Introduction and Overview

In many parts of the world, this century has brought about the most varied forms of expressions of discontent; all of which convey a desire for greater degrees of social justice, inclusion and equal opportunities. It seems, however, that all these ideas are not being properly represented within political systems. It is worth mentioning that these demonstrations are taking place in different countries with very different characteristics; from the U.S. to the Arab countries and from Spain to Chile. However, all these have something in common and that is the vision of a just and inclusive society based on the principle of equal opportunities under democracy. Few protesters claim today what Harry Frankfurt once called an “economic egalitarianism”.¹ Citizens of developed countries demand "fair play", where the losses as well as the gains in welfare are distributed in a consistent manner. Meanwhile, citizens of developing countries claim for "an evening out" process by which the benefits of economic progress will serve to improve the welfare of everyone and thus progress will be achieved towards overcoming poverty and inequality.

As for overcoming poverty, the Millennium Development Goals (MDGs) reflect efforts to institutionalize the fight against poverty in eight goals, 18 targets and 48 technical indicators to measure progress towards its achievement. The MDGs recognize poverty as a multidimensional condition and whose implication is that the well-being should not be reduced to a problem of a lack of money, its measurement needing to be supplemented by direct indicators, such as for example status and access to health and education. Cornia et al. (2008) argues that the inclusion of nonmonetary indications amongst the MDGs reveals that such indicators measure structural dimensions of the human well-being. In spite of many countries having reduced their poverty levels over the past decades, people also demand greater levels of equity. Regarding the relevance of inequality, Wilkinson and Pickett (2010) studied the 23 richest countries in the world with populations greater than three million providing adequate data for comparison. They conclude that economic inequality is the main determinant of all social problems such as reduced life expectancy, mental illness, child mortality, violence and educational failure amongst other problems. Wider income gaps are harmful to the wellbeing of almost everyone in the society, not only the

¹ Harry Frankfurt (1987) defines economic egalitarianism as “the doctrine that there should be no inequalities in the distribution of money”.
poor. The main implication of this is that solving these problems depends on the ability to reduce economic inequality.\textsuperscript{2}

In general, it may be argued that the largest portion of those manifesting demanding equal opportunity would tolerate inequality as long as opportunity is widely available. However, how to achieve equal opportunities is a complex matter. Bell (1973) argues that equal opportunities require the elimination of birth, nepotism, patronage or any other criterion different than the “fair” competition open equally to talent and ambition to allocate the position that an individual holds in the educational system and in the labour market. Under a simplified framework, I believe that equal opportunities mean to be properly prepared for a social and productive life, having equal opportunities to access good-quality jobs and compensations regardless of birth, race, gender, or other characteristics that might be considered arbitrary or beyond an individual’s control. In simple words, it means to provide a levelled playing field. In each of the essays, the problem of inequality is addressed from a different angle; however, the overall conclusion of this thesis, which focuses on studying the labour market in countries such as Paraguay, Honduras and Chile, shows that although certain individuals have adverse family backgrounds, this has permanent effects on their job performance. Adverse family backgrounds are associated with fewer employment opportunities, precarious employment or underemployment, the inability to migrate in search of better job opportunities and greater degrees of vulnerability when there are structural economic changes. Unfortunately, poor job performance of relatively large portions of the population results in low levels of income, poverty and vulnerability that are passed on to the next generation.

Essay 1 analyzes the dynamics of the income inequality change in the highly dualistic economy of Honduras between 1991 and 2007. This study was part of the UNU-WIDER project ‘The New Policy Model, Inequality and Poverty in Latin America: Evidence from the Last Decade and Prospects for the Future’ and it is the base of our contributing chapter to the textbook edited by Prof. Andrea Cornia "Falling Inequality in Latin America. Policy Changes and Lessons", published by the Oxford University Press.

Honduras stands out in Latin America as one of the few examples where inequality has not declined in the early 2000s, as in most other Latin American countries. Honduras has thus been an outlier where the peak in inequality occurred much later and the decline thereafter is also much more tentative. The macro and micro causes of this exceptionalism are the main topic of this paper.

\textsuperscript{2} Sen (1997) points out the importance in going from income inequality to economic inequality which is a much broader concept.
Honduras is a small open economy relying heavily on a narrow range of exports, mainly bananas and coffee, making it highly vulnerable to shifts in commodity prices and natural disasters. Hurricane Mitch largely wiped out the banana production in 1998 and 1999, from which Honduras recovered slowly thereafter. Additionally, the Honduran economy was damaged by falling coffee prices until about 2002 and benefited by rising prices for both commodities thereafter. However, investments in U.S. factories operated in Honduras under preferential tariff programs and non-traditional export sectors are slowly diversifying the production of the Honduran economy. Honduras is the fastest growing remittance destination in the region with inflows representing over a quarter of the GDP, equivalent to nearly three-quarters of all exports.

