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It is hard to find a popular business or news magazine today that does not focus on what is commonly described as the inexorable movement toward a single global market. With the collapse of the communist system in 1989, one economic system now dominates the globe. Moreover, in the past decade, both trade and foreign direct investment have grown at more than twice the rate of output growth. Globalisation—defined as the increasing mobility of goods, services, and factors of production across geographically distinct markets—is accelerating.

It is true that the national economies of the world will grow closer still in the coming century. However, it is highly unlikely that a single global market will emerge, and there are limits to the desirability of global integration. Though many of the alleged dangers of globalisation, such as the mass migration of jobs to low-wage countries, are bogeymen insupportable with hard evidence, there are real reasons to limit globalisation. There is a necessary balance to be struck between globalisation and isolation. The challenge of the 21st century lies in finding that balance. Globalisation erodes cultural traditions and political sovereignty and exposes economies to increased risk, whereas isolation places limits on economic growth and the resolution of human suffering.

The intuitive argument that global integration has costs as well as benefits has not been clearly or widely made. We often hear of the likely rewards—economic, human, political, even environmental—from integration. I review the most compelling of these claims in the next section. Far less attention, however, has been paid to the risks involved.

There are several:
- transnational transmission of economic or financial shocks;
- degradation of and clashes between distinct cultures;
- increasing inequality and threats to social stability, especially where globalisation erodes state sovereignty; and
- the costs of switching standards and of collecting and processing information from a broader market area.

The law of diminishing marginal returns applies to globalisation, as it does to most activities or processes. Given that there are non-trivial costs involved, partial globalisation is optimal.

I argue here for increased, although incomplete, global integration, emphasising interdependence rather than integration. The world economy is somewhat like the electronic networks that increasingly mediate it. The constituent nodes of a network do not lose their distinctive identities when linked together; indeed, their distinctiveness is an asset to the whole. Moreover, each node is merely a (partly restrictive) gateway between its subsidiary clients and the outside world. There is no “global village” and there will not be. At best, there will be a network of “regional villages”, an “open regionalism” analogous to that prevailing among linked computer networks. There remain important, valuable differences that are the product of distinct histories, cultures, belief systems, and geographies. As a result of these differences, nations adopt and enforce different technical standards for goods and services, immigration, child labour, occupational safety and environmental protection, a situation that will and should remain true throughout the 21st century.

In some areas, like western Europe, international differences may be small enough to permit unparalleled intraregional integration. I anticipate perhaps eight more regional economic unions by the end of the 21st century: North America, South America (around what are now the Mercosur and the Andean Community nations), Northeast Asia (Japan, Korea, and Taiwan), Southeast Asia (ASEAN), Australia-New Zealand, South Asia, eastern and southern Africa, and western Africa (based on the CFA franc zone). Though international differences may be markedly reduced within these “regional villages”, considerable differences will persist between them. These differences cause friction in the international marketplace, but they must be respected. There are even cases where prospective frictions contribute to aggregate economic welfare. For example, regulatory standards (such as sanitary standards on foods) that convey information about goods or services may increase economic and social well-being by resolving uncertainty surrounding the quality or safety of products. The economic net benefit of the regulations comes in spite of the fact that they may also act as a barrier to trade, although they are not (or should not be) set up for protectionist purposes. The advance of human well-being is the appropriate objective of policy-making. Market globalisation can help to advance that goal, but should not itself be viewed as an objective.

The Pursuit of Economic Growth

There will never be broad agreement on the best indicator of improvement in the human condition. Nonetheless, an indicator is needed with which to monitor and evaluate policies. Real per-capita gross national product (GNP), which measures average income in an economy, is the best of the bad measures
presently available. Despite considerable variation at any given level of real per-capita GNP, there is a clear and strong central tendency for most social indicators (such as life expectancy, child malnutrition, adult illiteracy and infant mortality rates) to improve with average income. Figure 1 plots a measure of chronic child malnutrition (low height for age) against per-capita GNP, and Figure 2 plots life expectancy at birth against per-capita GNP. In each figure the points represent individual country observations and the curved lines represent the central tendency in the data. Most other social indicators similarly show, on average, positive but diminishing returns to growth in per-capita GNP. Growth in real per-capita GNP, while not itself a perfect measure of improvements in living standards, is probably the best measure available because of its strong correlation with a range of alternative, reasonable indicators of human well-being.

