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Fundamental Determinants of Inequality and the Role of Government [1]

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Abstract

This paper discusses the fundamental determinants of inequality. These are identified as world or market forces, social norms, ownership of real and human capital, and the role of government. The change in the relative role of these factors in determining inequality during economic development is analyzed.

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Summary

Inequality is much influenced by systemic factors such as social norms and attitudes, broad economic changes, and governmental activity. In closed and traditional societies, where public sector intervention is limited, social norms and attitudes are very important in determining inequality. In more open and more developed societies, the role of government and the impact of broad economic forces progressively become more important. This paper analyzes some of these aspects stressing in particular the role of social norms. It argues that in traditional or poorer societies the interconnection of real wealth with existing norms goes a long way to determine the extent of economic inequality. The opening of markets and the broad economic changes brought about by structural reforms and globalization have powerful effects on social norms.

When these trends lead to economic development, the result will be a weakening of the impact of these norms and a progressive replacement of tangible wealth with human capital as the main determinant of income. Thus, progressively, the distribution of human capital becomes more important than the distribution of real assets in determining inequality. The role of government in this process is discussed. That role is carried out through the traditional tools available to the government, namely taxes, government spending, and regulations. It is concluded that the role that the government plays in creating human capital may be the most important impact that the government can have on income distribution.

I. INTRODUCTION

Amartya Sen has stressed that inequality has many faces and depending on the circumstances, some of these faces become particularly important causes for concern and for policy attention. See Sen (1998). Thus, the spotlight of public and policymakers' attention must be directed at the aspect of inequality that at a particular time appears most damaging or most offensive to the prevalent conception of justice. This may be extreme poverty, conspicuous wealth or consumption, the status of particular groups, lack of access to particular goods and services, such as education, health or justice, or just an uneven income distribution.

Regardless of the form it takes, inequality is generally determined by the interplay of various factors. Ignoring the often temporary impact of man-made or natural catastrophes on specific individuals or groups, which may produce famines, the main *systemic* factors are social norms or institutions, broad economic changes, and the role of government. At given times, each of these factors may come to play the leading role in determining an aspect of inequality or in shaping the income or wealth distribution of a country. In this paper, we concentrate mostly on income distribution.

In traditional, relatively close and stable societies, the impact of social norms is likely to be a particularly important determinant of inequality, or, more broadly, of inequity. In these societies, social norms tend to be relatively stable over time in specific countries even though they may differ among countries. These social norms can have powerful positive or negative effects on inequality. These norms together with the initial distribution of assets determine the extent of inequality. In these societies, the role of government may be relatively limited and stable. Furthermore, broad but slow economic changes might not have, for a long time, an easily determinable impact on inequality. There is now little support for the Kuznets' hypothesis that predicted, first, a deterioration and, then, an improvement in the income distribution over economic development. See Kuznets (1955).

In the more open societies of today, the role of government tends to be larger than in the past while the social norms become progressively less important as countries develop. At the same time, important economic changes, such as technological developments, globalization, privatization, trade liberalization, and other major structural policies, come to play a greater role. The interaction of these factors inevitably affects inequality in general, and income and wealth distribution in particular. However, the effects, though significant, are not obvious.

In this paper I shall discuss some of these issues starting with social norms and institutions, a topic that has received almost no attention on the part of economists.

II. World Forces, Social Norms, and Inequality

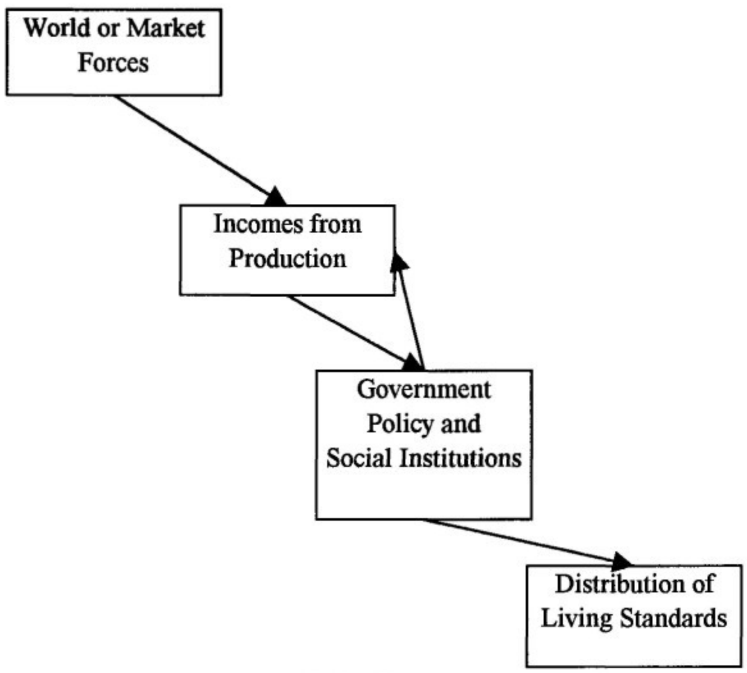
Economists have paid little attention to the fact that various societal arrangements and attitudes that develop over long periods of time (and that may or may not be codified in laws) might have powerful effects in determining inequities or the distribution of income that exist in given countries. Some of these arrangements may reflect the existence of formal institutions as, for example, slavery in the past or legalized discrimination such as apartheid in more recent times. Also, the existence of labor unions or of professional associations is another kind of formal institution with potential impact on income distribution. Others may reflect customs, religion, or cultural traits, as for example, *de facto* but non-legalized racial discrimination, the caste system, or the status of women in some countries. In some of the discussion, I will use for convenience a simple scheme provided by Atkinson (1998). See Figure 1.

