OBSERVATIONS ON THE SALVADORAN ECONOMY

(Principal Themes Presented at a Meeting Sponsored by

USAID and FUSADES), San Salvador

May 2007

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At the outset, let me inform some and remind other Salvadoran listeners and readers that I come to today's task as an old friend of this country. My first visit took place in the early 1970s (most likely in 1972) and I worked quite regularly here, under USAID auspices, during the rest of that decade. My next major stint of work took place in 1988-89, when I organized a team of foreign experts to study the economy of El Salvador, and then compile a series of policy suggestions that might be useful as a new president took office. Our visits spanned a period of over 6 months, prior to the presidential election. We met with all the candidates and all their economic teams. That election resulted in the installation of Alfredo Cristiani as President of El Salvador. From the standpoint of our own mission, which had its headquarters in FUSADES under the sponsorship of USAID, this was an extremely serendipitous outcome. The reason was that our Salvadoran counterparts (for our own studies) were all connected to FUSADES in one way or another, and it then turned out that President Cristiani selected many of them as members of his cabinet, as President of the Central Bank, and as technical experts. These and other members of President Cristiani's team were instrumental in implementing the important wave of economic liberalizations and other reforms that were carried out at that time. I believe that much of the subsequent success of the Salvadoran economy can be attributed to these reforms. I subsequently returned several times to this country, a few times at the invitation of FUSADES to update my own impressions and diagnosis of the economic panorama, and then several times in connection with the work of ESEN (Escuela Superior de Economia y Negocios), on whose Academic Advisory Board I serve.

Over the three-plus decade time span of these visits there is one topic that seemed always to be present -- the real exchange rate. Let me recount to you two experiences -- one from the latter part of the 1970s, the other from the late 1980s, to give you an idea of the persistence of this topic, and also how its specific form changed with the tides of history. Some of you will recall that the middle to late 1970s were a boom period in Central America, fueled in part by high coffee prices in the world market. In El Salvador, one manifestation of this boom was a rise in the general price level. What was the mechanism by which this came about? The first point to realize is that the rising price level of that time did not reflect a textbook-style inflation -- with the Central Bank printing money to finance huge government deficits. No, the printing of money that occurred came as the Central Bank did exactly what it was supposed to do under a fixed exchange rate regime. It bought dollars at the stipulated rate of 2.50 colones per dollar. It thus had hard currency backing for the great bulk of its monetary emissions. What we were seeing in El Salvador at that time was not a standard inflation but a process of real exchange rate adjustment to an increased flow of foreign exchange earnings. If foreign exchange earnings increase by 5% of GDP, the Central Bank (with a fixed exchange rate) buys these dollars, thus expanding the supply of local currency base money. If nothing happened to adjust the economy in light of this new situation, the Central Bank might keep on buying dollars and expanding the money supply forever. But adjustment not only typically occurs -- it occurs quite naturally and with no further help from the authorities. The way the process works is that the people receiving all that extra money will normally not want just to add it to their bank accounts or stash it under their mattresses. They will want to spend at least some of it, and as they do so they will cause the country’s imports to increase. As a consequence the Central Bank, instead of accumulating 5% of the GDP in increased dollar reserves, will add the dollar counterpart of maybe 4 or maybe 3 percent of GDP to its reserves. Of course the prices of nontradable goods will begin to rise as a consequence of demand pressure, and thus a price differential will appear, with imports looking ever cheaper as domestic goods prices rise. This causes people to divert additional expenditures from domestic goods to imports. Ultimately a new equilibrium will be reached, where the extra inflow of foreign exchange (5% of GDP in this case) is matched by an induced outflow of like amount (for additional imports in this case). Now the Central Bank is no longer a net buyer of dollars. What it buys from the extra export proceeds, it now sells to pay for the extra imports that have been induced by the process of real exchange rate adjustment. Adjustment is complete. But a critical part of the process of adjustment was the rise in the price of nontradables (which I also sometimes call domestic goods) relative to tradables.

