Human Capital

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It is a great pleasure to be here and have the opportunity to address you. My topic is the family, a subject I have worked on for many years; as a result of these investigations, I published a book called *A treatise on the family*, a first edition in 1981.

I believe that family is the most important institution in any society. Whether that is completely true or not, it certainly is one of the oldest and most fundamental institutions. Rudimentary forms are traced back by archeologists to more than 50.000 years ago, so it is a very old institution, pervasive in every nation of the world that has ever been studied. I know no nation studied by anthropologists and historians, wherever it may be, in Asia, in South America, in North America, in Europe, in Africa, where the family has not been a major, if not *the* major institution.

Family, however, has not been a static institution. It has changed dramatically over time. Most of these changes took place slowly. But the changes in family structure and organization during the past fifty years have probably been the most rapid in recorded history, and you can see that from a variety of statistics:

First, the number of divorces in many countries has grown rapidly. In the early 1960s, really few people divorced; there was still a great stigma attached to a divorced person. Now, something like 40% of all people in their first marriages divorce, and divorce is common and accepted. I am not saying it is necessarily admired, but accepted; divorced people are accepted along with everyone else in society.

Second, birth rates in the world have plummeted. Many people do not realize that more than 25% of the world's population today, excluding China, have birth rates that are below reproduction. By that I mean that if they continue this way, and without immigration, the population of 25% of the world's nations will begin to decline, and some nations like Japan and Germany will begin to do so very shortly. If you count China, you have almost half of the world's population with birth rates that are below reproduction. The rest of the

world has growing populations, but even there, in most of these nations—I count India, parts of Africa, most of Central and North America, Mexico, South America—, birth rates in many of these countries are still above reproduction, but they have declined enormously, too, over time. That has been one of the remarkable changes in the world. This great fear of extremely rapid population growth in the world has certainly abated, and I believe it was exaggerated at the time these fears were announced.

A third major change has been the increase in labor-force participation of married women, that has grown enormously in all nations, although not equally rapidly in all. In a country like Sweden around 90% of all married women have jobs. In the United States it is a smaller figure, more like 65% or 70%. In other countries it may be either a little higher or smaller, but in every single nation there has been an enormous growth in the labor-force activity of married women, the education of women in general, and the economic positions of women. There may be, and still is, discrimination against women in many nations, but nevertheless women have risen in much higher positions and are rising in much higher positions in virtually all nations of the world, despite the presence of, at times, some significant discrimination.

The fourth major change I will mention, has occurred in the way the elderly support themselves. The elderly were formerly supported almost entirely by their children—if they had kind enough children—or by charity when they did not have children who were willing or able to support them. Now they are largely self-supporting in many countries. Less so here—in the Southern cone— and other parts of South America, but very strongly so in Western Europe, the United States, Canada, Australia and New Zealand. Moreover, there is an increasingly large number of countries, including many ancient ones like Taiwan, with a tradition of elderly parents living with their children, where the elderly are becoming self-supporting. In the United States most elderly people live on their own, and the major reason for that is that they receive income from pensions, from social security, from private pensions and from their own savings. These sources of income have given them financial independence, and many of them prefer to live on their own rather than being secondary members of their children's families.

These are enormous and unprecedented changes in terms of their magnitude and rapidity. Despite that, the family is still crucial to a well functioning economy and society, and I believe—in the long run—that those economies that will advance most rapidly will tend to have strong family structures, even though the structures would be very different from what they were like in the past.

Now, people tend to think that the family has disappeared in the United States. That is not true. The family has changed enormously, and there are many families in dissolution. But what really is happening is that the large majority of the families are smaller, the women are

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working and their contact is less strong than in the past, because people scatter. And this is particularly true for the families that are producing the more educated children, the more successful children. Nevertheless there still is a strong bond among parents, children, grandparents and other relatives. I believe that these strong bonds are necessary in order to maintain an ethically, morally and socially effective society. I have long been concerned with these social issues because we cannot live by bread alone, as the saying goes. Social, cultural, ethical values are at least as an important part of life as the economic side. On the other hand, you cannot live well if your economic circumstances are very bad, either, so there is a need for both.

The family plays a major role in the teaching of their children, in the human capital investments of their children, in the formation of the attitudes and values of their children, which are so crucial for their optimal development. When I talk about investments, I really come to the area of human capital, a subject that has been a long interest of mine. I published my first paper on investment in human capital in 1960. That is over forty years ago now. The family is responsible for most of the investment in their children's human capital. It is not the only source —I will come to schools in a moment, which are clearly also very important— , but the family is crucial. The family gets children from their birth, and some psychologists and biologists now even talk about the great influence of the mother prior to the birth of the child, in nutrition, and in other ways.

