DISCOVERING EL SALVADOR'S PRODUCTION POTENTIAL

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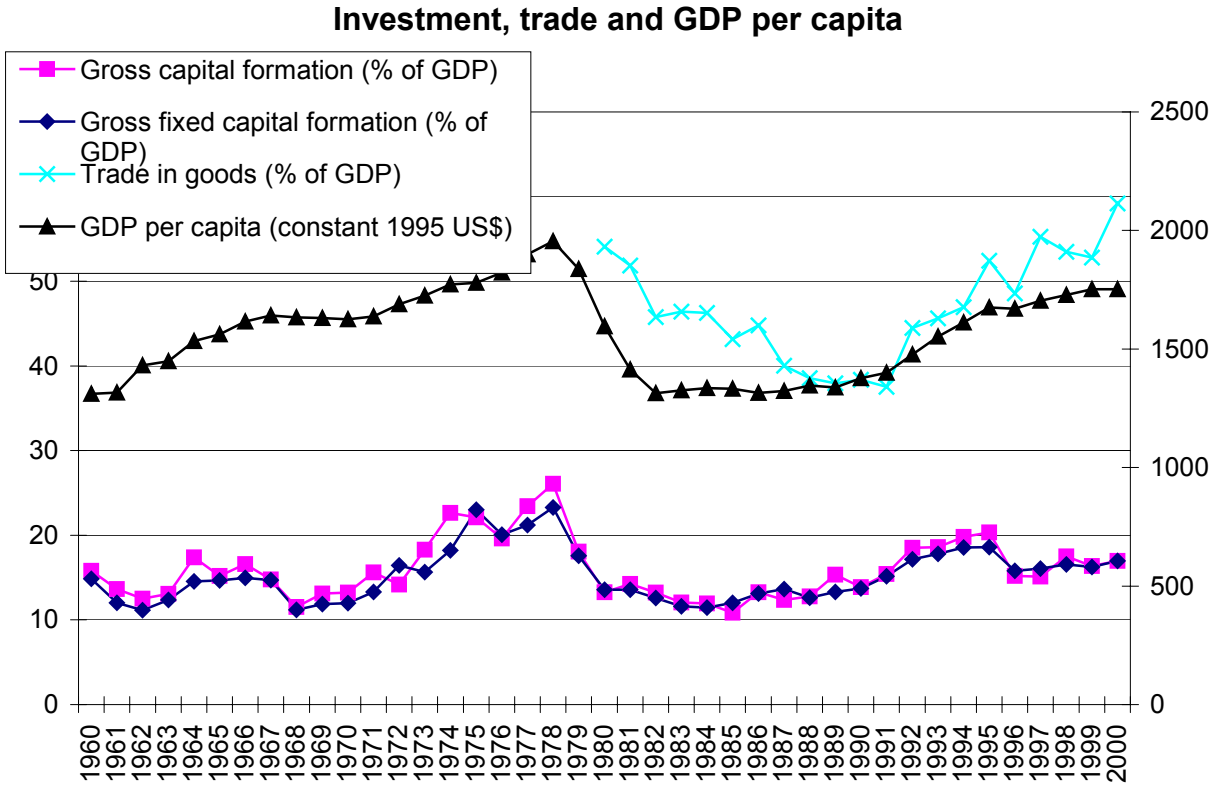
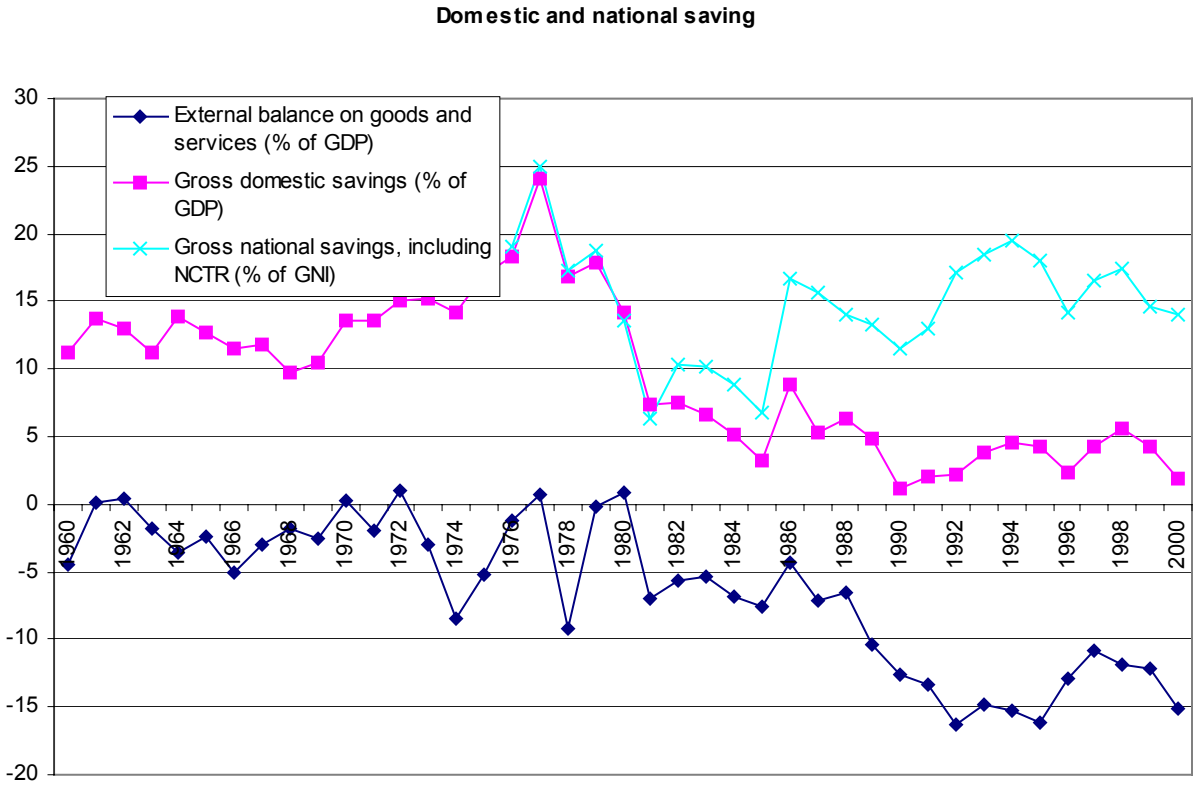
The challenge of structural transformation

El Salvador has undertaken an extraordinary amount of reform since the early 1990s. Macroeconomic stability has been achieved; the economy has been opened to foreign trade and investment; privatization and deregulation of key industries has been completed; the quality of public institutions has improved; and democratic governance has been established. Yet, per-capita GDP has yet to recover to the levels of the late 1970s (Figure 1). The impressive growth of the Salvadoran economy in the first half of the 1990s has petered out. With hindsight, this growth looks more like the result of economic recovery and a temporary consumption boom than as the payoff to the reforms of the period.



The proximate cause of the Salvadoran slump is low investment. During the second half of the 1990s (1996-2000), the investment rate averaged a full 5 percentage points lower than in 1974-78 (16 percent of GDP versus 21 percent). Even making allowance for the natural disasters suffered by El Salvador during the last few years, this investment record is hard to square with