As Figure 1 indicates, world or domestic market forces affect the prices and thus the incomes that individuals receive from their economic activities. For most countries that are only a small part of the world economy, the influence goes only in one direction--from the world forces to a country's incomes. For these countries, the traditional small-country assumption used in trade theory would be realistic. For a few very large countries, and especially for the United States, the influence might go both ways. What happens in the world has an impact on the United States, but what happens in the United States also has an impact on the rest of the world. In such cases, there would be another arrow in Figure 1 going from income from production to world or market forces.

The incomes derived from domestic economic activities will in turn influence government policy and may bring changes in the social institutions. The changes in these institutions would affect the distribution of income. Thus, government policy and the social institutions would determine the distribution of living standards because that distribution does not depend only on the market value of what is produced.

The market forces include factors such as growth of the rest of the world, the composition of that growth, the world rate of interest, the prices of major commodities, the terms of trade, the growth of world trade, technological developments and so on. These forces will inevitably affect the levels of incomes from production and will have different effects on different groups.

Figure 1. Major Forces Affecting Inequality



There is now a fast growing literature that discusses the impact of globalization on the relative wages of skilled and unskilled workers and on income distribution in general, especially, but not only, in industrialized countries. See, inter alia, Rodrik's recent book (1997). However, because of institutional arrangements and social norms, the direct impact of globalization and, thus, of market forces on the incomes received by particular groups, say the unskilled, will not result in precise or well-defined values for these incomes. Rather, it will result in a potentially wide range of values.[2] The point is that the traditional economic forces of supply and demand will determine a range rather than a single equilibrium value. Within that range existing social arrangements and attitudes will determine values which may differ significantly among countries even when the market forces are the same. In some countries, such as the United States, their culture, attitudes, and their institutional arrangements may lead to a "winner takes all" outcome. In others, such as Japan, such an outcome will be much less likely. See Kristoff (1998).

Although the Atkinson discussion relates to the impact of world forces on relative *wages*, in this paper we generalize it to all *incomes* including those that, strictly speaking, are not derived from directly productive activities. We need to provide examples of social norms or arrangements that influence the way the social pie eventually gets distributed in a given country. There are many such arrangements but their existence or their relevance varies from country to country.[3] Only a few examples of such arrangements or norms are provided in this paper. There are undoubtedly many others which can also be equally important.

Take, for example, *rental contracts* which are common, especially in countries where the ownership of assets is highly concentrated so that those who directly use those assets must rent them. Quite apart from governmental controls on rents that still exist in many countries, tradition continues to play a significant role in these contracts. For example, in parts of Italy, an institution inherited from Roman times called *mezzadria* still determines, today, the way the output of agricultural land is divided between the owner and the tenant, namely one half each. Thus, there is no market-determined, fixed rent paid by the user to the owner of the land.[4] There are many kinds of rental arrangements in countries and especially in developing countries for the use of land or other assets. These arrangements often depend exclusively on

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[2]According to Atkinson (1998), a "range theory" of wage differentials was implicit in Hicks' work and was developed by Lester (1952).

[3]Because they were writing about industrial countries, the social norms that Lester and Atkinson had in mind related to issues of labor organization, existence of unions and so on. In this paper, I bring in norms particularly, but not exclusively, important in developing countries.

[4]Incidentally, this arrangement is conceptually similar to that for the use of money in Islamic countries where the payment of a fixed interest is forbidden.

tradition; but tradition has come to play a role that is important in determining especially the distribution of agricultural income.

Take *labor contracts* which determine labor incomes. In several Asian countries (Korea, Japan) a paternalistic attitude by employers provided an implicit, nongovernmental safety net. Employees were hired for life by the enterprises and were retained even during economic slowdowns when their services were not needed. In these countries, recessions resulted in large fluctuations in profits and in small fluctuations in the unemployment rate. In Japan and Korea, for example, the unemployment rate was very low and relatively constant over long periods. In Korea, before the recent financial crisis the unemployment rate was only 2.5 percent. In these countries, the current financial crisis and the sharp recession has so far led to far less increase in the unemployment rate than would have occurred in Western industrial countries and especially in the United States. In fact, the unemployment rate in many Western countries which are not in recession is still much higher than the rates now prevailing in Japan and Korea.

