

The Year in Review: 2003

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A year ago, the economic downturn, the stock market decline, the technology slump, the revelations of corporate misdeeds, the prospects of war in Iraq, a legacy of overinvestment, the possibility of another terrorist attack, and the seemingly endless series of economic crises in emerging markets had raised uncertainty about the ability of the economies of Europe, Japan, and the United States to recover from recession and sustain solid growth going forward. Without recovery in these countries, the growth prospects for the developing world were restrained.

Today, the economic outlook looks much better than a year ago, even to some extent in Europe. Some of the uncertainties hanging over the world economy have dissipated, if not all of them. The invasion of Iraq is over, and some of the worst fears about jumping oil prices have not been realized. There has not been another terrorist attack on the scale of the World Trade Center. On the economic side, the excess capacity that built up in the 1990s has been reduced or eliminated in many industries, and stock markets have made a partial recovery from their slump.

On the down side, US and coalition forces are facing a long drawn out struggle against terrorist groups in Iraq. The task of stabilizing and rebuilding Iraq looks daunting. There have been a series of smaller but still deadly terrorist attacks around the world. Oil prices did not jump to \$50 or \$100 a barrel, but they did remain high. And consumer, business, and equity market confidence remain fragile, should there be more bad news ahead. To use the familiar clichés: the world economy does seem to have turned a corner, but it is not yet out of the woods.

The US economy grew at around 2 percent in the first half of 2003 and seems poised for faster growth in the second half of the year or in early 2004. Short-term

macroeconomic forecasters in the United States have become very much more optimistic as new data have been released in the summer of 2003. Employment growth still lags behind the recovery, although that is because of the continuing rapid increases in productivity. In Japan, gross domestic product (GDP) reportedly grew at around 3 percent in the first half of 2003, and there are clear signs of better economic performance than a year ago. However, with some skepticism about preliminary GDP numbers, and after 10 years or more of relative economic stagnation, doubts remain about Japan's ability to sustain an economic recovery. Among the developed economies, Europe seems the region that is having the most difficulty in recovering from the downturn, especially Germany. While there is significant improvement in business sentiment, the euro area economy was basically flat in the first half of 2003 and is expected to grow by only 0.6 percent for 2003 overall.

In the developing world, China's blockbuster economic growth performance has continued, apparently only modestly affected by the global slowdown and the outbreak of severe acute respiratory syndrome, SARS. The Chinese central bank is now worried about the economy overheating. Although less dynamic than China, other countries in Asia are also doing pretty well, including India. Latin America is gradually healing its wounds after a wave of crises—for example, the risk premium on sovereign debt in Brazil has dropped substantially. South Africa is growing, but it is also battling the AIDS crisis and its worsening economic effects, a topic that is discussed below.

This review considers some of the important issues and challenges facing the world economy that have emerged or been at center stage this past year. First there is a look at the impact of the war in Iraq and whether or not this will sour economic relations. The war was the central political and military event of the past year, and it has soured international relations. But so far, surprisingly, its economic consequences do not seem to have been all that large. Next is the issue of exchange rate adjustment and the rebalancing of global trade patterns. The United States has been running a massive trade deficit that continues to grow. Many policymakers have judged that at some point there would have to be a downward adjustment in the value of the dollar and in the current account deficit. This past year that adjustment seems to have started, with a substantial swing in the euro/dollar exchange rate. A particular concern now is to figure out how the world

economy can return to sustainable growth while adjusting to a still lower dollar and lower US deficit, when these occur. The adjustment process must be seen in a global context, not just in a US one. The review then looks at the steps being taken toward economic reform in Europe. Considerable momentum for a reform agenda has emerged this past year in Europe. The 2000 Lisbon EU council meeting was an important landmark, but implementation now seems to be taking place, although with some resistance. The fourth topic is an examination of deflation, an issue that has been around for a while as part of Japan's economic difficulties, but has assumed increased importance over the past year, with concerns that deflation could spread to the United States, Germany, and possibly other countries. The implications of rapid growth in China have been a hot topic for a while, but have become a much hotter topic in the past year. As the rest of the world economy turned sluggish, the Chinese surged ahead, increasing their exports at a very rapid pace. From Tokyo to Milan to Chicago, everyone is wondering whether China can continue to grow so fast and how their own jobs and businesses will be affected if it does. The discussion of China is followed by a short review of the economic effects of SARS outbreak of the past year. Finally we turn to Africa where there have been important developments, both in the evaluation of the dangers of AIDS to the economy of the region and in the local and international response to the disease. There is a short conclusion.

THE WAR IN IRAQ AND ITS ECONOMIC FALLOUT

Direct economic effects of the war with Iraq were felt prior to the outbreak of war, because of the uncertainty that was created. Oil prices increased, consumer and business confidence weakened, and economic growth—which was already weak—slowed or stalled in Europe and the United States. The war itself was short, less costly in human lives than might have been expected, and not hugely expensive relative to the size of the US economy. And not all of the economic effects were negative for growth. The increase in military spending in the United States and the United Kingdom served to sustain GDP growth in the first half of 2003.

The continuation of guerilla warfare with the agony of seeing soldiers and civilians killed almost every day is a serious political and social problem. The continuing economic costs are not as devastating, but are still significant. Currently the Coalition Provisional Authority (CPA) in Iraq has allocated US\$256.8 million to reconstruction in its budget for July–December 2003,¹ and The Emergency Wartime Supplemental Appropriations Act of 2003 granted the Bush Administration an additional US\$59.7 billion to Operation Iraqi Freedom and made US\$2.48 billion available to an Iraqi Relief and Reconstruction Fund until September 30, 2004.² However, the final costs of Iraqi reconstruction are likely to be much higher. Acknowledgement by the Bush Administration of rising reconstruction costs in both Iraq and Afghanistan emerged with the President's September 7th request to Congress for an additional \$87bn in funding for the fiscal year 2004. Included in this request was a \$20 billion request for Iraqi infrastructure (\$15 billion) and security provision (\$5 billion), as well as an initial medium-term estimate of \$50 billion to \$75 billion required for Iraqi infrastructure investments alone.³ Private estimates run even higher: Brookings scholars O'Hanlon and Brainard (2003) estimate costs borne by the United States for troop deployment in Iraq alone at US\$3 billion a month in the years ahead, while US reconstruction costs range from US\$5 billion to US\$120 billion a year. Much depends on the length of US deployment, therefore, but even in benign scenarios, the costs of the Iraq operation may continue to weigh on US government finances—up to 1 percent of GDP in additional spending per year if Bremer's highest figure is correct.

Oil prices did not spike when the war started, as there was no disruption to mid-east supplies except for Iraq itself. But after the short war it seemed possible that Iraqi oil supplies would quickly be back on line and then increased rapidly compared with pre-war levels. It now seems that it will take much more time to deal with the problems of antiquated supply machinery and sabotage. As of mid-year 2003, the price of light sweet

¹ See CPA 2003 Final Budget, available at <http://www.cpa-iraq.org/budget/2003budget.pdf>, accessed August 12, 2003.

² See Emergency Wartime Supplemental Appropriations Act, 2003 (Engrossed as Agreed to or Passed by House), H.R. 1559, available at <http://thomas.loc.gov/cgi-bin/query/D?c108:2:./temp/~c108OrntVo;>, accessed August 12, 2003.

