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SUSTAINABLE HUMAN DEVELOPMENT UNDER GLOBALIZATION: THE ARAB CHALLENGE

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INTRODUCTION

As the next millennium approaches, speculations and forecasts abound about what the world and the Arabs should expect and do. Grandiose predictions have proclaimed the end of almost every post-Second World War phenomenon or institution: the End of History,[1] the End of Democracy,[2] the End of the Nation-State,[3] the End of Work,[4] the End of Economic Man,[5] the End of Isms,[6] the End of Growth,[7] the End of Education[8] and the Clash of Civilizations.[9]

Of course, we are already aware that these predictions are faulty, and some even malicious. For better or worse, neither the "new world" nor the "end of history" nor "the end or work", nor "the end of democracy", nor even the "clash of civilizations" has come about.[10] However, massive and substantive changes in the world economic, political, social and technological foundations have come about. The new information and communication technologies (ICT) are reshaping the ways in which people live, work and interact with each other. They permeate through all facets of work and life. Electronic superhighways of broadband fiber optic cables and satellite channels have created high-speed digital communication networks that provide government, business and home users with interactive and instantaneous access to services, products and information within countries and across borders at fractions of past communication costs. Governments are "in retreat", and more political and economic space is left to the market and the private sector. The dismantling of the Soviet system has infused a

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[1] See Francis Fukuyama, *The End of History and the Last Man* (New York: Free Press, 1992).

[2] See Ralph Adam Crams, *The End of Democracy* (Boston: Marshall Jones, 1987).

[3] See Kenichi Ohmae, *The End of the Nation State: The Rise of Regional Economies* (New York: Free Press, 1995).

[4] See Jeremy Rifkin, *The End of Work: the Decline of the Global Labor Force and the Dawn of the Post-Market Era* (New York: Putnam,1995).

[5] See David Marsden, *The End of Economic Man? Custom and Competition in Labour Markets* (New York: St. Martin's Press, 1986).

[6] See Aleksandras Shtromas, ed., *The End of Isms? Reflections on the Fate of Ideological Politics after Communism's Collapse* (Oxford: Blackwell Publishers, 1993).

[7] See G.B. Stafford, *The End of Economic Growth* (Oxford: M. Robertson, 1981).

[8] Two authors have expounded on this theme: Geoffery A Wagner, *The End of Education* (South Brunswick: A.S. Barnes, 1976); and Neil Postman, *The End of Education: Redefining the Value of School* (New York: Knopf, 1995).

[9] Samuel P. Huntington, *The Clash of Civilizations and the Remaking of World Order* (New York: Simon and Schuster, 1996).

[10] Curt Gasteyger, "Security in the twenty-first century: trend and perspectives", Programme for Strategic and International Security Studies occasional paper No. 1 (1999). Geneva Switzerland.

sense of triumphalism into capitalism and its propagandists. Ironically, capitalism that is based on competition is now without competitors.[11]

Ideology and technology have combined to dismantle national borders and barriers. These changes are not about to halt; if anything, they are gathering momentum. They are part of a process known as globalization, whereby the boundaries and imagination of space have become independent of location and time.

It is certain now that the international economic environment that the Arabs will face in the next millennium will be dramatically different from the world of the 1980s and even from that of the 1990s. International competition is intensifying, space and time are being cumulatively compressed and the basis of economic success is changing. Massive political and economic restructuring are reinforcing technological breakthroughs. Successive rounds of trade liberalization under the General Agreement on Tariffs and Trade (GATT) and the newly created World Trade Organization (WTO) and cross-border investment and financial deregulation have led to major changes in world trade, finance and investment and to the rise of multinational corporations. Regional trading blocs dominated by the United States, Japan and the European Union are expanding and consolidating their markets and their competitive advantages. Newly industrializing countries and areas, such as the Republic of Korea, Taiwan Province of China, Singapore and many others, which until very recently were increasing competitive pressures in many industries and setting strong examples for others to follow have suffered a serious setback and are now mired in debt and contractionary cycles. The third world debt overhang (now in excess of $2.3 trillion) continues to shackle many developing countries and to sap their capacities to grow and meet the basic needs of their growing populations. Income and wealth disparities are growing at alarming rates within and between countries; the poor are becoming poorer and the rich are becoming richer. Social bargains that took labour decades of struggle to wrest from capital have been eroded, and social safety nets are being torn asunder or folded.

The rapid pace of technological change in the early 1990s further quickened and increased the value and importance of research and development and knowledge-based industries as the basis of competitiveness in the world markets. The new ICTs are changing the nature, pace and location of economic activity. They are creating new products, markets, institutions and values. Widely accessible and relatively inexpensive, they are changing at a dizzying pace. Software has replaced hardware as the major ingredient for improving efficiency and realizing competitive advantage. Advanced materials are substituting for natural resources, resulting in drastic declines in the resource intensities of products. Japan's industrial production almost tripled

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[11] See the interesting work on this subject by Lester Thurow, *The Future of Capitalism* (New York: Penguin Books, 1996).

between 1965 and 1985, while consumption of energy and raw materials hardly increased.

Combined with human intelligence, informatior technology has replaced physical capital as the leading factor of production. In an era of human-made brainpower industries, the distinction between labour and capital has become blurred. Skills and knowledge, which comprise human capital, can be created by the same investment funds that create physical capital. Raw labour still exists, but it has become much less important in the production process and can, in any case, be accessed cheaply from large pools of unemployed or underemployed workers around the globe.[12] Knowledge stands today as the only source of sustainable comparative advantage. Silicon Valley, Bangalore, and Boston's Route 128 are where they are simply because that is where the brainpower is.[13] Success and failure in this world are now increasingly more dependent on whether a country is making a successful transition to the human-made brainpower industries of the future, not on the size of any particular activity, sector or investment budget.

Ironically, even with the "revolution" in transportation, communication and information and the substantial progress in trade and investment liberalization, national economies remain remarkably isolated.[14] Paul Krugman argues that Governments are not nearly as shackled by economic globalization as has been suggested. Governments still retain substantial autonomy in regulating their economies, in designing and implementing their social programmes and in maintaining institutions and values that differ from those of their trading partners.[15] He emphasises that it is a little-known, but startling, fact that world trade as a share of world production did not return to its 1913 level until about 1970. Furthermore, net international flows of capital were a considerably larger share of world savings in the years preceding the First World War than they have been even in the "emerging

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[12] Thurow, op. cit., p. 68.

[13] In the mid-1980s companies such as Hewlett-Packard, Motorola and IBM began to employ new specialists from India at wages that were a fraction of what they pay their nationals; "brain shopping" it is called. When domestic Governments supported their nationals' complaints about moving jobs to India, many firms simply relocated major parts of their data work to India. It certainly helped that the Government in New Delhi laid out all the infrastructure—from air conditioned open-plan laboratories to satellite links—at almost zero cost to the multinationals, in ten designated zones. Within a few years the "Electronic City" of Bangalore emerged. From a population of less than a million to one with over 4 million inhabitants, the software industry now employs over 120,000 university graduates and created $1.3 billion in business, with more than 67 per cent of this business being derived from the export of software services.

[14] Dani Rodrik, "Sense and nonsense in the globalization debate", *Foreign Policy* (summer 1997), p. 20.

[15] Paul Krugman, *Peddling Prosperity* (New York: Norton, 1994).

market" boom of the mid-1990s. In his view, recent ICT breakthroughs are no more substantive or more substantial than the invention of the steam engine or the electrical motor or jet travel. He further asserts that "surely, everyone who thinks about it is aware that for all our current hysteria, international migration was far larger in an era that could build the Statue of Liberty to welcome immigrants than it has ever been since."[16] At the heart of these contentions is the central question: Is globalization no more than a confusing buzzword whose impacts are greatly exaggerated, or is it a source of economic growth and prosperity whose impacts are real, staggering but necessary?

This cannot merely be an academic debate. The future of many countries and regions lies in the balance. Policy makers must make quick and hard choices, with these choices being based on hard facts and not fiction. It is difficult, indeed, to sift through the many historical facts and logical arguments that debaters marshal in support of their various positions. It is clear, however, that the issues are complex and that there are not yet many settled and dominant choices.

In a comparative assessment of the global economy and the capacities of States and societies to adjust to its endemic changes, the American historian Paul Kennedy observes that "more than any other developing region" the countries of the Middle East and North Africa (basically inclusive of all the Arab countries) remain least prepared to meet the challenges of the next century.[17] Many basic structural weaknesses in the Arab economy hamper its ability to adjust to global change, meet the challenges of "peace" and protect itself from adverse and rapid changes in the international economic environment. By and large, the Arab economies are still at "a very low entry point into the Information Age".[18] Over the 1970s and 1980s the Arab economy's "success" was based on deriving a huge rent on oil exports, which masked many structural problems and allowed the Arabs to coast into the 1990s without having to restructure or reform their economies to improve their productivity. The harsh economic realities of the new millennium leave no options for the Arabs but to adjust, adapt, struggle, confront and meet the challenges of the globalized economy or face the prospects of being left behind.

Few regions of the world have their fortunes, livelihood and destiny as fundamentally tied to natural resources as the Arab world does. It is this excessive dependence on natural capital and non-renewable resources that is perhaps at the heart

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[16] Paul Krugman, " The localization of the world economy", *New Perspectives Quarterly*. vol. 12, No.1 (winter 1995), p. 2.

[17] Paul Kennedy, *Preparing for the Twenty-First Century* (New York: Vintage Books, 1994), p. 209.

[18] From a statement distributed by the UNDP Bureau for Arab States at the Regional Symposium on Jobs in the Information Society of the Twenty-first Century held in Damascus, 26-29 April 1999.

of the Arab development malaise. Two basic natural resources—oil and water—account for and explain almost the entire economic structure, performance, prospects and problems of the region.

It is in the way the scarcity of water and the abundance of oil in the region interact that defines the economic and environmental parameters within which the Arab economic future is articulated. The mechanisms and modalities through which the two resources interact and shape events in the region are indeed complicated and complex. They involve economic, geopolitical, demographic, environmental and technological factors and considerations. While it is difficult to disentangle and deconstruct this complex phenomenon, it is clear that each of these factors has a separate and pronounced influence on the unfolding reality of the region.

The future of the Arab economy in the new millennium will, however, depend on its ability to deal with its structural problems and lessen its dependence on nonsustainable income sources. It will critically depend on the Arabs' ability to anticipate and harness global change, alleviate water shortages, see to the effective management of oil reserves, prices and production, derive real dividends from "peace" and prepare themselves to capture new opportunities provided by the information and "digital economy". At the same time, the Arabs should be able to protect their economies and societies from globalization's many negative consequences. Ultimately, all of this will depend on the extent to which the Arabs can engender meaningful collective action to face these challenges and on how their Governments, businesses, investors, workers and communities respond to the challenges before them.

There is a critical and definite need for the establishment of a broad-based agreement among the Arabs on what it takes to succeed in the global economy. They need a common sense of purpose and a shared vision that will help them raise the productivity of their economic activities, improve their competitiveness in the world, build efficient and sustainable structures and transparent institutions, raise the overall standard of living of the common people and protect their values and specificity. Individual State action is necessary but not sufficient; it will always be small and insignificant in today's global world markets characterized by colossal trading blocs, giant multinationals, ideological hype and the strong hegemonic interests of the dominant and unipolar State power of the United States.

The basic argument in this study is simple: the Arabs need a collective, cooperative and innovative economic and social policy as part of a broader economic and social renewal agenda for the new millennium. This effort is not about setting out elaborate blueprints for the economy. Nor is it about establishing an array of expensive government programmes or unwarranted dreams and fads. Rather, it is about providing a framework, an understanding and a strategy that enables all segments of society to work realistically together as partners. Grand schemes and large and uncoordinated government programmes did not bear the fruits they were

supposed to in the Arab region. While some of these blueprints and grand schemes were necessary at the earlier stages of Arab development, they are no longer workable. Arab sustainable development is too complex a process; no single sector or scheme can carry it through.

The need for the new socio-economic programme stems from five basic factors:

(a) The global economic environment is changing, and these changes should be anticipated and harnessed;

(b) The Arab economy must overcome some severe structural problems and build sustainable sources of income;

(c) New competitive advantages must be created;

(d) Critical masses in strategic domains must be established;

(e) Sustainable development should be anchored on human development, a regulated entry into the new economy, the improvement of the transformative capacities of the State, and cooperative Arab joint strategies.

ANTICIPATING GLOBAL CHANGE: PARADIGMS, PREDICTIONS AND POLICIES

Globalization processes are complex. Abstractions and theoretical constructs simplify their understanding and anchor the predictions that can be made about their directions and the policies that can be prescribed to deal with them. Unfortunately, the debate about globalization has not displayed sufficient theoretical rigour and has involved a good deal of ideological posturing and stone throwing and has occasionally been indulgent in the assessments it evokes. It is not that no serious work is done on this subject. Rather it is the fact that globalization straddles so many disciplines and terrains that even in combination with solid disciplinary scholarship wild assertions are not uncommon. For instance, some argue that the impact of globalization is utterly destructive, others that it is the royal road forward or that it represents the way of the future, still others that it does not exist.

There are, however, four seemingly different theoretical perspectives on the globalization phenomenon and on what is shaping the new millennium. Each perspective comes with its own predictions and its favoured policy intervention. Neo-Schumpeterians point to technological changes, neo-Keynesians or regulationists to the breakdown of regulation and the retreat of the State from managing economic change, neo-Institutionalists or neo-Marxists to the incongruities between

technological infrastructures and the institutional suprastructures, and the proponents of flexible specialization to geographical fragmentation.[19]

Neo-Schumpeterians analyse future economic profiles and industrial divides in terms of technology-driven innovations. The contemporary world and future capitalist structures are viewed as knowledge-intensive, centred around information and computer technologies and concerned with economies of scope rather than scale. The type of policy interventions favoured by this perspective are supply-side strategies of training, education and skill-upgrading, identifying emergent technologies and promoting their diffusion. This approach is closest to today's mainstream Western policy thinking. One can readily recognize the influence of this perspective in the widespread concern with the following: national strategies of innovation; attempts to establish "technopoles", centres of excellence and cooperation between business firms and universities; the glorification of entrepreneurs; and the insistence on innovation-enabling environments, unfettered competition and market-biased preferences.

The neo-Keynesian regulationists view industrial systems as part of wider regimes and modes of accumulation and "societal paradigms", in which economic systems are embedded in institutional settings that organize economic behaviour. The emergence of globalization is not the product of inevitable technological forces. Rather, it is far more the outcome of political decisions and choices. The crisis of globalization is inherent to the divorce of Fordist accumulation (mass production and mass consumption) from Keynesian regulation (based on welfare programmes and demand management). Resolving this crisis necessitates the successful recoupling of the two. It is only then that sustainable growth may return. The State must regulate the market to correct market failures and must ensure macroeconomic balance between supply and demand at reasonable levels of employment.

Regulationists signal a wide variety of scenarios and tendencies, including automation, lay-offs, industrialization of services, social polarization, individualization, weak trade unions, new corporatist settlements, and the unchallenged dominance of transnationals. The ultimate outcome of these forces and tendencies is the emergence of different local solutions, ranging from neo-Taylorist, Californian (Silicon Valley) and Swedish (Kalmarian) options. The regulationists argue that good fortunes can be realized only at the local level and only in a few fortunate places. Policy interventions are only meaningful at the international level by coordinated macroeconomic demand management at the supranational level.[20] Other concerns of this school pertain to the future of the welfare State. Bob Jessop sees the future in a work-fare State (i.e., welfare made contingent upon work arrangements that

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[19] Ash Amin, ed., *Post-Fordism: a Reader* (Oxford: Blackwell, 994).

