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U.S. Energy Security Policy: The Reagan Administration Has Got It Right

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Energy security policy in the United States is, at lony last, on the right track. Policy changes since 1979 have reversed the disastrous direction of U.S. policies adopted in the wake of the first oil crisis. U.S. defense and hence deterrence posture in the Persian Gulf is stronger today, even though the threat to that region has become more complex and unpredictable. U.S. economic policy, particularly moves toward market pricing of energy supplies, has sharply reduced America's vulnerability to a new oil supply disruption, at least in contrast to controlled prices after 1973 which encouraged domestic consumption and discouraged production. And, finally, the accumulation of a meaningful strategic petroleum reserve of over 400 m. barrels offers for the first time a viable instrument for dealing with an actual oil supply crisis without resorting immediately to economically costly price and allocation controls.

There are still many areas of disagreement in U.S. energy security policy, even in some areas of broad policy direction, such as market pricing of natural gas supplies. Nevertheless, the debate since 1979 has become somewhat less partisan, and the opportunity exists to place U.S. energy security policies, regardless of who wins the elections in November, on a sound and sustainable course for the rest of this decade.

The key to achieve this outcome is to understand in broadest context what the Carter Administration started and the Reagan Administration has vigorously sought to complete in recent energy security policy. U.S. policymaking frequently suffers from two debilitating maladies, one political, the other analytical. The political malady is excessive partisanship which exaggerates differences and inspires vendettas to assign blame and credit for various policy outcomes. This malady is hardly fatal, however, and may be endemic to a vigorous democratic system.

More serious is the analytical malady. Our system, based as it is on individual and group interests, is prone to define problems too narrowly and to ignore interrelationships among problems and, even more importantly, trade-offs among solutions. Some groups, for example, think about energy security policy almost entirely in terms of emergency preparedness measures and relatively ignore or even oppose complementary defense and economic policy initiatives that would reduce the likelihood of an emergency or lower its long-term costs if it occurred. Others become so preoccuppied with the economics of market-based energy pricing in the United States or the politics of the Persian Gulf and Middle East that they neglect emergency preparedness measures. So it becomes possible in our system to define energy security, as we did in late 1973, in terms of national energy independence, without a passing thought to the costs this might entail by drawing excessive resources away from other worthy economic or defense pursuits, or the problems it might create for U.S. Alliance and foreign policy interests.

Today, fortunately, more and more Americans have recognized that energy security is not <u>primarily</u> (let alone exclusively) a matter of reducing dependence. Reducing dependence beyond levels dictated by the marketplace involves opportunity costs (assuming the dependence reflects comparative advantage). While the costs of reducing <u>U.S.</u> dependence on oil imports might be tolerable (although inevitably harmful to other U.S. objectives), costs of reducing <u>Western</u> dependence would be prohibitive.

U.S. energy security therefore should be based on levels of oil or other energy imports consistent with market forces. It should then seek to

"secure" these market-related import levels by means of an appropriate insurance policy, the cost of which must always be weighed against other desirable non-energy goals in a real world environment of inevitably limited resources.

The insurance policy must also be broadly conceived. It consists of three major areas of attention and effort, all of which are interrelated and can work to reinforce one another, or, if one area is given too much attention and priority, to defeat one another.

1. safeguarding dependence by a diplomacy and defense policy that deters disruptions and restores supplies as soon as possible after a disruption.

2. reducing vulnerability to a possible disruption by diversifying foreign supplies, encouraging domestic supplies and developing alternatives preferably at minimum cost by relying on market forces and eliminating market impediments rather than subsidizing to compensate for market impediments.

3. coping with disruptions when they occur by emergency responses that facilitate adjustment to what are inevitable and unavoidable economic costs, albeit within politically and socially acceptable limits.