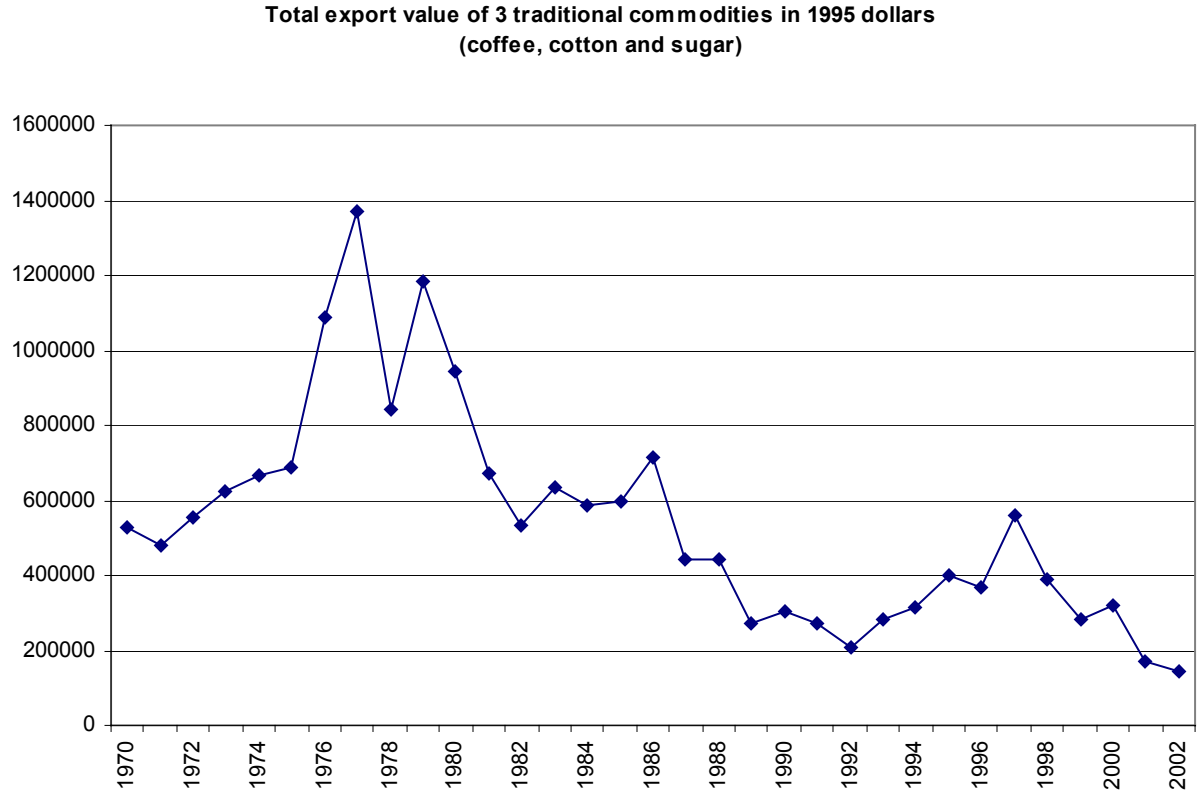
the reform efforts of the 1990s. Adding to the puzzle, El Salvador has been the recipient of a large boom in remittances from the United States, a source of "external savings" that could have should have facilitated the aggregate financing of domestic investment. Instead, the increase in remittances has been accompanied with a collapse of "domestic" savings, with no perceptible impact on the domestic investment effort (Figure 2). In other words, remittances have boosted consumption, but not investment.



The traditional commodities on which the economy relied in the past, and which fueled the boom of the 1970s, have shrunk to a fraction of their old size. While the volume of coffee exports has declined only marginally (in absolute terms), the sector has been hit badly a trend decline in world prices since the late 1970s. A back-of-the envelope calculation of the welfare loss to El Salvador on account of the decline on coffee prices alone yields $384 million (around 3.2% of GDP on an annual basis).[1] Cotton exports have disappeared, a casualty of inadequate pest control techniques and land reform. And sugar exports are up thanks mainly to high domestic prices which subsidize production **[check]**. The net effect can be seen in Figure 3, which charts the total exports receipts from these three traditional commodities since 1970 (with export receipts valued at 1995 dollars). On average, the 1996-2002 level has fallen short of the 1974-1978 level by $613 million (or around 5% of GDP). To put this number in perspective, note that

[1] This is calculated by taking the difference in export prices between two periods (1974-78 and 1996-2002) and multipying it with the average of the export quantities in the two periods.

this shortfall is significantly larger than net maquila exports at present,[2] indicating that maquila exports have yet to make up for the decline in traditional industries.

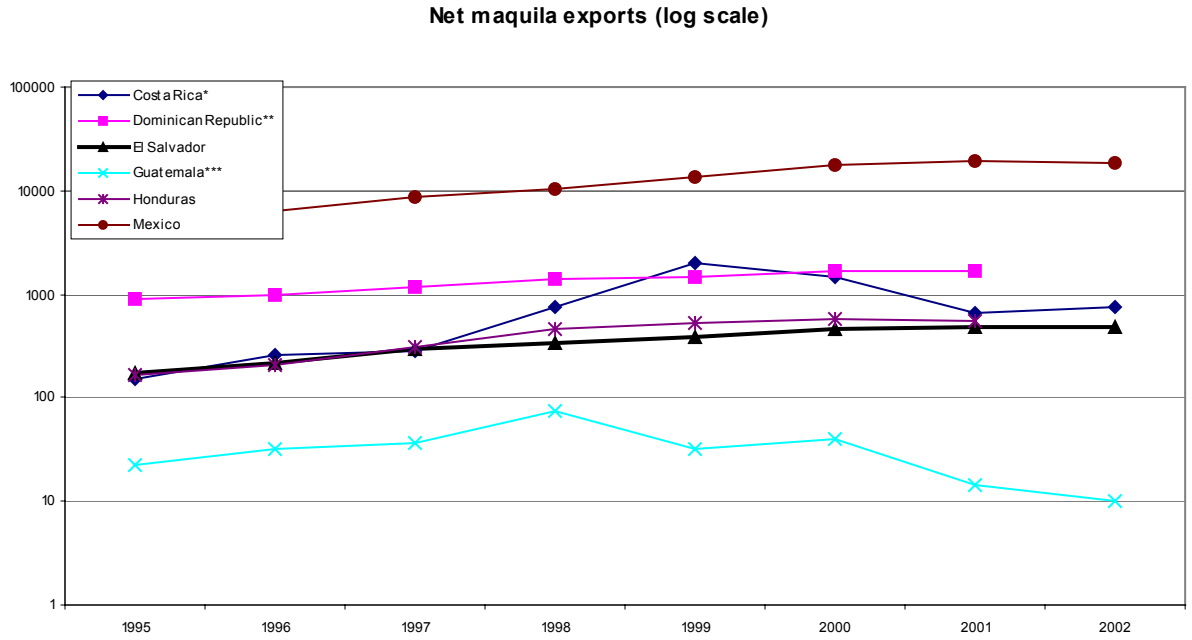


While the maquila sector has expanded rapidly in recent years, there are reasons to doubt that it will continue to lead growth in the future. With a dollarized economy (which rules out competitiveness gains through currency depreciation) and a level of the real exchange rate that is already high by many standards, El Salvador is not a source of cheap labor in the Central American region and is therefore unlikely to attract foreign investment on that basis. The extension of CBI benefits and the provision of NAFTA parity in 2000 have not had much of a perceptible effect on Salvadoran exports (Figure 4). The impending liberalization of the multilateral textile and apparel regime (with the phasing out of the MFA in 1995) also bodes ill for Central American countries. The areas of expansion are likely to be new activities, yet to be identified.

Why do Salvadoran households, businesses and entrepreneurs choose not to invest in new activities? The reason cannot be the high cost or lack of availability of investible funds. Neither can we attribute the absence of animal spirits to the usual litany of disincentives that go under the heading of "poor investment climate": corruption, excessive red tape, high taxes, restrictive labor

[2] Net maquila exports stood at $475 million in 2002 (or $452 in 1995 dollars). Ideally, the comparison should net out the imported component of traditional commodity exports, but it is reasonable to suppose that the imported component is not large.

laws, macro instability, import protection, and so on. El Salvador has made significant headway in tackling all these usual suspects. Perhaps investment is deterred by political polarization and the uncertainties associated with a possible FMLN electoral victory in the next presidential election. But the electoral uncertainty is a recent phenomenon, whereas low investment has been an ongoing problem. In our interviews with the business sector, we picked up a lot of concern that the FMLN may choose to undo ARENA's policies in trade, dollarization, and privatization. But we also came away with the strong impression that the private sector has very few investment ideas lying around. There is little indication of significant pent-up investment demand waiting to be released as soon as the political news is revealed to be positive or neutral.

