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POVERTY, INEQUALITY AND SOCIAL MOBILITY IN BOLIVIA: A SYNTHESIS OF RECENT EMPIRICAL EVIDENCE

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INTRODUCTION

A growing concern with serious social problems in Latin America has, in recent years, gone hand in hand with an equally growing literature specialized in topics related to poverty, inequality and, more recently, social mobility. At the same time, new data, particularly from household surveys, has allowed us to improve the quantitative analysis of levels, determinants and simulations of the main social variables. Empirical research gives us a chance to support some of the major changes in economic policy of the last few years (even without necessarily coming to conclusions about causality) and, at the same time, shed light on the main challenges some of our countries are facing.

On this basis, we provide below a short review of poverty trends, inequality and data that shows the degree of social mobility (or lack thereof) in Bolivia. One of the main objectives of this article is to provide information that allows us to lay a basis for an informed discussion around the levels, determinants and implications of public policy in these areas.

Based on empirical evidence mostly from economic studies, the article discusses the main characteristics of poverty. This approach does not deny that there are many different ways to address the topic but, at the same time, it acknowledges that economics is a useful tool to deal with topics like inequality or social mobility. The emphasis on "measuring poverty" is justified by the need to quantify clearly the magnitude of this problem, the methodological wealth that has developed recently, and the primordial role that this scourge has started to play in public policy agendas.

In Bolivia, there are only few topics that do not require us to think about indigenous issues. The large proportion of the population that can, by one definition or another, be considered indigenous (66% according to the latest UNDP and Unit of Social and Economic Policy Analysis (UDAPE) report, which combines linguistic criteria and self-identification) obliges us to include this consideration in our empirical analysis as well as in public policy-making. This question will be addressed explicitly in a special section, which outlines some of the main differences between ethnic groups.

The article starts with a review of the economic and social policies of the last three decades. It reviews the economic and social success stories and challenges in the past decade and then moves on to outline the current state of poverty and inequality. The indigenous question is explicitly addressed in the calculation of the gaps in various social indicators, particularly with reference to the building of productive assets. In fact, when

we review the role of human capital in its ability to promote social mobility, we illustrate some factors that might be behind the gap between indigenous and non-indigenous people. Finally, we provide a synthesis that restates the key line of thought behind the data and also indicates new directions for economic and social policy in the country.

1. ECONOMIC AND SOCIAL POLICY IN BOLIVIA

Below we review some of the main characteristics of Bolivian social policy over the last four decades. Beside a historical overview, this section contributes a comprehensive perspective to set the context for the economic and social indicators presented in the following section. We also show how the country's social policy is gradually appearing in the public policy agenda, even though this is happening, as we show in detail later on, more in a reactive way and not always linked to economic policy initiatives (Table 1).

Context before the "neoliberal" model

In Bolivia, just like many countries of the region, the pre-"neoliberal" model was characterized by a strong state presence in various productive and social activities. To a certain extent, this type of state policy – which was a response to an excessive dependence on external trade and a weak integration of export activities into the national economy – was a result of the National Revolution of 1952.

The Revolution introduced important economic, social and political changes to an economic model that was excessively dependent on the outside and a State model that was dependent on a group of families. Fundamental changes included the nationalization of the mines, the agrarian reform, the redistribution of the properties of the landowners in the West of the country and the right to vote for all men and women over 21 years. Together with other changes, these aimed no doubt at creating a more egalitarian society. This, however, did not materialize as such because new elites and economic and political power houses emerged (Pacheco and Morales, 1999).

To implement the major reforms introduced as part of the economic and social changes, the government introduced a series of incentives and sanctions to stimulate investment and production by private actors: credit was strongly subsidized, exchange rate differentials were financed by the government, and a series of fiscal incentives were introduced. At the same time, import barriers were put in place and the role of the State in the enterprise sector became more and more prominent (Kauffman et al., 2003).

This incentive package led not only to an unnecessarily strong presence of the State but also to the abrogation of the private sector as a competitive agent in the economy. In fact, the model of the State that emerged after the revolution ended up discrediting the entrepreneurs and introducing diffuse signals in the economy, of which actors with better connections to the government took advantage.

At the same time, a great uncertainty arose about property rights, and a growing vulnerability to possible corruption. These factors limited the competitiveness of the

country and led in several cases to an inefficient allocation of resources. This, in turn, led to a decline in agricultural and industrial growth, among other things. The large size of the state, together with these types of economic losses, explains in part the need for the State to resort to monetary expansion, which gave rise to an inflation surpassing 100% per year already by 1956.

In connection to the far-reaching social reforms stands the advent of the Bolivian Education Code of 1955, which served, in practice, as a guide to education policy until the beginning of the nineties. The main objectives of the Code were to eliminate illiteracy, democratize access to education, increase coverage among the indigenous population, and improve productive capacity through the promotion of science and technology even though, as should be mentioned, it ignored the ethnic, cultural and linguistic diversity of the country (Pacheco and Morales, 1999).

Already at the end of the fifties (beginning of the sixties), drastic economic reforms were introduced, including financial cut-backs and a greater opening to external trade. At that point the degree to which the state enterprises had become inefficient was already obvious. Kauffman et al (2003) mention that, out of over 1550 companies in the enterprise sector, only about 878 survived. This situation, together with the pressure of interest groups, led to the cancellation of the commercial opening and, with that, the return to the state model. This model benefited from high hydrocarbon prices, which enabled it to be maintained beyond the sixties. The military governments of the late sixties and early seventies also shared the spirit of this model.

The crisis of the state model

The excessive influx of dollars into the Bolivian economy, together with a mismanagement of the debt, probably explains the onset of the economic crisis that Bolivia would go through in the early eighties. In fact, the money flows from the oil exporting countries started reaching Latin America as low-interest loans, and these flows were growing rapidly until they reached their highest level in 1980. This situation, together with the rise in international interest rates, resulted in an unsustainable balance of payments.

In 1982, this problem became an imminent danger for lending banks when Mexico announced that it could not meet its interest payments; the response was a contraction in the offer of credit. Due to the problems, interest rates began to rise rapidly, since they had been negotiated as variable rates. This created a vicious circle for borrowers as well as for lenders. Bolivia was affected by these developments.

With the reduction in external funding, the persistent fiscal deficits had to be financed by the Central Bank by increasing the money supply, which caused more inflationary pressure. Besides maintaining these same deficits, the use of price controls also had an effect on the income of public enterprises and generated negative real interest rates and overvalued exchange rates. At this point, the degree of inefficiency of the commercial policies since the mid-sixties became obvious, which in turn caused inefficiency in resource assignment and led to insufficient internal savings to promote investment.

The Bolivian economy suffered a considerable decline between 1978 and 1982, which reached new extremes in the hyperinflationary time period between 1983 and 1985 (Graph 3). During this period, the GDP decreased by an average 3.5% per year and investments decreased by 7.3% (Graphs 4 and 6 respectively).

Adjustment Measures

The building of a new economic order: After the political and economic crisis of the late 70s and early 80s, characterized by successive coups, the dizzying increase in external debt and the fall of tin prices in the international market, Bolivia returned to a democratic regime and faced the challenge of controlling a hyperinflation that reached 8000% per year. These successes made it possible to introduce, in 1985, the first reforms that would allow a transformation from State capitalism to a market economy. Anti-inflationary measures, including exchange rate stabilization, restrictive monetary policies, an increase in public revenue through tax reform and an increase in revenue mostly from oil and gas, were essential to re-establish economic stability. The first result of these new policies was a reduction in inflation rates.

Between 1989 and 1993, the speed of reforms slowed down, even though key measures were implemented to promote foreign investment. These reforms in the area of investment had a range of important effects, including the granting of equal treatment to foreign and domestic investors and the right to form associations between state-owned and foreign oil companies in the area of oil and gas. The government also made other efforts to liberalize trade through the reduction of import duties, reducing them to the lowest level in the region. Nevertheless, towards the end of 1993, the fiscal situation and growth started to show signs of weakness (IDB, Office of Evaluation and Oversight OVE, 2004).

Structural Reforms

Between 1993 and 1997, we saw a return to the reform process with the implementation of privatization and the decentralization of decision-making. The privatization was without precedent in the region; it was carried out in two years and included the largest companies of the county. The program was very successful in attracting large foreign investments and the investment growth rate was 5 times greater than the consumption growth rate in those years (13%). Similarly, the centralized model the state had followed since 1952 started to change, putting a large share of the investments in the hands of subnational entities.

The framework for decentralization was established by the Law on Popular Participation and the Decentralization Law, with three prominent dimensions: i) the fiscal one, which assigned resources of their own to the Prefecturas, ii) service provision, which assigned to the municipal level most of the functions in the areas of education, health and social

development, and iii) the establishment of local-level institutions to promote participation in the political process.

The measures that incorporated the structural reforms were a continuation of the economic adjustment, though without any clear developmental goals. If anything, the emphasis of the reforms was on raising the efficiency of the economy in general and of the public sector in particular. During the 90s, the State focussed its efforts on redesigning an appropriate institutional framework and economic policies for the privatized and capitalized electricity, transport, communications, gas, water and financial services companies.

Various measures were approved with the aim to promote private investment in the mining, hydrocarbons, and forest sectors. In 1994, the Sectoral Regulation System (SIRESE) was established to set norms for, control and supervise the economic activities in the telecommunications, electricity, hydrocarbons, transport, and water sectors. The regulatory framework was accompanied by a series of measures for free competition and the control of monopolistic behaviour. In the financial domain, several banks were closed as part of the re-orientation of State activities. Among the measures to increase the efficiency of the banking system, the flexible interest rate system, the free availability of resources at the hands of financial intermediaries, and the establishment of the Central Bank as an independent and autonomous entity were consolidated to guarantee the purchasing power of the national currency.

Defining the State as regulator and facilitator of market relations meant, for example, the creation of the Fund for Financial Development and Support of the Financial Sector (FONDESIF). While the now smaller sector of privatized/capitalized companies came to benefit from institutions expressly designed for them, other economic sectors, especially those more active in internal and frontier markets, were disregarded by economic policies and, as a result, did not receive incentives and supports for their growth. In this context, the few large and medium enterprises that existed continued to participate in the drafting of laws and policies that affected them and to reach private agreements for special benefits.

The taxation measures, the stability and the promising reforms aimed to ensure the efficiency of the economy, likely together with the geographic location of Bolivia, generated large foreign direct investment flows. During the second half of the 90s, Bolivia saw a considerable influx of Foreign Direct Investment (FDI), which reached over \$ 1 billion US in 1998. During that timeframe, almost 40% of the FDI went towards the exploration and exploitation of hydrocarbon resources.

Even though the reforms facilitated commercial flows in different areas, they did not manage to resolve the main limitations related to low productivity and export capacity. Even though the post-1985 structural reforms opted for an economic growth strategy based on attracting foreign investment in a stable macroeconomic context, export diversification over the last 20 years has not resulted in a new growth paradigm.

Attempts at Social Policy

The aforementioned reforms may well have brought the country up to date in an institutional sense and laid a foundation for a more sustained and harmonious growth, but they were reforms that did not explicitly incorporate structural measures to reach development objectives. What did become more and more obvious was the need to complement the economic policy efforts – very much oriented towards economic growth – with more social policy options. This concern was born early on (1985) with the first social protection schemes that aimed to resolve the situation of unemployment, a consequence of the collapse of tin prices and the resulting mining crisis. The social funds acquired in those days the role of not only absorbing man power but also infusing energy into the economy.

Over time, these funds changed their role to being investment funds, maintaining their "social" nature but orienting their interventions towards the construction of social infrastructure. This approach had the advantage of directing a significant amount of resources to mostly rural areas (with a questionable degree of focus), which revealed the need to prioritize the needs of the poorest communities. Nevertheless, in many cases the results of these investments were either very diffuse or simply non-existing. What's more, what these funds achieved was to define an implicit social policy very focussed on the spending of assigned resources, far from the policy objectives of the social sectors themselves.

Sector policies (in education, health, water or sewage) started to gradually replace the exaggerated weight the social funds had come to carry. The Education Reform, the successive versions of health insurance, plus a badly formulated policy of water supply by the public sector congealed into a sort of a social policy. This meant serious efforts to improve the social situation, reduce poverty and promote equity; however, they never gave the impression of a well thought-out intervention. The sector policies were neither integrated with each other nor did they show any clear linkage to economic policies.