But whatever that may be, we know from the time of birth, it is the family that is the major care-taker: the mother in particular, but parents in general. It is them who invest in their children's adaptation to society, their learning of language, their learning of skills, their learning of values, the difference between right and wrong, the ethical values of people. Family does that in the United States; it does that in more traditional societies, as well. Thus, families are the crucial investors in human capital.

Now, it is a fact that human capital is absolutely essential to growth in the modern world. The very few Arab sheikdoms that make their income off from the high price of oil are the only exceptions to the rule that human capital, investments in people, are an essential ingredient to economic progress. I do not think there is any exception to that rule aside from the few oil producers. Fortunately, most countries do not have this large supply of oil, and cannot rely on it —most countries that have a large supply of oil, are wasting their resources—. This is just a fact, as we observe countries, I think. So most countries have to get by more on their wits than on simply what is in the ground. Therefore, we have to rely on our people, and basically what human capital does is put people at the center of any economy, and that is right where they should be.

There are several theories that attribute growth and development not to human capital, but other things instead. I will comment now on some of these theories, and on why they were mistaken.

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First, early development economists and, I am afraid, some in South America, stressed not people but a necessity of having a protective market, of machinery, modern machinery and keeping out foreign imports. The bad experiences of some of these highly protected countries, and Argentina is a good example of that, have shown that these policies could destroy your economy. In particular, Argentina is an excellent example of how following these policies could almost destroy an economy.

These theories failed because they neglected the role of giving people the right incentives. They also neglected the interaction between the investment in people and giving them the opportunities in the economic environment. Both aspects are essential so that they can utilize the talents that they acquired in a productive way.

For these reasons I like to call the last part of the 20th Century, and the beginning certainly of the 21st Century, the Age of Human Capital. Nowadays a primary determinant of a country's standard of living is how well it succeeds in utilizing the skills, knowledge and health of its people. These skills, knowledge and health are necessarily developed though investment in the people, and are used in an economic environment, in a sound structure, the market structure.

A second group of people like to attribute economic success to the culture of the society: the sound society is a more culturally prone to success. At first we would say the European society, and then we would say the American society. Some great economists of the past said China and Asia could never have economic development because of the emphasized neglect of business and the negative attitude toward business. And then along came the "tigers": Japan, Taiwan, Hong Kong, Singapore and South Korea. They showed that these people were wrong, that there was a great potential in Asia; they just needed the right environment.

The Chinese in Taiwan succeeded enormously, while the same Chinese in China did terribly until the reform, with the same people: the Taiwanese had emigrated mainly from China. It is the same people, but they were provided with very different environments, and these environments have made an enormous difference. This, and the fact that the Taiwanese were investing a great deal in their people, in part because of the environment, is what explains the different performances of China and Taiwan. In the mid-1970's, I had a meeting with the Minister of Education of Taiwan, who informed me that although there were only 20 million people then in Taiwan and 1 billion people then in China, there were more people in higher education in Taiwan at that time than in China. An amazing difference. Think of that: a 50-to-1 ratio. Now that is no longer true, for China has seen the light to some extent, and has really reformed its economy.

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The same thing probably happens at South America. I used to hear a claim that South America would never experience economic development because the people in South America too much like to have a good time, but I have always known that is not true. I have had many students from all parts, from Uruguay, from Argentina, from Brazil, from Chile, from Mexico, and so on, and I knew many of them did like to have a good time, but at the same time, they were very good students, and they worked tough. But that was a view, quite troubling, that South America would not develop. Despite these theories, you began to see many examples, maybe Chile or Mexico since entering NAFTA are the most prominent, but there are many others, having an accelerated growth and having an extraordinary increase in their exports and in their economic growth. Again, the theory that the culture of the society determined the development and growth of the economy proved nonsensical.

People now say "Africa could never grow, they will never have culture", but I think that is a wrong way to look at it. I think within any society there are the people who can be the promoters of rapid economic growth. The challenge to a good government is building on a strong family, to develop an array of economic policies that will accomplish two objectives. First, enable the basic talents that lie among the people of every society, every culture, to flourish. Second, these policies should promote the use of those talents in a productive way rather than in a counterproductive way.

The problems of Africa are not cultural. The problems are the lack of investment in human capital and the bad governmental policies that have been followed in Africa. If you eliminate the bad policies and you invest more in people, my prediction is that many African nations will take their place in the role of emerging market countries rather than being countries that have in many cases experienced negative economic growth through the last forty years.