When viewed in this perspective, defense and economic policy are as much a part of energy security policy as emergency preparedness. Indeed, the more successful U.S. diplomacy and defense policy is in deterring disruptions, the lower the probability of a disruption is and hence the less insurance one needs by way of reducing vulnerability or building up emergency capabilities. This does not mean that further measures to reduce vulnerability or establish emergency capabilities are not desirable especially if they can be achieved by relying on cost-efficient market forces. But it does set limits on the amounts of insurance one might wish to buy in these other two areas through non-market measures.

The task of safeguarding dependence not only affects the probability of disruptions but also determines the long-term costs of disruption. If supplies can be restored fully and quickly after a disruption, either as a result of successful diplomatic or military action or both, there will be

no long-term adjustments required by the disruption. If supplies cannot be fully restored, the extent of vulnerability of the importing nation defines the potential long-term costs. These costs equal the opportunity costs of obtaining alternative foreign or domestic supplies or corresspondingly reducing demand to make up for the permanently-disrupted supplies. Finally, these long-term costs can be compounded by inappropriate emergency responses which seek to prevent adjustment to long-term costs or which magnify short-term dislocations.

Response to 1973 Crisis

Let's consider for a moment, in the context of this perspective, how we reacted to the 1973 oil crisis. In my judgment, we vastly overemphasized the emergency response aspect of our energy security, while simultaneously neglecting and even making more difficult the tasks of safeguarding dependence and reducing vulnerability. Our relative neglect of measures to deter disruption or restore disrupted supplies meant there would be substantial long-term costs for the U.S. economy, defined by our considerable vulnerability at the time to cutoffs of Arab OPEC oil. Yet our emergency responses, rooted in price and allocation controls, prevented adjustment to these long-term costs and, more seriously, actually increased them by adding over time to our appetite for oil imports, especially from insecure sources, and hence our vulnerability.

The 1973 oil crisis came at a time when U.S. foreign and defense policy was being retrenched. Western strength in the Persian Gulf was on the wane. The British had withdrawn east of Suez, and the United States had declined to replace them, searching instead for surrogates in the area to "defend" Western interests. U.S. diplomacy, preoccupied by the Vietnam negotiations and then the Year of Europe, was also relatively

inactive in the area. In these circumstances, U.S. policy did little to deter the 1973 disruption, and even less to restore disrupted supplies, once production and exports were cut back.1/

This failure of U.S. diplomacy and defense policy meant there would be a long-term change in the world supply and demand equation for oil. The U.S. economy would have to adjust to this change. But because our vulnerability was so high at the time, the costs of this long-term adjustment promised to be substantial. To absorb these costs in a short period of time would have been politically difficult if not impossible. Thus a failure to pay sufficient attention to levels of vulnerability that could be managed politically in the event of a disruption led to a third failure of policy in 1973 - emergency measures to control the price and allocate the demand for oil which prevented adjustment and eventually increased vulnerability during the period following the first oil crisis. This increasing vulnerability, in turn, reinforced the prospect of "energy nightmares" in the Persian Gulf and made the task of deterring disruptions seem increasingly insurmountable.2/ Inappropriate emergency response policies, in short, seriously crippled America's efforts in the other two-energy security areas, namely reducing vulnerability and deterring disruptions.

Response to 1979 Crisis

The second oil crisis was possible in good part because America's energy security policy responses to the first oil crisis were so badly misdirected. Have we done any better in response to the second oil crisis?

1/See my article, "Securing Energy", The Washington Quarterly.

2/Joseph S. Nue, Jr. "Energy Nightmares", Foreign Policy, No. 40, Fall 1980, pp. 132-155.

I think, without doubt, we have. And it is long past time for us to recognize that the lessons we have learned are not partisan lessons. The previous Administration started the effort to reverse misguided policies (which had been initiated by a Republican, not Democratic, Administration) in the wake of the second oil shock, and the present Administration, rather than pursuing an ideological approach to energy security, is actually implementing more resolutely and with greater chance of success a more balanced combination of energy security efforts that can secure America's energy future at acceptable economic and political cost.