³ Office of the President, September 8th: Fact Sheet: Request for Additional FY 2004 Funding for the War on Terror, available at <http://www.whitehouse.gov/news/releases/2003/09/iraq/20030908-1.html>. Accessed September 22nd 2003.

crude was still in excess of US\$30 a barrel. If there had been a five or ten dollar drop in the price of oil, this would have helped the world economic recovery.

Economic frictions after the war

When the United States and Britain decided to go to war with Iraq, it was against the wishes of the United Nations and much of Europe, Russia, China, and many other countries. It is not clear yet whether the friction created by the disagreement over Iraq will spill over into the economic arena, but so far the indications are that it will not. The United States is a major market for China and Japan, and whatever misgivings these countries may have about the war have not seriously impacted economic relations. These countries have a lot to lose from economic conflict with the United States. Russia may move closer to Europe, but if so, the impact of the war itself is likely to be a minor factor in that process.

Frictions between Europe and the United States over trade and the environment were pretty strong even before the war. The European Union and the United States were engaged in a trade skirmish, if not a trade war, involving genetically modified organisms, hormone fed beef, the tax treatment of foreign sales corporations, steel tariffs, and other issues. The US government's attitude toward the European Union has not been particularly conciliatory since the war. The reactions in Europe vary by country. Germany, with huge business ties to the United States, has been more ready to try and restore good relations. Franco-American relations were never great and have suffered most.

There certainly is the potential for the trade frictions between the European Union and the United States to escalate into a damaging trade war. But the chances are good that time will ease tensions and allow the respective trade negotiators and the World Trade Organization (WTO) to find some level of compromise. Even if they do not, the disputes on the table so far, although important to specific economic constituencies within each

region, are not in total terribly important relative to all trade or the economic size of the two regions.⁴

Improving global trade relations

In the Cancun Ministerial, progress had seemed possible in resolving the disputes over agriculture. However, the European Union, Japan, and Korea requested new investment regulations, and these were rejected by the African and the Asian countries. At that point, the Mexican hosts decided to end the meeting. This seems to leave multilateral trade negotiations standing at a knife's edge with the support of the major economies wavering. WTO negotiators are to be called together for a new meeting in December, but with the 2004 electoral cycle opening, the United States at best appears destined to pursue only bilateral free trade agreements in the medium term. The European Union, which is engaging simultaneously in internal reform and enlargement, is also questioning not only its multilateral trade strategy, but also the functionality of a 146-member WTO as an effective forum for trade negotiations. Developing countries, spearheaded in Cancun by the new Group of 22, even as they celebrate their success in thwarting negotiations on the issues they opposed, have so far proven unable to formulate a coherent trade agenda for future negotiations and hence surfaces unable to agree on how to wield their new-found veto-power in multilateral negotiations. This is a potentially destabilizing new feature of global trade institutions, as it will likely cause negotiating partners in the developed world to refrain from fielding serious trade proposals, fearing that developing countries will be unable to reciprocate, due to their internal disagreements. For most welfare gains to be achieved and avoid a possibly prolonged stalemate, it is therefore of utmost importance to quickly rediscover the political will required to move the Doha process forward.

⁴ The European Union has a new regulatory initiative called REACH that would subject all chemicals to extensive new testing and would affect trade in any goods that contained chemicals (most trade). This initiative is potentially a very serious issue for businesses within the EU, and for all countries that either trade with the EU or have investments in the EU. As yet, it is not certain whether this initiative will be passed and, if passed, how it would be implemented in practice. But it could make all previous trade disputes look insignificant by comparison.

Another issue coming out of the war is tensions within the European Union itself. Several countries supported the war and so did countries due to enter the European Union shortly. Efforts to strengthen political and military ties within the European Union were set back by the conflict over the war. The United Kingdom in particular, which actively participated in the war and has decided to hold off on joining the euro zone, may find it is losing influence on economic decisions within the European Union.

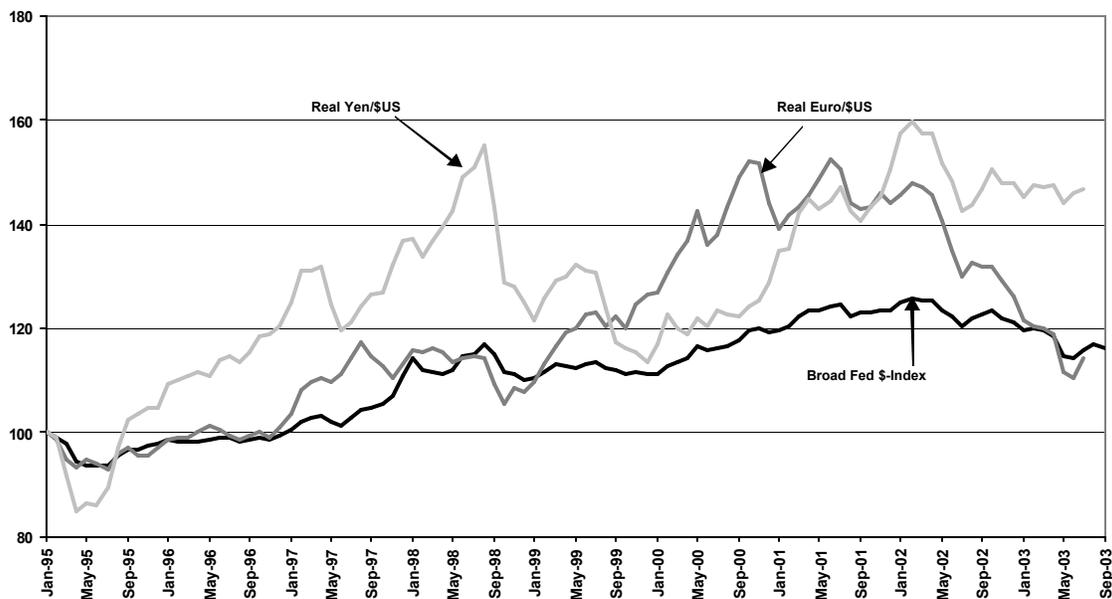
REBALANCING EXCHANGE RATES AND TRADE FLOWS

Sustainable world economic growth must involve a substantial trade and exchange rate rebalancing and policies in the United States and around the world should facilitate it. Importantly, the reduction of the US current account deficit is not just a US issue; it must also involve adjustments in the rest of the world. At the recent G-7 meetings in Dubai the Finance Ministers agreed on the importance of the issue of rebalancing the world economy.

Looking first at the exchange rate side of the story, figure 1 shows the movements of the euro versus the US dollar, the Japanese yen versus the US dollar, and a broad exchange rate index of the US dollar. In each case, January 1995 is set equal to 100 and an upward movement indicates a rising value of the dollar, a downward movement a falling dollar. There are two notable implications of this figure. First, it shows the very large and sustained swings in exchange rates, with a long rise in the dollar in the 1990s and a modest decline in the dollar since early 2002. Given the continuing growth in trade and investment, large relative exchange rate movements are potentially disruptive to the business sector as it sets its investment and production decisions. Second, the figure shows that the dollar has fallen much more against the euro than against either the yen or the broad exchange rate index in recent months. This last point is of course in large part the simple averaging effect of constructing an index. But beyond this, there are many currencies that have pegged their values in relation to the dollar, either fixing exchange rates or allowing only modest movements against the dollar.

