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Fiscal policy and income redistribution in Latin America: Challenging the conventional wisdom*

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Abstract

Conventional wisdom states that fiscal policy redistributes little in Latin America. Lower tax revenues and – above all – lower and less progressive transfers have been identified as the main cause. Existing studies show that, while in Europe the distribution of all transfers combined (cash and in-kind) is egalitarian, the bulk of transfers in Latin America accrue to the upper quintile. Through an in-depth fiscal incidence analysis applied to Argentina, Bolivia, Brazil, Mexico and Peru we argue that conventional wisdom may be wrong. First, the extent and effectiveness of income redistribution and poverty reduction, revenue-collection, and spending patterns vary so significantly across countries that speaking of ―Latin America‖ as a unity is misleading. The (after direct taxes and transfers) Gini, for example, declines by over 10 percent in Argentina but by only 2.4 percent in Bolivia. In Argentina, Brazil and Bolivia government revenues are close to 40 percent of GDP, whereas in Mexico and Peru they are around 20 percent. Social spending (excluding contributory pensions) as a share of GDP ranges from 17 percent in Brazil to 5.2 percent in Peru. Second, social spending does not accrue to the richest quintile. On the contrary, concentration coefficients for social spending are highly negative (progressive in absolute terms) for Argentina and slightly so for Bolivia and Mexico. In Brazil and Peru social spending is progressive in relative terms only. Third, there is no obvious correlation between the size of government and the size of social spending, on the one hand, and the extent and effectiveness of redistribution, on the other: government size is similar for Argentina and Bolivia but they are on opposite sides in terms of the extent of redistribution. Fourth, due to indirect taxes households are net payers to the ―fisc‖ beginning in the third decile in Bolivia and Brazil; for

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Argentina, Mexico and Peru this happens in the fifth decile. Fifth, corrective measures differ too: in Argentina, Bolivia and Brazil they may involve the reduction in revenues and total spending, while revenues and social spending (especially direct transfers to the poor) should be increased in Mexico and Peru. Bolivia and Brazil need to introduce changes to their tax and transfer system so that net payers to the ―fisc‖ start at higher incomes. All five countries need to improve the progressivity of their spending, including non-social spending components.

Keywords: fiscal incidence, fiscal policy, inequality, poverty, redistribution, social policy, taxes, transfers; Latin America, Argentina, Bolivia, Brazil, Mexico and Peru
JEL classification: D63, H11, H22, H5, I14, I24, I3, O15

Introduction

Conventional wisdom states that fiscal policy redistributes relatively little in Latin America, especially when compared with high-income democracies in Western Europe (Breceda et al., 2008; Goñi et al., 2011).Existing research blames lower tax revenues and – above all – lower and less progressive transfers for this outcome. Lower transfers, it is argued, are primarily due to the differences in revenue collection rather than the composition of spending: i.e., the share of spending allocated to transfers in the budget in Latin America is similar to that found in Western European countries. In addition, while in Europe the distribution of all transfers combined (cash and in-kind) is egalitarian, the bulk of transfers in Latin America accrue to the upper quintiles.

Through an in-depth fiscal incidence analysis applied to Argentina, Bolivia, Brazil, Mexico and Peru we argue that conventional wisdom may be wrong. First, the extent and effectiveness of income redistribution and poverty reduction, revenue-collection, and spending patterns vary so significantly across countries that speaking of "Latin America" is misleading. The (after direct taxes and transfers) Gini, for example, declines by over 10 percent in Argentina but by only 2.4 percent in Bolivia. In Argentina, Brazil and Bolivia government revenues are close to 40 percent of GDP, whereas in Mexico and Peru they are around 20 percent. Social spending as a share of GDP ranges from 17 percent in Brazil to 5.2 percent in Peru. Second, social spending (excluding contributory pensions) does not accrue to the richest quintile. On the contrary, concentration coefficients for social spending are highly negative (progressive in absolute terms) for Argentina and slightly so for Bolivia and Mexico. In Brazil and Peru social spending is progressive in relative terms only. Third, there is no obvious correlation between the size of government and the size of social spending, on the one hand, and the extent and effectiveness of redistribution, on the other: government size is similar for Argentina and Bolivia but they are on opposite sides in terms of the extent of redistribution. Fourth, due to indirect taxes households are net payers to the "fisc" starting in the third decile in Bolivia and Brazil; for Argentina, Mexico and Peru this happens in the fifth decile.

We attempt to assess the distributive impact of the full range of fiscal interventions. That is, we start –whenever possible—from market or primary income and sequentially estimate the incidence of. direct taxes and contributions to the social security system, ii. direct cash and in-kind transfers, iii. Indirect taxes and subsidies, and iv. in-kind transfers in the form of free or quasi-free services such as education and health.[3]As is always the case with this type of analysis, some caveats are in order. Since household surveys do not always include information on direct taxes or transfers from specific programs (or on expenditures needed to estimate indirect taxes), their incidence was sometimes estimated by inference, imputation or simulation (explained in more detail below). Although most of the incidence analysis has been done by the authors, the incidence of direct taxes in the cases of Argentina and Mexico, for example, was obtained from secondary sources. These two factors raise

[3] Income concepts and their components are described in section 2 below. The methods and sources used to build the income concepts and their components are in Appendix A.

some issues of comparability across countries; however, other available studies face the same limitation. Second, because we look at the average incidence effects, we leave out potential systematic differences between average and marginal incidence.[4] Finally, our analysis does not take into account general equilibrium effects, incidence or redistribution over the life-cycle or differences in the quality of public spending.[5] Hence, this exercise should be viewed as a first-approximation of the impact of fiscal policy on inequality and poverty.

The paper is organized as follows. Next section reviews the main results of some existing studies on fiscal policy and redistribution. Section 2 presents a brief description of concepts, definitions and methodology. Section 3 summarizes the results of our incidence analysis for Argentina, Bolivia, Brazil, Mexico and Peru. The main conclusions are presented in Section 4.

1. Conventional Wisdom: Little Redistribution, Low Revenues, Low Transfers and Low Progressivity

Fiscal policy can reduce poverty and inequality substantially or slightly depending on the size of the government and how progressive the collection of revenues and spending patterns are. High-income European democracies tend to redistribute a great deal (even if the analysis is confined to the non-retired population). For example, Barnard (2009) finds that the Gini coefficient for non-retired households in the UK declined by a staggering 10 percentage points (from .44 to .34) after direct taxes and (cash) transfers (but less so when indirect taxes were factored in (from .44 to .38)). DeFina and Thanawala (2004) find that direct transfers and taxes reduce the severity of poverty by over 90 percent in Belgium, Denmark, Finland, France, and Ireland and by 48 percent in the United States.

Breceda et al. (2008) report that social spending (which includes cash and in-kind transfers) in the UK raised the bottom 20 percent's income by 15 percent while the richest 20 percent's was increased by 5 percent. In contrast, for six (Argentina, Bolivia, Colombia, Guatemala Nicaragua and Peru) of the seven Latin American countries included in the study, there was a flat income increase of around 5 percent for all quintiles[6]; in the seventh country (Honduras)social spending was regressive (or, using our definitions described below, progressive in relative terms). Goñi et al. (2011) find that for fifteen Western European countries, the average Gini coefficient declines by 15 percentage points(from .46 to .31) moving from market (before direct taxes and transfers) income to disposable income; in contrast, for Argentina, Brazil, Chile, Colombia, Mexico and Peru the Gini declines by only two percentage points (from .52 to .50). When you factor in the effect of indirect taxes, the redistributive effect is tempered in both regions, but the contrast is still striking: the Gini declines by 12 percentage points in Europe and only 1 percentage point in Latin America.

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[4]Using average costs to impute the incidence of transfers in kind, for example, may under-estimate the true costs of closing the human capital gaps because marginal costs for the poor may be higher than the average.

[5] See the overview of these issues in the context of tax incidence in Fullerton and Metcalf (2002).

[6] The same was found for the United States.

Using Engel et al.'s (1999) analytical framework, Goñi et al. conclude that the lower fiscal redistribution in Latin America is a result of low tax revenues and – above all – lower and less progressive transfers. The neutral or even regressive incidence of the tax system (direct and indirect taxes combined) plays a secondary role; in those European countries that show a substantial redistributive effort, cash transfers account for the bulk of redistribution. While European countries devote 14.7 percent of GDP to cash transfers (mostly through their social insurance schemes), the six Latin American countries they study devote an average of 7.3 percent of GDP; the authors find that lower transfers are primarily due to the differences in revenue collection (and, thus, an ability to spend more) rather than the composition of spending (i.e., the share of spending allocated to transfers in the budget is similar between the two groups). In addition, while in Europe the distribution of all transfers combined (cash and in-kind) is egalitarian, the bulk of transfers in Latin America accrue to the upper quintiles. The exception is targeted cash transfers which are strongly progressive: close to 75 percent of the resources accrue to the bottom two quintiles of the population. (Lindert, Skoufias and Shapiro, 2006) However, targeted cash transfers represent a small share of government spending: for example, "while in the United Kingdom per capita cash transfers to the poorest income quintile amount to 6.9 percent of GDP per capita, the average in our Latin American sample equals less than one percent, with the country spending the most – Mexico – transferring only 1.1 percent to the poor." (Breceda et al., p. 13)

In the last ten years, with the introduction of large-scale[7] cash transfers and an emphasis on universal coverage of basic education and health, social spending in Latin America has become more pro-poor. (Lopez-Calva and Lustig, 2010) Is it still true that Latin America redistributes relatively little? If the answer is affirmative, is this because government revenues are low and government spending is not only low but insufficiently progressive? Does social spending tend to accrue to the richest quintiles? Are direct cash transfers – even if progressive – too small? These are some of the questions we shall address below. But first, because the literature on incidence analysis does not have established conventions on some key aspects pertaining incidence analysis, the next section will include a discussion of the concepts, definitions, methodologies and data used in our study.

2. Concepts, Definitions, Methodological Issues and Data[8]

i. Market, Net Market, Disposable, Post-fiscal and Final Income: Definitions and Measurement

The starting point of any incidence study must be a measure of household income. In an ideal world, we would use permanent comprehensive household per capita income before taxes and government transfers as the basic measure of income. Such a measure should include monetary and

[7] "Large" in terms of population covered by the cash transfers programs.
[8] For more details on methodology see Lustig (2011).

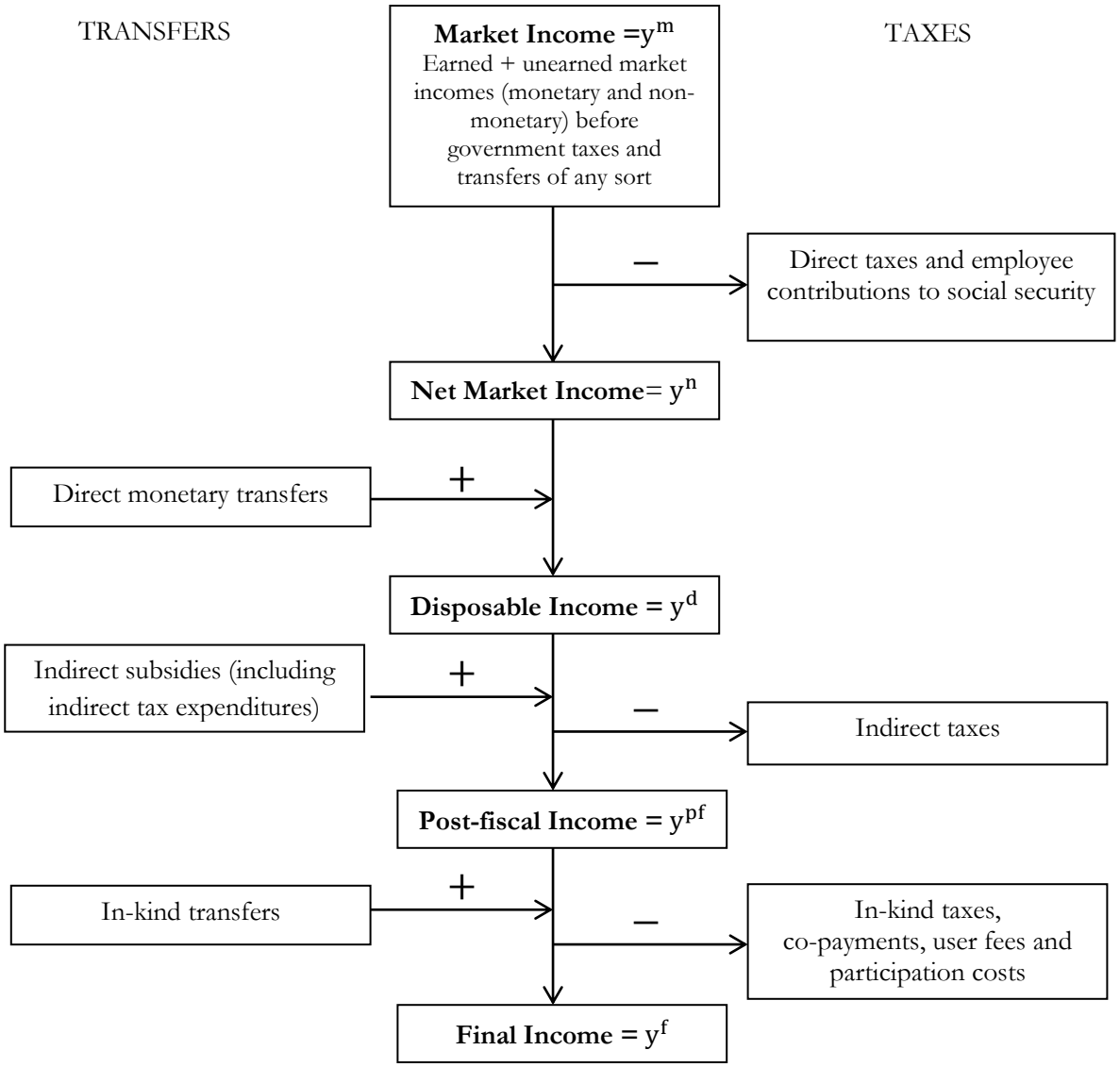
nonmonetary income such as gross wages and salaries, fringe benefits, income from capital (rents, interests, dividends, profits, and so on), self-employed gross income, government transfers, social security pensions (individual accounts or pay-as-you-go), remittances, income in-kind (free or quasi-free education and health services, for example), income from owner occupied housing (also known as imputed rent), auto- or self-consumption (important in societies with a significant proportion of peasant farming), retained earnings, plus corporate taxes and property taxes that reduce returns. Ideally, we would have this information for several years in order to estimate a "permanent" measure of income. In this study, the information on income is obtained from household surveys and the analysis is carried out for a specific year: the most recent year available when the study was launched.[9] Depending on the country, household surveys include some but not all the income categories just defined. In what follows we describe the definitions of income used here. A more detailed description of the household surveys and the methods (and sources) used to generate each income concept and its components appear in Appendix A.