A primary element of this Administration's energy security policy is the strengthening of America's defense and diplomatic capabilities. Rather than retrenching from oil rich regions, U.S. policy, in close collaboration with allies, is purposefully reasserting American and Western interests. The policy entails risks to be sure, and a vibrant democratic community such as our own can safely afford to debate and disagree on the details. But it would be well for the energy security policy community in particular to recognize that energy security is at stake in America's defense debate. It matters whether we have a naval and amphibious capability to deter closure of the Strait of Hormuz or to reopen the strait soon after an attempt at closure, particularly in dispelling nightmares of six-month or year-long "major disruptions" of Persian Gulf oil supplies, which preoccupied some analysts in the wake of the 1979 crisis.

A second major element of this Administration's energy security program is the strengthening of America's economic capability through policies to reduce spending, taxes, excessive regulations and the rate of growth of the money supply. These broad economic policy goals were given

priority over specific energy policies not because the latter were any less important but because the market process was thought to make the most efficient choices about the allocation of energy resources and demand consistent with other equally important non-energy economic objectives. The Carter Administration viewed energy policy as a principal ingredient of economic policy. The Department of Energy was set up and expanded because a comprehensive energy policy was seen as contributing to economic revitalization. What was good for energy policy, it was argued, would be good for economic policy. By contrast, the Reagan Administration views broad economic policy as the major factor promoting sound energy policy (or industrial policy or any other sectoral policy). What is good for the economy is felt to be good for energy. Hence incentives for energy production, conservation and emergency preparedness have expanded in the overall economy, even as incentives for near-market commercial energy projects have been reduced in government budgets.

Thus, the Administration's principal effort to reduce energy vulnerability before another crisis is primary reliance on the market place. This policy is an energy security, no less than an economic, policy. It is designed to reduce energy vulnerability to the extent compatible with other economic and defense policy objectives. Given the previous policies of price and allocation controls, it is succeeding in substantially reducing America's energy vulnerability. In 1980, a year when the U.S. economy grew at a nominal rate of 9%, the United States imported 6.9 mbd of crude oil and petroleum products - 62% from OPEC sources, 37% from Arab OPEC alone, and 38% from non-OPEC sources. In 1983, when the U.S. economy grew at a nominal rate of about 8%, the United States imported an average of 4.99

mbd of crude and products - now 63% coming from non-OPEC sources, only 37% from OPEC, and 12% from Arab OPEC sources.[3]/ Major efforts to achieve further reductions in vulnerability remain, such as the effort to deregulate natural gas and adopt more reasonable policies for encouraging coal production and use. These efforts should take priority, in my view, over proposals to place a "security premium" on oil imports. The latter once again constitutes an attempt to adopt a nonmarket measure in one place to compensate for continuing nonmarket measures in other places. Put candidly, the compounding of ill-founded regulatory measures may represent a policy for social security or equity but not a policy for energy security.

Admittedly, the decline in U.S. imports as well as the shift to non-OPEC supplies (since OPEC is the marginal supplier) is attributable in some unknowable measure to the recent recession. But it is also due to the pass through of market prices, particularly in oil. Production and consumption have already been affected by these higher prices. Further, conservation will come in industry if recovery can be sustained and new investment in more energy efficient plant and capital equipment is forthcoming. Indeed improvements in energy saving capital could offset a substantial part of the heightened demand for energy that will accompany renewed economic expansion. There has been little new investment in the U.S. economy since 1979 reflecting the price changes brought about by the second oil crisis.