[20] Jan Nederveen Pieterse, "Going global: futures of capitalism" *Development and Change*. vol. 28 (1997), pp. 367-382.

are in turn connected to retraining);[21] another scenario that has emerged in this literature is "welfare pluralism" in which non-State actors come to play a greater role.[22]

The thinking of neo-Institutionalists is based on the premise that technological change will drive institutional and social change. These social changes will involve the birth of new institutions, as well as the death of old ones, and the rise of new forms of regulation, as well as the deregulation of older services and industries. What counts in this perspective is the interplay between technical and institutional change. The institutional and social framework, which was inherited from the past, will be ill-adapted to the potential of the new technologies. This mismatch between technology and institutions will hinder the process of job creation and productivity increase. Far from accepting the technological determinism of old Marxists, the new view argues that technologies are developed and diffused by human individuals and institutions; the processes of development, selection, shaping and application are social processes. In the countries of the Organization for Economic Cooperation and Development (OECD) the selection process is heavily influenced by perceived competitive advantage, expected profitability and time-saving potential. It is for this reason that the proponents of this perspective prefer Carlotta Perez's expression "techno-economic paradigm" to the commonly used "technological paradigm". However, they concede that some technological trajectories, once launched, tend to have their own momentum and to attract additional resources by virtue of past performance. In the end, both the technological system and the economic system get "locked in" to dominant technologies once certain linkages in supply of materials, components, and subassemblies have been made, economies of scale realized, training systems and standards established and so forth. Consequently individuals, firms and societies are not quite so free in their choice of technology as might appear at first sight.[23] The core of this approach is about the interactions between technology and institutions. The more coordinated this relationship is, the smoother the social transition to the new technology and the greater the benefits to be derived from it.

In their early days, computers were in no way a dominant technology and had to struggle for survival in a world that was geared to totally different technology and institutions. Even supposedly well-informed industrialists and captains of industry, such as T.J. Watson, the head of IBM, did not believe that there would be any large commercial market for computers; he thought that there would be a demand for a few

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[21] Bob Gessop, "Post-Fordism and the State" in Ash Amin, *Post-Fordism: a Reader* (Oxford: Blackwell, 1994).

[22] Ramesh Mishra, "The welfare of nations" in R. Boyer and D. Drache, eds., *States against Markets: the Limits of Globalization* (London: Routlegde, 1996), pp. 316-33.

[23] Chris Freeman and Luc Soete, *Work for All or Mass Unemployment?* (London: Printer Publishers, 1994).

very large computers in governmental, military and scientific applications. Early computer users had difficulty in obtaining reliable peripherals, appropriate software and people with the necessary skills.[24] However, even in these early days, computers had already demonstrated their revolutionary technical superiority. The electronic industry remained wedded, albeit uncomfortably, to the old Fordist paradigm. The full advantages of the new technology would not be apparent until the social framework had been transformed to accommodate it.

The policy accent of this framework is on institutional reform that can reflect better and accommodate faster the transition of the economy and society from Fordist structures to ICT- and knowledge-based structures.

The fourth theoretical framework is that of the flexible specialization approach, which is followed by industrial sociologists rather than economists, and which hinges on the distinction of mass production and craft production.[25] According to this view, the move away from standardized production into customized outputs annuls the advantages of large firms and provides the opportunity to revive craft production by small firms. In this reading of globalization, the crisis is interpreted as opportunity and the future of the world economy lies in localization: in locally integrated and self-sustaining local economies, operating on the basis of proximity and relations of social solidarity and trust.[26]

The term flexible specialization is somewhat confusing because it refers to shifts in production methods. It is variously interpreted and carries limited serious implications, as with "flexible accumulation" and equivalents such as Toyotism, lean production teams and just-in-time capitalism.[27] In essence, what is seen as a liability by the regulationists—the absence of macroeconomic regulation, leading to fragmentation of local institutional fixes—is seen as an asset in the framework of flexible specialization, where the absence of macroeconomic regulation frees up local arrangements. This framework, however, does not address the issue of sustainability of local solutions in view of strong megaeconomic dynamics and the evolving interrelations among local arrangements. Some have even questioned the extent to which this framework is advocating enclave strategies, the success of which depends on other regions and localities not succeeding.[28] The craft-building strategy is seen as the upside of downsizing—a positive take on a cost-cutting exercise that is at best a neo-Schumpeterian innovation strategy.

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[24] Ibid.

[25] Pieterse, op. cit.

[26] For example, see Charles Sabel, "Flexible specialisation and the re-emergence of regional economies" in Ash Amin, *Post-Fordism: a Reader* (Oxford: Blackwell, 1994).

[27] Pieterse, op. cit.

[28] Ibid.

The framework is seen to propose a confusing mixed strategy that is clearly stated by Jamie Peck and Adam Tickell:

> Localities in the after-Fordist crisis have, to borrow a phrase from Marx, become "hostile brothers" flinging themselves into the competitive process of attracting jobs and investment by bargaining away living standards and regulatory controls...What is striking about local strategies at present is just how unlocal they are. Workforce training, the erosion of social protection, the construction of science and business parks, the vigorous marketing of place and the ritual incantation of the virtues of international competitiveness and public-private partnership seem now to have become almost universal features of the so called "local" strategies. In this sense, the "local" has gone global.[29]

It is clear that the boundaries of the four perspectives intersect at key and fundamental junctures. Technology, ideology and institutional change combine to reinforce one another. Technology drives institutional change, and ideology accommodates technological change. Political accommodation is a necessary condition for technological change. Computers cannot tie capital markets in different countries together if the regulatory regime does not allow it. Institutional change can be hastened by technological support, but it cannot happen in the absence of political will. While the policy implications of the four perspectives appear to be different, there are large margins within which these implications are similar. The theoretical and policy intersections among the four perspectives suggest that a proper and balanced view of globalization should take account of all of them. Each will contribute to a better understanding of the phenomenon and to a proper appreciation of its implications.

Among key issues over which most would agree are the following:

(a) Globalization is concentrated in the "inter-linked economies" of Europe, North America and Japan. Some now speak of "truncated globalization";

(b) Globalization is a complex phenomenon where technology, ideology, geography, demography and institutional change combine to define its inner workings and implications. Any separation of these complex components leads to a truncated understanding of its manifestations and implications;

(c) The North-South gap may have narrowed for some countries, but it is widening for most others;

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[29] Jamie Peck and Adam Tickell, "Searching for a new institutional fix: the after-Fordist crisis and the global-local disorder" in Ash Amin, *Post-Fordism: a Reader* (Oxford: Blackwell, 1994).

(d) De-linking economies is no longer a viable option.

Should one oppose globalization or try to shape its direction? Most now recognize three streams in their quest to deal with globalization and its implications: stopping globalization, slowing it down and reshaping it. A few oppose globalization and feel that it is inherently unjust, unstable and unsustainable.[30] A large group of social scientists have organized themselves around the notion of a third way, which believes that globalization can and must be slowed down.[31]

In what follows, the author plans to present the context within which globalization operates and the difference it has made on a number of key institutions, variables and issues. The present paper begins with the technological structures.

THE BIGGEST TECHNOLOGICAL JUGGERNAUT THAT EVER ROLLED: THE IMPACT OF ICTS

For the first time in human history, anything can be made anywhere and sold everywhere.[32] Under capitalism this means producing in the cheapest place. Dramatic improvements in transportation and communication technologies and equally dramatic reductions in such costs have made this possible. New systems of command and control have become feasible and have allowed the coordination of research and design groups in real time around the globe; components can be made anywhere in the world, wherever it is cheapest to produce, and delivered to assembly lines that minimize total cost. Finished products can be shipped to wherever they are needed with just-in-time delivery systems. The new economy of internationalized production was in the making since 1945, but the rapid changes brought about by what Zbignew Brzezinski dubbed the "technetronic" revolutions are more recent. In the last quarter century, rapid technological changes took a new turn. The most protean symbol of this change is the personal computer. Equally important, though, are flexible manufacturing systems, the information highway of the Internet, the World Wide Web, telematics, fibre optics and bioengineering technologies. The array of changes is staggering:[33]

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[30] David C. Korten, "The limits of the earth", *The Nation* (15/22 July 1996), pp. 14-18).

[31] John Cavanagh and Robin Broad, "Global reach : worker fight the multinationals," *The Nation* (18 March 1996), pp. 21-24.

[32] Thurow, op. cit., p. 115.

[33] The data in the section below are derived from a number of sources but in particular from C. Freeman and L. Soete, op. cit., from the *Economist*, (September 1996 and subsequent issues in 1997 and1998), and from an International Data Corporation study for the World Information Technology and Services Alliance in 1998. Much of this data can be viewed at witsa.org.

- During the past two decades, the global network of computers, telephones and television has increased information-carrying capacity a million times over. More than 50 million people are added to the communication network each year.

- Computing capacity apparently doubles every 18 months, according to Moore's Law (after Gordon Moore, co-founder of Intel).

- Today's $2,000 laptop personal computer is many times more powerful than the $10 million mainframe computer of the early 1970s.

- Three decades ago there were no more than 50,000 computers in the whole world; their number has now rocketed to over 200 million. This does not include any of the chips inside cars or singing greeting cards. At the end of 1997, there were over 118 million computers installed in homes and educational institutions worldwide, up from 35 million in 1992.

- A typical car today has more computer processing power than the first moon-landing vehicle in 1969.

- In 1960 a telephone cable could carry only 138 simultaneous conversations. Today a fibre optic cable can carry 1.5 million conversations.

- No communication medium has ever grown as fast as the Internet. It has over 100 million users and is doubling each year. In 1993, there were 1.3 million hosts (servers). In 1999, their number is expected to reach 43 million.

- Anyone with a personal computer and a modem can teleshop, telebank and telelearn 24 hours a day.

- More than 70 per cent of computer companies' revenues come from products that did not exist two years ago.

- More than 60 per cent of the workers in the United States today work with computers.

- Spending on ICT exceeded $1.8 trillion in 1997. This is approximately 6 per cent of the aggregate global gross domestic product (GDP).

- In 1997, this spending was 40 per cent higher than its value in 1992. It has grown 27 per cent faster than global GDP, even with the latter growing by an average 5.6 per cent annually during the same period.

- Spending on ICT between 1992 and 1997 grew in every economy worldwide regardless of GDP or population growth.

- Investments in ICT created a large number of companies in advanced economies—a net increase of 90,000 companies in Australia, Canada, France, Italy, Japan, the Netherlands, Sweden, the United Kingdom of Great Britain and Northern Ireland, and the United States, between 1992 and 1997. In the United States alone, an average of 7,200 new ICT companies were created each year between 1992 and 1997.

- Investments in ICT created jobs. In the United States a total of 380,000 jobs were created in the "software and services' industries. In Canada more than 51,000 jobs were also created over the same period in these industries. In Finland and France, these increases were more modest, at 7,200 and 1,200 respectively.

The implications of these advances and breakthroughs have been many and serious. They include the following:

(a) ICTs are everywhere: in the home, office, mosque, church and car. Their sheer pervasiveness is staggering. They affect every dimension of life, impinging on blue and white-collar jobs alike. They have replaced jobs in the services industry, where most of the gains in employment have been realized in the past five decades.[34] Speech recognition replaced secretaries, automated teller machines (ATMs) replaced bank tellers, voice mail replaced operators, synthesizers do the job of musicians, intelligent tutors replace teaching assistants, computer-aided design (CAD) programmes replaced drafters and engineers, and so forth. While it is true that ICTs have created jobs, they have destroyed quite a number as well;

(b) ICTs are inputs and final products at the same time. Unlike electricity or steam power, computers and cellular phones are final products in their own right;

(c) ICT prices have experienced vertiginous declines. Prices of most ICT products fell by 30 per cent per year in real terms in the past two decades. Computer power cost in 1998 was (one hundredth) of 1 per cent of what it was in 1970. If car prices had declined the same way, a typical car would now cost $5 and get 250,000 miles to the gallon. Steam power prices remained unchanged between 1780 and 1830. They only halved between 1890 and 1930. Between 1890 and 1930, the price of electricity dropped by 65 per cent, which translates into a 2 per cent decline per annum. This should partially explain the rapid diffusion of ICT and the slow pace that characterized the adoption of electrical power;

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[34] Rifkin, op. cit.

(d) ICTs made services more tradable by eliminating the direct contact between producers and consumers. Competitors are no longer 10,000 miles away but a microsecond or less;

(e) ICTs made production and producers more footloose through flexible manufacturing, concurrent design and coordinated networks of decision makers. Any product can now be produced anywhere and anytime;

(f) ICTs have liberated production from space and natural resources. ICTs claim fewer resources and substitute for patterns of production and consumption that are more resource-intensive;

(g) ICTs have raised the knowledge intensity of production and the value of skills, education and know-how. There are two sorts of knowledge that ICTs promote and expand. The first is *knowledge about technology*, which is known as simply know-how. Examples are birth control, nutrition, software engineering and accounting Typically, developing countries have less of this know-how than more advanced countries. There are real *knowledge gaps* among countries. The second is *knowledge about attributes*, such as the quality of a product, the creditworthiness of a borrower, the health record of an applicant for insurance and the diligence of a worker. All of these are crucial for the working of effective markets. The difficulties posed by incomplete knowledge of attributes are referred to as *information problems*. Mechanisms to alleviate information problems, such as certificates, product standards and credit reports are fewer and weaker in developing countries.[35] Reducing the knowledge gap and dealing with information problems cannot be ironed out without full recourse to ICTs. The latter have exacerbated the technological and informational gaps between North and South;

(h) ICTs have facilitated dis-intermediation and have in the process eliminated many intermediaries, from those in middle management positions all the way down to clerks and salespersons;

(i) ICTs have contributed to speeding the processes of innovation, downsizing, outsourcing and reengineering to levels where growth in productivity (and/or job losses) have grown faster than output growth, resulting in what is now known as "jobless growth";

(j) ICTs have materially contributed to the deterioration of the bargaining power of labour versus capital. Internationalism—once a propaganda weapon of the

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[35] World Bank, *World Development Report 1998/1999 on Knowledge for Development* (Oxford: Oxford University Press, 1999).

workers' movement against war-mongering Governments and capitalists—has now crossed over and is working for the other side.[36]

The implications above are only a part of the pervasive changes wrought on the world. There are a number of connecting impacts that are accommodated by technological factors but requiring additional support from other segments of the society and economy.

THE INTERNATIONALIZATION OF PRODUCTION, TRADE AND LABOUR

It is certain that technological advances alone cannot explain the rapid internationalization of the world production system. They may have quickened the pace, but the fundamental factors are elsewhere. The dismantling of trade barriers and the deregulation of the flows of goods, services and finance are perhaps as important to the solidification of the internationalization phenomenon as the technological revolution. The technological and the political factors are equal ingredients that have combined to transform the classical international economy. The new economy in its most fundamental arrangement is *global*, just as the classical economy was in its essential aspect *national*.

The increasing freedom of trade has had a major impact on the world economy. For the past four decades, world trade in goods and services has grown faster than production, and since 1985 it rose twice as fast as output. In 1995, a full 20 per cent of the recorded aggregate output was being traded across the world's borders.[37] Transnational corporations (TNCs) today carry on two thirds of world trade, with nearly 50 per cent of this trade taking place within the operations of these firms.

The United Nations Conference on Trade and Development (UNCTAD) suggests that around the world there are some 40 000 companies that have headquarters in more than three countries. The 100 largest of them alone account for over $1.4 trillion per year in sales. They are at the heart of the transnationalization process and are providing the momentum for its ceaseless growth. According to the respected London daily the *Financial Times*, there is now a "de facto world government of transnational corporations and international banking institutions" (19 July 1999). Of the world's 100 largest economies, 50 are TNCs. The Royal Dutch/Shell Group of Companies by itself controls a greater expanse of land–400 million acres—than 146 countries. Fewer than 10 TNCs control the entire world food supply. More than half of the world's grain is traded by one company (Cargill).[38]

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[36] Hans-Peter Martin and Harald Schumann, *The Global Irap Globalization and the Assault on Prosperity and Democracy* (London: Zed Books, 1997), p. 112.

[37] World Trade Organization, *Trends and Statistics 1995* (Geneva, 1995).

[38] As reported by David Craig, review of *Nature: Western Attitudes since Ancient Times* by Pater Coates, *London Review of Books*, vol. 21, No. 12 (10 June 1999).

