
“LA TRANSICIÓN DE UNA ECONOMÍA REGULADA A UNA ECONOMÍA DE MERCADO”^Ψ

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The subject I am going to talk about is one that of course has been of a lot of interest to me and to many people here in Uruguay: the experience of the transition from a regulated economy to a market economy. A transition which has been ongoing now in many different ways, in different parts of the world.

The largest most significant transition, of course, is not from a regulated economy, but from a communist economy, like in Eastern Europe and in the former Soviet Union. But the movement in Latin America has been from a very state oriented economy, an economy in which the government has a very central role.

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One has to begin with the observation that many of the sectors in which government has played an important regulatory role, like electricity, telecom, banking, and the provision of social security, are sectors in which the market originally did not function well for a variety of reasons. There were problems of monopoly, problems of the market not providing certain key services, or providing services in such ways, as in banking, which periodically led to collapse and to government intervention to resolve the problems of the private sector. So the areas in which government has in the past been heavily involved, have typically been areas in which the market in the past hasn't worked very well. In spite of this, there was a recognition that the government has not worked very well. Regulated sectors and government ownership have not really fulfilled the hopes of those who originally focused on the government having a very large role in these parts of the economy. Unfortunately, we now have a decade or more of a process of privatization and deregulation, and that process too, has not gone very well. It's a very dismal picture I am trying to depict. First of a government sector not working very well, but then of a situation where the process of deregulation and privatization, that was supposed to deal with the problems, also failed.

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In the United States, where the problems of government regulations were very low, and the regulated sector actually had functioned reasonably well, we have seen an enormous failure of the deregulation process. In the context of California, where electricity companies that were under the old system were functioning very well, providing services to their customers at reasonable prices, all of a sudden, in a span of a few months went bankrupt. The prices the consumers faced went up ten fold. To all accounts, it has been an utter disaster. I will come back to try to talk about the interpretation of what went wrong, but what is very clear is that that system failed.

In Great Britain there have been failures. The British Rail (the system in which railroads were privatized) has failed, and the British government has now proposed to retake, renationalize, the privatized railroad system. In Mexico, the privatized road system has collapsed and the government has had to take it over again. In Bolivia there are protests over the level of charges to poor people for the water system.

In the U.K., the system of privatization of social security has resulted in the benefits to the elderly, being reduced by 40% as a result of transaction costs. So in the UK, a country with a very well organized financial market (amongst the best in the world), the transaction costs have been eating up roughly on average 40% of the benefits of those in the social security. In some cases, for some of the people it is far worse than that.

In the case of Telecom in the United States, I was very heavily involved in the reform in the telecommunications sector, and the bill that was passed in 1996. That was the first major change in the telecommunications structure in 60 years, and we thought that was a great thing. But I have to admit that it has not come out in the way that we thought it would. What has happened, is that the telecommunications sector in the United States has been tied up in legal wrangles for the last five years, and there has been an increased market concentration, and far less competition than we had hoped.

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In the case of Russia, the privatization process and the movement to a market economy was supposed to bring unprecedented prosperity, after all, we all know how inefficient the communist system was. A system in which there was no incentives because there was no private property, no profit motive. A system in which there were enormous trade distortions and in which energy prices were kept artificially low. A system in which central planning required or had information requirements beyond what any system could handle. The forecast thus, was that when they moved from the inefficient communist system to the efficient market system, there would be a burst of economic energy, and national income would rise. What has happened? Country after country incomes have fallen, and when I say fallen, that is more than any possible war. GDP in Russia today is somewhat like 40% lower than it was eight years ago. The number of people in poverty has gone up from 2% to over 40% and more than one out of two children today live in poverty in Russia.



In the Czech Republic they had a system of rapid privatization without thinking through the regulatory framework. I sometimes joke that they were good students of Milken. In United States Milken was this guy who figured out what the limits of the law were, and then went a little beyond that. So he made millions of dollars very quickly in the capital markets. He did go beyond the law, and ended up serving five years in prison and paying a fine of one half billion dollars. But he taught the Czechs how to manage their capital market, and they didn't have a legal framework. The result of that was that they set in motion a process which we call tunneling (they developed a whole vocabulary as well). Tunneling is when you take out all the assets from an organization, leaving nothing but the shell of the corporation.