In what follows we present the definitions of market, net market, disposable, post-fiscal, and final income (and final income*) that were used in our analysis. *Market* (also known as *primary*) *income* is defined as earned plus unearned market incomes before government taxes and transfers of any sort. It includes net private transfers, net remittances, and net alimony payments. Ideally, it should also include imputed rent for owner-occupied housing and auto-consumption.[10] *Net market income* equals market income minus direct taxes and employee contributions to social security. *Disposable income* equals net market income plus direct monetary transfers. *Post-fiscal income* equals disposable income plus indirect subsidies and minus indirect taxes. *Final income* equals post-fiscal income plus in-kind transfers (e.g., the imputed value of free or quasi-free government services particularly in education and health), minus in-kind taxes, co-payments in cash or in-kind (e.g., when beneficiaries of anti-poverty programs are required to contribute with inputs such as labor inputs), user fees and participation costs (e.g., transportation costs, opportunity costs). (Diagram 1) Because some countries do not have data on indirect subsidies and taxes, we defined *final income** as disposable income plus in-kind transfers.

[9] This is not uncommon in incidence analysis. See, for example, See Alleyne et al. (2004).

[10] In our analysis, Brazil, Mexico and Peru's market income includes them. Argentina and Bolivia do not because there were no questions on these in the respective surveys. This means that Argentina's and Bolivia's market income underestimates the "true" market income. Rankings by market income might have also been different if we could have added autoconsumption and imputed rent to market income in Argentina and Bolivia.

Diagram 1 – Definitions of Income Concepts: A Stylized Presentation



A very important decision when constructing income categories is where to put *social security pensions*. On this, the literature is divided: some authors include public contributory pensions with market income while others add them to government transfers. The Microsimulation and Public Policy Analysis Unit project in the Paris School of Economics[11] includes social security pensions as part of market (primary) incomes. Breceda et al. (p. 5) say their paper "makes the deliberate choice of excluding pensions from the main analysis, as their intertemporal nature, and the mix of pay-as-you-go and fully funded systems, makes it difficult to assess their redistributive nature." In contrast, OECD (2008 and 2010) and Goñi et al. (2011) include social security pensions in government transfers.[12]Although treatment of pay-as-you-go contributory pensions in incidence analysis varies, strictly speaking, one should take into account the life-long contributions and benefits of the participants to estimate the "true" redistributive component. Pay-as-you-go systems tend to show "solidarity" in that the pensions of high-income people are usually capped (and thus what they receive is below their contribution for a large number of them) while low-income eligible individuals tend to receive more than what they contributed.[13]Measuring the redistributive impact of social security pensions accurately is very complex. However, our view is that including them in full with the rest of the government transfers grossly distorts results by making social spending look much more regressive than it is. In this study we decided to follow the same approach as the "Microsimulation" project and included contributory pensions in market income.

If the social security system (pensions component) showed a deficit in the year of the survey, we called that the "subsidized portion of social security pensions" and we presented some estimates of the incidence of this component whenever relevant. Mexico and Peru had a deficit in the year of the survey.[14] Argentina, Bolivia, and Brazil did not. Although Argentina has a pay-as-you-go system, there was no deficit in 2009 (i.e., contributions to the system exceeded payments). Although the "Pension Moratorium" is administered by the formal social security entity, strictly speaking these pensions are non-contributory by definition.[15] In Bolivia, due to the Reforma del Estado (the pay-as-you-go system was abolished in 1996) there were essentially no contributions to the system in 2007, and thus the system effectively functioned as a non-contributory system. In Brazil, while total payments from the entire system exceeded contributions, benefits paid to social security ("regular" pensions for the elderly and disabled) did not. In the latter case, "special circumstances pensions", which are intended to smooth idiosyncratic shocks such as hospitalization, loss of wages due to an accident at work, or the death of a spouse, are considered to be (100% subsidized) direct government transfers, while the benefits paid to the remaining "regular" pensions amounted to less than contributions to the system.

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[11] http://microsimula.parisschoolofeconomics.eu/

[12] In Goñi et al. (2011, p. 16, n. 30), despite choosing to treat pensions as government transfers, they note that "if pensions are viewed as an intertemporal transfer for an individual rather than as an intergenerational transfer at a point in time, the benefits of each household should be treated as deferred consumption."

[13] Of course, this depends on life expectancy as well. If the rich live longer than the poor, the redistribution is mitigated.

[14] We included a separate incidence analysis of the subsidized portion for Mexico and Peru.

[15] See Table 9 for details on the "Pension Moratorium" program.

ii. Progressive and Regressive Revenues and Spending: Definitions

Given that there is no unique convention in the definition of progressivity and regressivity as it relates to taxes and transfers, we also present the definitions used here in order to avoid ambiguities. Progressivity can be measured in absolute terms: i.e., by comparing transfers/taxes per capita among quantiles; or in relative terms: i.e., by comparing transfers/taxes as a share of each quantile's income.

A convention often followed in the literature is to call transfers progressive when they are progressive in absolute terms and to call taxes progressive when they are progressive in relative terms.[16]This is a bit strange as it leaves us with different criteria for taxes and transfers; how would we use the terminology in the case of net transfers? Here, we shall call net transfers *progressive (regressive)* if the post-taxes and transfers distribution of income is *more (less) equal* than the market income distribution.

On an individual basis, transfers will be *progressive in absolute terms* when their per capita value declines with market income. The corresponding concentration coefficients are negative. The latter is very typical of, for example, conditional cash transfer programs (CCTs) (such as *Asignacion Universal por Hijo* (AUH) in Argentina, *Bono Juancito Pinto* in Bolivia, *Bolsa Familia* in Brazil, *Oportunidades* in Mexico and *Juntos* in Peru) and public spending on primary education, as well as other social assistance programs targeted to the poor. Transfers will be *progressive in relative terms* when while their per capita value increases with market income, their relative value with respect to market income declines. The concentration coefficient is positive but smaller than the market income Gini. The latter is very typical of general price subsidies (including VAT exemptions on food as in Mexico, for example) and public spending on tertiary education. A transfer that implies the same benefit in per capita terms (in proportion to market income) for everyone is *neutral* in absolute (relative) terms. The concentration coefficient is zero (equal to the market income Gini coefficient). An example of a transfer that is neutral in absolute terms is Bolivia's *Bonosol*, the non-contributory pension established from privatization proceeds.[17]Of course, it is better (for equality, that is) if a transfer is progressive or neutral in absolute (as opposed to relative) terms. Transfers will be *regressive* when their relative value with respect to market income goes up. The corresponding concentration coefficient is positive and higher than the market income Gini. Regressive transfers are uncommon or nonexistent within social spending. However, subsidies to certain industries and producers as well as consumption subsidies on items purchased primarily by the non-poor have been found to be regressive.[18]For a graphical description of this classification see Diagram 2.

Taxes will be *progressive in absolute terms* when their per capita value increases with market income. However, practically all existing taxes (except for a poll tax; i.e., everyone pays the same

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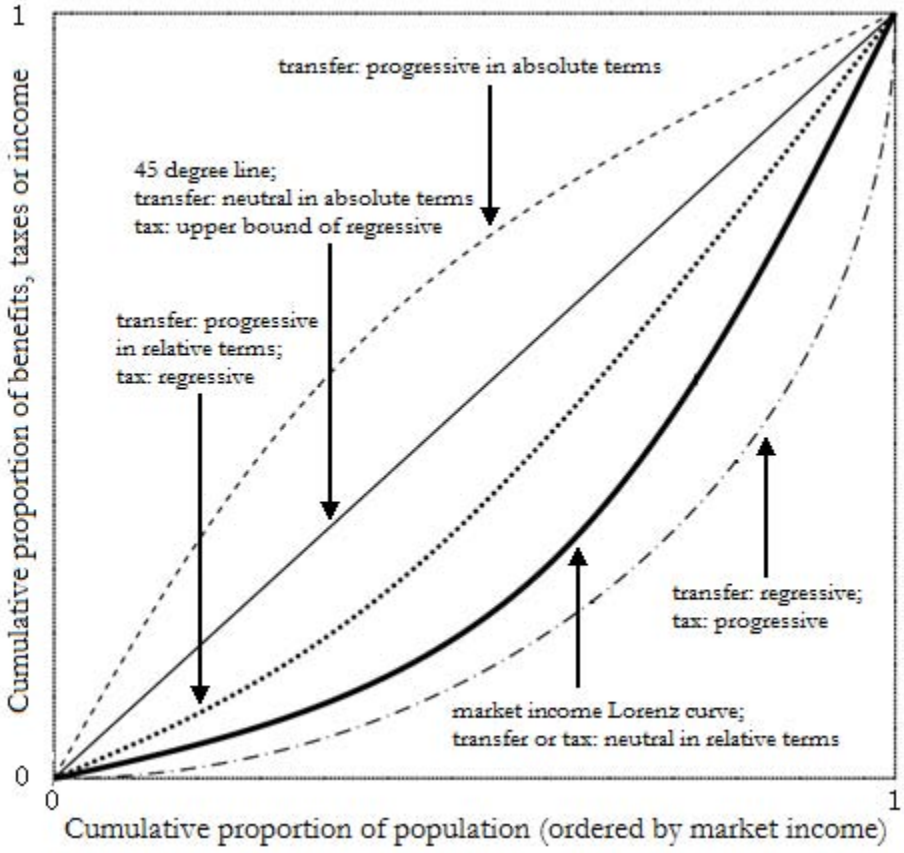
[16] See Lambert (2002).

[17] The actual concentration coefficient is not exactly zero but very close.

[18] If a transfer is progressive (regressive) in absolute (relative) terms, it follows by definition that it must be progressive (regressive) in relative (absolute) terms, but the converse is not true. If a tax is progressive (regressive) in relative (absolute) terms, it follows by definition that it must be progressive (regressive) in absolute (relative) terms. However, the converse is not true.

amount of the tax) are progressive in absolute terms. Thus, we are interested in relative progressivity: taxes (and social security contributions)will be *progressive in relative terms* when not only their per capita value rises with market income but when their relative value with respect to market income does too. For purposes of the analysis, we will call this tax *progressive* and omit the qualifier since it is really unnecessary. The majority of income tax systems (on paper but not necessarily in practice) have this characteristic. A tax will be *regressive* whenever its relative value with respect to market income declines as income rises. Value Added Taxes (VAT) are broadly regressive. A flat tax in absolute terms (a poll tax) is *regressive*. An example of this is the implicit tax paid by Mexican citizens if we assume each person is entitled to his/her per capita share of the revenues of PEMEX, the state-owned oil company. When everybody pays the same tax rate in proportion to their income, the tax is called *neutral*. For a graphical description see Diagram 2.