Figure 1: Real exchange movements, 1995–2003

(Jan 1995 = 100, increase in value on chart equals a strengthening US dollar)



Sources: US Federal Reserve, Bank of Japan, European Central Bank, Pacific Exchange Rate Service, US Bureau of Labor statistics.

Turning to the trade and income side of the story, the United States has a current account deficit of over 5 percent of GDP, and most of this reflects a trade deficit.⁵ The rest of the world, of course, is running a corresponding trade and current account surplus with the United States. There are two complementary factors that drove the long rise in the US dollar and the rising trade and current account deficits. First, as the US economy and the stock market boomed in the 1990s, Americans became richer and increased consumption. It also encouraged companies based in the United States to increase their investments. Private sector demand in the United States increased very rapidly, outpacing the growth of supply, and Americans chose to fill the gap between what they produced and what they purchased by buying from overseas. They financed these purchases by foreign borrowing or by selling US assets. Second, the rest of the world was happy to

⁵ The United States is now a large net borrower from the rest of the world, but the net income flows remain relatively small.

facilitate the US spending boom. There was a huge appetite in the rest of the world for US assets.

In combination, these two forces drove the very large increases in capital inflows to the United States, which in turn pushed up the value of the dollar in the late 1990s. As a matter of arithmetic, the large capital inflow to the United States had to create a large offsetting trade deficit, which indeed it did, as the high dollar made many US goods uncompetitive in world markets and made imports cheap for Americans. As well as being willing to finance the US spending boom, the rest of the world was happy to sell their products in the United States, filling the gap between the United States and the domestically available supply.

The need for rebalancing

Not everyone agrees that the large exchange rate swings and the large current account deficits and surpluses that develop around the world are a problem. After all, the flow of capital is part of the process of globalization and reflects the desire of wealth holders to seek the highest risk-adjusted returns. Mobile capital can increase efficiency as part of a market system that forces companies and policymakers around the world to ensure that capital receives a competitive return. Indeed, most economists agree with this view sufficiently to oppose capital controls and exchange rate intervention, at least for the major developed economies.

The benefits of mobile market-driven capital flows are reduced, however, by a tendency for exchange rates to overshoot. As capital flows into a country, the exchange rate rises, asset prices rise, and more capital flows in. On the down side, as capital leaves, exchange rates fall and more capital leaves. The overshooting problem is sufficiently severe that some countries intervene actively to stabilize their exchange rates. That solution can create problems of its own, of course, as the experience of Argentina has shown. Trying to prop up an overvalued exchange rate can result in a crisis with very adverse effects. But even in the large developed economies, exchange rate swings that create large trade problems can cause domestic difficulties. Specifically, the US manufacturing sector was hit hard by the rise of the US dollar and the large

manufacturing trade deficit. Political pressure for protectionism becomes stronger when trade deficits increase.⁶

At the end of the day, however, the rebalancing of exchange rates and trade flows is going to happen whether it is left to the market or interventionist policies bring it about. First, large and growing US deficits will eventually result in an overweighting of US assets in world portfolios and a resulting reduction in the demand for US assets. Second, the steady increase in US net foreign indebtedness will result in an increase in the outflow of income to service that indebtedness. So even if the US current account deficit stays high, the trade deficit and the dollar will eventually decline. And third, as the rest of the world accumulates larger and larger stocks of US assets, they will eventually decide to spend some of that wealth, especially given the demographic trends in place in Europe and Japan with increasing numbers of retirees.

Facilitating the rebalancing

As noted earlier, the dollar has fallen to some extent, and for the United States a further reduction in the dollar and in the trade deficit would be helpful in the short term. Currently, there is no inflationary pressure in the United States—indeed, there is concern about the possibility of deflation. There is plenty of economic slack to accommodate a rise in exports or fall in imports or both. Manufacturing employment has fallen dramatically and would be helped by a greater dollar decline.

As the US economy reached full employment, however, the adjustment process would become harder. Even cutting the current account deficit in half would involve a shift of 2.5 percent of GDP, in the form of lower consumption or investment or government spending. Simulations of a macroeconomic model have suggested that achieving the necessary reductions in the growth of private-sector spending could increase US interest rates to very high levels with adverse effects on investment, especially housing.⁷ Government fiscal policy is actually making the longer-run situation much worse. To facilitate a rebalancing, the US government should be at least aiming for

⁶ See Bergsten and Williamson (2003) for a discussion of this issue.

long-run budget balance. On the spending side, there are promises of spending restraint, but no action so far—indeed, federal spending has risen sharply with the step up in defense spending. Combined with the large tax cuts that have been passed, the result is enormous projected budget deficits. The US Congressional Budget Office predicts a federal budget deficit of \$480 billion for the 2004 fiscal year and deficits totaling \$1.4 trillion over the next decade, even with conservative assumptions. With assumptions that are probably more realistic, the US could experience deficits of \$400 billion to \$500 billion a year over the next ten years.

US fiscal stimulus is currently helping the US and the world economic recovery by adding to aggregate demand. But the particular policies enacted will make the rebalancing of exchange rates and trade flows much more difficult by lowering US national savings and will be harmful to long-term growth by raising interest rates not only in the United States but also in the rest of the world. The United States is on an irresponsible fiscal path.

The euro has accounted for much of the fall of the US dollar to date, and this has come at a very tough time for Europe. Germany in particular is heavily dependent on exports and is already on the verge of recession. European leaders are very concerned about the possible consequences of a further rise in the euro, with people in Germany saying that a euro at US\$1.25 would be a disaster. Watch out! It is unclear where the euro will go, but the euro at US\$1.40 or even US\$1.50 have been suggested as possibilities.

The main thing that Europe should do to facilitate rebalancing is to use macroeconomic policies to stimulate domestic demand and to use structural reforms to expand employment and investment. Both of these aspects are considered in more detail shortly, but it is important to recognize that rebalancing is very difficult if it occurs only through exchange rate adjustments. By stimulating its own demand, Europe will increase its imports from the United States and around the world. That is actually a good thing, allowing Europeans to consume more.

The euro alone cannot carry the full burden of the downward adjustment of the US dollar and the eventual reduction of its current account deficit. Countries such as

⁷ See the simulation results based on the model of Macroeconomic Advisers reported in Martin Neil Baily, “Persistent Dollar Swings and the US Economy,” in Bergsten and Williamson (2003).

China, Japan, and Korea must reduce their accumulation of foreign exchange reserves and allow their currencies to move toward market levels. China specifically has fixed its nominal exchange rate against the US dollar while its manufactured goods prices are falling. It has experienced a modest real devaluation against the dollar and a large devaluation against the euro. Like Europe, the rest of the world will have to increase domestic demand over the future in order to offset the eventual reduction in the US trade deficit. Faulty mercantilist thinking still permeates the world economy. Creating jobs with exports is fine, but the ultimate purpose of the economy is to provide consumption and investment for the domestic economy. If the US current account deficit declines, this means more goods and services for the rest of the world. That is good for them, but the domestic demand for these goods has to be there or else the reduction of the US deficit will induce economic weakness in the rest of the world.