The current crisis in South East Asia and in Japan, which has led to acute economic difficulties for many enterprises, is providing a strong challenge to the paternalistic attitude of employers with potentially obvious consequences for employment and for income distribution.[5] This crisis might force some relaxation of the life employment norm and force the enterprises to choose between egalitarian values and efficiency or even survival. It may also force the government to expand its role in this area through the introduction of significant, government-financed safety nets. In any case, the existence of this paternalistic attitude has had a positive impact on the income distribution and its abandonment will, most likely, have a negative impact. These countries had often been praised by economists for having low Gini coefficients.

Institutions and norms about marriages may also play an important role. Customs which influence the size of the dowry, the choice of spouses, the cost of marriages, the age at which people marry, the gifts associated with marriages, and so on, are all aspects with significant implications for income and wealth distribution. When the children of the rich marry only the children of the rich, while the children of the poor marry only the children of the poor, as happens in many societies, the income distribution tends to remain unchanged over time and also to be different from that in societies where such matching does not take place and where there is much more freedom in the choice of marriage partners. In societies where marriages are arranged by matchmakers, the latter will make sure that the spouses

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[5]For example, in Korea, labor unions have accepted the fact that restructuring by enterprises will require some lay off of workers and have accepted reductions in real wages so that fewer workers need to lose their jobs.

come from similar backgrounds.[6] Modernization, mobility, and globalization can have major impacts on these customs and consequently on inequality.

Customs and *rules about inheritance* are also important. In traditional societies where real wealth is more important than human capital in determining income, the way in which wealth is passed on between generations is a significant determinant of inequality.[7] How is property divided? In some traditional societies the first son often got the lion's share. In other societies, women are privileged or discriminated against. In any case, rules or customs about inheritance play a role and at times an important role. As long as the standard of living depends significantly on *real capital that can be inherited*, inheritance laws and customs will be important. When *human capital* becomes the most important determinant of income, as it is in advanced societies, then the way in which real capital is passed on between generations becomes less important although it will remain important as long as real capital is a necessary ingredient for obtaining human capital. And, of course, human capital cannot be passed only in the same way and with the same facility as real capital.

In many societies, the heirs inherit not just real assets, but also particular positions in society. That is, they inherit some "social capital" along with real assets. This social capital is made up of the family name and the prestige of that name, the family connections, as well as the family's claims to certain positions. These positions are not just the political ones which, even in some democratic societies, tend to be passed on from father or mother to son or daughter. They extend to many other areas. For example, in some countries the children of pharmacists, notaries, accountants, or some other professionals can almost inherit the activity of their parents.[8] Because of restrictions to entry in these activities, they are essentially small monopolies with high market values. Thus, high standards of living can be maintained by those who inherit the right to these activities.

These rents which could be defined as *positional rents* are very important in determining the distribution of income and privileges in many countries. But the concept of "positional rents" extends beyond these cases. Even in activities where there is no formal or apparent restriction to entry, the children of well placed individuals have often major advantages in following the footsteps of their parents. The field is often not leveled for children in the real world.

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[6]The role of professional matchmakers in traditional societies is in fact that of finding spouses from similar backgrounds.

[7]In fact, recent writing on income distribution in developing countries has highlighted the importance of the initial distribution of assets.

[8]In Great Britain, the House of Lords is filled with individuals who have inherited their positions. Great Britain may be removing this inherited privilege soon.

"Positional rents" are also derived from rules on promotion and on hiring that give priority or preference to individuals with certain characteristics (orphans, widows, war veterans, those with certain ethnic or political characteristics, and so on). In Japan promotions are largely based on seniority while in the United States the element of merit or performance is supposed to play a larger role. They are also connected with customs that determine the "commissions" that individuals in certain activities (architects, real estate agents, stockbrokers, lawyers) get in relation to particular transactions or activities.[9] They are also important in transmitting some human capital directly through the families. As many studies have shown, the educational background of the families from which students come is of some importance in determining school performance. This implies that even human capital can, to a limited degree, be passed on.

Social norms tend to be stable especially in traditional societies. As such, they have a strong influence in maintaining the existing income and wealth distribution. This may be the reason why some authors have found that, in many countries, Gini coefficients remain relatively unchanged over long periods. See Bruno, Ravallion, and Squire (1998). However, in periods of great internal turmoil such as major wars, severe depressions, foreign occupation, revolutions and so on, social norms tend to break down[10] They will also change when major economic developments occur. In societies where the government aims specifically at removing implicit privileges for some groups, or at establishing preferences for groups previously discriminated against, norms can have a powerful influence on the distribution of income or wealth. This, for example, has been often stated to have happened in Malaysia over the past two decades. It will happen in South Africa in the years to come.

Even in the absence of explicit governmental decisions to change the existing social norms, globalization and major economic developments are likely to relax or modify the prevailing norms, thus affecting the existing inequalities.[11] Modernization often brings more labor mobility; and, inter alia, mobility modifies institutions and norms related to marriages.