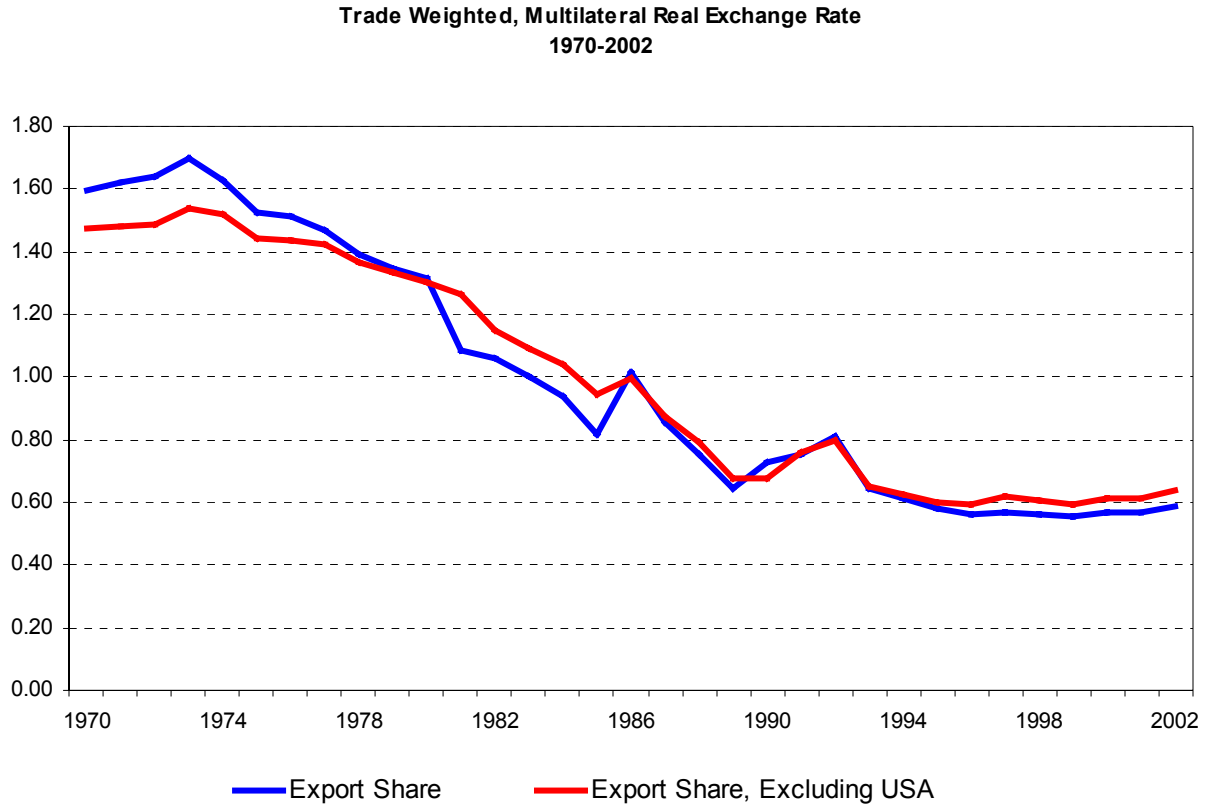


Renewed private investment in new, nontraditional industries is key to El Salvador's future. Witbout an increase in private investment, the Salvadoran economy will not undergo the structural transformation it needs in order to sustain higher levels of economic acitivity and make a significant dent in poverty. But the challenge of structural change is also an obstacle for private investment. Entrepreneurs face the difficulty that they need to undertake investments in new areas where profitability is inherently uncertain and depends on the complementary investments of others in the private and public sectors. Low investment is therefore both a cause and a symptom of the economic challenge that confronts El Salvador.

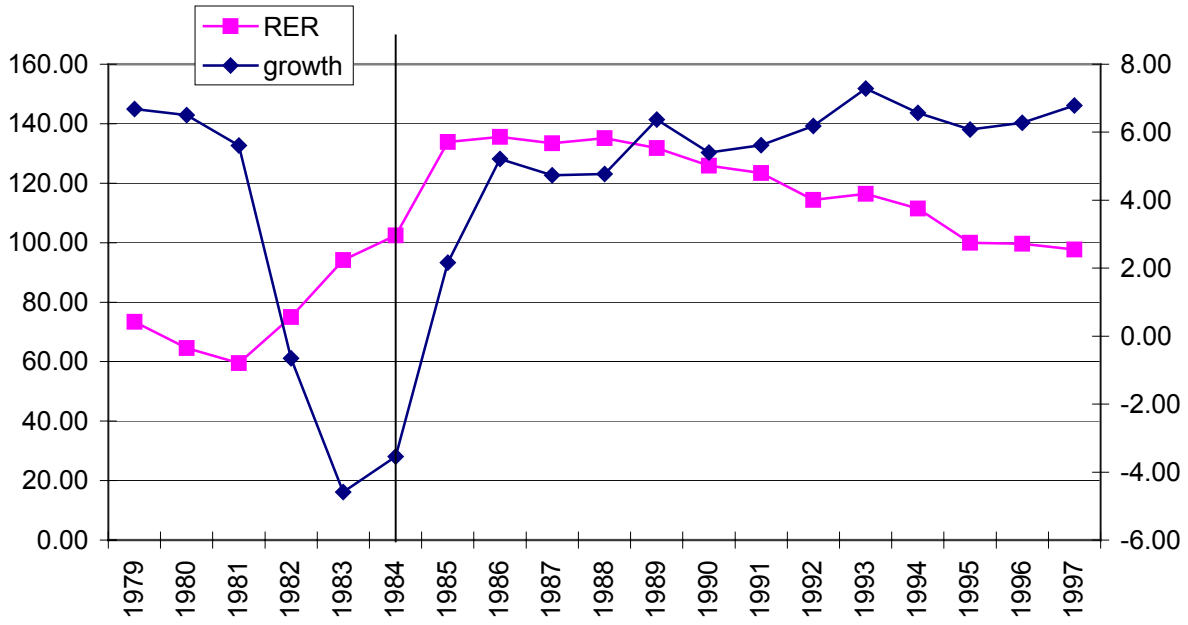
Our intepretation of El Salvador's low investment rate is that the country's entrepreneurs are bumping up against a specific constraint: the great amount of uncertainty regarding where the new, profitable activities are. As we shall discuss below, markets are not necessarily good at facilitating the kind of structural transformation that El Salvador needs. New activities often require complementary and lumpy investments to be made simultaneously (a coordination externality). Whether successful or not, they generate valuable information to other entreprenurs who can then choose to imitate incumbents (an informational externality). Such market failures

can undercut entrepreneurship and depress private investment. Overcoming them requires a more strategic, pro-active policy stance towards economic transformation—one that is willing to lead change rather then sit back and assume that economic growth is the natural outcome of market forces. In our view structural transformation needs to be addressed as a policy issue. The Salvadoran government needs to take it on as a challenge and be ready to deploy political capital in support of it.

What makes the challenge even tougher in El Salvador is a disadvantageous level of the real exchange rate. The Salvadoran real exchange rate has appreciated significantly since the 1970s, no matter how the real exchange rate is calculated. The real exchange rate has remained roughly stable (and perhaps has even depreciated slightly) in recent years as disinflation has taken root, but this follows a long period of ongoing real appreciation (Figure 5). This is all the more striking in light of the adverse shocks (terms of trade and natural disasters) that the Salvadoran economy has experienced during this period. The appreciated real exchange rate greatly complicates the process of structural transformation since it acts as a significant tax on investments in the tradable sector. We heard repeatedly in our interviews that El Salvador is unlikely to be competitive in activities where labor costs are the main determinant of success. Comparative evidence suggests that growth spurts frequently necessitate large real depreciations that boost tradabale activities. For example, Chile's recovery and growth in the mid-1980s was greatly facilitated by a more than doubling of its real exchange rate (Figure 6). The absence of a comparable episode of real depreciation in El Salvador raises the premium on active policies of structural transformation.



Chile
real exchange rate and per-capita GDP growth
(growth is shown as 3-year moving average)



Why new industries don't take off on their own

In low income economies that specialize in traditional commodities, the ability to break into non-traditional, higher-productivity activities is the key driver of economic growth. Consider some of the well known cases. Taiwan exported little else besides sugar and rice in the 1950s. Its subsequent explosive growth was based on a remarkable diversification into manufactures of various kinds. South Korea exported practically no manufactured products in the early 1960s. And Chile's dominant export was copper until the 1980s. In each of these cases, growth was accompanied, and indeed driven, by the acquisition of capabilities in an expanding range of non-traditional activities.[3] These and other successful cases demonstrate the importance of macroeconomic stability and a broadly market-oriented set of policies. But when we scratch the surface of these experiences we also find that productive transformation was hardly ever a natural, purely market-driven process. It was almost always stimulated and supported by public policies and public-private collaboration.

