of GDP, or about 15 to 20 percentage points above values of the capital share in countries at similar levels of development.[5] Net exports of goods and services accounted for almost 9 percent of GDP. The massive investments in China were expected to drive down

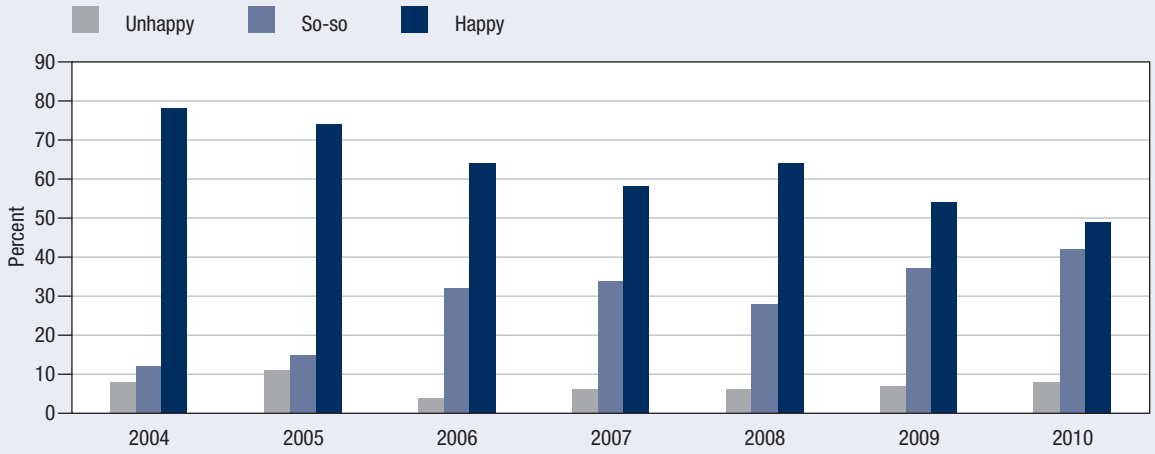
2. Douglas Gollin, "Getting Income Shares Right," *The Journal of Political Economy* 110, no. 2 (April, 2002): 458-474.

3. "发改委起草大范围提高社会工资等消费刺激方案," 经济观察报, November 22, 2007, at http://finance.sina.com.cn/roll/20081122/03155540190.shtml. Such numbers are at best approximate, and figures calculated from flow-of-funds data show substantially different results. I am indebted to Calla Weimer for discussing the data complexities with me.

4. Arvind Subramanian, "What Is China Doing to Its Workers?" *Business Standard,* February 8, 2008, http://www.iie.com/publications/opeds/oped.cfm?ResearchID=885 [2008-10-25].

5. Gollin 2002.

Figure 2 – Percent of Respondents in China Feeling Happy or Unhappy, 2004-2010



Source: Lijun Chen and Dali Yang, "Old Age Care Concerns and State-Society Relations in China: Public Anxiety and State Paternalism," forthcoming.

returns to capital over time. Yet remarkably, this did not happen prior to the onset of the global economic crisis in 2008. According to Bai et al., while the rate of return to capital did decrease between 1979 and 1992 to about 20 percent, it has stabilized at the 20 percent level since 1998, high relative to that of most advanced economies.[6] China's fusion of political power and economic interests has been a haven for capital.

Another angle to take on China's economic imbalances is that of inequality. Whereas China in the early 1980s was one of the world's most egalitarian economies, it is one of the most unequal today. According to the World Bank, China's Gini coefficient, based on expenditure shares by percentiles of population, had risen to .447 by 2001, ranking China the second most unequal after Malaysia among the East and Southeast Asian countries included in the World Bank database.[7] Chinese research suggests China's Gini coefficient has risen further to at least .46, but the National Bureau of Statistics stopped releasing its calculations of this coefficient in recent years. In interviews some Chinese researchers suggest China's Gini coefficient may have risen as high as .49, putting China in the same league as Mexico and the United States.

Rising inequality coupled with perceptions of corruption have fuelled a sense of inequity and contributed to a rise in the number of "mass incidents," including mass protests and riots, from around 10,000 in 1993 to an estimate of more than 100,000 in recent years. Again, officials have stopped releasing exact numbers but an interview put this number at about 180,000 for 2011. In general, the petitions and protests are efforts to seek redress, often for injuries caused by government actions to take over land and other rights on what are considered unfair terms. As the Chinese economy has boomed and asset values have risen, the struggle for property rights has intensified. There are also protests prompted by environmental concerns. Such struggles are in many ways welcome. What are especially disturbing to authorities are riots against local authorities touched off by minor scuffles and traffic incidents in Wanzhou (Chongqing), Chizhou (Anhui), and other interior localities as well as in boom towns such as Dongguan and Shenzhen in Guangdong. Such events reflect the sense of popular discontent and rising class tensions in parts of the country and raise the specter of social instability.[8]

6. Chong-En Bai, Chang-Tai Hsieh, and Yingyi Qian, "The Return to Capital in China," *Brookings Papers on Economic Activity 2:2006*, 61-101.

7. World Bank, *World Development Indicators,* http://www.worldbank.org/data/; UNU-WIDER, *World Income Inequality Database,* Version 2.0a, http://www.wider.unu.edu/research/Database/en_GB/database/.

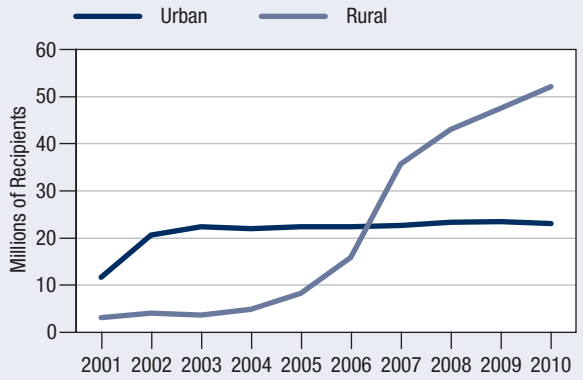
8. Dali Yang, "Economic Transformation and Its Political Discontents in China: Authoritarianism, Unequal Growth, and the Dilemmas of Political Development," *Annual Review of Political Science*, no. 9 (2006): 143-164.

So far the Chinese leadership has been able to rely on rapid growth and improvement of people's living standards to boost its legitimacy. There is growing evidence in recent years that the returns on such policies have begun to level off, if not yet declined. Surveys by Gallup and others indicate that in spite of growing prosperity, life satisfaction in China has ceased to improve. While the Chinese public continues to show strong support for the country's direction of development, a tracking opinion survey conducted by Horizon Research Consultancy Group, one of China's leading independent survey organizations, shows that the percentage of respondents who said they were happy has steadily declined from just under 80 percent in 2004 to under 50 percent in 2010 (see figure 2).

So far the Chinese leadership has used both sticks and carrots to promote social peace. By placing "stability above everything else," a stability maintenance system has been put in place, including increased investment in police equipment and efforts to censor and guide opinions on microblogging services. While for now the system has served its purpose, the costs of this system have also been extraordinarily high. Some cities such as Chongqing are known to have used draconian, extra-legal means to crack down on crime and political opposition. Indeed, sometimes the drive to ensure stability and "harmony" has generated perverse incentives; playing to local authorities' fears of being marked down by their superiors, petitioners time their moves to extract more concessions from local authorities.

Meanwhile, making use of its growing fiscal strengths, the Chinese government has adopted a broad range of policies to improve education, health insurance, and retirement, with special attention to rural areas. In a few years' time, the Chinese government has been able to put in place a new rural cooperative health insurance scheme to cover most of the rural population. There is also a drive to provide some retirement coverage to all segments of the population by the end of 2012. Under this scheme, which includes an individual contributory account that allows for varying amounts of contributions, the Chinese government has started with a government supplement set at no less than 30 yuan per month. Those aged sixty or above can get a monthly retirement payment, with the basic amount covered by government no less than 55 yuan per month (same as rural). Though these amounts are small, they put the government on the hook for social protection for a population that has complied with the government's draconian family planning policy. I believe we are witnessing the making of a new social contract in China.