INCREASING SUPPLY AND DEMAND IN EUROPE⁸

Europe has shared in the slowdown in global economic growth and currently suffers from weakness in the overall demand for goods and services. Over the next year or so, the biggest contribution to growth in Europe would come from an easing of monetary policy by the European Central Bank. The biggest impediment to growth would occur if the Stability and Growth Pact were to be used to force restrictive fiscal policies. Over the longer run, structural policies to increase both productivity and employment become the most important means of spurring growth. Some structural policies, such as those intended to increase work incentives, could be helpful rather quickly.

Barriers to increased growth in Europe

Europe has a substantial unrealized potential to increase its productivity growth. There are important issues of measurement and interpretation that make comparisons tricky, but the rapid productivity growth in the United States since 1995 stands in particular contrast

⁸ This section draws on Martin Neil Baily (2004).

to the very slow growth of productivity in the core European economies in recent years. A variety of barriers discourage best-practice performance.

Banks in Germany are not able to take full advantage of investments in information technology (IT) because they cannot lay off the workers no longer needed after installing the new technology. Further, preferential treatment is given to small local banks, which discourages industry consolidation.⁹ France has not privatized its electricity industry or provided effective competitive pressure in this sector. Because of the extensive use of capital intensive nuclear power, the level of productivity is quite high in the French power industry, but there is excess employment and a very slow rate of productivity increase. In retailing, Germany and France both place severe limits on the entry or expansion of the most productive companies. Zoning restrictions making it difficult or impossible to find new store locations and create a major performance barrier in this industry and affect other industries also. Protecting green space is reasonable, but in practice such restrictions are used to protect incumbent companies from best-practice competitors. Britain has moved a long way forward in freeing up its economy, but still has many restrictive regulations. Inflexible “historic preservation” laws make it a nightmare for companies to re-model buildings. Hotel operators in Britain, for example, find it hard to expand or operate efficiently.¹⁰

In general, competitive intensity is the best spur to improved productivity, and the regulatory environment must encourage this. High competitive intensity is not necessarily achieved by having a large number of companies; in fact, such intensity often requires the consolidation of small traditional operations and the entry of world best-practice companies. In industries where there are natural monopolies, privatization plus a strict price cap can be an effective device to improve productivity—the electricity distribution system in Britain is an example of this approach.

Information technology has been an important driver of the increased productivity growth in the United States, and there are opportunities to use IT more effectively in Europe that would help their performance. Even the strongest companies in Europe, for

⁹ Some smaller banks are state owned and others are given credit guarantees that lower their effective cost of capital. These latter provisions are due to expire in 2005.

¹⁰ This discussion is based on analyses by the McKinsey Global Institute, including studies of France, Germany, and Britain.

example, have not developed supply chain management systems that are as good as the leading retailers in the United States. Europe also suffers a productivity growth disadvantage relative to the United States because it does not have an equivalent high-tech production sector. In general, however, better use of IT in Europe will follow from deregulation and increased competition. It is a mistake for policymakers in Europe to expect technology policy to substitute for real economic reform.

There is some good news in Europe, where deregulation and the opening of the single market have resulted in rapid increases in productivity. The electricity industry in Britain is one such example. Another is the auto industry in France, where Renault was (mostly) privatized and allowed to make layoffs. Productivity growth has been so rapid that the French industry has overtaken the German industry in output per hour. The mobile phone industry was allowed to develop in a competitive environment in Germany with regulations that encouraged strong productivity performance. In the cases where European countries have undertaken regulatory reform and/or taken advantage of the increased competition provided by a single market, the results have been good.

There are also structural barriers to employment growth. All advanced countries have social safety nets for those suffering economic reverses and most provide at least a minimum level of pension support for the elderly. But in Europe people can collect unemployment benefits or welfare payments for years, and retirement benefits are largely unrelated to private saving decisions in many European countries. This means that the link between income and individual responsibility has been severely undermined and the distortions to private decisions are severe.

The labor market in much of Europe is devastating for employment. Wage rates for low-skill workers are kept high by minimum wage rates or high union wage rates. Payroll taxes are very high and inflate company employment costs (along with other employer mandates). Benefit levels paid to those who do not work are kept high relative to after-tax wages. This system discourages employers from hiring as well as discouraging workers from taking the jobs that are available.

This problem could get much worse in the future. Demographic changes already in motion will greatly increase the burden of pensions and health care for the elderly over the next decades because of the wave of upcoming retirements. In addition, people are

living longer than they used to and people are retiring younger than they used to. According to the Organization for Economic Cooperation and Development (OECD), there were two workers per retiree in 2000 in Germany and there will be only 1.3 workers per retiree in 2030. In Italy, the OECD projects only one worker per retiree in 2030! It is going to be very hard to ensure that work incentives are not crushed by the burden of supporting retirees.

What should Europe do?

Good monetary and fiscal policies are essential to sustain demand. The European Central Bank (ECB) can do more and reform of the Stability and Growth Pact is vital.

On structural reform, European governments have in principle embraced the need for change. Indeed, there are reform programs already in place in several European countries that have improved economic performance, and there are reforms being proposed throughout Europe. France achieved rapid employment growth in the late 1990s, helped by policies that increased labor market flexibility and by reductions in payroll taxes for low-wage workers enacted in 1993.

To improve the incentive to work, policymakers in Europe should announce now limits on unemployment benefits to take effect at some time in the future (such limits have been proposed and, in some countries, enacted). Companies in Europe should be able to make layoffs without the requirement of government or court permission. Companies that make layoffs should be required to make higher contributions to an unemployment fund over some period of time. There is a social cost to layoffs, and companies should be expected to offset the unemployment burden they impose, but their liability should be limited and should not be so high that it discourages needed restructuring. There should be no additional redundancy payment required beyond the experience-rated unemployment charges.¹¹

Reducing the heavy burden of payroll taxes in Europe would be an important stimulus to job growth. Given the fiscal restraints faced by most European countries,

¹¹ French economists Olivier Blanchard of MIT and Jean Tirole of Toulouse have proposed reforms similar to these. See Blanchard and Tirole (2003).

there is no easy or immediate solution to this problem. Scaling back pension levels, including increases in retirement age, limiting other income support programs, and restraining other areas of government spending can create the fiscal room to support payroll tax reductions, but this process will take time.

The programs of privatization and the increased competitive pressure from the single market are working in Europe, but there remains much more to be done, especially in service sectors. There is also a danger of backsliding. Industry organizations and unions (and the regulatory bodies that have been captured by these groups) are working to prevent further progress.¹² Europe already takes advantage of the benefits of trade, especially intra-European trade, but could do more to liberalize trade with the rest of the world. In service industries that are largely nontradable, best-practice companies should be encouraged to enter and compete.

Europe must develop a virtuous cycle of macroeconomic expansion, structural reform, job growth, improved fiscal position, and further structural reform. Pension reform in particular is vital to Europe's economic viability over the next 30 years.

THE DANGERS OF DEFLATION

Once only an issue for Japan, warnings about the possible adverse consequences from deflation have been heard all around this past year, particularly with relevance to Germany and the United States. In his testimony to the US Congress on July 15, 2003, Alan Greenspan noted that "Indeed, there is an especially pernicious, albeit remote, scenario in which inflation turns negative against a backdrop of weak aggregate demand, engendering a corrosive deflationary spiral."