The new global economy is not restricted to production and trade; it has spawned far-reaching ramifications that are replacing the old Fordist economies of scale and smokestack integrated mechanical production into a weightless, knowledge-intensive and digitized economy. Organized by transnational companies based on a web of relationships that run laterally across national boundaries, it inverts the pyramidal structure of industrial decision-making and production cycles associated with the classical nation-State economy. Global manufacturing within this new arrangement takes advantage of split production runs to locate in different national jurisdictions. It sets up one jurisdiction against another to maximize cost reductions and savings in taxes, to avoid domestic environmental regulations and to enhance its control and discipline over workers and unions. It offers political favours without the demands for national accountability.

The internationalization of production has made industry and capital more mobile, increasing their bargaining position and clout *vis-à-vis* labour. Labour, in turn, has become increasingly less mobile, while facing broader and more intensified competition thanks to national Governments vying with one another to seduce transnational firms to locate in their jurisdictions. It has intensified competition both among producers and among workers. Business competitors are no longer thousand of miles but fractions of seconds away. Footloose industries have integrated labour markets. There is now a global labour market within which the workers of the world compete and from which industry chooses to employ, leading some to suggest that wages are now set in Beijing.[39]

Goods and services are traded more freely across borders; the WTO is overseeing the liberalization of trade; financial capital is moving instantaneously within and between countries; and the Multilateral Agreement on Investment is trying to extend national treatment to TNCs. However, there is no organization or institution that is looking to make labour more mobile. If anything, the opposite is true, and labour today is less mobile than in earlier times. Indeed, more stringent impediments are put in place to reduce its mobility. Labour is increasingly being divorced from finance and capital. Labour markets are even segmented within national boundaries—unskilled labour is increasingly becoming redundant while highly skilled labour is more mobile and is extracting higher and higher returns.

GLOBAL FINANCE

Global finance, decoupled from production, is now virtually unregulated and maintains a multi-country, round-the-clock electronic network, transferring multiples of the annual international volumes of trade. Global finance moves freely across

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[39] See the interesting and thorough discussion of this issue by Richard B. Freeman, "Are your wages set in Beijing?" *Journal of Economic Perspectives*, vol. 9, No. 3 (Summer 1995), pp. 15-32.

borders at lightning speed, bringing together remote Moroccan villages with financial wizards on Wall Street in New York city or in Tokyo, Japan. The network is centred in cities and not States, and it has developed a supranational power of its own in which Governments are increasingly beholden and accountable to external bond markets rather than their own citizens. Their options in exchange rate policy, fiscal and monetary policy, and industrial and trade policy have all become constrained by financial interests linked to the global economy.

Explosive growth in speculation in international currency exchanges is also traced to deregulation in financial markets and the prevailing system of floating (market-determined) exchange rates. Today, no country is immune from the speculators. Their reach is so pervasive that even the United States, the largest economy in the world, has experienced pressure on its currency from speculators. There is so much trade in United States currency that one estimate puts it at $1.3 trillion per business day. Prices of currencies are no longer reflective of cost or preference differentials or other relevant economic conditions; rather, they mirror the fancies of currency speculators. Reacting to rumors or surges of adrenaline, these individuals can change the fate of a currency and with it the economic well-being of millions of people. Recent research has demonstrated that these financial markets usually overreact to any new information. Overreacting means that price fluctuation will be larger than warranted by economic conditions. On the other hand, multinational corporations have become more autonomous than Governments, while international finance looms autocratically over the real economy.

Investment is growing twice as fast as output and financial transactions at about six times this rate of growth. Transboundary sales of United States bonds and stocks were 3 per cent of United States GDP in 1973. In 1996, such sales grew to more than 167 per cent despite the phenomenal growth that GDP experienced over this span of time. With the lifting of controls on cross-border financial flows, under Article VIII of the articles of agreement of the International Monetary Fund (IMF), net private capital flows to developing countries (excluding East Asia) averaged $150 billion per year over the period 1993 to 1996 and climbed to $200 billion in 1996—a sixfold increase from average flows in the mid-1980s. Foreign direct investment accounted for the largest share of these flows ($90 billion in 1995).[40]

THE ASIAN CRISIS AND THE ROLE OF THE STATE

Why has Asia become embroiled in financial turmoil and why has it turned savage? Just when there seemed to be a growing acknowledgement across the economic and political disciplines that State involvement was vital to the rapid growth

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[40] Statement distributed by the UDPP Bureau for Arab States a the Regional Symposium on Jobs in the Information Society of the Twenty-first Century held in Damascus, 26-29 April 1999, p. 2.

of the South-East Asian economies, along came the financial hurricane and with it a reconsideration of the consensus.

Though commentators disagree about the fundamental causes of the crisis, two different views emerged. One focuses on internal variables within the nation-State, giving primacy to domestic vulnerabilities (i.e., flawed policies and institutions). The second directs the focus outward to international financial markets (i.e., speculators and investor panic).[41]

The crisis had two faces: one normal, the other abnormal. Linda Weiss argues that this schematic approach is more fruitful than the internal/external dichotomy. Financial crises have always been a normal pattern of capitalist development.[42] Whether one's perspective involves 15 or 150 years, it appears that the history of capitalism is strewn with financial crises of one form or another. However, the implication that no country is immune does not mean that all countries are equally susceptible to financial crises. In the world of volatile capital flows, some countries have become more vulnerable than others. These are countries that have domestic weaknesses, which before the crisis were thought to be benign.[43] The Asian countries were model economies with striking prospects for continued growth. Most of them enjoyed high savings, balanced budgets, disciplined and highly educated labour forces, strong private sector investment, low inflation, a relatively egalitarian income distribution and a long and unbroken record of strong exports. Vulnerability should be put in perspective: it seems to be a condition not a cause of the crisis.[44] The crucial question is: why has a problem that should have been transient and quickly rectified, like so many other problems before, turn into a full-blown disaster?[45] Domestic factors can explain a country's vulnerability but cannot explain why the crisis turned lethal. They cannot explain why the bursting of the property bubble in Thailand, for example, turned into full-blown capital flight. The answer can be revealed by examining why some East Asian countries were more vulnerable than others to the financial meltdown. In other words, why has the crisis been so uneven in its occurrence (the Republic of Korea was more vulnerable than Taiwan Province of China), and why was

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[41] For a different classification see K. Jayasuriya, "See through a glass darkly: models of the Asian currency crisis, 1997-1998", working paper, Asia Research Centre Conference, Murdoch University, Western Australia, 1998.

[42] See Linda Weiss, "State power and the Asian crisis", working paper, Institute on Globalization and the Human Condition, McMaster University, Hamilton, Ontario, 1999.

[43] Jagdish Bhagwati remarks that "like cats, crises have many lives, and macroeconomists, never a tribe that enjoyed a great reputation for getting things right or for agreeing among themselves, have been kept busy adding to the taxonomy of crises and explanations". See "The capital myth", *Foreign Affairs* (May/June 1998), p. 10.

[44] Weiss, op. cit.

[45] See Charles Kindleberger, *Manias, Panics and Crashes* (New York: John Wiley, 1996).

it so severe in the East Asian setting relative to economic fundamentals and to earlier crises in Mexico and elsewhere?

The main argument here is that while global financial markets obviously and directly produced the Asian crisis (by way of speculative runs and sudden withdrawal of funds—the so-called investor panic, or herding), they were not the primary determining factor. For the financial markets to precipitate the crisis in the first place, two less obvious variables had to be present. The first has to do with domestic vulnerability in the real economy. Here it was the weak and decomposing institutional capacities, in particular those of the State. This in turn exacerbated real vulnerabilities of the economy, such as falling exports, rising current account deficits and surplus capacity. A second factor is necessary as well. This is the externally induced vulnerability. The common denominator of the second vulnerability is the strong external power of the United States pursuing its own national economic agenda (with strong input from its domestic financial interests), partly on its own and partly in concert with the IMF.[46] Both arguments implicate State power. The basic thesis here is that the relative weakness of State capacity (in South-East Asia) and its marked if not complete decomposition in the Republic of Korea made these economies prone to speculative investment (in the case of the Republic of Korea, overinvestment in excess capacity sectors), asset bubbles and current account deficits, and consequently to unabated financial crisis. The flip side of this argument is the reason that explains why China, Singapore and Taiwan Republic of China were able to avoid the crisis.

In the case of the Republic of Korea, it was not institutionalized weakness per se but the gradual decomposition of core capacities of the State that paved the way for high-risk and short-term borrowing as well as overinvestment by *chaebol*, which in turn exposed the Republic of Korea to sudden downturns and capital flight. Ironically, the weakening of domestic State power to deal with the crisis was accentuated by the relative strength of America international State power.

In what way, then, is State power at issue in the crisis? When analysts invoke the State's role to explain the crisis, they typically draw on one of two quite different interpretations. By far the most common is the "excessive State interventionism" or "too much State power" thesis.[47] According to this view the Asian crisis is a demonstration of the folly of State intervention in the economy. Excessive intervention and too much State power have brought the crisis on by distorting the market, for if the State had not been so interventionist in its economies in the first place, there would be fewer distortions (corruption, cronyism, and rent seeking) blocking efficient market allocation. The crisis was an inevitable consequence of State-led capitalism (the Japanese model) that has recently proved itself to be a

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[46] See the excellent discussion by Linda Weiss, op. cit.

[47] Weiss, op. cit.

failure.[48] For all its crude overtones that replay the fruitless "State-versus-market" dichotomy, this is probably the most popular version of what has gone wrong in Asia. It is favoured by the IMF, by top officials of the United States Treasury and the Federal Reserve and by liberal economists generally.

Alternatively there are those who contend that the crisis was an inevitable consequence of the absence of or the weakened regulatory regimes and little State control. As Joseph Stiglitz, Chief Economist and Vice-President of the World Bank puts it, "The crisis was caused in part by too little government regulation (or perverse or ineffective government regulation)."[49] The thesis of too little control is chiefly concerned with the laxity of regulatory control over the capital inflows that came in the wake of financial liberalization (hence overexposed to unhedged short-term debt). After all, the opening of the capital account is central to the whole story of what has gone wrong in Asia. The crux of the matter involves too much short-term capital (denominated in foreign currency) coming to service long-term investments (at pegged exchange rates). The moral is clear. If the State were a stronger regulator—preventing dangerous inflows—there would be no crisis. It seems very plausible, but there is more at issue than the regulatory capacity. The real issue looks at why capital flowed in such massive amounts in the first place. In other words, what was the capital being used for and how did that use reflect underlying institutional weaknesses and exacerbate economic vulnerability? Why has capital flown out in a seemingly unstoppable haemorrhage—to the point that Indonesia, as the worst case, would become totally disconnected from the international banking system?

Identifying weaknesses in the real economy is not a difficult task in the South-East Asian experience. These include the following: falling export growth, which caused the ballooning current account deficits in the two years prior to the crisis; slowness to upgrade skills, products and technology; and an overreliance on price-sensitive goods being produced more competitively by new producers down-market (Thailand). The real question here is why these countries have been unable to stop overinvestment or to speedup the process of upgrading skills, products and technology. In all of these cases (Thailand, Indonesia, and the Republic of Korea) the reason is weakened institutional discipline and the decomposition in the power of the State to coordinate investment and to guide the transformation of the economy. While these factors were crucial weaknesses, a hostile external environment that exacerbated the crisis complemented them.

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[48] B. Lindsay and A. Lucas. "Revisiting the revisionists: the rise and fall of the Japanese model". *Trade Policy Analysis*. No. 3 (July 1998), p. 1.

[49] J. Stiglitz, "The Role of international financial institutions in the current global economy", address to the Chicago Council on Foreign Relations, 27 February 1998.

In Thailand and Indonesia the State failed to coordinate investment into productive sectors of the economy and to hasten the upgrading of skills and technology. This failure paved the way for high levels of speculative investment, in particular in real estate, and also led to falling export growth and rising current account deficits. In South-East Asia, the flip side of this institutional failing manifested itself in increased foreign indebtedness by private corporations and financial institutions, massive investment in non-tradable products, and ultimately real estate bubbles which burst, triggering the first phase of the crisis. In the Republic of Korea, State capacities had been gradually decomposing and the Government stood helpless as private companies and banks borrowed excessively in foreign short-term markets and companies overinvested in leading export sectors (steel, petrochemicals, semiconductors and cars). The oversupply resulted in falling exports, massive interest payments, a spate of corporate collapses and finally a full-blown financial crisis.

What is clear from the financial crisis in all the Asian countries that experienced it is the transmission of the real economic difficulties into the financial economy and back into the real economy. In Thailand, the fall in exports resulted in current account deficits, which brought about the need for borrowing. The borrowed funds were invested in non-tradable sectors (real estate). When repayment difficulties were experienced, interest rate hikes were used to attract more foreign capital to finance the deficits. These triggered a massive decline in real estate prices that burst the bubble economy, invited speculative attacks against the currency, led to enormous capital flight and ended up triggering massive unemployment and output losses. Had the economy moved to higher levels of exports—as did Taiwan Province of China and the Republic of Korea (in the past) by way of a selective industrial policy, which linked credit allocation and tax incentives to investment in high-productivity sectors—the cycle of difficulties mentioned above may not have been encountered. The end result for Thailand was the massive capital inflows whose composition and destination the State has appeared neither able nor willing to shape.

The decline in the transformative capacities of the State in Asia had another consequence.[50] Such weaknesses have tended to underpin weak regulatory control in the financial sector. Conversely, where the transformative powers remained robust, as in Japan, Singapore and Taiwan Province of China, the approach to financial liberalization has tended to *reaffirm rather than remove State control over capital flows*. The Republic of Korea and Taiwan Province of China affirm this proposition by the way each went about liberalizing the corporate bond market. In 1993, officials of the Republic of Korea folded the Economic Planning Board. When they approached the liberalization of the capital account in the early 1990s, they did so with a view to preparing the ground for further dismantling—not maintaining—State control over the

[50] By transformative capacity is meant the national contexts where the socio-political project of the State and the organization of State-society relations are biased towards improvement of the production regime. See Linda Weiss, op. cit.

economy. Rising wages and declining exports in the 1990s made the republic of Korea less attractive to foreign lenders, thus placing a premium on long-term interest rates. Long-term loans became more expensive and harder to obtain and recorded a net outflow. It was against this background that the Ministry of Finance made the decision to relax the greater access of the *chaebol* to short-term portfolio investment. The result was a surge of foreign capital inflow in excess of $27 billion between 1991 and 1994. The contrast with the deregulation by Taiwan Province of China of the corporate bond market in 1993 is instructive. For the fist time, the Central Bank allowed for corporations to remit proceeds of overseas bonds for domestic use. However, this was accompanied by new rules that such foreign currency remittances must be invested in plant expansion, and that the total national aggregate of these inflows must *not exceed $3 billion*. Moreover, the Central Bank backs up the regulations with close monitoring, intervening under its emergency powers when it suspects foreign inflows are not being used for the designated purposes. In the early 1990s, the Central Bank *closed the Taiwan Stock Exchange for a year* when it suspected that capital inflows were not invested but used to speculate against its currency.

The differences between the Republic of Korea and Taiwan Province of China suggest different routes to liberalization. The Republic of Korea appears to have moved towards a minimization of the State's role, in a market-enhancing direction, while Taiwan Province of China, like Japan, has chosen a more State-enhancing path via regulation. Korea succumbed to financial difficulties that Taiwan Province of China avoided without much difficulty.

There remains the issue of external pressure and the Strong State intervention by the United States, the IMF and other Western powers which prevented first the Republic of Korea and then Japan from dealing with the financial crisis before it hit. The first such manifestation of the foreign pressures came when the Republic of Korea was preparing to enter the OECD. It is then that the United States made membership by the Republic of Korea conditional upon greater opening of its capital market.[51] It may be misleading to leave the impression that external pressures were the main push factor for prodding the Republic of Korea into a more liberalizing stance. The drive to liberalization was under way throughout the 1980s. It manifested itself in many forms and small decisions that coalesced into a major liberalization programme. External pressure simply made the transition easier and more certain.