Figure 3 – Urban and Rural Dibao Recipients



Source: Travis Warner and Dali Yang, "Democratization, Marketization, and the 'Reach of the State' in Rural China," paper presented at the conference on Power in the Making in China, Oxford University, March 30-April 1, 2012.

Conclusion

For the present, China has had an enviable record of sustaining growth in spite of growing social cleavages and tensions. Even while we detect significant discontentment, it is useful to keep in mind the broad range of social, economic, and political measures the Chinese leadership has already adopted to cope with these tensions. Should additional problems emerge, it is likely that the Chinese leadership will adopt additional measures and policy innovations.

A Thought toward Global Governance

Noboru Hatakeyama
Chairman and Chief Executive Officer
Japan Economic Foundation

The G8 faces two fundamental problems:

1. No legitimacy due to lack of an objective standard to select members. There was, however, an objective standard between 1975 and 1994. In principle, the largest six (G6) or seven (G7) countries were always selected during that period.

2. The economic weight of emerging countries has increased. The aggregated total share of the G7's GDP fell from 61.7 percent in 1976 to 48.3 percent in 2011.

Table 1 – Top Ten Countries Based on GDP in 1973

		Billion USD
1	**United States**	**1,369**
2	**Japan**	**419**
3	**Germany**	**386**
4	**France**	**261**
5	**United Kingdom**	**183**
6	**Italy**	**169**
7	China	137
8	Canada	129
9	India	85
10	Brazil	79

Note: Bold type refers to the G6 countries.
Source: World Bank, World Bank Data.

An objective standard

We have to establish an objective standard by which member countries are selected for the summit meeting. Regarding the number of countries, a G20 framework is too big to allow serious discussion. Let's assume it would be ten. Also, as many emerging countries as possible should be selected through this objective standard.

A specific proposal for an objective standard

The G10 would be the largest ten countries on a new composite index based 50 percent on a country's share of global GDP and 50 percent on the country's share of global population.

Table 2 – Top Ten Countries Based on GDP in 1994

		Billion USD
1	**United States**	**6,993**
2	**Japan**	**4,779**
3	**Germany**	**2,146**
4	**France**	**1,368**
5	**United Kingdom**	**1,061**
6	**Italy**	**1,054**
7	**Canada**	**564**
8	China	559
9	Brazil	546
10	Spain	515

Note: Bold type refers to the G7 countries.
Source: World Bank, World Bank Data.

Table 3 – Top ten countries based on new index in 2011						
	Country	GDP (billion USD)	A Share of global GDP (%)	Population (million)	B Share of global population (%)	(A+B)x0.5
	World	**69,659.6**	**100.00**	**6,974.0**	**100.00**	**100.00**
1	China	7,298.2	10.48	1,347.6	19.32	14.90
2	United States	15,094.0	21.67	313.1	4.49	13.08
3	India	1,676.1	2.41	1,241.5	17.80	10.10
4	Japan	5,869.5	8.43	126.5	1.81	5.12
5	Brazil	2,492.9	3.58	196.7	2.82	3.20
6	Germany	3,577.0	5.14	82.2	1.18	3.16
7	France	2,776.3	3.99	63.1	0.90	2.45
8	Russia	1,850.4	2.66	142.8	2.05	2.35
9	Indonesia	845.7	1.21	242.3	3.47	2.34
10	United Kingdom	2,417.6	3.47	62.4	0.89	2.18

Population: United Nations (White Paper on the World Population in 2011)
Source: GDP, IMF (2012.4 Database).

Annual review

Statistics of each country's GDP and population should be reviewed every year and membership of the G10 adjusted accordingly.

Criticism against the proposal

The G7 used to be an organization that demonstrated the solidarity of developed countries, with beliefs in democracy, free market, and human rights. Critics say the proposed G10 is lacking this perspective. However, when Russia was admitted to the G7 in the 1990s, the organization changed its basic characteristic from that represented in category [3] of Table 4 (shared values) to that of category [1] (diversified values). Russia cannot be classified as a country that shares values with the other members. Therefore at that time, the G7 should have chosen either to be an organization with shared values or an organization with diversified values. You cannot have your cake and eat it too.

International organizations and conferences can be classified into five categories.

There are two different criteria to classify international organizations:

1. Whether or not member countries share the same or at least similar values.

2. Whether subjects dealt with by an international organization are security issues alone, nonsecurity issues, or both.

Therefore, there are 2×3 classifications, as shown in Table 4. However, in the case of nonsecurity issues, values do not matter, making the total number of categories five.

If you wish to have an international organization consisting of only countries with shared values in the Asia Pacific area (because in Europe the EU has already been there), its objective should be clearly established with an unambiguous name like the Democratic Union of Asia Pacific (DUAP).

Table 4 – Categories of International Organizations			
Issues Countries with	Both (A+B)	Security issues alone (A)	Nonsecurity issues (B)
Diversified values	[1] UN General Assembly (UNGA) East Asian Summit (EAS) G8 → G10	[2] UN Security Council (UNSC) Six Party Talks	[5] World Trade Organization (WTO) World Bank IMF COP G20 Trans-Pacific Partnership (TPP) European Free Trade Association (EFTA) Comprehensive Economic Partnership for East ASIA (CEPEA) ASEAN Economic Community (AEC)
Shared values	[3] European Union (EU) ASEAN Community (AC) G7 (DUAP)	[4] North Atlantic Treaty Organization (NATO) Japan-U.S. Security Alliance	

Global Imbalances Are Here to Stay

Keynote Address (as delivered)

Jean-Pierre Landau

Visiting Professor, Woodrow Wilson School
Princeton University

The international economic agenda is currently predicated on one major objective: reducing current account imbalances, which are seen as a source of potential financial instability, one cause of the crisis and a threat to future growth.

Tonight I will argue that this emphasis is partially misguided. True, current account imbalances may be dangerous. But they also appear as unavoidable, even a necessary feature of the world we live in. The right policy approach, therefore, is to create conditions where those imbalances can exist and persist without prejudicing growth and financial stability. That calls for a different emphasis and a different set of priorities and policy measures than the ones currently contemplated and discussed in the G7 and G20.

The Honorable Jean-Pierre Landau, visiting professor at the Woodrow Wilson School at Princeton University, delivers the opening keynote address.

Very little in what I will say is new. A lot is inspired by existing literature, although policy conclusions and prescriptions are mine—so are any errors and mistakes.

The starting point is that we live in a world which is both deeply interconnected and increasingly asymmetric. That our economies are interconnected is obvious for everyone to see. The absolute synchronization of the recession in 2008-2009—across all parts of the world—points to a much deeper connection than our traditional models of economic or financial contagion would have implied. More recently, deleveraging by banks in advanced countries (especially but not only European banks) had its effects felt in financial systems far away in emerging economies.

It is worth looking further into those interconnections. There is obviously a physical component as global production and supply chains are more and more organized on a global scale. Most striking, however, are a financial and what I would call a liquidity component.

Financial interconnections can be best measured by the expansion of gross international asset positions (whereas, of course, the current account only measures evolution in *net* positions). This expansion dwarfs the growth of trade in goods or even GDPs. Taking, as a yardstick, the average between gross international assets and liabilities, it has grown from around 50 percent of GDP in the U.S. in the 1990s to 150 percent today. Some emerging economies, as Singapore, stand at 200 percent,

while the euro area is somewhere in between. Obviously, the composition, the denomination, the maturity of those exposures matter enormously for growth and financial stability. Valuation effects, for instance, have a much bigger impact on net foreign positions than the current account.