Goods and services price deflation consists of a large or persistent decline in the price level, captured by broad price indexes such as the consumer price index or the GDP price index. This means that a rapid or persistent decline in the price of a single product or even a class of products does not constitute deflation. For example, the fact that computer prices have declined at around 25 percent a year over several years is not broad deflation. Goods and services deflation encourages individuals and businesses to

¹² See the discussion of the REACH initiative in note 6.

postpone consumption: if prices will be lower next year, why not wait until next year before buying?

Deflation must be seen in relation to the interest rate. The interest rate is a return received for postponing purchases until next year, and it can adjust up or down in response to expectations of inflation or deflation. Changes in the rate of interest (the nominal rate of interest) can to a degree offset or compensate for expected inflation or deflation. The ability of interest rate declines to compensate for price level declines works only up to a point, however. In Japan, the rate of interest on short-term government bonds is essentially zero and cannot go lower than this, since people can always hold cash.¹³

As well as encouraging people to postpone spending, deflation affects the real value of debts. Consumers or businesses that have borrowed money find that the real value of their debt has risen and they are worse off—unexpectedly so if the deflation was not anticipated. The lenders, banks or investors in the bond market, find that the real value of their assets has risen correspondingly, so there has been a shift of wealth between borrowers and lenders. This redistribution could in principle have little effect on overall spending in an economy (one group is richer and another poorer). But in practice, borrowers may choose to default on their debts or be forced to default if their incomes also fall relative to their debt service obligations. Deflation can be disruptive to the financial system.

This argument holds much more strongly when there is not only a decline in the overall price level but also a decline in asset prices. If both occur together, the economy can get multiple hits as weak demand and excess capacity are combined with declines in equity prices and perhaps real estate prices, as well as goods and services deflation. From its peak in 2000 to its recent trough, the US stock market lost \$7 trillion of value, although—fortunately for US households—this was offset in part by a rise in residential housing prices.

Japan's prolonged economic problems of the 1990s were triggered by, or exacerbated by, massive asset price falls, and these declines have continued to affect the

economy adversely. In April 2003, the Nikkei stock average was only “20 percent of its peak value” achieved in the late 1980s!¹⁴ Land prices in Japan have fallen dramatically also. Urban commercial land prices peaked in 1991 and had fallen by over half by 2002. Industrial and residential land prices also fell, although less dramatically.¹⁵

Asset price deflation adversely affected financial institutions in Japan. Both stocks and land had been purchased with money borrowed from banks and from the capital market. The asset price declines were large enough to reduce the value of the collateral below the value of the loan in many, many cases. As the overall economy weakened, borrowers were unable or unwilling to service the debts they had taken on,¹⁶ so that financial institutions were left with only bad choices and often became essentially bankrupt.

The effectiveness of monetary policy in raising demand¹⁷

Price level deflation and asset price volatility can be serious enough for the individuals or institutions that are affected directly. Beyond this, however, deflation is much more pernicious if it accompanies a severe weakness in aggregate demand. How can monetary policy, or a combination of monetary and fiscal policy, stimulate an economy caught in a pernicious spiral when the central bank has already lowered rates close to zero?

The first answer to this question is to avoid getting into that situation to begin with. Critics of Japanese policy generally comment that it was too tentative early on when the growth bubble collapsed at the end of the 1980s. Had monetary and fiscal policy been more expansionary then, the decade-long recession in Japan and the onset of deflation could most likely have been avoided (Kuttner and Posen 2002).

¹³ It is possible for governments to impose negative rates of interest on cash by forcing people to turn in their cash to a bank and get back a slightly smaller quantity of new cash. However, this would be politically difficult to do and hard and costly to implement.

¹⁴ Data are from the Tokyo stock exchange as reported by Yahoo, at <http://finance.yahoo.com/q?s=N225&d=t>, accessed July 3, 2003

¹⁵ Data are from the Japan Statistics Bureau at <http://www.stat.go.jp/english/>, accessed July 3, 2003.

¹⁶ Goods and services price deflation can create a similar situation if wages and incomes start to decline and debt rises as a share of incomes.

¹⁷ Japan and Europe arguably suffer from structural problems that limit their economic growth as much or more than demand weakness. This section, however, is focused on demand stimulus policies that are necessary for growth.

But suppose the worst happens, can monetary policy still be effective? A central bank can certainly keep expanding the money supply even after the interest rate has fallen to zero, but the question is whether it will most likely have any additional stimulative effect. One answer is to simply say, by analogy to supply and demand in any market: print enough money and the “price of money” will come down. In this analogy the price of money is interpreted to mean terms on which money is exchanged for goods and services. So a decline in the price of money implies a rise in the price of goods and services—a rise in the price level.

This simple analogy does give the right answer, but things are more complicated than it suggests. Money is not a simple commodity, and if reductions in the interest rate are the main method by which money expansion works, and if the interest rate has already fallen close to zero, then further expansion of the money supply will have little additional impact in stimulating economic growth. That is the basis for the recent concern about deflation, a fear that central banks will “run out of ammunition.”

One counter argument to this “liquidity trap” view is that money is part of total wealth. Flooding the economy with money adds to household wealth, and as people feel richer they will spend more and overall demand will increase, even though the interest rate is stuck at zero. For example, a central bank could simply print enough money to mail out thousands of dollars to every household. This policy would be a combined monetary policy expansion and fiscal policy expansion (in practice it would involve something like a tax cut that was paid for by printing money).¹⁸ Eventually this process must increase demand, although in order to be successful such a policy could well involve a money supply expansion far larger in magnitude than any that central bankers are used to making, especially Japanese central bankers. Central banks can add to total wealth only by increasing the money base, but the money base (cash and bank reserves)

¹⁸ Of course there could be a monetary expansion without a fiscal expansion if the central bank were to buy very large quantities of government debt outstanding: that is, open market operations, but carried out on a large scale. It is less certain that this would provide the necessary stimulus to the economy. It would be a net addition to wealth only to the extent that the household sector values money more highly than government debt. That would be the case only if households take into account the future taxes that will have to be paid to finance government debt service. So Keynesians can counter the above argument by saying that it is really the fiscal expansion that counts. The discussion here is around the feasibility of finding some policy combination that can in the limit reverse a downward deflationary spiral, not about a debate between fiscal and monetary policy.

forms only a very modest portion of total wealth in an economy—for example, it accounted for only about 2.3 percent of total household financial assets in the United States in 2002.¹⁹ Any significant increase in household wealth would require huge percentage increases in the money base. If self-sustaining growth were then to be achieved, there would be the possibility of a shift from a deflation problem to a serious inflation problem because the money base would have been greatly expanded. It would not be easy to calibrate monetary policy to overcome deflation and recession and then avoid inflation as growth got going.

Another way out of the liquidity trap goes back to the interest rate mechanism for stimulating demand, but it focuses on longer-term interest rates. Central banks affect or control the short-term interest rate, and this is the rate that can be driven very close to zero by monetary expansion. Even in this situation, however, long-term rates remain positive. Spending in the economy depends not only on short rates, but also on long rates such as the mortgage interest rate and the rates on auto loans or corporate bonds. One way a central bank can act to lower long-term rates is by promising to keep short-term rates low for an extended period. Or the central bank can buy long-term bonds directly, government bonds or private sector bonds, driving their prices up and the interest rates down.²⁰

In summary, monetary policy does not totally lose its effectiveness in stimulating demand as the short-term interest rate falls toward zero. But clearly the policy options for a central bank become less attractive and harder to calibrate once the ability to adjust short-term interest rates is lost. It is much better to pull all the stops out before the zero interest rate bound is reached.