Now we come to the key to the Salvadoran situation in the latter 1970s. This process of adjustment was underway, but in a context of a highly protectionist, highly restrictive import regime. When the access of the public to additional imports is artificially curtailed, it obviously will take a lot longer time, and will clearly also entail a much greater increase in the domestic price level (relative to the fixed exchange rate) in order to induce the needed increase in the demand for imports. As domestic prices rise, another force also enters the picture -- the costs of producing exports increase -- which in this case particularly hurt the (non-coffee) exports whose world prices had not increased. So an added element of adjustment appears -- a decline in exports to the extent that these are squeezed out by rising domestic costs of their production.

Now the reason why I’m giving you this background is to recall a speech that I gave before a large audience like this one, in El Salvador, at that time. Almost every time I have come to this country since the late 1970s, somebody has reminded me of that speech; it seems to have established some sort of bond between many Salvadoran old-timers and myself. In that speech I drew the analogy of you being home alone, with a wild tiger racing around your house. What should you do to deal with that problem? “Open all the doors, open all the windows,” I said, so the tiger will have the opportunity to get out of the house. The analogy is perhaps too vivid, but it certainly made the point. The tiger was the extra money that was circulating in El Salvador as a consequence of the coffee boom. The closed doors and windows were the restrictions placed on imports, impeding the escape of that extra money. The lesson -- that the equilibrium price level would rise less from its starting point, the more decisively the country liberalized its import restrictions and controls -- was plainly evident.

The second episode that I want to recount occurred during our 1988-89 visits to this country. In the course of our preparations, our team met not only with the candidates and their advisers; we also arranged numerous meetings with representatives of key interest groups -- manufacturers, agriculturists, importers, exporters, teachers, civil servants, etc. In the course of those meetings, I was particularly impressed, and later very frustrated, by an opinion that we kept hearing from exporters and from export-oriented producers. These groups were obviously suffering at that time from the low price of the dollar (in real terms). What had happened was that the internal price level had risen significantly, while the exchange rate had remained constant at 5 colones per dollar. What we heard from these groups was a continual complaint against the Central Bank and against the government authorities more generally. The complaint ran something like this. “Here we are, suffering terribly in economic terms, some of us going bankrupt, others near bankruptcy, and all because the Central Bank refuses to adjust the exchange rate. Don’t they realize that they could bring real prosperity to all of us, if only they would raise the exchange rate from 5 to 8 or 10 colones per dollar? How can they be so dense, so unperceptive, and ultimately so irresponsible?”

We would hear this complaint time after time. And in each such case we took pains to explain that the situation was not so simple. Yes, the dollar was cheap in real terms, we would say, but it was cheap not because of mistaken policies by the Central Bank, but because the dollar was so abundant. What we were looking at was an equilibrium real exchange rate adjustment to a very big inflow of dollars, period after period. The big new actors in the scene were foreign aid and emigrant remittances. Each of these sources was contributing an annual flow of dollars equal to 5% or more of GDP -- this on top of the traditional flow of dollars stemming from exports. So our retort to the complainers was that the low real price of the dollar was a natural outcome of the situation which the Salvadoran economy was living through. If they wanted a more expensive dollar, they should not look to the Central Bank to create one -- they should go to the ultimate cause of the cheapness -- namely, the abundance of dollars. In jest we said, but with a very serious purpose, “If you want a more expensive dollar, go to your government and tell them that next time foreign donors came offering foreign aid moneys, they should turn down those offers. And as far as remittances were concerned, we suggested jokingly that Salvadorans should write to their relatives, telling them to stop sending money.” Of course, we didn’t expect anybody to pursue such a course. Our jocular response was meant to drive home the point that the dollar was cheap in El Salvador for a very good reason -- because of its abundance. To make it more expensive in real terms one would have to do something to reduce that abundance -- something that the Salvadoran people were very unlikely to want to do. In the end one had to recognize that the cheap dollar was a reality, that it reflected a real economic equilibrium and that that real economic equilibrium would not be modified by such a simple action as raising the nominal exchange rate from 5 to 8 or 10 colones per dollar. To be sure, such a move would give some transitory relief to export interest groups, as the general price level adjusted to the new situation. But sound economics would predict that the ultimate effect of a rise in the nominal price of the dollar (starting from a position of equilibrium), would be a restoration of the same real equilibrium at a higher price level. Nowadays, to evoke this, use the analogy of being in a high-rise building, where every floor has an identical floor plan. The floor plan represents the real equilibrium of the economy, and successive floors represent higher price levels. So starting from an equilibrium with a fixed exchange rate of 5 colones per dollar and following the consequences of a devaluation to 8 colones per dollar, is like taking the elevator from the 5th floor to the 8th floor of the same high-rise building. The floor plan (the real equilibrium) is the same after the event as before it.