The third element of the Administration's energy security response has been perhaps the most misunderstood. It encompasses emergency preparedness

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[3]/Petroleum Supply Monthly, March 1984.

measures that emphasize a primary reliance on the market place and government intervention, if necessary, by bringing new supplies on the market rather than allocating demand or controlling prices. Part of this misunderstanding derives from a failure to view these emergency preparedness measures in light of the other two efforts comprising America's energy security. Because this Administration gives high priority to safeguarding energy dependence through an active diplomatic and defense policy and to reducing vulnerability through market-based energy and economic policies before a crisis, it is not inclined to pull the issue of emergency preparedness measures out of context or to design emergency measures which are inconsistent with other energy security efforts.

Standby allocation plans weaken incentives in the marketplace to reduce vulnerability before a crisis. Private and public users take fewer measures to reduce or protect against their vulnerability knowing that supplies will be available to them in a crisis, not only in quantity but also at a preferred price. Anyone who stockpiles under these circumstances loses. Indeed even the U.S. government did not stockpile from 1973 to 1979 probably because it was simply preoccupied with demand and price control schemes but also because stockpiling was too costly under assumptions of price and allocation controls. (If such controls prevail when the stockpile is accumulated, the government will pay a higher price than necessary for the oil because world demand is excessive; and if such controls apply when it is drawn down, the government will receive a lower price than would otherwise be the case.) With market incentives before a crisis, the market situation that prevails at the beginning of a crisis will also be less flexible than otherwise. Hence standby allocation controls adopted before a crisis make it that much less likely that the market will function with least cost in a crisis and therefore more likely

that controls will have to be applied early in the crisis. Moreover, once applied in a crisis, as we saw in 1973, controls became very difficult to lift. Adjustment is prevented, vulnerability is increased, and foreign policy interests, which involve more than energy supplies, may be cut back to escape heightened vulnerability.

None of this is to deny that in an emergency it may become necessary to intervene and in some circumstances, which I cannot foresee but which cannot be ruled out, to allocate demand and control prices (perhaps to support defense needs after every effort has been made to improve DOD's capability to compete for supplies in the market place). But before we plan for that contingency we should do everything humanly possible to think through and design alternative means of intervention. And we should leave the eventual design of an allocation scheme, if that should ever again prove necessary, to be done in the crisis period. We will not do any worse than we did in 1973, and <u>any</u> allocation scheme is going to exacerbate costs. The pre-crisis costs of designing one now outweigh the additional post-crisis costs of designing one then. If this advice is rejected as politically naive (it being argued that Congress, State and local governments will insist on pre-crisis discussion, if not design, of post crisis allocation plans), then I would urge one further piece of advice on those who think about allocation plans: <u>Include a phase out and time limit on any allocation scheme</u>. The only possible justification for such a scheme may be to ease adjustment for politically important users in a crisis; it can never be to prevent adjustment altogether.

Preoccupation with the allocation issue has meant that the Administration has not been given sufficient credit in my view for the determined emergency preparedness measures it has favored and adopted. Since January 1981, over 300 mb of oil have been added to the Strategic Petroleum

Reserve (SPR) at an approximate total cost of over $10 b. This expenditure has been undertaken in a period of greater budget pressure than at any time in the postwar period by an Administration that believes - fanatically, some would argue - in reducing expenditures. Moreover, the Administration made the initial decisions to accelerate SPR fill before the recession and even at the risk (which had deterred the previous Administration) of adding pressure to world prices through higher demand. The existence of SPR in usable quantities will now do more to alter our thinking about emergency responses than anything else.

Work on SPR drawdown scenarios has begun and should be intensified. In my judgment, none of these exercises should aim at setting firm post-crisis decisions as to how SPR will be used. Some uncertainty as to how SPR might be used is exactly what the doctor ordered to enhance pre-crisis planning and preparation by private actors. But the work on SPR can lubricate bureaucratic procedures and flesh out policy information and options for actual consideration in a crisis.