Paradoxically, the farthest-reaching social reform of the decade of the nineties originated far from the social sectors and closer to local actors. In 1994, as part of a series of profound changes to the democratic and institutional system of the country, a sui generis modality of decentralization to the municipal level was instituted: the Popular Participation. This process not only gave autonomy to the municipal governments but accompanied it with an automatic allocation of financial resources, which allowed, over time, a substantive increase in the level of social spending. With this measure, the pieces of the puzzle, while still not integrated, started forming a bigger picture of something that could be called "social policy": funds that were investing in infrastructure, ministries that were outlining policies and municipalities that were designing, as much as possible, their services to respond to the needs of the communities.

Based on this mosaic, the reforms of the years before had been more aimed at defining the institutional framework that would best complement the economic policy initiated in the mid-eighties. In a way, the assumption was that, if a number of "resources" were activated in the social sector, the success of the new economic model would be obvious. Consequently, what had to be done was to perfect said model. The process of capitalization, the establishment of the regulatory framework or the consolidation of the framework for foreign investment, to name just a few, reflected this position. [This could be an important point since one could argue that these changes only led to greater inequality by concentrating efforts on production in some more capital-intensive sectors and assuming that social reforms would automatically improve the well-being of the poorest population segments]. Probably, the clearest example of this way of thinking is the social insurance reform, which followed mostly economic criteria (how to make the pension system sustainable and generate internal savings) rather than social criteria (providing a social benefit to the most vulnerable people, which ended up being more of a secondary issue to the economic interests).

Probably, the favourable international context associated with the good economic performance made the need for progress in building a shared social vision less obvious. This explains in part why no major changes were introduced in the social sectors and why, instead, institutional changes were reinforced that, in some cases, set the stage for very strong social discontent later on. Likely nothing serious was done to reduce poverty or inequality because there was no need to do so. Moreover, the economic trend of the day was so positive (1988 was the year of the greatest economic growth) that it motivated the government to introduce reforms like the institutionalization of customs, taxes and the fight against drug trafficking. These reforms, which were meant to give the country a more institutional/serious nature (and maybe make it more efficient), ended up closing some escape "valves" for important segments of the population, including informal workers in the capital cities and people growing coca leaves in illegal areas.

The Causes of Social Dissatisfaction

The most violent clashes of the decade coincided with the emergence of an obvious need to build a shared vision for a fight against poverty (it would be difficult to say that one caused the other). The clashes, which included groups that fought against the privatization of water, for the right to cultivate coca leaves, or for a reduction in obstacles for the informal sector, ended up paralyzing the country. This raised the question whether these conflicts were due to the current economic trend (linked to the negative economic shock the country experienced in 1999) or whether they were structural in nature (more linked to the high level of exclusion, poverty and inequality that became more and more obvious in the country).

The need to make progress in building a more widely shared vision of development (always centred around poverty reduction), together with the more and more visible importance of actors outside the State (and outside of civil society), gave rise to a new "fashion" in public policy-making, which was much more participatory in nature [international aid played a major role in this]. This "fashion" gave rise to the Dialogue 2000 process, with its less publicized predecessor, the Dialogue 1997.

This participatory process (...) had two important consequences for the process of consolidating a scheme to design a more integrated vision for social policy. On the one hand, the need to have an instrument to integrate social policy not only internally but also with economic policy was permanently enshrined on the agenda. The Bolivian PRSP (Poverty Reduction Strategy Paper), designed based on the outcomes of the Dialogue, provided for a modality to link economic and social policy (it provides for mid- and micro-level interventions in social spending without touching the macroeconomic apparatus set up in the previous fifteen years). On the other hand, the Dialogue-PRSP process led to the progressive allocation of the resources freed up by debt relieve (HIPC) to all the municipalities, with priority for the poorest municipalities. In practice, this added an additional element to the fight against poverty by granting financial resources to the municipalities, although it pre-empted, just like all the other resource transfers, a coherent policy or plan to reduce poverty effectively.

This incoherent vision of social policy and, at the same time, its lack of connectedness to economic policy coincides with its meagre results when it comes to income and employment of the poorest part of the population. Consequently, the levels of poverty, extreme poverty, and inequality (all monetary measures) remained constant or increased throughout the decade of the nineties. The trends from 2000 on are not very clear, but no significant improvements have occurred in any of these indicators. However, very significant progress has been achieved during the same time period in terms of access to social services and even some human development indicators.

Social Policy and Economic Policy Reactions (2001 – 2006)

The scenario of social discontent and political weakness defines the new space for economic and social policy making in Bolivia. This means making concessions in many areas and based on specific demands, often from special interest groups. Even though this has so far not changed macroeconomic directions in any major way, it makes them, in a way, more vulnerable to short-term decisions.

Currently, there are very strong signals showing a need for a change in economic policy, even though it is unclear which elements of it should be changed. This instability has also led to sector policies in the social sectors being more reactive or simply inert/stalled or captured by interest groups.

The current situation certainly displays major differences from the critical period the country went through in the first half of the 80s, among other things because the country now has a better institutional base. This base provides a foundation, for example, for the independence of the Central Bank of Bolivia. The external position of the country is also significantly better with respect to its current accounts deficit and net international reserves. Probably the biggest challenge in economic policy is to create linkages with the main social objectives of Bolivian society in a framework of democratic institutions.

2. RESULTS AND REMAINING CHALLENGES

Stability and Economic Growth

Even though it was with sudden jumps over time and a somewhat unclear tendency, income per capita in Bolivia (approximated by GDP per capita) almost quadrupled over the last four decades (from under US \$200 to almost US \$1000 at the beginning of the 2000s). In part, this trend follows the international economic context and the natural dynamics of national exports with its attendant increase in internal economic activity. This same factor also explains the great fluctuations around the general trend.

It is difficult to say to what extent economic policy decisions influenced the growth rate of the economy. What is very noticeable is the great variability of this rate with changes in the international context. Since the beginning of the seventies, two great economic cycles can be identified (Humérez and Dorado, 2006), which characterize the behaviour of the economy and provide clues by which to examine the economic and social results of this time frame.

The significant increase that occurred between the **seventies** and the **eighties** (the time period where the \$1000 per capita were reached) can mostly be explained by continuous increases in investment, which grew by an average 9.41% per year until it represented 14% of GDP in the middle of the seventies. This continuous increase in resources showed an average growth of 5.63% throughout the sixties and of 4.08% in the seventies.

There is no information about how poverty or inequality evolved in this time period. Nevertheless, having followed the regional trend – which makes sense given the kind of growth focussed on the exploitation and export of extractive resources without major linkages to the rest of the economy – suggests that, in this time period, poverty reduction would have accompanied the high growth periods and that inequality would have remained stagnant.

The crisis of the state model, as it took shape from the mid-fifties on, became obvious when international market conditions became adverse. The high fiscal deficits that resulted from supporting a producer state, active in providing public employment and granting differentiated subsidies to promote production, made macroeconomic management more difficult (Graph 1). The weakness of the State became more obvious when it was incapable of obtaining adequate funding sources, leading to more credit from the Central Bank. The high levels of inflation ended up undermining any attempt to implement economic policies, be it to reactivate growth or to attenuate the social consequences of the economic misfortune.

In 1982, the return to democracy coincided with the worsened crisis situation. Debt levels were unsustainable, tax collection capacity was very low and very few export opportunities existed. This situation resulted in very restricted access to external funding, which continued to create pressure for credit from the Central Bank. The end result was an extreme increase in the inflation rate, which reached 25,000%. Several companies

declared bankruptcy and industrial production fell by as much as 40% (Kauffman et al, 2003).

In three years, the gains of ten years had been lost. GDP per capita declined by as much as 60% and reached levels comparable to those of the middle of 1970. **Between 1982 and 1985**, GDP per capita shrank by 2.13% (Humérez and Dorado – Graph 7). There are no measurements about what might have been the effect of this crisis on poverty or inequality. Nevertheless, some evidence from regional data based on surveys shows the negative effect of inflation (a key characteristic of the crisis period) on poverty which, in a way, suggests that those who lost the most due to the economic crisis were precisely those groups (Nina and Rubio, 2001). Their lack of access to assets that could shelter them in inflationary periods would explain this greater loss. A topic that has not been analyzed conclusively has to do with the way in which rural households, with greater natural assets, might have responded to these changes.

The Adjustment and the Change of Models

The adjustment program reached surprising short-term results: inflation was brought under control in less than two weeks. The inflation rate was stabilized around 20% in **1985** and reached one-digit numbers from 1986 on. However, it took two years to get back to a growth trend. This began with a slight growth from 1987 on, where it reached 1.5%, still insufficient to offset demographic growth (at 2.5%).

There is no reliable data about base-line poverty levels at the start of the "new economic policy". (More recently, from the mid-90s on, we have surveys which allow a consistent follow-up to poverty, at least in urban areas). Only with this type of information would it be possible to estimate better how poverty (measured by income) evolved with the introduction of the shock reforms and other more structural measures. In the absence of such information, income per capita is the only variable that reflects so some extent the level of well-being.

From the **90s** on, we see a period of moderate growth: the average annual growth rate reaches 3.41%, enough to bring the country closer to the income levels (per capita) of the late 70s (UDAPE, 2005). The available data for this time period suggests a reduction of poverty during this decade. This information, based mainly on information from the capital cities, shows how in these areas the (moderate) poverty has dropped from about 52% to about 46% between 1993 and 1999 (World Bank, 2005). Estimates based on demographic conditions and conventional social indicators suggest that this trend has also taken place in rural areas (Klasen et al, 2004).

Even though the effect of growth on poverty seems clear, the trend related to inequality turns out less convincing and, if anything, suggests a greater concentration of income. Information for the capital cities shows that the Gini coefficient has increased almost consistently from 0.48 in 1989 to 0.55 between 1989 and 2002. Data for the rest of the urban areas and for the rural areas is less consistent and suggests more of a stagnation in

inequality with Gini coefficients between 0.54 and 0.59 respectively (Landa and Jiménez, 2005 – see Tables 2a and 2b).

In part, the income disparities could be explained by the form of growth Bolivia underwent throughout the 90s, which was based mainly on the performance of the capital intensive sectors like electricity, transport and financial services. These sectors achieved growth rates of over 4.5% annually, in contrast to growth in other sectors like manufacturing (3.8%) and traditional agriculture (2.5%), which are more labour intensive. At the same time, growth was very uneven between regions: while the departments of Santa Cruz, Cochabamba and Tarija saw average economic growth rates of 5.7% per year, poorer regions like Chuquisaca, Potosí and Beni grew by less than 2.5% per year (Government of Bolivia, 2001).

Economic Crisis and its Impact

An unfavourable international context and restrictive measures in aggregate demand seem to explain a slow-down of the economy registered by the **end of the nineties** (See, for example, UDAPE -2001, 2000 and 1999 - or Milenio -2000). In fact, the positive economic performance of Bolivia in the 90s - with an average growth of 4.1%, which made it one of the two countries with the highest growth rates in the Region - declined drastically (rates of 0.7% and 2%). This led to systematic average per capita income decreases, which were only reversed recently, from 2004 on.

As a result of this trend, poverty rates rose from 1999 on. The incidence of poverty in the capital cities returned to the levels seen in the early 90s (51%). Evidence suggests that the trend for this indicator in the rural area remained practically constant, with over 81% (World Bank, 2005).

If anything is alarming, it is the fact that the negative impacts of the economic slow-down hit mostly the poorest households. While the real average income fell by 2% per year among urban households, the income of the top decile grew by as much as 7% between 1999 and 2002. This trend contrasts with that seen in the rural areas, where light increases were even noted in the incomes of the poorest and reductions among the top deciles (See Landa and Jiménez, 2005 and World Bank, 2005, for an exhaustive review of these trends).

The Role of Productivity in Explaining the Long-term Trends

The preceding results show how economic policy decisions and economic outcomes are directly related to the conditions of poverty and inequality. Following, we propose several elements to discuss the influence of more structural variables on the living conditions of the population. More concretely, we propose that it will only be possible to solve the problems of poverty and inequality in Bolivia in a sustainable way to the extent that we manage to remove some of the key barriers to productivity in the economy and to address some of the key productive factors.

The changes in economic policy and the first attempts at social policy that occurred during the past decade were clearly insufficient to generate substantial increases in economic productivity levels. As shown by Humérez and Dorado (2005) or the World Bank poverty report itself (2005), the increases in the economic growth rate were fundamentally based on increases in the numbers of the unskilled labour force. Meaning, the economy grows more because a greater number of people with the same skills enter the labour market to carry out low-productivity activities (agriculture, for example). Meanwhile, the higher-productivity sectors (hydrocarbons, electricity) increase the value of their production in a favourable international economic context, which requires highly skilled personnel.