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[9]Even in advanced societies such as the United States, these positional rents may be important in particular activities (dentists, doctors, lawyers), where the children of well established professionals have an easier time to follow the parents' steps.

[10]In some sense, our hypothesis bears some resemblance to Mancur Olson's hypothesis about the role of special interest groups in the economy. See Olson (1982).

[11]One reason why safety nets are required in modern economies is that modernization tends to destroy the traditional safety nets. In Japan and Korea income distribution, as measured by Gini Coefficients, had been relatively good (about 0.34) in part because of the traditional safety nets that insured life employment and that required family members to assist other members that ran into difficulties. The current crisis is likely to modify these traditions and especially life employment, thus leading to a worsening of the income distribution and forcing the government to develop more formal, explicit safety nets.

Individuals who move to a distant area, or even to another country, loose some of the constraints in terms of their choice of spouses. Cross-class marriages become more common. Dowries loose their importance, especially when human capital in the form of high educational levels replaces real capital as the most important factor for the generation of income. For many individuals, human capital rather than real wealth becomes the determining factor in the choice of spouses. In time, new and different norms may develop. For example, in time highly educated people may tend to marry highly educated people thus, reducing the social mixing that brings an improvement in the distribution of income. The stratification in the quality of schools may contribute to this development.

Rules or at least customs about inheritance also change with economic development. For example, the objective of keeping all the family wealth in one hand, which justified the custom of leaving the inheritance to the first born, becomes less important. This custom was particularly important when much wealth was held in the form of relatively indivisible assets, such as buildings, single pieces of land such as farms or haciendas or family controlled enterprises.

Modernization and mobility progressively reduce the importance of the positional rents that play a large role in traditional societies and that still play some role in modern societies. Some of these rents are lost when the beneficiaries from them move. The family name becomes a less important asset except for those of very prominent families. The family connections come to have less marketable value especially when extended families are replaced by nuclear families. A person that moves from the North East of Brazil to Sao Paulo is not very likely to find his or her family connections worth as much in the new environment as they were in the old one. On the other hand, genuine human capital is much more mobile.[12] Globalization and the changes it brings with it is likely to change the norms of some societies faster than those of other societies where these norms are more deeply imbedded. Therefore, its effect on different countries will not be the same.

Before leaving this section, it may be worthwhile to formalize a bit the somewhat implicit structure of our reasoning so far and draw some conclusions.

We have implicitly assumed that in traditional societies incomes depend to a large extent on real wealth and on positional rents. Therefore, the distribution of income, and

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[12]However, even human capital can lose value in the movement from place to place when specific certifications or residency requirements have created some positional rents for those already established in one place. Think of the many doctors or other professionals who emigrated to Israel from Russia and could not exercise the profession they had been trained to do. Of course, an easy explanation of this situation is to assume that, on the average, those who move to other countries have a training that is not as good as the average training of the professionals in the country of destination. However, in some cases, this is a convenient rather than a valid explanation.

inequality in general, are much influenced by the distribution of real wealth and by positional rents. Furthermore, real wealth is likely to be a major factor in the distribution of positional rents. At this stage of development, human capital plays a relatively modest role because much of the income goes to real wealth. Thus, factors that change the distribution of real capital (such as land reform) and of positional rents (such as social or structural reforms) will have an impact on inequality. In its *fiscal* role, the government may be able to influence the distribution of wealth and income more than the distribution of positional rents although in both cases its influence is likely to be limited. In its *regulatory* role, the government is more likely to maintain than to modify the distribution of positional rents.

In more advanced societies, human capital and its distribution acquire more importance and the share of total income received by human capital increases dramatically. At the same time, traditional or culturally generated positional rents become less important while market forces, especially those coming from the rest of the world come to have progressively more powerful effects because of globalization and because they conflict less against the social norms. At this stage, the government can change the income inequality or it can reduce other kinds of inequities mostly through the influence that it has on the generation and the distribution of human capital.[13] Of course, the extent to which the government allows market forces to influence economic activity and to determine the allocation of resources will also determine the degree of inequality in society. In some cases, governments may replace traditional norms with legislated norms that have the objective of creating new positional rents to favor particular groups. The rent-seeking literature of the public choice school has put particular emphasis on this possibility.

Two simple diagrams may clarify the main argument. See Figures 2 and 3. They are a stylization of known empirical observations.

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[13]For example, inequities vis-à-vis women or particular ethnic groups can be reduced by giving them more access to education or even to health services.

Figure 2.