Much less work has been done on the use of monetary and fiscal policy responses to mitigate the macroeconomic effects of a crisis or on revenue recycle to cope with social inequities that are bound to arise in a future crisis. There is a natural reluctance, especially in this Administration, to subordinate macroeconomic policy to emergency planning. But there is no escape from trying to understand the implications of pre-crisis macroeconomic policies on the crisis situation itself, even if one is reluctant to change pre-existing policy to mitigate effects of the crisis. Moreover, it is difficult to think about revenue recycle without knowing the consequences for tax revenues of various disruption scenarios. And the use of revenue recycle, as distasteful as it might be, may be the

only viable alternative to price and allocation controls once political pressures build up. With little information about and no experience in using emergency recycle mechanisms, the temptation will be great to resort to the more familiar control schemes, even as bad as our experience with them has been. Politicians will sacrifice memory to expedience to satisfy distraught constituents.

The rejection of allocation and price controls by the present Administration also made the Administration's early attitudes toward the International Energy Agency (IEA) somewhat ambivalent. But it was quickly recognized that the IEA is more than its emergency programs. It is a political and institutional deterrent to disruptions, representing the determination of oil consuming industrial countries to review, discuss and on occasion decide policies coooperatively before and during disruption crises. If it works, its programs will never have to be invoked (just as nuclear weapons will never have to be used if nuclear deterrence works). Indeed, its main program, the International Emergency Plan (IEP), has never been invoked even while the IEA has played an important political role in both oil crises. The IEA's program of course must remain credible (just as nuclear systems and policies for use of nuclear weapons must remain credible). Hence it is essential for this Administration to press continuously and incrementally for modification of IEA's emergency responses toward greater use of supply side (stockpile) as opposed to demand restraint measures. These discussions should reflect how seriously we take IEA programs and thereby serve to strengthen rather than diminish our commitment to this fundamental multilateral dimension of U.S. energy security policy.

Conclusions

America's energy security policy is back on track. A healthy defense of our interests in oil rich areas of the world will serve to minimize the probability of disruptions and by restoring disrupted supplies as soon as possible, to minimize the long-term adjustment in world markets necessitated by a crisis. A market-based policy to reduce vulnerability before a crisis minimizes the opportunity costs consistent with other goals to make the long-term adjustment should we be unable to avoid such adjustment through foreign or defense policy means. And emergency preparedness policies are being designed to permit adjustment within socially and politically acceptable limits through supply side and possible revenue transfer measures. Given these policies, the chances of another oil disruption are less than they would otherwise be, the insurance policy we have taken out is affordable in terms of our other goals, and emergency measures are designed to get on with "life after the costs of an oil disruption" rather than futilely to seek to avoid these costs.

International Technology Transfer: Security and Economic Consideration Under the Reagan Administration

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My topic today deals with two elusive subjects -- technology and the Reagan Administration.

Technology is hard to get a handle on. We deal with it through surrogates -- R&D expenditures and other data on the input side and as a residue in our output equations. In the end, of course, the technological activity is a form of human creativity which necessarily remains elusive. The Reagan Administration too is elusive, and it would be foolhearty to speak of a single Reagan Administration policy toward international technology transfer or, for that matter, any subject. This Administration, like all others -- indeed like the country itself, is pluralist. Nevertheless, there is an orientation or framework within which one can understand how this Administration has tilted on issues of international technology development and transfer. This orientation doesn't explain every decision but it does suggest the general direction.

To understand this orientation, we need to go back briefly to the 1970s. Technological pessimists ruled the day. The Limits to Growth

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School contended that the processes of a closed, finite international system would always dominate over policy in any particular country or technological advance at any point in the system. Whatever the technological achievements, the feedback processes of international interdependence, the model predicted, would eventually overwhelm technological change and bring about a collapse of the entire global system. The only alternative, we were told, was to renounce competitive national policies as the basis of technological and social development in the world system and to seek a consensus at the international level before we adopted new technologies.