These are two primary causes to growth in per-capita GNP: investment in factors of production and technological change. Investment depends on both the availability of investable savings and the returns to investment. Across the globe, gross domestic savings continue to increase, from roughly 20% of global income in the 1950s to approximately 25% today, providing a greater pool of investable funds. There are three distinct types of capital—human, physical, and natural. Human capital refers to the creative, managerial and physical abilities of working people and their capacity to function well together. The ability to collaborate is sometimes labelled “social capital” and is simply a subset of human capital. Physical capital includes machines and other factors of production created by human labour and ingenuity. Natural capital includes air, water, minerals, genetic material and other inputs to production neither embodied in nor created by people. Additions to the stock of any one sort of capital, holding the other two constant, increase output and, generally, human well-being. But diminishing returns set in quickly if investment is concentrated on just one form of capital. Economic growth depends on maintaining or building the stock of all three forms of capital.

This need for balance explains the importance of paying increased attention to stocks of natural and human capital. Throughout this century, economists and policy-makers have emphasised the accumulation of physical capital. But as the world’s savings expand and become more mobile internationally, building roads, ports, factories, computers or power grids is not enough. More must be invested in reducing human morbidity and in increasing education levels, nutrient intake and social stability. These are not just intrinsically worthy goals; the health, education, nutrition and interpersonal trust of a nation’s population are central to labour productivity and aggregate economic growth. Similarly, future economic and social advances depend on the restrained use of renewable resources—such as clean air and water, fertile soils, forest cover, and non-substitutable, non-renewable resources like hydrocarbon fuels, metals, and minerals. It is clear from ecological experiments such as Biosphere 2 that we are nowhere near being able to engineer substitute systems for the crucial life-support services produced by natural ecosystems. They provide a virtually costless stock of natural capital that generates a flow of goods and services—such as nutrient cycling, air and water purification, and timber—recently estimated at US$33 trillion per year, a figure well in excess of measured annual global income of US$18 trillion. While the precise figure is subject to reasonable dispute, the qualitative point is clear: natural capital contributes enormously to global economic welfare and it is prudent to nurture rather than deplete this endowment.

Wise investment also depends on reliable information and appropriate incentives. Markets are particularly effective at generating timely information and providing individuals with appropriate incentives. The demise of central planning, a system that systematically suppressed information flow and distorted incentives, promises improved global rates of return on investment. What is now needed are institutional advances, within and
between countries, that encourage better stewardship of human and natural resources and induce more inventive and innovative activity. This includes addressing pervasive “externality” problems associated with market valuation of human and natural capital, which have significant positive spillover benefits for third parties. In general, restrictive trade policy is a poor mechanism for aligning social and private incentives, but free trade between countries that have markedly different approaches to resolving these issues invites serious tensions, as I shall discuss later.

In addition to investment in human, physical, and natural capital, technological change is central to economic growth. Technological change yields increased output from a given flow of inputs. It involves discovery and adaptation and is thus the joint product of scientific and engineering research, as well as information and incentives. It also requires a certain degree of risk-taking.

Again, the problem of externalities arises. Because the rewards from scientific discovery tend to be spread widely and the risks borne narrowly, profit-minded private firms systematically undersupply basic research. Estimated annual social rates of return for basic scientific research are typically in the 30%-50% range, two to five times equivalent returns in the private sector. Public research therefore remains a wise investment for governments and philanthropic foundations. Private research nonetheless represents an increasing proportion of applied research. Where the gains from a discovery can be appropriated over a period of only a few years under the protection of intellectual property rights such as patents and copyrights, private firms can and do invest heavily in research and development. In addition, shorter product life-cycles and expanded markets relative to firms’ minimum efficient operating size make industries more competitive than ever. In such an environment, brief periods of industries more competitive than ever.

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Globalisation’s Contributions to Growth

Since investment and technological change are central to economic growth and poverty alleviation, what promotes openness to international trade and investment. Empirical studies routinely find robust, positive relationships between trade and foreign investment indicators and rates of both investment and technical change. Participation in the world economy has its benefits. No nation can isolate itself without suffering real decline.

