ACCEPTANCE SPEECH BY ROBERT M. SOLOW FOR THE DOCTOR HONORIS CAUSA DEGREE HE RECEIVED FROM THE UNIVERSITAT POMPEU FABRA

29 th February 2008
Ciutadella campus auditorium
UNIVERSITAT POMPEU FABRA

I am very grateful to the Universidad Pompeu Fabra and to my colleagues in the Barcelona Graduate School of Economics for this great honour. It means more to me than they can know. The Spanish Civil War was a central defining political event when I was growing up. I can still remember reading many narratives, and especially George Orwell's book *Homage to Catalonia,* and the powerful effect it had on me. Today is a wonderful way to come to Catalonia, but in my mind and heart I feel that the honour should go in the other direction.

Since I have begun with the past, I will go on with the past, although now on a different subject. My intention, however, is to aim at the future. When I began to study economics seriously in 1945 as a returning soldier, questions about economic growth were already in the air. They arose from two big practical issues of the day: the first was the need —both political and humanitarian— to revive the physically destroyed economies of Europe and Japan, despite simultaneous doubts about whether the U. S. could itself prosper without the stimulus of military production; the second was the issue of economic development in the "backward" nations, especially after the great pre-war empires had broken up.

My interest eventually came to be focussed on the first of these questions if only because the tools I was learning seemed better able to cope with it. When I published my first papers on economic growth, in 1956 and 1957, I had no idea that they would become the basis of a whole industry among economists, and that, 50 years later, they would still be recognizably part of a literature that is not only still very active, but may again be increasing in scope and intensity. We now understand something, quite a lot, actually, about at least the necessary conditions for long-term growth in an industrial economy. (And many of these principles seem to apply quite naturally to developing economies as well, but that is another story.)

It is even possible to make some rough quantitative statements about the process of economic growth and its first-order determinants. (In all honesty I have to add that the proliferation of cross-national data has also made it possible to produce many meaningless quantitative statements about ultimate determinants of growth.) My guess is that the attempt to define and measure stocks of human capital and, less securely, technological capital have been a step forward toward the goal of a quantitative theory of growth. I would not go that far with the notion of social capital, not yet: it clearly singles out genuinely important underlying aspects of the growth process, but I would not dignify them as a form of capital without an understanding of how investment and depreciation are to be conceived and measured.

Nevertheless, the important fact is that the modern aggregate theory of economic growth has made enormous progress. It has deepened its understanding of substitution among forms of labor and forms of capital, and it has broadened its scope to include demographic, environmental and other factors. Of course, this being an academic occasion, you know in your bones that I say these things only because I want to talk about research that has not been done, and not even seriously attempted. That would be exactly what I have in mind. And once again I have in mind a problem that is posed not by the internal logic of the theory, but by events in the external world.

In particular: we would all agree that it is desirable that the benefits of economic growth should be widely shared in the population, not necessarily exactly equally, but broadly across social and demographic groups. No group should be left far behind. That is the main reason why we think of economic growth as a good thing. Recently, however, in much of Europe, in the United States, and even in some prospering middle-income countries like Chile, that has not happened. Inequality has been on the whole increasing; more specifically, those at the bottom end of the distribution of income and skill have not only lagged behind those at the top, they have, in some times and places, stagnated or sometimes even deteriorated in absolute terms. I don't know if this is a surprising fact, but it is a fact. It does not contradict anything in the standard theory of economic growth.

The issue has not found its way into the theory of economic growth. What the theory can talk about, and has talked about, is the functional distribution of income among more and less skilled labour, capital and natural resources. But that is not the relevant question. It is not workers in general, neither those, in financial institutions nor those in less glamorous enterprises, who are losing ground. The distribution of income by size comes closer to the point, especially if the focus is on simple inequality. Even then it is hard to see how size-distributional considerations can be built integrally into growth theory. It would be easily possible to adopt some extraneously given model of the size distribution of incomes from property and from work, and then glue it to a model of economic growth, with some feedback into savings. That would be a useful thing to do, but I do not think it would really capture the social problem that now worries serious people.

There are, even in rich countries, many jobs with intrinsically low, and possibly stagnant, productivity, no matter who does them. They are not much affected by technological improvement. They are usually unpleasant jobs too. The normal working of the labor market sees to it that, those jobs are occupied by workers with very little education or other human capital, often immigrants, but also women and the young. But the jobs would yield low productivity no matter who occupied them. Those in these jobs earn very low wages, and they have a very small probability of moving upward. They have very little political power or influence. We can see here the beginnings of a permanent underclass.

The textbook policy response to a situation like this is that the labour market should be allowed to function undisturbed, so as not to tamper with the efficiency of market outcomes. Then, if the voters are so inclined, the state can engage in some redistribution of income, also to be carried out efficiently. The trouble is, as we all know, that purely redistributive policy is never politically popular, and in any case it is always carried out by inefficient means. So that simple solution is too simple, and leads to neglect of the problem of combining growth with equity.

Could growth theory contribute something here? There is a long history of two-sector stories: involving industry and agriculture, for instance, or consumption goods and investment goods. It might be more appropriate today to think in terms of a low-productivity service sector and a high-productivity remainder, combined with the fact of differentiated human capital. The source of the differentiation might be limited access or discrimination or natural ability. There is considerable evidence that even nations as similar in their institutions as those of western Europe differ noticeably in terms of what one might call the "inclusiveness" of their explicit social policies and their implicit social norms. And these differences have real consequences that can be seen in the compression of wage distributions, especially in the lower tail.

The textbook model tells us that equity achieved in this way may have costs that come in the form of lost efficiency. That is certainly possible, even likely. But the bare possibility —or even likelihood— does not get us very far. Embedding all this in a quantitative theory of economic growth could get us further. For instance, if an efficiency loss can be quantified as a fraction of total potential output, it might be possible to ask and answer questions like this: what fraction of one year's steady-state growth must be given up to achieve some particular increment of equity? To take a purely hypothetical example: suppose that a certain binding minimum wage entails a deadweight loss of one percent of national income. In an economy whose trend growth rate is 3 percent a year, we could say that the price of whatever gain in equality is achieved amounts to 4 months of foregone growth. Whether that is a lot or a little is an altogether different sort of question on which each of us is entitled to an opinion.

Realistically, that kind of clarity is too much to hope for. But I am only trying to suggest that there are ways for the theory of economic growth to evolve that respond to the intellectual and moral issues that engage or should engage our society, and our economists. In the meanwhile, I thank you again, and I wish the University, the Graduate School of Economics and the city of Barcelona a long period of strong, prosperous and equitable growth

Moltes gràcies