It is worth noting that the only significant non-traditional industry that has emerged in El Salvador in the last two decades, namely the *maquila* industry, is itself the product of artificial inducements provided by the Salvadoran government (and to some extent the preferential policies of the U.S.). *Maquila* operations are exempt from import duties on capital equipment and inputs, and do not pay income taxes, municipal taxes and the tax on transfer of real property

[3] Wacziarg (2003) shows that economic growth is accompanied by productive diversification, until a relatively high level of income is reached.

as long as their output is destined for export markets. The tax and tariff advantages provided to *maquila* industries helped identify labor-intensive assembly operations as an investment opportunity for domestic and foreign investors. Since the differential incentives provided to these operations constitute a subsidy from an economic standpoint, *maquilas* were in effect the product of industrial policies.[4] The Salvadoran success with *maquilas* therefore confirms the point that economic transformation requires a concerted government strategy. Indeed, one can also go back to an earlier time and reflect on the role played by the protection of the home market (and of other neighboring markets) in driving diversification and industrialization during the 1960s and 1970s. Coffee profits were invested in industry in large part because high trade barriers in the region created profitable import-substituting opportunities.[5]

There are several reasons why market forces, left to their own, will generally remain too weak to achieve the productive transformation that El Salvador needs. We discuss here the main market failures that seem to us to be relevant in the Salvadoran case.

A. Informational externalities. In our discussions in El Salvador, we frequently asked business people the following question: Suppose you had $10 million that you could invest in whatever activity you want. Where would you invest?

Let us put ourselves in the shoes of this investor. There are potentially thousands of projects in which the investment could be made. Each one will require the expenditure of not only resources but also time and effort to adapt best-practice technologies to Salvadoran conditions. Obviously not all of these investment ideas will pay off. When the project fails, the investor loses the money. When it succeeds, the investor will reap the profits—but not for very long. A successful project is likely to attract emulators. Once the initial investment signals that there is money to be made in, say, avocados, call centers, or TV tubes, other entrepreneurs will come in and dissipate the profits of the original investor. And the better markets work—the cheaper is finance, the more flexible are labor markets, the less the red tape, the easier is entry and exit—the quicker will be the pace of emulation. Hence, any entrepreneur who "innovates" by investing in a new activity bears the full cost of his failure when the project is a flop, but reaps only a portion of the gains when it is successful. Put in economic terms, the private benefit of entrepreneurship in non-traditional activities is only a fraction of the social return.[6] Can we blame the entrepreneur if he is unwilling to subsidize his competitors?

[4] The policy regime qualifies as an export subsidy, and has been notified as such to the WTO.

[5] A striking illustration of this came out in our interview with Roberto Paloma, president of UDOC. UDOC is a highly successful shoe company that employs around 3,000 people and exports around $50 million **[check]**. It has its origins in the ISI period of the 1950s. The company was initially financed by family money made in coffee and banking, and the absence of import competition was the stimulus for diversification into manufacturing. As the business was getting established, the company went through some rough times and had to be bailed out by the family bank. Trade protection and connected lending are currently no-nos, but they were critical in the establishment of this successful enterprise.

[6] See Hausmann and Rodrik (2003) for further discussion.

We believe this is an important obstacle to entrepreneurship and investment in El Salvador currently. The Salvadoran economy needs to "discover" a new range of activities that it can produce at low cost. Since it is not immediately obvious what these activities are, the discovery process necessarily requires experimentation—entrepreneurs getting their feet wet to see what works and what doesn't. Experimentation of this kind is costly and rife with informational externalities. Meanwhile the openness of the Salvadoran market and the high degree of competition keep profit margins low. Under these circumstances, the market mechanism cannot do a very good job of fostering economic restructuring. Unless investments in new activities are specifically promoted, the pace of structural change is too slow and suboptimal.

B. Coordination externalities. Imagine our investor knows, on the basis of feasibility studies, that pineapple can be produced cheaply in El Salvador. Consider the obstacles he would face in exporting to the U.S. market. He needs helps with transport, logistics, customs, phytosanitary standards, marketing and distribution. He has neither the expertise nor the scale for his own downstream investment in these areas to make sense. So he is stuck with unattractive options—dealing with third-party brokers, poor transport links, ineffective marketing, and so on. How different would things look if there were a large number of Salvadoran pineapple exporters that all needed the same services. Then the scale effects would come into operation, and the downstream services could be organized much more efficiently—either with the exporters banding together or with the creation of an independent company that services Salvadoran exporters.[7]

Such complementarities among lumpy investment projects is a common feature of non-traditional activities. If our entrepreneurs considers building a hotel in the Gulf of Fonseca, he will need other investments (in infrastructure, tourist facilities, advertising abroad etc.) to be in place. If he wants to build a dyeing and finishing plant for textiles destined for the U.S. market, he will need a water-treatment plant nearby (which in turn will be built only if there is enough dyeing and finishing activity that is going on).[8]

In each one of these cases individual projects are likely to be profitable if complementary investments are made, but not otherwise. Given the lumpy nature of the investments, what is required is a coordination of these various upstream and downstream activities. Sometimes the coordination can be achieved without government help through sector associations and industrialists' groups. At other times, it may require government agencies to gather investors around a table and provide sweeteners to initial investors.[9]

C. Labor training externalities. Most labor training takes place on the job, and the most significant forms of inter-firm technological spillovers occur through labor mobility among firms. This creates a tradeoff. On the one hand, we need adequate labor turnover for new

[7] This story is inspired by the FUSADES experiment with pineapple, which comfronted these difficulties. Another source of complementarity is that an efficient-size pineapple packaging plant needs adequate pineapple supply to operate at full capacity.

[8] This example was provided to us by Miguel Lacayo.

[9] For an interpretation of the South Korean and Taiwanese "miracles" along these lines, see Rodrik (1995).

technologies and productive capabilities to disseminate among firms. On the other hand, labor turnover undercuts the incentive of firms to invest in on-the-job training. Think for example of bilingual operators for call centers. While much of the training of an operator is specific to the firm, much of it is also of a general nature that could be easily deployed in other firms in the same line of business (language skills, customer relations, software skills). The economic logic of labor turnover suggests that firms will generally underinvest in these general skills, to the detriment of the economy. The appropriate response is for the government to subsidize firms that provide on-the-job training for general skills, or when firm-specific and general training can not be easily distinguished, to subsidize private training facilities that provide the requisite skills. INSAFOR already does provide some of this by taxing the payroll of firms and subsidizing demand determined programs. However, at US$ 17 million a year, the program is modest.

Moreover, in the context of innovation, firms may be limited by the lack of trained personnel, given the novelty of the idea, but the training required may be quite general to any firm in that new activity, whether innovator or copycat. This will slow down and reduce the efficiency of the process of self-discovery. Therefore, socializing the costs of training and increasing the elasticity of supply of trained personnel is crucial.

How new industries are created: illustrations from Chile

As mentioned previously, successful structural transformation often needs a helping hand from the government. It is well known that East Asian governments employed a wide range of policy interventions to direct industrialization. But the Asian experience is remote both in time and in geography from the Salvadoran reality. In this section, we provide some illustrations drawn from the Chilean experience. The point is not to provide a model to emulate, but to give an idea of the range of strategies that have borne fruit elsewhere.

Chile is a country that is often touted as a miracle of free-market economics. In reality, public-private collaborative strategies have played a very important role in fostering structural change and stimulating non-traditional activities in this country. Indeed, the Chilean government has had a hand in the early stages of development of all major non-traditional exports.

The foundations of the fruit industry, which is the second largest export item after copper, were laid in the early 1960s through the efforts of the Corporacion de Fomento (CORFO), University of Chile, and the National Institute of Agricultural Research (INIA). These institutions transferred, adapted, and disseminated foreign technologies to domestic growers (Jarvis 1994). Here is how the World Bank summarizes this experience:

> The Corporación de Fomento (CORFO) played an important role in the early 1960s in surveying existing fruit orchards, analysis of potential demand in foreign markets, elaboration of production goals, introduction and screening of new varieties, establishment of nurseries to propagate disease-free plants, construction of cold-storage facilities at strategic locations to promote postharvest care, phytosanitary inspection of exported fruit, establishment of favorable credit lines and working capital, and "drawback" payments for fruit exports. In 1965 a 10-year program of cooperation

> between the University of California and the University of Chile was established to permit technical cooperation and improve graduate training. This helped the University of Chile develop a first-rate faculty in fruit-related sciences and to begin modern fruit research. Spillover effects strengthened government agencies and other universities. … In 1964 Chile established the National Institute of Agricultural Research (INIA), which paid relatively high salaries and attracted skilled researchers. The agency initiated a fruit research program from the start. By these means, Chile developed the scientific personnel and knowledge to achieve technological transfer, identified and began to plant new varieties suitable for foreign markets, improved orchard and postharvest management, upgraded fruit research and teaching, and developed the infrastructure necessary to export fruit to foreign markets. [UC Davis economist] Jarvis notes that the bulk of these developments were carried out by the public sector. (de Ferranti et al., 2002, chap. 4.)