In fact El Salvador had tried something like this experiment in 1986, when it raised the nominal exchange rate from 2.5 colones to 5.0 colones per dollar. In that episode it took only about 18 months for the price level to double, and for something quite close to the initial equilibrium to be restored.

<u>Today's Scenario -- Emigrant Remittances</u>

If emigrant remittances were an important element explaining a dollar that was cheap in real terms in 1988-89, they are practically the whole story today. Some may ask, looking at today's picture, how can there be an exchange rate problem, when we really have no exchange rate (in a dollarized economy). The answer is that the real exchange rate is present just as much with dollarization as without it. Adjustment takes place via movements in the internal price level (relative to what is happening in the outside world). A cheap dollar in real terms means a relatively high internal price level, an expensive dollar would come with a low internal price level. Salvadorans should be grateful that fate has not thrust upon them the need to crunch the economy to a new equilibrium at a much lower price level. Such adjustments (England in the

1920s, Chile in 1981-82, Argentina leading up to the crisis of 2001-02) are extremely painful and are invariably characterized by huge problems of unemployment.

In 2006, emigrant remittances are reported to have amounted to some 18% of GDP, and as of my present visit, they are projected to be at least at that level, and perhaps even at 20% of GDP for 2007. This phenomenon has altered the economic situation of the country in a number of ways. But the first point to be made is that the remittances and the events giving rise to them have represented a tremendous plus for the Salvadoran nation and its people. Perhaps the most impressive bit of information on this score is the fact that the earnings of the approximately 1.5 million Salvadorans in the United States amount to more than the entire GDP generated within the geographic boundaries of El Salvador.

This gives rise to an interesting set of comparisons. One has, first of all, the gross domestic product (GDP) of the country. This, in 2004, amounted to $15.8 billion. Then, we have the GDP augmented by the remittances received. That brings the 2004 total to $18.3 billion. And finally, we have the estimated worldwide income of Salvadorans, which in 2004 amounted to $35.8 billion.

One can also consider the rate of growth reflected in each of these three concepts. On the first concept, locally-produced output (real GDP) grew by a little less than 4% per annum. If remittances are added, the growth rate (1990-2004) grows to a bit more than 4.5%. In 1990, the approximately 500,000 Salvadorans in the United States are estimated to have had total earnings of somewhat less than $5 billion. In 2004 the approximately 1.5 million Salvadorans in the U.S. earned somewhat more than $20 billion. The growth rate of these earnings is about 14% per year in nominal terms, over 10% in real terms. Adding overseas earnings to nominal GDP in El Salvador we get a figure of $35.9 billion in 2004 compared with around $9 billion in 1990. In real terms, correcting each part with its own price level, the real growth rate of this aggregate was over 6% per year.

Obviously, these figures represent a very positive evaluation for Salvadorans taken as a group. It is very hard to see in such results any basis for negative responses to these developments. (Of course, this does not deny that there have been losers from these experiences -- particularly Salvadoran families which did not receive significant amounts of remittances from abroad.)