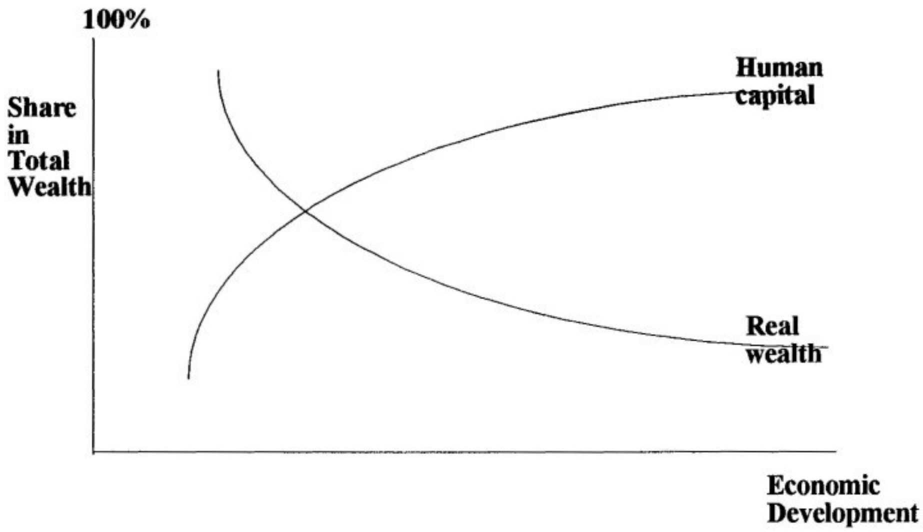
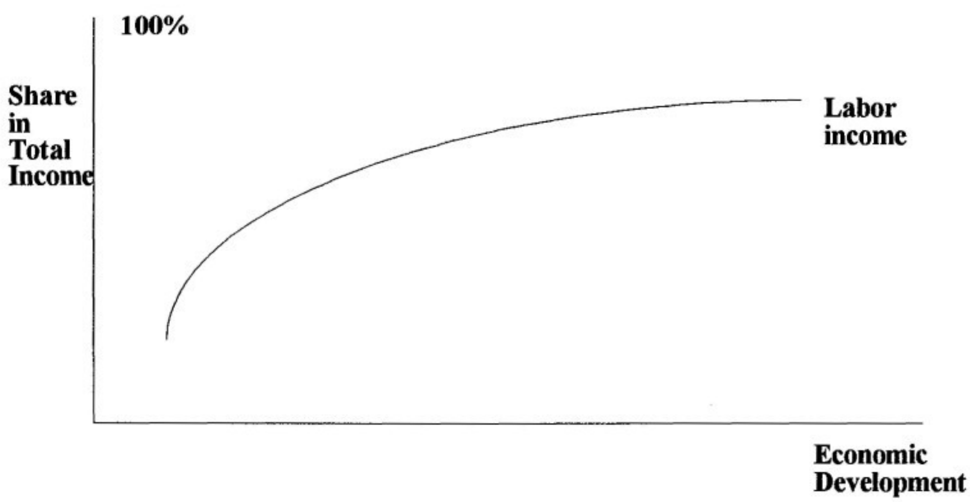


Figure 3.



Total income is of course the return to total wealth. Total wealth is the summation of real wealth and human capital. The relative importance of real wealth in generating income is very high in poor societies but falls gradually with economic development, while the importance of human capital grows with economic development. The two curves in Figure 2 show these trends. At high levels of development the relative importance of real wealth in determining total income becomes low, while that of human capital becomes high. These results are supported by the available statistics of many countries. Another way of making the same point is to show that the share of labor in total income tends to grow with economic development.[14] See Figure 3. The return to labor can be assumed to be largely a return to some form of human capital. Thus, the way labor income is shared and the way human capital is divided among the population become much more important than at early stages of development. Of course, while real capital can be highly concentrated--in theory one person could own everything--human capital tends to be much less concentrated especially in modern societies. As a consequence, in more developed countries, the increased importance of human capital tends to reduce income inequality as compared with less developed societies.

III. The Traditional Role of Government

The role of government in a country is conditioned by the level of economic and institutional development. There is a vicious circle in the sense that when the government is most needed (because the market needs many corrections, the income or wealth distributions are considered socially or politically unacceptable, and the market is unable to insure against particular risks), it is often least capable of carrying through the needed corrective functions in an efficient way. Advanced industrial countries, with efficient markets, tend to have much larger governments, measured by the share of public spending into GDP, than developing countries. The reason is not that the former need more government than the latter but because they can collect more taxes. Being unable to raise taxes, the governments of the poorer countries tend to promote their objectives through less efficient tools, such as regulations and quasi-fiscal activities. In the process the role of government becomes more distorting. See Tanzi (1998a). The governments of poor countries would find it much more difficult to promote policies aimed at reducing inequality except perhaps through expropriations and inefficient regulations.

Even a government highly concerned about inequality should promote, first of all, macroeconomic stability which is a necessary requirement for growth. And growth is not only a good provider of jobs, but also a strong provider of public resources necessary to finance social programs that can reduce poverty and inequality. See Aninat (1998). Aninat has argued that stability *and* growth have provided an increasing amount of resources to the Chilean government allowing it to better pursue its social objectives.

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[14]It is known that the share of labor in national income rises with the growth of income. In very advanced countries, the share of capital may again show some increase because of the growing share of national income going to pension funds.