What these examples show is that incentives do work; economists are right -in case any of you had any doubt. But if incentives are not put in the right place, instead of getting wealth creation we get asset stripping. What happened in Russia and Czech Republic was that the way the privatization process, the deregulation process, and the legal environment were structured, led to incentives for asset stripping rather than wealth creation. As a result of that, a country is not richer, but poorer, and poverty is higher, far higher than it was under communism. In fact, one of the jokes going around now in Russia is: "the market economy is even worse than the communists said it was."

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Even the United States has had its problems with its one privatization. This is a little bit of an exaggeration but it will be useful for getting the point across. When Bush and Reagan used to go to the G-7 meetings to talk about the changes in the world, they heard everyone talking about how much privatization they were doing. Thatcher would have privatized six billion dollars in a steel company, four billion dollars in a Telecom, eight billion dollars in some other industry you know, they were all bragging on how much they were privatizing. What did Bush and Reagan have? It was a two million dollar helium plant in Texas. It was embarrassing for the leader of the free world, not to be able to do more than a two million dollar helium plant. So finally they said: "There is something here, that no one else will even think about privatizing, and that is privatizing making atomic bombs". There were only a few countries in the world that could even possibly do it, and who would dare? So they pushed ahead in this agenda, in privatizing making the atomic bomb. You may be surprised, but this is actually the truth. They didn't actually privatize making the atomic bomb, but yes the essential ingredient of the atomic bombs, that is the highly enriched uranium that goes inside. If you have a highly enriched uranium anyone can go on the web, and find out the directions for the rest of the task. So, it is not a particularly difficult thing, and countries around the world are doing it. The point is, that this is the core ingredient and believe it or not, they pushed ahead with this agenda. I had argued that one of the great achievements into the Bush and into the early Clinton administration, was to have an agreement with Russia in which the nuclear war heads from their missiles, were taken out, and this highly enriched uranium -which is a very dangerous stuff-, was de-enriched. When it's de-enriched it can be used for nuclear power plants and it is perfectly safe. So the idea was: take the

enriched uranium, de-enrich it, and put it into the power plants to provide energy. By the way, a kind of energy that does not produce the greenhouse gases, global warming, and the floods that are going around the world today. What the Council of Economic Advisors under Clinton pointed out was that “if you privatized this US enrichment corporation which had been entrusted with bringing in the material to the United States, they would have every incentive to keep the material off Russia”. This would happen because the more stuff that came into the United States, the lower the price; and the lower the price, the lower their profits. So I would argue against a global interest in anti terrorism not to have this privatized. Well, ideology won over reason. The view was we had to privatize and they pushed ahead, I stopped it for four years, but when I left, the idea went ahead and they privatized. The forecasts that said this was going to be a disaster, turned out to be true. At first they said, to give you one example: “We would never try to stop the flow of the material into the U.S. We understand our national interest”. But then I uncovered a secret agreement between Russia and this company. Russia offered to triple the amount of stuff coming into the United States, while this company paid a fifty million dollar hush money bribe to not only not send it, but to agree to be secret about it. It is difficult to believe, but we went ahead. After it was privatized, they tried to keep the material out of the United States in a whole variety of ways. They managed that badly, so badly that today, there are bills in Congress to renationalise it. So this is the unsuccessful case of privatization in United States.

Although there are a lot of articles written about corruption in the process of privatization, there is considerable work showing -and I will come back to this- that the process has a certain degree of corruption associated with it.

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An important thing to have in mind is that even when privatization is well done, even in countries with advanced institutional structures, corruption often arises.

All this is a background for saying that the process of privatization-deregulation is extraordinarily difficult. Very easy to be done badly. Very hard to do well.

What we have to argue is that it is still important to go ahead, that there are very strong reasons for going for the process of privatization and deregulation. But, in doing that, one cannot be guided by ideology, by simple models. There are complexities that have to be recognized in the design of the programs.

I want to begin my discussion then, with a broad, a broader theoretical perspective on the set of issues of deregulation and privatization. Then I am going to move on to try to discuss some of the concrete problems that the theory predicts that will occur, which in fact have occurred; and some of the things that can be done to address these problems.

The theoretical perspective that guided much of the process of privatization and deregulation was a very simple one: it said that markets are efficient, governments are inefficient, and therefore we ought to move from governments to markets.