The apocalyptic dimensions of this argument stifled the imagination, and the argument soon lost its public prominence. But its effects on our way of thinking were more lasting. By the end of the 1970s and continuing in some circles today, there is a more limited argument that the United States has entered the geriatric phase of its technological and economic power. Whatever we might try to do, we face an inevitable loss of strategic superiority to the Soviet Union, economic prowess to our Western allies, and technological relevance to the third world.

Let me clear from the outset. This argument draws on two undeniable facts. America's dominance after World War II was unique and inevitably temporary. And we live in an open world system, even with our adversaries, where what we do affects them and vice versa.

However, the Reagan Administration's orientation, as I see it, differs in two important respects. First, this orientation does not view the evolution of interdependence in postwar world as historically inevitable or, looking into the future, as irreversible. We created it, and America's

farsighted leadership in the 1940s and 1950s had something to do with the peace and progress achieved, just as American policies in the 1960s and 1970s had something to do with the difficulties subsequently encountered. Second, while it is fair to argue that "OK we created it but now we must live with its consequences" the Reagan orientation would argue that American leadership today must be even more vigorous, indeed sometimes unilateralist, precisely because we live in a more competitive world in which consensus is increasingly difficult to achieve without strong leadership. It rejects the notion that consensus is necessary before action can be taken; it argues instead that competition must inspire the action essential to achieve consensus. In short, policy counts more than process, both in creating interdependence and maintaining it.

Let me illustrate how this orientation helps to explain the general direction of Reagan Administration policies toward international technology transfer in East-West, West-West and North-South relations.

East-West Technology Relations

In East-West relations, the Administration views strategic competition with the Soviet Union as the only viable foundation for East-West cooperation and stability. In the 1970s the United States allowed the foundations of strategic competition to shift, even while it pursued deepening political and economic cooperation with the East. The Soviet Union rapidly closed the gap in strategic weaponry and military power projection. Europeans complained first about this changing strategic situation, probably because they had the strongest interest in the political and economic cooperation that could only endure on solid strategic foundations.

Reagan policies attacked this situation in two ways. They sought to:

1. strengthen the physical balance of capabilities by modernizing U.S. strategic forces.

2. reinvigorate the psychological balance of resolve by toughening U.S. foreign policy pronouncements and actions, particularly in protest of Soviet actions.

These policies had implications for technology development and transfer. They rejuventated defense and space technology development, and they led to a predictable tightening of technology flows to the Soviet Union.

The restrictive technology policies toward the Soviet Union were designed to serve three objectives:

1. First, a tightening of strategic controls was essential to protect the new technological investment in U.S. defense and space programs.

2. Second, foreign policy controls would be used as necessary to signal U.S. intent to contest Soviet actions that threatened the psychological balance of resolve.

3. Third, a prudent concern about economic vulnerability -- excessive reliance on Soviet resources or markets -- was necessary to thwart Soviet foreign policy leverage over the West, especially America's European allies.

All of these policies presumed allied cooperation. In early 1981, the Administration initiated consultations with the allies on possible uses of foreign policy export controls should the Soviets intervene in Poland. At the Ottawa Summit in July 1981, the President gave priority to the tightening of COCOM controls, and opposed in principal (that is, symbolically) but not in practice the implementation of big new projects that would increase dependence on natural gas from the Soviet Union. (overruling the Defense Department on this point on embargoing pipeline equipment).

The allies resisted these initiatives. At the margins, their interests differ from those of the U.S. They have greater economic interests in East-

Uncertainties also exist abroad and impede U.S. initiatives to revitalize world trade. The Europeans, most of all, fear the prospects of a short-lived recovery. They are reluctant to undertake a new round of trade negotiations particularly in high technology areas as long as they face high and perhaps growing levels of domestic unemployment. The Japanese support a new round, but their enthusiasm lacks credibility as long as they lag behind Europe and the U.S. in opening their markets to foreign goods and capital.