The trend of greater economic dynamism associated with sectors that create less employment was also reflected in the widening of the earnings gap between workers in the different economic sectors. With household survey data, it is possible to analyze how the gap between the more traditional sectors and the more modern sectors has grown over the last years.

The Role of Employment in Explaining the Distribution of the Economic Benefits of Economic Growth

The data series on employment in Bolivia are short and do not allow an exhaustive analysis of their links with economic growth. In the following section, we attempt an analysis of labour market trends as a link to facilitate an understanding of the interrelationships between growth, poverty and inequality.

Consistent with the regional trend, the country increased its available labour force during the nineties. CEPAL (2004b) provides information about the increase in the (refined) rate of urban labour force participation, which, in the case of Bolivia, increased by more than 15 percentage points between 1986 and 2002. While this trend might be a response to a household need for additional income, it is also a result of a higher presence of women in the labour market. This presence is unusually high in comparison with the regional average (Mazza, 2005).

The distribution of employees within economic sectors has undergone some significant changes. Urban data for Bolivia shows a trend towards a reduction in the service sector, which includes trade activities - often informal trade – which provides employment to a high number of the poor.

Bolivian unemployment has doubled and reached almost 9% in the year 2003. This is a striking trend considering the degree of informality of the economy, which, one might think, should have served as a shock-absorber for the economic crisis of the late nineties. The decrease in urban employment led to a decrease in family incomes. In addition, this reduction was not homogeneous but affected primarily the agricultural sector, with the natural consequence of widening the urban – rural gap.

How did the Working Conditions Change over Time?

In Bolivia, the proportion of informal work is very high. For example, the percentage of self-employed workers at the national level has remained practically unchanged during the last decade – between 35 and 40%. The only countries in the region with higher levels of self-employment are Honduras and the Dominican Republic (IDB, 2004).

This characteristic and others pertinent to the functioning of the labour market would seem sensitive to economic activity, at least in urban areas. For example, underemployment increased by more than eight percentage points between 1996 and 2000, a time period in which the economic growth rate fell drastically until it reached its lowest level (0.4%) in the year 2000. The slight recuperation of the economy in the following years could help to explain the reduction in self-employment. However, this does not explain its later increase.

One indicator of how little protection the labour market provides is the low proportion of employees who are covered by social security. This proportion is 26% in Bolivia, and it has remained at that level during the past few years (UDAPE, 2004).

"Quality" of Employment and Urban Labour Dynamics

Even though the classification of employment by type of occupation allows for a better understanding of working conditions, less "formal" work (self-employed sector, work for family members and work in small enterprises) cannot, a priori, be called "low quality". A job in the "informal" sector is not necessarily of low productivity and, in many cases, could be the outcome of a rational decision motivated by the great legal obstacles to and requirements of participating in the more formal sectors of the economy.

In support of the hypothesis advanced in the previous paragraph, Jiménez and Jiménez (2002) provide evidence for the "high" degree of occupational mobility in the urban areas of Bolivia, with which they refute the apparent dichotomy between the "formal" and "informal" sectors. In addition to rejecting the hypothesis of labour market segmentation, they point out the role of "human capital" in the ability to access better jobs. In addition, they highlight the role of the "informal" sector in the acquisition of skills and abilities, which can bring people to enter another sector of the economy.

Nevertheless, as the authors point out, the evidence comes from a period of high economic growth (the years 1993 and 1994, when growth rates reached over 4%) in a context where the possibilities to "change occupations" could have been unusually favourable. In another perspective, when Escalante (2004) updated calculations of the profitability of "human capital," he found that returns in the "self-employed" sector were abnormally low – evidence that puts into question the "rationality" of choosing more "informal" jobs.

The Difference in Incomes and Salaries is Widening

The review of the trends in earnings obtained in the labour market is complementary to the analysis of the employment situation. The negative impact of the fall in employment translated into a shrinking of earnings from the primary activity, which were reduced by 21% during the time period between 1999 and 2002. In fact, according to Landa and Jiménez (2005), the decline reached up to 40% in the rural areas, a situation which widened the differences between regions. Paradoxically, the main income concentration level in the rural areas shows a lowering of the Gini coefficient (from 0.61 to 0.587), which suggests that greater differences within the rural areas did not emerge.

The deterioration of the economic conditions affected primarily the activities where working conditions were most precarious, which are also the activities mostly done by the poor. In fact, only incomes in the category "employed" saw a clear rise over the decade with increases of up to 23%. In contrast, in the other sectors the gains that had been obtained until 1997 were reversed rapidly, with the earnings of self-employed workers declining the most (-38%).

The trend toward greater disparity in the generation of incomes and salaries is also reflected when we compare the performance of the economic sectors in their capacity to raise the earnings of the people involved in each sector. Based on data from household surveys, we see not only a negative trend in earnings from agriculture and mining (the sectors that have the greatest number of employees), but also a great variability in these income trends. When comparing the results over the decade, we notice declines of up to 41% in agriculture and 11% in mining during the period from 1989 to 2002. In contrast, employees in the electricity, gas and water sectors saw income gains of up to 140%.

[Not only do we see ever wider gaps, but the situation of precarious employment does not seem to change with time. Serious problems of underemployment and informality continue, to which we need to add: 1. labour discouragement, which is reflected in a decline in labour force participation, and 2. a greater level of unemployment since those who remain in the labour market do not find employment].

The Redistributive Power of Growth

The low labour market dynamism in the least productive sectors (which have the most employees), together with the growing disparity over the last few years, explains why the distributive capacity of growth have remained unchanged or might even have increased over time (Graph on growth – poverty reduction). In fact, the elasticity of growth – poverty reduction, which in 2000 was calculated as 0.6 on average (World Bank, 2002), might even have declined to levels between 0.3 and 0.5 (World Bank, 2005: 18). The average for the countries of the region would be 1, while the average for developing countries is said to reach 2, according to Ravallion (2002).

The measures to calculate the degree to which growth was pro-poor are not conclusive at all, though they allow us to claim: 1. that economic growth has an enormous potential to benefit the entire population; and 2. that the poorest groups, above all the communities in rural areas, are the ones least likely to benefit from this growth.

On the one hand, the study by Klasen et al. (2004) suggests that "...there was pro-poor growth between 1.9 and 2.2% per year between 1989 and 2002, mostly due to the high pro-poor growth in the smaller urban areas and some pro-poor growth in rural areas, while the pro-poor growth in the capital cities was negligible." Nevertheless, the document goes on, "... between 1999 and 2002, there was a very rapid anti-poor decline in the capital cities, which off-set most of the gains the urban poor had made in the previous ten years."

Based on stricter criteria for a definition of the concept of pro-poor growth (including an explicit pro-poor growth index, in contrast to the partial focus, which does not require this index), Landa and Jiménez (2004) do not find any period in which growth could have been classified as "pro-poor" in a consistent way. For example, after estimating a Growth Incidence Curve (GIC) for Bolivia for the time period from 1999 to 2002, they find that there was no pro-poor growth. In fact, the growth rate of the incomes for the poorest groups (those percentiles below the poverty line) is lower than the mean growth of the whole population.

The non-existence of pro-poor growth, according to the authors, is very obvious when GICs are compared for the urban and rural areas. In the latter case, the decline of per capita income of the poorest groups can reach up to 30%. This analysis is corroborated by a calculation of pro-poor growth rates, which reach, over the same period, -5.19 in the urban case and -6.0 in the rural case. Both are well below the average growth rates, which are estimated at -3.13 and -3.42, respectively, suggesting that households in the lowest income percentiles lost the most during the period of economic slow-down. The abovementioned work calculates the rates for the capital cities, the remaining urban areas and the rural areas, in the highest growth period of the decade (1993 to 1997) and in the period of slow-down (1999 to 2002). In none of the cases did they find any evidence for pro-poor growth.

A Review of the Social Achievements of the last two Decades

The new role of the State after the structural reforms meant a reallocation of public resources towards the social area, both for investment and for ongoing expenses. The resources for social spending have tended to grow during the past few years, and the proportion of public spending that was allocated to social sectors increased from 12.3% of GDP in 1995 to 16.5% in 1999. The most recent information indicates that it stabilized at 21% of GDP (Graph 6). A striking detail is that this spending includes the cost of the reform of the pension system, making its potential impact on social indicators somewhat unclear.

The increase in social spending signals a greater preoccupation of the State with social issues, a preoccupation that was accompanied by a series of reforms to increase the efficiency and equity of social service provision. Even though the living conditions – education, health, water, basic sewage or housing, for example – continue to be well below the hopes and expectations of Bolivian society, it is important to point out that

rapid improvements have been made in several of these elements. In some cases this forebodes future changes in the distribution of human assets (the cases of primary education and primary health care are two examples of this positive performance).

Even though the levels of income, poverty and inequality remained practically the same over the last two decades, several social indicators have increased noticeably. Let us look at two elements to evaluate these results. On the one hand, we analyze the development of the Unsatisfied Basic Necessities index (NBI) as an approximate measurement of coverage of several basic services. As expected, poverty levels declined drastically from 85% to 58% in the time period from 1976 to 2001. This means a reduction in privations, with its highest rate in the time period 1992-2001, when it reached 2.3%, higher than the rates in the 80s, when they reached 2.1%.

Even though these are good news (the privation of social infrastructure and the deficit in access to basic social service are getting smaller), it is still worrisome that so many people live in "poor conditions" of housing, water, education or health. The concern is even greater when we look at the enormous gap between urban and rural areas, where privations are higher than 90% of the aggregate index and vacillate between 54 and 92% for different services (Government of Bolivia, 2001b). What is more, according to a recent report these privations are particularly common among the indigenous population: 81% of all the poor households – those that have less access to services than the expected thresholds – are indigenous either based on linguistic characteristics or based on the self-identification of the household head (UDAPE, INE, UNDP, 2004).

Progress in coverage with social services also corresponds to progress with respect to better achievements in terms of human development in Bolivia, an indicator that combines the financial dimension with non-monetary elements. This analysis allows three conclusions: 1. important progress was made throughout the decade of the 90s; 2. this progress was mostly concentrated in the areas of education and health and less so in the area of income gains; and 3. this progress has no relationship with average income levels in the country.

In fact, over the last 30 years, the Human Development Index (HDI) has increased from 0.512 to 0.691. According to the latest Human Development Report (2005), over 75% of this increase is due to changes in indicators related to education (school attendance and literacy rate) and to some extent in health indicators (life expectancy). Less than 25% is due to higher income levels. This shows that the level of human development does not correspond to income levels. Probably the great differences in income described in this article contribute to an explanation of this gap.

It is almost logical that coverage would have increased as a result of greater social investments and spending (considering the relatively low coverage in the mid-eighties); it is less obvious whether this has led to better living conditions. On this point, the results are rather mixed. Education levels have been raised (at a faster pace than in many countries of the region) and important reductions in infant and maternal mortality have been achieved (though still insufficient to take Bolivia out of the group of countries with

the highest such mortality). Nevertheless, serious problems persist with poor quality, inefficiency and inequity in social service provision.

3. THE CURRENT STATE OF POVERTY AND INEQUALITY

Poverty Levels

The alarming poverty levels in Bolivia raise questions not only about the effectiveness of the economic policies of the past twenty years but also about the way the country was built since its foundation. Poverty, defined as the percentage of people whose income per capita (*income* from here on) does not cover the minimal necessities of life (food and non-food), affects 2 out of every 3 Bolivians, which places the country among the poorest in Latin America. What is more, the percentage of people who cannot even cover their nutritional necessities (extremely poor) reaches up to 80%. The differences by area and ethnic group are clear: rural poverty is almost twice as high as urban poverty, while the percentage of poverty among those who define themselves as indigenous is about 2.5 times as high as among those who do not consider themselves indigenous (Table 7).

But the place of residence and ethnic affiliation are not the only characteristics of poverty. A brief review of poverty profiles for the past few years shows unambiguously how productive assets, particularly education, are strongly associated with poverty. Other important factors are related to the sector of employment, the type of job, migration, and even the age of individuals (Table 8). These factors will be analyzed with particular attention to the potential role of education and employment in facilitating social mobility.

