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The World Over the Next Twenty-five Years: Global Trade Liberalization, and the Relative Growth of Different Regions

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January 1996

Department of Economics

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Abstract

This paper examines prospective developments for the next 25 years under four headings.
I. The Economic Size of Different Countries. We begin by examining the current GDP rankings, and the process whereby various countries have closed the gap in per capital income with the United States over the last 50 years. We then turn to the recent literature on convergence, factor accumulation, and total productivity growth, in explaining the superior record of the East Asian countries (including the Krugman-Young claim that mere factor accumulation explains the entire miracle, and the Summers-Easterly claim that mere chance does), before venturing predictions.
II. Increases in International Trade: Will Globalization Continue? Some have concluded that countries are now so open and integrated internationally that such geographical encumbrances as borders and distance no longer play a role. If a level of perfect integration had indeed already been achieved, one might expect that over the next 25 years trade would no longer continue to grow more rapidly than income. Such a conclusion would be incorrect, however. It follows that trade will continue to grow more rapidly than income in the future. The reasons are not only the obvious ones of declining costs of transportation and communication and declining trade barriers, but also rising incomes in formerly-poor countries.
III. The Impact of Trade: Will the U.S. and Europe Be Endangered by Widening Deficits? The paper forecasts that the problem of the Japan-U.S. trade imbalance will probably vanish by the year 2020, as the result of financial implications rather than of deliberate trade policies. We then discuss the trend in the trade balances of Europe and the U.S., vs. Developing Countries, and the debate on the causes of stagnation in demand for labor. Trade does not appear to be the major cause of stagnation.
IV. Bilateral Patterns: Who Will Trade with Whom? Clearly, trade will grow the most rapidly where economies grow the most rapidly, especially among NICs in East Asia and elsewhere. But we also look at the effects of distances, common languages, political federations and their dissolution, preferential trading arrangements, and currency unions.

The World Over the Next Twenty-five Years:
Global Trade Liberalization,
and the Relative Growth of Different Regions

Prediction, as they say, is difficult, especially as regards the future. Nevertheless, political leaders have proclaimed that very specific things are going to happen at very specific future dates: 1997 (Hong Kong reverts to China), 1999 (European Monetary Union), 2000 (admission of some Eastern European countries to the EU), 2003 (ASEAN Free Trade Area to go into effect), 2005 (Free Trade Area of the Americas), 2010 (free trade among industrialized countries in APEC), 2020 (China to surpass U.S. economy; Malaysia to attain industrialized standard of living; free trade among all countries in APEC). Not all these fine developments will come to pass. Furthermore, formal proclamations and substantive effects on trade or income are two different things. "Twenty-twenty" vision is impossible. Even moderate myopia may be too much to hope for. Nevertheless, as unknown as the territory that stretches before us is, an invitation to speculate as to what may happen in the world economy over the next quarter-century is too tempting to pass up.

I. THE ECONOMIC SIZE OF DIFFERENT COUNTRIES AND REGIONS: WHO IS UP AND WHO IS DOWN?

Throughout most of this century, all the European-settled regions of the world remained far above the others economically. As of 1945, the only big question was whether the Soviet Union could equal, or even surpass, the United States. Twenty-five years later, little had happened to change that picture. And yet, another twenty-five years further on, everything has happened to change that picture.

A. The Current Rankings

A few years ago, the World Bank issued the startling statistic that China had, by the preferred measure, attained the world's second largest GDP (Gross Domestic Product). This one fact, which nobody would have predicted even ten years earlier, combines four distinct phenomena. First, as has always been evident, China has the world's largest population. Second, East Asian countries appear over the last 25 years to have found the secret to rapid growth. Third, whatever that secret may be, the abandonment of central planning and the opening up to the world economy are necessary prerequisites to growth. (Previously China had everything Taiwan had, geographically and culturally; but until it liberalized, it remained poor.) Fourth, the currencies of rich countries have higher real values than the currencies of poor countries.

This last point is a technical one. Nevertheless, we will begin with it, to understand the World Bank's GDP rankings. Then we will turn to the larger questions of what determines growth.

Not only had China surpassed Japan and Germany by the World Bank's measure in 1992, but India had surpassed France, Italy and Britain; Russia, Brazil and Mexico had surpassed Canada; Indonesia had surpassed Spain, and Korea and Thailand had surpassed Australia. This measure, which makes the GDPs of the Less Developed Countries look so large, compares by

Canada; Indonesia had surpassed Spain, and Korea and Thailand had surpassed Australia. This measure, which makes the GDPs of the Less Developed Countries look so large, compares by using Purchasing Power Parity rates (PPP), rather than current exchange rates. (At current exchange rates, Japan easily remains the world's second largest economy. This is especially true in light of the appreciation of the yen in recent years.) If the PPP measure of GDP is the correct one, and if size is considered the criterion for admission to the Group of 7, for example, then by 1993, six emerging countries had a greater claim to membership than Canada. Similar considerations apply for the representation of less developed countries in the International Monetary Fund and other organizations, which is supposed to be in proportion to economic size.

The International Monetary Fund also switched in May 1993 to using PPP rates to compare outputs. The IMF *World Economic Outlook* now shows the share of world output accounted for by Less Developed Countries at 34 per cent, versus only 18 per cent under the old measure. The industrialized countries now weigh in at only 54 per cent, versus 73 per cent under the old measure. By 1996 this share, if properly measured, may even be less than one-half.

Which measure of outputs is correct, the one that evaluates them at current exchange rates or the one that uses the PPP rate? There are some differences regarding the reliability of the measure. On the one hand, the exchange rate is highly variable from year to year, while the PPP rate changes only slowly, in line with the prices of a basket of goods and services. On the other hand, the PPP rate depends on a painstaking and error-prone process of gathering prices of many individual commodities and services, while the exchange rate can be observed effortlessly and precisely.

The important difference between the two measures is more systematic and interesting than the question of measurement error. In poor countries, unskilled labor and (usually) land are cheap, while in rich countries they are expensive. In poor countries, prices in turn tend to be low for housing, services, and other goods that are not internationally traded, while in rich countries such prices tend to be high.[1] To the extent that these "non-traded goods" enter the consumption basket, life is cheaper in poor countries than in rich countries. This is why poor countries tend systematically to rank higher when their GDPs are evaluated at PPP rates than when they are evaluated at current exchange rates. (It is also why rapidly growing countries, like Japan in the past, tend to undergo real appreciation in their currencies.)