The financial crisis of the Republic of Korea, which began in January 1997 with the collapse of the Hanbo group, has a great deal to do with private sector excesses. Uncoordinated overinvestment was exacerbated by State retreat; that is, there was massive private borrowing for investments in sectors not only already well-supplied by other *chaebol* (steel, petrochemicals and semiconductors) but also price-sensitive and subject to downturn. The crisis certainly had nothing to do with weak-state

[51] Linda Weiss, "Developmental States in transition", Unpublished paper, 1998.

cronyism (crony capitalism) or even of a strong State overriding efficient market logic.[52]

The domestic vulnerabilities by themselves do not produce financial crisis of the magnitude experienced in Asia. Moreover, the kind of vulnerabilities identified above are not lethal. Many suggest that it was investor panic, self-fulfilling expectations and sheer herd behaviour—but what sustained and nurtured the panic in the first place? To invoke panic is to provide not so much an explanation as a restatement of the problem. Why has capital flight been so massive, so relentless and so damaging? It is necessary to look outside the nation-State for answers.[53] Of the three international power actors involved in deepening the crisis, it has been the United States Treasury-finance nexus that has been least visible yet the most damaging. While the IMF is also implicated in the unfolding drama, its role has differed on two counts: its interventions have neither enjoyed the level of autonomy displayed by other actors nor deployed their more calculated self-interest. The key proposition is that the American administration has not merely used the crisis as a leveraging opportunity to prise open markets once closed to foreign financial institutions, it has played a critical role in deepening the crisis.

First, the United States did not act with due speed to contain the panic and indeed appeared also to prevent containment by Japan or the IMF, intervening only after the situation had deteriorated to an alarming degree. The United States and the IMF could have easily persuaded the lenders to roll over their loans without IMF guarantees and could have calmed the foreign exchange markets by ensuring that lenders understood that the country's problem of inadequate reserves was a temporary problem of liquidity, not insolvency. This is precisely what the United States and the IMF did during the 1996 Mexican currency crisis. Their timely intervention worked perfectly. It was not until the foreign exchange reserves of the Republic of Korea were depleted and after the major damage had already been done that the United States Federal Reserve Board—in January 1998—took the steps that would have earlier averted the crisis: bringing together the major players to co-ordinate a programme of debt restructuring and short-term debt roll-overs.

By not intervening, the United States was merely bringing policy into alignment with the new geopolitical reality in the aftermath of the dismantling of the Soviet Union. In the post-cold war environment, there was no longer a significant national "security" interest in protecting Asia that in the past would so often override the economic interest of opening markets of the Republic of Korea to American goods and finance. Deputy Secretary of the Treasury (at the present writing Secretary) Lawrence Summers proclaimed in February 1998 that the IMF had done more to

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[52] Ibid.

[53] Ibid.

promote the American trade and investment agenda in the Republic of Korea than had 30 years of bilateral trade talks."[54]

While *global* and *national* are commonly portrayed as antithetical, as mutually exclusive principles of organization and interaction, the Asian crisis has shown that they are in fact interdependent and mutually reinforcing. The extent and sustainability of financial liberalization will continue to depend on the solidity of domestic structures. Where these structures are weak, global networks merely end up undermining their conditions of existence. Indonesia's case is a good example of domestic collapse that went hand in hand with the country's involuntary detachment from the global financial system. At the other extreme lies the Malaysian response of voluntary semi-detachment from global finance, ostensibly in an effort to build and strengthen its institutional capacities. Somewhere between these two extremes, others such as Hong Kong, Singapore and Taiwan Province of China are drawing lessons from the crisis by tightening and improving capital controls. Above all, the lesson to be learned from the Asian crisis, which has drawn attention to the institutional limits to liberalization, is that of the implausibility of a world economy sustained by unlimited global flows.

THE STATE, OPENNESS OF THE ECONOMY, INCOME DISTRIBUTION AND SOCIAL PROGRAMMES

Dani Rodrik notes that owing to the increased importance of trade, the options available to national Governments have narrowed appreciably over the past three decades. Governments are now scrambling to maintain international competitiveness. In the process they are loosening their grip on their economies and retreating from their traditional role of providing social safety nets and moderating the negative outcomes of the market.

Ironically, a key component of the implicit social contract between labour and capitalists in the advanced economies from the 1950s up to the late 1980s was the provision by Government of social insurance and social safety nets that included unemployment insurance, severance payments and universal medical insurance in exchange for the adoption of freer trade policies and stances.[55] Today globalization and the freeing of trade are eroding these social contracts, and their programmes are leaving labour and vulnerable groups defenceless in the face of massive restructuring of industry, biased and polarized income distribution regimes and massive employment losses. Rodrik points to two seemingly contradictory trends in the post-

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[54] R. Leaver, "Moral and other hazards: the IMF and the Asian currency crisis", Asia Research Centre Conference, Murdoch University, Western Australia, 1998.

[55] Dani Rodrik, "Sense and nonsense in the globalization debate", *Foreign Policy* (Summer 1997), p. 20.

war period in both developed and developing countries: the growth of trade and the growth of Government. Before the Second World War, government expenditures averaged about 20 per cent of GDP of the industrialized countries. By the mid-1990s this figure had more than doubled, to 47 per cent. These increases in the government role in the economy are more striking in such countries as the United States, where it increased from 9 to 34 per cent, in Sweden, where it increased from 10 to 69 per cent, and the Netherlands, where it increased from 19 to 54 per cent. It should come as no surprise that the more open an economy is the more he Government has to do to minimize the social impacts of openness to the international economy. It is now clear that the social welfare State is the flip side of the open economy. It is here where globalization is perhaps sewing the seeds of its own demise. Openness and freer trade are increasingly eroding social programmes and polarizing labour markets and income and wealth distribution. Greater and more pronounced openness of the economy is taking place against a backdrop of Government retreating from the provision of social programmes and from playing the adjudicating force over negative market outcomes.

Real GDP per capita in the United States increased by 3 per cent between 1973 and 1995, but the real hourly earnings of non-supervisory workers declined by 14 per cent during the same period. In the decade of the 1980s all of the increase in earnings went to the top 20 per cent of the workforce and 64 per cent of that went to those at the top 1 per cent of the income distribution scale. If incomes rather than earnings are examined, the top 1 per cent gets even more—90 per cent of total income gains.[56] In 1995, four fifths of all male employees and workers in the United States earned 11 per cent less an hour in real terms than they did in 1973.[57] Back in the 1960s, John F. Kennedy summed up the expectation of rising prosperity for all in a simple statement: "When the river rises, every boat on the water rises too." The effects of globalization are making the kind of an economy to which this metaphor no longer applies. Today the richest 1 per cent of households have doubled their income since 1980, and the half million superrich now own a third of all private wealth. The top managers in American corporations, on average, had an income that was 40 times more than that of their ordinary employees. Now the ratio is 120:1. The pay of the average Fortune 500 CEO ranges from 35 to 157 times that of the average production worker. CEO salaries tripled in France, Italy and the United Kingdom and more than doubled in Germany between 1984 and 1992.[58]

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[56] Daniel Feenberg and James Poterba, "Income inequality and the incomes of very high income taxpayers", in *Tax Policy and the Economy*, vol. 7, ed. James Poterba (Cambridge, Mass.: MIT Press, 1993).

[57] Data from the US Census Bureau, current population reports. Also quoted by Lester Thurow, op. cit.

[58] Lester Thurow, op. cit.

The change in the labour market has encompassed nearly all of the world's labour. Between 1973 and 1995, 43 million workers lost their jobs.[59] The great majority soon found new work but, in two thirds of the cases, with far lower earnings and with few or no benefits. In 1980 more than 20 per cent of the workers were members of a union, whereas by 1995 this figure has declined to 14 per cent—and in France it was less than 9 per cent.[60]

The income distribution inequality between industrial and developing countries is also rising. According to UNCTAD, the share of world income owned by the richest quintile has increased by 14 percentage points since 1965, to 83 per cent of world GDP in 1990. In 1965, average income per capita in the richest quintile was 31 times the income in the poorest quintile; in 1990, it was 60 times and in 1998 it has increased to 75 times. Earnings gap inequality has also increased within countries, as the wages of skilled workers have tended to rise faster than those of the less skilled. This has been particularly true in Latin America where, with the exception of Chile, Costa Rica and Uruguay, real earnings of unskilled workers actually fell between 1990 and 1998.

The widening of the income and wealth gap between rich and poor in the same country and between countries are threatening the social stability of many countries and regions. It is difficult to believe that one can keep the effects of poverty at bay for long. There will eventually be an eruption of large and massive illegal immigration and boat people (witness the recent flood of boat people from China to both Canada and the United States), drugs, terrorism or political and social violence. The globalized world is increasingly a less stable and secure world.

THE DIGITAL ECONOMY AND DIGITAL POLITICS

The Untied States economy has grown 20 times over what it was in the early 1900s, and yet surprisingly the weight of its aggregate output has actually remained the same or even declined. The structure of output has moved away from products to services, from resources to knowledge, from hardware to software. The transition of the economy from a "mechanical" economy to a "digital" economy was facilitated by and involved substantial changes in the entire organizational and institutional framework of both the economy and society. In more than one sense, the emergence of this new digital, weightless and software economy is predicated on a new techno-economic paradigm that is fundamentally different from the old Fordist one. Some of the most salient differences between the "old" and the "new" economy are described below.

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[59] *International Herald Tribune* (6 March 1996).

[60] Friedrick Ebert Stiftung Egypt, *A partner in Development* newsletter, No. 9 (June 1999), p. 9.

While the old economy was based on an energy-intensive (resource) system, the new economy is information-intensive (knowledge). In the old system, design and engineering was done in drawing offices; now it is based on computer-aided designs. Sequential design and production is replaced by concurrent engineering. Standardized mass production is giving way to customized production. A rather stable product mix characterized the old production system; this has lost ground to the rapidly changing product mix of the new economy. Dedicated plant and equipment are replaced by flexible production arrangements. Automation is replaced by systemization; single investments and overinvestment in sectors already experiencing declines are replaced by investments in networks and clusters of firms. Hierarchical structures have been flattened horizontally, and independent departments have been integrated within lean organizational structures. Products with service are now switched around to services with products, and centralization is transformed into distributed intelligence, specialized skills into multi-skilling and planning into visioning.[61] In other words, a whole new nexus of institutions, values, techniques and management have combined to underpin the new economy. At the heart of all these changes is the ability of the new economy to develop, train and expand labour and organizational skills that can lead, manage, coordinate, programme and innovate success in this complex, rapidly changing and highly uncertain world. The change was not about adopting techniques and purchasing appropriate technology. Rather, it was about building institutions, about restructuring activities and about overhauling the entire old Fordist structures. These changes are massive and drastic. They cannot happen piecemeal, and they were not left totally to market forces and the private sector Where the transition was successful, whether in developed or in developing countries, the transformative power of the State has guided and protected it; in addition, the transition was carried out within a broader context than that provided by the small and fragmented nation-states. Major trading blocs emerged and solidified the globalization trends. The jump into the world arena, for many if not all the successful experiments, was cushioned and involved preparation through regional arrangements.

The dismantling of the Soviet Union, likened to a tectonic plate shift by Lester Thurow, has left the United States as the only effective and unchallenged world power. The withering away of the Soviet Union has had many difficult and serious consequences, in particular on the third world. These include the reduction of the maneuvering in the third world of the two superpowers, who sought influence, ideological support and markets. Furthermore, the transformation of the Eastern European countries has replaced the third world as the new economic frontier. Today, there is a crowded queue for international aid and loans, as Russia, as well as other members of the Commonwealth of Independent States (CIS), and many Eastern European countries compete with the third world for the dwindling aid resources of OECD countries. For all practical purposes, the third world's strategic importance as a contested domain for ideology, influence and markets has been eroded.

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[61] Freeman and Soete, op. cit.

The United States has exploited and will continue to exploit its new unchallenged technological and military superiority, pursuing opportunistic strategies in dealing with the rest of the world. The example of the Republic of Korea outlined above is only one of many. The United States has quickly realigned its policies with the new geopolitical reality, which is for the most part unencumbered by past cold war constraints. The rest of the world is facing the stark choice of either accepting American hegemonic interests and dictates or face harsh measures, some of which have included the kind of military thrashing that Iraq and Yugoslavia had to endure. This has prompted many to suggest that the American digital economy is being complemented by binary politics of extreme zero/one choices.

THE HUMAN DEVELOPMENT PARADIGM

The globalization debate has missed a crucial point. Proponents of globalization suggest that the process is a win/win strategy for all. In other words, the increased economic efficiencies that will follow the liberalization of trade, finance and capital will make everyone a winner. This liberalization will also unleash innovative products and processes that can transform the utilization of technology and generate real productivity gains for all. In addition, liberalization will anchor the rational allocation of scarce resources to their best uses and users. Globalization is seen as synonymous with the rationalization of production, with liberalization for efficiency and with innovation for growth. Implicitly however, success here is defined in terms of increasing the material command over goods and services and exclusively in terms of economic growth. Missing from this debate is the main purpose of globalization and the basic criteria that must be used to evaluate its consequences and contributions.

It seems to the author that the real question is: to what extent does globalization enlarge people's choices? To what extent does it create an enabling environment for people to enjoy long, healthy and creative lives? The defining difference between material growth and human development schools is that the first focuses exclusively on the expansion of one choice—income—while the second embraces the enlargement of all human choices.[62] The latter includes economic, social, political and cultural choices. It may be argued that income expansion can enlarge all other choices as well; but this is not necessarily the case. Income is typically unevenly distributed within society. Persons with limited access or no income will see their choices constrained and diminished. Income does not trickle down. It is far more like glue than mercury, sticking to the hands that touch it first. There are also more fundamental reasons why income expansion may fail to enlarge human choices and options. This has to do with national priorities and cultural choices. Surely, the choices between guns and butter, between an egalitarian model of development or an elitist one, between a command

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[62] See Mahbub ul Haq, *Reflections on Human Development* (Delhi: Oxford University Press, 1999).

economy or participatory development, between political authoritarianism or political democracy are as important if not more important than the generation of income.

The use of income is as important as its generation. Indeed, the expansion of income has less enjoyment in a political prison or cultural void than in a more open political and economic environment. Many choices do not involve any creation of wealth. A society need not be rich to afford democracy. A nation need not be affluent to treat its citizens equally. Many human choices extend far beyond economic well-being. Knowledge, wisdom, political freedom and a clean environment are not exclusively or even largely dependent on income. Expansion of wealth may or may not expand people's choices in these areas.[63]

The human development paradigm, which the author would like to tender as the best framework for evaluating globalization, questions the presumed automatic link between expanding income and expanding human choices Such a link depends on the distribution of income between countries, classes, regions, sects, ethnic groups and gender. In many respects a link between growth and human choices has to be consciously created through public policies—spending on social services, progressive taxes and biased fiscal policies that redistribute income to the poor and target vulnerable groups.[64] This does not argue for rejecting growth. On the contrary, growth is necessary to alleviate poverty and overcome tensions exacerbated by scarcity. Yet growth is not sufficient. What is needed is linking growth to human development. It requires a massive political restructuring of economic and political power. Expansion of human choices may require massive redistribution of income and wealth programmes, bank credit to the poor and "non-bankable" people, a major expansion of universal social services, equalization of access and opportunities and affirmative action programmes. Such policy programmes are fairly fundamental and progressive. They will be resisted by the elites that tend to benefit from the status quo. They will certainly clash with the basic tenets and the core ideology of globalization as practised today in the West.

The major clash between the human development perspective and globalization is about whether people are moved to centre stage of development and progress or not, and to what extent people benefit from globalization to improve their lives rather than simply to expand production. Human development regards people as both the end and the means of the development process and as the principal beneficiaries. It is development by the people and for the people. The material well-being of people is only one aspect of their lives. The human development perspective embraces all of society—not just the economy. It gives political, social, environmental and cultural factors as much attention as the economic factors.

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[63] Ibid., p. 15.

[64] Ibid., p. 17.

There are five constituent components to the human development paradigm that can be used to gauge the consequences and implications of globalization. These include equity, sustainability, democracy, productivity and empowerment. If globalization is to enlarge people's choices, people must have equitable access to opportunities. Globalization without equity reduces people's choices and may disenfranchise large segments of society and the world. Equity here should be understood as equity of opportunities, not necessarily sameness in outcomes, although very skewed results can reflect implicit or hidden barriers that need specific attention.