The experience of Brazil, after 1995, has shown that a reduction in the rate of inflation is often an important contributor to the growth of the income of those at the bottom of the income distribution. See Clement (1997).[15] Poor people are much less able than rich people to protect themselves from the effects of inflation. If stability brings both growth and stable prices, its positive effect on the poorer groups can be potentially important. Whether this also reduces overall inequality, i.e., whether it leads to lower Gini coefficients, is more debatable. See Tanzi (1998b).

However, stability can come with a minimal government role or with a more ambitious role. Some authors have argued that the government role, measured through the tax and expenditure levels, can be too low or too high. See Tanzi and Zee (1997) and Alesina (1998a). A level of taxation that is too low will not allow the government to carry out its essential functions. A level that is too high may be too burdensome on the economy and lead to wasteful and unproductive spending. Thus, stability should be maintained at a level of government expenditure that best allows the government to pursue its essential or core functions. The more efficient is the government in carrying out its functions, the lower the level of public spending needs to be. Thus, efficiency should be an important objective for any government.

In the literature on the role of government in income distribution much emphasis has been placed on taxing and spending even though, of course, the regulatory role can also be very important. Through its many regulations and through other policies such as rent and price control and land reform, the government can have powerful effects on the distribution of income and wealth. However, these effects will not always be in the desirable direction.

It is now broadly accepted that the role of taxation in income distribution has been somewhat limited. See Tanzi (1974) and Harberger (1998). Because of the importance of tangible wealth in income distribution in poorer countries, a redistributive role could be pursued through the taxation of land and property. Unfortunately, for political or administrative reasons, countries and especially poorer countries, have rarely been able to tax wealth or property effectively. Thus, they have, instead, attempted to tax income rather than wealth. In past years, when high marginal tax rates were imposed, they were often accompanied by so many loopholes and such poor tax administration that their progressivity was mostly neutralized while the high tax rates created many inefficiencies in the economy. The present thinking, based largely on the past experience, is that the major contribution that a tax system can make to an effective government role in reducing inequality, especially in developing countries, is, first, by providing the revenue needed for essential expenditure programs, and, second, by avoiding the generation of horizontal inequities that occur when taxpayers with similar incomes end up paying very different effective tax rates. Tax systems

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[15]See also Guitian (1998) for evidence that price stability brings a better distribution of income.

with broad bases, limited exemptions and special treatments (tax expenditures), and low rates better satisfy the two objectives.

It should be recognized that the above conclusion is based on past experiences. It is not necessarily a normative conclusion. Thus, a country that was able to impose an effectively progressive tax system and that could do so without creating excessive disincentives, should not refrain from relying on the tax system for redistributive purposes.

Much faith remains in the ability of governments to reduce inequality through the use of public spending. There is some evidence that the industrial countries with high public spending levels have more even income distributions and less extreme inequalities than countries that spend less. However, this result may have come at the cost of high unemployment and lower rates of growth. Over the years, many bad policies have been justified in the name of income redistribution. Public spending, justified in the name of equity, has at times contributed little to equity and much to macroeconomic instability.

Two major problems that often characterize public spending reduce its potential contribution to equity.

First, is the *hijacking* of expenditure programs *by special interest groups*. The public choice literature on this aspect is now very extensive. Political pressures often push spending away from the intended or the desirable targets and redirect it towards the general population or toward less desirable destinations. Thus, subsidies may start as well targeted and may become general; spending may be diverted toward tertiary or secondary education and away from primary education;[16] too much health expenditure may go for modern hospitals in big cities and not enough for basic health care especially in poorer areas; too much money may go for new projects and not enough for operation and maintenance expenditure, especially in less developed or poorer areas. It is a common observation that roads in poorer areas are less well maintained than roads in richer areas.[17] This problem has been recognized for a long time. See, for example, Tanzi (1974) and more recently, Alesina (1998b). The existence of this problem implies that the level of social spending may provide less information about the impact that social spending is having on poorer groups than is commonly believed. Thus, simply looking at the share of spending on health and education in GDP or in the total budget may not tell much about the impact of governmental actions on these areas. It is necessary to know who the real beneficiaries are. Thus, governments cannot be labeled as for or against equity simply on the basis of how much they spend on so-called social expenditure.

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[16]Clements (1997) argues that this has happened in Brazil. Tanzi (1974) made the same point.

[17]Some misdirection of spending may reflect regional political power. Some regions may end up with disproportionate shares of spending.

A second problem, and one that has attracted much less attention, is the significant probability that the *hijacking* will not be done politically, by the recipient of the public services, but administratively, *by the provider of the service*. For certain public functions, and especially for those that are highly labor intensive, such as education and health, the role of the providers, such as school teachers, school administrators, doctors, nurses and so on, is fundamental. Unlike transfers made in cash, such as pension payments, where much of the actual spending is received by the legal benefactors of the services, for activities such as education and health, much of the actual spending goes to the providers (the public employees) in the form of wages and salaries or in other forms. These providers are supposed to produce an output or a service (education, good health) that benefits the users of that output or service. There is a tendency to measure the output on the basis of the cost of the input but the two may be widely different. See Tanzi (1974).