Many economists have said that the PPP measure of GDP is the "correct one," because it reflects the real value of the goods and services produced. The right answer depends on the question one is trying to address, however. If one seeks to compare countries' success at raising the real incomes of their peoples, then the PPP measure is indeed the correct one. The conventional measure does overstate the standard of living of the Japanese, for example. While

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[1] Of course, rich countries have the advantages of abundant capital, skilled labor, and technology. But these factors of production tend to go into manufactures and other goods that are traded internationally. When productivity gains drive down the prices of these goods in rich countries, international arbitrage makes sure that they get driven down everywhere. Arbitrage, by definition, cannot operate on the prices of housing and other nontraded goods and services, so they remain lower in poor countries.

their income looks impressive when translated into dollars or lira, this does not take into account the high cost of life in Tokyo. This is in part the explanation behind the Japanese saying "Rich country, poor people."

The PPP-based rankings for GDP per capita run as follows [for 1993]:

1. Luxembourg	6. Hong Kong	11. France	16. Australia
2. United States	7. Japan	12. Norway	17. Italy
3. Switzerland	8. Germany	13. Denmark	18. Netherlands
4. UAE	9. Singapore	14. Austria	19. United Kingdom
5. Qatar	10.Canada	15. Belgium	20. Sweden

Particularly striking is that Hong Kong and Singapore now rank ahead of most industrial countries.

For other purposes, however, the exchange rate measure may be preferred.[2] Assume we wish to think about power and responsibility on the world stage. For example, we might care about how many F-16s a country can buy, how much money it can offer a small island nation for the right to put a naval base there, how much it can contribute to a multilateral peacekeeping operation, how much it can donate for famine relief, or how much it can lend the IMF in emergencies under the General Arrangements to Borrow. For such purposes, actual current exchange rates are the ones that matter. It matters little how much a currency buys back in the home country. In this sense, the legitimacy of the current membership of the G-7 is relatively intact.

B. The Last Fifty Years

The simple-minded way to predict GDP growth rates for the future is, of course, to look to the past. Three aspects of the global growth record during 1945-1995 are particularly noteworthy.

* First, is the phenomenon whereby Japan and Europe, have been catching up to the United States in terms of per capita income. While the other combatants had been devastated by World War II, the U.S. came out intact, with almost half of world GDP. The greater growth rates of Japan and Europe during the post-war period mean that they have been closing the gap. Indeed, when the comparison uses current exchange rates, many of these countries have by now fully caught up.[3]
* Second, is the break in productivity growth rates experienced in the United States, and many

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[2] At current exchange rates, Hong Kong and Singapore still lag Canada [in 1994; *World Bank Atlas*, 1995]. In September 1995, the World Bank released a different sort of ranking of countries, by level of per capita wealth, including produced assets, human resources, and natural resources. The top ten were: 1. Australia, 2. Canada, 3. Luxembourg, 4. Switzerland, 5. Japan, 6. Sweden, 7. Iceland, 8. Qatar, 9. UAE, and 10. Denmark. The U.S. was in 12th position, Germany 15th, and Italy 20th. Such a calculation is very sensitive to the value one places on natural resources. [*Monitoring Environmental Progress: A Report on Work in Progress.*]

[3] In dollar terms, Japanese income per capita exceeds U.S. income by 27 per cent.

other industrialized countries, around 1973. The 1974 recession, which was induced by the 1973 oil shock, undoubtedly affected the timing and suddenness of the transition. The slowdown of the last 20 years, however, must be due to longer-term factors than the oil shocks.

* Third, is the rapid growth of some countries that used to be classified as Less Developed, particularly the Newly Industrializing Countries of East Asia.

The time taken for a new economic power to double its per capita GDP has fallen steadily over the centuries. Startlingly, it now takes only ten years, judging by the accomplishments of some of the Asian newcomers. In the original Industrial Revolution, it took the United Kingdom 58 years to double its income, starting from 1780. It took the United States 47 years to do so, from 1839. It took Japan 35 years, from 1885. For Korea, the feat was accomplished in 11 years, from 1966. Now it has taken China just 10 years to double its per capita income, counting from 1983, and Chile 7 years, counting from 1987. One interpretation is technology diffusion. Industrialization for the pathfinders in part meant developing new technologies and production methods, while the latecomers have the luxury of emulation and adaptation of existing techniques, which they can learn through increasingly-easy trade and communication.

Extrapolation of growth rates can give some striking results. China will surpass U.S. GDP by 40 percent in the year 2020.[4]

1. China	6. Germany	11. Brazil
2. United States	7. South Korea	12. Italy
3. Japan	8. Thailand	13. Russia
4. India	9. France	14. United Kingdom
5. Indonesia	10.Taiwan	15. Mexico

Simple extrapolation can be dangerous however. To take an extreme example, it would have total Japanese GDP surpassing American GDP by the end of the decade, by the measure using current exchange rates. This outcome is unlikely. To formulate intelligent predictions about the future, we need to go beyond simple extrapolation, to understand the reasons for the growth record of the past.

C. Convergence, Factor Accumulation, Productivity, and Chance

In 1957, Robert Solow calculated that the accumulation of the factors of production -- the capital stock, workforce and land -- explained relatively little of U.S. growth. (It was largely for his contributions to growth theory that Solow was awarded the Nobel Prize.) Most of growth was evidently due to technical change. This was called the "Solow residual," also known as the increase in total factor productivity. Nobody could explain what determined technical change, however, so it was labelled "exogenous."

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[4] At PPP rates. (*Global Economic Prospects*, World Bank, 1994.)

The subject was revived in the 1980s.[5] There is a general tendency for *convergence*, that is, for countries that were poor at the beginning of the postwar period to grow more rapidly than those that were rich to start with, conditional on factor endowments. As noted, the natural interpretation is technological diffusion. The East Asian growth miracle seems to be a good example of this phenomenon. One would still have to explain why the East Asians were able to emulate the rich countries better than the Latin Americans or those in the Arab world were, or why most of Africa South of the Sahara has in fact gone backwards. Some characteristics of a country evidently improve its receptivity to innovation. Various authors have pointed to such elements as openness to trade and investment, a bias toward exports, political stability and egalitarian distribution of income, macroeconomic stability, the nature of the educational system or bureaucracy, and local culture.

Just when the debate over the nature of the miracle of East Asian productivity growth had become a babble of competing explanations, a few upstarts have surprised everyone by suggesting that there is in fact no miracle to be explained.

The Krugman-Young claim regarding East Asian growth

First we consider the claim of Paul Krugman and Alwyn Young. They calculate that most of the growth in some East Asian countries, especially Singapore and Japan, can be explained by simple factor accumulation. Importantly, the accumulation of "human capital," as measured by schooling, is included as a factor of production. (It must be admitted that the distinction between human capital and technological progress is not always clear-cut.) Accumulation of capital, both physical and human, explains most of East Asian success. These countries built up their economies by brute force, the two authors say. There is no Solow residual or increase in total factor productivity left to attribute to openness or stability or culture, or anything else. There is no miracle.