It was based in a way on a very simplistic idea, that had a long standing in economics,



which is Adam Smith's invisible hand. This invisible hand says that the market by itself leads to efficient outcomes; and that in fact there is another part of it, that says that you don't have to worry about distribution, you can separate out distribution issues from efficiency issues.

The theoretical work, done by George Akerloff, Spence and me, which was recognized by the Nobel Prize Committee, emphasized that the assumptions that undermined Adam Smith's invisible hand, were essentially not relevant. Put in another way: one of the reasons why we could not see Adam Smith's invisible hand, was that it wasn't there. A lot of work has been done in economics trying to understand the limits of the market. There is a whole theory that developed, called the theory of market failure. This theory, talked about for instance, areas of externalities. We all know that markets do not handle externalities well. The air pollution and water pollution, are areas in which government needs to play an important role. There are also positive externalities. There are areas like research and education, where government needs to play an important role too. We now understand these limitations to the markets: externalities in pollution, externalities in research; but those are relatively limited. Those define what the government needs to do and then the private sector should do all the rest.

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The theories developed over the last two hundred years, have all been based on the assumption that information was perfect. Not because anybody really believed that, but because they did not know how to model, to construct theories, in which they explicitly brought in imperfections about information. It was hoped that a world in which information was slightly imperfect, would be very much like a world in which information was perfect. Therefore by studying the case of perfect information, you would learn about the case of imperfect information. What our work showed was that that was not true, that hope was not valid. Even small degrees of imperfections of information, have very large consequences in market behavior.

To give you one example and one that should be obvious: the theories that were taught for two hundred years, said that in competitive markets the demand equals supply. Everybody obviously studied that. It made not a great deal of sense, but it has one implication: that the demand for labor equals the supply of labor, means there is no such thing as unemployment. Now I wish that was true! If there were no such thing as unemployment, the only people who would be unemployed would be the economists. But the fact is, that people (you know the twenty percent of the population in Argentina), that think they are unemployed, really can't get jobs. The problem is not that they think there are no jobs for them. They are right. It's only the economists who say that the market is such that demand actually equals supply, that unemployed people must understand that the market gives them jobs, they just need to want it. The extreme form of that is that many people in American Academia actually went so far, as to say that what happened in Great Depression, was nothing more than an increase in the demand for leisure. All the people in the Great Depression who decided not to work, were just

enjoying a lot of leisure. Usually when we have a lot of leisure we are happy. Why were they so unhappy then at this huge amount of leisure, they were suddenly being given the gift of? The fact is that there is involuntary unemployment, and in fact one of the reasons it is so painful, is that they can't even borrow on the prospect of future income; there is credit rationing.

Traditional theory also says that demand for capital equals supply of capital, then there is no such thing as credit rationing. Therefore, if you go to your bank you can get any money you want at the risk adjusted rate. I used to tell my students: "go to the bank and explain to them you're just about to get a Ph. D., and that your income is going to be very high". In economics we talk about intertemporal smoothing. So, as their income is going to be higher in the future, they should smooth it, and the bank should help them increase economic efficiency by allowing them to borrow against their future prospects. But as you know, specially those of you who are bankers, this argument is not very persuasive.

Well, these are all obvious ways in which the traditional theory was simply wrong. It made predictions in which you don't need to use a sophisticated econometric statistical model, to come to the conclusion that something is wrong with this theory. It is fundamentally leaving out something that is of first order importance in understanding our society and our economy. That was what our research in economics and information was concerned with, and I think we succeeded in providing explanations for phenomena like credit rationing, unemployment, and a whole set of other phenomena. The bottom line that came out of all that is that often markets do not work efficiently, and often there is a role for government, even when government has the same limitations of information than the market has. It's not pretending that the government has more information, that the government is omniscient. But taking into account that government has the same problems of information as the market, there are circumstances that are very wide spread, in which the government intervention, could improve things.

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That theory does undermine the validity of the Adam Smith's invisible hand that provided the intellectual foundations for much of the thrust for privatization and deregulation. It in fact undermined the intellectual underpinnings for the set of ideas that can be called the Washington consensus, that pushes strongly some of the international economic organizations.