Private investment and exports took off after the reforms of the mid-1970s, once uncertainties regarding land reform, macroeconomic stability, and labor militancy were resolved. They received an added boost in the mid-1980s when the sharp real depreciation raised profitability of exports.

The Chilean fruit industry is almost a textbook example of how public investments in technological expertise combined with private sector dynamism can generate a sustained economic boom (Jarvis 1994). A couple of examples, drawn from Jarvis (1994), illustrates how public efforts helped overcome the type of bottlenecks identified above.

- Table grapes tended to rot in the long transit to markets as a result of infections from fungus. The infection could be controlled by gassing with SO_2. However, one gassing did not work very well over a long voyage. In 1969, a CORFO official observed experiments in California in which small pads were designed to release SO_2 gradually over time. CORFO adapted the technology, carried out experiments in Chile, and shared the results with exporters. The following year the leading Chilean exporter of grapes shipped all his grapes with with SO_2 pads. This is an instance in which public adaptation of foreign technology internalized an informational externality (with the externality arising from the public-good nature of the new technology for the entire industry).

- U.S. regulations required fumigation of Chilean grapes against insect pests. This was initially done at U.S. ports, but as the volume of Chilean shipments increased, exporters began to run into capacity problems and long delays. With U.S. agreement, the Chilean government moved fumigation to Chilean ports. Chile's National Institute of Technology (INTEC) built fumigation into a cooling tunnel. This speeded up transit and allowed continuous cold storage until sale. This is an instance in which public investment solved a coordination problem.

Fish products, the next big export item, were also significantly aided by public interventions. The salmon industry, which now generates $600 million in exports, was created singlehandedly by Fundacion Chile, a non-profit institution which the Chilean government created in 1976 with a $50 million endowment received through an agreement with the ITT Corporation. Fundacion Chile brought the technology of salmon farming to Chile, adapted it and made it commercially

viable, formed private sector businesses to use it, and eventually sold its participation to Japanese investors at great profit. Without Fundacion Chile's efforts, Chile would either not have a salmon industry or the industry would have come into being much later. Fundacion Chile has performed a similar incubator role in a number of other areas such as fish products (other than salmon), furniture, goat cheese, medicinal herbs, and raspberries. Not all of these have been as successfull as salmon. But one would have to conclude that the organization's net impact on Chile's productive potential has been quite positive.

There are many other agencies in Chile besides CORFO and Fundacion Chile that are engaged in technological development and economic diversification. PROCHILE undertakes export promotion through the provision of technical and marketing assistance and matching grants. The Foundation for Agricultural Innovation (FAI) provides technological assistance in agriculture. FONTEC gives matching subsidies to R&D projects in the private sector.

Even with hindsight, it is difficult to evaluate how much difference these programs have made to Chile's economic growth. We can never be sure that Chile's economic performance would not have been equally good in the absence of government programs aimed at diversification. The question of appropriate counterfactual plagues all analyses of industrial policy, which is why there remains so much controversy about its effectiveness. Moreover, one should not read into Chile's experience a well-planned, deliberate strategy of promoting structural change. Much of it was made up along the way, as policy makers took advantage of luck or circumstance. For example, the climactic similarity with California greatly facilitated the efforts to transfer agricultural technology from abroad. Fundacion Chile, as mentioned above, was funded by the ITT corporation as compensation for its reprivatization after the military coup. The main message to take from Chile's experience is that in the appropriate economic context—in an economy that is substantially market-oriented and with sound fiscal policies—policies aimed at economic self-discovery can have a substantial upside.

Pro-active policies for spawning new industries: design principles

We outlined in the previous sections some of the key market failures that keep the perceived return to private investment low and thereby block economic diversification. In principle, these market failures can be addressed by well targeted Pigovian subsidies. For example, informational externalities can be corrected by subsidizing the fixed costs of entrants in non-traditional industries. However, as Latin American policy makers have discovered through painful experience, things are not that simple. Governments are subject to "failure" as well, and any approach to policy that presumes omniscient, well-intentioned buraucrats that can costlessly implement first-best policies while keeping political influence at bay is doomed to failure. Therefore our approach to policy design has to be informed not just by the market failures that block economic take-off, but also by the potential government failures that can render the textbook remedies worse than the disease.

In short, we need a balanced strategy that recognizes the presence of both government and market failures. A schematic representation of our approach is presented in the next box. As shown in the box, the main sources of government failure are: (a) the lack of complete

information about the nature, source, and magnitude of the relevant market failures; (b) the possible "capture" of policy interventions by the firms whose behavior the interventions are aimed at regulating; and (c) the ability of the private sector to game policy makers when policies suffer from dynamic inconsistency (i.e., when the promise to withdraw support from poorly performing activities lacks credibility). The generic response to these failures is to discipline policy makers by requiring non-discretion, uniformity, and arms' length relationships with the private sector. However, while such an approach may work well in the absence of any useful role to be played by policy, it becomes seriously incomplete in the presence of the challenges we have identified above. These challenges--rooted in market failures--require the deployment of production incentives, which in turn cannot be provided without a degree of selectivity, non-uniformity, and interaction with the private sector.

Public interventions that have the potential to alter the allocation of resources in the economy are always subject to capture by well-connected businesses. This is the familiar syndrome of rent-seeking, which has often plagued policies of import substitution (and occasionally those of export promotion). It is important, not just for the economic effectiveness but also for the broader political legitimacy of the policies we are proposing here, that the institutional setting in which they are carried out provide for safeguards against capture, rent-seeking, corruption, and cronyism. On the other hand, we need to ensure that policy making is informed by and takes advantage of detailed knowledge about market constraints and opportunities that only businessmen can convey. Complete insulation from business interests is therefore not the answer either. A governmental effort to affect structural change must strike a delicate balance between the Scylla of private capture and the Charybdes of bureaucratic ignorance. Our institutional recommendation below must be understood in this context.

Box: Policy Pathologies

A. Government failures
   a. Inadequate information
   b. Capture
   c. Time inconsistency
      … require discipline

B. Market failures
   a. Technological externalities
   b. Coordination externalities
   c. Informational externalities
      … require incentives

A balanced growth agenda requires discipline + incentives

Designing the requisite mechanisms and institutions is a hard task. While the experiences of other countries help provide some hints, there are no blueprints that can be adopted in

straightforward fashion. Domestic creativity and political leadership is crucial. We discuss below some "design principles" that are helpful in structuring the appropriate mechanisms.

Our approach emphasizes process over specific policies. In view of the inherent uncertainty about what is likely to work and not work, we believe it is more important to design "robust" institutional arrangements than it is to adopt an agenda of specific policy actions. The process of self-discovery is as much about policy learning—what types of policies work and which do not under existing realities—as it is about entrepreneurial learning. In the long run, the key is to have an effective institutional capacity for policy experimentation and trial-and-error. Robust institutional arrangements maximize the potential of revealing welfare-enhancing interventions, minimize the political failures discussed above, and are viewed as legitimate by broad sections of society.

Accordingly the institutional architecture we recommend has the following elements.

1. Political leadership from the top. Just as sound finance and fiscal probity have a high profile political champion in the person of the finance minister, the strategy of economic transformation needs a highly placed political advocate who has the ear of the president (or perhaps is the president himself). This would ensure that the strategy receives the priority it needs. A high level of political leadership is essential if the opportunities and obstacles that are identified by promotion agencies or the coordination council (see below) are to be addressed with speed and efficiency.[10] A top political figure needs to feel responsible for making economic transformation happen, in the same way that a central bank governor feels responsible for monetary stability and a finance minister feels responsible for fiscal solvency.

2. A high-level coordination council. With an appropriate refocusing of the activities of BMI, PROESA and other agencies, there may not be a need to create new institutions from scratch. However, it would be useful to have a coordinating agency that takes a pro-active role in identifying and generating new investment opportunities, acting in line with the principles enunciated above. The coordination council would seek out and gather information (from private sector and elsewhere) on investment ideas, goad BMI, PROESA, and others into desirable promotion efforts, achieve coordination among these different agencies when needed, push for changes in legislation and regulation to eliminate unnecessary transaction costs or other impediments, have the capacity to provide complementary public goods, could generate subsidies and financial backing (either debt or equity) for new activities when needed, and could credibly bundle these different elements of support along with appropriate conditionalities. To facilitate the working of the council, it should be kept small and preferably composed of key economics ministries and headed by the president or vice-president. The council should have its own staff of technocrats.