There is also what I would call a "liquidity" component. Financial intermediaries form a global network inside which they develop short-term claims on each other. Global institutions manage liquidity globally. Shocks in the system are therefore instantly transmitted as those short-term exposures can be unwound with no delay. In my view, this the best way to interpret the synchronous recession in 2008-09: as a global liquidity shock, where both financial and nonfinancial entities across the world started to hoard liquidity in response to the uncertainty created by Lehman's failure.

Let me point to three major asymmetries. First in savings. There is no need to elaborate much. Saving rates in emerging Asia are double those in advanced economies. Usual explanations evolve around financial repression, the absence of social safety net, or even cultural factors. The hard truth is that most saving differences come from the corporate sector, at least over the last decade.

A second asymmetry can be seen in financial development. Again, this is well known. While most EMEs [emerging market economies] have overcome the "original sin" and can issue debt in their own currencies, many EMEs still lack deep and liquid domestic markets. One important consequence, to which I shall return, is an asymmetric ability between countries to produce safe and liquid assets.

Finally, there is an asymmetry in debt situations, both public and private. It has appeared more recently. Public debt will average around 100 percent of GDP in advanced economies vs. 30 percent in EMEs, a stunning reversal from a few decades ago.

Those asymmetries will likely disappear over time. The transition, however, will be long. Stabilizing public debt in advanced economies will prove extremely challenging. And so will financial development in EMEs. Demographic factors may keep pushing up EMEs' saving rates.

In the meantime, we will inhabit a world which can be (simplistically) characterized as follows. On one side, there are advanced economies with high absorption capacities, but also low savings and high debt. On the other, emerging economies with extremely low debt, high savings and, still, limited absorption capacities. So the main imbalances—those that will count in the next decade—are imbalances *in stock*s. If properly addressed, they can be managed. Advanced countries can manufacture safe assets for savers in emerging economies and find suitable paths to debt sustainability and growth. And emerging economies may find it convenient to park their wealth in those safe assets in advanced economies, which means that international flows of capital and goods and current accounts will stay unbalanced. It stands to reason that you don't solve imbalances in stocks by balancing the flows.

It is therefore important to have the right diagnosis and set the right priorities. If we cannot find ways to secure stable and international financial flows and increase gross international financial exposures, we may return to some kind of financial autarchy, debt problems will be dealt with by each country in isolation, macroeconomic policies in all countries will be more constrained. It's hard to see that the world would be a better place.

Does that mean that we should be indifferent to the current account? Absolutely not. Large and persistent imbalances can be a source of vulnerabilities. They may be symptoms of underlying domestic imbalances. At the very least, they are indicators of potential troubles and disruptions. Even inside a monetary union, they do matter. One appropriate way to look at the euro crisis would see it as building up of internal imbalances, with extremely fragile financing structures, followed by a sudden stop. To quote Obstfeld, the current account "warrants careful scrutiny with no presumption of innocence."

But it is also true that the level of imbalances that the world can withstand depend on robustness of financial architecture (something we

Europeans should have been aware of). The policy agenda should therefore concentrate on efforts to build a robust architecture, strong enough to support growing financial integration. Achieving that result when global capital markets are still segmented between different sovereign jurisdictions will necessitate efforts in many directions. I will just mention two of them.

First, financial regulation. Most countries would agree that some degree of harmonization is necessary. These are very technical, but extremely important issues, which will decide on the shape of global capital markets for the next decades. Countries will have to choose the right balance between host and home jurisdictions. They will have to agree on how far they can go in implementing macroprudential measures on cross-border capital flows. They will have to decide on liquidity regulations. Resolution regimes for global institutions may shape the future international financial system more than what happens with exchange rates. An important issue is whether current trend towards retrenchment in international banking will persist or simply shows a temporary adjustment of balance sheets.

A second important component of a global architecture relates to the existence of safe stores of values. Every financial system, in fact, any organized society needs a reliable store of value. It serves two main purposes: first to park wealth and transfer it from one period or one generation to another. And second, it provides self-insurance against uncertainty and unexpected shocks.

The demand for such instruments is actually very strong and growing. The supply, on the other hand, is dwindling rapidly. This global liquidity imbalance, to quote Gourinchas, is far more serious than the usual global imbalance.

Demand for riskless assets comes from the private sector, but also, mainly, from public entities, in particular through the accumulation of foreign exchange reserves. Following the 1997–98 crisis, emerging countries have constantly sought to expand their foreign exchange reserves. The emerging markets' average reserve ratio has more than quintupled from 4 percent to over 20 percent of GDP since 1990. One cannot assume, however, that equilibrium has been reached and that the demand for reserves will stabilize. On the contrary, there are strong indications that this trend will persist or even be amplified following the crisis. Foreign exchange reserves are now used as a tool for *internal*—as well as external—financial stability. National central banks, especially in Latin America, acted as dollar lenders of last resort to their domestic banks. This function will develop in the future and is bound to impact the demand for reserves. With no international lender of last resort, precautionary motives could lead to unlimited accumulation of liquidity.

On the other hand, one consequence of the crisis has been to cast doubts on the ability of some assets, up to now considered as riskless, to serve as reliable stores of value. The ability of the private sector to create "safe" assets through financial innovation has proved largely illusory. And one major outcome of the European crisis has been to introduce an element of credit risk in public debt of advanced economies.

Maybe holders of those assets can accept some exchange rate risk because it can be diversified away and tends to cancel out in the longer run. There are also ways to get protection: the willingness of many EMEs to contribute to IMF resources may have a lot to do with the advantage of holding claims denominated in their domestic currencies or in SDRs [special drawing rights].

But bond holders will have greater difficulty in coping with credit risk. Credit risk makes securities/financial instruments information sensitive, and that, in turn, makes them illiquid in times of stress, precisely when you need them most.

In the future, advanced countries issuing debt instruments may face a kind of "triffin dilemma," as identified by Obstfled and others. Strong issuance will be necessary to satisfy the demand for safe assets. But strong issuance will compromise the creditworthiness of those assets. One major challenge facing the international community will be to find a way to circumvent this dilemma. History as well as theory tells us that excess demand for liquidity can be a powerful deflationary force. Coupled with deleveraging in advanced econo-

mies, could lead to very difficult global environment in next decade.

Credible fiscal consolidation in advanced economies is certainly a prerequisite, but only part of the solution. It would avoid "depreciating" existing debt and further shrinking the pool of available risk-free assets. But, by itself, it may not provide a sufficient supply to meet future needs.

There is room for meaningful and positive financial innovation to create new classes of risk-free assets. This may be a controversial statement to make right now. One of the causes of the financial crisis may have been misguided financial innovation. This was, however, a disorderly process, poorly supervised and monitored, and whose development was distorted by skewed incentives. A different approach, promoted by public authorities themselves in full transparency, would be very different and use financial innovation for the public good.

Many avenues can be explored. Two can be specifically productive. First, instruments based on real—physical or productive—assets (including land) and replicating partially their risk return profiles. If they don't transfer ownership of those assets, they could help and circumvent the political obstacles attached potentially to a substantial expansion in FDI [foreign direct investment] from emerging to developed economies.

Second, instruments based on a diversified portfolio of sovereign risk. Most current thinking revolves around the idea of pooling and sharing sovereign risk (through eurobonds, for example), a step which would create both strong solidarity but impose a high degree of common coordination and discipline on national fiscal policies. Political obstacles, therefore, are enormous and may prevent the emergence of such instruments for a very long period.

The same objective could be achieved without those political constraints by seeking safety and liquidity not in the sharing of risk but in the structure of the instrument itself. At the European level, one proposal is to create European Safe Bonds (or "ESBies") obtained by extracting a senior tranche from a diversified portfolio of government bonds. Properly implemented and closely managed and supervised, those instruments could provide a much-needed supply of safe, euro-denominated assets (as witnessed by the appetite of noneuro investors for EFSF [European Financial Stability Facility] issuances).