This simple lesson is perhaps nowhere more evident than on the Korean peninsula. In 1955, North Korea’s standard of living, whether represented by income or food availability per capita, was far superior to that of the South. What a difference 40 years have made! Today, North Korea is desperately seeking rice donations from the world community to feed a famine-stricken population whose per-capita income is roughly one-quarter that of its southern neighbour. Though there remains considerable dispute over what best explains South Korea’s phenomenal growth over the past two generations (its current problems notwithstanding), the consensus is that causal factors include active—but not unfettered—participation in the world economy, investment in human capital through education and health, and effective social safety nets to insure individuals against adverse risks associated with participation in an aggressive global market.

Globalisation has helped spur investment by encouraging greater saving and by improving the allocation of those funds across projects world-wide. Global financial liberalisation, particularly the elimination of quantitative restrictions on financial flows, has dramatically expanded the menu of investments available to savers seeking the best possible returns on their assets. Saving rates have naturally increased as the real returns to saving have improved. Moreover, as per-capita incomes continue to grow, increasing the world economy’s propensity to save, and as banking technologies improve further, the volume and velocity of investable funds will continue to grow rapidly throughout the 21st century.

Globalisation helps encourage investment in physical capital through the expansion of markets, which permits the realisation of economies of scale and scope and by lessening the cost of financing capital accumulation. International openness can also help build human bridges among prospective suppliers, customers, and partners, fostering trust that is central to investment and trade—in addition to keeping peace. Where production and exchange systems cross borders, international co-operation in education, humanitarian assistance, and the arts helps build social capital of considerable economic and political importance.

There is mounting evidence that openness to international trade facilitates technology transfer. Interaction and communication between individuals and institutions in different places allows ideas to travel across borders. Technologies also flow between countries when embedded in internationally traded intermediate and consumer...
goods. This flow of ideas benefits all, but especially countries with scant scientific and engineering expertise—countries which therefore have limited ability to invent or innovate on their own. Openness is an agent for technological catching-up. Continued acceleration in the international flow of productive ideas leads to increased international harmonisation in legal codes, particularly in property rights, and in contract, liability, and tax law. Important advances have already been made, such as the treaty on intellectual property rights (TRIPs). Widespread commitment among international leaders to continued progress in this area bodes well for the next century.

Finally, the mere act of being open to trade is akin to one-off technical improvements. The “gains from trade”, one of the staples of introductory economics courses everywhere, come from the improved allocation of resources among production units, permitting a larger total of goods and services to be made than under pre-trade arrangements. As tariffs, quotas, transport and communications costs, and other trade barriers have shrunk, opportunities have increased, effectively providing a steady improvement in productivity for those countries participating in globalisation.

The Costs of Globalisation

Globalisation is a major gross contributor to growth, but it also has costs. These costs may, at some point, begin to outweigh the benefits. Globalisation is only desirable as long as it continues to contribute to an improvement in the human condition, but there is good reason to believe that the optimal amount of globalisation falls well short of fully integrated international markets. The crucial task of policy-makers in the 21st century will be to ensure that current trends toward international integration continue to improve the human condition and do not begin a process of deterioration.

Also important are the transboundary contagion effects that can arise from globalisation. Just as a well-designed electronic network maintains not only the connectivity but also the integrity of the individual component nodes, prudent limits to globalisation must be recognised so that the integrity of distinct national economies remains intact. Increasing international exchange weakens nation states’ independence and hastens the transmission of crises, as has been amply demonstrated by the effect of the Mexican peso crisis in early 1995 on countries as diverse as Argentina, Turkey, and the United States, and by the effects of the Asian crisis in late 1997 on stock markets as far away as New York or Brazil. Both problems and solutions are becoming more transnational as economies become more interdependent. Over the past decade, we have witnessed a string of boom-and-bust cycles in liberalised financial systems around the world. Economists do not (yet) really understand these phenomena but policy-makers and investors rightly worry about such cycles and their contagion effects. Analogous to the process of biological homogenisation that leaves a species vulnerable to pandemics, a fully integrated global economy has little defence against serious shocks (like a stock-market crash or a massive currency depreciation). Thus, there is fundamental insurance value in the diversity provided by distinct national economic policies.