The flow of remittances clearly brought a new-found sense of economic security to many recipient families. This has had the effect of making some family members less willing to engage in painful, backbreaking labor, like planting and harvesting of crops. The result has been a degree of pressure in the labor market for unskilled and low-skilled labor, generating a gap that has been partly filled by migratory labor from Guatemala, Nicaragua, and Honduras. At the same time the attractions of the U.S. labor market have operated to draw many semi-skilled and skilled migrants out of the Salvadoran market, leaving elements of unsatisfied demand for these labor categories. Once again, migrants from Guatemala, Nicaragua and Honduras seem to have responded, thus filling many of the empty places left by the Salvadoran out-migrants.

As an economist I was sort of pleased to learn of all these happenings. To us as professionals, it is reassuring to see that not only do the laws of supply and demand work, but they work in ways and through channels that most casual observers might not expect. In short, market forces are not only strong; they are also often quite subtle.

One issue that came up in our general meeting, and also in many conversations throughout my visit to El Salvador, was the question, what is the future of our remittance flows? Sometimes this question was couched in terms of a perceived downturn in the construction industry in the U.S., where an important segment of Salvadoran migrants are occupied. My first reaction to this question was not to deny the possibility of some downward fluctuations in the flow of remesas, but not to see in it a problem of huge dimensions. Think of remesas on the one hand versus the flows of dollars coming from coffee exports, oil exports, copper exports, beef exports, etc., on the other. Countries whose foreign exchange flows depend mainly on those commodities have often seen huge swings, even from year to year, in the nation's total foreign exchange earnings. We should not forget that even oil was selling only for around $10 a barrel only a few years back (in 1998).

Thus it is easy to find cases where oil proceeds or coffee proceeds or copper proceeds or beef export proceeds fall by twenty or thirty percent in a single year. For me, it is hard to imagine Salvadoran remittances falling by even as much as 10%. There are many reasons for this. First, while construction actually is a volatile component of every country's GDP, and while there is a certain concentration of Salvadoran migrants in that industry, that concentration probably does not exceed 10% of all Salvadoran workers in the U.S. (or perhaps 20% of Salvadoran male workers in the U.S.) Thus, even if construction activity were to fall by half, the effect on total earnings of Salvadorans now in the U.S. would almost certainly be less than 10%.

To this must be added a demonstrated fact of absolutely critical importance -- the tendency of migrants to move to places where their friends and relatives are already installed. This "friends and relatives multiplier," discovered by students of migration more than half a century ago, is one of the most profound constants to be found, as people have tried to explain international migration. Friends and relatives at the point of destination may not weigh too much in the decisionmaking of U.S. citizens to move from one state or city to another, because life is not likely to be very different for them, going from one point to another in the same country. But migrants from abroad are likely to be literally "lost" if they move alone to a city where they have no friends or relatives, while they are likely to have their arrival celebrated with a party, then be sheltered and fed for a while, then be guided and mentored through the intricacies of the housing and labor markets, of how to find the best shopping bargains, of how to keep clear of the law. These benefits from the presence of friends and relatives are obviously of great value to international migrants. The migrants themselves have proved as much over the decades, even over centuries, as they have made their migratory decisions. Historically, this tendency is what made Boston a city of Irish, Portuguese and Italian immigrants, New York the destination of Italians and Jews, Milwaukee a haven for Germans, and Minnesota the goal of Scandinavians. More recent migrations have shown similar patterns -- Salvadorans to Los Angeles, Florida, and Washington, Haitians and Dominicans to New York and Florida, etc. Mexicans have gravitated to different U.S. cities, depending on where they came from in Mexico. The dominant refrain here is that new migrants tend to go to where old migrants already are installed.