Let me now conclude. By no means do I want to underestimate the benefits of macroeconomic coordination. It is good. It is necessary. It should be developed, and the G20 is doing a very good job at it. Nor would I like to minimize the very significant results achieved over the last four years, when international cooperation has pulled the world economy out of the abyss.

But we are entering a new phase. We have to recognize that interactions between our economies are increasingly determined by the diversity of our structures, preferences, and financial systems. That diversity can be a source of tensions and antagonism, or quite the contrary, it can create mutually beneficial complementarities and increase global welfare. That, in turn, will depend on our ability to build an international architecture, especially an international financial architecture, commensurate with the level of interdependence we have achieved.

Policy Challenges for Emerging Market Economies

Keynote Address (as delivered)
Y.V. Reddy

Former Governor
Reserve Bank of India

Friends,
I am thankful to the organizers, in particular, President Marshall Bouton and Professor Raghuram Rajan, for giving me this opportunity to participate in the conference.

An important word of warning about oversimplification. Just as all advanced economies or industrialized economies are clubbed despite differences, emerging market economies are also treated as a homogenous group despite considerable diversity. So, there will be in the presentation bold generalizations and exploratory opinions on challenges to public policy in emerging market economies. The presentation is in the context of global economic developments.

Dr. Yaga V. "Y.V." Reddy, former governor of the Reserve Bank of India, delivers a keynote address.

Short-term challenges

The short-term challenges for emerging market economies arise out of unconventional policies in advanced economies, potential for volatility in commodity markets and in financial markets, and the need to reevaluate the path of economic reforms in the light of experience with the crisis.

Unconventional policies in abnormal times

First, there is a general consensus that the global economy in the near term appears to be far from what may be described as normal times. In this atmosphere there is considerable policy intervention, in particular by the advanced economies, encompassing not only fiscal and monetary measures of an unprecedented and unconventional nature, but also in some cases, in forex [foreign exchange] markets.

The unconventional policies of advanced economies have spillover effects on the emerging market economies, and the emerging market economies cannot be indifferent to these effects.

Should the policymakers in emerging market economies keep in view, in designing and in implementing their policies, the nature of nonnormal functioning of the markets and the spillover effects of unconventional policy interventions by advanced economies? How far would that warrant nonconventional measures by emerging market economies also? How to fit these unconventional

policies at national level into the global efforts at coordination?

Volatility in commodity markets

There are concerns about the possible volatility in the commodity markets, both due to economic uncertainties and political developments. Apart from increasing geopolitical uncertainties, two forces are likely to operate, viz., possible suppression of demand due to moderation of growth in output, particularly in advanced economies, and the ample liquidity that is available in those economies. Assurances of continued liquidity by central banks over extended periods often lead to trade in commodities being used as trade in financial assets. The impact of level as well as the volatility is likely to be different on different emerging market economies, depending on the nature of vulnerability to shocks on external account. The impact on oil-importing countries or those dependent on imported food could be acute. The impact on emerging market economies with current account deficits may be significant.

Should emerging market economies, who are vulnerable to commodity shocks, consider some policy responses or contingencies to moderate the impact of volatility in commodity markets on their economies?

Volatility in financial markets

The financial markets are also expected to be somewhat volatile in the near term. There are efforts at deleveraging several balance sheets in advanced economies in a somewhat simultaneous fashion. Rebalancing both on external and internal elements of the economies are being induced by the policymakers in both advanced and in some emerging market economies.

In advanced economies, the excess leverage has been transferred from financial sector to government's balance sheets to some extent. The financial markets have to be convinced of the long-term sustainability of governments' finances, while the real economy may warrant fiscal expansion and not contraction in short term. In addition to this disconnect between demands of sovereign debt markets and needs of real economy, the flight to safety in times of uncertainties induces volatility in currency markets. The unclear path of resolution of crisis in eurozone adds to these uncertainties.

It is necessary to make a distinction between the net flows that would be helpful in financing current account deficits and the gross capital flows which could be volatile and thus may introduce volatility in forex markets and exchange rates. Some of the measures suggested to manage capital account such as fiscal measures and allowing appreciation do not address the problem of short-term excess volatility. My friend, Mr. Jean-Pierre Landau, referred to difference between "gross" and "net" yesterday evening, and that is very critical for design of policy.

There is general recognition that emerging market economies may have to address the issue of large inflows. Capital control measures, in particular in the form of prudential regulation in financial sector, are now being considered appropriate as temporary measures. In this regard, the policy instruments available for managing large outflows has not been adequately addressed.

The capacity of a central bank in emerging market economies to intervene to moderate appreciation of their currencies is more than its capacity to intervene to moderate depreciation since the former can be done with domestic currency. The latter requires foreign currencies, which is often in limited supply. The asymmetrical strength of central banks during the two different phases of the market compels the countries to build reserves, and this compulsion has not been reduced so far by the developments after the crisis.

The implications of global developments and the policy space available for different emerging market economies are quite varying. Rebalancing of saving-investment balances is warranted in some of emerging market economies. Deleveraging in household, fiscal, financial sectors may not be a serious problem in most, but for a few, fiscal position may be stretched. For most of them, room for further monetary actions appears limited, while

for some, room for fiscal actions also appears very limited. Policy challenges are particularly acute for the few with fiscal deficits if they happen to be constrained by current account deficits.

How should emerging market economies fortify their space for public policy and range of policy instruments to moderate the impact of the likely acceleration of volatilities in financial markets in general and currency markets in particular?

Reevaluation of reform path

Even in the short term the emerging market economies may have to consider reevaluation of the reform path that has been set by each one of them before the crisis in order to capture the lessons of experience from global financial crisis. IMF, World Bank, and BIS [Bank for International Settlements] have, no doubt, been working on the parameters of new thinking on economic policies, and hence they could provide guidance.

Parameters of new thinking on economic policy are still evolving at current times of uncertainties in economic and financial prospects of the global economy. If so, should each emerging market economy decide on the rewards and risks of proceeding now with the path of reform as conceived in the precrisis period? While the policymakers will have to tackle the current problems of uncertainties in a gloomier world of 2012, should they also reevaluate their reform path that was drawn in the earlier years? In fact, the crisis seems to compel many economies to review both the goalposts of reform and path or sequencing of economic reforms.

Medium-to-long-term challenges

The emerging market economies were characterized by impressive economic performance in the years preceding the crisis and have shown considerable resilience to crisis. However, the evolving new normal of global economy may not necessarily be conducive to similar high growth.

First, high growth was enabled by boom in advanced economies during precrisis, which may not be new normal.

Second, replacing of advanced economies as locomotives of global economy involves considerable rebalancing of economic activity between domestic and external, between savings and consumption, and between advanced and emerging market economies. Such rebalancing could be time-consuming. I do not foresee the possibility of EMEs replacing AEs as locomotives of global growth in the near future.

Third, some leading economies among them have to graduate out of possible middle income trap.

Recognizing that new normal in future may be different and difficult to assess, we can say that the medium-to-long-term challenges to public policy emanate out of prospects on several fronts. These are: prospects for allocation of global capital, global regulation of financial sector, global monetary system and financial architecture, global trade, global demography, global social cohesion, and above all, global governance.

Global capital

To reflect several new realities, the allocation of global capital between different segments is likely to undergo a paradigm shift in future. The requirement of capital to finance the huge public debt obligations of advanced economies is a major part. The allocation between debt and equity, between sovereign debt and corporate debt, and between financial instruments and physical assets such as real estate and gold, and between advanced economies and emerging market economies may have to be continuously monitored. In brief, emerging market economies may have to compete with sovereign debt of advanced economies for global capital. At the same time, the sovereign debt of the advanced economies, which was considered to be free from credit risk, may no longer be so. As pointed out yesterday by Mr. Landau, there may be scarcity of ultra-safe assets, which are essential to financial system as benchmarks.