I am emphasizing human capital, and not machinery and physical capital, although you need this in any modern economy. You need good machines, equipment and plants. But you need the good workers and the good managers, and innovator entrepreneurs along with the right and sound structure, to utilize these machines effectively. There are many examples in the world where we have first-class machinery and third-class ways of production. This happens because the workers do not work the machinery effectively, the managers do not utilize the machinery to produce useful products, and the regulatory structure discourages workers from working very hard or managers from managing very effectively.

In this interaction between machinery and human capital is where the family plays its role. Its roles are forming –in a broad sense– of the human capital of the population and contributing to the training of the people and to the attitudes and preferences of the people as they grow up. That is, the family shapes what are people's attitudes towards honesty, towards • 5 •

responsibility, towards hard work and towards self-reliance. These are the classical virtues in Economics, reliability, honesty, self-reliance, individual responsibility. Without these attitudes, which are mainly produced by families, you cannot have, in my judgment, a successful economy and a successful life.

One of the problems of having too much oil is that you do not have to cultivate self-reliance, hard work and individual responsibility, and that leads, as I said, towards waste. If you ask what the oil producers, including Venezuela, have to show in the long run for this enormous wealth that they have had, you will see that often *per capita* income has been on a strong downward movement for the last forty years.

As I have been arguing, the family is important but there have been some troubles and changes within the family, and I mentioned only some of them. Another important change, and also a problem, is that the number of single-parented families is growing. This is a major problem in the United States, specially for African-American families, where something like two thirds of all children grow up with only a single parent. But it is also a growing problem for white families in the United States. Growing divorce rates are another major problem, since children sometimes feel neglected in divorce. Unmarried teen-agers becoming parents and care of children not by their parents but by others are two other major problems.

• 6 • The question of whether these changes are permanent, and what can one do to reverse the tendencies if possible is an important one. When I addressed the Vatican —and I am a member of the Pontifical Academy of Science—, I was asked precisely those questions. My answer to them has been twofold. A part of the answer they do not like so much, part of the answer maybe they find more amenable.

The part they do not like, and many conservatives in the United States do not like it either, is that many of the changes in the family –in my judgment– are inevitable, an inevitable byproduct of the modern economies that we are living in. I am not saying that what is inevitable is bad, because I would say some of those changes are good.

Fortunately, in modern life we are educating women, unlike in the past, when women's education was neglected. So women along with men are being educated; indeed, women are more likely to go on to universities in the United States than men. This is a really recent development, but it is a significant alteration. There also are excellent economic opportunities for women in the marketplace; you can argue about how much discrimination there is, but on modern economies there are very good opportunities for women.

Also, it is inevitable that in all societies a significant fraction of women will be unhappy with the marriages they made when they were younger. When women achieve

financial independence, earn a good income, and are educated, they are less likely to remain in a marriage where they are unhappy. Therefore, marriages will break up. So, I do not believe that in countries that allow divorces we will see a reversal of the tendency to have a significant rate of divorce. The size of the rate will vary from country to country, but it will be significant in all the countries.

A second aspect of modern life that is inevitable is that birth rates are going to remain quite low, not necessarily below replacement, but quite low. Reasons again are very simple and are very inevitable, and there are two that I will stress. One is, as any parent knows, that children are expensive. They are expensive in terms of goods, but they are even more expensive in terms of time. It is very expensive in the time people devote to their children. Some parents like doing that, but the fact you like it does not mean it is any less expensive. Therefore families will choose to have fewer children. A highly educated woman who likes her family, likes raising children, but also likes working, will make a trade-off and she will decide, not to have no children, but to have fewer children than in the past. Such one force that is inevitable will be with us.

The second major force is that since each family is concerned about the welfare of their children, they will try to provide the opportunities for their children to have a successful future. In order to do that, they have to invest in the education of their children, not only by themselves, but also to pay whatever costs are involved. These costs are high, in university tuition and fees and the like, plus there is the added cost that children will not work until much older, until they have finished schooling. These costs, that are borne typically by parents, are particularly expensive in a country like the United States, with costly private universities. But it is also true in other countries. For example now you have four private universities here in Uruguay. I think that is a very good development. There is nothing that improves any industry better than competition. My rule of thumb is "I do not care about state enterprises or private enterprises, what you need is competition". If you have competition, then all the better. The private institutions now in Uruguay have to charge tuition, which is expensive. But they are providing effective competition for themselves and for everybody else. Education is expensive, therefore families make this trade-off between having many children or having more educated children, children who are more capable of succeeding in the modern world.