THE MIRACLE IN CHINA AND THE CHALLENGE FROM INDIA AND CHINA

¹⁹As a reference point, the money base in the United States in 2002 was around US\$700 billion. Households and nonprofits in the United States held around US\$30 trillion in financial assets in that year. A 50 percent increase in the money base (a very large change) would add US\$350 billion to wealth, but this is only a 1.1 percent addition to total wealth. By contrast, the value of US financial assets fell by US\$2 trillion between 2001 and 2002.

Except for a very brief interruption caused by SARS, economic growth and export growth have continued in China right through the global slowdown. Can this growth continue for an extended period? One question about China's growth is whether it can avoid the dangers of the "Asian development path" followed by Japan and Korea. These countries protected the largest part of their economies from competition, market forces, and foreign investment. One can make the case that China is not going down this path. It is increasingly market driven, with prices set competitively. Tariffs have come down and will drop further by 2005. Many nontariff barriers are collapsing. Foreign-based production now accounts for a larger share of manufacturing than state-owned enterprises. Banks have a mountain of bad debt, but rapid overall economic growth should allow the government to recapitalize the banks. Rising revenues will allow for the creation of a modest social safety net and to begin the process of environmental remediation.

On the other hand, China still has major structural problems to overcome. It scores rather poorly in the Growth Competitive Index, being ranked 44 in 2003, down from the previous year. It ranks particularly low on technology indicators. So far this has not proven to be a barrier to growth; in part this is because China's manufacturing production is geared to low-wage labor-intensive activities. In addition, it is because China has used foreign investment as a vehicle to introduce the technology it needs.

It is not clear at present whether this strategy can be used as effectively in the future. In consumer electronics and PCs, for example, local companies have rapidly expanded their share of the market at the expense of multinational companies. It is hard to know whether this is because they have mastered the technology and are now exploiting their superior understanding of local conditions, or whether it is because government agencies at the local or national level are favoring the local champions. If it is the latter, foreign investment will slow down and China will move closer to the traditional Asian model of growth. There are reports of popular discontent at the success

²⁰ This has been done in the past. It is not clear it would be effective in changing long rates unless the central bank is able to create the expectation that short rates will stay low for some time.

of multinational companies,²¹ but it is not clear whether the Chinese government is responding or will respond to this pressure by acts of favoritism. Time will tell.

How can any high-wage country compete with China?

Those who are not skeptical about China's growth prospects are often fearful of the impact this growth will have on their own economies. People look at how rapidly China's manufacturing sector is growing, at how rapidly the quality of the products is increasing, and at how the combination of foreign direct investment and local initiative are raising the technological sophistication of the goods produced there (how China is moving up the value chain). People see the fact that there is an almost unlimited, industrious, and trainable workforce willing to work at very low wages. And they conclude that no one else can compete any more. Fear of China as a competitor has grown rapidly over the past year. What will limit China from taking over all (or large parts of) global manufacturing?

The basic answer is that although China is adding rapidly to the "supply" of manufactured goods in the economy, it is also adding rapidly to the "demand" for manufactured goods. China is growing rapidly and its citizens are getting richer over time. As they do so, they demand imported goods and services from the rest of the world. People in developed economies see the growth of manufacturing capacity in China and forget that there is a counterpart that makes China a fast-growing market for consumer and capital goods.

In order that China not be a drain on manufacturing jobs around the world, the Chinese currency must be set either by market forces or set by policy in close relation to a market equilibrium value. In practice, China has been adding to its foreign currency reserves, which rose by about US\$170 billion over two years, reaching US\$356 billion in July of 2003. This has led some policymakers in developed countries, notably in Japan and the United States, to say that China should revalue its currency.

This is not the place for an assessment of that issue in any detail. It is hard to determine what a market-determined exchange rate would be for China. The rate might

²¹ Although there are also crowds of Chinese shopping at French and US retailers Carrefour and Wal-Mart.

rise or fall, depending on whether capital controls were fully or partially lifted and how much money would flow into and out of China.²² However, China is actually not running a large trade surplus in manufactured goods and so it has not been a net drain on manufacturing jobs in the world economy so far.²³ Politicians in the United States look at the large bilateral deficit between China and the United States, but bilateral deficits do not indicate that the Chinese currency is overvalued.

As noted earlier, there is a need for a rebalancing of world exchange rates going forward, and China's exchange rate will likely change as that process takes place. As countries develop economically, it is often the case that their currencies appreciate in value; China should be flexible enough to allow this to happen. In short, the message to China should be that it has not been responsible for draining jobs from the developing world up until now, but it must make sure that situation continues going forward.

The real challenge from China (and India)

The impact of trade in either goods or services is to “shift production from one industry or activity to another”. The challenge from China's trade for the rest of the world is that, because it is already large and is growing so fast, it forces structural change in China's trading partners. The faster the growth in China's trade, the faster shifts have to take place among its trading partners from one economic activity to another.

India's presence in the world economy has not grown nearly as rapidly as China's. But India has a unique role in trade in services that, while still small now, is growing very fast indeed.²⁴ Programming and technology centers have grown up rapidly in India and this has been followed by business process off-shoring—call centers, back office work for banks and insurance companies, and so on. It used to be that service industries were largely insulated from international trade, but that seems to be changing.

²² Capital controls in China are by no means fully effective at present. The easing of controls, however, would allow wealthy Chinese who remain constrained by regulations to diversify their assets through foreign holdings.

²³ The accumulation of reserves has been financed (indirectly) through the inflow of foreign investment capital.

²⁴ This discussion draws on work being carried out by the McKinsey Global Institute, to be published in the fall of 2003.

At this point, it remains uncertain how large the off shoring of white-collar jobs will be, but the long-term potential is large.

International trade, whether in goods or in services, increases productivity and increases incomes for both trading partners. In order to take full advantage of the gains from trade, it is necessary for production to shift. Those economies where workers who are laid off have new jobs to go to and incentives to take the new jobs will do well. Those economies that facilitate startup companies and rapid employment expansion will be able to survive and benefit from the new challenges from India and China. Those economies that are not flexible will either have to erect protectionist barriers or else face increased structural unemployment. The earlier discussion of the need for flexibility in Europe is relevant here, and the same issues apply to other countries, including the United States.²⁵

That said, the size of the adjustment in developed economies caused by China and India should not be exaggerated. China's exports in 2001 were less than 4.5 percent of total world exports, so even if rapid growth continues in the years ahead, China is still going to be only a small part of total world trade. And trade in services is still in its infancy. The challenge from China and India is just a continuation of the pattern of globalization that has been going on for 50 years.

THE SARS OUTBREAK: CONSEQUENCES AND PROSPECTS

The first case of SARS, severe acute respiratory syndrome, was discovered in southern China in November 2002. Before it was contained at the end of June 2003, the disease had infected 5,300 people nationwide and killed more than 348. After the Chinese government realized the seriousness of the SARS outbreak in late April and informed the public, the service economy in many parts of China came to a standstill as people stayed at home for fear of contracting the disease. Once the disease was controlled, however, the economy returned to normal and SARS seems to have been only a temporary blip. The

²⁵ Five states in the United States have introduced legislation to prohibit companies that take state contracts from providing services by outsourcing the work overseas. Only New Jersey has actually introduced such legislation, the Turner Bill, and this is stuck in committee. Legislators in Connecticut, Maryland, Missouri, and Wisconsin have "explored" similar type of legislation, but not presented actual bills.

key question that remains is whether or not SARS will resurface again in the fall or winter and perhaps inflict greater costs in the future.