The Poorest Groups

Data from household surveys allows us to reconstruct quite accurately the mentioned poverty profiles, particularly the socioeconomic characteristics of households (some important dimensions are present in this analysis, though others are not well captured by this instrument: issues related to production or access to markets and road infrastructure are very important to understand income generation but cannot always be gathered by this kind of survey).

Based on this information, a "typical" profile of a poor person or household can be built. The percentages of poverty among various categories suggest which categories have a higher probability (independent of other variables) of falling into poverty. The data for Bolivia, which coincides with evidence for other Latin American countries, suggests that people with less education, those unemployed or positioned in a more precarious condition in the labour market, or people employed in agriculture have a higher probability of falling into poverty (see Tables 7 and 8). Nevertheless, there are a few less conventional variables associated with poverty: non-migrants have higher rates of poverty than migrants; those who declare that they speak an indigenous language or belong to an ethnic group show higher levels of poverty; those who live in the highlands are poorer than those who live in the lowlands; households whose head works in an economic activity categorized as export-linked have a higher chance of being poor.

A review of poverty profiles for the last four years for which information is available (1999 to 2003) allows us to assess that differences in the incidence of poverty over time behave in the same way; it does not vary much between the first ranks. The trend does not appear to change within groups, though we can see a small reduction in poverty among the group that has little education (Graph 13).

The incidence of poverty, disaggregated by groups, shows the same trend as that of other indicators associated with the same issue. For example, the incidence of extreme poverty is greater among those who reside in the rural area than in the urban area. Indeed, the gap between the incidences of poverty is very high and, even though it has become smaller in the last three years, the difference is still over 20 points (Graph 14).

Determinants of Poverty

Based on a linear regression model, the World Bank (2002) establishes the primary factors associated with poverty, which it calls its "microdeterminants". The advantage of this approach is that it allows us to put in context different variables related to household structure, education and employment without losing information (i. e. capturing all the variability of the variable income per capita) and, at the same time, to discount the exact weight of each variable. Though it is not very recent, this diagnosis provides useful information for the design and understanding of anti-poverty policies (in so far as the author knows, there is no up-to-date analysis of this kind).

The report supports the intuitive claim from the analysis of the profiles but clarifies, however, the room there is for influence from several variables: education, employment structure, household composition and place of residence. It finds, for example, that education can raise household income per capita by up to 136% (in the case of adult education in rural areas). In other cases, the weight of education in influencing household income could probably be zero: the case of primary education in large and small cities.

The previous analysis, focussed on per capita income for each household, is related to employment income of household heads and spouses. In the case of education, for example, we observe that its (private) returns are between 9.5 and 10.5%. It is striking that the disparities between returns on education have declined considerably over time: while in the early 90s, the gap between the return on the most basic education (6 to 7 years) and that on university education (15 to 16 years) was practically 10 percentage points, the same gap has been reduced to practically 1 percentage point in 1997. One hypothesis could be related to the fact that, in times of greater economic activity (between 1996 and 1998, the real growth of the economy reached up to 4% in per capita terms), the gap becomes smaller as a result of a greater demand for both skilled and unskilled labour.

The study also advances our understanding of the labour-related factors that influence household per capita income. The report claims that the fact that unemployment has no major influence on poverty results from the fact that "almost nobody" can stop working in the Bolivian labour market. This can be explained by the lack of worker protection

measures, which obliges many people to become underemployed or join activity sectors with low productivity (this explanation makes sense for the time period where the estimate was made, 1996 to 1997, but for times where the economy was growing by 4% it does not make sense, once the economic shocks and their social consequences had passed). Household heads or their spouses who are unemployed or work in low-productivity jobs, in turn, are also the ones who belong to the poorest households.

One of the various aspects that the report associates with income per capita and hence with household poverty is the geographic issue. When we include explicitly the differences between departments, we see that living in one region or another can make a difference in per capita income of up to 84%. This difference could be, at least, due to the following arguments: 1. geographic location influences not only the likelihood of getting more resources but also the likelihood of finding work; and 2. location is associated not only with income level but also with the likelihood of having health problems in the household or having children in high school, which determines to some extent the preference for one or another place. Unfortunately, due to the way the variables are defined, the study could only verify that geography is in fact an important factor in poverty. It could not determine which geographic factors influence this situation, leaving free reign to interpretations of what specifically the factors could be that influence poverty (market access, land fertility, cultural factors, climate or others).

A Focus on Productive Activities

To complement the previous analysis, we review some of the factors that could explain poverty "sequentially". We hence posit that poverty is determined by: 1. the assets individuals and households have; 2. the relative use they make of these assets in the labour market; and 3. the value and profitability they have in the market.

A look at the assets of the population is fundamental not only to understand the dynamics of poverty but also to derive public policy implications regarding what level of equality to aspire to. [Asset inequality – in education or land – can be important to understand income inequality. Opportunities or the distribution of opportunities determines in the end whether inequality implies inequity or not. For example, Bourguignon and Ferreira (1998) estimate that 40% of income inequality in Brazil is due to differentials in opportunities].

Assets Influence Poverty Reduction

Despite the diversity of assets related to poverty (economic, productive, natural, physical, social assets), one of the fundamental ones has to do with human capital. In addition to being one of the central assets, household surveys collect data about schooling quite frequently as indispensable information to understand the functioning of the labour market.

The education level of the Bolivian population has increased substantially over time. Probably, years of schooling have increased less than expected (given the amount of resources invested over the time period; education spending has risen from under 4% to

over 6%), but significant progress has been made. The rate of growth in the years under study has surpassed the Latin American average, as underlined by the regional report of the IDB (2004). According to Hernani (2002: 64), this evidence is corroborated by transversal data sets. In fact, the average years of schooling have increased at an average rate of 1.2 years while the regional average was one of 0.9 years.

Even though this progress is significant, it has not been sufficient to reduce the gaps between human capital levels in urban areas and rural areas. To illustrate this, we cite a striking fact presented by Hernani (2002), who compares average schooling levels of different age cohorts. The author shows how average schooling of the younger urban population (born in 1975) is comparable to the levels among the same age groups in Argentina and Uruguay (two of the countries with the highest education levels). In contrast, the Bolivian rural population of the same age has barely six years of schooling, a level much lower than the urban average.

Hernani complements the cohort analysis with data about the schooling level that the population between 6 and 25 years reaches. He shows how the children of the two areas are systematically increasing their educational levels up to 16 years, although at different rates. From that age on (approximately), the differences increase, leading to the 4 years differential cited above. What causes this difference? [The factors that explain the difference can vary from demand-based factors (parents are not interested in having their children continue in school beyond primary school; cultural issues can play an important role in this decision) to supply-based limitations (in rural areas, there is a scarcity of classrooms – not necessarily of schools – and of supplies, which can limit the offer to primary school). All these factors reduce the possibilities of more human capital accumulation].

Conditions of Access and Characteristics of the Labour Market

The labour market in Bolivia shows serious imperfections, which prevent a direct association between the level of pay and the level of productivity. Workers not only reach the labour market in different conditions (from different socioeconomic contexts and/or different opportunities to accumulate human capital based on the amount of schooling), but these differences are amplified in the labour market. Several studies have shown consistently the role of factors like gender, ethnic group or place of residence in determining labour income. These factors have nothing to do with the productivity of the individuals (see, for example, Fields (1996), Pérez de Rada (1997), Jiménez and Rivero (1998) and, more recently, Andersen (1999), Hernani (2002) and Landa and Jiménez (2005)).

With the household survey data from the years 1999 to 2001, Hernani (2002: 68) estimates that discrimination against women exists in urban and rural areas and, in both cases, could reach about 30%. This means that almost a third of salary-based income cannot be explained by visible factors like education, experience, place of residence or line of activity of the worker. This estimate is for a population group between 30 and 55 years old.

Based on the same population group, the author finds that, for the urban areas, discrimination against indigenous people ranges from 15 to 25%, while for the rural areas, it ranges from 23 to 50%. These estimates are consistent with the ones presented by Jiménez et al (2005), who find a maximum limit for ethnic discrimination in the capital cities of 27% for data of the year 2000. In work with data from earlier surveys, Rivero and Jiménez (1998) show that this discrimination has increased from 18% in 1990 to 25% in 1997.

Another labour market distortion has to do with the segmentation of the labour market. In fact, there are great differences between jobs in the urban and rural areas or between employees in different departments of the country. Average income from labour in the urban area, for example, is 5.4 times greater than rural income. Similarly, the remuneration of a worker in one of the eastern departments of the country (Beni) can be up to twice as high as that of a worker in the Andean zone (Potosí).

Thoughts on Inequality

Poverty is related not only to economic growth but also to the distribution of income. Given income inequality, the contribution of growth to poverty reduction is not constant but decreasing. This suggests that the effectiveness of growth declines more and more, which requires a change in distribution to make poverty reduction sustainable.

This insufficient connection between economic growth and poverty reduction is explained by the high levels of inequality. CEPAL (2004b) shows how the share of the poorest quintile of the countries has declined from 2% to 1.5% and the share of the richest quintile in total income has increased from 63% to 65% in the time period from 1980 to 1998. Landa (2004) adds evidence to this dangerous trend that inequality in Bolivia tends to be "pro-cyclical", meaning that the distribution of income seems to get worse in times of lower growth like in the late nineties and early 2000s.

Now, where does inequality come from? Based on a microeconomic analysis, Gasparini et al (2003) find that a substantial part of the distribution of the incomes of Bolivian workers is explained by invisible factors, which also causes the increase in inequality since the 90s. Yañez (2004) adds to this result by indicating the factors that can be changed over time. He finds that greater labour market participation, particularly among the percentiles with the lowest incomes, lower unemployment and, above all, more and better (more relevant) education can improve income distribution. On this point, the cited article points out the equalizing nature of investment in education which, in the last few years, has focussed on the primary level. The increase of investment in primary education over the last few years has fundamentally benefited the poorest.

Social Mobility

If the problems of poverty and inequality are already big in Bolivia, low social mobility suggests that these problems with take more time to be solved. Low mobility has less to

do with poverty rates or the absolute number of the poor but more with who these poor are. Which factors lead to higher mobility? How can these be used to contribute to design a policy for the poor?

Andersen (2001) elaborates an index to measure social mobility in the country, puts it together and compares it to calculations for a group of Latin American countries. She finds an index of 0.8 for Bolivia. This is not only among the lowest indexes but shows great variability. It places Bolivia among the lowest three places with regards to social mobility. The author associates this phenomenon with three factors, based on transversal estimates to explain labour income: an insufficient public education system, a high degree of marriage within socioeconomic groups and insufficient rural – urban migration.

4. EDUCATION, SOCIAL MOBILITY AND POVERTY IN A CONTEXT OF ETHNIC DIFERENCES

Analyzing poverty in Bolivia without reference to indigenous issues means denying the highly heterogeneous reality of the society and economy of this country. In order to give a logical sequence to the indicators reviewed throughout the article (poverty, inequality, social mobility) with reference to indigenous issues, we outline below as an example the differences with respect to economic and social outcomes between indigenous and non-indigenous people. The review starts with a calculation of the gaps in poverty levels, goes on to a definition of labour-related problems indigenous people face and concludes with references to the quality of the education this group receives.

The Origin of the Indigenous – Non-indigenous Gap

The historical processes Latin America has undergone have had a decisive influence on the extreme level of inequality that has persisted in our countries for centuries. We cannot understand inequality without recognizing that it originated in colonial times. The initial basis of inequality came from the poor distribution of human capital, riches and legal status between the small group of Europeans and the indigenous groups, which were the great majority of the population (De Ferranti et al, 2004).

These differences continued over time and are, as they are seen in the current day, usually attributed to "discrimination". Nevertheless it is worthwhile to ask how this phenomenon originated in order to better understand the systematic income differentials between one group and the other. According to Heller and Mahoney (2003), this phenomenon originated either because of the way behaviours and attitudes (preferences) of subordinate and dominant groups were determined or because of the use people make of the differences between groups to gain influence in their work places, schools or other areas of activity.

The Extent of the Gap according to Different Indicators

In order to compare the situation of indigenous people in Bolivia with information from other countries with large indigenous population groups, we refer to an article by Hall and Patrinos (2004). They provide evidence of the relative progress achieved by indigenous groups in five Latin American countries. Based on this information, the differences between one and the other group are calculated.