Diagram 2 - Concentration Curves for Progressive and Regressive Transfers (Taxes)



iii. Allocating Taxes and Transfers at the Household Level

As mentioned above, unfortunately the information on direct and indirect taxes, transfers in cash and in-kind and subsidies cannot always be obtained directly from household surveys. When it

can be obtained, we call this the *Direct Identification Method.* When the direct method is not feasible, one can use the inference, simulation or imputation methods (described in more detail below). As a last resort, one can use secondary sources. Finally, if none of the options exist, the analysis for that category will have to be left blank.

Direct Identification Method

On some surveys, questions specifically ask if households received benefits from (paid taxes to) certain social programs (tax and social security systems), and how much they received (paid). When this is the case, it is easy to identify transfer recipients and taxpayers, and add or remove the value of the transfers and taxes from their income, depending on the definition of income being used.

Inference Method

Unfortunately, not all surveys have the information necessary to use the direct identification method. In some cases, transfers from social programs are grouped with other income sources (in a category for "other income," for example). In this case, it might be possible to infer which families received a transfer based on whether the value they report in that income category matches a possible value of the transfer in question.

Simulation Method

In the case that neither the direct identification nor the inference method can be used, transfer benefits can sometimes be simulated, determining beneficiaries (taxpayers) and benefits received (taxes paid) based on the program (tax) rules. For example, in the case of a conditional cash transfer that uses a proxy means test to identify eligible beneficiaries, one can replicate the proxy means test using survey data, identify eligible families, and simulate the program's impact. However, this method gives an upper bound, as it assumes perfect targeting and no errors of inclusion or exclusion. In the case of taxes, estimates usually try to make assumptions about evasion.

Imputation Method

The imputation method is a mix between the direct identification and simulation methods; it uses some information from the survey, such as the respondent reporting attending public school or receiving a direct transfer in a survey that does not ask for the amount received, and some information from either public accounts, such as per capita public expenditure on education by level, or from the program rules.

The four methods described above rely on at least some information directly from the household survey being used for the analysis. As a result, some households receive benefits, while others do not, which is an accurate reflection of reality. However, in some cases the household survey analyzed lacks the necessary questions to assign benefits to households. In this case, there are two additional methods.

Alternate Survey

When the survey lacks the necessary questions, such as a question on the use of health services or health insurance coverage (necessary to impute the value of in-kind health benefits to households), an alternate survey may be used by the author to determine the distribution of benefits. In the alternate survey, any of the four methods above could be used to identify beneficiaries and assign benefits. Then, the distribution of benefits according to the alternate survey is used to impute benefits to all households in the primary survey analyzed; the size of each household's benefits depends on the quantile to which the household belongs. Note that this method is more accurate than the secondary sources method below, because although the alternate survey is somewhat of a "secondary source," the precise definitions of income and benefits used in CEQ can be applied to the alternate survey.

Secondary Sources Method

When none of the above methods are possible, secondary sources that provide the distribution of benefits (taxes) by quantile may be used. These benefits (taxes) are then imputed to all households in the survey being analyzed; the size of each household's benefits (taxes) depends on the quantile to which the household belongs.

The method used by each country and for each component of fiscal policy is mentioned in Table 3 under the corresponding column.[19]

iv. Measuring Redistributive Effectiveness

The Effectiveness Indicator is defined as the redistributive effect of the taxes or transfers being analyzed divided by their relative size. Specifically, it is defined as follows. For the net market income Gini, it is the fall between the market income and net market income Gini as a percent of the market income Gini, divided by the size of direct taxes and employee contributions to social security as a percent of GDP. A negative sign means that direct taxes and/or employee contributions increased inequality. For the disposable income Gini and headcount index, it is the fall between the net market income and disposable income Gini/headcount index as a percent of the net market income Gini/headcount index, divided by the size of direct transfers as a percent of GDP. For the final income* Gini, it is the fall between the net market income and final income* Gini as a percent of the final income* Gini, divided by the size of the sum of direct transfers, education spending, health spending, and (where it was included in the analysis) housing and urban spending, as a percent of GDP.

v. Data

[19] For more details on the methodology used by each country for each component of fiscal policy, see the "Country Information" table in the Statistical Annex which is available upon request.

The data on household incomes, taxes and transfers comes from the following surveys: Argentina: Encuesta Permanente de Hogares, 1st semester of 2009; Bolivia: Encuesta de Hogares, 2007; Brazil: Pesquisa de Orçamentos Familiares, 2008-2009; Mexico: Encuesta Nacional de Ingreso y Gasto de los Hogares, 2008; Peru: Encuesta Nacional de Hogares, 2009.[20]When household surveys did not include questions on certain items, the values were imputed following the methodology described above (and summarized in Table 3 and Appendix A). Data on government revenues and spending come from the country's National Accounts (details in Appendix B).

3. Fiscal Policy and Income Redistribution in Argentina, Bolivia, Brazil, Mexico and Peru: Summary of Findings

In this section we analyze the impact of fiscal policy on inequality and poverty using standard incidence analysis. Specifically, we address the following questions:

1. How much redistribution (inequality and poverty reduction) do the countries accomplish through fiscal policy? Does the extent of redistribution and redistributive effectiveness vary significantly across countries?

2. Is the extent of redistribution directly correlated with the size of government, social spending and spending on direct transfers as stated by existing research?

3. What accounts for "success" in terms of both the extent of redistribution and government effectiveness to achieve it?

4. Should governments collect more revenues, spend more or spend more progressively to increase redistribution and improve effectiveness?

Our main results are presented in Tables 1 through 9 and Figure 1. Table 1 includes the summary indicators for "pre-fisc" and "post-fisc" inequality and poverty (measured by the Gini coefficient and headcount ratio, respectively), indicators of the size of government and indicators of redistributive effectiveness.[21] Table 2 summarizes the additional fiscal effort that would be required to eradicate extreme and moderate poverty (income poverty, human capital poverty and overall poverty).[22] Table 3 presents the incidence of taxes and transfers by decile (quintile in the case of Argentina). Table 4 presents the concentration shares of taxes and transfers by decile. Table 5 and Figure 1 show the concentration coefficients and budget shares by individual (principally social) spending items and social spending as a whole. Table 6 includes a brief description of the programs

[20] For more details on the household surveys see the "Country Information" table in the Statistical Annex which is available upon request.
[21] More detailed information on each country's public accounts can be found in Appendix B.
[22] For details on how the human capital poverty gaps are calculated see Lustig (2011) and Pessino (2010), Scott (2010), Gray Molina et al. (2011), Jaramillo (2011) and Pereira and Higgins (2011).

and interventions included in Table 5 (and Figure 1). Table 7 classifies government spending by the extent of its progressivity. Table 8 has the coverage and leakages for flagship programs described in some detail in Table 9.

As we can see in Table 1, measured by the size of their primary (everything but debt servicing) spending as a proportion of GDP, countries differ significantly: Argentina, Bolivia and Brazil spend between 36 and 40 percent while Mexico and Peru closer to 20 percent. If you take into account non-tax and provincial government revenues, the fiscal space to engage in redistribution can be quite large: in Brazil, total government revenues (as a share of GDP) surpass 50 percent while in Argentina and Bolivia the figure is close to 40 percent. At the other end of the spectrum are Mexico and Peru where total revenues are just over 20 percent of GDP.[23]Social spending[24] (as a share of GDP) ranges from around 17 percent in Brazil to 5.2 percent in Peru. Direct cash transfers as a share of GDP are different as well: at the bottom are Mexico and Peru where spending on direct transfers is around 0.5 percent while Argentina, Brazil and Bolivia spend 3.1, 4.1 and 5.1 percent of GDP, respectively. The much larger size of cash transfers in these countries arises from various forms of non-contributory pension programs: the *Pension Moratorium* (2.3 percent of GDP) in Argentina, *Special Circumstances Pension* (2.3 percent of GDP) in Brazil, and *Bono Sol* (0.9 percent of GDP) and the left-over payments of the pay-as-you-go system which was scrapped in 1996 (3.6 percent of GDP) in Bolivia. When these items are removed, cash transfers as a share of GDP in Argentina, Brazil and Bolivia decline to 0.8, 1.8 and 0.6 percent, respectively.

The bulk of social spending does not always accrue to the top 20 percent. In fact, the concentration coefficient for Argentina, Bolivia and Mexico is negative indicating that social spending is progressive in absolute terms: the bottom 20 percent receives a larger share than the top 20 percent. For Brazil (when health spending is included) and Peru the concentration coefficient for social spending is positive but smaller than the market income Gini indicating that social spending is progressive in relative terms. The degree of progressivity of social spending varies across countries. In Argentina, the concentration coefficient for social spending is -0.15 while it is around -0.05 in Bolivia and Mexico. For Brazil it is 0.13 when health spending is included and -0.05 without health.[25] For Peru, it is 0.15.

One key result is that income inequality reduction varies a great deal among countries. (Table 1) Argentina is the "champion" and Peru[26] the least redistributionist state.[27] Taking account of direct

[23] The sources for these numbers can be found in Appendix B.
[24] Social spending here includes public spending on education, health and social assistance. It does not include spending on contributory pensions except for the "subsidized" portion. The "subsidy" is equal to the deficit of the pay-as-you-go pension system in the year of the survey. If the contributory pension system did not have a deficit, the subsidy was taken to be equal to zero.
[25] The methodology used to measure the incidence of health spending in Brazil implies that there might be a "regressiveness-bias" and hence we are reporting both results.
[26] The incidence analysis for Bolivia is based on revenue and spending patterns that were in place in 2007. With the introduction of new programs and the increase in coverage of existing ones since then, the results may be different.
[27] The ranking obtained here is the same as in CEPAL (2010), Figure VII.1.

taxes and all transfers (cash and in-kind in the form of imputed values for public education and health), final income inequality in Argentina measured by the Gini coefficient is 27 percent lower than the "pre-fisc" market income inequality (the Gini declines by 13 percentage points).[28](Table 1, column 5) In contrast, Bolivia's Gini declines by 11 percent (6 percentage points) in spite of the fact that social spending in Bolivia is roughly the same as in Argentina (about 15 percent of GDP) and that Bolivia spends more on direct transfers (5.1 percent of GDP vs. 3.1 percent in Argentina). Bolivia spends over ten times more than Peru in direct transfers but the reduction in the disposable income Gini is roughly the same in both countries. As would be expected, the *redistributive effectiveness*[29] is also quite different across countries. Argentina seems to get the most redistribution "for the buck" spent by the government followed by Mexico and Peru. Compared to Brazil and Bolivia, on average, these three countries are about three times more effective in terms of the distributive impact of cash transfers and two times more effective when in-kind transfers are added. In terms of effectiveness, Bolivia ranks worst.

When indirect taxes[30] are factored in, the results follow the expected pattern. Although the post-fiscal (after direct and indirect taxes and transfers – excluding in-kind transfers in education and health) Gini is practically equal to the disposable income Gini, a closer examination of the incidence of indirect taxes reveals some worrisome traits. In Bolivia and Brazil, households (ranked by per capita market income) from the third decile onward become net payers. In the case of Bolivia (Brazil), this means that some of the extreme (moderate) poor are net contributors to the fiscal system (the government collects more than it transfers to them in the form of direct transfers and indirect subsidies – excluding in-kind transfers in education and health). In Peru and Mexico, households become net payers from the fourth decile and the fifth decile onward, respectively. Thus, in these two countries neither the extreme nor the moderate poor are net contributors to the fiscal system. The relatively less unequalizing incidence of indirect taxes in Mexico and Peru is probably due to the VAT exemptions on food because the latter comprises a large share of the expenditures among low-income groups.

Existing studies tend to focus on inequality. However, the question of how much poverty reduction is attained through fiscal policy is of equal (if not greater) importance. Our analysis shows that, again, results vary significantly across countries. Argentina's fiscal policy reduces extreme

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[28] The two most important (in terms of progressivity and budget share) public spending items for disposable income redistribution are the *moratorium pension* and the CCT *Asignacion Universal por Hijo (AUH)*. Neither was captured in the surveys. The first one was estimated using the inference method and the latter was simulated. Hence, the results should be treated as an upper bound. Preliminary results with the 2010 survey, however, indicate that the simulation of AUH used here is quite accurate when compared to actual (survey-based) results.

[29] The Effectiveness Indicator is defined as the redistributive effect of the taxes or transfers being analyzed divided by their relative size with respect to GDP. See section 2.iv.