The appropriateness of the word "miracle" lies in the eyes of the beholder. If Krugman had chosen to phrase his conclusion differently ("The miracle of East Asian growth is due to miraculous rates of investment in physical and human capital"), fewer people would have been so surprised.

More importantly for our purposes, he claims that there is little reason to expect rapid growth to continue in East Asia over the next 25 years. Residents of Singapore and Japan may have exhausted their remarkable propensities to save by now. And, even if they haven't, their economies have run into diminishing marginal returns to capital.[6]

This verdict is overstated. In the first place, catch-up is still important, and none of the

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[5] Stimulated by Paul Romer, who originated "endogenous growth theory." The initial finding was an apparent failure of countries to converge, which was interpreted as evidence against declining returns to capital (a property of neoclassical models such as Solow's).

[6] Krugman, Paul, 1994, "The Myth of Asia's Miracle," Foreign Affairs 73, no. 6, Nov./Dec., 62-78; and Young, Alwyn, 1994, "Lessons from the East Asian NICS: A Contrarian View," European Economic Review Papers and Proceedings, May.

East Asian countries except Japan has yet caught up with the United States. Especially such countries as Indonesia, China and Viet Nam still have a very long way to go. In the second place, such countries as Korea, Taiwan, Thailand and Indonesia do have large unexplained residuals. In the third place, other authors have been able to explain part of the residual, by means of such variables as openness or income equality.[7] There is no reason to think that the effect of these variables will diminish in the future. The blistering pace of growth in such countries as Malaysia and China will almost certainly moderate over the next 25 years, and Prime Minister Mahatir's goal of catching up with the industrialized countries by the year 2020 may not be realized. But these countries will continue to grow rapidly nonetheless. Even if China's growth rate diminishes to a more reasonable 7 percent, from its current unsustainable 10 percent, it will still surpass the U.S. economy in size by 2020 (at PPP rates).

The Summers-Easterly claim regarding East Asian growth

The second attack on the East Asian miracle is even more surprising than the first. William Easterly and Lawrence Summers (now Deputy Secretary of the U.S. Treasury Department) agree that East Asian growth exceeds what can be explained by factor accumulation, but argue that the residual is just chance. After all *some* country has to grow the fastest, in any given period. One respect in which this claim is even more surprising than the Krugman-Young claim is that, if true, it would make it very unlikely that the countries that were lucky enough to grow the most rapidly over each of the last two decades would be the same as those that are to grow the most rapidly over the coming decade.[8]

The main fact arguing against the idea that the East Asian record could be due to luck is that it is too improbable a coincidence that all the world's star performers should happen to be located in the same region. Easterly and Summers counter that Botswana in fact is a star performer that one seldom sees on the list. Somewhat more persuasively, they show that our tendency to speak of East Asia as a distinct region, drawing the dotted line at Burma rather than at the Mideast, is a recent development, a *result* of the outstanding economic performance of these countries. More intriguing still, there is evidence that rapid growth tends to spill over from one country to its neighbors; this raises the possibility that Japan's miracle was due to luck, and its neighbors then benefitted from proximity to Japan. But such spillover effects -- whether we think of them as demand transmission or technology diffusion -- surely must come via trade and investment. Thus we are back to openness as a key attribute that helps countries catch up with their more advanced neighbors.

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[7] One study finding an effect of openness, even when controlling for the endogeneity of trade, is "Trade and Growth in East Asian Countries: Cause and Effect?" (J. Frankel, D. Romer and T. Cyrus), Pacific Basin Working Paper Series No. 95-03, Federal Reserve Bank of San Francisco, July 1995. [Openness is found to be particularly important for Singapore, Hong Kong and Malaysia.]

[8] Easterly, William, Michael Kremer, Lant Pritchett, and Lawrence Summers, 1993, "Good Policy or Good Luck? Country Growth Performance and Temporary Shocks," *National Bureau of Economic Research Working Paper* No. 4474, September.

Which countries will grow rapidly between now and 2020?

To sum up, then, the reasonable view is that:
(1) the most important identifiable determinant of growth appears to be accumulation of factors, if human capital is counted as a factor, alongside physical capital,
(2) convergence is also an important phenomenon, and
(3) other contributions to total factor productivity that can be identified include macroeconomic and political stability, and openness to trade and investment. Trade and investment, whether resulting from a deliberate policy of liberalization or from proximity to advanced neighbors, may be important as a conduit for absorbing innovations of technology and production.

What does the reasonable view of growth determinants predict for the next 25 years (relative to simple extrapolation)? East Asian countries will continue to register the highest growth rates, for the reasons stated: high saving rates, education, and openness. The predicted values from an econometric equation (which one should not take too literally) suggest that six of the countries that have the greatest *unrealized* growth potential are the Philippines, Uruguay, Chile, Ghana, Togo, and China.[9] Chile is already the star performer of Latin America, much as the Philippines is the laggard of East Asia (children that were switched at birth?). But Chile still has much potential left to go. Latin America is discussed at greater length below.

Six countries that are predicted to be riding for a fall are Rwanda, Cameroon, Egypt, Jordan, Morocco, and Japan.[10]

In Japan's case, the fall that the equation predicted in 1992 has since been partly realized. When the Bank of Japan tightened monetary policy in 1990-91, it succeeded in deflating the speculative bubbles in the land and equity markets, which was the aim. But there followed in short order: a new speculative bubble in the yen (*endaka*), severe Tokyo banking problems (similar to the American S & L crisis of the 1980s, not least in that reluctance to admit the problem publically has vastly raised the ultimate cost of dealing with it), and an unprecedented Japanese recession. Some journalists continue to warn that the dragon is not dead, but only feigning illness in an attempt to lull its competitors into letting down their guards.[11] This is a reflection of how feared in the United States and Europe has been the Japanese manufacturing and financial juggernaut of the past. But views of the Japanese as economic supermen are out of date. To be sure, Japan will recover from its recession. But the *endaka* shock and subsequent 1992-95 recession may turn out to play a similar role as the original oil shock and

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[9] The equation is from Frankel, Romer and Cyrus, *op.cit.* The total sample consists of 100 countries for which data on factor endowments in 1960-1985 was available. The six potential growers include only those for whom the potential still remained unrealized as recently as 1992. (For example, growth in a seventh country, Mauritius, had by 1992 raised GDP up to the level that would have been predicted with 1985 data.)

[10] The countries of North Africa and the Middle East have done spectacularly badly since 1980, even worse than Africa south of the Sahara. In part this is because they were hit by the decline in oil prices in the 1980s. But their longer term record shows an actual drop in total factor productivity since 1960. [World Bank, 1995.]