Closely related to the savings-investment balances and capital flows is the issue of management of public debt in advanced economies. History has

shown that countries can move out of large burden of public debt through high growth rates, taxation, inflation, and using some repression of financial sector—and often a combination of these. In this package, it is likely that advanced economies may opt for some toleration for higher inflation, and more important, using the regulation over financial sector to supplement tax effort. These policies would require some element of autonomy for public policies in advanced economies, and in particular, in the functioning of the central banks.

What would be the role of national public policies in the allocation of global capital among different countries, instruments, and markets, as consequence of fiscal impact of global crisis and demographic changes in advanced economies? Is it possible that capital flows between emerging market economies will be a dominant factor, way forward? If so, whether the determinants of global capital flows between emerging market economies are different?

Global regulation of finance

A view on the optimal extent and composition of financial sector in advanced economies is yet to emerge amidst concerns at excessive financialization, toxic products, and the shadow banking, etc. There is considerable emphasis on treating financial sector as a means to the development in "real sector" and not as an end in itself.

The regulatory regimes in U.K. and U.S.A. are keen to maintain their supremacy as the dominant international financial centres. This has repercussions both for global finance and global economic integration as is evident from the current tensions between U.K. and eurozone. The eagerness to maintain competitive advantage in some jurisdictions through soft regulation puts adverse pressure on global coordination. A lesson of the crisis is that regulation is a national responsibility and global coordination is at best on account of peer pressure. The consequences of instability in financial sector are often national, and hence should the emerging market economies keep options to insulate themselves from potential for instability, depending on the quality of regulation in international financial centers?

The reforms and regulatory regimes that are under consideration are designed as a reaction to the financial crisis, and hence there is a bias towards stability, though growth and stability are closely intertwined. While intervention in the financial markets to ensure stability is supported, similar intervention for growth does not seem to be adequately recognized, presumably on the assumption that the financial sector is still the best instrument for allocation of resources most efficiently. The emerging market economies, by and large, may legitimately emphasize the importance of regulation of financial sector serving three objectives, namely, growth, stability, and equity.

Recent experience has shown, as in case of Japan also, holding of sovereign debt by nonresidents lends greater instability than otherwise. Nonresident holding could, in theory, discipline fiscal management, but in practice it may not. Overall, the links between global finance and national fiscal policies in the postcrisis world may be differently perceived than before.

Finally, the optimal approach towards capital account management is somewhat unclear at this stage. However, any operationalization of management of capital account requires discrimination on the basis of residency of the entity that is regulated and on the basis of denomination of the currency in which the financial transaction takes place. Such discriminations have significant connotations for national policies relating to global finance.

International monetary system and global financial architecture

Considerable discomfort has been expressed in regard to the dominance of U.S. dollar as a global reserve currency. Alternatives under consideration appear to be another national currency, multiple reserve currencies, SDR [IMF's special drawing rights], and global currency. None of these appear to be politically or operationally feasible in the medium term. This would imply that the international monetary system would continue to be less

than stable, without a clear possibility of a consensus on a system which provides an alternative to U.S. dollar. In terms of global financial architecture, appropriate mechanisms of lender of last resort are not in sight, despite additional resources to the IMF. Some sort of debt restructuring in eurozone is happening, but on an ad hoc basis.

Will it be useful for emerging market economies to proceed on the assumption that the infirmities of the global financial architecture may not be significantly resolved in the medium term, though hopefully there may be elements of improvements? The G20 is a useful instrument and an improvement over the past G7 arrangement, but it has not stood the test of time yet. Its legitimacy is questioned—not only that it is not representative of the community of nations, but also because justification for inclusion of few countries and exclusion of a few other countries is simply not available. In any case, G20 is an informal group and its operationalization is essentially through the existing institution like IMF, which despite hopeful signs of improvement is not representative enough of global economy at current juncture.

It is undeniable that G20 is an improvement, especially in mutual understanding and learning through interactions, but its efficacy is yet to be convincingly established except in fight the crisis so that collapse was avoided. Some of the emerging market economies may view it with justifiable cautious optimism, while some are benefiting from the above participation in global governance.

Global trade

The benefits of liberalized trade in goods are generally recognized, though there are some dissenting voices on the impact of globalized trade on equity and climate change. The export-led strategy which has paid rich dividends to several emerging economies, including China, could, according to some, have reached the limits. While the demand that may be generated from advanced economies may be moderated, it is possible that the trade between emerging market economies could increase substantially. In the context of the current crisis, there are signs of protectionism even in advanced economies. It is not clear how transient such protectionist tendencies would be.

The failure of Doha round so far does not inspire confidence in the rule-based global trade regime for the future. The current atmosphere seems to favor further strengthening of bilateral agreements and regional arrangements. How would the national policies of both advanced and emerging economies respond to the new challenges to rule-based global trade in goods and services in the context of varying consequences of the crisis on their economies now?

Equity and social cohesion

Inequalities have been a matter of considerable discussion, particularly after the financial crisis. However, financial crisis has clearly spilled over into economic crisis with looming signs of political crisis and social tensions. These are unlikely to be resolved smoothly in the medium term.

The advanced economies are likely to face greater challenges to social cohesion in future. The younger generation is not only facing problems of large-scale unemployment, but are also concerned that they may not be in a position to maintain their current standards of living in future. Further, they are also concerned whether their children would be better off than them. The elder generation is fearful of their social benefits and the future pensions. On the other hand, the youth in the emerging market economies are hopeful of a brighter future for themselves and their children, though there may be some tensions that are sharing the gains.

While technically the advanced economies could resolve the problem by increasing the productivity of their workforce, this will be seriously constrained by their age profile. Further, they need time to bring about huge increases in their productivity.

The public policy responses of the national governments in advanced and emerging market economies to these divergent states of mind among the workforce, fear and hope, will therefore be different, as between advanced and emerging market

economies. How relevant would these divergences be for the pace of globalization in future?

Global demography and migration

It is acknowledged that over the medium-to-long term, demography favors emerging market economies, and there will be considerable addition to workforce in these economies. The advanced economies may have a reduction in the workforce and larger number of aged people. This would put pressure for migration to advanced economies. At the same time, sociocultural factors would resist migration on a large scale.

Among emerging market economies there could be differences in wage levels and employment opportunities. Therefore, migration among emerging market economies could also be increasing in future.

We should expect the dominance of issue of movement of persons across countries on a scale that has not been seen before.

In brief, would a viable globalization of economies warrant well-managed national policies of migration? Would cross-border movement of persons be a major challenge, way forward?

Global governance and national policies

Technology is perhaps the most important force that drives the globalization of the national economies. Harnessing technology for the welfare of the people requires appropriate institutions. Currently, the national governments are legitimate institutions for conduct of public policy. To harness the benefits of technology and minimize costs at a global level, appropriate global governance must also evolve. In order to ensure legitimacy to global governance, it is necessary to nurture global institutions that are truly representative of the global community. There are three choices for the design of the global governance structures, or a combination of the three, viz., one vote for one nation with each national representing its people; one vote for one dollar or wealth, represented through weighted voting; and one vote for one person across the globe. UN represents the first; IMF and World Bank represent the second, with some concession for first; while the third, the most democratic, does not exist. It is well recognized that the tensions in resolving these are evident in the current crisis in eurozone.