Globalisation can increase risk to individuals, institutions, and the economy as a whole. The competitive pressures of a world market that foster improved resource allocation also increase the substitutability among alternative suppliers and consumers, leading to less stable income streams and greater job and market insecurities that many workers and firms feel have increased over the past two decades. Recent empirical evidence suggests this—not a reduction in demand for workers in or goods from high-income countries—may be the dominant market effect of globalisation.

Faced with increased employment and income risk, workers and firms may be worse off unless public institutions offer a reliable safety net. Increasing mobility within and between economies has tended to reduce the role of families and communities in providing social security, so states have picked up a far greater share of that burden in the 20th century. The rise of the modern welfare state has been the handmaiden of globalisation. But the mobility—of goods, services, capital and some forms of labour—that is the hallmark of globalisation also makes it harder for nation-states to generate tax revenue without...
concentrating tax burdens regressively on the least mobile factors of production, notably low-skilled labour and natural capital. This observation has recently led the OECD to make the elimination of tax competition among member states a high priority in multilateral consultations. While the demands for publicly provided safety nets increase with globalisation, the state’s fiscal capacity to provide such services shrinks unless it is willing to decrease incentives to critically needed investment in human and natural capital. More thought needs to be given to the importance of providing social insurance and investment in human and natural capital, and to the means by which these aims can be achieved in the face of globalisation that inexorably weakens nation-states.

Globalisation harmonises not only economies but also their host cultures. Given that people around the world like different things, in part because of distinct local histories, the erosion of cultural distinctiveness imposes real costs on many people. These costs and the insecurity fostered by increasingly mobile goods, capital, labour, and ideas sometimes cause cultures to clash more regularly than in the past, as evidenced in the sometimes ugly politics surrounding trade agreements, films, language, or immigration policies in western Europe and the United States. Political nationalism is on the rise in much of the world, sometimes violently, as people resist the partial national disintegration that goes hand-in-hand with global integration. As isolationism, sought to preserve cultural identities, imposes far too high a cost, greater efforts must be made to safeguard traditional cultural mores as economies integrate more closely.

War is the greatest threat to the economic and social well-being of the human population. Though the 20th century has been a period of unprecedented technological change and economic growth, it has also been a time of unparalleled bloodshed. A significant challenge of the 21st century is to maintain robust economic growth and to alleviate poverty while simultaneously keeping the peace. This depends on social stability and economic and political co-ordination within and between countries. Insofar as globalisation intensifies frictions between and within countries and accelerates the pace of Schumpeterian “creative destruction”, it threatens social stability and pluralistic co-operation.

There are both winners and losers in the process of globalisation. If ancillary transfers, worker retraining and other such activities are undertaken effectively, there is the potential that all can gain. But such compensation rarely occurs in sufficient measure to prevent increasing inequality. The gains from globalisation accrue disproportionately to the well-educated, skilled, and wealthy, intensifying the need for increased investment in education, health, and other means of human capital formation. The World Bank estimates that as globalisation has accelerated the ratio of the wealth of the top 20% of the world’s population to the bottom 20% has doubled, from 30 to 60, over the past generation.

Recent economic research suggests that asset and income inequality are serious drags on economic growth. Income inequality fuels socio-political instability, thereby distracting governments from their fundamental economic purposes of maintaining macroeconomic stability and providing public goods such as education, research, physical infrastructure, and the rule of law. Inequality can likewise narrow the size of domestic consumer goods markets. In both cases, income inequality results in less investment in physical, human and natural capital and slower rates of technological change. Scholars trying to understand the extraordinary performance of the East Asian economies over the past 30 years are increasingly pointing to high initial levels of education, the general health of the population, a relatively equitable distribution of income and wealth, and the increasing openness of the world economy as crucial explanatory variables. It seems clearer than ever that economies cannot grow sustainably in the 21st century unless they ensure that rising economic tides lift all boats.
full international market integration, and can undeniably be abused for protectionist purposes. Yet, regulatory barriers to international trade can serve two important purposes. First, they may resolve consumer uncertainty about product quality or safety, thereby potentially stimulating economic welfare. This is the purpose of sanitary standards on imported foodstuffs. Second, regulatory barriers can enforce local laws and mores concerning socially acceptable methods of production on suppliers to the local market. If a nation’s consumers deem it unacceptable, for example, for businesses to compete by employing child labour or discharging untreated pollutants into the air or water, they are unlikely to tolerate foreign competition that uses such techniques to secure a cost advantage over domestic producers.