Sustainability refers to the right of the next generation to enjoy the same capacities and amenities enjoyed by the present generation. Sustainability need not involve the renewal of any particular natural asset. It refers rather to the sustainability of capacities and opportunities. What must be preserved is the capacity of the future generation to produce a similar level of human well-being even with a stock of human, physical, natural and social capital different from what may have been inherited. Too often sustainability is read to mean sustaining the present levels of poverty and human deprivation. This present must be changed before it is preserved and sustained. Sustainability is ultimately about sustaining distributional equity within the present generation and between the present and the future generations. Sustainability is such a fundamental tenet of human development that it makes little difference whether the paradigm is labelled "sustainable human development" or simply "human development".

Only democratic societies are sustainable and equitable societies, and their economic performance can be considered to be consistent with human development. Surely, there are many societies in South-East Asia that achieved rapid economic growth without being democratic, but being oppressive of their people tarnishes their economic record. Political oppression undermines well-being and diminishes human choice. To the extent that growth is not equivalent to development, the absence of democracy—freedom from oppression, participatory rights, accountability of Government and politicians to their electorates, majority rule, and respect and protection of minority rights—will preclude the transformation of growth into development.

The empirical record is mixed on the contribution of democracy to economic well-being. The difficulty is inherent to the way economic well-being is defined. If it is identified to reflect exclusively economic and material variables, then perhaps democracy may not perform as well as some oppressive regimes. These latter regimes are typically successful in extracting by fiat large surpluses for investment from their citizens and are not hampered by decision and implementation delays that democratic processes often involve. However, what may be sacrificed in terms of material progress in democratic societies is often more than compensated by social stability, community solidarity, freedom of choice and many other critical variables to human well-being.

Scarcity is a difficult problem. There is no human development without overcoming the dictates and implications of scarcity. Increasing productivity is an essential component of the human development paradigm. This involves investment in people and the creation of an enabling macroeconomic environment that allows them to achieve their maximum potential. Economists tend to give this factor undue importance, elevating it above all other considerations. What is unique about the human development paradigm is that while recognizing productivity as an essential factor in human development, it sees it as equal to the other many factors.

There exists the fear that the emphasis on human development could be mistaken for advocating charity and the erection of social welfare programmes. One the contrary, the human development paradigm is neither paternalistic nor based on charity or welfare concepts. Its focus is on development by the people who are responsible for their lives and who must participate fully in the economy and society. The worst thing that can happen to poor people or poor nations is to place them on permanent charity. This is inconsistent with human dignity and sustainability.

In what follows, the author will attempt to square the globalization logic and consequences against the criteria developed above. The context is that of the Arab economy and society in the next millennium.

THE ARAB ECONOMY AND SOCIETY IN THE NEW MILLENNIUM

In a comparative assessment of the global economy and the capacities of States and societies to adjust to its endemic changes, the American historian Paul Kennedy observes that "more than any other developing region" the countries of the Middle East and North Africa are afflicted by the debilitating issues of wars, internal disorders and anti-democratic forces.[65] In Kennedy's assessment, the Arab world remains least prepared to meet the challenges of the next century.

Paul Kennedy's bleak pronouncement on the Arab economy is matched by a pessimistic and critical assessment of Arab chances in the next century, a World Bank study entitled *1996 Global Economic Prospects and the Developing Countries*. It portrays a troubling outlook for economic growth and development in the Middle East and North Africa. During the 1980s, according to this study, the region's economic growth averaged less than 1 per cent (0.5 per cent) with the world average being over 3 per cent. Actually, real per capita gross domestic product fell by 2.7 per cent per year—the largest such decline in any developing region outside the transition economies of the former Soviet republics. Among the major oil exporters, per capita GDP fell by more than 2 per cent per year. The more diversified exporters, however, experienced a 3.5 per cent real rate of growth per year. Real per capita export earnings

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[65] Kennedy, op. cit., p. 209.

for the region, dropped by more than 4 per cent per year between 1980 and 1993, while the import purchasing power of the per capita export revenues fell by more than 7 per cent per year.[66]

While indeed the 1980s represent a lost decade for the Arabs and the early 1990s did not augur for much improvement, the real question is: why has development continued to be so illusive in the Arab world? What are the basic explanatory factors of this abysmally slow growth? What accounts for the success of South-East Asia and many other developing regions that outperformed the Arabs? What is needed to reverse the negative sliding economic trends? Why has the massive Arab investment in infrastructure and education failed to pay off the returns it paid elsewhere in the world?

STRUCTURAL PROBLEMS OF THE ARAB ECONOMY

Many underlying structural weaknesses in the Arab economy hamper its ability to adjust to global change, meet the challenges of "peace" and protect itself from adverse changes in the international economic environment. Over the 1970s and 1980s the Arab economy's "success" has masked many structural problems, which are now becoming more important for future economic performance. Only a brief account of the most salient problems is presented below. The Arab economy is generally characterized by the following:

- A heavy (if not exclusive) direct and/or indirect dependence on the rent from natural resources (oil). This dependence has propagated an "Arab Disease", manifested by over-priced domestic currencies that deter the development of manufacturing exports as well as inflated costs of production that undermine local industry and agriculture. Arab countries were also characterized by:

  (i) Domestic markets flooded with cheap imports that have ultimately compromised the balance of payments of even the richest States;

  (ii) Unsustainable high consumption patterns that were divorced from high production;

  (iii) Investment in large projects that were often unnecessary and unproductive, and which ultimately left the economy with large maintenance costs;

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[66] E. Mick Riordan et al., "The world economy and its implications for the Middle East and North Africa" in N. Shafik, ed., *Prospects for Middle Eastern and North African Economies: From Boom to Bust and Back?* (New York: St. Martin's Press, 1998).

(iv) Bloated government bureaucracies with overlapping rings of rent seekers.

Moreover, in most Arab countries, income was divorced from production, and domestic economies were exposed to the wide fluctuations of the world market for oil, over which the Arabs had little control. In 1996, for example, the value of Arab commodity exports reached $167 billion, or 3.2 per cent of world trade. Oil and natural gas accounted for 71.9 per cent of these total Arab exports;

- Low levels of research and development and slow rates of technological diffusion. Egypt is one Arab country that has mounted a credible research and development programme, but it under-performs its competitors in the third world and spends far below the record of developed countries on research and development (R&D). The Arabs have shown a perverse tendency to pursue turnkey technological projects with limited or no potential for the transfer of technical knowledge to the local labour market. There is also an observed slow tendency to adopt new technologies;

- Lack of well established clusters of firms. It is becoming widely recognized that over the long run, sustainable competitive advantages develop in clusters of linked industries. The Arab industrial structures are typically fragmented and weakly articulated. There have been some successful attempts in large industrial cities (e.g., Yanbu and Jubail in Saudi Arabia), but much more is needed than building on technical affinities;

- A shortage of medium-sized and large firms with a home base in the Arab world. The branch plant organization of multinationals have often resulted in poor local skill development and fewer spin-off industries developed in the Arab region than in other regions of the world. Small firms are not capable of massive efforts in (R&D) and are too fragile to compete on the increasingly globalized world markets;

- Underinvestment in training and slow adoption of flexible workplace organizations compared to other more advanced developing countries;

- Inadequate financing for technology and export-oriented companies;

- Widespread income and wealth inequality within and between Arab States, which manifests itself in limited domestic purchasing power. This in turn reduces the capacity of the local market to sustain local production and also undermines health and education opportunities for the masses, which in turn hampers labour productivity growth;

- High levels of illiteracy, in particular among females, as well as low levels of education among the labour force. Adult illiteracy rates in the Arab world are relatively high. Total adult illiteracy is about 47 per cent, which is significantly higher

than the corresponding rates in low and middle income countries in South-East Asia and Latin America or in the developing countries of Europe. When female illiteracy rates are singled out, the Arab world shows a relatively worse record. Jordan, Lebanon and the Syrian Arab Republic show relatively lower rates of illiteracy than the rest of the Arab countries, rates that are comparable to some of the rates of the newly industrializing countries (see table 1);

- Life expectancy at birth in the region is rather low. Only South Asia and sub-Saharan Africa have lower values. Population growth rates are very high and exceed all other corresponding rates, with the exception of sub-Saharan Africa, between 1980 and 1990. People 14 years and younger represented 43.3 per cent of the Arab population in 1990; the corresponding share for low- and middle-income countries is 35.3 per cent. Only the sub-Saharan Africa region has a higher percentage (see table 2);

TABLE 1. BASIC INDICATORS BY REGION

	Population (millions) mid-1990	Area (thousands of square kilometres)	GNP per capita		Average annual rate of Inflation (percentage)		Life expectancy at birth (years) 1990	Adult illiteracy (percentage)	
			Dollars, 1990	Average annual growth rate (percentage), 1965-1990	1965-80	1980-90		Female 1990	Total 1990
Low and middle income	4 145.8	78 919	840	2.5	16.7	61.8	63	46	36
Sub-Saharan Africa	495.2	23 066	340	0.2	11.4	20	51	62	50
East Asia and Pacific	1 577.2	15 572	600	5.3	9.3	6	68	34	24
South Asia	1 147.7	5 158	330	1.9	8.3	8	58	67	53
Europe	200.3	2 171	2 400	..	13.9	38.8	70	22	15
Middle East and North Africa	256.4	11 334	1 790	1.8	13.6	7.5	61	60	47
Latin America and Caribbean	433.1	20 397	2 180	1.8	31.4	192.1	68	18	16
Other economies	320.9	22 634	..	..	..	..	71	7	6
Severely indebted	455.2	21 048	2 140	2.1	27.4	173.5	67	24	21

Source: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992).

Note: Two dots (..) indicate that data are not available.

TABLE 1A. BASIC INDICATORS BY CO JNTRY

	Population (millions) mid-1995	Area (thousands of square kilometres	GNP per capita			Average annual rate of inflation (percentag)			Life expectancy at birth (years)	Adult illiteracy (percentage)	
			Dollars, 1995	Average annual growth rate (percentage)							
				1965-90	1985-95	1965-80	1980-90	1985-95	1995	Female, 1995	Total, 1995
Egypt	57.8	1 001	790	4.1	1.1	6.4	11.8	15.7	63	61	49
Sudan	26.7	2 506	..	..	..	11.5	..	..	54	88	54
Morocco	26.6	447	1 110	2.3	0.9	7	7.2	4.8	65	69	56
Syrian Arab Republic	14.1	185	1 120	2.9	0.9	7.9	14.6	16	68	44	36
Jordan	4.2	89	1 510	..	-4.5	..	..	..	70	21	13
Tunisia	9	164	1 820	3.2	1.9	6.7	7.4	6	69	45	33
Lebanon	4	10	2 660	..	..	..	..	..	68	10	8
Yemen	15.3	528	260	..	..	..	..	..	53	74	62
Kuwait	1.7	18	17 390	-4	1.1	15.9	-2.7	-0.5	76	25	21
Saudi Arabia	19	2 150	7 040	2.6	-1.9	17.9	-4.2	2.8	70	50	37
Iraq	20.1	438	..	..	..	..	..	..	65	51	40
Libyan Arab Jamahiriya	5.4	1 760	..	-3	..	15.4	0.2	..	65	50	36
Oman	2.2	212	4 820	6.4	0.3	19.9	..	-0.2	70	..	..
United Arab Emirates	2.5	84	17 400	..	-2.8	..	1.1	..	75	20	21
Israel	5.5	21	16 490	2.6	2.5	25.2	101.4	17.1	77	..	..
Republic of Korea	44.9	99	9 700	7.1	7.7	18.4	5.1	6.7	72	less 5	less 5
Turkey	61.1	779	2 780	2.6	2.2	20.8	43.2	64.6	67	28	18

Source: World Bank, *World Development Report 1992* and *1997* (Oxfo d: Oxford University Press, 1992 and 1997).

Notes: Entries in italics indicate 1990 values. Two dots (..) indicate that ata are not available.

TABLE 2. POPULATION GROWTH AND PROJECTI ONS BY REGION

	Average annual growth of population (percentage)			Population (millions)			Age structure of population			
							0-14 years		15-64 years	
	1965-80	1980-90	1989-2000	1990	2000	2025	1990	2025	1990	2025
Low and middle income	2.3	2	1.9	4 146	4 981	7 032	35.3	26.5	59.7	65.4
Sub-Saharan Africa	2.7	3.1	3	495	668	1 229	46.4	36.9	50.8	59.8
East Asia and Pacific	2.2	1.6	1.4	1 577	1 818	2 276	29.2	21.6	64.3	67
South Asia	2.4	2.2	1.8	1 148	1 377	1 896	38.2	25	57.7	68
Europe	1.1	0.1	0.3	200	217	252	26.3	20.4	64.6	64.4
Middle East and North Africa	2.8	3.1	2.9	256	341	615	43.3	34.1	53.4	61.1
Latin America and Caribbean	2.5	2.1	1.8	433	515	699	36.2	23.4	59.3	67.2
Other economies	1	0.9	0.7	321	345	355	25.2	20.2	63.4	63.1
Severely indebted	2.4	2.1	1.8	455	546	757	36.2	24.3	58.9	66.5

Source: World Bank, *World Development Report 1992* (Oxford: Oxford Jniversity Press, 1992).

• Participation rates in education, at every education level, rose dramatically in the Arab world between 1965 and 1995. There is still room for improvement, in particular when Arab indices are seen against those in the Pacific rim or Europe (see table 3). Mean years of schooling in the Arab world are still relatively lower than those in East Asia and the Pacific, Latin America and the Caribbean (see table 4a).

TABLE 3. HEALTH AND NUTRITION BY REGION

	Persons per physician			Person per nurse			Infant mortality rate (per 1,000 live births)			Daily calorie supply (per capita)	
	1965	1984	1993	1965	1984	1993	1965	1990	1995	1995	1989
Low and middle income	8 170	4 980	..	5 010	1 850	..	117	63	60	2 108	2 523
Sub-Saharan Africa	33 310	26 670	..	5 420	2 180	..	157	107	92	2 074	2 122
East Asia and Pacific	5 600	2 390	1 063	4 130	1 530	1 490	95	34	40	1 939	2 617
South Asia	6 220	3 460	2 847	8 380	2 650	3 313	147	93	75	1 992	2 215
Europe	1 260	700	371	510	480	260	71	30	26	3 069	3 433
Middle East and North Africa	7 740	2 410	..	6 160	1 800	..	151	79	54	2 153	3 011
Latin America and Caribbean	2 380	1 220	970	2 100	1 010	..	94	48	37	2 445	2 721
Other economies	500	530	522	300	290	216	30	23	..	3 125	3 327
Severely indebted	3 140	1 250	..	2 220	920	..	93	50	..	2 569	2 883

Sources: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992); World Bank, *1997 World Development Indicators* (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

The education attainments of Arab labour do not prepare it for international competition. In 1992 the average year of schooling of Arab labour was equal to 3.6 years, and even the 2010 forecast is only for 4.5 to 5.5 years. In comparison, in China it was 5.2 years in 1992 and the 2010 forecast is for 5.4 to 6.1 years. The poor performance of Arab countries is particularly evident when one considers that mean schooling in East Asia and OECD in 1992 exceeded the 2010 forecasts for the Arab world: in 1992, mean schooling in East Asia was 6.9 years, while the OECD average was 9.2 years.[67]

[67] Antoine B. Zahlan, "Globalization and science and technology policy", *Forum* (newsletter of the Economic Research Forum for the Arab Countries, Iran and Turkey) vol. 4, No. 3 (December 1997-January 1998).

TABLE 4. EDUCATION BY REGION

	Percentage of age group enrolled in education															Primary net enrolment (percentage)			Primary pupil-teacher ratio		
	Primary						Secondary						Tertiary (total)								
	Total			Female			Total			Female											
	1965	1989	1993	1965	1989	1993	1965	1989	1993	1965	1989	1993	1965	1989	1993	1975	1989	1995	1965	1989	1993
Low and middle income	78	105	105	62	97	99	22	43	39	14	37	49	3	8	..	..	89	99	37	35	28
Sub-Saharan Africa	41	69	72	31	61	65	4	18	24	2	14	20	0	2	..	..	47	..	43	40	36
East Asia and Pacific	88	129	117	..	124	116	..	46	55	16	42	51	1	5	5	..	100	99	33	23	23
South Asia	68	90	98	52	75	87	24	38	..	12	27	35	4	..	..	..	..	..	42	57	..
Europe	102	102	97	97	100	97	45	73	86	41	70	90	11	17	32	..	90	96	31	22	17
Middle East and North Africa	61	90	97	43	82	91	17	53	59	9	45	51	3	12	14	..	85	..	38	25	24
Latin America and Caribbean	99	107	110	97	107	..	20	50	51	19	55	..	4	18	15	..	87	91	34	27	24
Other economies	104	105	103	104	105	103	70	96	97	77	94	98	29	25	55	..	95	98	12	10	..
Severely indebted	96	105	..	92	100	..	25	52	..	24	54	..	6	18	..	79	88	..	33	25	..