Information asymmetry imposed some of the most important constraints of the success of regulation. So the regulators had to take into account this information asymmetry. In our theories of privatization we also took into account the reasons why, the circumstances under which, privatization might or might not work. It was far more complicated than the simplistic theories that supported that privatization always and inevitably was going to work and was going to increase efficiency.

One of the aspects of this, is the recognition that large organizations, whether in the public or private sector, face important problems of incentives. That the theory of the



firm that had been taught for a hundred years, was really on very weak grounding because large corporations are not run by the owner. In fact there are thousands or millions of owners. They are run by managers, who have incentives quite different from the incentives of the shareholders and the other owners. In fact, this was an issue that was emphasized in the beginning of the twentieth century, by the famous work of *Burl & Means*, and actually, as I was doing some work on this area, I came across an article that was written in 1897, by one of the most famous economists of the nineteenth century, *Alfred Marshall*. At the end of the nineteenth century he was asked to write an article in which he had to talk about what were the major advances in economic theory that occurred during that century, and what was the most important challenge to economic theory for the next century. What he said was quite interesting. The most important advances were easy, and were those related to what his research had contributed to economic theory over the previous hundred years. But to the question of what was the most important challenge, he said it was the theory of the modern corporations. He said we don't really understand how the modern corporations work, because the incentives of the theory of the firm, in which we have the owner making the decisions, doesn't apply to the modern firm, to the modern large corporation. If he thrashed around for an explanation, this was before information economics, so he didn't come up with a very good one. What he did was actually interesting, like a lot of economists at that point he turned to sociology. In effect, what he said was that the solution for why British corporations worked well, was the British boarding school. There they were traditionally taught (the joke you know), for God, King and Country; but now the modern boarding school teaches for God, King, Country and Company. So, the managers dedicated themselves to the life of the company, not for incentives, but because they had been programmed in school to do that.

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Modern information economics has highlighted the importance of governance, the importance of the discrepancy between the incentive of managers and the incentive of the owners, and incentives by the way of the workers. It has also pointed out that the modern corporation is a much more complicated animal than traditional theory assumed.

Herbert Simon, who received his Nobel Prize for his important contributions to understanding how organizations behave, put the matter this way: most producers are employees, not owners of firms. Viewed from the vantage point of the classical theory, they have no reason to maximize the profits of the firm, except to the extent they can be controlled by owners. Moreover, there is no difference in this respect, among profit making firms, non profit organizations, and bureaucratic organizations. All have exactly the same problem: inducing their employees to work towards their organizational goals. There is no reason, a priori, why it should be easier or harder, to produce this motivation in organizations aimed at maximizing profits, than organizations with different goals. The conclusion that organizations motivated by profits will be more efficient than other organizations does not follow in an organizational economy from the neoclassical assumptions. If it is empirically true, then other axioms will have to be introduced to account for it. It is a very powerful statement, because it says that the belief that

privatization and deregulation are going to result in more efficiency, is not supported by economic theory. It may be true, and I actually think that there are reasons for why it is true, but it has not come out of the simplistic economic models that were the bases of the Washington consensus. If it's true it comes out of a more refined analysis based on economics of information and the incentives derived from that. Once one recognizes that, one recognizes that one needs to approach the issue from a broader perspective, of not just the contrast between two organizational forms, but between a contrast, multiple, organizational forms.

One of the most interesting parts of my stay in the White House, was to participate and help lead an initiative that we called "Reinventing Government". There we went around each of the agencies and each of the areas of the government and asked a series of simple questions: "What is the role of the public sector here?, Why are you involved in this at all?" And when there was no good reason, we said: "Get out! You should leave that to the private sector." But usually there was a reason. So the second question we asked was: "How are you achieving those objectives?", "Are there alternative ways of achieving those objectives?, Are there ways of achieving those objectives that are more efficient, more effective, more consumer responsive, than the ways you are currently doing that?" And if so, "why don't you change?" It was a process that had some enormous successes, but as many political processes it didn't change in response to logic. So we didn't have success in all the areas that we identified.

The ideas that we put forward were that between the limits of privatization on the one hand and government run the old way on the other, there were a whole series of things. For instance corporatization. When you corporatize, you would get hard budget constraints, you allowed more freedom and incentive structures, but on the other hand, you had a larger role of the public sector involved in governance to make sure that the public objectives were pursued.