The country began to liberalize its international trade in 1990. As a result, total imports increased enormously. At the same time, the growth of Honduran exports lagged well behind the surge in imports. After the 1994 crisis, where the exchange rate was drastically depreciated, GDP growth resumed and the country witnessed improved public finances, a reduction of inflation and an increase of international reserves. Nevertheless, the trade imbalance continued to grow, real interest rates increased until 2002, and the real exchange rate continued to appreciate steadily until the same year. The appreciation of the real exchange rate seems to be linked to significant capital inflows received after Hurricane Mitch and donor transfers for reconstruction, and more recently by increased remittances, aid and debt relief.

But what are the channels of this disequalization of the income distribution? In order to answer this question, Essay 1, based on a methodology proposed by Barros et al. (2006), identifies and quantifies these inequality changes due to change in demographics, labour markets, remittances (international), government transfers (social policies) and other non-labour income (principally capital incomes and domestic private transfers). It relies on series of counterfactual simulations.

During the nineties, while in urban areas, the slight equalization of the household per-capita income distribution is driven by changes in non-labour income per adult, in rural areas, the story seems to be pretty much the same as what we observe at the country level, where the distribution of monthly earnings is the main disequalizing factor. Between 1999 and 2005, labour earnings are by far the more important inequality driver. Additionally, we find a limited impact of non-labour income on inequality changes. This impact is broken down into remittances, on the one hand, and other non-labour income on the other. At a country level and in rural areas, the impact is almost nonexistent, while in urban areas, the impact is slightly disequalizing. Finally, the period between 2005 and 2007 is characterized by a strong equalization in the household per-capita in-
come distribution with a decrease of 5.2 Gini points at the country level, and of 7.3 and 3.2 Gini points in rural and urban areas, respectively. It is worth noting that changes in labour and non-labour income are responsible, almost in equal proportions, for the equalization pattern observed at the country level during this period. However, labour incomes appear to be more relevant in rural areas than in urban areas as a driver for reducing inequality. On the other hand, non-labour income are extraordinarily equalizing in all areas explaining about 43% of the equalization in rural areas and about 80% in urban areas.

Summarizing, changes in the distribution of labour incomes are by far the greatest contributor to the disequalization of the household per-capita income distribution between 1991 and 2005, particularly at the country level and in rural areas where most of the inequality change took place. In order to assess the relevance of the various factors on income inequality changes, handling whole distributions instead with averages, a micro-econometric decomposition methodology first proposed by Bourguignon et al. (1998) was tailored and applied to the Honduran case. Changes in unobservables (prices and endowments) and in the structure of education, together with a pronounced occupational sorting associated with an increasing productivity gap between the tradable and non-tradable sectors, represent the main drivers of the disequalization between 1991 and 2005. Regarding unobservable factors, it is plausible that the relative expansion of the non-agricultural sector during the 1990s, which demands a wider set of skills, is behind the extraordinary contribution of the unobservable to the increase in labour income inequality. Contrary to this, during the 2000s, the equalizing contribution of changes in the structure of formal education, together with a recovery of the tradable sector - driven by favourable external conditions and improved export revenues - promote equality by increasing labour earnings in the tradable sector, expressed as a reduction in the price to occupations (occupational sorting), and an equalizing impact of changes in unobservable factors on inequality.

Finally, Essay 1 presents an application of a methodology decomposition of a distributional change proposed by the author in Essay 2. Between 1991 and 1999, results show that the exogenous macroeconomic shift between the tradable and non-tradable sectors (occupation) explains a minimum of 8% of the observed disequalization at the country level. The contribution tends to be higher in the later periods contributing up to 40% of the disequalization between 1999 and 2005. After 2005, the commodity boom seems to have reversed the tradable-non-tradable shift, but whether it is able to overcome the other structural causes of rising inequality, is hard to predict at present. The presented methodology in Essay 2 aims to link findings from the micro-econometric decomposition by Bourguignon et al. (1998) with the macroeconomic story. The
mentioned methodology assumes workers’ heterogeneity (allowing correlation between mobility costs and skills) causing an insufficient mobility of workers between tradable and non-tradable sectors (inducing a positive sloped non-tradable labour supply) and skill capital complementarity. Therefore, different equilibrium labour earnings across sectors determine the observed wage gap between sectors. This formulation is compatible with the model by Devillanova et al. (2010) which also relies on the complementarity between the two types of labour. The prediction of this formulation is that an economy suffering a sectoral shift against the backward sector will increase the inequality between and within sectors.