The measured differences in well-being show that indigenous groups have systematically poorer outcomes than those obtained by the non-indigenous. Indigenous people are poorer, the distance that separates them from the poverty line is much larger than for non-indigenous people, and the income distribution among the indigenous poor is much more unequal. To a large extent, these gaps are due to the capacity each group has to generate earnings in the labour market. The case of Bolivia is unusual primarily because of the great weight of the indigenous population that works without being paid and, secondly, because of the huge gaps in the rates of return to education. The latter, estimated at 6% for indigenous people, are a bit more than two thirds of the rates calculated for non-indigenous people (9%).

Where it is available, data shows that indigenous people are more active in the labour market even though they are active mostly in the informal sector or in domestic employment, where they do not receive any remuneration. On the other hand, they do not only have lower levels of education but they also often get less benefit per additional year of schooling than a non-indigenous worker would receive. Finally, we see that child labour is more common among indigenous people, which not only compromises regular school attendance of girls and boys but very likely also their performance at school.

Which Factors explain the Income Gap between the two Groups?

The review of the weight of productive factors and their returns in different countries puts into perspective the larger deficit that indigenous people in Bolivia experience (Graph 17). First of all, the fact that over two third (73%) of the gap between indigenous and non-indigenous people is due to different levels of human capital suggests that there is significant room for increasing the level of schooling indigenous boys and girls receive. Secondly, the lower rate of return education brings for this group suggests that the "quality" of the years of schooling they receive is not the same for both groups.

Quality of Education

In the following section, the present article illustrates observed differences in educational results that are linked to educational quality. This way we underline the potential impact these differences could have in reducing the income gap between indigenous and non-indigenous groups. If education for indigenous people and non-indigenous people has different results in terms of salary in the labour market, what are the indicators that make us think that this is due to differentials in educational quality?

With data on scholastic deficits, Vera (2005) shows how the grade-for-age distortion is systematically larger among indigenous boys and girls. In fact, from second grade on, the deficit of this group is more than twice that among non-indigenous people. This disproportion is much higher than what we see in other countries with a significant

indigenous presence. On the other hand, results from standardized maths tests show that Bolivian indigenous children obtain educational outcomes up to 12% below their non-indigenous counterparts. Even though this gap is a moderate one compared to other comparable countries, it constitutes a warning sign showing the need to make access to quality education more equitable.

In connection with the previous point, McEwan (2004) provides evidence about the factors behind the gap in education among students of the 4th and 8th grades of primary school. In a comparative analysis including Bolivia and Chile, he finds that over 50% of the difference in education quality (approximated by scholastic outcome) can be explained by differences in the schools and classrooms that the children attend. Between 20 and 25% is explained by factors associated with the family or the student. Only a minimal percentage of between 5 and 10% cannot be explained by either of these factors (Table 14).

5. CHALLENGES IN POVERTY REDUCTION POLICIES

Empirical evidence about poverty, its correlation with inequality levels and its possible implications on social mobility is continuously increasing. The present article attempts to outline some of the central elements of the current discussion, with special attention to its potential implications for public policy. To do this, it started of with a review of the last four decades of economic policy and the more recent advent of attempts to define a social policy in the country.

The implicit question throughout the document has to do with the way in which economic and social policy can be integrated in a harmonious way around valuable objectives. Nowadays, the great inequality in the capacity to create employment and income has the result that the precarious economic growth of the country neither helps to diminish the high rates of poverty nor to change a social and political development model based on "coexistence in inequality" (Gray Molina, 2004).

Social policy goes beyond sector policies and has to make progress in building more durable agreements that lead to less social exclusion. The lack of social mobility shows itself in a complex social, political and cultural web that hinders change and intergenerational transformation. The coexistence of diverse practices and institutions leads to a high degree of fragmentation of the model of development, which depends on life, survival and diversification strategies that have cultural roots and are highly idiosyncratic to their place and moment in time.

The State can be a "re-builder of political and social communities" (Government of Bolivia, 2001). Nowadays there is much emphasis on rethinking economic and social policy to highlight the historical and cultural characteristics of the country. The changes that are suggested are so profound that they challenge both public policy instruments to build capacities to make poverty reduction and the protection of vulnerable groups sustainable and durable. They pursue objectives much wider than the strictly economic

ones, towards the design of a concept of development that is itself based on the cultural, social and human potential of the communities.

Bibliographic References:

- Alarcón, Diana and Eduardo Zepeda (2004). "Economic Reform or Social Development? The Challenges of a Period of Reform in Latin America: Case Study of Mexico", in *Oxford Development Studies*, Vol. 32, N°1, March.
- Andersen, Lykke and Wiebelt, Manfred, 2003, *La mala calidad de la educación en Bolivia y sus consecuencias para el Desarrollo*, Documento de trabajo 02/2003, IISEC-UCB
- Andersen, Lykke, 2001, *Social Mobility in Latin America*, Instituto de Investigaciones Sociales y Económicas, Documento de Trabajo, núm. 03/2000, Universidad Católica Boliviana, Bolivia.
- Andersen, Lykke, 2003, Educación en Bolivia: El efecto sobre el crecimiento, el empleo, lad desigualdad y la pobreza, IISEC-UCB, proyecto PIEB.
- Andersen, Lykke, 2003, Revista Latinoamericana para el Desarrollo "Baja Movilidad Social en Bolivia: causas y consecuencias para el desarrollo", IISEC-UCBSP.
- Andersen, Lykke; Mercado, Alejandro and Muriel, Beatriz, 2003, *Discriminación étnica en Bolivia: En el sistema educativo y el mercado de trabajo*, Documento de trabajo 03/2003, IISEC-UCB
- Arias, Omar; Gustavo Yamada and Luís Tejerina. (2002). *Education, Family Background and Racial Earnings Inequality in Brazil*. IDB, Sustainable Development Department, Poverty and Inequality Advisory Unit, Technical Paper, Washington, D.C.
- Becker. 1991, *A treatise on the family*. Enlarged edition. Cambridge, Mass., Harvard University Press.
- Bourguignon, F.; Ferreira, F. and Lustig, N. (1998). The Microeconomics Of Income Distribution Dynamics in East Asia And Latin America. World Bank Research Proposal, Washington, D.C.
- Buvinic, Mayra; Jacqueline Mazza, Juliana Pungiluppi and Ruthanne Deutsch. (2004). Inclusión Social y Desarrollo Económico en América Latina. IDB. Washington, D.C.
- Canavire, Gustavo and Landa Fernando, 2006, Duración del desempleo en el área urbana de Bolivia: Un análisis de los efectos de niveles de instrucción y características socioeconómicas, Revista de Análisis Económico, volumen21, articulo 4, UDAPE.
- CEPAL, 1969, El cambio social y la política de desarrollo social en América Latina.
- Comisión de revisión de gasto público, 2004, *Informe de septiembre 2004*, Ministerio de Hacienda, Bolivia

- Comisión Económica para América Latina y el Caribe (2004b), Anuario Estadístico de América Latina, CEPAL, Santiago de Chile. Available at: http://www.eclac.cl/badestat/anuario 2004/esp.htm
- De Ferranti, David, Guillermo Perry, Francisco Ferreira and Michael Walton. (2004). Inequality in Latin America and the Caribbean: Breaking with History". World Bank, Washington, D.C.
- Escalante, Scarlet (2004) "Los retornos de la inversión en capital humano en Bolivia" in *Revista de Análisis Económico*, Volume 19, UDAPE, La Paz, Bolivia.
- Escobar, Flavio and Vásquez, Claudia, *Impacto socio-económico de las reformas financieras en Bolivia*, Documento de trabajo 06/2001, IISEC-UCB, La Paz, Bolivia.
- Fields, 1996, Accounting for differences in income inequality craft draft school of industrial and labor relations, Cornell University
- Government of Bolivia, 2001, Estrategia Boliviana de Reducción de la Pobreza, La Paz, Bolivia.
- Government of Bolivia, 2006, *Plan Nacional de Desarrollo*, Ministerio de Planificación del Desarrollo, La Paz, Bolivia.
- Gray Molina, George, 2004, *Desigualdad en Bolivia*, Presentation available on the Internet: http://www.udape.gov.bo/revista/UDAPE-12-02-04-v3.pdf.
- Gray Molina, George, 2004, *Informe Nacional sobre Desarrollo Humano 2006, El Estado del Estado en Bolivia*, documento de trabajo 2/2006 (Proyecto BOL/02/008).
- Hall, Gillete and Harry Patrinos (Editors), 2004, *Indigenous People, Poverty and Human Development in Latin America*, Published by Palgrave Macmillan, Great Britain.
- Hernani, Werner, 2002, Mercado laboral, Pobreza y desigualdad en Bolivia, INE.
- Humerez, Julio and Dorado Hugo, 2006, *Una aproximación de los determinantes del crecimiento económico en Bolivia 1960-2004*, Revista de Análisis Económico, Volume 21, Article 1, UDAPE.
- Instituto de Estudios Sociales, 2004, Evaluación de las estrategias de reducción de la pobreza (ERP) en América Latina, Country Report: Bolivia.
- Interamerican Development Bank (IDB), 2004, Se buscan buenos empleos: Los mercados laborales de América Latina. Informe de Progreso Económico y Social 2003 2004. IDB. Washington, D.C.

- Interamerican Development Bank (IDB), Office of Evaluation and Oversight (OVE), 2004, Evaluación del programa de país (CPE): Bolivia 1990-2002.
- Interamerican Development Bank (IDB), 1999, América Latina Frente a la Desigualdad. Informe de Progreso Económico y Social 1999. Washington, D.C.
- Jiménez, Elizabeth and Wilson Jiménez (2003), "Movilidad ocupacional y desempleo en el área urbana de Bolivia", in *Revista de Análisis Económico*, Volume 18, UDAPE, La Paz, Bolivia.
- Jiménez, Wilson and Lizarraga, Susana, 2004, Ingresos y desigualdad en el área rural de Bolivia, Revista de Análisis Económico, Volume 19, Article 2, UDAPE.
- Jiménez, Wilson; Pereira, Rodney and Hernani, Werner, Bolivia: efectos de la liberalización sobre el crecimiento, empleo, distribución y pobreza
- Kaufmann, Daniel; Mastruzzi, Massimo and Zavaleta, Diego, 2003, *Sustained macroeconomic reforms*, *tepid growth: A governance puzzle in Bolivia?* In search of prosperity: Analytic narratives on economic growth, Princeton University Press.
- Klasen, Stephan et al (2004) "Operationalizing Pro-Poor Growth: Country Case Study Bolivia", Draft.
- Landa, Fernando and Wilson Jiménez (2005), "Bolivia: Crecimiento 'Pro Pobre' entre los años 1989 y 2002", in *Revista de Análisis Económico Volumen 20*, UDAPE. La Paz, Bolivia, June.
- Landa, Fernando, 2004, ¿Las dotaciones de la población ocupada son la única fuente que explica la desigualdad de ingreso en Bolivia?, Una aplicación de las microsimulaciones, Revista de Análisis Económico, Volume 19, Article 4, UDAPE.
- Lora, Eduardo; Panizza, Ugo and Quispe, Myriam, 2004, *Reform fatigue: Symptoms, Reasons, and implication*, Federal Reserve Bank, Economic Review.
- Marulanda, Nohra Rey de and Guzmán, Julio, *Inequidad, Desarrollo Humano y Política Social: Importancia de las "Condiciones Iniciales"*.
- Mazza Jacqueline, Inclusión Social, mercados de trabajo y Capital humano en América Latina
- McEwan, Patrick J. (2004). "The indigenous test score gap in Bolivia and Chile". In: *Economic Development and Cultural Change*, 53, 157-190.
- Mercado Salazar, Alejandro, 2003, Movilidad Social: La clave para el desarrollo, una agenda de políticas para la nueva década.