Education and health often absorb a very large share of the public sector's labor force. This labor force may or may not be productive; and through salaries and other expenses it can absorb a large share of total public spending . If this labor force is unproductive, or if additional spending is absorbed mostly by high wages, it is possible that large public spending may generate little real or concrete benefits to the students or the patients.[18] And this may happen even in relatively well-run countries. Aninat (1998) mentions the Chilean experience where a tripling of the real spending for health over a few years did not result in any quantifiable or visible increase in the quantity or the quality of services to those who used the public health system. There have been episodes where large increases in educational spending have not resulted in any objectively measurable increase in educational output. To ensure that this kind of *hijacking through inefficiency or job shrinking* does not occur, deep and complex administrative and legal reforms are necessary.

In conclusion, the impact of governmental action on inequality cannot be measured only by the level of spending for social categories although that level is of course important. The input (the spending) is not as relevant for equity as the output. It is the output (what the citizens actually receive) that determines the impact the government is having on human capital and on income distribution. But, of course, without social spending there is no hope that the government will affect the income distribution in a positive way.

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[18]It is a known fact that in some countries, doctors working in public hospitals and thus receiving a government salary spend most of their energy and often a good share of their working hours in private practices. School teachers may be ill prepared or often absent.

IV. The Role of Government in Assets and human Capital Distribution

Available statistics indicate that the share of wages and salaries in national income rises with economic development.[19] It is also known that human capital grows with economic development. See Barro and Sala-i-Martin (1995). This implies that, in the determination of inequality, the distribution of real assets must be more important at low levels of development while the distribution of human capital must become more important at high levels of development. This conclusion has a powerful message for policy.

For poor countries the distribution of real assets (land, buildings, factories) is very important not only in determining incomes but also in providing access to scarce resources. For example, as pointed out by many studies, access to credit often requires collaterals in the form of *real* assets. In these countries, families with real assets probably also have more "social capital" as defined earlier. Furthermore, social capital provides the contacts and the connections that make it easier for a person to get important information as well as access to scarce resources such as credit, foreign exchange, positional rents and so on.[20] In these countries, there will be clubs or associations of individuals whose common characteristic is real wealth.

In the imperfect and inefficient markets that characterize many developing countries, information does not flow easily and is not as readily available as in advanced countries. Much of it is often obtained through a network of personal contacts. The rich people, i.e., those who have real assets, are likely to have better contacts and better connections than those who do not have them. At higher levels of development information becomes more easily available and the network created around *human* capital becomes more important that the network created around *real* assets. Also, income from employment, which depends on a person's human capital, becomes an important collateral for obtaining credit. The establishment of a market, based more on arm's length relationships and rules of law than on the personal relationship, reduces the importance of personal connections and the value of the "social capital" as defined above.

In developed countries, human capital acquires, thus, fundamental importance. It contributes enormously to the generation *and the distribution* of income. The more widespread is education and human capital among the population, the less inequality there will

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[19]Unfortunately, data are available for limited numbers of developing countries. Still, they indicate that the share of wages in national income is much higher in industrial countries.

[20]Wealth will also provide access to political power and political power often brings higher income.

be in a society.[21] Also, the social capital based on family connections and real assets is progressively replaced by a social capital based on school connections and profession-related contacts. To a large extent, professional associations replace class-based or wealth-based clubs. This points to the fundamental role that the government can play in this area.

We have thus been led to a conclusion that should be hardly novel to modern economists. This is the conclusion that human capital is the most fundamental factor not only for promoting growth but, *provided that it is broadly spread among the population*, it may well be the most important factor for promoting a more equitable and just society.[22] However, we should not fall into the trap of believing that the fundamental policy change is simply to allocate more resources in the budget for education and health. Such a policy may well reinforce a pattern common in many countries, including Brazil, where the output of this spending goes largely to the urban middle classes while much of the input (i.e., the budgeted money) goes to the public employees who provide the services and who are not poor.

Thus, countries need to allocate far more brain power and, possibly though not necessarily, more money to bring the educational and health reforms that will change the character of these programs in a fundamental way *aimed at producing better human capital for as large a share of the population as possible*. [23] This may require reform of curricula, retraining of teachers and doctors, special attention to poorer groups, and, of course, major administrative and legal changes. This is a very difficult enterprise which has often failed in the past. The government should also play a larger role in training activities. In modern societies, high incomes do not go exclusively to those with high formal education but also to those with high developed skills such as athletes, musicians, computer experts, etc. There is no reason why public educational spending should not cover these areas when they give opportunities to people from the poorest backgrounds. Human capital is a function for formal education, innate ability, health, training, and other undefined characteristics. The government cannot do much about the innate abilities of individuals. But by judiciously using its budget, it can create opportunities for the poor through the role it plays in educating, training, and improving the health of the population.