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One of the things that we emphasized a great deal, was the use of market like mechanisms. Use of auctions, use of consumer based responses, contracting out parts. One of the simple ideas was that in many cases, rather than privatizing the whole thing, which involved complexities and often failures, if you contracted out particular parts, you could get more effective competition. To give you one example: in one of the developing countries I've worked in, the country, rather than privatizing the whole telephone company (as it was a very undeveloped country, it was difficult to get people to come in and compete effectively) they had competition for providing new lines and competition for cellular services. So they had competition in parts. It turned out that the result of this process of competition in those areas, was much and more intense, and the price was much lower, than was obtained by those who would try to get competition by selling the unit as a whole. In some other cases, we tried to use more incentive based pay, called performance based organizations and introduced stronger incentives.



The bottom line that I want to emphasize, is that the theoretical perspective, begins by saying that differences between the public and the private sectors are smaller than we might otherwise think; and that both public and private have very important incentive issues that they have to address. It is important to think very carefully about how to introduce the incentives in the right way and at the same time, how to maintain some concerns about public interest in the most efficient way.

To give you some other examples, one of the areas that I pushed very strongly for privatization, was the air traffic control system. This is the system that guides the airplanes so they do not crash into each other. The problem here was that as it had been faced with very high budget constraints, it could not do the investment in computers and so didn't work very well. I hate to tell you how bad things were about six years ago, but as things are better now, I can tell you. When I went down to see how things were, I went down to national airports to look at their computers. They had one whole computer room, with an old fashioned computer -when I say old fashioned, you wouldn't believe it; they still used vacuum tubes, and since they didn't manufacture vacuum tubes anywhere in the US, they had to get their vacuum tubes from Poland-. The back up battery in case of electricity failure, was another whole room. Probably none of you have seen this, but the old batteries, used to have very dangerous chemicals, and because of this they also had a room with showers in case of an accident. That was the state of play. It was very clear then that the government agency was not doing a very good job. It was really a miracle that there weren't more problems.

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I pushed for privatization of the air traffic control system, on the grounds that the airlines had an interest in having an efficient air traffic control system, making sure the planes wouldn't crash into each other. That was perfectly coincident with the public interest. Therefore, one can have a private system with the right incentive devices. I also thought that it would be better -from the organizational point of view- to have the safety regulations separated from the management. The problem I saw (one of the problems), was that under the current system, the safety regulator and the manager were the same person. An excellent recipe for disaster, because as soon as there is a problem, the safety regulator is going to say : "Oh, don't worry, he did the best he could". It was important to have somebody who was independent, checking up on the other person. So having the separation, I thought was a good thing.

There was another advantage that turned out to be the critical problem, which was the following: in the United States, corporate jets, get subsidies by not paying their full cost of landing and using the air traffic control system. They get subsidies by the tune of 2 to 4 million dollars a year. This money goes to the poor corporations, who have to fly around in their private airplanes. And I thought: "once you have this privatized, you will have strong incentives to charge them the full user cost of their services. What I thought was an advantage, the corporate jet companies thought was a disadvantage, and they saw through it (I hoped they would not see) what was going to happen on down the

line. So they said: “A privatization will be more efficient, but the gains in efficiency are for the public. The cost to us is the 2 - 4 million dollars in subsidies, so we prefer an inefficient air traffic control system where we get subsidized in, than an efficient air traffic control system where we are not subsidized”. So, as in politics in every country you can basically pay contributions to the Congress men, we didn’t get anywhere. That’s an example of the difficulties of some of these reforms, but also it emphasizes the importance of some of these reforms.

Let me give you one other example, where I thought we had enormous success. It is a little bit related to some issues in many of the Latin American countries, and that is social security administration. There is a wide spread view around the world, that public social security systems are inherently inefficient. That is not true. I talked about the transaction costs in the case of UK where benefits have been reduced by 40% on average. Some people, poor people, have their benefits reduced even more as a result of transaction costs. But the efficiency of the US social security administration continues to amaze me. I can’t explain it, but the fact is, these transaction costs are very low and the services very high. Another thing we did in the “Reinventing Government” effort was to say: “We want to make it even better”. One of the things that we did within this agency, and many other agencies, was to try to change their minds saying: “You know: citizens don’t exist to serve government, government exists to serve the citizens”. A very big change of mind set. One of the reasons we did this, was because we realized that there was a real challenge to the role of government in society, by a group of people who want to minimize the role of government, and actually to engage in redistribution from the poor to the rich. Our view was that if we couldn’t succeed in making government more efficient, we would not be able to succeed in our programs, in what we thought would bring about social justice.