- Mercado, Alejandro and Aguilar, Tirza, 2005, *Mercado y desigualdad*, Documento de trabajo 09/2005, IISEC-UCB.
- Mercado, Alejandro and Rios, Fernando, 2005, *La informalidad: ¿Estrategia de sobrevivencia o forma de vida alternativa?*, Documento de trabajo 04/2005, IISEC-UCB.
- Miralles Martínez, Pedro, La vivienda urbana como espacio social, económico y privado, e instrumento para la movilidad social. El ejemplo de artesanos y comerciantes en la Murcia del siglo XVII
- Nina, Osvaldo and Rubio, M., 2001, *Bolivia: Desempeño Macroeconómico y pobreza*, Interamerican Development Bank, MIMEO, Sustainable Development Department.
- Pacheco, Napoleón and Morales, Juan Antonio, 1999, *Economía "El reto de los liberales"*, en Bolivia en el siglo 20, la formación de la Bolivia contemporánea.
- Pérez de Rada, Ernesto, *Discriminación salarial por género y étnica en ciudades principales de Bolivia*, Documento de trabajo 47/97, UDAPSO, La Paz, June 1997.
- Ravallion, Martin (2004), "Pro-Poor Growth: A Primer?" World Bank Policy Research Woking Paper 3242, March, World Bank, Washington D.C.
- Rivero, Roberto and Jimenez, Wilson, 1999, *Diferencias salariales en el mercado de trabajo urbano en Bolivia*, Revista de Análisis Económico, Volume 17, Article 2, UDAPE.
- Thiele, Rainer, 2001, *Impacto social del ajuste estructural en Bolivia*, Documento de trabajo 09/2001, IISEC-UCB.
- Unidad de Análisis de Políticas Económicas y Sociales, August 2003, Estrategia Boliviana de Reducción de la Pobreza: Informe de avance y perspectivas.
- Unidad de Análisis de Políticas Económicas y Sociales, Agosto 2006, *Informe económico y social, primer semestre 2006 y perspectivas*, Ediciones UDAPE.
- Unidad de Análisis de Políticas Económicas y Sociales (2003), *Estrategia Boliviana de Reducción de la Pobreza: Informe de Avance y Perspectivas*, UDAPE, La Paz.
- Unidad de Análisis de Políticas Económicas y Sociales (2004), *Dossier de estadísticas sociales* y *económicas*, Volume 14, UDAPE, La Paz, Bolivia.
- United Nations Development Program (UNDP), 2005, *Informe de Desarrollo humano 2005*, Ediciones Mundi Prensa, Director and Editor-in-Chief Kevin Watkins, translated by LTS Mundo Traducciones.
- United Nations Development Program (UNDP), various years, Informe de Desarrollo Humano

- en Bolivia (1998, 2000, 2002 and 2004).
- Vera, Miguel (2005), "Calidad de la educación: Un ejemplo de articulación de políticas económicas y sociales", in Repetto, F. (ed) *La gerencia social ante los nuevos retos del desarrollo social en América Latina*. Programa INDES Guatemala. Guatemala.
- Villegas, Horacio and Núñez, Javier, *Discriminación étnica en Bolivia: Examinando Diferencias regionales y por nicho de calificación*, Documento de trabajo 02/2005, IISEC-UCB.
- Vos R, Lee H and Mejia JA, *Structural adjustment and poverty in Bolivia*, Interamerican Development Bank, INDES WP N° I-3, Washington, DC.
- World Bank (2002), "Bolivia Poverty Diagnostic", Final Report, Washington D.C.
- World Bank, *Poverty Assessment*, Selected Policies for Expanding Earning Opportunities for the Poor, Volume I: Reporte Principal
- Yañez, Ernesto, 2004, Qué explica la desigualdad en la distribución del ingreso en las áreas urbanas de Bolivia: Un análisis a partir de un modelo de microsimulación, Revista de Análisis Económico, Volume 19, Article 3, UDAPE.

Annex: Tables and Graphs

Table 1: Bolivia - Synthesis of 15 years of Structural Reforms

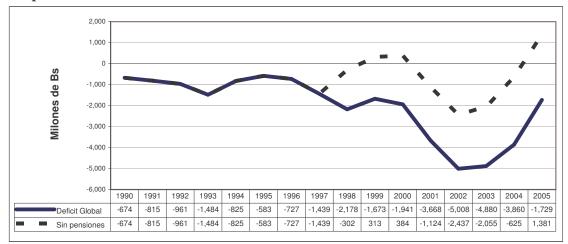
Year	Policy	Objective	Achievements
1985	DS. 21060: Stabilization and structural reform of the economy.	Macroeconomic stability and growth.	Low inflation rates, moderate growth.
1986	Flat rate for import duties: Opening of the economy.	To improve competitiveness.	Acquisition of new fixed assets and new inputs for export.
	Club of Paris Accords I: Restructuring of the bilateral external debt.	External debt relieve.	Increased resources for the social area.
	Tax reform: Increase of financial revenue.	Better functioning of Public Finances.	Increase of tax revenue.
1987	Finance Reform: Regulation, supervision and support for the bank.	Better functioning of the financial system.	Increase in public savings deposits.
	Liberalization of the labour market.	Better functioning of the labour market.	Decline in the rate of visible unemployment.
1990	Law SAFCO: Management and control of State resources.	Higher efficiency in the use of public resources.	Higher level of compliance.
	Investment Act: Regulations for private nacional and external investment.	To increase investment.	Increase in investment rates.
	Hydrocarbons Act: Legal framework for the development and exploration of hydrocarbon fields.	Better resource utilization, expansion of the energy base of the country.	Increased investment, expansion of hydrocarbon reserves, empowerment of a strategic sector for national development.
1991	Review of the Mining Code: Legal framework for investment in the sector.	To increase investments.	Investment in exploration. One of the greatest silver deposits in the World was found. Mina San Cristóbal.
	Tax Act.	Improve the efficiency of tax collection, increase tax revenue.	Increase of pressure for tax collection.
	Free-Trade Zone Regime: Promotion of manufacturing activities.	Development of the manufacturing industries.	Increase of the growth rate of the industrial sector.
1992	Privatization Act: Sale of public enterprises.	Improve and redistribute financial resources.	More resources for the social sector.
1993	Export Law: Opening of the economy.	To increase exports.	Increase and diversification of exports.
	General Banking Act: Regulation of the financial system.	To strengthen the financial system.	More reliable financial system.
1994	Capitalization Act: Sale of public enterprise stock.	Better distribution of financial resources, generation of more internal savings.	Increased external direct investment.
	Popular Participation Act: Redistribution of income.	More social participation in public policy making.	Better resource allocation.
	Education Reform Act: Raise education quality and coverage.	Better education quality and coverage.	Better coverage. Lower school drop-out rates.

Table 1: Bolivia - Synthesis of 15 years of Structural Reforms (Continuation)

Year	Policy	Objective	Achievements
1995	Administrative Decentralization Act: Assignment of new functions to levels of the administration.	Better management of the public sector.	Increase of investment at the municipal level.
1996	Pension Act: Individual savings and capitalization of contributions.	To strengthen the pension system.	Growth of the savings system for long-term social insurance.
	Nacional Institute of Agrarian Reform (INRA) Law: Registration of property titles and solution to disputes over agrarian properties (*).	To improve the living conditions of the rural population. To guarantee property rights in rural areas. To make provisions for the villages in the east and for women's land rights.	Progress in registering titles for (indigenous) land that has always been community property.
1997	Health reforms, implementation of the National Maternity and Child Insurance (SNMN).	Better services for mothers and children.	Better coverage in benefits.
	Judicial Reform: Ombudsman, Judicial Council, Constitutional Tribunal and Supreme Court.	To improve access to the justice system. Active participation of civil society.	Increased equity in access to the justice system.
1998	Beginning of health reform, implementation of the Basic Health Insurance (SBS) and the program Escudo Epidemiológico.	Free new services for the general population. Continuous improvement of Mother-Child care. Control of the main endemic communicable diseases (Chagas, Malaria, Tuberculosis).	Increase in Mother-Child services. Increase in prevention, diagnostic and treatment activities for the main endemic diseases.
	Stock Market Act: Support for the stock market.	To strengthen the financial system.	Higher rate of participation of large enterprises in the stock market.
	Property and Popular Credit Act: Expansion of micro-credit.	To improve the conditions of the micro-enterprise sector. Democratization of credit.	Growth of the share of microcredit.
2000	Customs Act: Customs Reform.	To increase customs collection and improve the institutional framework of the customs system.	Reduction in smuggling.
	National Statute of Public Officials.	To improve the institutional framework and the performance of the public sector.	
	Law on the Institutionalization of the National Service of Internal Taxes.	To improve the transparency, efficiency and management of the taxation system with a one-stop approach.	Increases in the collection of internal income are hoped for.

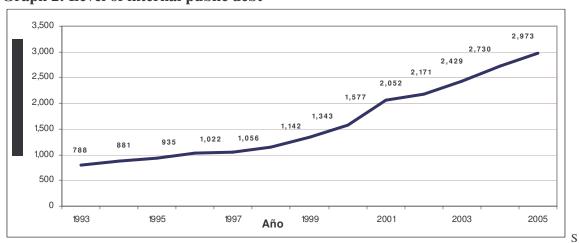
Source: Government of Bolivia, 2001

Graph 1: Total Deficit (1990-2005)



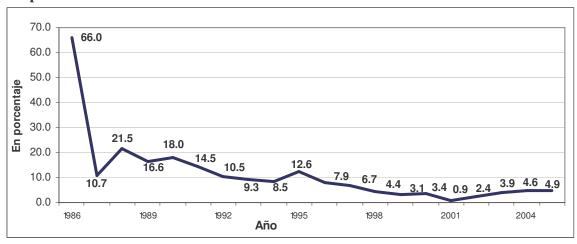
Source: Dossier UDAPE, 2006.

Graph 2: Level of internal public debt



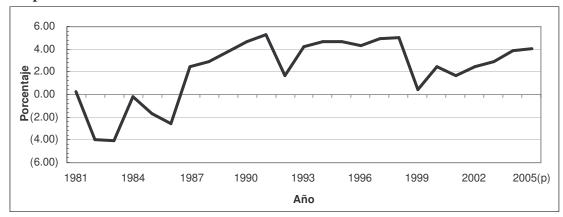
Source: Dossier UDAPE, 2006.

Graph 3: Inflation



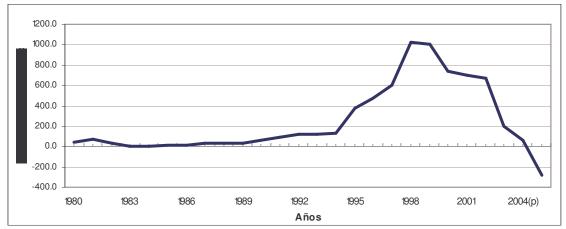
Source: Dossier UDAPE, 2006.

Graph 4: GDP Growth



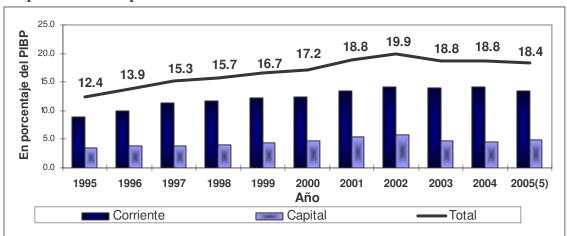
Source: Dossier UDAPE, 2006.

Graph 5: Foreign Direct Investment



Source: Dossier UDAPE, 2006.

Graph 6: Social Expenditure



Source: Dossier UDAPE, 2006.

7,0 6,0 5,0 4,0 3,0 2,0 1,0 0,0 1,0 -2,0 1971-1975 1976-1980 1981-1985 1986-1990 1991-1995 1996-2000 1961-1965 Periodo Fuerza de trabajo Capital Físico Total Factores

Graph 7: Contribution of different Factors to GDP Growth

Source: Humérez, Julio and Dorado, Hugo in *Una aproximación de los determinantes del crecimiento económico en Bolivia 1960-2004*.

Table 2 a) Income from the Primary Activity of the Employed Population (in 1991 Bolivianos).

Description	1989	1993	1997	1999	2002
Income from Primary Activity	n.d	n.d	438,9	370,9	345,7
Urban Area	n.d	n.d	662,4	563,3	534,8
Capital Cities	636,4	629,8	727,4	584,4	546,3
Rural Area	n.d	n.d	195,6	131,6	117,6

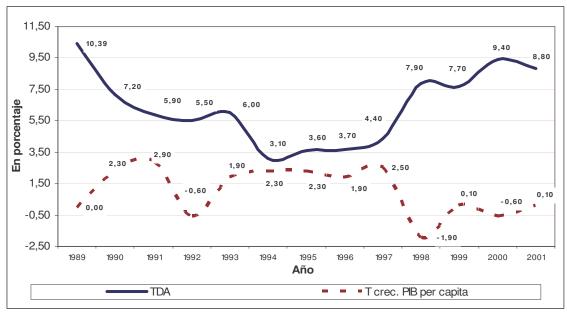
Source: Jiménez, Wilson and Landa, Fernando in Bolivia: Crecimiento "Pro pobre" entre los años 1989-2010

Table 2 b) Bolivia – Capital Cities: Average Income from Primary Activity of the Employed Population, by Economic Sector of Activity (in 1991 Bolivianos).