[10] The role played by President Park in South Korea in monitoring exports and economic performance on an almost daily basis is legendary. More recently and closer to home, the promotion of tourism in Costa Rica has been greatly facilitated by the close involvement of then-president Figueres in the activities of the Costa Rican tourism competitiveness board.

3. Transparency and accountability. It is important that this strategy of economic transformation be viewed by society at large as part of a new social compact rather than as a set of give-aways to the private sector. This is particularly important since the pro-active policies of the type described here can sometimes be partial to bigger firms and entrepreneurs (unlike microcredit programs, say, or support of SMEs). This raises the premium on ensuring that these promotion activities are undertaken in a transparent and accountable manner. One possibility would be to create a broadly-based "board of directors" to which the coordination council would report every quarter on its activities. The board would include not only parliamentarians (including from the opposition) but representatives from business (both big and small), agriculture, trade unions, and other parts of civil society. The board would not have the power to vet or reject the council's decisions, but it would be able to question the council, seek out information, and therefore have the ability to embarrass. This or other similar mechanisms could be important in a divided and polarized society such as El Salvador in order to build trust and confidence in government programs.

Within this architectural setup, the new programs initiated must also conform with a set of "design principles" for maximum effectiveness:

1. Incentives should be provided only to "new" activities. The main purpose of the policies in question would be to generate new areas of comparative advantage for El Salvador. Hence, incentives ought to focus on economic activities that are new to the Salvadoran economy. "New" refers to both a new product as well as a substantially new process for producing an existing product. Note how this differs from the focus that often attaches to the support of small and medium sized enterprises (SMEs). SME support policies are based on the criterion of size—not on whether the activity in question has the potential to spawn new areas of specialization. From the standpoint of growth, what is key is to get entrepreneurs to try out new activities.

2. There should be clear benchmarks/criteria for success and failure. It is in the nature of the entrepreneurial "trial and error" process that not all investments in new activities will pay off. In fact, one can even expect only a small fraction of "trials" to be eventually successful. It is enough to have one salmon success to pay off for scores of failures. But without a clear idea of what constitutes success and observable criteria for monitoring it, recipients of incentives can game public agencies and continue to receive support despite poor outcomes. Ideally, the criteria should depend on productivity—both its progress and its absolute level—and not employment or output. While productivity can be notoriously difficult to measure, project audits by business and technical consultants after a set number of years can provide useful indications.

3. There must be a built-in sunset clause. Related to the above, it is important that resources (both financial and human) not remain tied up for a long time in activities that are not paying off. Hence, every publicly supported project needs to have not only a clear statement ex ante of what constitutes success and failure, but also an automatic sunset clause for withdrawing support after an appropriate amount of time has elapsed. .

4. Public support must target activities, not sectors. The targets of public support should be viewed not as sectors but as activities. This facilitates structuring the support as a corrective to

specific market failures instead of as generic industrial policies. So rather than providing incentives, say, for electronics, tourism, or call centers, government programs should subsidize bi-lingual training, feasibility reports for nontraditional agriculture, infrastructure investment, adaptation of foreign technology to Salvadoran conditions, risk and venture capital and so on. The government should be supporting not specific sectors, but growth promoting activities, which will often span several sectors at once. Neither should the deciding factor be the size of the recipient enterprises.

5. Activities that are subsidized must have the clear potential of providing spillovers and demonstration effects. There is no reason to provide public support to an activity unless that activity has the potential to crowd in other, complementary investments or generate informational or technological spillovers. Public support must be contingent on an analysis of this sort. Moreover, activities that are supported should be structured in such a way to maximize the spillovers.

6. Agencies carrying out promotion must be autonomous; therefore the authority must be vested in agencies with demonstrated competence. Subject to the constraints to be discussed below, the authorities in which the responsibility for carrying out promotion is vested need to have enough autonomy and independence that they can insulate themselves from lobbying, design their work agenda appropriately, and have the flexibility to respond to changing circumstances. This in turn requires that the agencies selected for the purpose preferably have a prior track record of professionalism, technical competence, and administrative effectiveness. When administrative and human resources are scare, it may be better to lodge promotion activities in agencies with demonstrated competence, even if that restricts the range of available policy tools, than to create new institutions from scratch.

7. The relevant agencies must be monitored closely by a principal with a clear stake in the outcomes and who has political authority at the highest level. Autonomy does not and should not mean lack of accountability. Close monitoring (and coordination) of the promotion activities by a cabinet-level politician, a "principal" who has internalized the agenda of economic restructuring and shoulders the main responsibility for it, is essential. Such monitoring guards not only against self-interested behavior on the part of the agencies, but also helps protect the agencies from capture by private interests. This "principal" could be the minister of the economy or the president. In any case, if the principal is not the president himself, it is important that s/he have the ear of the president, and that s/he be viewed as the latter's associate rather than rival.

8. The agencies carrying out promotion must maintain channels of communication with the private sector. Autonomy and insulation does not mean that bureaucrats maintain arms' length relationships with entrepreneurs and investors. In fact, ongoing contacts and communication are important so as to allow public officials to have a good information base on business realities, without which sound decisionmaking would be impossible. This combination of bureaucratic autonomy and connectedness is what the sociologist Peter Evans (1995) has termed "embedded autonomy" in his discussion of successful economic strategies in East Asia and Latin America.

9. Optimally, mistakes that result in "picking the losers" will occur. Public strategies of the sort advocated here are often derided because they may lead to picking the losers rather than the winners. It is important of course to build safeguards against this, as outlined above. But an optimal strategy of discovering the productive potential of a country will necessarily entail some mistakes of that type. Some promoted activities will fail. The objective should be not to minimize the chances that mistakes will occur, which would result in no self-discovery at all, but to minimize the costs of the mistakes when they occur. If governments make no mistakes, it only means that they are not trying hard enough.

10. Promotion activities need to have the capacity to renew themselves, so that the cycle of discovery becomes an ongoing one. Just as there is no single blueprint for undertaking promotion, the needs and circumstances of productive discovery are likely to change over time. This requires that the agencies carrying out these policies have the capacity to reinvent and refashion themselves.

Back to El Salvador: some implications

Since the early 1990s, Salvadoran governments have focused their efforts on cementing macroeconomic stability and establishing a market economy. Formulating and implementing a strategy of economic transformation has not been a priority—in part because of the idea (common throughout Latin America in the 1990s) that market-oriented reforms obviated the need for such a strategy. We believe that a strategy of the sort discussed above needs to be placed at the front and center of the economic agenda of the next administration, to complement the fiscal, social, and market-oriented policies we discuss elsewhere in the report.

There is a multitude of agencies in El Salvador engaged currently in investment promotion. But on the whole these efforts tend to be of recent origin, poorly focused, not adequately targeted, diffuse, and uncoordinated. For example, BMI is a second-tier credit institution that supports private investment through lending to financial institutions. But it has not focused its efforts on promoting new economic activities per se, taking a more passive stance in allocating credit according to demand. PROESA is very new, and focuses its efforts on promoting foreign investment in El Salvador, rather than promoting domestic investment and entrepreneurship in new activities. Its priorities are determined along sectoral lines (e.g., textile and apparel, call centers, agribusiness, electronics) rather than along the lines of specific economic activities that need support. The minister of the economy has described to us a range of investment coordination and promotion activities that his ministry undertakes. But these tend to be done on an ad hoc basis, are not well coordinated with similar activities of other agencies, and often do not have the support of other key ministries in the government. FUSADES has engaged in the past in projects to develop new economic activities (e.g., pineapples), but its current efforts are at too low a level to make a difference. Its microfinance operations are more appropriately viewed as a social program rather than a program of promoting growth through economic transformation. These programs of BMI, PROESA, FUSADES and the Ministry of Economy have little political salience and do not enjoy broad political support at the highest levels of the

government.[11] In order to become more effective, these efforts need to be not only ramped up, but also placed on a more solid institutional footing, as discussed previously.

What type of new efforts might the coordination council, and the other agencies with which it would work in concert, undertake?