No evidence on this subject is more persuasive than the record of recent migration from Central America to the U.S. We now have in the U.S. a Salvadoran population equal to over 20% of the number of Salvadorans in El Salvador. The corresponding number is about 12% for Guatemala, 7% for Honduras, and 6% for Nicaragua. How can these disparities be explained, when income per capita is higher in El Salvador than in the other three countries. The force of attraction of the Salvadoran population in the U.S. is clearly the most plausible explanation -- especially so since 2/3 to 3/4 of all Salvadorans now in the U.S. have come since the end of the civil conflict, and <u>since</u> the onset of prosperity in El Salvador.

Now look at the matter from the standpoint of migrants <u>into</u> El Salvador. In the first place, over a million such migrants have come in, just from Guatemala, Honduras and Nicaragua in the period 1997-2004. This net movement of Guatemalans and Hondurans just to El Salvador alone was almost as large as the total population of Guatemalans and Hondurans in the United States, as of 2004.

In each of the cited cases that same mechanism, the "friends and relatives multiplier" seems to be very strongly at work.

Where does all this lead? To me the main conclusion to be drawn is that the friends and relatives multiplier will continue to operate, and that the natural tendency would be for the population of Salvadorans in the U.S. to keep growing in the years to come. Stricter border enforcement and employer sanctions may operate in the other direction, but it would take an utter sea change in enforcement to make much of a dent in the magnetic attraction of the friends and relatives multiplier to bring ever greater flows of new migrants into the U.S. Hence, my own bottom line from this discussion is that I doubt very much that the flow of remittances will drop at all, and feel very confident that if a drop should indeed occur, it will very likely be modest in size and short in duration. Salvadorans, then, have little or no reason to fear that a crisis situation will develop, arising out of a sharp drop in remittances.[1]

Economic Growth

Part of the stimulus for my visit to El Salvador came from a rather widely-held perception that somehow that country's rapid economic growth had petered out, and that maybe the country would wallow in stagnation during the years to come. Growth, however, picked up its pace in 2006 and seems on track to be over 4% (in real terms) again in 2007. This is a good performance by international standards but does not compare to the rates of over 6% that were achieved in the wake of the economic reforms and transformations of the early to middle 1990s.

My first comment here is a lesson from the analysis of economic growth. It just is not true that a high rate of growth in one quinquennium or decade is a reliable predictor of a high

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[1] The data on migrations reported here came mainly from Informe sobre Desarrollo Humano, El Salvador 2005, esp. Tables 1.7, 2.1, 4.3 (San Salvador: UNDP, 2005).

growth rate in the next such period. Quite the contrary, this period's growth is in general a poor predictor of next period's growth. Such predictability as there is stems from the less volatile components of the growth rate -- the rate of increase of the workforce and the country's rate of investment (as a fraction of GDP). The first of these is stable simply for demographic reasons (and in the case of El Salvador by the out-migrants to the United States being virtually replaced by in-migrants from Guatemala, Honduras and Nicaragua). The second of these forces derives its relative stability from the country's rate of saving (low in El Salvador, but not highly volatile). The sharpest discrimination to determine whether a growth episode will be rapid or slow, however, comes from real cost reductions (improvements in total factor productivity). It is strong real cost reductions that predict successful growth episodes, and weaker ones that predict a relatively listless economy. And only rarely do high rates of real cost reduction create an atmosphere in which the following quinquennium or decade will see a repeat operation. In general, from period to period, real cost reductions come in totally different sectors of the economy, are originated by totally different people, and consist of totally different elements (different inventions, different technical improvements, different underlying ideas).

El Salvador's economy benefited in the 19990s as the economy recovered from the years of conflict, leading to benefits from all components of growth -- more labor, more capital, higher rates of return, greater economic efficiency (real cost reductions). Once the economy reached the new, higher level dictated by peace plus policy reforms, it required new elements of impetus to keep the growth rate high. I believe I perceive this to be happening; I think that the recent uptick of GDP growth to the 4% per annum range reflects this new impetus. But real cost reduction cannot be expected to "normally" contribute more than 1 to 2 points of economic growth per year. In El Salvador the relative predictable components of growth are an actual labor force growing at perhaps 1 to 1 1/2 percent per year and a rate of gross investment of about