To succeed internationally, therefore, the Reagan Administration must sustain the recovery in this country and maintain the campaign to open the Japanese market. If the Reagan approach fails on either account, pressures will grow for a more consensual and protectionist industrial policy approach at the federal level in the U.S. This approach in my view abandons America's strength in the market in order to imitate countries that use government structures to compensate for market weaknesses. For example, the Japanese government allocates credit through the Bank of Japan and other governmental institutions because Japan lacks the broad and deep private capital market we have in the U.S. Indeed, I wonder if the entire fascination with government policies abroad as an allegedly new factor in international comparative advantage does not err by pulling governmental factors out of context. If we cry foul because government structures allocate credit in some economies like the Japanese or the French, can they cry foul because the U.S. has regulations and tax laws that encourage the biggest and deepest private financial market in the Western world, which accomplishes the same end in our economy. Don't misunderstand me, we need broad rules, especially with the practical disappearance of tariffs, for judging fair and unfair short-term governmental

governmental policies in international trade competition. But we also need a broader understanding of what constitute equivalent public and private structures in different societies that are actually part of and not antithetical to comparative advantage.

North-South Technology Relations

If competition is the prerequisite of cooperation and consensus in East-West technology relations and consensus, especially the consensus that markets work, is the basis of competition in West-West technology relations, neither competition nor cooperation is sufficient alone to guide North-South technology relations, according to the Reagan Administration orientation. Cooperation is viewed as essential to build the basis of competition in many poor developing countries which lack essential physical and human infrastructure to compete. But more competition and greater involvement in the world economy are also seen as essential for the newly industrializing countries (NICs) -- and eventually for all developing countries -- in order to gradually construct and solidify the consensus that underlies West-West technology relations, namely that markets work better than manuals.

In viewing competition as the goal of North-South cooperation, the Reagan orientation broke with the consensual, more international or system-oriented approach to North-South relations in the 1970s. The proliferation of global conferences, the emphasis on cartelizing markets, the focus on aid to the relative exclusion of trade and investment -- all placed too much stress on international procedures and solutions for what were more often problems of domestic policy. Import substitution policies which

may have made sense on a selective and temporary basis to initiate industrialization, had become a way of life in many developing countries, and national laws and international codes to restrict capital and technology flows rounded out the failed attempt to develop in isolation of the world economy. The oil shocks discouraged and delayed adjustment processes in developing (as they did in industrial) countries, and from one point of view progress was sustained in the 1970s for some developing countries, particularly the NICs, only on the basis of the largest international recycling of financial resources in history, the petro-dollar recycle phenomenon. The result of course was a mountain of debt which would have eventually required, even without the recession and high interest rates of 1981-1982, a systematic redeployment of resources in developing countries to more efficient export-oriented sectors in agriculture, manufacturing and, for some NICs, service sectors.

The Reagan response again was to emphasize competitive national policies rather than international processes. It downplayed the international institutional aspects of the North-South dialogue -- Global Negotiations -- and launched a debate about domestic policy adjustment in the developing countries. It urged

1. disinflation to undo the accumulated distortions of a decade of "debt-led" growth.

2. greater reliance on the domestic market place to alleviate pressures on public resources and remove gross disincentives in the agricultural and import competing industries.

3. integration of developing, particularly the more advanced ones, into the multilateral trading system.

Once again these broad policy responses have important implications for technology development and transfer. Policies of disinflation and

greater efficiency through market mechanisms are far more important to the development of appropriate technology and improved competitiveness in developing countries than specific technology policies or laws. The World Bank Development Report of 1983 found that one third of the variation in growth performance in thirty-one developing countries could be accounted for by price distortions. Those countries with the worst distortions experienced the lowest savings and investment and slowest growth, all without any evidence of gains in equity, according to the Report. When developing countries do devote resources to specific technological purposes, the amounts are often small, hardly sufficient to overcome market distortions, and go to finance an elite scientific or military establishment rather than the innovative, commercial or agricultural sector. Inappropriate technologies result not so much because of the bargaining power and insensitivity of multinational companies, but because policies in many developing countries encourage demand for precisely those technologies that multinationals are best able to provide, namely capital-intensive, highly sophisticated mining and manufacturing technologies.