To begin with, the design principles enumerated above make clear some of the things that the Salvadoran government ought not to do: it should not create new state-owned enterprises; it should not assume that the government has all the necessary information on what activities to promote; it should not think in sectoral terms, nor promote existing activities; it should not focus on SMEs, employment, or distributional equity per se, but on growth-promoting non-traditional activities.

With regard to positive policy recommendations, we start by emphasizing an obvious but important point: Most of the new policy opportunities are likely to emerge out of the changed mindset of policy makers and the new information produced by the institutional framework we described above. Attempting a detailed and exhaustive list of policy innovations runs against the risk that such a list would foreclose options that the council's own deliberations would eventually produce—indeed foreclose the deliberations themselves (which we see as an important part of the policy development process). Salvadoran policy makers and business people are in a much better position to think through the specific implications of this framework than external consultants with limited exposure to Salvadoran realities.

Nonetheless, it would be useful to give a sense of the possibilities through a few ideas that the team developed during our visit in El Salvador. We list these below.

Promoting new activities by covering part of the costs of "self-discovery". As we discussed above, uncertainty about what new products can be profitably produced constitutes a key obstacle to economic restructuring. The resolution of this uncertainty typically requires some upfront investments, as well as productive tinkering to get imported technologies to work well under local conditions. Since both of these areas are rife with externalities (successes can be easily emulated), the economic case for subsidizing them is strong. Therefore, the government needs a facility to defray the costs of the early stages of the cost discovery process. The coordination council can be allocated a budget for this purpose. With this budget, the council's staff would be empowered to co-finance feasibility studies, demonstration projects, technology transfer arrangements, and the preparation of business plans in non-traditional activities.

Essentially we envisage a "contest" whereby private-sector entrepreneurs would bid for these resources by bringing forward pre-investment proposals. The criteria for financing such studies would be that (i) they relate to substantially new activities within El Salvador; (ii) they have the potential to provide learning spillovers to others in the economy (ii) the private sector entities are

[11] An indication of the low level of intensity of these activities is the following quote from the WTO's most recent survey of El Salvador's trade practices: "The Salvadoran authorities have pointed out that there are no programmes of assistance either for individuals or enterprises or for regions or specific factors to facilitate modernization and adjustment to structural change" (WTO 2002, p. 61).

willing to submit themselves to oversight and performance audits. Projects that are eligible would include not only new products but also new processes (as in the importation of foreign engineers to look into technology upgrading). As a rule, co-financing is a good instrument, since it ensures that entrepreneurs risk their own resources as well. The chief objective of opening this window would be to create a pipeline of new investment ideas within El Salvador.

How much would this cost and how would it be financed? Since this facility is meant to de facto subsidize feasibility studies rather than investment projects, its cost can be kept modest. For example, in the long run, if 70 proposals a year were financed at an average cost of $500 thousand each, total expenditures would amount to a quarter of a percent of GDP. In the short run, external funding for a pilot project should be obtainable in concessional terms through the Multilateral Investment Fund and can be complemented with other bilateral donors. Once the program is evaluated and shown to be successful, it should be expanded and funded through regular loans from the multilateral development banks. The IDB has recently been active in funding initiatives similar to this one, especially in Chile. Moreover, oversight by the IFIs may further increase monitoring of the initiative.

Developing mechanisms for higher risk finance. Going from the pre-investment phase of a project to the investment stage requires a more sizable expenditure of resources, which must be financed somehow. El Salvador has a good banking system: credit is relatively cheap, lending spreads are low, credit to the private sectors as a share of GDP is high for a country at this level of development. But bank lending is necessarily low risk as it involves intermediating deposits, i.e. obligations that must have a fixed price and be highly liquid. Therefore, banks must lend only in low risk situations, and thus require the presence of a secure cash flow or a readily disposable collateral, ideally both. By contrast, business development and self-discovery requires much riskier forms of financial intermediation. Ranked by increasing risk, these additional forms of finance include corporate debt, subordinated debt, preferred equity, normal equity, venture capital and angel capital. El Salvador has a dearth of these riskier forms.

The absence of these markets is quite stark: in spite of the fact that AFPs are allowed to invest up to 30% of their assets in BMI bonds and up to 20% in Salvadoran mutual funds, at present 85 percent of Salvadoran pension fund (AFP) assets is held in the form of government debt, a higher ratio than in any other Latin American country (save for Costa Rica) for which the AIOS provides comparable data. The equity market has a total valuation that is minimal, in spite of the fact that capital market laws were upgraded, that the AFPs can purchase stocks and that privatization generated a potential supply of securities. In the countries where these markets exist, they do not finance new firms, but instead are a vehicle for the developers of new ideas to eventually fund their expansion or realize their gains. Early development is usually the realm of venture capital, or even more, angel capital. Notice however, that the presence of capital markets facilitates the development of venture capital, as it allows for an exit strategy for investors to realize the gains.

There may be many reasons why these markets do not develop. Capital markets are highly dependent on the quality of corporate governance as this is critical to assure shareholders that their interests are adequately protected by management. They also require companies to broadcast information to its shareholders and bondholders, but this information may be used by

the tax authority or organized crime. Without a capital market, venture capital will even have more difficulty in developing and its absence will retard the process of structural transformation of El Salvador.

Therefore we believe that the absence of venture capital in El Salvador is not going to go away anytime soon. Therefore we propose to deploy BMI as a source of venture capital. BMI has entrepreneurial and competent leadership, is profitable, and is actively looking for new opportunities. It would be possible to redeploy it as a venture capital fund with a "developmental philosophy" along the lines discussed above. This idea is further developed in Chapter [Velasco finance]. These venture capital activities should be financed with a capital contribution by the government with resources obtained either from privatization proceeds or from MDB loans.

It is also important to develop mechanisms to mobilize AFP resources. As proposed in Chapter [Velasco, finance], BMI could develop a guarantee program that may transfer enough risk onto its own balance sheet so that AFPs can participate at more appropriate levels of risk.

That chapter also proposes to develop credit-based (as opposed to securities-based) products targeted to the AFPs. This may help get around the typical hurdles that prevent the development of the capital markets, such as high minimums and information disclosure.

Mobilizing society to tackle coordination externalities. Coordination externalities are essentially impossible to make concrete ex ante. They are very specific to each new activity. For example, tourism needs an adequate system of road signs for foreigners to find their ways around. Fruit exports require complex phytosanitary standards to be negotiated with the importing country. Airplane repairs may require an adequate system of labor certification. In all sectors, research and development needs are highly specific and changing. Forestry requires special financial arrangements to provide producers with an annual income out of their highly bunched cash flow. And the list goes on… This means that the government needs to have the capacity to identify these coordination failures and attempt to resolve them.

How can a government organize itself to identify and resolve these different and changing coordination needs? It has to rely on the ability of the whole society to identify these opportunities. Since opportunities are highly specific, it is logical to have the respective business sectors involved in their identification. This is a constructive role that can be played by chambers of commerce and other forms of social organization. However, economists have been reluctant to provide any significant role in the policy process to these organizations, seeing them mainly as rent-seeking activities. And they have a point. It is clear that influence can be used to divert public resources for private or corporatist gains. Moreover, expectations by others in society that this behavior will be prevalent will reduce the social legitimacy of any initiative.

This poses a dilemma. Business, farmers and labor associations are uniquely placed to identify problems that need fixing but can also abuse their relationship with the government for private gain. A solution would be to imbue the relationship with mechanisms that facilitate its legitimacy. Having the proposals made public, having them formally scored by the technocrats in the technical secretariat of the council for their impact on the fiscal accounts and on society as a

whole the country, and having these assessments discussed publicly would naturally force proponents to be serious about the logic behind their request for public attention and support. Ideas that cost nothing and bring some benefits should face little opposition. Ideas that have fiscal costs in the present and benefits in the future should be considered within the public investment budget. Ideas that do not bring a net fiscal gain over the long run would likely receive much less favor.

The idea is to mobilize the identification of coordination opportunities while constraining inconvenient rent-seeking behavior.

Socializing part of the cost of general technical training. New activities will find an absence of adequately trained personnel. However, innovating firms will fear that labor turnover will reduce the returns to on-the-job training and will thus under-provide training. This will inevitably delay the process of self-discovery. So there is a strong case to be made for subsidizing training for vocational, technical and language skills. INSAFOR, with annual spending of US$ 17 million is a modest step in the right direction. It correctly is focused in providing demand subsidies, rather than in producing directly. However, it insists on purchasing the training programs itself rather than compensating firms for their training expenditures. We propose that it develop programs especially designed for innovating firms. In the context of a new venture, it should offer to provide monetary grants to co-finance training efforts.