1.5% of GDP. To get labor's impact on growth, we multiply the labor force growth rate by labor's share in GDP (about 1/3 in El Salvador). To get capital's contribution to growth we multiply the ratio (net investment/GDP) by the gross-of-depreciation rate of return that is expected to be generated by that investment. A 15% gross investment rate probably reflects net investment of around 7-1/2%. To this I would apply an expected real rate of return of 15 to 20 percent. Thus I would expect a labor contribution to growth of about 0.5% (1.5% labor growth × a labor share of 1/3), and a capital contribution to growth of 1.1 to 1.5 percent per year (= net investment rate of 7.5% times a gross-of-depreciation rate of return of 15 to 20 percent). Add to these contributions a rate of real cost reduction of between 1 and 2 percent per year and you end up with a range of 2.6 to 4 percent per annum. So I am not surprised with the actual rates of growth we have seen in recent years. I feel the recent surge of growth to 4% is very welcome, and (happily in a sense) within the more-or-less normal range of 1-2 percent per annum for the real cost reduction component. (If that were to reach 4 to 5 percent, we could be quite sure that that rate would not be matched over a longer haul.)

The China Syndrome

When people study the world economy in our present era, it is hard to fail to see that the elephant in the room is and has been (for the last decade or more) China. Let me start by saying that China's spectacular growth of 10% or so per year, in real terms, is indeed another outlier among the world's growth experiences, but it is something that I feel we can readily understand. The big key to China's huge growth has been investments fueled by a huge savings rate among the Chinese people, and by massive movements of capital in the form of direct foreign investment. In recent years China's rate of gross investment has been about 45% of GDP, with net investment being around 35%. Apply to this a gross-of-depreciation rate of return of 20%

(probably an underestimate) and you already have explained 7 points of the country's growth rate. Add to that a significant amount of real cost reduction that was brought in (in the form of more modern techniques) along with the foreign direct investments and you get close to the observed 10% growth rate. An added element in the Chinese case (which is typically present but not of major importance in other countries) is the massive and rapid shift of labor from low-productivity activities in the rural sector to much higher-productivity activities in the urban sector of the economy. This element, which some accounting approaches will assign to the labor contribution to the growth rate, and other approaches will count it as part of the real cost reduction (increase in productivity) component, has been particularly important in the case of China, where the recent migrations from farm to city are said to be the largest migratory movements to have taken place in the entire history of the human race.

The reason for going into this amount of detail about China's growth rate is in part just so readers will understand it, and see that, though an outlier, it still fits into our analytical schema, but in the main it is to convince you that the particular tricks that made for China's great growth are not easily transported into the Salvadoran scene. One can be quite sure that it would be a real achievement for El Salvador to bring its gross investment up from 15 to 20 percent of GDP, which by our estimates would add about one point to the annual rate of growth. And its hard to imagine a labor contribution much higher than 0.5% per year or a real cost reduction rate (over the whole economy) of more than 2% per year. So Salvadorans should not sniff at a 4% growth rate as if it were something miserable -- actually, it is quite a nice performance. And it is something that could be made even nicer if the rate of investment were to be stepped up to, say, 20% of GDP.

Before I close this discussion of China, let me bring into view an added element that may help readers to better understand the realities that El Salvador has had to face and will continue to face in the foreseeable future. This element concerns the fact that the Chinese economy is in large measure a competitor of the Salvadoran economy insofar as export markets are concerned. El Salvador is like Mexico in this respect. Both of these economies had evolved into being significant exporters of low-end manufactures, of both the integral-production and the maquila varieties. As China's economy developed, it became the world's fastest growing source of low-end manufactures of both varieties. Not only did Salvadoran and Mexican firms have to compete with a flood of cheap Chinese exports in world markets, it also turned out that a number of Salvadoran and Mexican firms actually shifted their production operations to China. Small wonder then, that these two Latin American economies have had to work hard to achieve rather ordinary economic growth in recent years. And while I emphasized the case of China, we should not forget that India, Indonesia, Malaysia and Thailand are also adding significant amounts of low-end manufactured exports to the same world market.