Branch of Activity	1989	1993	1997	1999	2002
Total	636,4	629,8	727,4	584,4	546,3
Agricultura	1036,2	984,6	1355,3	376,6	604,8
Extractive	712	998,1	1231,8	1455,9	632,4
Industry	548,8	558,2	588,1	436,3	384,3
Electricity, gas and water	902,8	1007,6	1925,9	1012,6	2170,5
Construction	651,8	551,4	700,7	678,7	492,7
Trade	585,5	530,3	625,8	499,1	480,2
Transport	927	810,3	1002,9	735,5	640,7
Financial	992,6	1403,7	1170,4	1161,4	1082,5
Services	581,3	573,7	666,2	546,8	587,1

Source: Jiménez, Wilson and Landa, Fernando in Bolivia: Crecimiento "Pro pobre" entre los años 1989-2010

Graph 8: Open Unemployment Rate in the Capital Cities and GDP per capita Growth Rate



Source: Jiménez, Wilson and Landa, Fernando in Bolivia: Crecimiento "Pro pobre" entre los años 1989-2010

Table 3: Participation in the Labour Market by Gender and Place of Residence

Year	National	Urban	Rural	Men	Women
1996	66,3	56,9	81,3	73,9	59,2
1997	63,0	53,4	79,5	72,1	54,3
1999	64,2	55,9	80,0	72,0	56,8
2000	62,4	56,1	74,6	71,8	53,7
2001	67,8	60,6	80,9	75,9	60,1
2002	64,6	58,0	76,2	73,2	56,3
2003	66,0	57,8	80,2	74,2	58,2

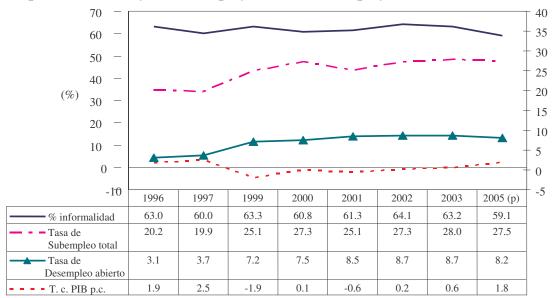
Source: Dossier UDAPE, 2006.

Table 4: Unemployment Level by Gender and Place of Residence

Year	National	Urban	Rural	Men	Women
1996	2,1	3,8	0,2	2,1	2,2
1997	2,1	3,7	0,2	2,1	2,0
1999	4,3	7,2	0,5	3,7	5,1
2000	4,8	7,5	0,9	3,9	5,9
2001	5,2	8,5	0,8	4,5	6,2
2002	5,5	8,7	1,2	4,3	6,9
2003	5,5	8,7	1,4	4,4	6,7

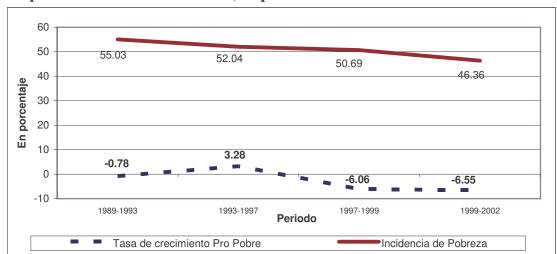
Source: Dossier UDAPE, 2006.

Graph 9: Informality, Underemployment and Unemployment



Source: UDAPE, 2006 with information from INE, Preliminary

Graph 10: Pro-Poor Growth Rate, Capital Cities - Estimates



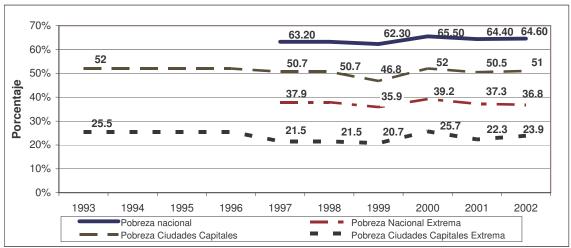
Source: Jiménez, Wilson and Landa, Fernando in Bolivia: Crecimiento "Pro pobre" entre los años 1989-2010

Table 5: Bolivia – Estimates of Pro-Poor Growth by Place of Residence

Cuarrith Data	1999-2002							
Growth Rate	Total	Urban	Rural					
Average	-3,45	-3,13	-3,42					
Median	-4,77	-7,39	-2.69					
Average of all Percentiles	-5,75	-5,14	-5,19					
Incidence of Poverty at the Beginning	63,47	51,36	84					
Pro-Poor	-6,05	-5,19	-6,00					

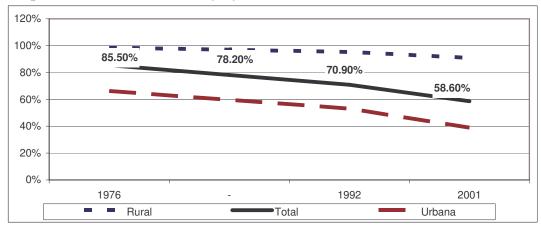
Source: Jiménez, Wilson and Landa, Fernando in Bolivia: Crecimiento "Pro pobre" entre los años 1989-2010

Graph 11: Evolution of Moderate and Extreme Poverty at the National Level and in the Capital Cities



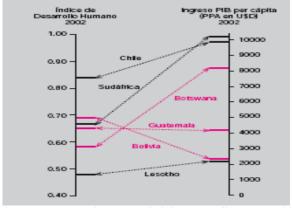
Source: Progress Report PRSP, 2003.

Graph 12: Evolution of Poverty by Unsatisfied Basic Necessities

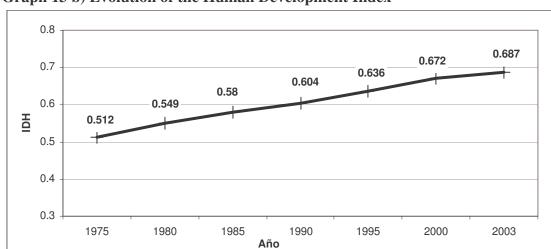


Source: Progress Report PRSP, 2003.

Graph 13 a) Human Development without Income



Source: UNDP, Informe Mundial de Desarrollo Humano 2004.



Graph 13 b) Evolution of the Human Development Index

Sournce: UNDP, Informe Mundial de Desarrollo Humano 2005.

Table 6: Poverty by Area and Ethnic Group

INDICATORS	1999	2000	2001	2002	2003 *
BOLIVIA					
Incidence of poverty (%)	63,5	66,4	63,1	63,3	63,1
Indigenous	73,1	76,0	69,4	71,0	70,1
Non-Indigenous	45,1	54,1	51,9	53,3	49,1
Incidence of extreme poverty					
(%)	40,7	45,2	38,8	39,5	34,5
Indigenous	50,6	56,1	46,0	48,7	42,0
Non-Indigenous	21,8	31,1	25,9	27,5	19,4
URBAN AREA					
Incidence of poverty (%)	51,4	54,5	54,3	53,9	54,4
Indigenous	60,8	62,2	59,1	60,5	61,7
Non-Indigenous	40,7	48,2	48,2	48,1	43,7
Incidence of extreme					
poverty (%)	23,5	27,9	26,2	25,7	22,9
Indigenous	30,2	34,1	29,3	31,6	29,0
Non-Indigenous	15,9	22,9	22,2	20,5	14,1
RURAL AREA					
Incidence of poverty (%)	84,0	87,0	77,7	78,8	77,7
Indigenous	85,8	89,8	81,4	81,9	80,7
Non-Indigenous	72,1	78,0	64,1	70,2	66,4
Incidence of extreme					
poverty (%)	69,9	75,0	59,7	62,3	53,7
Indigenous	71,8	78,3	65,7	66,7	58,3
Non-Indigenous	57,5	64,3	38,1	50,1	36,4

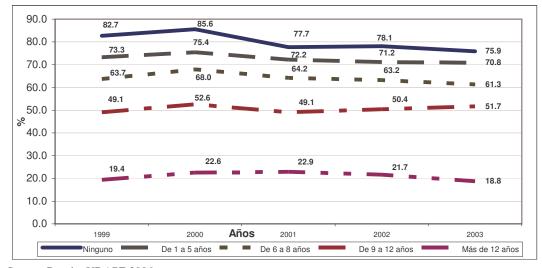
^{*} Calculated with the support of the Program for the Improvement of Surveys and the Measurement of Living Conditions in Latin America and the Caribbean (MECOVI), 2003-2004 Source: Dossier UDAPE 2006.

Table 7 a) Poverty profile with selected variables

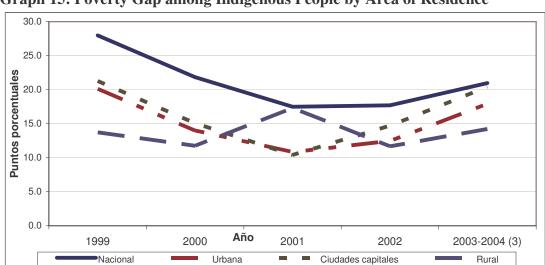
CHARACTERISTICS	1999	2000	2001	2002	2003 *
By Level of Schooling Reached			•	•	
None	82,7	85,6	77,7	78,1	75,9
1 to 5 years of schooling	73,3	75,4	72,2	71,2	70,8
6 to 8 years of schooling	63,7	68,0	64,2	63,2	61,3
9 to 12 years of schooling	49,1	52,6	49,1	50,4	51,7
Over 12 years of schooling	19,4	22,6	22,9	21,7	18,8
By Activity					
Employed	61,1	63,0	59,3	60,2	58,4
Unemployed	55,6	75,6	63,7	62,6	65,8
Inactive	57,1	61,3	59,1	59,2	60,8
By Branch of Activity					
Agriculture, Silviculture, Hunting					
and Fishing	82,4	89,5	81,6	81,7	80,4
Extraction from Mines and Quarries	58,8	47,3	44,9	44,9	35,2
Manufacturing Industry	61,2	54,0	51,8	55,3	52,8
Electricity, Gas and Water	53,6	18,4	21,2	15,5	36,6
Construction	49,5	61,3	58,5	57,9	62,9
Trade	40,9	46,9	46,4	44,1	48,6
Transport and Storing	41,6	40,7	43,3	40,0	42,5
Finances	23,9	21,4	23,6	20,3	27,7
Services	35,1	38,4	31,9	34,0	35,8
By Occupational Category					
Worker	61,7	58,2	52,2	61,9	52,8
Employee	31,4	32,8	28,6	29,8	30,8
Self-employed	62,1	67,6	63,5	61,8	64,2
Employer or Partner	32,5	31,6	37,3	45,9	40,9
Family Worker	81,6	85,8	79,7	83,3	78,9
Domestic Help	49,5	57,3	56,7	58,6	53,6

^{*} Calculated with the support of the Program for the Improvement of Surveys and the Measurement of Living Conditions in Latin America and the Caribbean (MECOVI), 2003-2004 Source: Dossier UDAPE 2006.

Graph 14: Incidence of poverty by years of schooling



Source: Dossier UDAPE 2006.



Graph 15: Poverty Gap among Indigenous People by Area of Residence

Source: Dossier UDAPE 2006.

Table 8: Income Elasticity per capita – of Education

		1997		1999			
	Rural	Small Cities	Large Cities	Rural	Small Cities	Large Cities	
Household Head	'						
Primary	0,34	0,27	0,38	0,25	0,34	0,18	
Secondary	0,53	0,45	0,53	0,39	0,61	0,32	
Adult Education	NS	NS	0,35	NS	NA	NS	
Teacher College	0,98	0,75	0,64	0,55	0,98	0,47	
Technical Training	0,56	0,55	0,72	0,99	0,86	0,56	
Military and other	0,57	0,53	0,66	1,14	0,93	0,31	
University	1,14	0,89	0,97	0,62	1,08	0,73	
Spouse							
Primary	0,13	NS	NS	0,13	NS	NS	
Secondary	0,11	0,16	NS	0,38	NS	NS	
Adult Education	1,36	0,36	0,33	NS	NA	NS	
Teacher College	NS	0,37	0,21	0,58	NS	NS	
Other	NS	0,27	0,35	0,87	NS	0,46	

Source: World Bank, Poverty Diagnostic, 2000.