[30] The impact of indirect taxes comes from secondary courses in general so the quantitative results should be viewed with caution. Qualitative results, however, may be robust.

poverty[31] the most both in relative and absolute terms. In Argentina, Brazil, Mexico and Peru, the "pre-fisc" headcount ratio for extreme poverty is between 13 and 15 percent. Direct cash transfers in Argentina reduce extreme poverty by a staggering 63 percent; after direct transfers and taxes extreme poverty in Argentina is as low as 5 percent (headcount ratio). At the other end of the spectrum is Peru where direct transfers[32] reduce extreme poverty by only 8 percent. Bolivia is second to last. Brazil and Mexico are in between: *disposable income* (that is, after direct net transfers) poverty is roughly 22 percent lower than *market income* extreme poverty. However, because Mexico's and Peru's direct transfers are better targeted than those in Argentina, the *poverty reduction effectiveness* is highest in Mexico followed by Peru. By this measure, Argentina ranks third, and Brazil and Bolivia rank worst. Brazil has roughly the same headcount ratio as Mexico for "pre-fisc" extreme poverty (15.6 and 13.5 percent, respectively). While Brazil spends about eight times more on direct cash transfers (as a share of GDP) than Mexico, fiscal policy reduces extreme poverty by 22 percent in both countries.

In sum, if we classify countries by the size of government, we end up with two distinct categories: large government countries (Argentina, Bolivia and Brazil) and small government countries (Mexico and Peru). In terms of redistribution, each country represents a "prototype." The "Argentine prototype": a country with very high government spending which redistributes a great deal both in absolute terms and in relation to what it spends. The "Brazilian prototype": a country with very high government spending which achieves moderate redistribution in absolute terms but not in relation to what it spends. The "Bolivian prototype": a country with very high government spending which redistributes little both in absolute terms and in relation to what it spends. The "Mexican model": a country with low government spending which achieves moderate redistribution in absolute terms and in relation to what it spends. The "Peruvian prototype": a country with low government spending which redistributes little in absolute terms but not in relation to what it spends. (Table 1, columns 10 and 11).

Thus, there is no obvious (positive) correlation between government size and redistribution. In fact, large government countries can achieve much less redistribution than small government countries (e.g., Bolivia (large government) vs. Mexico (small government)), and governments of vastly different size can achieve similar reductions in income inequality and poverty (Brazil (large government) and Mexico (small government), for example). Social spending and spending on direct transfers are not correlated with the extent of redistribution either.

Based on our results, it would seem that a high share of spending on direct transfers that are progressive in absolute terms leads to the greatest success both in terms of the absolute size of inequality and poverty reduction and the effectiveness of government to achieve it. This is the case for Argentina. Sixty percent of the country's social spending (education, health, social assistance and

[31] Extreme poverty is measured using the international PPP US$2.50 a day poverty line which for Latin America corresponds to roughly the median of national extreme poverty lines.
[32] In Peru, direct transfers include an important share of transfers in-kind in the form of targeted subsidies for food.

the subsidized portion of social security pensions, the latter of which was nonexistent in Argentina in 2009) is allocated to programs which are progressive in absolute terms (have a negative concentration coefficient). (Tables 7 and 5) The largest items within social spending that are progressive in absolute terms are the following: Primary and Secondary Education (27.8 percent of social spending), Moratorium Pensions (14.7 percent), Primary Health (14.6 percent) and targeted anti-poverty programs (4.6 percent) of which Asignacion Universal por Hijo (AUH) – the CCT launched in 2009 – accounts for 2.9 percent. (See Table 9 for a description of AUH and the other direct transfers programs).[33] Another dimension of Argentina's success at widespread redistribution is that the proportion of the poor that are covered by at least one direct transfers program is very large: 83.3 percent of the extreme poor (households with per capita market income below PPP US$2.50/day) and 75.6 percent of the total poor (households with per capita market income below PPP US$4/day). (Table 8) The problem for Argentina is that its spending policies (not just social but including myriad of subsidies to productive sectors) might not be macro-economically sustainable.

On the other end of the spectrum is Bolivia, another large government country. Bolivia (together with Peru) ranks among the last in terms of inequality and poverty reduction in absolute terms; it ranks the worst in terms of effectiveness. (Table 1) In Bolivia, only 32 percent of its social spending is progressive in absolute terms (compared to twice that in Argentina and Mexico) and 68 percent is progressive in only relative terms. (Table 7) Non-contributory pensions (the left-over of the scrapped pay-as-you-go system and *Bonosol*) represent a third of social spending and are (practically) neutral in absolute terms. (Table 5) Health and secondary education represent close to another third of social spending and are also neutral in absolute terms. Tertiary education (a fifth of social spending), while not regressive, is barely progressive in relative terms. As can be seen in Table 8, the transfers programs in Bolivia, exclude close to sixty percent of the extreme and total poor. *Juancito Pinto* (see description in table 9) stands out for the low coverage of the poor: around 80 percent are not covered by this program and one third of the beneficiaries are non-poor; they receive one third of the benefits. (Table 8) It should be mentioned that the analysis presented here was made using the characteristics of the programs as they existed in 2007. Since then, some programs were expanded (*Juancito Pinto*) and some new ones were introduced (*Renta Dignidad*); the redistribution results might have changed as a result but testing this will have to wait until the more recent household surveys are released.

Brazil is a large government country with moderate redistribution (by Latin American standards) and relatively low redistributive effectiveness. (Table 1) Because the incidence of health spending comes from secondary sources, the distribution of social spending by degree of progressivity is presented with and without health. (Table 7) As one can see, the upper bound estimate (without health) of social spending that is progressive in absolute terms is 10 percentage points lower than

[33] Although the impact of AUH was simulated based on administrative rules, preliminary results with the 2010 survey (which includes data on AUH transfers) show that actual patterns are very similar to the administrative rules.

Argentina's and Peru's, and 20 percentage points lower than Mexico's. If health spending is included, the results for Brazil are very similar to Bolivia's. (Table 7) The single most important spending items that account for Brazil's relative lack of progressivity in its social spending are the *special pensions program* and public spending on *tertiary education,* which represent 13.4 and 4.8 percent of social spending, respectively. (Table 5) (Health spending represents 24 percent of social spending.) As can be seen in Table 8, coverage of the extreme poor by cash transfers is almost 70 percent. This is much larger than Bolivia's coverage and ten percentage points lower than Argentina's. *Bolsa Familia*'s covers about 55 percent of the extreme poor, however. Thus, in spite of its large scale (more than 12 million households according to official records are beneficiaries), a large share of the extreme poor are excluded according to the 2009 household survey. While household survey may under-estimate the "true" coverage, this result suggests that in order to achieve more extreme poverty reduction, *Bolsa Familia* should be expanded to include many more of the extreme poor. The bulk of benefits (more than 80 percent) of *special pensions* accrues to the nonpoor and 71 percent of the beneficiaries are nonpoor. (Table 8) Whether the government could reduce spending on special pensions (by reducing its coverage and/or amounts per beneficiary) and use it for the expansion of *Bolsa Familia* remains to be seen. Before cutting spending on social programs that are progressive in relative terms, the government should analyze if cuts can be made in nonsocial spending first.

Mexico and Peru are small government countries but Mexico is more redistributive (especially in terms of extreme poverty reduction) and it is also more effective at poverty reduction than Peru. (Table 1) Mexico is able to reduce extreme poverty by similar rates as Brazil, although it spends (considerably) less on cash transfers.[34] (Table 1) In fact, in terms of poverty reduction effectiveness, Mexico ranks first and second (after Argentina) in terms of inequality reduction effectiveness. (Table 1, columns 10 and 11) What accounts for Mexico's "success"? One obvious answer is that it allocates the highest share of social spending (around 70 percent) to programs that are progressive in absolute terms (of the five countries analyzed here). (Table 7) Around 8 percent of social spending goes to cash transfers programs which are progressive in absolute terms. (Table 5, Figure 1 and Table 6) Mexico allocates fifty percent more to targeted cash transfers as a share of GDP than Peru. (Table 1) And, since Mexico's GDP/capita is higher than Peru's, the higher proportion of targeted transfers translates into even more resources per poor person transferred to the extreme poor. Thus, Mexico is quite successful in channeling its social spending disproportionately to the poor. However, because the amounts spent are small, extreme poverty rates are still quite high, especially when compared with poverty reduction in Argentina. The share of transfers accruing to the extreme poor (those earning less than PPP US$2.50 a day) is roughly the same in Argentina and Mexico (Table 8), but this translates into smaller per beneficiary amounts. In addition, the percentage of extreme poor excluded from the safety net system is about one third. Mexico is a clear case in which the government should spend more on cash transfers programs targeted to the poor both to

[34] The difference shown on Table 1, though, may be an exaggeration. The project is still working at ensuring that spending categories are strictly comparable across countries.

expand their coverage and, depending on the program, increase the size per beneficiary. While the resources can be obtained from redistribution, given the size of government, Mexico has wiggle room to increase revenues. With perfect targeting, eliminating the 2009 extreme poverty gap would require to spend (and collect) additional resources of around 0.2 percent of GDP.

Peru is a small government country that redistributes very little. (Table 1) As mentioned above, Peru's ranking in terms of inequality and poverty reduction in absolute terms is the lowest (together with Bolivia's). However, per amount spent as a proportion of GDP (effectiveness indicator), Peru does better than Brazil and Bolivia, and in the case of extreme poverty reduction, also better than Argentina. Peru appears to be the only country of the five that fits the "conventional wisdom." Peru accomplishes little redistribution because its revenues and social spending are low. Social spending is also quite less progressive than in the other countries. Targeted transfers are quite progressive (*Juntos* and *food transfers*), but they are very small. (Tables 1, 5 and 6; Figure 1)

4. Conclusions

Does Latin America redistribute relatively little? Based on our results, the answer is still a "yes" especially when compared with the advanced countries in Western Europe. The size of redistribution found here, however, is a bit higher than in previous studies. All in all, fiscal policy reduces market income Gini (when compared with disposable income Gini) by between 1.2 percentage points in Peru and 4.8 percentage points in Argentina. This redistributive improvement may be the result of the introduction of large-scale cash transfers targeted to the poor, the most important innovation in social policy of the last fifteen years. When in-kind transfers (imputed values for public education and health) are included in the calculation, fiscal policy reduces market (net market in the cases of Argentina and Mexico) income Gini (when compared with final income*)[35] by between 3.2 percentage points in Peru and 12.8 percentage points in Argentina.[36]

Does Latin America redistributive relatively little because government revenues are low and government spending is not only low but insufficiently progressive? Does social spending tend to accrue to the richest quintile? Are direct cash transfers – even if progressive – too small? Our analysis shows that we cannot arrive at the sort of broad conclusions that previous studies seem to imply.

First, we found that neither the extent of redistribution nor government's effectiveness is (positively) correlated with the size of government or social spending. Bolivia, a large government country, achieves much less redistribution than Mexico, a small government country. Meanwhile

[35] For the definition see section 2 and Chart 1.
[36] Since the incidence of indirect taxes comes mainly from secondary sources, and Argentina does not report them, we do not present the results in the conclusion.

Argentina, another large government country, is the most redistributionist state. Brazil, whose primary spending as a share of GDP is twice as large as Mexico's achieves roughly the same reduction in extreme poverty as the latter. Social spending and spending on direct transfers are not correlated with the extent of redistribution either. For example, Bolivia spends over ten times more than Peru spends in direct transfers but the reduction in market income Gini (when compared with disposable income Gini) is roughly the same in both countries. Redistributive effectiveness is not correlated with government size either. Argentina – a large government country – ranks among the first in terms of redistributive effectiveness (the amount of inequality and poverty reduction obtained per amount spent as a proportion of GDP). Mexico and Peru – two small government countries – are also ranked at the top in terms of redistributive effectiveness.

Second, the degree of progressivity of social spending also varies across countries. In Argentina social spending is quite progressive in absolute terms and in Bolivia and Mexico, it is mildly progressive in absolute terms. In Brazil and Peru, it is progressive but in relative terms only meaning that a larger share of social spending accrues to the top deciles.

Third, we found that cash transfers in Bolivia are large and not very progressive. In Argentina, cash transfers are not small and are quite progressive. The only country that seems to fit what we called here the "conventional wisdom" is Peru. In Peru, redistribution is very limited because revenues and spending are low, social spending is not sufficiently progressive and cash transfers are very progressive but also very small.

As expected, our results indicate that a high share of spending on direct (and in-kind) transfers that are progressive in absolute terms leads to the greatest success both in terms of the size of inequality and poverty reduction (in percent or percentage points, for example) and the effectiveness of government to achieve it (the extent of reduction per peso spent on transfers, for example). In our sample, this is the case of Argentina. However, Argentina (along with Bolivia and Brazil) may be on a fiscally unsustainable path. In these three countries, fiscal redistribution might be highly dependent on exceptionally benign macroeconomic conditions, especially very favorable terms of trade. For redistribution to become sustainable, these countries will have to find ways to both cut spending and make the collection of taxes and allocation of spending more progressive. Bolivia will have to change the design of its safety net system which, as of 2007, achieved very little redistribution.

On the other side of the spectrum are Mexico and Peru – small government countries. In the cases of Mexico and, above all, Peru, the smallness of the government translates into a certain degree of "stinginess" in terms of the safety net available to the extreme poor. In order to attain more redistribution, Mexico and Peru will have to raise more revenues (though by a relatively small amount) and/or devote the additional resources to social spending and, in particular, direct transfers

targeted to the poor (increase the coverage among the extreme poor and raise the benefits per poor person).