Sources: World Bank, *World Development Report 1992, 1997* and *1998/99* (Oxford: Oxford University Press, 1992, 1997 and 1999); World Bank, *1997 World Development Indicators* (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

TABLE 4A. MEAN YEARS OF SCHOOLING BY REGION, 1985

East Asia and Pacific (excluding China)	6.9
Latin America and the Caribbean	6.2
Middle East and North Africa	5.4
South Asia	4.5
Sub-Saharan Africa	4
China	5.7

Source: Antoine B. Zahlan, "Globalization and science and technology policy", *Forum*, vol. 4, No. 3 (December 1997-January 1998).

TABLE 4B. MEAN YEARS OF SCHOOLING IN THE MIDDLE EAST AND NORTH AFRICA

Country	1960	1990	1995
Algeria	1.74	5.06	6.37
Bahrain	..	5.81	6.23
Egypt	2.75	4.94*	..
Iraq	0.92	5.17	5.9
Jordan	1.56	6.56*	..
Kuwait	..	5.65	7.05
Morocco	0.38	2.48*	..
Syrian Arab Republic	2.17	5.86	6.66
Tunisia	1.32	3.58	4.22

Source: Antoine B. Zahlan, "Globalization and Science and technology policy," *Forum*, vol. R, No. 3 (December 1997-January 1998).

Note: Two dots (..) indicate that data are not available.
* 1987 values.

- The lopsided industrial structures of many of the economies of the Arab world compromise the ability of these economies to sustain stable investment environments and provide local opportunities to local labour. The Arab economy is primarily an "old" economy. The Arabs have not ventured, in a serious manner, into the new economy. Primary manufacturing production still dominates the Arab structure of production. The Third Industrial Revolution is rooted in solid-state electronics and ICT, and the Arab countries have not been able to develop even a rudimentary base in these industries. Conversely, newly industrializing countries (NICs) in South-East Asia have successfully developed an export-oriented electronics industry. Employment in agriculture in the range of 30 to 70 per cent is typical in the most populated Arab countries. One also sees a high level of employment in services, which reflects basically inefficient bureaucracies. For example, employment in services in the Gulf Cooperation Council countries represents 65 per cent of total employment and 76 per cent of employment in Jordan;

TABLE 5. STRUCTURE OF PRODUCTION BY COUNTRY

	GDP			Distribution of gross domestic product (percent)											
	(Million of dollars)			Agriculture			Industry			Manufacturing			Services, etc.		
	1965	1990	1995	1965	1990	1995	1965	1990	1995	1965	1990	1995	1965	1990	1995
Egypt	4 550	33 210	47 349	29	17	20	27	29	21	..	16	15	45	53	59
Sudan	1 330	..	..	54	..	..	9	..	..	4	..	..	37	..	..
Morocco	2 950	25 220	32 412	23	16	14	28	33	33	16	18	19	49	51	53
Syrian Arab Republic	1 470	14 730	16 783	29	28	..	22	22	..	..	..	..	49	50	..
Jordan	..	3 330	6 105	..	8	8	..	26	27	..	12	14	..	66	65
Tunisia	880	11 080	18 035	22	16	12	24	32	29	9	17	19	54	52	59
Lebanon	1 150	..	11 143	12	..	7	21	..	24	..	..	10	67	..	69
Yemen	..	6 690	4 790	..	20	22	..	28	27	..	8	14	..	47	51
Kuwait	2 100	23 540	26 650	0	1	0	70	56	53	3	9	11	29	43	46
Saudi Arabia	2 300	80 890	125 501	8	8	..	60	45	..	9	9	..	31	48	..
Iraq	2 430	..	..	18	..	..	46	..	..	8	..	..	36	..	..
Libyan Arab Jamahiriya	1 500	..	..	5	..	..	63	..	..	3	..	..	33	..	..
Oman	60	7 700	12 102	61	3	..	23	80	..	0	4	..	16	18	..
United Arab Emirates	..	28 270	39 107	..	2	2	..	55	57	..	9	8	..	43	40
Israel	3 590	53 200	91 965	..	..	..	..	..	..	..	..	..	..	..	..
Republic of Korea	3 000	236 400	455 476	38	9	7	25	45	43	18	31	27	37	46	50
Turkey	7 660	96 500	164 789	34	18	16	25	33	31	16	24	21	41	49	53

Sources: World Bank, *World Development Report 1992* and *1997* (Oxford: Oxford University Press, 1992 and 1997).

Note: Two dots (..) indicate that data are not available.

- Manufacturing activity is still relatively modest in all Arab States. The region seems to depend rather strongly on primary production. With the exception of Jordan, Morocco and Tunisia, Arab manufacturing activity has remained limited or stagnant. Notably, however, the North African countries show higher shares in manufacturing than their counterparts in the Middle East (see table 5);

- Manufacturing value added per capita in the Arab world is below the average of low- and middle-income countries. It is significantly below even Latin American and Caribbean countries (see table 6);

TABLE 6. STRUCTURE OF MANUFACTURING BY REGION

	Value added in manufacturing (millions of current dollars)		
	1970	1989	1994
Low and middle income	112 550	815 003	963 642
Sub-Saharan Africa	3 013	..	40 925
East Asia and Pacific	34 582	274 680	341 881
South Asia	10 545	54 788	61 355
Europe	..	..	..
Middle East and North Africa	4 813	38 858	52 699
Latin America and Caribbean	35 817	258 271	258 271
Other economies	..	..	..

Sources: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992); World Bank, *1997 World Development Indicators* (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

- Textiles, clothing and chemicals are three dominant manufacturing products of the Arab world. Machinery and transport equipment manufacturing shows very low shares. By all standards, Arab manufacturing activity is traditional, and the shares of the modern sector and products are low (see table 7);

- For all practical purposes, the Arab economies are all export-oriented economies and show very high foreign trade percentages (exports plus imports as a percentage of GDP). Arab oil producers typically show export shares that exceed 70 per cent. Non-oil Arab economies are also highly exposed to trade. This exposure measured by the share of exports of goods or non-factor incomes (exporting the producer) in GDP is also relatively high. It is perhaps important to note here that the high share of exports to GDP is more the result of non-factor incomes than the exports of merchandise (see table 8);

TABLE 7. STRUCTURE OF MANUFACTURING BY COUNTRY

	Value added in manufacturing (millions of current dollars)			Distribution of manufacturing value added (percentage)														
				Food beverages, and tobacco			Textiles and clothing			Machinery and transport equipment			Chemicals			Others		
	1970	1989	1994	1970	1989	1994	1970	1989	1994	1970	1989	1994	1970	1989	1994	1970	1989	1994
Egypt	..	..	5 782	17	31	21	35	16	13	9	9	13	12	8	13	27	35	40
Sudan	140	..	521	39	..	..	34	..	..	3	..	..	5	..	..	19	..	..
Morocco	641	3 932	5 343	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syrian Arab Republic	..	..	..	37	32	25	40	22	31	3	5	..	2	5	..	20	36	44
Jordan	..	443	651	21	22	27	14	4	6	7	2	4	6	11	16	52	61	48
Tunisia	121	1 460	2 863	29	17	19	18	21	22	4	5	6	13	9	5	36	49	46
Lebanon	..	..	850	27	..	..	19	..	..	1	..	..	3	..	..	49	..	..
Yemen	..	601	606	20	..	..	50	..	..	..	..	..	1	..	..	28	..	..
Kuwait	120	2 032	2 616	5	..	8	4	..	7	1	..	7	4	..	2	86	..	76
Saudi Arabia	372	7 292	7 740	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Iraq	325	..	..	26	..	13	14	..	..	7	..	8	3	..	11	50	..	60
Libyan Arab Jamahiriya	81	..	..	64	..	..	5	..	..	0		..	12	..	..	20	..	..
Oman	0	319	495	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
United Arab Emirates	..	2 507	2 967	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Israel	..	..	..	15	16	..	14	8	..	23	28	..	7	10	..	41	38	38
Republic of Korea	1 880	66 215	102 049	26	12	10	17	14	12	11	30	34	11	9	9	36	36	36
Turkey	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sources: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992); World Bank, *1997 World Development Indicators* (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

TABLE 7A. GROWTH OF PRODUCTION BY COUNTRY

	Average annual growth rate (percentage)														
	GDP			Agriculture			Industry			Manufacturing			Services, etc.		
	1965-80	1980-90	1990-95	1965-80	1980-90	1990-95	1965-80	1980-90	1990-95	1965-80	1980-90	1990-95	1965-80	1980-90	1990-95
Egypt	7.3	5	1.3	2.7	2.5	2.1	6.9	4.3	0.4	..	..	0	13.7	6.7	1.5
Sudan	3.8	..	6.8	2.9	..	..	3.1	..	..	..	..	..	4.9	..	..
Morocco	5.7	4	1.2	2.4	6.4	-5.9	6.1	2.8	1.7	..	3.8	2.2	7.1	4.1	2.8
Syrian Arab Republic	9.1	2.1	7.4	5.9	-0.6	..	12	6.8	..	..	..	..	10.5	1.6	..
Jordan	..	..	8.2	..	..	10.2	..	..	7.9	..	..	7.7	..	..	6.2
Tunisia	5.6	3.6	3.9	5.5	2.3	-2.1	7.4	2.6	4	9.9	6	5.3	6.4	4.5	5.6
Lebanon	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yemen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kuwait	1.6	0.7	2.2	..	18.8	..	..	1	..	..	-0.2	..	..	0.6	..
Saudi Arabia	10.6	-1.8	1.7	4.1	14.6	..	11.6	-4.4	..	8.1	8.8	..	9.8	-0.03	..
Iraq	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Libyan Arab Jamahiriya	4.2	..	..	10.7	..	..	1.2	..	..	13.7	..	..	15.5	..	..
Oman	13	12.8	6	..	5.1	..	..	13.7	..	..	27	..	..	10.5	..
United Arab Emirates	..	-4.5	..	..	9.3	..	..	-8.7	..	..	2.7	..	..	3.7	..
Israel	6.8	3.2	6.4	..	..	..	..	..	..	..	..	..	..	..	..
Republic of Korea	9.9	9.7	7.2	3	2.8	1.3	16.4	12.2	7.3	18.7	12.7	7.6	9.6	9.2	7.9
Turkey	6.2	5.1	3.2	3.2	3	0.9	7.2	6.2	4.2	7.5	7.2	4.7	7.6	5.2	3.3

Sources: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992); World Bank, World Development Indicators (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

TABLE 8. STRUCTURE OF DEMAND BY COUNTRY

	Distribution of gross domestic product (percentage)					
	Gross domestic investment		Gross domestic savings		Exports of goods and non-factor services	
	1965	1994	1965	1994	1965	1990
Egypt	18	17	14	16	18	21
Sudan	10	..	9	..	15	..
Morocco	10	21	12	13	18	27
Syrian Arab Republic	10	14	10	14	17	27
Jordan	..	26	..	3	..	49
Tunisia	28	24	14	20	19	40
Lebanon	22	29	9	-12	36	46
Yemen	..	12	..	10	..	43
Kuwait	16	12	60	18	68	55
Saudi Arabia	14	20	48	30	60	40
Iraq	16	..	30	..	38	..
Libyan Arab Jamahiriya	29	..	50	..	53	..
Oman	..	17	..	27	..	49
United Arab Emirates	..	27	..	27	..	70
Israel	29	24	15	13	19	29
Republic of Korea	15	37	8	36	9	33
Turkey	15	25	13	20	6	20

Sources: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992); World Bank, *1997 World Development Indicators* (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

- While exports from East Asia and the Pacific grew at 9.8 per cent between 1980 and 1990, they declined in the Arab region at the rate of 1.1 per cent per year. Between 1990 and 1995, the disparity between the two regions is even more stark: while exports in East Asia grew at 17.8 per cent per annum, Arab exports fell by 4.7 per cent per annum. Using 1987 as the base year, the terms of trade (ratio of export prices to import prices) declined from 130 in 1985 to 96 in 1990. Although terms of trade have improved slightly in the mid-1990s, the region has still not counteracted the reverses it suffered in the 1980s. Indeed, while most regions of the developing world experienced declines in their terms of trade, none were as severe as those of the Arab region (see table 9);

TABLE 9. GROWTH OF MERCHANDISE TRADE BY REGION

	Merchandise trade (Million of dollars)		Average annual Growth rate (percentage)						Terms of trade (1987 = 100)		
			Exports			Import					
	Exports 1990	Imports 1990	1965-80	1980-90	1990-95	1965-80	1980-90	1990-95	1985	1990	1995
Low and middle income	632 304	630 328	4.1	4.1	8.8	5.8	1.4	11.4	109	100	114
Sub-Saharan Africa	34 056	32 377	6.1	0.2	0.9	5.6	-4.3	5	110	100	88
East Asia and Pacific	217 030	224 021	8.5	9.8	17.8	7.1	8	17.9	106	103	..
South Asia	27 699	38 217	1.8	6.8	10.7	0.6	4.1	8.8	101	95	185
Europe	94 082	126 493	..	..	..	..	..	..	94	103	..
Middle East and North Africa	112 644	89 842	5.7	-1.1	-4	12.8	-4.7	0.6	130	96	119
Latin America and Caribbean	123 181	101 119	-1	3	9.1	4.1	-2.1	14.3	111	110	120
Severely indebted	135 856	99 721	-0.5	3.4	..	6.6	..	..	118	101	..

Sources: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992); World Bank, *1997 World Development Indicators* (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

TABLE 10. STRUCTURE OF MERCHANDISE EXPORTS BY REGION

	Percentage share of merchandise exports									
	Fuels, minerals and metals		Other primary commodities		Machinery and transport equipment		Other manufactures		Textiles and clothing	
	1965	1990	1965	1990	1965	1990	1965	1990	1965	1990
Low and middle income	33	31	42	20	9	15	17	35	7	12
Sub-Saharan Africa	23	63	70	29	0	1	7	7	0	1
East Asia and Pacific	21	13	48	18	5	22	27	47	13	19
South Asia	6	6	57	24	1	5	36	65	29	33
Europe	10	9	21	16	33	27	32	47	8	16
Middle East and North Africa	74	75	24	12	1	1	4	15	3	4
Latin America and Caribbean	45	38	48	29	1	11	6	21	1	3
Severely indebted	39	42	42	22	8	14	9	22	2	4

Source: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992).