Table 9: Income Elasticity per capita –Branch of Primary Activity

		1997		1999 (NOV)			
	Rural	Small Cities	Large Cities	Rural	Small Cities	Large Cities	
Primary Activity	of Househo	ld Head		'	•		
Mining	NS	0,36	NS	0,44	NS	0,49	
Manufacturing and Industry	0,44	0,13	NS	NS	NS	NS	
Construction	0,34	0,3	NS	0,17	0,38	0,28	
Trade	0,67	0,33	NS	NS	0,52	NS	
Transport	0,91	0,43	NS	0,4	0,36	NS	
Services	0,45	NS	NS	NS	NS	NS	
Primary Activity	of Spouse			<u>.</u>			
Manufacturing and Industry	NS	0,38	NS	NS	0,61	NS	
Trade/ Transport	NS	0,48	NS	NS	0,91	NS	
Services	NS	0,3	NS	0,32	0,61	NS	

Source: World Bank, *Poverty Diagnostic*, 2000.

Table 10: Main Education Indicators

Indicator	1996	1997	1998	1999	2000	2001	2002	2003	2004 (p)		
Average Years of Schooling (Population 15 years or older)											
National	7,1	7,2	n.d.	7,6	7,7	7,6	7,5	7,5	7,7		
Indigenous	n.d.	n.d.	n.d.	6,1	6,0	6,6	6,3	6,3	6,9		
Non-Indigenous	n.d.	n.d.	n.d.	10,0	9,7	9,4	8,9	9,7	9,1		
Urban	9,0	9,0	n.d.	9,5	9,4	9,3	9,2	9,1	9,0		
Indigenous	n.d.	n.d.	n.d.	8,2	8,0	8,3	8,3	7,9	8,2		
Non-Indigenous	n.d.	n.d.	n.d.	10,6	10,5	10,4	10,0	10,5	10,1		
Rural	3,8	4,0	n.d.	3,8	4,2	4,5	4,4	4,7	5,3		
Indigenous	n.d.	n.d.	n.d.	3,6	3,8	4,3	4,2	4,5	5,1		
Non-Indigenous	n.d.	n.d.	n.d.	5,1	5,3	5,1	5,2	6,0	6,0		
Perce	entage of the	e Population	n (15 years	or older) w	ith 8 or mo	re Years of	Schooling				
National	45,3	47,0	n.d.	50,7	51,5	50,4	49,4	50,8	51,6		
Indigenous	n.d.	n.d.	n.d.	37,5	36,0	41,2	38,1	40,0	44,3		
Non-Indigenous	n.d.	n.d.	n.d.	72,7	69,7	66,1	62,7	70,5	65,2		
Urban	62,9	64,1	n.d.	67,5	67,7	66,0	64,8	65,1	63,1		
Indigenous	n.d.	n.d.	n.d.	56,4	53,8	57,3	54,9	54,4	55,2		
Non-Indigenous	n.d.	n.d.	n.d.	78,4	77,8	76,2	72,5	77,6	74,3		
Rural	15,3	16,9	n.d.	17,4	18,9	21,7	21,3	25,1	30,6		
Indigenous	n.d.	n.d.	n.d.	16,2	16,6	21,0	19,4	23,2	29,1		
Non-Indigenous	n.d.	n.d.	n.d.	26,0	27,0	24,2	26,3	34,6	35,6		
Percentage of the population between 6-14 years with educational delays	40,0	n.d.	n.d.	38,9	42,1	39,0	41,4	33,0	42,7		
Urban	31,7	n.d.	n.d.	28,2	32,8	32,9	36,2	25,7	40,0		
Rural	51,2	n.d.	n.d.	53,8	56,0	48,1	48,9	43,1	46,5		

Source: Dossier UDAPE 2006.

Table 11: Unemployment Rate by Gender, Age and Ethnic Group

Tuble 111 Chemployment that by Gender, rige and Lemme Group										
Indicator	1999	2000	2001	2002	2003 (p)					
TOTAL	7.21	7.46	8.50	8.69	8.71					
Gender										
Men	6.17	6.22	7.47	7.31	6.84					
Women	8.49	8.99	9.67	10.32	10.98					
Age										
<25 years	14.25	13.95	13.05	16.12	16.87					
25-44 years	5.08	5.84	7.52	7.00	6.42					
>45 years	3.68	4.15	4.88	4.41	3.91					
Ethnic Group										
Indigenous	4.28	4.59	5.72	6.61	6.18					
Non-Indigenous	8.24	8.44	10.97	10.55	11.18					

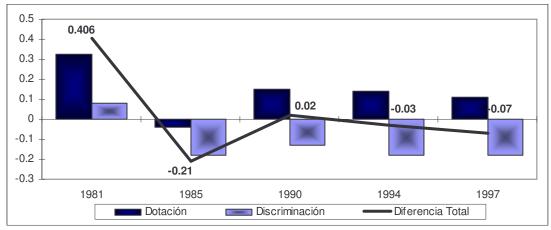
Source: Canavire, Gustavo and Landa, Fernando Duración del desempleo en el área urbana de Bolivia: Un análisis de los efectos de niveles de instrucción y características socioeconómicas.

Table 12: Unemployment Rate by per capita income and Level of Schooling Completed

Completed	1								
Indicator	1999	2000	2001	2002	2003 (p)				
Total	7.21	7.46	8.50	8.69	8.71				
Quintile of per capita income									
First quintile (poorest)	10.66	15.00	16.46	14.66	15.18				
Second quintile	7.23	11.55	9.20	9.58	11.32				
Third quintile	8.40	7.59	8.14	8.11	7.73				
Fourth quintile	4.79	3.46	6.28	8.35	6.84				
Fifth quintile (richest)	6.12	317	5.21	5.08	5.37				
Level of Schooling Completed									
Primary or less	5.22	6.70	7.27	7.94	6.55				
Secondary	10.75	9.34	10.68	10.08	11.38				
Higher	6.03	6.01	7.74	8.16	9.14				

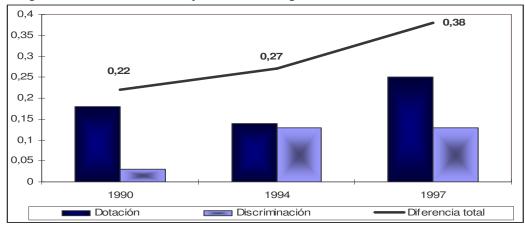
Source: Canavire, Gustavo and Landa, Fernando Duración del desempleo en el área urbana de Bolivia: Un análisis de los efectos de niveles de instrucción y características socioeconómicas.

Graph 16: Discrimination by Gender



Source: Rivero, Roberto and Jiménez, Wilson

Graph 17: Discrimination by Ethnic Group



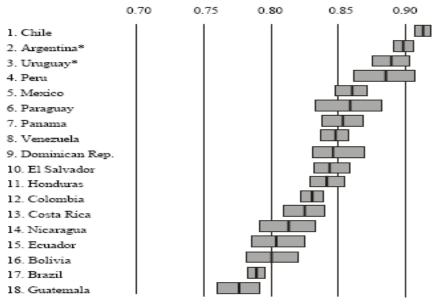
Source: Rivero, Roberto and Jiménez, Wilson

Table 13: Segmentation of the Labour Market by Branch of Activity

	Total			Urban			Rural			
	Uncond.	Cond.	Cond.	Uncond.	Cond.	Cond.	Uncond.	Cond.	Cond.	
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	
Extent of										
Segmentation	13.0	6.8	5.4	3.4	2.6	3.0	10.0	8.9	8.8	
Ave	Average Salary by Branch of Activity (as a percentage of average agricultural salary)									
Mining	675.3	545.8	536.0	284.6	257.3	302.2	461.4	445.9	563.5	
Manufacturing										
Industry	518.6	393.1	263.8	137.0	137.4	148.6	456.8	412.9	332.7	
Electricity	1,025.7	678.0	425.5	279.5	220.1	224.6	759.9	627.1	650.1	
Construction	504.8	430.6	287.5	136.9	149.5	158.1	435.4	405.9	408.8	
Trade	536.6	392.4	252.2	138.4	135.1	142.3	622.8	514.5	444.2	
Transport	569.7	430.2	289.8	143.0	143.5	155.4	1,000.4	890.8	884.6	
Finances	1,301.4	584.2	407.6	340.4	206.9	227.5	691.7	374.0	370.2	
Administration	966.0	494.8	372.1	263.3	180.9	202.0	819.9	456.8	454.5	

Source: Hernani, Werner Mercado laboral, pobreza y desigualdad en Bolivia.

Graph 18: Social Mobility for Adolescents between 13 and 19 years



SMI for teenagers (point estimate and 95% confidence interval)

* Based on urban samples only. Source: Andersen (2001).

Source: Andersen, Lykke, Low Social Mobility in Bolivia: Causes and Consequences for Development.

Table 14: Differences in Well-being between Indigenous and Non-Indigenous Groups: Selected Indicators¹

Indicator	Bolivia 2000²	Ecuador 1998	Guatemala 2000	Mexico 2002	Peru 2001					
	Poverty Measurements									
1. Poverty (P0)	1.40	1.40 1.43		1.92	1.52					
2. Extreme Poverty	1.88	2.21	1.81	4.60	2.34					
3. Poverty Gap (P1)	1.82	1.85	1.96	3.09	1.98					
4. Severity of Poverty (P2)	2.16	2.18	2.11	4.17	2.27					
Labour Market										
5. Participating in Labour Force (Men)	1.26	nd	1.06	nd	nd					
6. Percentage Working without Pay	2.15	nd	1.62	nd	nd					
7. Percentage Informal Employment	1.27	nd	1.26	nd	nd					
8. Years of Schooling	0.61	0.62	0.44	0.58	0.74					
9. Salary Income ³	0.71	0.50	0.53	0.37	0.55					
10. Return on Education ⁴	0.68	0.88	0.85	0.82	1.13					
Child Labour and Education										
11. Percentage of Child Labour	2.58	2.15	1.73	2.27	nd					
12. Tasa de Culminación Secundaria	0.46	0.32	0.28	0.33	0.56					

Source: Own Elaboration based on Hall and Patrinos (2004).

4

Notes: (1) Compared are the indicators for the indigenous groups in relation to the non-indigenous group; (2) Data only from capital cities and El Alto; (3) Differences between male salary incomes; (4) Estimated value of one year of schooling to the salary income of an average male.

Table 15: Disaggregation of Earnings Differentials between Indigenous and Non-

Indigenous People¹

	Percentage of the differential explained by:						
Country	Resources Coefficients		Schooling	Profitability			
	(1)	(2)	(3)	(4)			
Bolivia 2000 – capital cities							
. Evaluated in Indigenous Avg.	73.3	26.8	60%	83%			
. Evaluated in Non-Indigenous Avg.	62.7	37.3	nd	nd			
Ecuador 1998							
. Evaluated in Indigenous Avg.	55.4	44.7	nd	nd			
. Evaluated in Non-Indigenous Avg.	17.4	82.6	nd	nd			
Guatemala 2000							
. Evaluated in Indigenous Avg. ²	58.0	42.0	43%	-4%			
. Evaluated in Non-Indigenous Avg.	58.1	41.9	nd	nd			
Mexico 2002							
. Evaluated in Indigenous Avg.	62.0	38.0	31%	12%			
. Evaluated in Non-Indigenous Avg.	58.0	42.0	nd	nd			
Peru 2001							
. Evaluated in Indigenous Avg. ³	43.1	56.9	32%	9%			
. Evaluated in Non-Indigenous Avg.	49.3	50.7	nd	nd			

Source: Hall and Patrinos (2004)

Notes: 1. Except in the case of Peru, the percentages (resources and coefficients) show the difference between indigenous and non-indigenous males. 2. Columns 3 and 4 show estimates for the sample of women. 3. Percentages are for both male and female workers together.

Table 16: Disaggregation of the Gaps in Test Scores of Indigenous Students in **Bolivia and Chile**

		Bolivia	(1997)		Chile (1999)				
	Third	Third Grade		Sixth Grade		Fourth Grade		Grade	
	Spanish	Native language	Spanish	Native language	Spanish	Native language	Spanish	Native language	
Total	100%	100%	100%	100%	100%	100%	100%	100%	
Not explained	17%	20%	9%	5%	8%	13%	18%	14%	
Family/ Student	27%	26%	25%	23%	41%	40%	26%	23%	
School/ Class- room	57%	51%	65%	72%	51%	48%	56%	63%	

Source: McEwan, 2005.