Contrast El Salvador and Mexico with Chile in the same recent period. Chile exports copper, lumber, salmon, wine, table grapes, other fresh fruits and vegetables. These products are all demanded by China and some of the other growing economies of Asia. While for Mexico and El Salvador, each added percentage point of Chinese growth is another headache, for Chile it represents another blessing.

There can be no doubt that Chile has had the best package of economic policies of any Latin American country, and surely one of the best in the entire developing world. Some important component of Chile's successful growth surely stems from this source. But also we must recognize that not all of Chile's recent performance has come from its good policies. Some has surely come because of the complementarity of Chile's economy with that of China and other rapidly growing Asian nations.

The Role of Policy

Economic policy reform has been important in enabling the Salvadoran economy to perform as well as it has, and in spite of the special difficulties is has had to confront. But readers should be aware that good policy can create an environment that is friendly to the forces of growth, or one that is distinctly unfriendly. Once policy has created a favorable environment, it then becomes the task of economic agents to uncover fruitful avenues of investment, to assign or attract the necessary funds and to year after year keep finding new ways to reduce real costs.

El Salvador probably now has (after Chile) the second best economic policy package in Latin America. Certainly it ranks in the top quarter of Latin American countries in this regard. This means that most of the major flaws of economic policy that existed in earlier times have been corrected. International trade has been greatly liberalized, the tax system modernized, the regulatory structure has been rationalized and simplified, the economy has been dollarized.

Surely there are further steps that can be fruitfully taken, and that will do their part in adding to the efficiency level of the economy. Further tuning of the tax and regulatory systems can still be done; the climate for small business can still be improved, and above all the spending side of the government's budget can be rationalized. But these remaining reforms will not set in motion a great spurt of growth such as occurred in El Salvador in the 1990s. They more likely may add a fraction of a point to the growth rate over a period of years.[2]

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[2] I have a problem in communicating the verities of growth, because many people have acquired a mindset on this subject which is totally at variance with reality. Spurred on by what they read in the press and what they see on television, they somehow expect that simple moves of policy should have a big influence on the growth rate. When a country experiences growth at the rate of 6 or 7 percent per year, the government in power is almost certain to claim credit for that result. And when a country experiences only 1 or 2 percent growth you can be pretty sure that the party or parties out of power will blame the government for the result, and often promise that if only they were elected, they will create growth at a 6 or 7 percent rate. Rarely are these claims accurate -- yes, a very bad economic policy can cause low or even negative growth for a period, and correcting a very bad policy can bring about a nice spurt of higher growth, but normally a country's growth rate is determined mainly by forces outside the government's direct control.

In my opinion, by far the most important reform to be implemented is the creation of a national system of project and program evaluation. The purpose of such a system is to bring under more rational control the expenditure side of the government's budget. The sad truth is that El Salvador set in motion such a system in the early 1990s, but it subsequently fell into disuse and ultimately disappeared. I believe that system was restricted to public investment projects, and did not extend to other spending programs. Whether or not a new system should be similarly restricted is an open question. In my opinion the answer depends on where in the government hierarchy the system should be located. My own opinion is that the budget office is the best location, and if the program is located there, its scope could quite naturally be as broad as the budget itself.

Another reason to locate a system of project and program evaluation in the budget office is the fact that the budget office already possesses a certain degree of authority to control the quantity and quality of government spending. The use of the criteria of cost-benefit analysis to

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To get a better sense of reality in this topic, consider the following imagined scenario. The U.S. government decides to hire the entire economics profession for three years, and charge them with finding policy measures that will raise the country's GDP growth rate. The 100,000-strong profession responds, works hard for three years and comes up with policy changes that cause the growth rate to rise from its otherwise level of 3% per annum up to 3.1%, and to stay at 3.1% for just 5 years, after which it falls back to 3%.