- Primary products accounted for over 98 per cent of Arab exports in 1965. This share declined to 87 per cent in 1990 and to 75 per cent by 1996. This is still an excessive share and is symptomatic of the heavy reliance on the export of natural resources and the limited shares of manufactured exports. Machinery and equipment were less than 1 per cent of total exports in 1965 and 1990. Chemicals and refined petroleum exports increased as did textiles and clothing, but the increases in these exports remained modest, in particular in comparison with other successful developing regions. Actually, exports of machinery and transport equipment increased in most regions between 1965 and 1990, except in the Arab region (see table 10);

- Dependence on external sources of finance is also manifested by a high indebtedness in the Arab region. Egypt's public foreign debt in 1990 was put modestly at $34.2 billion. This debt was less than $1.5 billion in 1970. It is twice as large as that of the Republic of Korea. By 1990, Kuwait had accumulated a total external debt of $34 billion. In 1995, poor Sudan had a debt of $18 billion, while Morocco's external debt is put at $22 billion, that of the Syrian Arab Republic is at $21 billion and that of Jordan at $8 billion (see table 11). Iraq's external debt is rumored to run over $100 billion. External debt as a ratio of exports was over 180 per cent for the Arab countries in 1990. It was over 52.6 per cent of the region's GNP in the same year. The latter ratio is the highest for all developing regions except sub-Saharan Africa. Servicing the debt is exacting a heavy toll on the economy. Measured as a percentage of exports, it exceeded 14.9 per cent in 1995. Earlier, the debt-service demands were even higher: in 1990, they were 24.6 per cent, and it is thanks to debt restructuring and debt forgiveness, lower international interest rates and some growth in the region that this figure has dropped. Nonetheless, interest payments on this debt alone absorb 8.1 per cent of export proceeds of the region (see table 12). Moreover, the average effective interest rate on this debt was 7.7 per cent in 1990, about 1 percentage point above the average interest rate charged on the external debts of low- and middle-income countries. The average maturity of Arab external debt was 13 years as compared to 18 years for low- and middle-income countries in 1990. This maturity average was 17 years in 1970. This pattern suggests that the burden of external indebtedness in the region is rising. The debts have to be paid more rapidly, the interest rates are higher and the export income from which to effect payments is falling (see table 13);

TABLE 11. TOTAL EXTERNAL DEBT BY COUNTRY

	Long-term debt (millions of dollars)						Use of IMF credit (in millions of dollars)			Short-term debt (in millions of dollars)			Total external debt (in millions of dollars)		
	Public and publicly guaranteed			Private non-guaranteed											
	1970	1990	1995	1970	1990	1995	1970	1990	1995	1970	1990	1995	1965	1990	1995
Egypt	1 517	34 242	31 325	0	1 000	313	49	125	103	..	4 518	2 478	..	39 885	34 116
Sudan	298	9 156	9 779	0	496	496	31	956	0	..	4 775	7 348	..	15 383	17 623
Morocco	712	22 097	21 347	15	200	331	28	750	52	..	477	469	..	23 524	22 147
Syrian Arab Republic	233	14 959	16 757	0	0	0	10	0	0	..	1 487	4 561	..	16 446	21 318
Jordan	120	6 486	6 904	0	0	0	0	94	252	..	1 097	1 040	..	7 678	7 944
Tunisia	541	6 506	8 814	0	218	193	13	176	293	..	634	931	..	7 534	9 938
Lebanon	64	545	1 550	0	0	50	0	0	0	..	1 387	1 396	..	1 932	2 996
Yemen	31	5 040	5 528	0	0	0	0	0	0	..	1 196	684	..	6 236	6 212
Kuwait	1 816	17 814	..	175	5 400	..	0	0	..	..	10 800	..	..	34 014	..
Saudi Arabia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Iraq	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Libyan Arab Jamahiriya	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oman	..	2 205	2 563	0	0	3	0	0	0	..	279	541	..	2 484	3 107
Republic of Korea	1 816	17 814	..	175	5 400	..	0	0	..	..	10 800	..	..	34 014	..
Turkey	1 846	38 595	50 128	42	1 054	7 079	74	0	684	..	9 500	16 385	..	49 149	73 592

Sources: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992); World Bank, *1997 World Development Indicators* (Washington, D.C.: World Bank, 1997).

Note: Two dots (..) indicate that data are not available.

TABLE 12. DEBT SERVICING INDICATORS

	Total external debt as a percentage of:						Total debt service as a percentage of exports of goods and services			Interest payments as a percentage of exports of goods and services	
	Exports of goods and services			GNP							
	1980	1990	1995	1980	1990	1995	1980	1990	1995	1980	1990
Low and middle income	127	171.3	151.4	26.2	40.2	39.6	20.5	19.4	..	10.5	8.5
Sub-Saharan Africa	96.8	324.3	241.7	28.5	109.4	81.3	10.9	19.3	15.4	5.7	8.9
East Asia and Pacific	88.8	91.1	98.3	16.8	26.9	32.9	13.5	14.6	12.8	7.7	5.8
South Asia	162.9	281.5	218.7	17.3	30.7	30.5	12.2	25.9	24.6	5.2	13.1
Europe	90.6	125.7	130.7	23.8	41	39.9	15.9	16.9	13.8	7.1	6.8
Middle East and North Africa	114.9	180.3	133.4	31.1	52.6	37.3	16.4	24.4	14.9	7.4	8.1
Latin America and Caribbean	196.8	257.4	212	35.2	41.6	41	37.3	25	26.2	19.7	13.3
Severely indebted	180.7	273.8	..	34.4	46.4	..	35.1	25.3	..	17.7	11.8

Source: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992).
Note: Two dots (..) indicate that data are not available.

TABLE 13. TERMS OF EXTERNAL PUBLIC BORROWING BY REGION

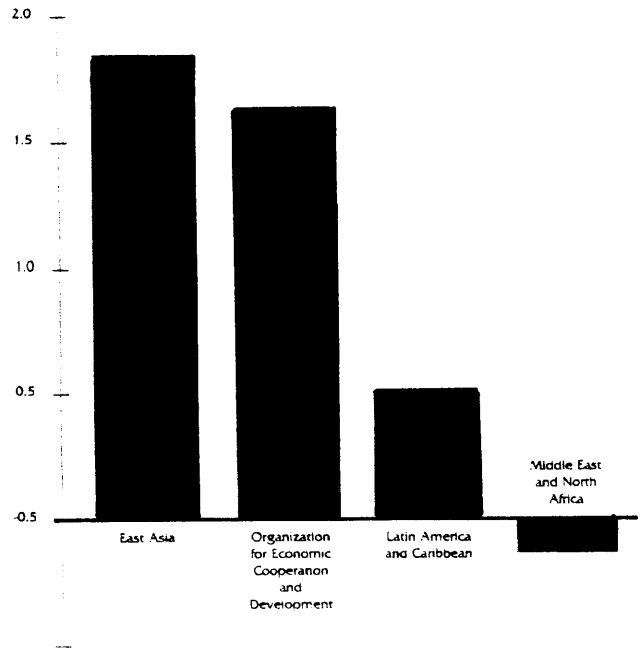
	Commitments (Millions of Dollars)		Average interest rate (percentage)		Average maturity (years)		Average grace period (years)		Public loans with variable interest rates, as a percentage of public debt	
	1970	1990	1970	1990	1970	1990	1970	1990	1970	1990
Low and middle income	12 123	92 677	5	6.8	21	18	6	5	1.7	37.8
Sub-Saharan Africa	1 890	9 577	3.6	3.9	26	26	8	7	0.9	18.2
East Asia and Pacific	1 689	25 581	5	6.8	23	19	6	6	0.5	33.1
South Asia	2 052	12 223	2.7	4.4	32	26	10	8	0	12.9
Europe	755	14 366	4.6	8.7	19	12	5	5	1.5	51.2
Middle East and North Africa	1 366	11 429	4.3	7.7	17	13	5	4	0.6	24.1
Latin America and Caribbean	4 372	19 501	7	8	14	15	4	5	4	55.9
Severely indebted	3 910	26 354	6.9	8	14	13	3	4	5	55.2

Source: World Bank, *World Development Report 1992* (Oxford: Oxford University Press, 1992).

- Total factor productivity (residuals in production functions) and partial factor productivity (average input productivity) fell drastically in the Arab region between 1960 and 1990, while in most other developing countries average total factor productivity increased. In East Asia and in the OECD countries it grew by over 1.5 per cent per year (see figure I);

- Until now, no Arab State has established an adequate science and technology system. Although there are more than 10,000 consulting firms and over 100,000 contracting firms in the Arab world, these remain small and narrowly specialized in the areas of civil engineering. A number of constraints impede the work of these consulting and design organizations. There are few or no financial services provided to these institutions on a par with their OECD competitors. They typically undertake projects within their home base and rarely outside it because they lack

Figure I. Average total factor productivity 1960-1990



Source: John Page, "Economic prospects and the role of regional development finance institutions", *Regional Economic Development in the Middle East: Opportunities and Risk* (Washington, D.C.: Center for Policy analysis on Palestine, 1995).

access to risk coverage. While Asian countries that are serious about developing domestic technological capabilities have emulated OECD practices, the Arab countries have not;[68]

- In 1995, Arab scientists and professionals published over 7,077 articles and notes in international refereed journals. About 80 per cent of this published research was carried out in academic organizations. The two leading fields are applied chemistry and clinical medicine. The Arab world's scholarly output in 1995, as measured by the number of publications per million inhabitants, was 26. By way of contrast, Brazil had 42, France 840, Switzerland 1,878 and the Republic of Korea 144. To compare the advancement of the Republic of Korea with that of the Arab world, one need only note that in 1985, the scholarly output of the Arab world was equal to that of the Republic of Korea, at 15 per million inhabitants;[69]

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[68] Zahlan, op. cit., p. 13.

[69] Ibid.

- In 1995, more than 1,000 Arab organizations published one or more scientific papers. It is estimated that the full-time equivalent of researchers working in research centres in the Arab world amounts to about 10,000 persons. In the same year, the departments of basic and applied sciences in Arab universities were staffed with 50,300 faculty members, of whom 32,200 held a Ph.D. degree in science and technology. Antoine Zahlan estimates that there are roughly 50,000 Ph.D. professionals in science and technology in the Arab world. They have limited output and limited effectiveness on account of low R&D budgets and owing also to the absence of science and technology systems;

- In 1995, about 33 per cent of all scientific publications were produced in the Gulf Cooperation Council (GCC) countries, which account for only 9 per cent of the Arab population. Egypt accounts for 32 per cent with 25 per cent of the Arab population. The Maghreb accounts for 18 per cent of the publications and has 31 per cent of the population. Jordan, Lebanon and the Syrian Arab Republic have 8 per cent of the publications and 9 per cent of the population. Only 29 organizations published 50 or more scientific papers in refereed international journals, and only 5 organizations published 200 or more papers. King Saud University (Riyadh) had 422 publications and was the leading research organization in 1995. Cairo University was next with 330 publications. King Fahd University of Petroleum and Minerals (Dhahran) had 320 publications;[70]

- The Arab countries collectively spent $750 million on research and development in 1995, about 0.2 per cent of their GNP. Industrial countries devoted $500 billion on research and development in 1995, representing about 3 per cent of their GNP. NICs devoted 1 to 3 per cent of their GNP towards R&D. The Arab world devotes few resources towards this crucial activity and far below what it could and should;

- There are very few patent applications, grants of patents or patents in force in the Arab world. In 1990, Algeria had 185, Egypt 789, Iraq 322, Tunisia 144 and Saudi Arabia 455. By way of contrast, Israel had 3,908, Japan 376,792, the Netherlands 53,514 and the Republic of Korea 31,387;

- There were 4.9 main telephone lines per 100 Arabs in 1996 as compared to 0.8 lines in 1975. This is about the same level as that of South-East Asia, but below Latin America with 10.2 lines per 100 inhabitants. The disparities between the various countries of the region are staggering, with 5 main lines per 100 in Egypt, 30.2 in the United Arab Emirates, and 1.3 lines in Yemen. Most of the telecommunication industries are public utilities operating under monopoly conditions. Only Morocco and Tunisia have opened the door to foreign investment in these sectors;

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[70] Ibid.

- Mobile cellular phones are widely used in the GCC countries, Jordan, Lebanon, Morocco, Tunisia and Yemen. They are typically very expensive to use, and the initial subscription fees are prohibitive. In Saudi Arabia the subscription fee is $800—the highest in the world. In Saudi Arabia there are more than 10 cellular phones per 100 inhabitants and in Lebanon 6.5, but in Jordan the rate falls to 0.3 and in Yemen as low as 0.1. When compared to averages in Latin America (1.4) and South-East Asia (0.7), the Arab numbers are rather high. It is difficult to determine precisely the business/consumption divide in the use of the cellular phones; there are considerable grounds for suspecting that their use in consumption is rather high;

- Unlike mobile phones, Internet connections are limited and are at the initial stages of use. Saudi Arabia and the Syrian Arab Republic do not permit Internet connections for "security" reasons. The highest rates of connectivity are in the United Arab Emirates and then only at the rate of 0.8 hosts per 1,000 inhabitants. There are 0.4 hosts in Jordan, about 0.03 in Egypt, Lebanon and Morocco, 0.001 in Algeria and 0.002 in Tunisia. This compares to 0.06 in South-East Asia and 0.35 in Latin America.

- Computer ownership is rather high in the Arab region, with the United Arab Emirates having 6.5 personal computers per 100 inhabitants, followed by Saudi Arabia with 3.7, Lebanon 2.4, Oman 1.0, Jordan and Tunisia 0.7, Egypt 0.6, Algeria 0.3, Morocco 0.2 and the Syrian Arab Republic 0.1. In Latin America the average per 100 inhabitants is 2.4 and in South-East Asia it is 0.45;

- Arab countries spend about 4.5 to 5.5 per cent of their GDP on education. This is about the same as most low- to middle-income developing countries spend on education, but significantly lower than advanced and NIC expenditures. Furthermore, the Arabs spend heavily on tertiary levels (four times more than on primary and secondary levels). This is a significantly higher ratio than other developing countries spend on this level;

- Between 1990 and 1995, in 20-24 age group, 0.1 per cent of Egyptians studied mathematics and computer science and 2.5 per cent studied engineering. These figures were 0.8 and 2.5 for Algeria, 0.6 and 1.1 for Lebanon, 0.3 and 0.5 for Saudi Arabia, 0.3 and 0.8 for Tunisia, 0.1 and 1.0 for the Syrian Arab Republic , and 2.5 and 3.1 for Jordan. This compares with 2.8 and 13.5 for the Republic of Korea, 1.2 and 2.7 for Mexico and 2.7 and 4.2 for the United States;

- The competency of the education system is typically low. A recent study in Egypt showed that competency in language and mathematical skills is 30 per cent and 40 per cent, respectively. In a 1996 international study of comparative educational achievement, Kuwait, the only Arab entrant from the Arab world, came in thirty-ninth out of 41. A year earlier Jordan came last;

- The high unemployment rates in the Arab world (10 million unemployed), in particular among university graduates (30 to 35 per cent), are rather

high. This may be in part due to the lack of synchronizatic n of the educational system output with the skills required by industry and Government;

- The region has the highest population growtl in the world. More than 30 million new jobs will be required by the year 2005 sin ply to employ the expected increase in labour supply.

ARAB ECONOMIC AND SOCIAL CHA LLENGES

While it may be convenient to argue that the Arab economic difficulties of the 1980s can be completely explained by the decline in oil prices, the truth lies elsewhere. The fact that oil prices can affect so adversel / all economic indicators of performance is itself revealing. In this respect the heav / dependence on oil rents is symptomatic of general economic failure.

The Arab economy today remains almost as undiversified as it was in the 1970s. Oil exports are still the exclusive economic engine of the region. Beyond oil, the Arab world, with over 260 million people, does not exp ort what Finland does with 6 million people. Rentierism is a widespread phenomenon and is not restricted to the oil-rich countries. There is now a "secondary dependence" on oil revenues throughout the region. Exports of manufactured renewable commodities and services contribute very modestly to the external sources of finance of all Arab countries. Non-oil-producing Arab countries have exported their producers to the Gulf and have enjoyed the convenience of remittances to the developm nt of domestic exports. Manufacturing activity outside oil is limited, disartic lated, traditional, inward-looking, and technologically dependent on outside sour es. Limited technological capabilities are developed within the region. There is stro g preference for "turnkey" projects. Expenditures on research and development are modest if not totally absent. Regional cooperation is limited and could be expanded to the benefit of all. Most Arab countries are linking to non-Arab economic centres with little or no concern for their Arab neighbours. External indebtedness is massive and is beginning to sap the energies of the region. The Arab region is still gambling on so-called "sunset" industries and old Fordist and smokestack manufacturing activities. There is little evidence of the new economy in the industrial structures of most Arab economies. Domestic savings are inadequate, rarely financing investment. High and unproductive consumption habits have been staunchly ingrained in the operating systems of most Arab societies. Illiteracy is still excessively high. Mean years of schooling have increased but remain far below other successful develo ping countries. Industrial policies are almost too stringent, or absent entirely, and there is a tendency to adopt IMF peddled "policy fads" that are inappropriate for Arab development and values.