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So for us efficiency was a means to an end of a particular view of society that we had. The interesting thing was that we were remarkably successful. We inculcated in many departments, the view that social security administration, old age pension, existed to serve the people who are retiring. We monitored -going back to the notion of incentives-, we kept track of what they were doing. For instance to give you an example, it used to be the case that if you called up a government agency, you might have to be put on hold on the phone for a very long time. By the way, not any longer than if you try to call one of the american airline companies where you have to hold for a very long time as well. But our view was that this is costing people money, to hold on to the phone is using up resources. Even if you don’t have to pay for it. As your role is to help increase economic efficiency, you have to take those costs into account. As we started to monitor, we started to have people focus on this; and within a year, surveys done of the social security administration, showed that the consumers, the people who used the service, ranked it amongst the best four corporations, organizations, in the country, in terms of consumer responsiveness. The quickness and the accuracy of all the responses was as good as, or better than, most private organizations. It was really at the top. The story here, is that the efficiency of the public sector can be improved if one focuses on it as an explicit goal.



Now I want to spend just a few minutes trying to summarize some of the problems that have occurred in the process of privatization and deregulation around the world. I gave a lot of examples before; I want to try to put a taxonomy, a structure to these. To sort of give a picture of the kinds of things or at least some of the things that one has to be careful of. There are obviously others, but these are some of the problems I have seen most frequently around the world.

The first is *monopoly power*. Quite often, there is a tendency, particularly among those organizations who say the most important thing is to privatize, to do it quickly, and only after privatizing, think about what is the appropriate regulatory structure, the competition structure.

That view, I would argue, is fundamentally wrong. One of the things that one discovers, is that if you privatize a monopoly, quite often it is more efficient in exploiting consumers than the government monopoly was. I can describe examples for instance in one West African country, that what it did was to raise the price for instance, on Internet connections, to the point where the University could no longer afford to have Internet connection.

• 28 • There are some people, some academics, who argue “don’t worry about whether the institutional structure is there, the legal structure, the regulatory structure, because once you have private property put into the place, you will have incentives for creating a good legal infrastructure”. But nothing can be further from the truth. Think about it: if you privatize into a monopoly, you create a private monopoly. What is the incentive of that monopolist? To use his wealth and influence to maintain that monopoly. John D. Rockefeller was not the strongest proponent of competition policy in United States into the nineteenth century and Bill Gates is not the stronger proponent of competition policy into the twentieth century.

If you create monopolies, and you create wealth, they will use that wealth to try to maintain that monopoly. Studies that were done by the World Bank, show the sequencing is absolutely essential. If you do the sequencing wrong, you get bad outcomes.

A second set of problems, has to do with *corruption*. One of the arguments that is often put forward for privatization, is that it reduces corruption. That government enterprises are inevitably suspect to corruption, and I think there is a lot of evidence that that is true.

The problem is, will privatization solve it? Unfortunately, in many cases privatization has led to an institutionalization of corruption. Let me give you a slight exaggeration, which I think is the story of the privatization process that the IMF and the World Bank had behind their minds. They got into a poor African or Latin American country and said: “You are corrupt. You are stealing the people’s money. You are leaking off the profits. And that’s wrong!”. But they said it with such fervor, that the government officials

hearing the sermon would say: “Alleluia, we’ve been sinners! Please, forgive us God! We won’t do it anymore! We will privatize! And we will stop, we’ll lock our hands so we can no longer steal!”. So that was the theory of the missions.

What actually happened was that they went into a country, and explained about privatization. So then a light bulb lighted in the minds of the government officials and said: “Alleluia, you’ve just given us an idea! Why should we share the rents, the theft of future politicians, why not grab it for ourselves?” As economists they said: “We can get the present discounted value of all future rents, by having a corrupt privatization process. So before the profits would be a hundred million, and we would take off thirty million. The present discounted value, of a hundred million say a billion. We can get seven hundred million!”. And what’s worse, is that then that seven hundred million, can become the bases of a more institutionalization of corruption in society.