Short-run economic impact on China, Hong Kong, and Singapore

As a result of SARS, Chinese GDP grew at a slower rate in the second quarter of 2003, than it had been growing in the preceding period. The service and retail sectors were the worst affected by the disease as tourism and transportation expenditure contracted and private consumption was affected. In contrast, the manufacturing sector that constitutes approximately 45 percent of the total economy has escaped relatively unscathed from the SARS epidemic, and trade growth has also remained robust. As well as manufacturing output, foreign direct investment also proved resilient during the SARS outbreak, while retail sales and demand for services picked up quickly once the outbreak was contained. If SARS is contained going forward, its outbreak in the spring of 2003 is likely to be considered a temporary demand shock to the Chinese economy that will not significantly affect long-term growth. However, the fact that the Chinese authorities covered up and mishandled the outbreak could raise concerns about the openness and transparency of the Chinese economy that would adversely affect trade and investment.

Outside of China, the SARS outbreak had the largest impact in countries that have large travel-related sectors such as Hong Kong and Singapore—as financial services centers, both were also hit by the drastic decline in business travel and deal making—where preliminary estimates suggest both economies contracted during the second quarter of 2003 (by roughly 5 percent and 11 percent, respectively). Both economies are likely to recover, given that China has recovered rapidly, but this recovery also depends on whether or not SARS returns, and, if it does, how effectively it can be contained.

Possible recurrence of SARS

SARS is a seasonal virus that may resurface and establish a pattern of recurring when winter comes. So although the short-term economic impact of SARS in 2003 has been less severe than expected, the long-term effects may be more pronounced. It is unlikely

that either a cure or vaccine will be developed quickly, which means that the disease will probably be around for some years, according to many medical experts. Public health measures, including effective screening, health systems, and quarantining, therefore provide the best defense against another serious outbreak. SARS need not be a major health problem or spread from the currently affected areas if appropriate measures are taken. The more effective governments are in dealing with the disease, the less severe the economic consequences will be.

THE IMPACT OF AIDS IN AFRICA

The AIDS scourge has already lowered individual life expectancy in several sub-Saharan African countries by 15 to 20 years, to the point that life expectancy is only in the thirties.²⁶ For the region as a whole, the estimate of the AIDS infection rate is 8.8 percent of the adult population (aged 15–49). But this overall rate masks large differences by country—38.8 percent in Botswana, 22.5 percent in Namibia, 20.1 percent in South Africa, 33.4 percent in Swaziland, 21.5 percent in Zambia, and 33.7 percent in Zimbabwe—these numbers are estimates and subject to substantial error. The extraordinarily high figures contrast with much lower rates (0.5 percent to 5 percent) in several countries including Ghana, Senegal, and Uganda. With some exceptions, West Africa has been hit less severely than east and central Africa and South Africa, although there are signs (in Nigeria for example) that this is because West Africa is in an earlier stage of the epidemic, and not because the disease is following a different path (UNAIDS/WHO 2003).

Not only has the epidemic turned out to be as bad or worse than anticipated, but also estimates of the economic impact of the epidemic have been revised up, suggesting a much more serious impact than had previously been thought. Early studies of the macroeconomic impact of AIDS in Africa concluded that its effect would be limited, but recent research sponsored by the World Bank²⁷ has come to a different view and

²⁶ Life expectancy from 1990 to 2001 declined from 57 to 38 years in Botswana, 49 to 37 in Zambia, 56 to 39 in Zimbabwe and 62 to 47 in South Africa. Source: World Bank Development Indicators at <http://devdata.worldbank.org/dataonline/>.

²⁷ See also Barnett (2002).

concludes, "... that the long-run economic costs of AIDS are almost certain to be much higher [than previously thought]--and possibly devastating" (Bell, Devarajan, and Gersbach 2003, 7). The main reason is that the AIDS virus predominantly kills young adults rather than children and the elderly, as is or was the case for other major diseases such as malaria or tuberculosis. This means its impact on human capital—the level of skills and education—in Africa is particularly harmful. AIDS not only destroys the human capital already acquired by the young adult segment of the population through their upbringing, education, and job experiences, but it also destroys the mechanisms by which parents hand on knowledge to their children. Part of this vicious cycle is that as members of the young adult population die, there will be a reduction in tax revenue to the government, making it harder to provide health care for the afflicted or education for the AIDS orphans left behind.

According to the World Bank study, South Africa is in danger of succumbing to a vicious cycle with AIDS. The infection rate is already high and the severe threat cited in the World Bank study was that it would become much higher because of a reluctance to face up to the nature of the epidemic and what will be needed to overcome it. Fortunately, this reluctance now seems to be disappearing, as policymakers in South Africa are recognizing the need for antiretroviral drugs (the standard western treatment for HIV/AIDS).

Dealing with the AIDS problem

Although there have been some encouraging private-sector and business responses to AIDS, the main responsibility for dealing with the AIDS epidemic and avoiding the economic disaster that is threatened lies with African governments and with the developed world, which can provide financial assistance. There are success stories, which indicate that a coordinated attack on the problem can succeed. This is not the place for a detailed discussion of AIDS policy, especially because data are often weak and it is hard to be sure how much of any AIDS infection outcome is the result of policy and how much other factors, such as the time when AIDS first appeared in the country. However, there are some lessons to be learned from successful approaches to AIDS within Africa,

and in addition, Brazil provides another example of a successful approach to dealing with the disease. The governments that recognized the danger from AIDS and took early aggressive steps to deal with the problem have had some success. These steps included visible campaigns to inform people about the nature of HIV/AIDS and to change behavior, conducted at the village and national levels. Increased access or free access to condoms has been helpful, together with some provision of antiretroviral drugs.

Africa faces stiff challenges on the road to sustainable economic development. Overcoming the AIDS epidemic is clearly one of the first that must be overcome. For the developed world, providing the resources to defeat or control the epidemic is a humanitarian imperative.

AIDS lessons outside Africa

This discussion has focused on Africa. However, AIDS lessons need to be learned rapidly also outside Africa. Already India, with 4.5 million people infected with HIV/AIDS, has the second-highest number of infections after South Africa, and, according to the National Aids Control Organization, the disease is spreading now into Indian rural areas and the general population.²⁸ Massive migration fuels the growth of the disease in China, where up to 10 million people may be infected by 2010 unless immediate action is taken.²⁹ AIDS could potentially threaten the progress of these two bright global economic success stories in recent years. AIDS is also a threat in Russia, where infection rates have exploded in recent years, to about 1 million in mid 2002 according to the Russian Academy of Medicine. As in Africa, the key issue for these countries is to take preventive measures and follow aggressive treatment protocols.