[11] Eamonn Fingleton, Blindsided, 1995.

subsequent 1974-75 recession: It will probably serve to sharpen in time a long-run slowdown that would have occurred anyway. Japan will not again see the rapid growth rates of the 1960s. The country may have run into the natural limits of the world technological frontier and the island country's restricted geography.

Western Europe shares with Japan and the United States the property that, as a mature economy, it is not predicted to grow as rapidly as most developing countries. It may take Germany another 25 years to finish absorbing fully the eastern Lander, as a result in part of the unwise labor and currency policies that accompanied the Union.[12]

The outlooks for France, Italy, and the United Kingdom are tied up with the outlook for EMU, a topic that is postponed to the end of this essay.

The long-term outlook for Eastern Europe is relatively bright, at least for those countries that can continue the liberalization process, while maintaining political and macroeconomic stability.[13] The Czech Republic is already the star performer, along with Slovenia, which is a case that is lesser-known. The eastern European countries have long had the advantage of a high level of human capital. They were held back from 1945 to 1990, not only by the communist system, but also by the cutting off of contact with the advanced economies of the world. Now that the barriers are down, their proximity to Western Europe, combined with their skilled labor force, should allow adoption of "best practice" production techniques. Needless to say, the process cannot begin in any countries where property rights and personal safety remain uncertain. The large role of organized crime in Russia, in particular, suggests that the former super-power will not be moving up the international GDP rankings, notwithstanding the substantial progress that has been made with respect to privatization and other economic reforms.

II. INCREASES IN INTERNATIONAL TRADE: WILL GLOBALIZATION CONTINUE?

As incomes grow, so, naturally, does trade. But world trade has increased much more rapidly than world income during the post-war period, as it had also during the period 1870-1913. It will continue to do so in the future.

A. Increased Openness of Each Country: Have We Now Attained Global Integration?

Trade has increased as a share of income in almost every country during the last 50 years. Many observers have concluded that countries are now so open and integrated internationally that such geographical encumbrances as borders and distance no longer play a role. If a level of perfect integration had indeed already been achieved, one might expect that

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[12] The policy of granting the easterners wage parity before their productivity levels have caught up to those of the West can only have slowed down the rate of investment in the East, and thereby postponed the day when those productivity levels do in fact catch up.

[13] These countries, and those of the former Soviet Union, lacked the data availability to be included in the sample of 100 countries used int he study described above.

over the next 25 years trade would no longer continue to grow more rapidly than income. Such a conclusion would be incorrect, however. The U.S., Japan, and EU all import (or export) about 8 per cent of their income abroad. While this is twice the level of openness of 1971, and far above the nadir of the 1930s and 1940s, it is nevertheless only 1/10 the level of openness that would correspond to complete international integration.[14] This can be readily seen as follows. Each of these three countries or regions represents roughly one-fifth of the world economy. If residents of each bought goods from the rest of the world as easily as from their own country, then about 80 per cent of their purchases would be from overseas. Yet the actual number is only about 1/10 of that. Thus the world still has a long way to go before we attain perfect integration. If the integration process continues, and there is every reason to believe it will, then it follows that trade will continue to expand more rapidly than income.

B. The Reasons for Rising Trade

There are three reasons for the tendency of trade to grow more rapidly than income over the last 50 years, and all three are likely to continue in the future. They are: (1) declining costs of international transportation and communication, (2) declining trade barriers, and (3) growth in formerly-poor countries.

(1) Declining costs of transportation and communication are the most obvious cause of growing trade. Not only has the level of trade reached new heights, but its composition has changed fundamentally in several ways. There is much more intra-industry trade than there used to be. There is also much more of what Krugman calls "slicing-up of the value-added chain."[15] Intermediate inputs are sent back and forth between countries, with each country performing only the task to which it is best suited, before sending the product on to the next stage. This itself constitutes much of the increase in trade. It is also evidence that the diminution in transportation costs does play an important role. But the decline in shipping costs is just one of several factors.

The importance of declining costs of transportation and communication is sometimes exaggerated. Many of the most important technical advances occurred before 1870 (e.g., steel-hulled ships, the screw propeller, the trans-Atlantic telegraph), and others by World War I (the airplane and the telephone). To be sure, there have been many further advances over the last 50 years: jet air travel, containerized cargo, roll-on-roll-off ships, supertankers, and now faxes and electronic mail. The key fact arguing against the dominance of technological advance is that all the increase in trade (relative to income) during the first three decades of the post-war period did no more than reverse a drastic decline over the preceding three decades. As Krugman points out, it was not until the mid-1970s that trade re-attained the same share of income that it had held in 1914. If technological progress had been the dominant factor in the course of the

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[14] Frankel, *Regional Trading Blocs*, Institute for International Economics, forthcoming 1996.

[15] Paul Krugman, "Growing World Trade: Causes and Consequences," *Brookings Papers on Economic Activity* 1995, 1: 327-377.

twentieth century, as commonly supposed, then one would have expected the upward trend to have been stronger and more continuous.

(2) The cause of the drastic decline in world trade over the period 1915-1945 is no mystery. The decline originated in the actions of governments: sharp increases in trade barriers in the 1930s, followed by World War II. The most important sources of the rapid growth of trade from 1945 to 1995 have again been the actions of governments: the establishment of peace -- first between the opponents in that war, and now between the opposing sides in the Cold War -- and the steady reduction of trade barriers.

Much of the reduction of trade barriers has taken the form of successive rounds of tariff-reduction negotiations under the GATT. For all the delays and disappointments of the Uruguay Round, its ultimate consummation in 1993, particularly the agreement to bring the sectors of agriculture, textiles, and services under the sway of multilateral rules, should yield further increases in trade over the next ten to twenty-five years. (Phrasing that prediction in terms of the long horizon is appropriate, in light of the slow phase-in of liberalization agreed upon in such areas as agriculture and textiles.) Further negotiations will be needed under the WTO to realize the potential of liberalization, even in the areas already agreed to.

Meanwhile, some "grey-area" protectionist practices are spreading ominously. This includes Anti-Dumping procedures (the unsatisfactory treatment of which was one of the big disappointments of the Uruguay Round) and Voluntary Export Restraints (supposedly now banned under the WTO, but we shall have to see). To deal with them effectively at the global level might require a multilateral agreement on competition policy. The world is not yet ready for that, though the next WTO round might start by taking on the issue of investment. Negotiations in such new areas as competition policy probably cannot even begin, until countries arrive at a paradigm for thinking about the subject that is more widely shared than is any paradigm now. The same is true of environmental standards.[16] It may not be too much to hope that these issues will begin to be effectively addressed at the multilateral level by 2020. The movement overall with regard to trade policy seems to be in the right direction, even if progress is slow and erratic.