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[21]Many economists tend to identify human capital with formal education but, while education is very important, human capital is a much broader concept. In the United States and in other industrial countries, some of the highest incomes received by individuals with high human capital are not returns to education.

[22]High educational levels were given as the main reason why the countries of Southeast Asia that grew fast had also good income distributions.

[23]Because primary education benefits a larger share of the population than higher levels of education, it is obvious that primary education should receive the greatest attention.

V. Summary and Conclusions

Inequality is much influenced by systemic factors such as social norms and attitudes, broad economic changes, and governmental activity. In close and traditional societies, where public sector intervention is limited, social norms are very important. They differ among countries but change little over time within countries, thus generating Gini coefficients that are relatively stable within countries but different among countries. In more open and more developed societies, the role of government and the impact of broad economic forces are more important.

This paper has analyzed some of these aspects stressing in particular the role of social norms. It has argued that in traditional or poorer societies the interconnection of real wealth with existing norms goes a long way to determine the extent of economic inequality that exists. Social norms and asset distribution also contribute to the existence of "social capital" and "positional rents" that are very important in maintaining or even creating inequality.

The opening of markets and the broad economic changes brought about by structural reforms and globalization can have powerful effects on social norms. When these trends lead to economic development, the result will be a progressive replacement of tangible wealth (assets) with human capital as the main determinant of income. Thus, as countries develop, the distribution of human capital becomes progressively more important than the distribution of real assets in determining inequality.

The government can play a significant role in this process because of its role in human capital formation. It must first maintain economic stability and promote economic growth. Both stability and growth are powerful factors in reducing poverty (though not necessarily inequality). Second, it must generate the public revenue needed to support an adequate level of public spending. The more efficient is the government in its spending activity, the lower the tax burden need be.

Past experience indicates that taxation may not be able to do much to reduce inequality directly. Its main role should be the indirect one of financing public spending unless the government is able to impose efficient, progressive taxes. The imposition of taxes should minimize horizontal inequities among taxpayers as well as welfare costs. Thus, public spending to generate human capital should be the essential tool for promoting a more equitable society. However the paper cautions against two common and major problems.

First is the hijacking of the potential benefits from public spending by powerful vested interests. These groups will attempt to redirect spending towards them thus decreasing the potential benefits on income distribution and equity from that spending. For example, pension expenditure may become too high while spending for primary education may become too small because of the political power of the elderly. Second is the form of hijacking that is undertaken by the providers of the public services. Through higher costs, inefficiency, and at times corruption, this form of hijacking can significantly reduce the value of the output without reducing the budgetary costs of the activities, thus reducing the rate at which human capital is created.

The paper concludes that over the long run the distribution of human capital becomes the most important factor in determining the distribution of income. Governments can do a lot to increase the quantity and the quality of human capital and to make sure that all sectors, and especially individuals at the lower end of the income distribution, have full access to relevant and high quality education as well as to relevant training provided outside formal education. In fact, some of the highest incomes in advanced societies such as the United States are received by individuals using human capital but a human capital of a kind not derived from formal education.[24]

This paper has focused on inequality. However, its major concern has been the incomes of the lowest sectors in society. This is clearly the group that merits most attention. However, there was time, not too long ago, when the incomes and the wealth of the richest groups also attracted a lot of attention. Societies still differ not only in their attitude vis-à-vis the very poor but also vis-à-vis the very rich.

While I was finalizing the last version of this paper, two recent articles attracted my attention. First, an article which gave the news that the lawyers who negotiated the settlement between the states of Florida, Mississippi, and Texas on the one side and the tobacco industry on the other will receive US$8 billion (sic) for their efforts. See Barry Meier (1998). Now US$8 billion is higher than the GDP of many countries and about the yearly income of 21 million Indians! The payment, which does not seem to be based on any possible relationship to effort, reflects one of the social arrangements described in this paper.[25] Second, an article in *Forbes* (December 15, 1998, p.8), which reports that Kirk Kerkorian made $660 million in 6 1/2 hours in the stock market selling Chrysler stocks. This is equivalent to the per capita annual income of about 1.8 million Indians! The same article reports that in 1997, Bill Gates increased his wealth at the rate of $2.1 million per hour.

It is not obvious whether news of this kind, or the news about heads of America enterprises receiving tens of millions of dollars in annual compensation for their efforts, should be cause for public concern. They don't seem to be in the United States. It is, however, obvious that this kind of compensation is much more acceptable in some societies than in

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[24]See the incomes received by some professional athletes, entertainers, actors. These individuals often do not have much formal education and come from less privileged groups.

[25]Incidentally, the $8 billion compensation for the lawyers will make individuals who are already well to do very rich, while it will make poorer the final contributors to that payment, the smokers, who tend to be low income individuals. The implications for income distribution are obvious.

others. And, for course, public attitude vis-à-vis it has a large impact on the income distribution that a country ends up with.

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