In the absence of a convincingly legitimate system of global governance, national governments will continue to be pillars of public policy. There are three important considerations arising from the experience with global crisis that should govern conduct of national public policies. First, fisc is the ultimate risk bearer and fisc is national. Second, current account imbalances should not be unsustainable, and current account deficits and surpluses are national. Third, countercyclical policies require coordination of fiscal policy, monetary policy, and financial sector regulation, all of which require space for public policies at the national level. In brief, the real issue way forward would be to consider the space available for public policy at national level that is consistent with the changing global economic and social developments.

In the short term, many advanced economies are battling with the consequences of imbalances and excess leverages in the past, with several tools of public policy. Many emerging market economies are orienting their public policies to address some domestic imbalances and some spillover of actions of advanced economies.

Both in the short term and in the medium-to-long term, the challenge both for emerging market economies and advanced economies is likely to be one of redefining the space for public policy at national level: (a) on the basis of lessons from the financial crisis, (b) the overall costs and benefits of global integration, and (c) inevitable geographic shift in economic activity across nations, though not necessarily a concomitant and simultaneous shift in economic power. The shift in economic power may be influenced not only by shift in economic activity, but several considerations, including human capital, the institutional capital, and the capacity of the concerned national economies to withstand shocks.

The nations have a responsibility to their citizens, and there is no global institution with responsibility to the global populace. Yet, technology and human endeavour to be free will continue to drive globalization, while institutions, national and global, try to catch up with the forces of globalization.

Conclusion

Emerging market economies are increasing their share in global output, global trade, foreign direct investment, capital spending, retail sales in commodities like automobiles and mobile phones, etc. They are comfortable with forex reserves, and have a low share in global government's debt. Their share in financial assets is low, but expanding. There are several positives to all, and there are also differences in the problems and prospects of different countries. For example, demographic outlook for South Africa, India, and Russia differ significantly. The resource endowments of Russia and India are dissimilar. The level of household savings vary.

Despite the challenges that I have listed in the presentation, the emerging market economies can legitimately hope for a far better future than the past; but that is conditional on sound public policy. Public policy has to face several challenges in these countries, both global and domestic. At a global level, these arise out of global financial crisis and what may be called a somewhat unclear, new normal in the global economy in future. I have referred mainly to these challenges in the presentation today.

The emerging economies have equally complex tasks for public policy in terms of domestic expectations in education, health, urbanization, and environment as a result of anticipated demographic profiles and urbanization.

The tasks demand good public policy and good governance—good governance practices in both public and private sector in equal measure. Hopefully, good governance in global economy also will prevail.

The World Economic Scenario: A Latin American Perspective

Keynote Address (as delivered)

Jesús Silva-Herzog

Former Secretary of Finance
Government of Mexico

It is my real pleasure to be back in Chicago and to participate in this important conference on "Searching for Strategies to Restore Global Economic Stability and Growth." My appreciation to the Chicago Council on Global Affairs for their kind invitation.

We all recognized that the economic and financial crisis of 2008-09 has been the most dramatic since the Great Depression of 1929-32. What we saw in the 2008 autumn was something difficult to imagine. During several weeks, it seemed like a terror movie.

The Honorable Jesús Silva-Herzog, former secretary of finance for the Government of Mexico, opens the final day with a keynote address.

Bear Sterns rescue with J. P. Morgan Chase. Northern Rock in England. The bankruptcy of Lehman Brothers that sent wrong signals to the market. The enormous injection of financial resources by U.S. authorities into Fannie Mae and Freddie Mac, the two most important intermediaries in the mortgage market. The surprising failure of the American International Group and the $85 billion plus that was required to keep it afloat. The initial rejection of the U.S. Congress to the rescue package to buy "toxic assets." The financial problem of General Motors. The public appearance of the derivatives that were named by Warren Buffet "arms of mass destruction."

Paradoxically, it was necessary—an unprecedented injection of financial resources by the governments of different industrial countries to avoid a financial collapse and to face the market failures. As a matter of fact, Mr. Greenspan has recognized that he had made a mistake thinking that the market was going to solve its own problems.

The events referred to above have produced three important consequences that are affecting the prospects of the world economy today and in the next few years: a high public-sector deficit, a high level of public debt, and very high rate of unemployment.

In 2009 many countries in the world had negative rates of growth. Mexico had a fall of 6.5 percent, the worst since 1932 and the worst in Latin America.

In 2010 the global economy grew again, with a sluggish recovery in the industrial countries and a more dynamic behavior in the emerging economies.

In 2011 when there was the perception that things had improved significantly, the world was concentrated in the problems of overindebtedness in a number of European countries. First, it

was Ireland and Portugal that received international support, introduced an austerity program, and they are today in the right track. Then Italy and Greece (the presidents in both countries were forced to resign), where we saw lack of leadership and the absence of timely measures, with a heavy load of dogmatic attitudes. Today, the attention is concentrated in Spain, that is struggling with a vicious circle: a severe austerity program, a recession in economic activity, a record unemployment rate close to 25 percent of the labor force (40 percent in the young population), and a growing social unrest. A few days ago, the Spanish sovereign debt was downgraded by one of the rating agencies.

Austerity is the name of the game for the European economies under the influence of the German authorities. I wonder if that is going to be possible given the social and political consequences of such policy. Fortunately, we have seen in the last few days a more flexible attitude by Chancellor Merkel.

Additionally, the firewall that the Europeans have built in the recent past is a step in the right direction, but insufficient in case of serious liquidity problems in Italy and Spain.

The global economy is going through a slow-growth period. The European crisis is back, or actually, it never went away and won't for many years. A lost decade—like the Latin America lost decade in the eighties—is quite a possibility. The U.S. economy is doing relatively well, with a modest expansion of around 2 percent, but a high unemployment and a high government deficit, where there is an ideological conflict between the Obama administration and the Republican Party. China will see a slower rate of growth of only 8.5 percent this year, but with serious repercussions for the prices of certain commodities and for the exporting countries to the Asian giant.

Well, but what were the main causes of the financial crisis that originated in the U.S. and spread all over the world?

In my opinion there is a word that comprises the main elements: excess.

- Excessive deregulation of the financial institutions and lack of adequate supervision. The market forces were not able to solve the problems by itself.

- Excesses in the level of indebtedness, particularly in the U.S. This applies to government, corporations, families, and financial institutions. In this last case, the leverage ratio—regulated before—was made flexible and reached very risky levels of more than fifty times the capital of the bank. The same problem occurred in a number of European banks.

Particularly relevant was the credit expansion in the mortgage market, with a bubble in the value of real estate and its final explosion (remember Spain). Subprime debtors, ninjas, and a number of financial innovations backed by mortgages and the market of derivatives [grew] exponentially. We enter[ed] into a process that led to what Schumpeter called "reckless banking," a shadow financial system without regulation.

There is an old saying in the Yucatan Peninsula, home of the ancient Mayan culture: "All excesses are too much."

Today, the global economy is facing an old dilemma: fiscal consolidation or incentives to grow. The austerity programs are confronted with social and political resistances in a number of European countries. Holland is the most recent example. More recession and unemployment are not the answer. There is a need to grow in order to deal with stagnation and with the debt problem. The real question is not one or the other, but to look for the proper and reasonable balance outside of dogmatic attitudes.

Very closely related to the dilemma between stability and growth is the question of the relationship between the market and the state. An important trend is looking for a higher degree of state intervention, and there is a resurgence of government regulation in the financial institutions and in other sectors of the economy. We have already observed a process of reregulation.

Additionally, we have to recognize that the United States leadership and intellectual authority is being diminished, together with the domestic political struggle between the Obama administration and the Republican Party, highly influenced by the most conservative elements in the Tea Party.

Beyond the economic and financial factors, the world economy is facing other risks: the price of oil, Syria, Iran, the deceleration of the Chinese economy, and the sustainability of the U.S. recovery in an electoral year. There is no question that we are living in difficult times.