Not all the important progress toward trade liberalization is taking the form of multilateral negotiations under the GATT or WTO. Major unilateral liberalization has also taken place in many countries lately. Mexico, for example, initiated the dismantling of its formidable trade barriers unilaterally, before either joining the GATT or negotiating NAFTA. The new liberalizers are countries that used to believe in import-substitution (especially in Latin America) or worse (in former centrally planned economies). The two great object-lessons that served to convert previous skeptics were, on the one hand, the failure of socialism in the Soviet Union and elsewhere, and, on the other hand, the success of the East Asians.

The peso crisis that hit Mexico in December 1994 posed the danger that developing countries would be frightened off the free-market model, or what has been called the "Washington consensus" set of policies: liberalization with macroeconomic stabilization. After

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[16] The paradigm for negotiating over trade barriers up until now has been "I will agree to take more of your exports if you agree to take more of mine." This logic does not readily extend to the new issue areas of investment, competition policy, and environment.

all, Mexico had been touted as a model of free-market technocratic reform. Yet Mexico had experienced no growth during the 1980s (despite the extra advantage of proximity and links to the United States), and now faced a possible economic collapse in 1995. While it is too early to know how things will turn out in Mexico, the worst fears of a widespread turning away from the Washington consensus do not appear to be coming true. Even the countries hardest hit, Argentina and Mexico itself, have redoubled their efforts at privatization, fiscal discipline, and reform. Perhaps the U.S.-led rescue package is in part to thank for this.

There are certainly many lessons to be drawn from the Mexican episode. But there are also lessons to be drawn from success stories, like Chile.[17] Nobody has gone back to believing that economic isolation is the key to development.

We come to the third reason for the increase in trade: rapid growth in previously-poor countries, of which we examined the causes earlier, in the first half of this paper. Trade as a share of income tends to rise as countries grow. We know this from the modern theory of trade in imperfect substitutes,[18] and as an empirical regularity as well. The world of the 1950s, in which the United States made up almost half the world's output and most other countries were poor, was a world of relatively little trade. The world of the 1990s, in which the United States makes up only 22 per cent of world output and the developing countries 34 per cent, features more trade. As the process of economic convergence is expected to continue, on average, one can forecast further increases in trade over the next 25 years.

III. THE IMPACT OF TRADE: WILL THE U.S. AND EUROPE BE ENDANGERED BY WIDENING DEFICITS?

While expanding trade offers opportunities for firms and consumers alike, the popular focus is often on the loss of sales and jobs in import-competing industries. We look at the outlook for trade deficits, and then turn to the implications for labor markets in Europe and the United States.

A. The U.S.-Japan Trade Imbalance: Will It Continue?

The most dramatic development with regard to trade imbalances in the 1980s was the emergence of a huge trade deficit in the United States, matched by a huge trade surplus in Japan.

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[17] The lessons of Chile [or, for that matter, Mexico] are *not* that rigid free-market orthodoxy is always the right answer. Governments must step in when capital market liberalization leads to overindebtedness, when currency stabilization leads to real overvaluation, or when bank deregulation leads to prudentially unsound lending. But, otherwise, free markets and monetary stability are good.

[18] Helpman, Elhanan, 1987, "Imperfect Competition and International Trade: Evidence from Fourteen Industrial Countries," Journal of the Japanese and International Economies 1: 62-81.

(Initially, Germany also had a very large trade surplus. But the spending necessitated in the 1990s by the absorption of East Germany put a quick end to that.) Many warned in the 1980s that this trade imbalance could not continue. Yet it has continued. After a large reduction in the trade imbalance at the end of the 1980s (due in part to the depreciation of the dollar), it is on the rise again in the mid-1990s. The U.S. deficits have now returned to the record dollar levels of 1987, though they are only half the peak when expressed as a share of GDP.

Will the Japan-U.S. imbalance be resolved by the year 2020? There are a number of influences that could force this outcome.

Political implications

First are the political implications of the trade imbalance in the United States. The trade deficit in the United States is a perennial political issue. There is always a certain amount of support for threatening unilateral sanctions against Japanese exports if a sequence of particular demands is not met. This will continue. (The idea that the Japanese government could, if it wanted to, remove major trade barriers *and that this would eliminate the trade imbalance*, is, of course, fantasy. The Japanese surplus and American deficit are the result of high and low levels of national saving, respectively, not of the relative openness of the two markets.) Yet there is little sign currently of the intensity of thirst for blood that predominated ten years ago, the last time the U.S. deficit was this high. The American public is jaded, and the leaders have become aware of the danger of making threats that cannot be carried out. Washington will continue to back off in confrontations before starting a trade war that it cannot win. This is not necessarily to say that it will not continue to do damage to the important Japan-U.S. relationship. It probably will. But the United States is unlikely to shut off the flow of imports, or the flow of capital with which those imports are financed.

Second are the political implications in Japan. For ten years there has been the hope that endaka, the high yen, would put political pressure on Japan to reform its economy, with the effect of increasing consumption and imports. Japan experts have always pointed out two difficult prerequisites for fundamental reform: the breaking of the LDP's monopoly on power, and reform of the rural-biased multi-member constituencies that elect the diet. These reforms were thought to facilitate, for example, the repeal of the Large-Scale Retail Law and of the prohibition on rice imports. Each of the two unlikely political reforms have, against all predictions, recently come to pass. Yet progress toward more enlightened economic structures is barely perceptible, let alone a reduction in the trade surplus. Progress is blocked by scandal-driven disorder in the political realm and bank-driven recession in the economic realm.

Financial implications

The financial implications of the trade imbalance may force a resolution, before the political implications do the job. The current account deficit means that the United States is going more deeply into debt every year. The year 1994 was the first when Americans paid more to foreign investors in interest, dividends, and profits than they received on their own past investments overseas. The interest bill will continue to rise. At some stage Americans will have to cut back their spending.

Economically, there is no reason why the adjustment need come now, any more than five years ago or five years in the future. Indeed, the likelihood of a *hard landing* -- a sudden

reluctance by global investors to hold U.S. assets, leading to a sharp depreciation of the dollar, rise in interest rates, and recession -- looks less now than perhaps at any time in the last ten years. Panicked predictions in the spring of 1995 that the dollar was in crisis -- "Who is going to finance the U.S. deficit when the Japanese government tires of it, private investors having already pulled out of the U.S. after being burned in the 1980s?" -- turned out to be incorrect.[19] Nevertheless, even without a crisis, it may shortly turn out that we are witnessing the adjustment. The Clinton budgets of 1993-95 and Gingrich budgets of 1996- , for all the folly involved in the spectacle, may turn out to represent the long-term reversal of the preceding twelve years of mounting budget deficits.