All five countries spend on interventions outside social spending such as, for example, tax expenditures and subsidies to producers in agriculture, industry and services. There is evidence that the bulk of this spending is definitely not progressive in absolute terms (although it is in relative terms) and some of it might be regressive (as shown, for example, for the cases of Argentina and Mexico in Table 7). Spending that is regressive should be scrapped. Spending that is progressive in relative terms should be made more progressive. One caveat is in order, however: regressive or relatively progressive spending may still imply important sources of fiscal "revenue" (in the form of lower prices for consumption items, for example) for the poorest deciles. They should not be scrapped or modified without the poor being compensated for their losses. Otherwise, a fiscal policy's redistributive effectiveness may improve, but at the cost of higher poverty.

Finally, as shown above, indirect taxes can turn the extreme poor (Bolivia) or moderate poor (Brazil) into net contributors to the fiscal system (the government collects more from them than it transfers to them in the form of direct transfers and indirect subsidies– excluding in-kind transfers in education and health). This calls for an assessment of current direct and indirect taxes as the poor should not come out as net contributors to the fiscal system, especially when there is space to distribute the tax burden and public spending in more equitable ways.

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Lists of Tables and Figures
Countries: Argentina, Bolivia, Brazil, Mexico and Peru

Table 1. Gini, Headcount Ratio, Redistributive Effectiveness and Rankings by Country

		Mket	Net Mket	Disp	Post-fisc	Fin*	Fin	Ranked by indicator			Ranked by reduction and effectiveness		GNI/cap	Primary spending as % of GDP	Direct Transfers as % of GDP	% Increase in spending	% progressive	Con Coeff
								Mket	Disp	Fin*	Disp	Fin*						
	Column Number	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]
Argentina (urban)	Gini	0.479	0.480	0.431	N/Av	0.350	N/Av	1	1	1			$14,030	37.60%	3.10%	0.40%	60.4%	-0.15
	% mket inc	--	0.2%	-10.1%	--	-26.9%	--				1	1	2	2	3	1	1	1
	% net mket inc	--	--	-10.3%	--	-27.1%	--				1	1						
	Effect ind	--	-0.02	3.33	--	2.02	--				1	1						
	HI $4 PPP	N/Av	24.9%	15.7%	Not applicable			1	1									
	% net mket inc	--	--	-36.9%							1							
	Effect ind	--	--	11.99							2							
	HI $2.5 PPP	N/Av	14.7%	5.4%				2	1									
	% net mket inc	--	--	-63.3%							1							
	Effect ind	--	--	20.54							3							
Bolivia	Gini	0.550	0.550	0.537	0.533	0.490	0.501	4	4	4			$4,069	40.60%	5.10%	4.30%	31.80%	-0.05
	% net mket inc	--	--	-2.4%	-3.1%	-10.9%	-9.0%				5	4	5	1	1	5	5	2-4 (tie)
	Effect ind	--	0.00	0.48	--	0.73	--				5	5						
	HI $4 PPP	43.2%	43.2%	40.6%	Not applicable			5	5									
	% net mket inc	--	--	-6.0%							4							
	Effect ind	--	--	1.18							5							
	HI$2.5 PPP	25.9%	25.9%	23.4%				5	5									
	% net mket inc	--	--	-9.6%							4							
	Effect ind	--	--	1.90							5							
Brazil	Gini	0.572	0.560	0.546	0.545	0.504	0.499	5	5	5			$10,140	36.90%	4.10%	1.10%	52.60%	-0.05
	% mket inc	--	-2.1%	-4.5%	-4.7%	-11.9%	-12.8%				2	3	3	2	2	3	3	2-4 (tie)
	% net mket inc	--	--	-2.5%	-2.7%	-10.0%	-11.0%				2	3						0.13
	Effect ind	--	0.17	0.60	--	0.83	--				4	4						5
	HI $4 PPP	26.6%	27.3%	24.2%	Not applicable			3	3									
	% net mket inc	--	--	-11.4%							2							
	Effect ind	--	--	2.75							4							
	HI $2.5 PPP	15.3%	15.6%	12.2%				4	3									
	% net mket inc	--	--	-22.2%							3							
	Effect ind	--	--	5.35							4							

Table 1.Gini, Headcount Ratio, Redistributive Effectiveness and Rankings by Country Cont. (cont.)

Mexico	**Gini**	0.511	0.502	0.493	0.487	0.437	0.433	3	3	2			$14,530	21.90%	0.60%	0.90%	56.70%	-0.05
	% mket inc	--	-1.9%	-3.6%	-4.6%	-14.5%	-15.2%				3	2	1	4	4	2	2	2-4 (tie)
	% net mket inc	--	--	-1.8%	-2.8%	-12.9%	-13.6%				3	2						
	Effect ind	--	0.73	2.88	--	1.56	--				2	2						
	HI $4 PPP	N/Av	26.4%	23.5%	Not applicable			2	2									
	% net mket inc	--	--	-10.9%							3							
	Effect ind	--	--	17.87							1							
	HI $2.5 PPP	N/Av	13.5%	10.4%				1	2									
	% net mket inc	--	--	-22.8%							2							
	Effect ind	--	--	37.50							1							
Peru	**Gini**	0.504	0.495	0.492	0.490	0.472	0.470	2	2	3			$8,349	18.90%	0.40%	2.80%	45.50%	-0.04
	% mket inc	--	-1.7%	-2.5%	-2.8%	-6.3%	-6.6%				4	5	4	5	5	4	4	5
	% net mket inc	--	--	-0.8%	-1.1%	-4.6%	-5.0%				4	5						
	Effect ind	--	0.30	2.15	--	0.90	--				3	3						
	HI $4 PPP	N/Av	28.8%	28.1%	Not applicable			4	4									
	% net mket inc	--	--	-2.4%							5							
	Effect ind	--	--	6.71							3							
	HI $2.5 PPP	N/Av	15.1%	13.9%				3	4									
	% net mket inc	--	--	-7.9%							5							
	Effect ind	--	--	21.70							2							

Notes:

a. On vertical axis, "% mket inc" is an abbreviation for percent change with respect to market income; "% net mkt inc" is an abbreviation for percent change with respect to net market income; "Effect ind" is an abbreviation for the Effectiveness Indicator; "HI" is an abbreviation for Headcount index, and is expressed as a percentage. On horizontal axis; [1] "mket" is an abbreviation for market income; [2] "net mket" is an abbreviation for net market income; [3] "disp" is an abbreviation for disposable income; [4] "post-fisc" is an abbreviation for post-fiscal income; [5] "fin*" is an abbreviation for final income*; [6] "fin" is an abbreviation for final income; [12] "GNI/cap" is in PPP for the year of survey using US dollars; [15] "% increase in spending" is for primary spending required to close the $2.50 (extreme poverty) gap; [16] "% progressive" is for spending in absolute terms; [17] "Con coeff" is an abbreviation for concentration for social spending. N/Av is an abbreviation for Not available. [12]-[17] are ranked from best to worst.

b. The Effectiveness Indicator is defined as the redistributive effect of the taxes or transfers being analyzed divided by their relative size. Specifically, for the net market income Gini, it is the fall between the market income and net market income Gini as a percent of the market income Gini divided by the size of direct taxes and employee contributions to social security as a percent of GDP. For the disposable income Gini and headcount index, it is the fall between the net market income and disposable income Gini/headcount index as a percent of the net market income Gini/headcount index, divided by the size of direct transfers as a percent of GDP. For the final income* Gini, it is the fall between the net market income and final income* Gini as a percent of the final income* Gini, divided by the size of the sum of direct transfers, education spending, health spending, and (where it was included in the analysis) housing and urban spending, as a percent of GDP.

c. Not available means that the corresponding figure could not be estimated based on the household survey being used. Not applicable indicates that market income is not applicable in Bolivia because there were negligible or no direct taxes on income and contributions to social security in Bolivia in the year of the survey.

Dark grey shading and the words "not applicable" are used to signify that poverty is not calculated beyond disposable income because the poverty lines are not meant to account for the costs of health, education, etc.

d. For Argentina the Gini of post-fiscal income could only be calculated by quintile because indirect taxes are imputed based on secondary sources. The Gini calculated by quintile for post-fiscal income (ignoring intra-quintile inequality) is 0.421, which is an increase over the disposable-income Gini when it is calculated by quintile, of 0.408.

e. The % of spending which is progressive in absolute terms in the cases of Brazil, Mexico and Peru includes the subsidized portion of contributory social security pensions; also, in the case of Brazil it corresponds to the figure leaving out health spending; with health spending, the number is 29.2%.

f. Social Spending includes public spending on Education, Health, Social Assistance and the Subsidized Portion of Social Security.

g. The concentration coefficient excluding CEQ Social Spending is reported excluding health spending for Brazil. Brazil is the only country studied that does not include a question on its survey regarding use of health services or health coverage. Thus a secondary source (IBGE, 2009) was used to determine the distribution of health spending. Unfortunately this source does not break down health spending into sub-categories, some of which would probably be absolutely progressive while others would be relatively progressive (as we see in the other countries studied). Given the limitations of our secondary source, all of health spending must be considered relatively progressive. Since health spending is large, this would distort the concentration coefficient of CEQ Social Spending.

h. The Gini reported for Argentina and Mexico ignores intra-decile inequality while the Gini reported for Bolivia, Brazil, and Peru take intra-decile inequality into account.

i. The surveys used for each country are as follows. Argentina: Encuesta Permanente de Hogares, 1st semester of 2009; Bolivia: Encuesta de Hogares, 2007; Brazil: Pesquisa de Orçamentos Familiares, 2008-2009; Mexico: Encuesta Nacional de Ingreso y Gasto de los Hogares, 2008; Peru: Encuesta Nacional de Hogares, 2009.

Table 2. Required Increases in Government Spending and Revenues to Close the After Transfers Income Poverty Gap

			Spending or Revenues in millions of LCU	Income Poverty Gap		Human Capital Gap		Overall Poverty Gap	
				$2.5 PPP per day	$4 PPP per day	$2.5 PPP per day	$4 PPP per day	$2.5 PPP per day	$4 PPP per day
Argentina	Gap in millions of LCU[b]		--	1,685	7,488	6,279	10,080	7,964	17,568
	Required increase to close gap	Total Spending	459,961	0.4%	1.6%	1.4%	2.2%	1.7%	3.8%
		Primary Spending[f]	430,401	0.4%	1.7%	1.5%	2.3%	1.9%	4.1%
		Gov. Revenue[e]	359,729	0.5%	2.1%	1.7%	2.8%	2.2%	4.9%
Bolivia	Gap in millions of LCU[b]		--	1,789	5,952	1,024	1,850	2,812	7,802
	Required increase to close gap	Total Spending	43,144	4.1%	13.8%	2.4%	4.3%	6.5%	18.1%
		Primary Spending[f]	41,799	4.3%	14.2%	2.4%	4.4%	6.7%	18.7%
		Gov. Revenue[e]	44,930	4.0%	13.2%	2.3%	4.1%	6.3%	17.4%
Brazil	Gap in millions of LCU[b]		--	12,645	45,294	4,543	7,326	17,188	52,620
	Required increase to close gap	Total Spending	1,629,853	0.8%	2.8%	0.3%	0.4%	1.1%	3.2%
		Primary Spending[f]	1,173,831	1.1%	3.9%	0.4%	0.6%	1.5%	4.5%
		Gov. Revenue[e]	2,219,950	0.6%	2.0%	0.2%	0.3%	0.8%	2.4%
Mexico	Gap in millions of LCU[b]		--	22,953	104,055	31,473	62,623	54,426	166,678
	Required increase to close gap	Total Spending	2,894,807	0.8%	3.6%	1.1%	2.2%	1.9%	5.8%
		Primary Spending[f]	2,667,694	0.9%	3.9%	1.2%	2.3%	2.0%	6.2%
		Gov. Revenue[e]	2,824,741	0.8%	3.7%	1.1%	2.2%	1.9%	5.9%
Peru	Gap in millions of LCU[b]		--	2,080	7,820	880	2,290	2,960	10,110
	Required increase to close gap	Total Spending	79,304	2.6%	9.9%	1.1%	2.9%	3.7%	12.7%
		Primary Spending[f]	74,293	2.8%	10.5%	1.2%	3.1%	4.0%	13.6%
		Gov. Revenue[e]	71,625	2.9%	10.9%	1.2%	3.2%	4.1%	14.1%

Notes:

a. Assumes additional revenue is allocated to targeted anti-poverty programs with perfect targeting. For the after-transfers income poverty gap, disposable income is used

b. LCU stands for local currency units. Each country's LCU is as follows: Argentina - Argentine peso; Bolivia - boliviano; Brazil - real; Mexico - Mexican peso; Peru - nuevo sol.

c. Disposable income is used to calculate the after transfers income poverty gap.

d. The gaps for Argentina include the simulated effect of Asignación Universal por Hijo.

e. Government revenue for Argentina includes federal and provincial tax collection, and does not include municipal revenue or consolidated non-tax revenue. Non-tax revenues in the case of Argentina include unorthodox forms of revenue including the use of central bank reserves, pension savings from individual accounts after they were nationalized, and inflation tax; thus non-tax revenues are not included here, in contrast with the other countries.

f. The difference between total spending and primary spending is that total spending includes servicing internal and external debt, while primary spending does not.