Actively promoting foreign direct investment as a strategy to accelerate structural transformation and self-discovery. We have argued that the problem of structural transformation of any developing country is related to the identification, among many options, of the products and processes that can be efficiently carried out there, given the endowments, institutions, practices and relative prices. In many respects, potential foreign investing firms face a very similar problem. They know how to make certain products, but do not know if they can do so in a given untested country. They must make guesses as to the potential problems that may arise, given the unknown setting. As before, by trying out, they generate spillovers of valuable information. This justifies an active promotion policy.

Up to the present, El Salvador has acted to reduce transaction costs and discrimination to foreign firms. The Investment Law (Decree 732 of 14 October 1999) guarantees freedom of investment and national treatment, notes the relatively few exceptions and sets up a single window -- National Investment Office (ONI) for formalities required to be met. There are also numerous bilateral agreements on reciprocal promotion and protection of investments. These measures are obviously positive and justified as they reduce obstacles and facilitate investment.

However, it is useful to think about what more active promotion strategies a country should be prepared to do to attract investment, and foreign investment in particular. First of all, it is clear that special attention should be given to new activities that can potentially lead to exports. Secondly, there is no a priori reason to favor foreign over domestic firms. However, foreign firms often already possess a technology that has yet to be tested in the country. There is a case for defraying part of the cost of this test. Here is a set of activities that should be considered:

- providing information about the country to the relevant levels in international corporations. PROESA does this, although at a modest level.

- willingness to reduce setup costs by providing, for example, needed specific local infrastructure,
- willingness to adjust inefficient existing regulations
- provision of cash subsidies for the training of the personnel in new activities.

These specific activities must be deployed in a context where potential innovating firms, whether foreign or domestic develop a founded conviction that the government has an interest in their productive success. The uncertainties involved in innovation for exports means that all contracts are going to be incomplete, as unexpected situations will arise that were not foreseen. It is critical that the country develop a reputation that these unforeseen circumstances are managed in a cooperative spirit, without opportunism. By the same token, firms should not feel that they are protected against low productivity due to fundamental reasons.

Taking advantage of Salvadorans abroad. To date, Salvadorans in the United States have been regarded exclusively as a source of remittances and (to a lesser extent) as a market for "ethnic goods" exports. But Salvadoran migrants are potentially an important source of ideas, entrepreneurship and finance for spawning new economic activities in El Salvador. The fact that remittances are used primarily to boost Slavadoran consumption, and that very little of it apparently goes to productive investment activities, points to an important failure, as well as an opportunity.

We recommend that PROESA make the pooling and attraction of Salvadoran savings abroad into investment projects at home an important part of its mandate. With the help of the domestic private sector, PROESA can identify projects that are likely to be of interest to Salvadorans abroad. These may be activities that relate to the migrants' own life experience or projects that could use their specific skills upon return to El Salvador. PROESA can then solicit the migrants' participation, both in financial terms and through entrepreneurship. There are examples of small scale efforts of this kind that have arisen on their own. For example, Salvadorans living in the U.S. created an electronic network for providing support for local development projects in El Salvador.[12] Small scale funding (about $500,000 over the last two years) for social and physical infrastructure has been made available through a FISDL/Unidos por la Solidaridad program.[13] These efforts need to be actively stimulated and scaled up by PROESA or other Slavadoran agencies. As part of this effort, PROESA should build and maintain ongoing relationships with networks of Salvadoreans and their associations abroad. Since Salvadoran migrants in the U.S. are regionally concentrated (with a disporoportionate share in California), it should be possible to exploit the geographical proximity of these communities.[14] Regional concentration facilitates establishing Salvadoran networks and targeting them. For example, when feasibility reports in agroindustries point to profitable new opportunities, PROESA could mobilize Salvadorans abroad to participate as investors.[15]

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[12] See http://www.conectando.org.sv/English/Strategy/Migration.htm.

[13] Mentioned in Dean Yang aide memoire, p. 2.

[14] Almost 50% of Salvadoran migrants in the U.S. live in California. Texas and the greater Washington, D.C. region each claim more than 10 percent of the total.

[15] In our interviews, we were told of a number of Israeli projects in agriculture, which seemed stalled for lack of domestic investors.

Salvadorans abroad tend to be employed in low-skill occupations. Less than 5 percent are in business and management (with the bulk employed in cleaning services, factory work, food service, construction and transportation). However, almost a fifth of Salvadorans in the US 25 or older have at least some college education, with 16 percent reporting to have a university degree. In terms of absolute numbers, that means there are close to 100,000 Salvadorans in the U.S. with a college degree. Even if a small portion of this large pool of human capital were drawn back into Salvadoran enterprises, the impact on the home economy would be perceptible. More discussion of and ideas on how to capture the opportunities presented by Salvadorans abroad is presented in the chapter on [Dean Yang's chapter].

Box: Diversification in agriculture.

Farmers do not have a good idea of what new crops could be planted profitably; they do not have access to the foreign technology and the local adaptations that would be required, nor do they have the resources to experiment in domestic production or international marketing to find out. Public agencies need to address these problems in a systematic manner. They ought to finance and co-finance feasibility studies, organize and pay for demonstration farms, provide extension-type services, coordinate joint investments, and be willing to put up risk capital. The experiences of successful countries such as Chile and Israel can provide helpful guidelines here.

It may be useful in this context to illustrate with two examples of the problems that need to be addressed in the context of structural transformation: fruit and forestry.

At least since the 1980s, the country has tried to diversify into non-traditional fruit. The AID-supported FUSADES project of La Colina, tested pineapple. IICA has tried to develop a variety of tropical fruit. More recently, Israeli investors have explored the possibilities of easy peel citrus, tomatoes and other vegetables produced in greenhouses. Complicating matters, El Salvador has a factor endowment that is different making ideal new projects unlike those that are likely to succeed in neighboring countries. In particular, land in El Salvador is scarcer. The agrarian reform rules on land tenure make large scale farming unconstitutional. Capital is potentially cheaper. This suggests that the ideal technology is likely to use land and capital more intensely than, say, in Guatemala, Honduras or Nicaragua.

There are several complementary interventions that facilitate success.

- An alliance with a major international academic agricultural institution to provide stimulus for local research testing and adaptation
- Funding for feasibility studies and experimental farming
- An alliance with a major firm with strengths in international fruit marketing and distribution.
- Provision of services to minimize the cost of phytosanitary compliance
- Incentives to overcome complementarity externalities between crop size and investments in packaging and distribution

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In some countries, these problems have been addressed through vertical integration in large fruit companies such as Dole or Chiquita. These companies can have the size to overcome scale constraints in crop area, packaging and marketing and they can internalize R&D. Their interest in El Salvador is limited due, inter alia, to the constitutional provision that limits land tenure to 300 hectars **[check]**. The country could study ways of luring these companies to establish a significant presence in the country or instead, to look at other organizational forms that are able to overcome the coordination failures without vertical integration. This would require a more complex system of institutional alliances and forms of cooperation.

Forestry is another area that ex ante appears as potentially promising but that also suffers from a related set of constraints. On the one hand, forestry promises an alternative form of land use, especially in areas such as the coffee growing region, where there is a crisis in the previous form of land utilization. In addition, forestry can avoid what could otherwise become a serious environmental problem, if lands were simply to be abandoned. On the other hand, forestry needs to address technology and complementarity issues. Knowledge needs to be improved on the precise types of trees to be planted in different regions and the potentially most attractive uses: long or short fiber for pulp, precious or standard wood for furniture, etc. In addition, investment in wood processing or pulp and paper plants will not be forthcoming until there is a clear commitment to a sufficiently large planting effort. But this commitment will not be massive unless the economic returns of this initiative are more clearly seen as attractive and until financial mechanisms are developed – such as the sale of certificates of wood in trees – that allow for farmers to derive an annual income out of a crop that is sold only once every 12 years or so[16].

Both fruit and forestry illustrate clearly the need to address potential market failures in order to achieve the needed productive transformation in agriculture.

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[16] Chile has been attempting to develop a market for rights to the wood while still in the trees. This would allow long term investors such as AFPs to effectively buy and hold a portion of the wood growth of every year until it is cut and the gains realized in the market. Such a market would allow forest farms to sell their output on a yearly basis, before trees are ready to cut.