For Japan's part, its current account surplus means that it is accumulating larger asset positions every year. At some stage Japanese will begin spending their wealth. Japanese economists and bureaucrats think they know how this will happen. Over the next 25 years, the population will be ageing even more rapidly than in other industrial countries. Japan will go from the lowest proportion of elderly among the G-7 currently, to the highest proportion by 2020. As a result, dissaving by Japanese retirees is expected to rise sharply. The result of the increase in spending should be an increase in imports and reduction of the current account surplus. (Also: a rise in Japanese real interest rates, a decline in Japanese equity and real estate prices, a rise in the dividend payout rate, and a depreciation of the yen.)

It is likely that, one way or another, the U.S. trade deficit will have vanished by 2020. There are cases in history of countries running trade deficits for long periods of time. But they tend to be countries, like Canada or Australia, with a high endowment of natural resources to be profitably exploited. The historical record suggests that the U.S. deficit will not continue unabated for another 25 years.

One cannot be sure when or how the adjustment will come. There is probably still some mileage to be gotten out of the 1985-95 depreciation of the dollar against the yen [and mark] that has already occurred. Standard analysis does not allow adequately for the very long lags between a change in the real exchange rate and the full effect on exports and imports. Some elements of the process, such as the decision by a corporation in which country to place a factory, can take many years to play themselves out.

B. The Trend in the Trade Balances of Europe and the U.S., vs. Developing Countries

There is a widespread perception of an adverse trend in the trade balances of industrialized countries vis-a-vis developing countries. Three philosophical traditions -- of varying degrees of academic respectability -- lead to such fears.

First, and most respectable in theory, is the idea of natural life-stages among creditors and debtors. A developing country that is running a trade deficit must be borrowing from abroad to finance that deficit. Presumably it is borrowing to finance investments that have a higher expected rate of return than projects in industrialized countries, or perhaps to finance consumption in anticipation of being more well-off in the future. But as such a country's potential for development is realized, it will start to pay off the debt it has incurred. This means

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[19] As I predicted at the time. "Still the Lingua Franca: The Exaggerated Death of the Dollar," Foreign Affairs, 74, no. 4, July/August 1995, 9-16.

running a trade surplus.

At first this theoretical pattern -- developing countries progressing from trade deficit to surplus vis-a-vis the industrialized countries -- seems to fit the popular fears in Europe and the United States. But it does not fit the reality well. The reality is perhaps better described as a cycle in which spells of increased capital flows from rich to poor alternate with reversals. In the 1970s, Latin American countries ran trade deficits financed by capital inflows; after the cut-off in new bank lending in 1982, they were forced to run trade surpluses. The process seems to be repeating in the 1990s. Certainly the cycle had already been run repeatedly, earlier in history.[20]

The second tradition that leads to fears of secular decline in the trade balances of Europe and the United States began with Houthakker and Magee: the econometric estimation of elasticities of import demand with respect to income. The finding is that the U.S. and Europe have higher elasticities than developing countries, implying that as the world grows, the imports of the North will grow more rapidly than the imports of the South.[21]

The third tradition is the popular fear, which goes back several centuries but is alive today in the writings of Sir James Goldsmith and others, that as trade with poor countries grows, the rich countries will find it progressively more difficult to compete with cheap-labor rivals. Ever since David Ricardo debunked the pauper-labor argument by developing the principle of comparative advantage, it has been as thoroughly enshrined in economics textbooks as it has been frequently ignored elsewhere. The theory is supposed to be reassuring, in that every country has a comparative advantage in something.

Economists' perpetual dismay at the views of non-economist policy-pontificators on trade is more a professorial disapproval at their failure to master the basics, such as the meaning of comparative advantage, than it is disagreement with the conclusion that those who compete with the exports of poor countries may be hurt by trade with them. Classical trade theory says that if unskilled labor is the scarce factor of production in an industrial economy -- and it is -- then trade can hurt unskilled workers, even as it benefits the country as a whole. However, even if the foreign competition initially shows up in the form of trade deficits and concomitant lost output and employment, this deficiency of demand will not last for 25 years. Rather, the country will have to adjust, whether by depreciation of its currency, by reductions in prices of labor-intensive goods, or by reductions in wages paid to unskilled workers. In other words, short-run quantity effects give way to price effects in the long run. But the "bottom line" conclusion that unskilled workers will experience a decline in their standard of living is similar to that of the popular picture of jobs moving overseas, even though the specifics are different.

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[20] The pattern of steady progress in East Asia versus repeating cycles in the Western Hemisphere is ironic when viewed from the perspective of comparative religion and philosophy. Eastern philosophy is supposed to view life as cyclical, while Western philosophy takes a linear and teleological view.

[21] Houthakker, H. and S. Magee, "Income and Price Elasticities in World Trade," Rev. Ec. and Stat., 51, 2, May 1969, 111-124.

We thus now turn directly to the topical issue of the impact of trade on labor markets.

C. The Debate on the Causes of Stagnation in Demand for Labor in Industrialized Countries.

Unskilled workers can be defined, for concreteness, as those without a college education. The demand for unskilled labor has stagnated in both Europe and the United States. This stagnation has shown up in different ways on the two sides of the Atlantic. In Europe, with its rigidity in real wages and benefits, the end of growth in the demand for labor around 1973 showed up as an end of growth in the level of employment. In the United States, with its relatively more flexible structure of real wages and other institutions, the same phenomenon has shown up over the same period as a decline in real wages. Whichever the form in which one chooses to take the stagnating demand for labor (and most Americans tend to prefer the lower wages, if it means keeping people working), it is important to understand the root cause. It would also be nice to be able to do something about it, if possible.

Many blame trade. Certainly the widening gap between skilled and unskilled workers seems to match the predictions of classical trade theory.

Most American international economists have concluded otherwise, however. It is not that competition from cheap-labor countries cannot have a negative effect on those who compete directly with their products. It is just that the magnitude of the effects that can be arithmetically explained in this way is small, relative to the total increase in the gap between the wages of skilled and unskilled American workers over the last 25 years. Similar considerations apply to the loss in employment under the "European model." In both cases -- U.S. real wages and European employment -- most of the stagnation must be attributed to some other source.

The other source is technology. As the economy becomes increasingly technical, literacy, numeracy and basic computer abilities become increasingly important. The prescription is evident: better education and training. But this is only a long-run solution, and there is no use pretending that the typical steel-worker can be easily retrained as a computer programmer who earns equally high wages.

One possibility is that the process whereby a major new innovation like computers feeds through to higher productivity, lower prices, and higher real standards of living for all citizens, takes decades to complete, as the entire economic system reconfigures itself to take advantage of the innovation. This was apparently the historical pattern after the introduction of steam-powered machinery, electricity, and the automobile. But there is no way of predicting whether or when the computer technology will show up in productivity.