At present, however, the World Trade Organisation forbids trade discrimination on the basis of production practices, no matter how deplorable. This ignores the legitimacy of societal preferences with respect to production processes and invites social instability and the mistaken belief that international trade in general is “unfair”.

**Toward Open Regionalism**

Global economic integration thus has costs as well as benefits, and the principal challenge of the 21st century lies in finding and maintaining an appropriate balance. In the remainder of this essay I shall suggest where that balance lies and discuss some implications for policymakers. Generally, the feasibility and desirability of the integration of economies is a function of cultural, historical and physical “distance”. Greater and more rapid progress can and should be made within regions than between them. Hence the “open regionalism” approach—wherein multilateral globalisation provides a basic foundation of openness among all economies. Reasonably homogeneous regions go further still, integrating to the maximum degree consistent with maintaining social order, necessary investment in human and natural capital, and local norms of acceptable production processes.

The US is a useful, although imperfect, example of an open regional arrangement. As a federation of 50 states and several territories, the US operates as an economic union within which there are no tariff barriers. The union enjoys a common monetary policy with a network of subnational reserve banks each issuing its own currency with a fixed, one-to-one exchange rate to the other reserve banks’ currencies. But there are restrictions on financial institutions’ interstate operations. Intellectual property rights are fully harmonised across the states, and there is a common core of contract and tax law and of environmental, health, safety and other regulations, although there are subtle differences across states. The federation as a whole pursues reasonably open financial and trading relations with foreign economies, but with no illusion that integration between the states and foreign economies will approach that among the states themselves.

The extent of intra-US integration is surely beyond the reach of the present global system. Although there are subtle cultural interregional differences, the country is a modern creation with (by international standards) little internal variation in norms, language and culture. Even then, tensions fostered partly by economic integration and inequality ignited a bloody internal conflict that set the country back a generation in its development. Moreover, the states began with a common legal code and political system; there were negligible costs involved in integrating the states’ economies. Finally, considerable fiscal redistribution mechanisms exist within the states in order to reduce interjurisdictional variation in income growth and standards of living. This is probably the principal reason the federation’s distinct monetary regions have been able to maintain a fixed inter-regional exchange rate without suffering the serious “balance of payments” crises that have so often afflicted nation-states operating fixed exchange rates.

More rapid progress can be made within regions than across them. Even though multilateral liberalisation of trade, investment flows, and property rights is on the rise, the trend toward parallel regional trade and investment pacts will not be slowed. There are great incentives to enlarge markets among populations with reasonably similar tastes and income levels and to enhance national security by improving economic relations with neighbours. It is true that regional economic agreements can be inefficient, diverting trade from producers with international comparative advantage, but significant net gains from regionalism will remain throughout the 21st century. Partly for this reason, heterogeneous product standards and technical barriers to trade will increase in absolute terms, and relative to tariffs, quotas, and other forms of traditional trade barriers. This will increase the role for legal and scientific experts in international trade. Furthermore, while there is little sound economic basis for tariffs in the high-income world, some low-income regions will continue to need tariffs as a means for raising revenues with which to finance necessary public goods because their income-, property- and sales-tax systems are simply too immature. This is not a defence of imprudent, fiscally unsustainable, or uncoordinated national economic policies. Rather, it is a recognition of the varied initial conditions of different economies and the associated variation in appropriate policies.

Though a strong case can be made for tariff unification and minimisation among the high-income countries, the same cannot be said for currency unification. A currency union is the limiting case of fixed exchange-rate regimes, wherein distinct national currencies are replaced by a common currency (like the euro for the EU in 1999), with no future capacity to adjust parities among the eclipsed national currencies. The inability to adjust exchange rates in response to evolving economic conditions can breed fiscal crises unless significant intra-union redistributive mechanisms exist among member states. If foreign aid flows are any indication, few nation states are willing to undertake substantial fiscal redistribution on an international scale, which bodes poorly
Floating exchange rates merely represent open trade in a financial good—the currency. And just like trade in real goods, this trade subjects the domestic economy to the useful discipline of international competition. Fixed exchange rates are simply not feasible in today's world. As successful speculative attacks on the British pound and Italian lira in 1992, the Mexican peso in 1994, and several Southeast Asian currencies in 1997 vividly demonstrated, the sheer volume of foreign exchange transactions today (roughly US$ 1.5 trillion traded daily now, up 50% in four years) can overwhelm even well-financed government interventions in foreign-exchange markets.