Both forces mean that the low levels of fertility that we see are here to stay. Without doubt in South America they will continue to fall and fall drastically during the next decade. Particularly in countries that experience sizable economic growth. Thus, political leaders have to anticipate for social security. A privatized individual account social security system is less vulnerable to declining birth rates than the system you used to have here in Uruguay. Leaders will have to anticipate that birth rates here in South America will come down further. They are already coming down rapidly in Mexico, which is experiencing a rapid

economic growth; they come down significantly in virtually every South American country that we have looked at. And they will come down further. Then I tell you this is not the end of the decline in birth rates in this part of the world. They will come down further. Whether they go below replacement or not, we do not know, but they will come down further. So low birth rates are with us to stay.

The question then is, are there any changes in the family that are not inevitable? I think there are. There have been changes —here I know best the United States experience but I think some of them apply to other nations as well—induced by unwise governmental policies with respect to the family. In this respect, there is room for hope. We can change some of these policies to eliminate, or at least reduce, their harmful effects on the family.

I will only mention three of these policies. The welfare program as we have had in the United States, and we still have to some extent, only payed welfare to mothers with children when fathers were not present. You do not need to be a sophisticated economist to realize what consequences that will have for the stability of these marriages. In some cases they faked the husband not being present, but in other cases, they said: "Well, look, I am married to this bum", and you know that means "I can get almost as much income without having the bum around as I can by having the bum around, so let's throw the bum out". In many of these families the "bum" was thrown out. In the absence of this policy, some of that would have happened anyway, but the families around the margin, taking account of their concern for their children would stay together. This policy was particularly destabilizing precisely in families that needed both parents present: the lower income families, the black families, and so on. This is specially bad since the major social problem in the United States is how we can integrate black families more into the full economy. The major problem has been among the black men in the United States, and a lot of psychological and other studies show that they are more hurt than the girls by not having a father present in their households. For those families who have been primarily affected by these welfare policies, that is one area where bad policies have been a very serious contributor to the deterioration of the family.

The second area is in divorce laws. I am a proponent, mainly, of having more contractual marriages, that families could contract "that we will not divorce", as one option. That should be an eligible option that they could contract. Or they could contract that "we could divorce at will," which is the American law in almost every state now in the United States. Or they could contract for some intermediate position.

Instead, wherever you go in the United States, basically we have what we call "no-fault divorce". This means that either husband or wife without giving any reason could say they want a divorce and they basically would be granted the divorce.

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Sometimes they have to wait six months but they will be granted the divorce. How big an effect has this had on divorce rates is controversial. I think it only has been one of many facts that is affecting the divorce rate. However, I do think that it has made it much more difficult for mothers who are divorced and have to raise their children. Typically mothers get custody and under this novel environment it is very difficult for them to get any help from their former husbands. Therefore, many low income mothers, who have to both raise their children and be their primary financial supporters, have a very difficult time. Since these mothers have to work long hours, children are left alone a lot, and this is a cause of serious problems. I believe this is a result of the way the laws of divorce have been structured. There is no reason why it should be that serious. It would be easy to reform these laws, if this was the will.

I think that the people who were most harmed by these laws have been the children and the mothers. It is apparent that initially the feminist movement in the United States supported no-fault divorce. But after they saw the results of it, many of the feminists have changed their mind about it, and recognize now that instead of being liberating this harmed women. The results were predictable, and I in fact –let me say– I did predict this in my book on the family: they were predictable from economic analysis.

The third area, the closing area that I am going to address, is education policy, specially with regard to poor children. As I indicated, families are crucial, but they are not the only ones to affect the human capital. The choice of schools is clearly of great importance, as well. The problem in most countries is that the education provided particularly to children from poor families has been inadequate. It has been of a not very good quality. I speak with most authority about the United States. However, I have visited other educational systems: I had a tour in Brazil, by the Governor of Rio de Janeiro, of their school systems; I have examined school systems in a number of countries since this has been a long interest of mine. So I know a little bit about the systems, but my main expertise is for the United States.

For the United States on the whole, our public school education system is not bad, and for many families it is good. However, it is bad among the 25% or so of the poor families, the poor populations in rural areas, but mainly in urban centers, like in Chicago, where I live, or in New York City, or in Detroit. Similar problems are found in London. If you go throughout Europe you find exactly the same problems. The same is true of Mexico, of Brazil, and I suspect it is true in much over South America and Central America as well, but I am less than an expert on that.