We argue that the underlying determinant of the disequalization is the relatively low mobility between sectors and occupations of less-skilled workers, where typically a poor agricultural worker is unable to abandon his sector and change to other sectors or occupations. As shown Essay 2, improvements in productivity tend to cancel the wage-gap between the tradable and non-tradable sectors and also ensure higher labour income levels, while improvements in mobility between sectors lead to an accelerated decrease in this gap. We argue that the rising international competitiveness through policies promoting the productivity of the tradable sectors, at the expense of other sectors, increases the standard of living in the country, when compared with treating the other sectors equally.

Turning to Chile, although the dynamic growth experienced during the past two decades, there is a consensus that the improvement of the standards of living has not been equally distributed across regions or communes. In a context where it is expected that internal migration may work as a mechanism to equalize relative resource scarcities over regions, Soto and Torche (2004) show evidence that migration has become increasingly less important as an equalizing mechanism for regional disparities. Based on this evidence, Essay 3 focuses on the determinants of inter-communal movements of workers aiming to understand how the selection process of the migrant population is. It considers observed and unobserved characteristics, productivity differentials and initial conditions allowing to assess which factors are currently discouraging migration and thus hampering the equalization of living standards. The empirical approach of this paper consists of a switching regression model presented by Goldfeld and Quandt (1973) with endogenous switching (Maddala, 1983) which can be properly used as a counterpart from an extended Roy model in the migration context. The used methodology contributes through the provision of a structural form for internal migration, which is derived from a powerful theoretical framework.

Evidence has been found that the potential wage differential strongly determines the probability to move, but only when the differential reaches some de-
terminated threshold for individuals with mean characteristics (about 0.5 and 0.3 log-points for workers originating from rural and urban communes respectively). This evidence supports the idea that migration can be seen as an investment decision. However, the potential wage differential for most individuals is relatively small compared to the migration costs. This explains why migration is a rare phenomena being unable to reduce regional disparities. Moreover, migration not only depends on individual characteristics, but strongly relies on the household education. Unfortunately, this evidence indicates that it is highly possible that the one who is migrating is not necessarily the one who may benefit from higher labour incomes at the destination (observing high potential wage differentials and therefore, contributing to equalize outputs across regions), but the one who is not being constrained by its household. Contrary to this, the one who may probably take advantage from labour market differentials, but belongs to a household with low levels of education, will probably be forced to stay. Thus, household-level migration costs are a source of inefficiency when labour markets allocate workers between rural and urban communes. Finally, this study suggests that supporting the supply side in the rural economy is not the only way to achieve convergence across the territory. Subsidies aimed to reduce migration costs can also be considered under a framework oriented towards encouraging functional migration flows. Thus, this paper supports the main idea of the New Economics of Labour Migration Theory, considering migration as a household decision (Stark and Bloom, 1985 and Stark 1993).

Turning to education, the idea that schooling scores depend on a combination of family background characteristics, ability and school-institutional related variables is well-accepted. Regarding the issue of intergenerational transmission of inequality in the educational system, the degree to which a better institutional performance of the school service can compensate problems originated in the family background is crucial. In the case of Paraguay, despite the significant progress achieved in recent years regarding access to education and school permanence, the country still faces great challenges. These include the problems of internal efficiency, quality in learning and equity. Essay 4 merges three different data sets and uses the mathematics and communication scores in its pure form (non-logarithmic) as dependent variables. In general, the way our model is specified, it can be understood as a reduced form specification where the coefficients change in their scope according to the specification of the education production function.

By providing integral health solutions, minimizing under-nutrition and providing good conditions in the classroom, training teachers (according to their gaps) can impact positively on low and mean learning outcomes, thus contributing to an improved educational quality and breaking cycles of intergenerational
transmission of inequality. Moreover, the equality approach should focus on trying to improve the worst scores and our results show that this can be reached at a significant level closing teacher training gaps, improving classroom conditions and improving health and nutrition. To ask education policies to focus their efforts regarding inequality-reducing measures on lower income quintiles should not be that difficult, given that an important part of students from higher income quantiles are enrolled in private education. Unfortunately, any action taken by public policies to reduce inequality will have, in the short run, a limited impact regarding its possibility to reduce the intergenerational transmission of (welfare) inequality, since family background is a much stronger force in determining the persistence of high inequality levels.