Surely these are serious problems, and there is little that a development policy framework can do to deal with them individually or collectively. However, an appreciation of what went wrong and that simplistic and borrowed solutions will not

suffice is critical for reversing the negative operating mechanisms of the recent slow-down and entrenched underdevelopment of the Arab world.

There is also a tendency in the Arab world to underestimate positive achievements and to exaggerate negative trends. When oil is excluded, intraregional exports are a quite respectable proportion of total exports, amounting to about 19 per cent of total Arab non-oil exports. This percentage is comparable to intraregional exports in Mercosur and the Association of South-East Asian Nations (ASEAN), although it is far smaller in absolute amounts ($8 billion). This is a crucial and positive point. It indicates that more may be going on in terms of intraregional trade than aggregated data that include oil would suggest, and that intraregional non-oil trade may have the potential for acting as a basis for developing international competitiveness in non-oil goods.[71]

Arab intraregional trade in non-oil products increased at the rate of 11 per cent per year throughout the 1990s, double the growth rate achieved in the 1980s. The 1990s also saw more rapid growth in intraregional non-oil exports than in global non-oil exports. Whatever these trends may suggest about the region's integration into the global economy (or lack of it) they *call into question the conventional view of a region that barely trades with itself and has little prospect of doing more in the future.*[72]

Among the bright achievements of the Arabs are the solid gains in the GCC in the upstream development of oil into higher value added products and some successful achievements in certain specific sectors in each of Egypt, Jordan, the Syrian Arab Republic and Tunisia.

There is still more to be done. What must be avoided are simplistic solutions that tend to exaggerate the implications of one paradigm or another. Most of the tendered recommendations these days involve neo-Schumpeterian solutions and/or the perpetuation of the mythology of technological solutions. A more balanced and eclectic perspective is needed.

The Arabs need to move away from the rentier economies (heavy dependence on rents from oil, or the monetization of oil wealth) of the past to productive economies based on high value added and renewable production. This will increasingly depend on building innovation capabilities, entrepreneurial and technical skills, appropriate educational and research policies, broader democratization of political and social systems, and a full-fledged and deliberate entry into the new

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[71] Kemal Dervis, Peter Bocock and Julia Devlin, "Intraregional trade among Arab countries: building a competitive economic neighborhood" (paper presented at the fifty-second annual conference of the Middle East Institute Washington, D.C., 17 October 1998).

[72] Ibid.

economy. To move into high value added and renewable sustainable) production the Arabs must build and strengthen their competitive fundamentals. These call for the following:

- Massive literacy campaigns, in particular for females. The aim is to empower people to participate fully in the development project;

- Improving, balancing and reforming the educational systems at all levels. There is an urgent need to emphasize science, computer literacy and high-tech subjects;

- Embarking on a serious streamlining of the bureaucracy (removing red tape), making government decisions, policies and procedures more transparent and instituting better and more effective governance systems with greater room for participation of the citizens in the formulation and review of policies. This follows from the realization of the importance of the State in liberalization strategy, in building the requisite ICT infrastructure, in coordinating investment allocation towards the higher productivity sectors, in upgrading skills, in guiding the move to the new economy, in the push towards diversification, in ensuring the protection of domestic interests against currency speculators and volatile capital markets, in thwarting excessive use of self-interest and power by strong hostile external Governments and in the contributions of democracy to the unleashing of the energies and innovative powers of people. In building the transformative capacity of the State, the Arabs will be following the lead of some of the most durable, successful and sustainable developmental efforts in South-East Asia;

- Empowerment of the private sector and community initiatives through partnerships with the public sector and through providing the enabling macroeconomic environment to sustain and solidify their participation;

- Effective policies and institution-building to encourage and develop domestic savings and coordinate investment;

- Raising skill levels (learning by doing, abandoning turnkey projects and implementing massive and widely accessible training programmes). The emphasis here should be on building domestic productive capacities that can absorb and train on the shop floor, in the schools and everywhere;

- Increasing domestic technological capabilities by building university centres of excellence and local technology incubators and by coalescing domestic consulting houses and engineering-design contractors into viable international competitors;

- Developing linkages and networks between firms that should be seen as technoeconomic laboratories and agents of knowledge creation and dissemination. This is accomplished by helping firms strengthen their internal problem-solving capacities (though skill upgrading and building competencies) and by fostering external linkages to other firms and knowledge-producing institutions;

- Developing linkages and networks within each State and among Arab States. There is a crucial advantage to developing competitive structures among similar and neighbouring economies. There is a teething period that allows States to develop sharper and more pronounced capabilities before they expose themselves fully to the currents of world competition.

- Building international capabilities in all aspects of production;

- Increasing the share of the new economy and the knowledge economy. Competitiveness now seems to depend on getting the right information and knowledge to the right place at the right time. This requires a viable and efficient informational infrastructure from Internet connections, to Web sites, to satellites, to fibre optics, to Governments opening up the information highway corridors;

- Continuous innovation through developing national and regional policies that foster a spirit of innovation as well as through dismantling barriers that preclude the full participation of people and in ensuring that they realize the principal benefits of development.

Each one of the elements above could be the subject of a research project. What is intended here is a general outline of the fundamentals that have to be debated. These were chosen because they are proven ingredients in the success of other advanced and rapidly developing countries, because they address directly observed weaknesses in the Arab economy, because they build on Arab strengths as a means to meet the challenges facing them, and because they would create large indirect and spin-off benefits throughout Arab economies.

Focusing on the competitive fundamentals and increasing value added activities that are divorced from natural resource dependency have implications for change throughout the economy: for business, for other sectors, for individual State Governments, for regional institutions and for the Arab economy and society as a whole. A consistent picture has recently emerged from the diverse literature on technological gaps, information gaps and knowledge gaps. The potential for "catch-up" is there but can only be realized by countries that have a sufficiently strong "social capability", that is, those that manage to mobilize the necessary resources (investments, education, R&D) and actors (people, firms, entrepreneurs, Government,

universities, unions). These factors should also be seen as complements rather than as substitutes for economic growth.

It is equally crucial to not treat technology as "blueprints" or "designs" that can bought and sought in the market. Rather, technology should be treated as organizationally embedded, tacitly cumulative in character, influenced by the interaction between firms and their environments, and geographically localized.

Governments will still have to act in the following critical areas for catch-up to happen and to yield the greatest benefits in strengthening Arab competitive fundamentals.

- Changing the way they invest for the future: putting strong emphasis on investing in people, training, information and knowledge;

- Changing the way the public sector relates to the private sector: emphasizing the development of sectoral strategies, strategic groups of companies, community initiatives and regional cooperation. Above all removing the impediments on the full participation of people in all aspects of development;

- Changing the management of economic change: finding winners, building on strength and creating flexible systems for a more adaptable economy;

- Changing the structure of bureaucracy: emphasizing efficiency, merit, expertise, accountability, transparency, service, objectivity and integrity;

- Changing the balance of power between the public sector and civil society: emphasizing balance and the empowerment of institutions that mediate between the State and the citizens. Solidifying the democratic practices that allowed the industrial countries to realize their advantages and to progress;

- Building the needed infrastructure in all of its aspects—the physical, the informational, the organizational and technological.

Although Governments have an important and vital role to play in the economic development process, they cannot alone make the policy work. Everyone must work together to develop an economy with the built-in capacity to upgrade and continuously move to higher value added and to the newer realms of the international economy. The State, however, must retain its adjudicating powers and eminence in protecting the vulnerable and the national interest.

It used to be fashionable to compare countries in terms of their R&D systems, but it has been increasingly recognized that a *national system of innovation*, of the type being suggested here, is far more than an R&D system. It is imperative to evaluate the qualitative feature of an innovation system, as well as such quantitative features as the level of R&D expenditures. On the qualitative side there is considerable agreement on the importance of user-producer relationships, of subcontracting networks, of external linkages within the science/technology system, of the training system in industry, of the importance of the physical/informational infrastructure, of skills and tacit knowledge, of the consultancy system and markets, of technology import capacity, of reverse engineering, and of linkages between R&D, production and marketing.

The development policy being defined here is not a budget or a short-term stabilization policy or even a plan. It is a framework that is intended to create a shared vision and a common sense of direction that shapes the way all segments of the economy and society can work together.

Value added is the difference between an industry's total sales and the cost of raw materials and the goods and services it buys from other industries. The higher the value added, the larger the income that can be shared by business, labour and Government. Companies can increase their value added by becoming more efficient and reducing unit costs. Alternatively, they can produce something that is worth more to their customers. Higher value added activities include continuous improvements in design and engineering, research and development, training, marketing, quality control and customer service. Other activities such as organizational innovations, greater workplace flexibility, adopting state-of-the-art technologies and reducing cycle times can dramatically reduce cost or material inputs and thereby increase value added.

Moving into higher value added is not a one-time event. It should be seen as a process, not a destination. Higher value added is a result of both doing different things and doing them differently. In the Arab world, moving into higher value added requires moving in six principal directions.

First, we need to move away from exclusive dependence on oil and oil-related production. There is indeed higher value added in moving upstream and downstream in oil processing. That we should do. But we should also increasingly move away from oil and away from our dependence on natural resources. This is needed to diversify economic structures, markets, technological capabilities and skills and to circumvent rampant rentierism in the Arab economy.

Second, we need to develop a stronger presence in the new economy where industries grow rapidly, are less volatile and can create new knowledge.

Third, we need to emphasize renewable sources of income (sustainability). It is not smart to build industrial foundations on a non-renewable resource that will disappear in the lifetime of our grandchildren.

Fourth, moving into higher value added will require a great deal of effort in research and development and the placing of emphasis on developing technological capabilities. This is precisely what is needed to address a fundamental structural weakness in the Arab economy of today.

Fifth, Arab universities should spearhead the technological transformation process, as universities did in Brazil and Malaysia. Government, industry and universities can team together to build technological incubators, and consulting houses can work together and independently to build the enabling environment for domestic technological innovations.

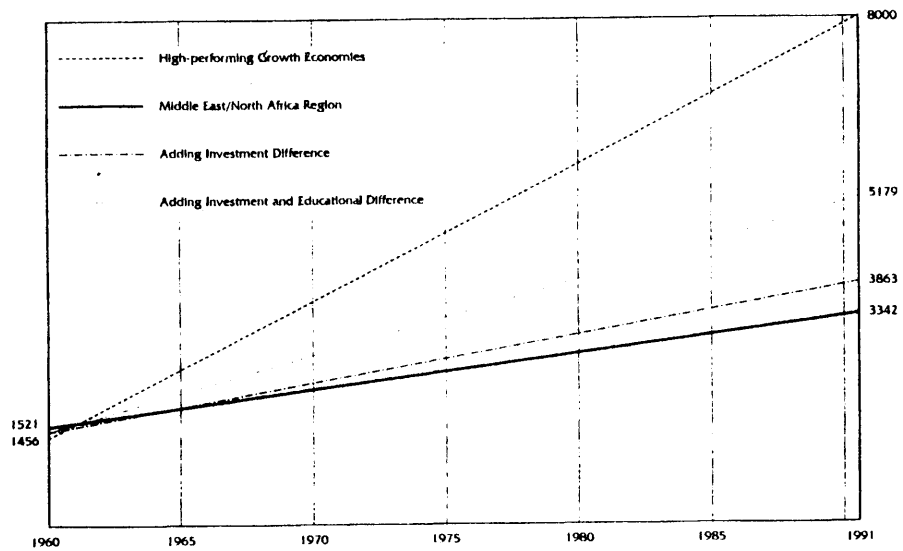
Sixth, we can no longer depend on low wages to compete in the world market. Most of the wages in the Arab world that are under pressure from wages and alternative employment in the Gulf are relatively high. What is needed is high factor productivity that can reduce cost of production and increase the competitive capabilities of domestic production. Low wages do not necessarily mean low costs, in particular if productivity is low. What counts is not the cost of labour but the unit labour cost (this is the total labour cost divided by total output).

It is legitimate to ask whether these prescribed actions can deal with the complex and endemic difficulties constraining the Arab economy and society. Indeed, it is difficult to suggest that following the programme above would bring about total economic success. Figure II shows the kind of returns that the Arab economy could realize if it were to "adopt" the Asian ingredients and proportions. It is clear from figure II that if the Arabs added only the "investment difference", per capita income in the Arab region would rise from the current $3,342 to $3,863. A much larger return could be expected by adding the "investment and education difference". Per capita income would rise to $5,179, with a net educational return of $1,316 per person. If all the ingredients of high-performing growth economies were factored in, per capita incomes could rise above $8,000.

The returns to education, investment and the export of manufacturing products are high and real. The Arab economy does not have time to spare: the changes are needed quickly.

Figure II. Differential in per capita income growth

Per capita GDP in US dollars



Source: John Page, "Economic prospects and the role of regional development finance institutions", *Regional Economic Development in the Middle East: Opportunities and Risk* (Washington, D.C.: Center for Policy Analysis on Palestine, 1995).

CONCLUSIONS

In a process that is likely to be with us for a long time, the forces of globalization are gaining momentum. The push for liberalizing trade, finance and capital has resulted in higher efficiencies for some but not for all. The world is more polarized now than it has ever been since the 1920s. The inequitable distribution of income and wealth is growing between countries and within individual countries. The ranks of the poor or those who have slipped below the poverty line are swelling. Technological change is proceeding at a dizzying pace, levelling old Fordist structures and ushering in new structures and models of economic, political and social structures that influence and shape the way people interact, work, live and move. Many, however, are questioning whether these changes are inevitable and for the good of all.

While productivity increases have so far been modest or difficult to measure, they are concentrated in a few countries and regions of the world. This has prompted some to call this process "truncated globalization". Environmental degradation is rampant, with natural capital being depleted at faster rates than its regenerative capacity. Future generations will not have the same capacity or opportunity to enjoy a well-being similar to our own. The globalization processes are increasingly unsustainable.

The new ICT technologies are creating new jobs, but they are also destroying jobs. Unemployment rates in the industrialized world are at record levels, and those in the third world are far higher. In the past, the openness of the economies to commerce and trade was underpinned by elaborate social safety nets that took care of those whom the market-propelled growth left behind. Today trade liberalization is joined by financial and capital movement liberalization that has wrought havoc on some of the most advanced third world countries of East Asia. Governments—in retreat just when TNCs are solidifying their powers and asserting their dominance and clout—are abandoning their protective roles of their vulnerable groups and of their domestic economies.

Ironically globalization, which was supposed to broaden people's choices and options, has resulted in the weakening of people's power and the restriction of their choices. The increasing mobility of capital along with the decreasing mobility of labour has weakened the bargaining power of labour and vulnerable groups and has meant that capital can impose its interest and dictates upon labour. Social programmes are now too expensive and an impediment to competition. They cannot be afforded because capitalists are not willing to finance them, and they can move their capital in a microsecond into any place in the world, within a web of intractable financial derivatives.

People are not at the centre stage of globalization. Rather, it is capital and technology that assume this role. The State has abandoned its adjudicating powers and

now only attempts to moderate market outcomes and underpin social stability with social safety nets. Globalization has increasingly disempowered people.

Delinking from the world is not a viable option for the third world or the Arabs. Indeed, it is the regulated entry into the world fray that is at the heart of the challenge to the Arabs. It is here where the transformative powers of the State can guide and safeguard their interests as they embark on the process of opening up their economies and transforming their institutions and performances.

A regulated and cautious entry into the new economy and the new international arena is necessary, but only after a "teething period" within the comfortable confines of a competitive regional Arab common market. This would require the overhaul of the Arab education system, with more emphasis on science and technology, coupled with a massive literacy campaign. In addition, creating strategic clusters of firms to overcome the small and medium sizes of Arab firms would help create the competitive agents that could compete with the giant TNCs that are levelling any barrier standing in the way of their complete domination of world trade.

Innovation does not spring forth in oppressive societies. There is a direct link between freedom and innovation, and it is only democratic societies that typically unleash the innovative forces of people. Democracy in the Arab world is limited, which perhaps explains why the Arabs have lagged behind other nations in developing performance.

Human development imperatives call for equity, sustainability, democracy, productivity and empowerment—and globalization threatens most of these pillars. The Arab challenge is about sustaining human development in an increasingly globalized and cruel world.

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