There is a question that has not been answered sufficiently. The economic and financial crisis in the industrial countries did not appear from one day to the other. It was a gradual and cumulative process. Where were the local central banks, the supervisory authorities, the rating agencies, the international financial institutions, especially the International Monetary Fund? An opportune voice of alarm would have been very useful and would have avoided traumatic consequences.

We have not learned that booming times are not forever. Now, let me turn to the last past of my remarks.

When we became aware of the problems of liquidity (or solvency), the problems of a high level of indebtedness and the difficulties to maintain the capacity to pay, we in Mexico and in many other Latin American countries said at loud voice: "It sounds familiar." This is a picture that we have already seen.

And it was true. In 1982—thirty years ago—we went through similar circumstances, not considering the profound differences between Europe, the U.S., and Latin America. In that year Mexico had the responsibility to detonate the so-called debt crisis that extended immediately to the rest of the region and to other parts of the world.

In August of that year, Mexico suspended payments of capital and looked for fresh money—our foreign exchange reserves were not existent. It was not a default. We called it restructuring. Through successive restructuring arrangements of our foreign debt—that was highly concentrated in hundreds of commercial banks all over the world—we put all the players together with a clear political decision and under a very able leadership of the IMF. After several years of hardship and complicated negotiations, the Brady Plan that recognized the need of important write-offs in our obligations and the need to recover economic expansion, we began to come out of the debt problems. Our steps in the process were closely followed by the other Latin American governments.

Our public-sector deficit was 17 percent of GDP in 1982, and we had a stagnant economy. We brought down that figure to half in 1983 and were able to resume growth at a modest pace. We certainly tightened our belts.

At the same time, the Mexican authorities introduced a number of structural reforms: privatization of a number of public companies, opening of the economy to the outside world, etc. A "change of route" took place in economic policy.

Latin America went through a lost decade. However, it was a period when many of the countries of the region introduced structural changes that have permitted to face the recent crisis in a relatively satisfactory manner. We have learned the hard way that nobody—including the United States—can live beyond their own means.

Today, Mexico and Latin America, with some exceptions, have a responsible management of economic policy and are looking forward to a better future. During the eighties, when the debt crisis erupted, Mexico and many other Latin American countries were called fiscal irresponsibles, incurring excessive indebtedness and living beyond our own means. They were right, but I wonder if those adjectives could not be applied today to many European countries and to the United States.

Conference Participants

Ignazio Angeloni
Visiting Fellow
Bruegel Institute

Advisor to the Executive Board
European Central Bank

Asha Bangalore
Vice President and Economist
Northern Trust Corporation

Sally Blount
Dean, Kellogg School of Management
Northwestern University

Regis Bonelli
Senior Researcher
Instituto Brasileiro de Economia,
Fundação Getulio Vargas

Barry Bosworth
Senior Fellow, Economic Studies Program
The Brookings Institution

Marshall M. Bouton
President
The Chicago Council on Global Affairs

Rachel Bronson
Vice President, Studies
The Chicago Council on Global Affairs

Armando Castelar Pinheiro
Coordinator of Applied Economic Research
Instituto Brasileiro de Economia,
Fundação Getulio Vargas

Paul Christensen
Associate Dean and Executive Director,
Global Programs and Clinical Associate Professor of Finance
Kellogg School of Management
Northwestern University

Richard H. Cooper
Founder
General Welfare Group, LLC

Meredith Crowley
Senior Economist, Economic Research Department
The Federal Reserve Bank of Chicago

The Honorable Kenneth Dam
Max Pam Professor Emeritus of American & Foreign Law and Senior Lecturer
The University of Chicago

Michael Damore
Executive Managing Director
Epstein

Martin Eichenbaum
Ethel and John Lindgren Professor of Economics and Codirector, Center for International Macroeconomics
Northwestern University

Barry Eichengreen
George C. Pardee and Helen N. Pardee Professor of Economics and Political Science, Department of Economics
University of California, Berkeley

Charles L. Evans
President and Chief Executive Officer
The Federal Reserve Bank of Chicago

Ali Fatemi
Alumni Professor and Chairman, Department of Finance
DePaul University

Chetan Ghate
Reserve Bank of India Chair, Professor of Macroeconomics
Indian Council for Research on International Economic Relations

Animesh Ghoshal
Professor of Economics
DePaul University

The Honorable Austan D. Goolsbee
Robert P. Gwinn Professor of Economics
The University of Chicago Booth School of Business

David Hale
Chairman
David Hale Global Economics, Inc.

Lyric Hughes Hale
Economic Analyst and Contributor

Mike Hales
Partner
A.T. Kearney

The Honorable Noboru Hatakeyama
Chairman and Chief Executive Officer
Japan Economic Foundation

Bruce A. Heyman
Managing Director
Goldman, Sachs & Co.

James Hoge
Chairman of the Board
Human Rights Watch

Mark Hoplamazian
President and Chief Executive Officer
Hyatt Hotels Corporation

Jim Jirsa
Executive Managing Director and Chief Financial Officer
Epstein

Jeff Joerres
Chairman and Chief Executive Officer
ManpowerGroup

Rajat Kathuria
Professor
International Management Institute, New Delhi

Consultant
Indian Council for Research on International Economic Relations

John Kirton
Director, G8 Research Group
Codirector, G20 Research Group

Keiichiro Kobayashi
Professor, Institute of Economic Research
Hitotsubashi University

Spencer Krane
Senior Vice President and Senior Research Advisor
The Federal Reserve Bank of Chicago

The Honorable Jean-Pierre Landau
Visiting Professor, Woodrow Wilson School
Princeton University

Adolfo Laurenti
Deputy Chief Economist and Managing Director
Mesirow Financial

Cathy Lemieux
Executive Vice President, Supervision and Regulation
The Federal Reserve Bank of Chicago

Richard C. Longworth
Senior Fellow
The Chicago Council on Global Affairs

Wayne Moore
Retired Partner
Goldman, Sachs & Co.

The Honorable Michael H. Moskow
Vice Chairman and Senior Fellow on the Global Economy
The Chicago Council on Global Affairs

The Honorable Henry M. Paulson Jr.
Chairman
The Paulson Institute at the University of Chicago

Samuel de Abreu Pessôa
Senior Researcher
Instituto Brasileiro de Economia (IBRE/FGV)

Partner
Tendências Consulting

Stephen Pickford
Associate Fellow
Chatham House, London

Jean Pisani-Ferry
Director
The Bruegel Institute

Raghuram Rajan
Eric J. Gleacher Distinguished Service Professor of Finance
The University of Chicago Booth School of Business

Yaga V. "Y.V." Reddy
Former Governor
Reserve Bank of India

Ambassador Shinichi Saito
Executive Director
Japan Economic Foundation

The Honorable Susan C. Schwab
Professor of Public Policy
University of Maryland

Strategic Advisor
Mayer Brown, LLP

The Honorable Jesús Silva-Herzog
Former Secretary of Finance
Government of Mexico

Joan Steel
Founder and President
Alpha Wealth Advisors LLC

Marcos Troyjo
Director, BRICLab
Columbia University

Frederick H. Waddell
Chairman and Chief Executive Officer
Northern Trust Corporation

Dali L. Yang
Faculty Director
The University of Chicago Center in Beijing

Yang Yao
Professor
China Center for Economic Research, National School of Development, Peking University

Naohiro Yashiro
Visiting Professor
International Christian University

Miaojie Yu
Associate Professor
China Center for Economic Research, National School of Development, Peking University

Leah Joy Zell
President and Lead Portfolio Manager
Lizard Investors LLC

Marvin Zonis
Professor Emeritus
The University of Chicago Booth School of Business

Conference Agenda

Wednesday, May 2, 2012

5:30-8:00 p.m.
Welcome, Keynote, and Dinner

Welcome
Charles L. Evans, President and CEO, Federal Reserve Bank of Chicago

Opening Keynote
"Global Imbalances Are Here to Stay"
Jean-Pierre Landau, Former Deputy Governor, Banque de France, Former Executive Director, IMF. Introduced by Mark Hoplamazian, President and CEO, Hyatt Hotels Corporation

Thursday, May 3, 2012

7:30-8:15 a.m.
Breakfast and Registration

8:30-8:45 a.m.
Welcome
Marshall M. Bouton, President, The Chicago Council on Global Affairs

8:45-10:00 a.m.
Taking Stock of the Current Crisis

The rapid economic deterioration of some European economies and the inability or unwillingness of others to effectively stave off crisis is testing the larger European economic experiment. If Europe unravels, it would seriously damage many if not most other economies as well. Meanwhile, U.S. housing remains depressed and challenges posed by real estate markets in emerging economies may be harbingers of future crises. This session considered the following questions: How can the global economy best be shielded from Europe's troubles? Does China's economy have the resiliency to cope with the challenges caused by economic weakness in its top export partners? What new policy challenges will emerging markets face in this turbulent global environment?