Shades of grey are used to make it easy to distinguish between spending/revenues (medium grey) and the poverty gaps, and to further distinguish the gaps between those using a $2.50 PPP per day poverty line (white) and a $4 PPP per day poverty line (light grey).

Table 3. Incidence of Taxes and Transfers by Decile a/ With Respect to Market Income b/

	Mkt Inc	Dir Taxes	Empl Contr SS	Dir Taxes plus Empl Contr SS	Net Mkt Inc	Non-Contr Pens	Monetary Trans	Other Dir Trans	All Dir Trans	Disp Inc	Indir Subs	Indir Taxes	Net Indir Trans	Post-Fisc Inc	In-kind Educ	In-kind health	Housing and Urban	In-kind Trans plus Housing and Urban	All Trans (excl taxes)	All Taxes	Final Inc*	Final Inc	Subs Contr Pens
Argentina Method:		Sec	Sec			Inf	DirID	Sim			Sec	Sec			Imp	Imp	Sec						
Quintiles																							
1	0.0%	0.0%	-12.2%	-12.2%	-12.2%	68.8%	11.3%	13.8%	93.9%	81.7%	28.0%	-45.7%	-17.7%	64.0%	93.1%	61.4%	24.0%	178.5%	300.5%	-57.9%	260.3%	242.6%	
2	0.0%	0.0%	-6.6%	-6.6%	-6.6%	9.4%	2.1%	2.6%	14.0%	7.4%	15.7%	-22.4%	-6.6%	0.8%	29.7%	15.0%	8.7%	53.4%	83.2%	-29.0%	60.8%	54.2%	
3	0.0%	0.0%	-5.5%	-5.5%	-5.5%	5.1%	0.8%	0.8%	6.7%	1.1%	13.5%	-17.4%	-4.0%	-2.8%	14.4%	5.6%	5.7%	25.7%	45.8%	-22.9%	26.8%	22.9%	
4	0.0%	0.0%	-4.7%	-4.7%	-4.7%	2.9%	0.2%	0.2%	3.3%	-1.4%	9.2%	-14.3%	-5.0%	-6.4%	6.8%	2.1%	3.7%	12.6%	25.1%	-18.9%	11.2%	6.2%	
5	0.0%	-2.5%	-3.9%	-6.4%	-6.4%	0.7%	0.1%	0.0%	0.8%	-5.6%	7.5%	-10.7%	-3.2%	-8.8%	2.2%	0.4%	1.7%	4.3%	12.5%	-17.0%	-1.3%	-4.5%	
Total Pop	0.0%	-1.3%	-4.7%	-6.1%	-6.1%	4.4%	0.7%	0.8%	5.8%	-0.3%	9.9%	-14.3%	-4.4%	-4.7%	9.6%	4.3%	3.9%	17.8%	33.5%	-20.4%	17.6%	13.2%	
Bolivia Method:						DirID	Sim	DirID and Sim			Imp	Sec			Imp	Imp							
Deciles																							
1	0.0%					73.9%	48.9%	12.0%	134.8%	134.8%	0.8%	-24.5%	-23.7%	111.1%	93.2%	6.3%		99.5%	235.1%	-24.5%	234.3%	210.6%	
2	0.0%					8.1%	11.1%	3.8%	23.0%	23.0%	0.5%	-13.0%	-12.5%	10.5%	34.6%	1.8%		36.4%	59.9%	-13.0%	59.4%	46.9%	
3	0.0%					0.7%	3.8%	2.4%	6.8%	6.8%	0.4%	-11.1%	-10.7%	-3.9%	24.0%	0.8%		24.8%	32.1%	-11.1%	31.7%	21.0%	
4	0.0%					1.9%	2.7%	1.8%	6.4%	6.4%	0.4%	-11.5%	-11.2%	-4.8%	18.0%	0.7%		18.7%	25.5%	-11.5%	25.1%	14.0%	
5	0.0%					1.0%	1.6%	1.4%	4.0%	4.0%	0.3%	-11.4%	-11.1%	-7.1%	12.8%	0.5%		13.3%	17.6%	-11.4%	17.3%	6.2%	
6	0.0%					1.3%	1.2%	0.9%	3.4%	3.4%	0.3%	-11.6%	-11.4%	-7.9%	11.6%	0.4%		12.0%	15.7%	-11.6%	15.4%	4.0%	
7	0.0%					1.5%	1.3%	0.9%	3.8%	3.8%	0.2%	-11.9%	-11.7%	-8.0%	7.9%	0.3%		8.2%	12.2%	-11.9%	12.0%	0.3%	
8	0.0%					1.3%	0.8%	0.6%	2.8%	2.8%	0.2%	-12.0%	-11.8%	-9.0%	7.9%	0.3%		8.1%	11.1%	-12.0%	10.9%	-0.9%	
9	0.0%					1.0%	0.7%	0.5%	2.2%	2.2%	0.1%	-12.0%	-11.8%	-9.6%	4.7%	0.2%		4.9%	7.2%	-12.0%	7.1%	-4.7%	
10	0.0%					0.6%	0.4%	0.1%	1.1%	1.1%	0.1%	-12.5%	-12.4%	-11.3%	1.6%	0.0%		1.6%	2.8%	-12.5%	2.7%	-9.7%	
Total Pop	0.0%					9.1%	7.3%	2.4%	18.8%	18.8%	0.3%	-13.2%	-12.8%	6.0%	21.6%	1.1%		22.8%	41.9%	-13.2%	41.6%	28.8%	
Brazil Method:		DirID	DirID			DirID	DirID	DirID				Sec			Imp	Sec							
Deciles																							
1	0.0%	-0.1%	-0.7%	-0.8%	-0.8%	11.8%	19.7%	36.8%	68.3%	67.5%		-22.2%	-22.2%	45.3%	167.3%	77.9%		245.2%	313.5%	-23.0%	312.7%	290.5%	
2	0.0%	-0.3%	-1.7%	-2.0%	-2.0%	3.7%	6.3%	13.9%	23.9%	21.9%		-16.3%	-16.3%	5.6%	64.4%	16.9%		81.3%	105.2%	-18.2%	103.2%	86.9%	
3	0.0%	-0.3%	-2.2%	-2.5%	-2.5%	1.9%	2.8%	9.5%	14.1%	11.6%		-15.3%	-15.3%	-3.7%	37.9%	10.2%		48.1%	62.2%	-17.8%	59.7%	44.4%	
4	0.0%	-0.4%	-2.6%	-3.0%	-3.0%	1.2%	1.2%	8.1%	10.5%	7.6%		-15.0%	-15.0%	-7.4%	25.2%	7.0%		32.2%	42.7%	-18.0%	39.8%	24.7%	
5	0.0%	-0.4%	-2.9%	-3.4%	-3.4%	0.7%	0.5%	8.3%	9.6%	6.2%		-15.0%	-15.0%	-8.8%	16.4%	5.3%		21.7%	31.2%	-18.4%	27.9%	12.8%	
6	0.0%	-0.6%	-3.1%	-3.6%	-3.6%	0.3%	0.2%	6.4%	6.9%	3.3%		-14.9%	-14.9%	-11.6%	11.9%	8.8%		20.7%	27.7%	-18.5%	24.0%	9.1%	
7	0.0%	-0.7%	-3.2%	-3.9%	-3.9%	0.1%	0.1%	5.0%	5.2%	1.3%		-14.7%	-14.7%	-13.4%	7.9%	11.9%		19.8%	25.0%	-18.5%	21.1%	6.5%	
8	0.0%	-0.9%	-3.7%	-4.6%	-4.6%	0.1%	0.0%	4.5%	4.6%	0.0%		-14.7%	-14.7%	-14.8%	5.9%	10.5%		16.4%	20.9%	-19.4%	16.3%	1.6%	
9	0.0%	-1.6%	-4.0%	-5.6%	-5.6%	0.0%	0.0%	3.0%	3.0%	-2.6%		-14.6%	-14.6%	-17.2%	3.4%	13.5%		16.9%	19.9%	-20.2%	14.3%	-0.3%	
10	0.0%	-5.7%	-3.9%	-9.6%	-9.6%	0.0%	0.0%	2.2%	2.2%	-7.4%		-14.2%	-14.2%	-21.6%	1.3%	7.4%		8.7%	10.9%	-23.8%	1.3%	-12.9%	
Total Pop	0.0%	-3.1%	-3.6%	-6.6%	-6.6%	0.3%	0.4%	4.2%	5.0%	-1.6%		-14.6%	-14.6%	-16.3%	8.3%	9.9%		18.2%	23.2%	-21.2%	16.6%	2.0%	

Table 3. Incidence of Taxes and Transfers by Decile [a/] With Respect to Market Income [b/] Cont.

Mexico Method		Sec	Sec				DirID and Alt	Imp and Alt			Imp and Alt	Sec			Imp	Imp	Imp					Imp
Deciles1	0.0%	0.0%	-0.4%	-0.4%	-0.4%		21.9%	0.4%	22.3%	21.9%	9.6%	-6.3%	3.3%	25.2%	76.9%	27.7%	0.5%	105.2%	137.1%	-6.7%	127.1%	130.4%	0.1%
2	0.0%	0.0%	-0.5%	-0.5%	-0.5%		7.0%	0.5%	7.5%	7.1%	6.3%	-6.2%	0.1%	7.2%	35.2%	14.9%	0.1%	50.2%	64.0%	-6.7%	57.3%	57.4%	0.4%
3	0.0%	0.0%	-0.5%	-0.5%	-0.5%		3.7%	0.8%	4.5%	4.0%	5.5%	-6.4%	-0.9%	3.1%	24.8%	11.5%	0.1%	36.4%	46.4%	-6.9%	40.4%	39.5%	0.8%
4	0.0%	0.0%	-0.6%	-0.6%	-0.6%		2.1%	0.8%	2.9%	2.3%	4.9%	-6.6%	-1.7%	0.6%	18.1%	9.3%	0.1%	27.5%	35.3%	-7.2%	29.8%	28.1%	1.0%
5	0.0%	-0.1%	-0.6%	-0.6%	-0.6%		1.3%	0.9%	2.2%	1.6%	4.9%	-6.8%	-1.9%	-0.3%	14.0%	6.9%	0.1%	20.9%	28.1%	-7.4%	22.5%	20.6%	1.0%
6	0.0%	-0.5%	-0.6%	-1.1%	-1.1%		0.9%	0.8%	1.7%	0.6%	4.1%	-6.3%	-2.2%	-1.6%	10.8%	5.9%	0.1%	16.8%	22.6%	-7.4%	17.4%	15.2%	1.3%
7	0.0%	-1.3%	-0.6%	-2.0%	-2.0%		0.6%	0.7%	1.3%	-0.6%	4.2%	-6.6%	-2.4%	-3.0%	8.0%	4.9%	0.1%	13.0%	18.5%	-8.6%	12.3%	9.9%	1.5%
8	0.0%	-2.2%	-0.6%	-2.9%	-2.9%		0.4%	0.6%	1.0%	-1.9%	3.8%	-6.6%	-2.8%	-4.7%	5.9%	4.0%	0.0%	9.9%	14.7%	-9.5%	8.0%	5.2%	1.9%
9	0.0%	-3.7%	-0.7%	-4.3%	-4.3%		0.2%	0.4%	0.6%	-3.7%	3.6%	-6.8%	-3.2%	-6.9%	3.8%	2.8%	0.0%	6.6%	10.9%	-11.1%	2.9%	-0.3%	2.3%
10	0.0%	-5.7%	-0.5%	-6.2%	-6.2%		0.2%	0.1%	0.3%	-6.0%	2.3%	-5.8%	-3.5%	-9.5%	1.1%	1.1%	0.0%	2.2%	4.7%	-12.0%	-3.8%	-7.3%	3.0%
Total Pop	0.0%	-3.3%	-0.6%	-3.9%	-3.9%		0.9%	0.4%	1.4%	-2.5%	3.5%	-6.3%	-2.8%	-5.3%	7.1%	3.9%	0.0%	11.1%	15.9%	-10.2%	8.6%	5.8%	2.2%
Peru Method:		DirID	DirID				DirID	DirID				DirID			Imp	DirID						Imp
Deciles																						
1	0.0%	0.0%	0.0%	0.0%	0.0%		6.4%	3.6%	10.0%	10.0%		-0.7%	-0.7%	9.4%	30.9%	5.8%		36.7%	46.7%	-0.7%	46.7%	46.1%	0.0%
2	0.0%	0.0%	0.0%	0.0%	0.0%		2.0%	1.4%	3.4%	3.4%		-0.6%	-0.6%	2.7%	14.7%	3.4%		18.2%	21.5%	-0.6%	21.5%	20.9%	0.1%
3	0.0%	0.0%	0.0%	0.0%	0.0%		0.9%	0.9%	1.8%	1.8%		-1.0%	-1.0%	0.8%	10.0%	2.6%		12.6%	14.5%	-1.0%	14.4%	13.5%	0.4%
4	0.0%	0.0%	0.0%	0.0%	0.0%		0.3%	0.5%	0.9%	0.8%		-1.2%	-1.2%	-0.3%	7.0%	2.5%		9.5%	10.3%	-1.2%	10.3%	9.2%	0.5%
5	0.0%	0.0%	0.0%	0.0%	0.0%		0.2%	0.3%	0.5%	0.4%		-1.3%	-1.3%	-0.9%	5.1%	2.5%		7.6%	8.1%	-1.4%	8.0%	6.7%	0.8%
6	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.2%	0.2%	0.2%		-1.6%	-1.6%	-1.4%	3.5%	1.9%		5.4%	5.6%	-1.6%	5.6%	4.0%	1.1%
7	0.0%	0.0%	-0.1%	-0.1%	-0.1%		0.0%	0.1%	0.1%	0.0%		-1.7%	-1.7%	-1.7%	2.4%	1.9%		4.3%	4.4%	-1.8%	4.3%	2.6%	1.2%
8	0.0%	0.0%	-0.1%	-0.1%	-0.1%		0.0%	0.1%	0.1%	0.0%		-1.7%	-1.7%	-1.7%	1.8%	2.0%		3.8%	3.9%	-1.8%	3.8%	2.1%	1.7%
9	0.0%	0.0%	-0.2%	-0.2%	-0.2%		0.0%	0.0%	0.0%	-0.1%		-1.9%	-1.9%	-2.1%	1.1%	1.8%		2.9%	2.9%	-2.1%	2.7%	0.8%	1.9%
10	0.0%	-0.1%	-0.2%	-0.3%	-0.3%		0.0%	0.0%	0.0%	-0.3%		-2.0%	-2.0%	-2.3%	0.3%	1.3%		1.5%	1.6%	-2.3%	1.2%	-0.7%	1.8%
Total Pop	0.0%	0.0%	-0.1%	-0.2%	-0.2%		0.2%	0.2%	0.4%	0.2%		-1.7%	-1.7%	-1.5%	2.6%	1.8%		4.4%	4.8%	-1.9%	4.6%	2.9%	1.5%