Trade policies in developing countries, particularly in the NICs, are a further factor distorting international technology flows. Infant industry protection is applied indiscriminately across the board from consumer to intermediate to the most sophisticated high technology. The pervasiveness of protection tends to push most developing countries <u>out of</u> their areas of comparative advantage, in labor-intensive or capital-saving technologies, while pushing industrial countries <u>into</u> their areas of comparative advantage, namely capital equipment and still more advanced technology products and engineering services. Trade liberalization which

has figured prominently in the Administration's approach to development would reverse these patterns. It would permit, for example, the United States to export somewhat less sophisticated products to Brazil, where there is ample competition from other industrial countries and hence better terms for Brazil, and Brazil to export more apparel, consumer electronics, and steel to the United States. Moreover, trade negotiations offer the best hope politically for NICs and eventually second-tier exporting countries in the developing world to stop creeping protectionism in the industrial countries in their principal areas of comparative advantage -- consumer and intermediate products. By offering greater access to their markets, the developing countries gain a whole set of new allies in industrial country legislatures and parliaments. These are the export industries which stand to gain from trade liberalization and thus countervail the protectionist appeals of the import competing industries.

Integrating the developing countries gradually into the multilateral trading system is the key, in my view, to renewing and revitalizing international commitments to long-term development assistance and finance. If the purpose of development cooperation was perceived more explicitly as building the capability in developing countries to compete in the world economy, a new coalition could be found in the U.S. Congress for support of development funds. More open markets would ensure a more efficient flow of private capital in international markets, and aid funds would then be perceived as complementary rather than competitive with private investment.

Conclusions

To sum up, there is a consistent intellectual orientation that helps

to explain the Reagan Administration's orientation toward international economic and technology transfer relations. It begins from the premise that in the 1970s the international community made too much of the processes of interdependence and too little of the policies that create mutually beneficial interdependence and maintain it. The processes of detente, especially economic and political interdependence between East and West, were stressed, while national policies to maintain strategic competition and balance, which constitute the only viable foundation for cooperation between East and West, were allowed to languish. In West-West relations, interdependence was celebrated, while domestic macroeconomic policies accommodated inflation, eventually eroding domestic growth and employment and with it the prospects of sustainable interdependence in trade and financial relations. Finally in North-South relations, a fascination with globalism and international institutions distracted attention from domestic policy adjustment, trade, investment and sustainable financial relations -- which represent the most dynamic aspects of development -- and did not achieve any gains in equity that might have justified nonmarket institutions and procedures.

The new orientation, reflected in Reagan Administration policies, reminds us that competitive policies make good international processes, not the reverse. Unless erected on sound national policies, international interdependence can erode rather than enhance mutual good will, as occurred in the 1930s. Accordingly, in East-West relations, national policies of strategic competition creating a perceived balance of capabilities and resolve vis-a-vis the Soviet Union (which no longer existed in the late 1970s even in Europe) are the prerequisite of international economic and technological

cooperation. A strengthened commitment among the allies to protect the technological investment of new defense and space programs is the necessary counterpart to maintaining market levels of East-West economic and technological trade. In West-West relations, national policies of competitiveness based on comparative advantage are the only basis, indeed the only economic justification, for open international trade and financial relations. (If we do not want comparative advantage to operate, why have open markets?). While government institutions and policies contribute to comparative advantage in different ways in different societies, policies of industrial and technological targeting are less critical than policies of price stability and broadly open markets. Finally, in North-South relations, national policies must adapt to new requirements of world market competition, particularly in the more advanced developing countries, while international institutions develop the competitive basis in poorer societies eventually to participate in the open world market.

In every instance, there is as much to be accomplished through improved and better aligned national capabilities as by international processes and institutions.