Then of course we have the sad story of what happened in Russia. The Kleptomaniacs, the mafia capitalism, where ten people were given half of the country’s resources. A reason why a country with rich natural resources went into this decline, is that these resources were given to relatively few people, who figured out how to get them to give all this wealth, and were finally told by the IMF to take the money and invest it anywhere in the world. They were smart enough not to invest it in a country going into depression, and to put it into the New York Stock Exchange, where you have a country with good economic management at the time. So as a result you have this asset stripping, this capital outflow that made the country weaker and weaker. Corruption then had played an important part in the failures.

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A third problem, in a way related, that occurred particularly in the electricity industry (in many countries), is the so called “*take or pay*” contracts. Here you have a private sector that makes the investment, for example building an electricity plant, and the government that absorbs all the commercial risk. The government accepts to take all the electricity, at a fixed price, whether they need it or not. It is a wonderful thing for the private sector who likes quite often this kind of risk sharing. Or this kind of sharing where: “you take the risk and we take the profits”. It is called partnership. But the result of it is of course that it provided enormous incentives for bribery. After all if they take or pay, what you did is you bribe the current government officials. The problems then would come down somewhere down the line in five years time, when the take or pay contracts actually came into play. Then, they had these contracts for the purchase of electricity at prices that were two or three times international prices, and they said: “oh, we have the sanctity contracts and we can’t break the contracts”. So, this was a problem for instance in Indonesia, where we had these contracts, and the US government insisted that these contracts should be complied, even though they were contracts that were clearly not based on commercial principles.

A fourth problem that has occurred in many countries, concerns *the design of the change of regime*. To illustrate let me describe the kind of reasoning (thinking what went on in



California), that led to some of the problems in this matter. On one hand some people were skeptical about the privatization, about the deregulation process (in California), and on the other hand there were other people very optimistic. The pessimist said: “How do we know that the deregulated companies won’t exploit the consumers by raising the prices? How do we know the competition is actually going to work?” But the advocate said: “Trust us”. So the pessimistic answered: “Well, but why?” So you put into the law, an assurance that consumers are not going to be hurt. But then, circumstances change and that rigidity in the contract is part of the problem that causes the disaster that occurs.

So the fundamental problem here is that there is enormous risk when we change regimes, and whenever you have that enormous risk people try to put contract provisions to mitigate that risk. Those contract provisions work on average well, but unfortunately life is never full of averages, and there is where things come out quite different.

Another problem is what Argentina is facing and that is the risk of regulating too strongly, and keeping the prices so low, that the value of the privatized enterprise disappears. So what is often done is to allow the prices to go up, at the international rate, linked to international prices. But that may be a good idea except if those international prices change relative to your domestic non traded prices, because if not you get huge distortions in the system, and again you have a problem.

- 30 • So the kinds of clauses that you put into contracts to protect against abuse, often turn out to tie your hands and to lead to problems. There’s no easy solution, and it’s the kind of thing that has been a problem over and over again.

Finally, another issue that has been a problem in many different countries, is the issue of what we in technical economics call, *renegotiation proof*. When a contract is signed, and the world turns out to be different from what was expected, appears what is called renegotiation. One of the sides says: “We didn’t really mean that”. For example, when Chrysler got into economic problems, the US government, did a very good thing. They said: “You believe and we believe you’re going to recover, and when you recover your stock is gonna be worth a lot. You would have to compensate us for giving today this loan guarantee”. But when they recovered, that warrant was worth three hundred fifty million dollars. What do you think Chrysler did say to the US government at that point? “Oh, that’s too much! After all, we have recovered and we didn’t have to default. Therefore, you guaranteed us nothing and it hasn’t cost to you anything”. The fact was that the market thought the risk was very high, but it was the government who was bearing the risk. The fact that the worst disaster didn’t occur, is like saying to your insurance company at the end of every year: “Give me back the premium because the house didn’t burn down”. That was Chrysler’s attitude: “Give us the money back for our insurance premium because we didn’t go into default”. Well, in that case we didn’t renegotiate.