The calculation that international competition can explain only a small decline in the welfare of unskilled workers over the last 25 years, might seem to leave open the possibility that this could change in the future. In fact, however, the logic extends to the future as well. We are essentially talking about two industrial sectors, in both of which much of the adjustment has already taken place. First, in autos and steel, Americans 25 years ago were earning monopolistic "rents" that were not sustainable. [Wages and salaries were substantially in excess of what comparable workers and managers were earning in other industries]. Those differentials have by now been mostly competed away. Second are the tradeable sectors that use unskilled labor intensively, which are also relatively few in number: textiles, apparel, footwear, toys, and basic consumer electronics. Employment in these industries has already shrunk substantially in

the United States and Europe. Before long, they will disappear completely, except for upper-end niches, such as high-style clothing and footwear, especially the design and marketing components thereof. When this happens, further increases in trade will work to improve the standard of living of all workers, not just those at the top of the ladder. Lower-income workers, after all, spend at least as much of their income on clothing, etc., and thus benefit from cheap imports, as do wealthier people.

How will unskilled workers earn their living when their old jobs are gone? There are as many jobs in the goods and services that are not traded internationally (especially services), as there are in manufacturing and agriculture. Old-line labor leaders are reluctant to give up basic manufacturing and move into services. The stereotype dead-end job in the United States is "flipping hamburgers" at MacDonalds. "Services" is really an extremely heterogeneous classification of sectors, however, and the distribution of jobs runs a similar gamut of skill levels and pay rates as in manufacturing and agriculture.[22]

The most difficult issue is not the equilibrium in which unskilled workers are settled into new jobs, but rather the painful transition during which dislocated workers are unemployed, or have to settle for worse jobs than those they are leaving.

Nostalgia for simpler centuries aside, few suggest that we should deliberately give up technological improvements because they dislocate some workers. Yet some suggest that we should give up trade on account of the same kind of effects. There is little justification for treating trade different from technological progress. To be sure, trade has the property of benefiting foreign countries at the same time as the domestic country, but it is hard to see why this should be counted against it.

In any case, the only reasonable forecast is that both trade and technological progress will continue. In both cases, the extent to which the gains are shared by all Americans and all Europeans, or are instead denied to many at the bottom of the ladder, depends primarily on the extent to which the unskilled can be given skills.

IV. BILATERAL PATTERNS: WHO WILL TRADE WITH WHOM?

Until recently, international economists had focused all their attention on trying to explain what sorts of goods a given country exported and imported, and the total quantities involved. They did not attempt to explain *bilateral* trade patterns, that is, who trades with whom. Indeed, they had neglected geography altogether. This has changed recently. We can now say a lot

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[22] Krugman (1995, *op.cit.*) offers a back-of-the envelope calculation that the ratio of skilled wages to unskilled wages will peak at 1.5 times the level that would prevail in the absence of any trade, and then diminish. Responding to Richard Cooper's point that this neglects the absorption of unskilled labor into non-traded goods and services, he then recomputes the wage ratio to peak at 1.17.

about bilateral patterns.[23]

A. The Predictions of the Gravity Model

The gravity model, in its simplest form, says that the magnitude of trade between two countries is proportional to the product of their sizes, and inversely related to the distance between them. (The name *gravity* comes by analogy with Newton's theory, which said that the gravitational attraction between two heavenly bodies is proportional to the product of their masses and inversely related to the distance between them.) It seems to do a good job of predicting bilateral trade.

If one country grows one percent faster per year than other countries, then its trade with each of its partners will tend to grow one percent faster. While that might sound obvious, it implies that any *pair* of countries, each of which grows one per cent faster, will experience growth in bilateral trade that is *two* percent faster. This explains why trade among Southeast Asian countries has been growing at roughly 16 percent a year, each of them experiencing income growth of roughly 8 percent a year.

It makes a difference whether countries grow because of population growth or because of productivity growth. If the population grows one percent faster than in other countries, but income per capita does not, then trade grows only about .7 percent. In this case, trade actually falls as a share of the country's GDP.

The other important determinant of bilateral trade in the gravity model, besides size, is transportation costs, and other costs to doing business at a distance. Trade falls by about .7 percent for one pair of countries that is 1 percent farther apart than another pair. [This estimate, like the others presented here, holds constant for the effects of each of the other variables.] Similarly, trade approximately doubles for countries that share a common border.

Of course, the distance between countries is not likely to change much over the next 25 years! Transportation costs will continue to decline gradually over time, as they have in the past. As we have already seen, this will tend to raise international trade as a share of GDP, for all countries. Interestingly, however, there has not been a tendency for the statistics just cited to decline over the course of the 20th century. As technological advances reduce the cost of shipping, they tend to reduce the cost roughly equiproportionately at all distances. Thus, in the year 2020, it will still be true that pairs of countries that are far apart trade less than pairs that are close together, with the trade probably still falling off at roughly .7 times as fast as the distance.

When two countries speak the same language, they trade approximately twice as much as an otherwise-analogous pair of countries. This coefficient, like that for distance or a common border, does not seem to have much of a trend over time. The linguistic effect does mean that

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[23] The estimates reported here draw on recent research such as: J. Frankel, 1995, *op.cit.*, and J. Frankel and S.J. Wei, "European Integration and the Regionalization of World Trade and Currencies: The Economics and the Politics" in Monetary and Fiscal Policy in an Integrated Europe, edited by B. Eichengreen, J. Frieden, and J. von Hagen, Springer-Verlag Press, Heidelberg, 1995.

if, for example, a country that was formerly in the Soviet Union changes its language from Russian to a national language, this would have some negative effect on its trade with Russia. This effect would likely be less than the full factor of two, however, and to take many decades to work itself out. The reason is that linguistic, colonial, and other historical ties have effects on trade that last long after the original link has disappeared.

B. The Effects of Regional Integration

In many parts of the world, integration along regional lines is proceeding faster than along global lines. This includes political, trade, and currency dimensions.

The effect of political federations on trade

Since two regions trade more when they are close together, share a common border, or share a common language, it stands to reason that they will trade even more if they go beyond that sort of proximity, and actually join into a common political federation. For Germany, it has already happened. The most important example on the horizon is the possibility that the European Union will develop into a full-fledged political union. The process can also run in reverse. Trade among the former republics of the Soviet Union will presumably be smaller in the future than when they were one country. The same is true of trade between the Czech and Slovak Republics, or among the former Yugoslav Republics (if and when normal relations are instated in that land). By how much would one expect trade to increase among the EU members, if full federation is achieved? By how much would one expect trade to fall among the various countries that have recently had their former marriages [in the church of communism] annulled?