To the average politician, to the average television commentator, to the average newspaper writer or editor, and in all likelihood, to the average citizen, viewer and reader, this seems a pittance of a result of so much work. "The elephant labored long and hard, and then brought forth a mouse," some would say. "Economists never have clear answers to anything, what can you expect?" would be the comment of others.

Now to the truth. Think of the growth path of the economy without the economists' suggestions. It starts at, say, 100, and then rises at a compound interest rate of 3%. Then, with the economists' recommendations, the growth path diverges, going beyond the original path by 0.1% the first year, 0.2% the second, 0.3% the third, 0.4% the fourth, and 0.5% in the fifth year. After that the new time path stays half a percentage point above the old one, on and on into the indefinite future. The present value (at a real rate of 5%) of this sliver of extra product turns out in a simple calculation starting in the fifth year, to be $.005GDP_5/(.05-.03)$ = 25% of the fifth year's GDP. Twenty-five percent of today's GDP is more than 3 trillion dollars. This compares with an annual salary bill for the entire economics profession of probably no more than ten billion dollars, or a 3-year cost of no more than $30 billion. The benefit-cost ratio of this huge and expensive effort, with such an apparently minor impact on the growth rate, would be (at a 5% discount rate) something like 100 to 1. Those who think that we can easily impact growth permanently, raising the rate permanently from, say, 3 to 4 percent, must have in mind benefit-cost ratios in the stratosphere. (The present value of moving the growth rate from 3 to 4 percent indefinitely, is equal to 50 times the initial GDP, evaluated at a 5% rate and is equal to 5 times the initial GDP evaluated at a 8% rate.) Policy reform typically impose a certain amount of systematic discipline on government spending is a natural implementation of the budget office's existing responsibility and a natural extension of its existing activities.

One key piece of advice that I feel constrained to give is that the development of such a national system of project and program evaluation must be extremely well planned, especially with respect to personnel and training. The leader of the program must be a person who is totally in command of the methodology of cost-benefit analysis. He or she must be capable of teaching that methodology at a high university level, and must be capable of supervising all the details of analysis over the whole gamut of public projects and programs. In addition this leader should have the communication skills to explain to ministers, presidents, and the public at large exactly why a bad project or program fails to meet the cost-benefit test. Also that person should have the courage to do battle with the strong interest groups and other political forces that are always present among the key advocates of a bad program. A person with all these characteristics is hard to find, but getting the right person is critical. If one has to wait to accomplish this, a wait of one or two years would almost certainly be quite worthwhile.

Quite possibly linked with the search for the leader of the program, but also totally necessary in its own right, is a plan for the systematic training of the analysts who will actually do the work of cost-benefit analysis. These people are needed not only in the place (e.g., the budget office) where the final report card on a project or program is drawn up. For the system to be effective, such experts should also be present in the ministries and agencies that undertake public projects and programs. Even in the legislature it is wise to have cost-benefit experts, so

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reflects fruit that's ripe for the picking, but it would take an incredibly productive reform to give us a bump upward of one percentage point in our permanent growth rate.

that mistakes of concept and design can be nipped in the bud, even before a draft law is brought up for consideration.

A model for a Salvadoran training program would be the one that has been functioning at the Catholic University of Chile for some 30 years. Initially started with a grant from the Inter-American Development Bank, its financing was within a few years taken over by the Chilean government and continued uninterrupted under four successive presidential administrations. The course initially was of one academic year's duration but was subsequently shortened by a couple of months. Its director from the beginning was Professor Ernesto Fontaine, whose presence on the Chilean scene has yielded huge dividends for the Chilean economy and people. Professor Fontaine has helped get similar efforts started in a number of Latin American countries (including the 1990s program in El Salvador). I believe it would be extremely wise for the government to engage his collaboration and advice in setting up both the new program at the governmental level and the new training program to provide the needed talent and expertise.