But in the case of many developing countries the problems of renegotiation are quite real, and they are very asymmetric. There is a neighboring country, where they have water concessions. They basically privatize the water. They have competition for the water concession, and so what happens sometimes when you compete? You bid too low. -There is actually a whole literature based on asymmetric information, called the winner's curse-. What would you do at that point? You would say: "Well, I bid too low, I want to renegotiate, I want a higher price". There is an asymmetry, because you can say: "If you don't renegotiate I'm gonna walk out of here and your people aren't going to get any water, so they will be very unhappy". Something that makes it particularly unpleasant, is that this was a foreign company, and we all believe the government should not get involved in these commercial activities. But what do you think this foreign government did? It started putting pressure on this country to renegotiate.

There is an asymmetry here, and to see this think of the reaction the company would have if they bid too high and the government says: "We ought to renegotiate and take away some of these excess profits" Obviously the answer is going to be: "No, no, that's a commercial contract, you can't renegotiate that".

What I've tried to do, is to give a very brief picture of how difficult life is. Of course all of you know that. But I tried to give a taxonomy, a structure, of some of the problems that I have been encountered in the process of deregulation and privatization.

Let me try to conclude by putting forward a couple of suggestions so that this kind of things can be done better.

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The first, is the use of the benchmarking or what is sometimes called yardstick competition. Even in countries where there is only one electricity company the situation is sufficiently similar to other countries. Then, there is no reason why the electricity price in one country should be ten cents a kilowatt, while in the other country is 3 cents a kilowatt, unless you have some very compelling unique circumstances. One of the great things is that we now have information bases to look across countries and say: "What are the reasonable numbers?" "What are the costs of providing these services in countries like our country?" This kind of information is one of the advantages of competition. So yardstick competition or benchmark competition, is useful to see whether our country is up to international standards or not. We have then bases of making information judgments about performance, that are not just based on standard incentives. They are based really on information provided by relative performance, relative to other countries.

The second thing is, I mentioned this before, study whether competition in parts can take place. Countries around the world have been able to decompose the nature of what is involved, and then, identify parts that have more scope for competition than other parts. The general principle is that one needs to be careful about the abuses. You need to have close supervision of the bottle necks. For instance, the transmission lines in natu-



ral gas and the transmission lines in electricity, often are key bottle necks through which monopoly power gets exercised.

In the United States, in California, the case of the electricity story illustrates the complexity. There is a belief that part of the problem of electricity in California, was caused by the problem of gas pipelines. The company who owned the gas pipeline also owned gas generation. Although they were controlled so that no interaction could take place, there is some evidence -and it's highly controversial-, that some monopoly power was used to restrict the gas flow, and so increased the price of natural gas and the price of electricity, which was what caused the problems in California. What was very clear is that the price of the natural gas was much higher than in the rest of the country, and you know lots of stories about why, but at least one possible story, was that existed monopoly power in the gas pipeline.

It seems to me that the complexities of the issues are so great, that one has to approach these issues with a great deal of caution, which does not mean zero, it means caution.

It's hard to anticipate all the problems; it's clear that some of the problems in British rails, in US in electricity, were anticipated, but many of them were not. One can learn from the problems of other countries, but each country has its distinctive difficulties, and therefore a headlong rush to do this quickly, gains very little and risks a great deal.

- 32 • Let me finish by returning to the basic theme that I began with. I do think that restructuring reforms in these economies in which governments played a too large role, are absolutely essential.

I'm going to go back actually to a remark that an old friend Andreas Papandreu who is the Prime Minister of Greece said to me when he got to the Government. He was an old socialist, and he recognized that: "One of his major tasks was socializing the nationalized enterprises". He said they weren't acting in the interest of society. They were acting in the interests of the unions, in interests of the management, interests of all variety of groups, but not in the interest of society. So he took as one of his ambitions, the socializing of the nationalized enterprises. He failed.

The task of socializing nationalized enterprises is extremely difficult. Probably even more difficult than the job of marketing the former nationalized enterprises.

Incentives matter, changing incentives is difficult. So the task of restructuring the economy, deregulating in the heavy regulated markets, is one that is not easy. One that has to be undertaken, but with care. In doing that, old fashioned theories based on simplistic models of competitive markets will not work. It does require bringing into account some of the kinds of complexities, some of the kinds of problems, that I hope I've illustrated in this talk this morning.

Thank you.