Speakers:
Austan Goolsbee, Robert P. Gwinn Professor of Economics at the Booth School of Business, The University of Chicago, and Former Chairman, U.S. Council of Economic Advisers

Yang Yao, Director, China Center for Economic Research, Peking University

Chair:
Sally Blount, Dean, The Kellogg School of Management, Northwestern University

10:00-10:30 a.m.
Break

10:30-12:00 p.m.
The Medium-Term Outlook

Even if the leading economies are able to muddle through the current crises, structural impediments remain. Existing macro-imbalances are unsustainable, as are existing tax and spending policies in the United States and other developed countries. Existing financial institutions and regulations are in need of restructuring to help put markets on a more secure footing. Emerging economies are expected to play a pivotal role in this restructuring process. This session considered the following questions: Is the Euro sustainable? What role will ascendant currencies take in the diversification of the global economy? What policy actions would be appropriate to deal with persistent global imbalances? Can private demand take over from government stimulus? Can steps be taken to change the long-term unsustainable trend in U.S. government spending and tax revenues? What regulatory policies would be appropriate to protect against systemic risks while encouraging economic growth?

Speakers:
Regis Bonelli, Senior Researcher, Brazilian Institute of Economics (IBRE), Getulio Vargas Foundation

Jean Pisani-Ferry, Director, Bruegel Institute

Chair:
Martin Eichenbaum, Ethel and John Lindgren Professor of Economics and Codirector, Center for International Macroeconomics, Northwestern University

12:15-2:00 p.m.
Lunch and Keynote Address
"Policy Challenges for Emerging Market Economies"
Yaga V. "Y.V." Reddy, Governor, Reserve Bank of India, 2003-08. Introduced by Asha Bangalore, Senior Vice President and Economist, Northern Trust

2:15-3:30 p.m.
Afternoon Breakout Groups (off-the-record)

Breakout Group # 1:
Can Macro-Imbalances be "Rebalanced"?

Keiichiro Kobayashi, Professor, Hitotsubashi University

Breakout Group # 2:
The Role of International Institutions and Financial Regulation

Stephen Pickford, Managing Director, International and Finance, HM Treasury (2007-2010)

Breakout Group # 3:
What Happens When No Country Leads?

Susan Schwab, U.S. Trade Representative (2006-2009), Professor, University of Maryland

Breakout Group # 4:
Austerity versus Stimulus

Naohiro Yashiro, Professor of Economics, International Christian University

3:30-4:00 p.m.
Break

4:00-5:00 p.m.
Report from Breakout Groups

6:45-8:45 p.m.
Dinner, The Art Institute of Chicago, Chicago Stock Exchange Trading Room

Chicago has been a major center for American architecture since the late nineteenth century. The city's most important early architects, Louis Sullivan and his partner Dankmar Adler, designed the Chicago Stock Exchange, built from 1893 to 1894. When the original Stock Exchange was demolished in 1972, sections of Sullivan's elaborate, stenciled decorations, molded plaster capitals, and art glass

were preserved from the Trading Room. Using these fragments, the Art Institute was able to reconstruct the Trading Room in its new Rubloff Building, constructed between 1976 and 1977.

Friday, May 4, 2012

7:30-8:00 a.m.
Breakfast

8:00-8:45 a.m.
Opening Keynote
"The World Economic Scenario:
A Latin American Perspective"
Jesús Silva-Herzog, Ambassador to the United States (1995-1997) and Secretary of Finance, Mexico (1982-1986). Introduced by Richard Cooper, Founder and Managing Director of the General Welfare Group

8:45-10:15 a.m.
Threatened Social Compacts and Political Responses

Headlines from around the world make clear that domestic stability cannot be separated from global uncertainty. From the "Occupy" movement that has spread across major American cities to protests in Athens, Rome, and London and massive demonstrations in Tel Aviv against housing subsidies, longstanding social compacts risk unraveling. How significant is the growing income inequality in some developed countries to maintaining political consensus? As sovereign debt mounts and governments begin to run out of the financial ammunition needed to address local concerns, what (if any) globally coordinated policies are available to assist governments faced with pressing popular demand for domestic concerns? This session considered the following questions: How can long-standing social compacts evolve and survive in a globally integrated economy? What types of political reform are possible in a period of slow economic growth? Is it possible to maintain political consensus during a time of economic stress?

Speakers:
Ignazio Angeloni, Visiting Fellow, Bruegel Institute; Adviser, ECB Executive Board

Jeff Joerres, Chairman, CEO, and President, ManpowerGroup

Dali L. Yang, Faculty Director, University of Chicago Center in Beijing; Board member of the Paulson Institute at the University of Chicago; Member of the Committee of 100

Chair:
Raghuram Rajan, Eric J. Gleacher Distinguished Service Professor of Finance at the Booth School of Business, The University of Chicago

10:15-10:30 a.m.
Break

10:30-12:00 p.m.
Are New Economic and Political Models Required?

As fiscal stimulus winds down, leaders will have fewer tools available to bolster local economies and shield populations from the pain of a sluggish economy. It remains to be seen if private demand can take over from government stimulus and whether new political and economic frameworks are required to manage political paralysis and economic stagnation. *The Economist,* in its January 21, 2012, headline announced "the rise of state capitalism" and warned of risks to growth and innovation. This session considered the following questions: Can policymakers and business leaders develop strong, coordinated responses to economic challenges? Are new social and political compacts needed in order to put the economy on a new footing and strengthen recovery? What trade-offs do new models bring in terms of innovation, free trade, and stability? What new institutional models on global governance could better manage tomorrow's challenges?

Speakers:
Barry Eichengreen, George C. Pardee and Helen Pardee Professor of Economics and Political Science, University of California Berkeley

The Honorable Noboru Hatakeyama, Chairman and CEO, Japan Economic Foundation

Chair:
Charles L. Evans, President and CEO of the Federal Reserve Bank of Chicago

12:15-2:00 p.m.
Lunch and Concluding Discussion (off-the-record)
The Honorable Henry M. Paulson Jr., Chairman, The Paulson Institute at the University of Chicago, in conversation with Michael H. Moskow, Vice Chairman and Senior Fellow on the Global Economy, The Chicago Council on Global Affairs. Introduced by Leah Joy Zell, President and Lead Portfolio Manager, Lizard Investors LLC

2:00 p.m.
Adjournment

The Chicago Council on Global Affairs, founded in 1922 as The Chicago Council on Foreign Relations, is a leading independent, nonpartisan organization committed to influencing the discourse on global issues through contributions to opinion and policy formation, leadership dialogue, and public learning.

THE CHICAGO COUNCIL
ON GLOBAL AFFAIRS

332 South Michigan Avenue
Suite 1100
Chicago, Illinois 60604
thechicagocouncil.org

Printed on recycled paper