Notes:

"Empl Contr SS" represents Employee Contributions to Social Security; "All taxes" contains Direct and Indirect, including contributions to Social Security; "Subs Contr Pens" represents Subsidized Portion of Contributory Pensions. Where it occurs, "Mkt" stands for market; "Disp" stands for disposable; "Inc" stands for income; "Dir" stands for direct; "Indir" stands for indirect; "Pens" stands for pensions; "Trans" stands for transfers; "Subs" stands for subsidies. "Alt" is an abbreviation for Alternate Survey. "DirID" is an abbreviation for Direct Identification. "Imp" is an abbreviation for Imputation Method. "Inf" is an abbreviation for inference method. "Sec" is an abbreviation for Secondary Sources. ""Sim" is an abbreviation of Simulation Method. "Trans" is an abbreviation for Transfers. "Educ" is an abbreviation for education

a. For Argentina the distribution is given by quintile because some categories use secondary sources that provide the distribution by quintile only.

b. For Bolivia it is with respect to net market income rather than market income because market income is not available. However, there are no direct taxes applied to personal income in Bolivia so net market income is comparable to market income.

c. For Bolivia there are no direct taxes applied to personal income. For the countries using secondary sources for direct taxes, Argentina includes partial general equilibrium effects in the analysis; Mexico does not.

d. For Brazil, this category also includes deductions identified as "other deductions" (not "income tax" or "contributions to social security").

e. For Argentina, non-contributory pensions are the moratorium pensions. For Bolivia, Mexico, and Peru, non-contributory pensions are grouped with targeted transfers, thus this column is left blank. For Brazil, non-contributory pensions are Benefício de Prestação Continuada (BPC).

f. For Argentina, targeted monetary transfers include Jefes y Jefas de Hogar, Familias, Becas, and unemployment insurance. For Bolivia, the column includes Bono Juancito Pinto, maternity subsidy, Beneméritos de la Patria and non-contributory pensions (Sistema de Reparto Residual). For Brazil, the column includes only Bolsa Família; other targeted monetary transfers are incorporated in the column "other direct transfers". For Mexico, the column includes Oportunidades, Adultos Mayores (non-contributory pensions), Procampo, Becas, and other social programs. For Peru, it includes Juntos.

g. For Argentina, other direct transfers is Asignación Universal por Hijo, which was not captured by the survey (it was implemented later in 2009) but is simulated according to the program rules, assuming perfect coverage and targeting. For Bolivia, the column includes food programs as Lactation Subsidy and Desayuno Escolar. For Brazil, it includes Programs Erradicação do Trabalho Infantil (PETI), Bolsa Escola, other scholarships, special-circumstances pensions, unemployment benefits, minimum-income programs, Abono do PIS/PASEP, Auxílio-Gás, and other government auxílios. For Mexico, it includes opciones productivas, employment subsidies, and agricultural subsidies. For Peru, it includes food transfers, mainly from the programs Programa Integral de Nutrición, Programa de Complementación Alimentaria, and Vaso de Leche.

h. For all countries, indirect taxes were imputed using effective rates by quantile from secondary sources. For Brazil, the secondary source incorporates multisectoral effects, cumulatively and the evasion of indirect taxes, based on an input-output matrix for Brazil. The matrix reports total indirect taxes net of indirect subsidies as well as the effects of the direct and indirect taxation of inputs.

i. It is assumed that the distribution of the subsidized portion of pensions is the same as the distribution of pensions themselves. For Argentina, Bolivia, and Brazil there was no social security deficit in the year of the survey; thus the subsidized portion of social security was effectively zero.

j. For Bolivia, indirect subsidies includes only Subsidio al Gas Licuado (GLP). For Brazil, the column indirect taxes accounts for indirect subsidies and is the net effect, so this column is left blank.

Table 4. Concentration Shares of Income, Taxes and Transfers

	Mkt Inc	Dir Taxes	Empl Contr SS	Dir Taxes plus Empl Contr SS	Net Mkt Inc	Non-Contr Pens	Monetary Trans	Other Dir Trans	All Dir Trans	Disp Inc	Indir Subs	Indir Taxes	Net Indir Trans	Post-Fisc Inc	In-kind Educ	In-kind health	Housing and Urban	In-kind Trans plus Housing and Urban	All Trans (excl taxes)	All Taxes	Final Inc*	Final Inc	Subs Contr Pens
Argentina																							
1	0.6%	0.0%	3.0%	2.3%	0.5%	35.3%	24.7%	24.6%	32.7%	2.4%		3.8%			11.7%	18.6%				2.9%	3.8%		N/A
2	2.2%	0.0%	4.1%	3.2%	2.1%	8.2%	22.1%	26.6%	12.2%	2.7%	7.8%	4.5%	8.6%	4.5%	15.0%	20.5%	17.0%	27.6%	24.7%	3.7%	4.4%		N/A
3	3.4%	0.0%	5.2%	4.1%	3.4%	9.2%	14.7%	15.9%	10.7%	3.8%	12.9%	5.4%	11.1%	8.4%	13.1%	15.8%	18.2%	24.3%	20.1%	4.5%	5.1%		N/A
4	4.7%	0.0%	6.2%	4.8%	4.7%	8.3%	10.8%	11.7%	9.1%	4.9%		6.4%			12.0%	12.3%				5.5%	5.8%		N/A
5	6.0%	0.0%	7.2%	5.6%	6.0%	8.3%	7.7%	8.4%	8.3%	6.2%	18.5%	7.4%	14.3%	13.7%	10.5%	10.3%	19.9%	19.6%	18.6%	6.3%	6.7%		N/A
6	7.6%	0.0%	8.7%	6.8%	7.7%	7.5%	8.9%	5.3%	7.4%	7.7%		8.7%			9.9%	7.3%				7.5%	7.8%		N/A
7	9.7%	0.0%	9.6%	7.5%	9.8%	8.0%	3.6%	3.6%	6.9%	9.6%	20.7%	9.3%	21.7%	22.1%	8.6%	6.1%	21.4%	15.7%	16.7%	8.2%	9.4%		N/A
8	12.6%	0.2%	12.3%	9.7%	12.8%	6.9%	3.3%	2.1%	5.9%	12.4%		12.0%			7.0%	4.5%				10.6%	11.6%		N/A
9	17.4%	5.7%	16.0%	13.8%	17.6%	4.8%	1.2%	1.1%	3.9%	16.8%	40.2%	15.4%	44.3%	51.4%	6.9%	2.9%	23.5%	12.8%	19.9%	14.6%	15.5%		N/A
10	35.9%	94.1%	27.8%	42.3%	35.4%	3.4%	2.9%	0.8%	3.0%	33.6%		27.1%			5.2%	1.7%				36.3%	30.0%		N/A
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		N/A
Bolivia																							
1	0.5%				0.5%		21.8%	8.7%	19.2%	1.1%	2.5%	1.0%	1.0%	1.1%	6.5%	10.8%		7.1%	10.8%	1.0%	1.8%	1.6%	N/A
2	1.8%				1.8%		12.2%	9.8%	11.8%	2.1%	5.6%	1.9%	1.8%	2.1%	8.7%	11.2%		8.8%	9.7%	1.9%	2.9%	2.6%	N/A
3	3.0%				3.0%		4.8%	10.5%	5.9%	3.1%	8.1%	2.7%	2.7%	3.2%	10.3%	8.7%		10.3%	8.9%	2.7%	4.0%	3.7%	N/A
4	4.1%				4.1%		6.7%	11.0%	7.6%	4.2%	9.5%	3.9%	3.8%	4.3%	10.5%	10.6%		10.4%	9.5%	3.9%	5.0%	4.7%	N/A
5	5.4%				5.4%		5.1%	10.8%	6.2%	5.4%	9.8%	5.0%	5.0%	5.5%	9.8%	9.8%		9.7%	8.6%	5.0%	5.9%	5.8%	N/A
6	7.0%				7.0%		6.2%	9.8%	6.9%	7.0%	10.9%	6.6%	6.6%	7.0%	11.5%	10.5%		11.5%	10.0%	6.6%	7.5%	7.4%	N/A
7	8.6%				8.6%		8.9%	11.5%	9.4%	8.7%	11.6%	8.5%	8.4%	8.7%	9.7%	9.6%		9.7%	9.7%	8.5%	8.8%	8.8%	N/A
8	11.2%				11.2%		8.8%	9.9%	9.0%	11.2%	12.7%	11.1%	11.0%	11.2%	12.6%	10.8%		12.4%	11.3%	11.1%	11.3%	11.3%	N/A
9	16.4%				16.4%		10.2%	11.2%	10.4%	16.2%	14.2%	16.1%	16.1%	16.2%	11.0%	10.7%		10.8%	10.7%	16.1%	15.5%	15.8%	N/A
10	42.1%				42.1%		15.2%	6.8%	13.5%	41.1%	15.2%	43.2%	43.5%	40.8%	9.5%	7.3%		9.3%	10.7%	43.2%	37.2%	38.4%	N/A
Total	100.0%				100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	N/A
Brazil																							
1	0.8%	0.0%	0.2%	0.1%	0.8%	27.4%	35.2%	6.7%	10.6%	1.3%		1.2%	1.2%	1.3%	15.5%	6.1%		11.3%	11.1%	0.9%	2.7%	3.0%	N/A
2	1.8%	0.2%	0.8%	0.5%	1.8%	19.4%	25.1%	5.7%	8.4%	2.2%		2.1%	2.1%	2.2%	13.5%	3.0%		8.8%	8.7%	1.6%	3.0%	3.2%	N/A
3	2.7%	0.2%	1.7%	1.0%	2.8%	15.0%	17.1%	6.0%	7.6%	3.0%		2.9%	2.9%	3.1%	12.2%	2.8%		8.0%	7.9%	2.4%	3.7%	3.8%	N/A
4	3.7%	0.4%	2.7%	1.6%	3.8%	13.3%	10.3%	7.0%	7.7%	4.0%		3.9%	3.9%	4.0%	11.0%	2.6%		7.3%	7.4%	3.3%	4.4%	4.5%	N/A
5	4.8%	0.7%	3.9%	2.4%	5.0%	10.2%	5.8%	9.5%	9.2%	5.2%		5.1%	5.1%	5.2%	9.5%	2.6%		6.5%	7.2%	4.4%	5.3%	5.3%	N/A
6	6.2%	1.1%	5.4%	3.4%	6.4%	6.4%	3.0%	9.4%	8.6%	6.6%		6.5%	6.5%	6.6%	8.9%	5.6%		7.5%	7.8%	5.6%	6.6%	6.7%	N/A
7	8.1%	1.8%	7.3%	4.7%	8.4%	3.3%	1.6%	9.5%	8.4%	8.4%		8.3%	8.3%	8.4%	7.7%	9.8%		8.7%	8.6%	7.3%	8.4%	8.5%	N/A
8	11.0%	3.4%	11.3%	7.6%	11.2%	2.0%	1.0%	11.6%	10.0%	11.1%		11.3%	11.3%	11.1%	7.8%	11.7%		9.5%	9.6%	10.3%	10.9%	10.9%	N/A
9	16.2%	8.4%	18.2%	13.7%	16.4%	1.9%	0.6%	11.4%	9.8%	16.1%		16.2%	16.2%	16.0%	6.7%	22.2%		13.6%	12.6%	15.5%	15.9%	15.9%	N/A
10	44.8%	83.7%	48.6%	64.9%	43.4%	1.1%	0.4%	23.1%	19.7%	42.2%		42.4%	42.4%	42.2%	7.2%	33.6%		18.8%	19.0%	48.8%	39.0%	38.4%	N/A
Total	100.0%	100.0%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	99.9%	100.0%	100.0%	100.0%		100.0%	99.9%	100.1%	100.0%	100.0%	N/A

Table 4.Concentration Shares of Income, Taxes and Transfers Cont.