Floating currencies nonetheless encourage speculative finance. "Hot money" can induce serious cyclical disruptions in economies where prices and wages adjust only gradually. For this reason, many economists advocate the introduction of "Tobin taxes"—small taxes on short-term international transactions designed to throw a bit of sand into the wheels of international finance. This idea was first suggested by Nobel laureate James Tobin as a means to slow the cross-border transmission of shocks by limiting unnecessary international contagion effects. Perhaps more important than the (disputable) efficiency of such taxes in dampening financial crises, Tobin taxes are a means of taxing factors of production growing increasingly footloose with globalisation. An international accord to levy a small tax on all short-term capital-account transactions could be instituted to create an international social-insurance fund to help shore up the diminished capacity of individual nation-states to finance such assistance. Although this sort of modest tariff on some financial transactions would limit global market integration, it would be beneficial as a means to reduce the greatest prospective risk of globalisation: social instability which harms economic growth and human welfare. Similarly, it will become necessary for the WTO to recognise the need for countries to be permitted, in unusual circumstances, to restrict trade in products made using processes some populations find objectionable. Compliance with widespread social mores (for instance, against child labour or unregulated toxic-waste disposal) is as important as compliance with health and safety standards. Failure to accommodate this invites social unrest directed against the generally salutary effects of increased integration of global markets.

Perhaps the most curious facet of contemporary globalisation is that increasingly open markets in capital and goods and services have been coupled with tightened restrictions on the international flows of labour. Labour is far less mobile across borders today than it was a century ago. The asymmetry between footloose capital and hamstrung labour plays an important role in growing inequality and social unrest with regard to globalisation. Liberalised immigration laws offer perhaps the greatest potential gains in global welfare of any policy initiative on the table.

### The promise of the early 20th century floundered as increasing economic inequality fed nationalism, imperialism and war that ultimately reversed the rapid globalisation of the late 19th century.

A computer network fails when one or more of its nodes does not function properly. So it is with the world economy. The regional villages of the world economic network are increasingly interdependent and serious disruptions to any one may affect the others. Hence the need to foster continued but better-shared economic advance and improved international linkages, largely through investment in the human and natural capital necessary to achieve higher standards of living. Toward that end, institutions such as the UN, the World Bank, the IMF, the OECD, and the WTO are indispensable as multilateral fora through which independent nation states can work together for social progress and political stability through economic advancement, while still respecting national sovereignty. The first and greatest challenge to the principle of pluralism in the 21st century world economy will be negotiating China's inevitable and desirable entry into the WTO. This must accompany a commitment by Beijing to constructive, peaceful engagement with the rest of the world, not just in matters of commercial trade, but in all its affairs.

The world economy at the dawn of the 21st century is surprisingly similar to that with which we began this century. There is widespread and rapidly growing interdependence through trade, financial flows, and direct investment, a process which promises widespread economic growth and poverty alleviation. Yet, the promise of the early 20th century floundered as increasing economic inequality and insecurity fed nationalism, imperialism and war that ultimately reversed the rapid globalisation of the late 19th century, a time when trade was about as large a proportion of global income as it is today. Can humanity do better this time around? This remains to be seen. Central to the challenge is coping with the need for shared advances. Technological change and increasing international interdependence favor well-educated, skilled workers. If we fail to educate the labour force of the 21st century in a manner that ensures interindustry flexibility; if we fail to ensure that all maintain access to the natural capital necessary for economic growth; if we fail to provide social insurance (made ever more necessary by exposure to a more competitive global marketplace); and if we ignore the structural impediments that impede sharing international economic advance with low- and middle-income countries that account for 85% of the world's population, then intra- and international conflict will likely erase the economic and technological gains of recent decades. Striking a balance in the process of globalisation is no simple task, but it is an unavoidable one.