Here the government has an important responsibility along with the family. The challenge is what kind of policies can we implement to improve that. I believe there are two approaches that are absolutely essential.

One approach is, as you have moved now in Uruguay, to generate competition on the higher education system. Generating competition at all levels, including high school and university levels, would yield high returns for poor families. Competition can take many forms, competition among public schools —we have that growing on in the United States—but also competition among private schools. In order to make that competition fairer you need to have the Government providing what we call "vouchers", the voucher movement which I assume is somewhat known here in Uruguay but should be better known. Under this system, the Government issues vouchers to families in general but poor families in particular. The families can then use these vouchers to attend any school, public or private, that their children can be accepted in. I think that competition would not only help the children in the private schools but, like at higher education, it would make the public schools better.

The criticism sometimes made of vouchers is that all the good students would be taken away, and the public schools would go down. I think that is absolutely wrong. Some of the good students would go away, but it is because the good students will be bid away to some extent that pressure will be put on public schools to reform. Reforms could come with either new administrators or with pressure from the Government who is providing the money or in many other ways. Indeed this is already happening in the United States, and there are very good studies now, showing quantitatively these effects. It has already happened, it is not just a theoretical whim of some economist. The schools will improve: the public schools will get better, the private schools will offer good education, and the total mix will be better, specially as I said for the poor children.

I will now analyze the second program that I think is necessary, but I think that you have a program like this in Uruguay now. I am less familiar with it than I am with programs in Mexico and in Brazil. The problem that this program tries to solve is that of the education of children in very poor families, where "very poor families", for example in Mexico, earn a hundred dollars a month. These families may be as concerned about their children and may love their children just as much as richer families. But being poor, the poverty has to be shared among all of the members, and that means that they take their children out of the school and send them to work at very early ages, ages that would disturb all of us, nine, ten, eleven, twelve. They earn very little, but the little they earn help contribute to the income of these very poor families. So to families that are earning 100 dollars a month, if their children can bring in 5 or 10 dollars a month, that is an addition.

Now in the United States there is an enormous protest about child labor and these international companies' exploiting, using child's labor. What is not recognized by these critics of globalization is that the problem is not the multi-nationals. The problem is twofold, the poverty of the families and the governmental policies in these nations that are attacking

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these problems. So, what is the solution? In addition to vouchers, you could say "we will have compulsory school laws", you could say "we force them to send their children for eight years to school" and whatever.

Poor families would ignore those laws. Also, very few governments have the courage to take a very poor family which needs the income of its children and put it in prison for taking its children out of school, and having them work. So it is a very difficult thing to do politically, and it is properly so that it should be difficult to do politically. Compulsory school laws for these very poor families are ineffective, so what can we do?

The policy that I have been trying to promote for ten years or more, and now has been implemented, at least in Brazil and Mexico which I follow very carefully, is to "bribe" the poor parents to keep their children in school. By that I mean to give them a monthly supplement conditional on three things: that children attend school regularly, that they do well, and that children attend regular health check-ups. Because health is a problem for the very poor, the program combines attendance and performance at school with health checks.

There have been a few evaluations of the Mexican system. I have a Mexican student now, working on a detailed evaluation of the system for his doctoral dissertation. The early results for the first two years suggest actually dramatic improvements in the educational achievements of both boys and girls. In Mexico they have a little extra supplement for girls, and we find that this has improved relatively the education of girls compared to boys. The reason for this extra incentive is that poor families often take the girls out of school at an early age.

This is a simple lesson in economics. On one side, you have families that are concerned about the education and welfare of their children. But they are poor, so they allocate the resources in a manner that the government dislikes, by taking their children out of school. On the other side, you have the Government that with a little change in the families' incentives manages to put the children back to school. The change in incentives looks modest: the average monthly supplement to the Mexican families participating in this program is twenty dollars a month. It seems small, but it is 20% of their income, so it is large relative to their income. This incentive change has had large effects on the continuation in school of the group that I think every country should be mainly concerned about: how can we make the poor families rise up from their poverty so that their children have greater opportunities.

Let me conclude briefly. Families are still of great importance. They changed enormously, they changed under forces that are inevitable due to the modern economy, and under some forces that were induced by bad policies. We can introduce good policies. This will not bring us back to the family that we had fifty, a hundred years ago, but it will eliminate some

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of the unnecessary and harmful changes in the families that we experience. And I recognize in these two things we can adapt to the modern family and recognize that when we stress the family or stress human capital we put people at the center of economic life, and I believe that is where they belong to be.