Adequate data to address this question do not yet exist. Data from previous historical experiments is limited. One case is the Federation of Malaya, which in 1965 split into Singapore and Malaysia. Trade between the two countries grew subsequently, but only because each of the economies grew. Adjusting for their size in world markets, trade between Singapore and Malaysia fell by 2 per cent in the year of dissolution (relative to 1964), and had fallen by 8 per cent by 1967.

A good indication of the long-term effects of federation is provided by data on trade among Canadian provinces and U.S. states. A recent study, using the gravity model, estimates that trade between two Canadian provinces is more than twenty times higher than trade between a Canadian province and an American state, even when the pairs are of the same size, distance, etc.[24] The effect is far greater than most people think. This estimate could suddenly become very relevant, if Quebec separatists were to force another vote, and to secede from the Canadian

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[24] John McCallum, 1995, "National Borders Matter: Canada-U.S. Regional Trade Patterns," American Economic Review 85, no.3, June, 615-623. Notice that this effect holds even though Canada and the United States share a common border, language, culture and Free Trade Area. The estimate may be a bit overstated, however, by the omission of an allowance for Canada's remoteness from the rest of the world.

Federation. It says that trade between Quebec and the rest of Canada would fall drastically, though to be sure the process would be drawn out, perhaps over a century. The estimate also provides a useful guideline for other parts of the world. It suggests that if the E.U. were to go beyond a common market, and attain full political union, then trade would gradually rise by a factor of 20. It would take much longer than 25 years to attain the full effect, but the increase over that period would nevertheless be very large.

The effect of preferential trading arrangements on trade

A less extreme measure than full political federation is the formation of a Free Trade Area or Common Market, which the Western European countries have already accomplished. Europe is in the forefront here. It is hard to know what the full effect will be in the long run. In the past, many such Preferential Trading Arrangements (PTAs) have been proclaimed among groups of countries in other parts of the world, only to fizzle out without real effects. In the last ten years, however, some initiatives have been more serious. They seem approximately to have doubled trade among their members. Major PTAs now exist, or are under discussion, at three levels.

* **At the regional level**, the Australia-New Zealand Closer Economic Relationship (expanded in 1988), Mercosur (1991), the Andean Pact (strengthened in 1992), and NAFTA (1994) are all in operation, and having positive effects on trade among their members. The ASEAN Free Trade Area in southeast Asia is to go into effect by 2003, and members are already accelerating their liberalization.

* **At the continental level**, there is movement toward three possible large trading blocs. In Europe, the EU has now expanded to 15 members, with ten Central and Eastern European members waiting in the wings. Full-fledged membership for any of these countries is unlikely by the year 2000, notwithstanding an ill-considered promise of Chancellor Kohl to Poland. This is on account of budget realities, to which the EU is beginning to face up, fiscal constraints that will be especially prohibitive if protecting farmers with the Common Agricultural Policy continues to command top priority. Some sort of eastward expansion by 2020, on the other hand, seems likely. In the Western Hemisphere, governments have recently reaffirmed their intention, first expressed at a Leaders' Summit in Miami in December 1994, to conclude negotiations on a Free Trade Area of the Americas by 2005. Regarding East Asia, there is much talk of a Japan-centered "yen bloc." It is overblown however: intra-Asian trade will increase rapidly over the next 25 years as it has over the last 25 years, but as a result of rapid growth in incomes, rather than of regional trading arrangements.

* **At the trans-oceanic level**, two far-reaching proposals have been advanced. First, the Asia Pacific Economic Cooperation forum agreed at the 1994 Leaders' Summit in Bogor, Indonesia, to attain free trade in the Pacific, by 2020 for developing countries and by 2010 for industrialized countries (the U.S., Canada, Australia, New Zealand, Japan, Singapore and -- by then -- probably some of the others). The leaders are expected to reaffirm this intention in Osaka in November 1995, although they will continue to postpone deciding such basic issues as whether "free trade in the region" means a regional Free Trade Area, liberalization on a non-discriminatory Most-Favored Nation basis, or something else. Meanwhile, some European leaders have proposed a Trans Atlantic Free Trade Area (TAFTA). This proposal would seem to have little future, as just about any trade issues that Europeans and Americans could agree

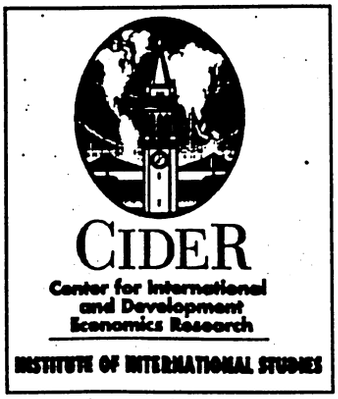
on between themselves could also be agreed at a multilateral level in Geneva.

Currency union

Stabilizing the exchange rate between a pair of countries, or going one step further and adopting a common currency, probably has a further positive effect on trade between them. Most economists' estimates show smaller effects than, for example, the architects of the European Monetary System, and now the European Economic and Monetary Union, believe. For better or worse, however, European leaders have opted for EMU, as the stage of integration that comes after common market, but before political federation. Will it work?

There is a proposition in international finance, known as the Theorem of the Impossible Trinity. A country can choose to have any two advantages out of three -- a fixed exchange rate, open financial markets, and independence of monetary policy -- but it cannot choose to have all three. To most American economists, much as we wish good will to the inspiring European venture to achieve integration of their economies, it seems that European leaders do not always act as if they understand the impossibility of attaining all three advantages of the trinity. The plans for EMU agreed upon at Maastricht in 1991 were proven overly optimistic, first in the ERM crises of September 1992-August 1993; and, secondly, when hope on the possibility of a 1997 start date was abandoned. It seems to most of us that a 1999 start date is also unrealistic. The risk is clear, even for France, and far more so for Italy. As the date begins to draw near, everyone notices that the Maastricht fiscal criteria, if strictly interpreted, are not met, regardless how the EU leaders choose to interpret the figures. If France or Italy try to peg their currencies, or to re-establish reasonably narrow bands, speculators sense a replay of 1992-93, when there were billions of dollars to be made from low-risk one-sided bets. They sell francs and lira. Once again, speculation regarding devaluation leads to the reality of devaluation.

A longer-term perspective offers a brighter picture for Euro-enthusiasts. Intra-European trade and factor movements will continue gradually to grow, as will the sense of Euro-citizenship among the nations' populations. As it does, the day will come when Italians and Frenchmen are willing to give up all monetary sovereignty, in the way that the Dutch, say, have already done. Then they will be ready for a common currency. EMU by 1999 is too optimistic; EMU by 2020 is not.



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