CONCLUSION

In this same review last year, I noted that the economic downturn, the collapse of the technology sector, and the recurrent economic crises in developing economies had cast

²⁸ Comment by NACO Director Meenakshi Datta Ghosh, quoted in BBC On-line at http://news.bbc.co.uk/2/hi/south_asia/3098921.stm, accessed August 12, 2003.

doubt on the value of the economic path of liberalization and globalization. This was a pity, because even though there are indeed serious market failures and crises, the use of competitive markets remained by far the best way to achieve economic success. They generally provide the strongest incentives for work, investment, and innovation. Countries that had cut themselves off from the global economy were doing worse than those that had participated in the global economy.

How does that assessment stand today? The same conclusion still applies, and indeed the sustained economic success in China and the potentially strong recovery in the United States strengthen the case for liberal market economics with active stabilization policies.

Regardless of whether one supported or opposed the war in Iraq, the fact that it so sharply divided the world has been a setback to global cooperation and inevitably a setback for globalization and economic cooperation. The United States easily defeated Iraq with only limited international assistance, but it is learning now, as it tries to deal with the chaos and violence of a conquered Iraq, that the United Nations and the international community are more important than it realized. The global spread of AIDS and the sudden dangers of SARS reinforce the message that worldwide cooperation is essential to continued economic success. The US Administration should learn the right lessons from the past year and use economic cooperation as a way back to better political and military cooperation. Opponents of the war in Iraq, such as France, must overcome their distaste for the US administration and look for areas of mutual interest.

Economics is not a zero-sum game. Growth in China and in the United States can help Europe and Japan to recover. Recovery in the developed world will help growth in the poorer economies. The challenge for the world economy today is to overcome the divisions created this past year and push toward mutually supportive policies. Facing the AIDS epidemic is one area for cooperation; using the Doha round constructively to reduce trade barriers and help poorer countries is another.

²⁹ UNAIDS/WHO factsheet 2003 for China.

References

Asian Development Bank, Regional Economic Monitoring Unit. 2003. "Asia Economic Monitor, July. Available at http://aric.adb.org/aem/completereport_jul.pdf, accessed September 22, 2003.

AngloGold. 2002. Facing the Challenge of HIV/AIDS 2001/2002. <http://www.anglogold.com/Corporate+Responsibility/HIV+Aids/>, accessed September 22, 2003.

Bank of Japan Online Statistics at http://www.boj.or.jp/en/stat/stat_f.htm.

Baily, M. N. 2004. A Radical Transformation of the European Economy. Forthcoming. Washington: Institute for International Economics.

Baily, M. N. 2003. Persistent Dollar Swings and the US Economy, in Bergsten, C.F. and Williamson, J., *Dollar Overvaluation and the World Economy*, p. 81-135. Washington: Institute for International Economics.

Barnett, T. 2002 (forthcoming). Progress Report: HIV/AIDS Impact Studies II – Some Progress Evident, Progress in Development Studies. Available at <http://www.uea.ac.uk/dev/publink/barnett/asb02d.shtml>.

Barton, D., R. Newell, and G. Wilson. 2003. *Dangerous Markets: Managing in Financial Crises*. New York: John Wiley & Sons.

BBC On-line at http://news.bbc.co.uk/2/hi/south_asia/3098921.stm, accessed August 12, 2003

Bell, C., S. Devarajan, and H. Gersbach. 2003. The Long-run Economic Costs of AIDS: Theory and an Application to South Africa, June. World Bank, available at http://www1.worldbank.org/hiv_aids/docs/BeDeGe_BP_total2.pdf, accessed July 28, 2003.

Bergsten, C. F., and J. Williamson. 2003. *Dollar Overvaluation and the World Economy*. Special Report No.16, October. Washington: Institute for International Economics.

Bill and Melinda Gates Foundation at <http://www.gatesfoundation.org/GlobalHealth/Announcements/Announce-030528.htm?version=print>, accessed July 28 2003.

Blanchard, O., and J. Tirole. 2003. *Contours of Employment Protection Reform*. Paris, Conseil d'Analyse Economique.

Brazilian STD AIDS Program, at <http://www.aids.gov.br/indexingl.htm>, accessed July 28, 2003.

Brainerd, E., and M. V. Siegler. 2003. The Economic Effects of the 1918 Influenza Epidemic, Centre for Economic Policy Research Discussion Paper No. 3791, London.

Bureau of Labor Statistics, CPI data online at <http://www.bls.gov/cpi/home.htm>, accessed August 12, 2003.

China Daily. 2003. China's Service Industry Shakes off SARS Impact, http://www1.chinadaily.com.cn/en/doc/2003-07/10/content_244241.htm, accessed July 10, 2003.

Chinese National Bureau of Statistics, available at <http://www.stats.gov.cn/english/>, accessed August 12, 2003.

Coalition Provisional Authority in Iraq, 2003 Budget, available at <http://www.cpa-iraq.org/budget/2003budget.pdf>, accessed August 12, 2003.

The Economist. 2002. Strategic Caring, October 3, available online at http://www.economist.com/displaystory.cfm?story_id=1373275.

European Central Bank, Online Statistics at <http://www.ecb.int/>

International Monetary Fund (IMF). 2003. International Financial Statistics, June 2003, IMF, CD-ROM.

Kuttner, K. N. and Posen A., 2003. The Great Recession: Lessons for Macroeconomic Policy from Japan, *Brookings Papers on Economic Activity*, 2: 2001, 93-185.

Lee, J-W. and W. J. McKibbin. 2003. Globalization and Disease: The Case of SARS, Unpublished Working Paper presented at the Asian Economic Panel meeting in Tokyo, May 11–12.

McKinsey Global Institute studies of France and Germany and the UK, available at www.mckinsey.com.

Monico, S. M. 2003. HIV/AIDS in Africa: What Works. CGD HIV/AIDS in Africa: What Works" conference, January 8, 2003. Center for Global Development and John Snow Inc, available at <http://www.cgdev.org/events/HIV-AIDS.html>, accessed July 28, 2003.

Moss, T. 2003. Adventure Capitalism—Globalization and the Political Economy of Stock Markets in Africa. New York: Palgrave MacMillan.

Ndoye, I. 2003. Senegal Experience on HIV/AIDS control. CGD HIV/AIDS in Africa: What Works, conference, January 8, 2003. Center for Global Development and John

Snow Inc, available at <http://www.cgdev.org/events/HIV-AIDS.html>, accessed July 28, 2003.

O'Hanlon, M. and L. Brainard. 2003. "The Heavy Price of America's Going It Alone," *Financial Times*, August 6, p. 15:

Organisation for Economic Co-operation and Development (OECD). 2003. "Sources of Economic Growth In OECD Countries". Paris

Ugandan AIDS Commission, available at <http://www.aidsuganda.org/aids/index.htm>, accessed July 28 2003.

UNAIDS/WHO factsheet 2003, Epidemiological Fact Sheets by Country,

UNAIDS/WHO at http://www.who.int/emc-hiv/fact_sheets/All_countries.html, accessed July 28th 2003.

US Congress, Emergency Wartime Supplemental Appropriations Act, 2003 (Engrossed as Agreed to or Passed by House), H.R. 1559.

The Wall Street Journal. 2003. China's Economic Growth Slowed to 6.7% in Quarter, http://online.wsj.com/article_print/0,,SB105843729444769400,00.html (accessed July 17, 2003).

The Wall Street Journal. 2003. Despite SARS China's Economy Bounces Back, July 14, 2003.

World Bank Development Indicators at <http://devdata.worldbank.org/dataonline/> (accessed July 28, 2003).