Mexico																						
1	1.1%	0.0%	0.1%	0.0%	1.1%	7.2%	20.6%	0.9%	11.3%	1.4%	2.8%	1.1%		1.4%	11.1%	10.0%	13.0%	10.7%			2.3%	2.4%	0.2%
2	2.3%	0.0%	0.5%	0.1%	2.4%	11.7%	17.5%	2.6%	10.9%	2.5%	4.5%	2.2%		2.6%	11.0%	9.8%	7.7%	10.5%			3.3%	3.4%	1.1%
3	3.3%	0.0%	1.5%	0.2%	3.4%	9.4%	14.5%	4.6%	10.0%	3.5%	5.6%	3.3%		3.6%	11.3%	9.9%	11.8%	10.8%			4.3%	4.3%	2.6%
4	4.3%	0.0%	2.7%	0.4%	4.4%	9.5%	10.5%	6.6%	8.8%	4.5%	7.3%	4.5%		4.5%	10.7%	10.0%	10.0%	10.4%			5.1%	5.1%	4.3%
5	5.4%	0.1%	4.1%	0.7%	5.6%	10.5%	8.6%	9.0%	8.9%	5.6%	8.7%	5.8%		5.7%	10.6%	10.1%	9.8%	10.4%			6.1%	6.1%	6.3%
6	6.7%	1.1%	5.7%	1.8%	6.9%	8.9%	7.3%	10.9%	8.9%	6.9%	9.8%	6.8%		7.0%	10.3%	10.1%	12.0%	10.2%			7.3%	7.3%	8.4%
7	8.6%	3.5%	9.0%	4.3%	8.7%	8.8%	5.5%	13.6%	9.1%	8.7%	11.1%	9.0%		8.8%	9.7%	10.4%	13.7%	10.0%			8.9%	8.9%	12.3%
8	11.1%	7.6%	12.7%	8.4%	11.2%	8.7%	4.1%	15.6%	9.2%	11.2%	12.3%	11.7%		11.2%	9.5%	10.4%	4.6%	9.8%			11.1%	11.1%	15.3%
9	16.0%	17.7%	21.2%	18.2%	15.9%	7.9%	3.6%	17.5%	9.6%	15.8%	15.1%	17.2%		15.7%	9.1%	10.4%	11.3%	9.6%			15.2%	15.1%	22.4%
10	41.3%	69.9%	42.4%	65.8%	40.4%	17.3%	7.8%	18.6%	13.1%	39.9%	22.9%	38.4%		39.6%	6.8%	8.8%	6.0%	7.5%			36.4%	36.3%	27.2%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%			100.0%	100.0%	100.0%
Peru																						
1	1.2%	0.0%	0.0%	0.0%	1.3%		41.2%	23.1%	25.4%	1.4%		0.5%	0.5%	1.4%	14.0%	3.8%		9.5%	10.7%	0.4%	1.7%	1.8%	0.0%
2	2.3%	0.0%	0.0%	0.1%	2.4%		24.8%	16.8%	22.8%	2.5%		0.8%	0.9%	2.5%	13.1%	4.4%		9.9%	10.9%	0.8%	2.8%	2.9%	0.2%
3	3.4%	0.0%	0.2%	0.0%	3.5%		16.2%	16.1%	16.4%	3.6%		1.9%	2.0%	3.6%	12.8%	4.9%		9.7%	10.2%	1.8%	3.8%	3.9%	0.8%
4	4.5%	0.0%	1.3%	1.0%	4.6%		8.2%	12.2%	12.4%	4.7%		3.0%	3.1%	4.7%	12.0%	6.1%		9.7%	9.9%	2.9%	4.9%	4.9%	1.4%
5	5.8%	0.0%	1.6%	1.4%	5.9%		4.9%	10.3%	9.0%	5.9%		4.5%	4.5%	6.0%	11.3%	7.8%		9.9%	9.8%	4.2%	6.1%	6.1%	2.9%
6	7.3%	0.0%	3.8%	3.1%	7.4%		1.9%	7.6%	4.9%	7.4%		6.7%	6.5%	7.4%	9.7%	7.4%		9.1%	8.8%	6.2%	7.5%	7.5%	5.4%
7	9.2%	0.0%	5.0%	3.7%	9.2%		1.1%	5.0%	3.4%	9.2%		9.2%	9.3%	9.2%	8.3%	9.6%		8.9%	8.4%	8.7%	9.2%	9.2%	7.3%
8	11.8%	0.0%	12.8%	10.6%	11.8%		0.9%	5.9%	3.6%	11.8%		11.7%	11.6%	11.8%	8.2%	13.1%		9.4%	8.9%	11.5%	11.7%	11.7%	13.6%
9	16.3%	2.0%	15.0%	12.1%	16.2%		0.7%	2.0%	1.5%	16.1%		18.2%	18.4%	16.0%	6.7%	16.2%		10.8%	10.1%	17.8%	15.8%	15.8%	20.8%
10	38.3%	98.0%	60.4%	67.9%	37.7%		0.1%	1.0%	0.6%	37.6%		43.5%	43.2%	37.2%	4.0%	26.8%		13.2%	12.2%	45.6%	36.4%	36.2%	47.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

For abbreviations see notes for Table 3 Incidence of Taxes and Transfers by Decile a/ With Respect to Market Income b/

a. For Argentina, the distribution of indirect subsidies and housing and urban were taken from secondary sources that used quintiles; thus deciles could not be used for all transfers or income definitions.

b. N/A: means not applicable because there was no deficit in the contributory social security system in the year in question

For information on what is included in each transfer or tax category by country see the notes to Table 3.

c. Note that the above are "concentration shares" by decile. That is, the light grey columns for each definition of income are not the distribution of each income concept that would correspond to the Gini coefficients in Table 1. In the case of Argentina, the "x-axis" of the concentration curve uses households ranked by per capita NET market income; for all the others, households are ranked by market income. In Bolivia, market income and net market income are the same because there are no direct taxes are zero and contributions to social security are negligible.

Figure 1a. Concentration coefficients: Argentina

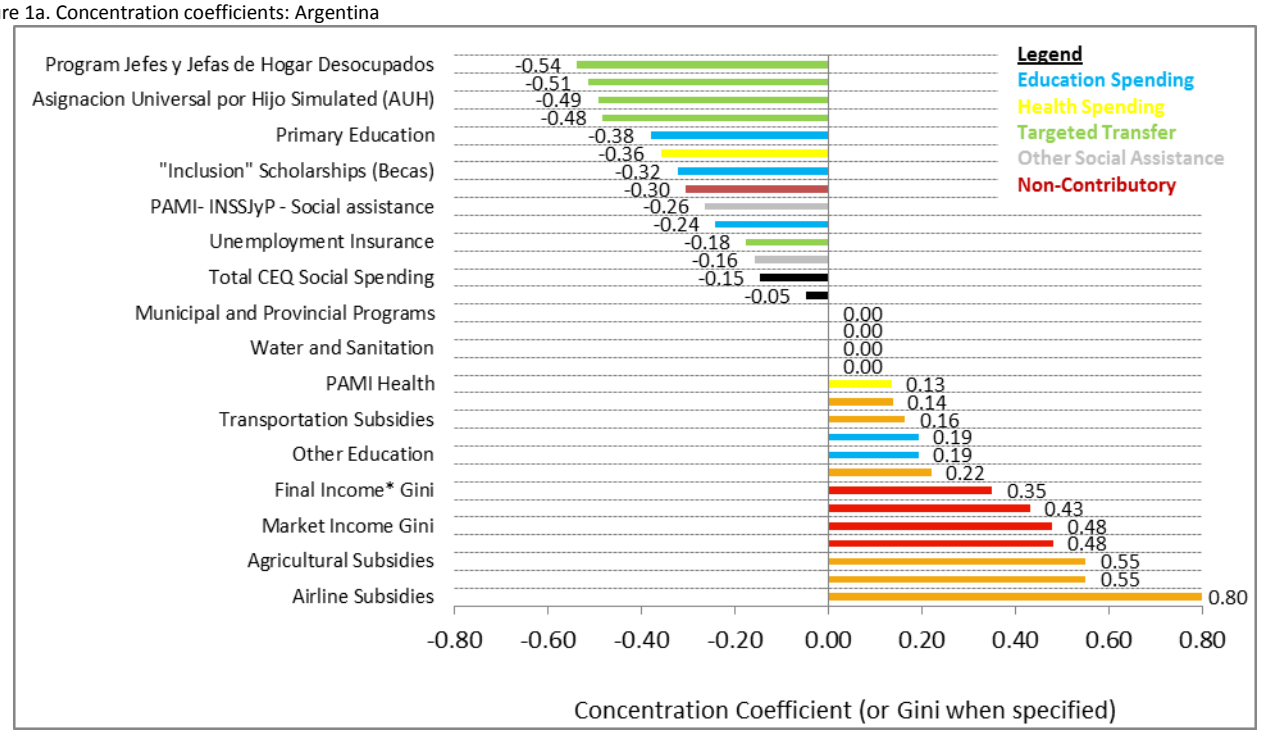

Table 5a. Concentration Coefficients and Budget Shares: Argentina

Program	Concentration Index	Size of Budget (millions of pesos)	As percent of CEQ social spending	As percent of redistributive spending	As percent of GDP
Program Jefes y Jefas de Hogar Desocupados	-0.54	878.00	0.5%	0.4%	0.1%
Program Familias	-0.51	1,080.00	0.6%	0.4%	0.1%
Asignacion Universal por Hijo Simulated (AUH)	-0.49	5,000.00	2.8%	2.0%	0.4%
Seguridad Alimentaria	-0.48	1,288.00	0.7%	0.5%	0.1%
Primary Education	-0.38	23,608.00	13.1%	9.6%	2.1%
Health Primary Attention	-0.36	26,475.55	14.6%	10.7%	2.3%
"Inclusion" Scholarships (Becas)	-0.32	250.00	0.1%	0.1%	0.0%
Moratorium/Non Contrib Pensions	-0.30	26,633.00	14.7%	10.8%	2.3%
PAMI- INSSJyP - Social assistance*	-0.26	2,071.50	1.1%	0.8%	0.2%
Secondary Education	-0.24	21,563.00	11.9%	8.7%	1.9%
Unemployment Insurance	-0.18	963.00	0.5%	0.4%	0.1%
Obras sociales - Social*	-0.16	1,668.87	0.9%	0.7%	0.1%
Other Federal Social Protection Programs*	0.00	2,955.00	1.6%	1.2%	0.3%
Water and Sanitation*	0.00	3,644.95	2.0%	1.5%	0.3%
Housing*	0.00	8,930.88	4.9%	3.6%	0.8%
Municipal and Provincial Programs*	0.00	17,368.00	9.6%	7.0%	1.5%
PAMI Health*	0.13	9,363.50	5.2%	3.8%	0.8%
Other Urban Services*	0.14	11,118.28	6.2%	4.5%	1.0%
Transportation Subsidies*	0.16	25,337.00	14.0%	10.3%	2.2%
Other Education	0.19	11,148.00	6.2%	4.5%	1.0%
University Tertiary Education	0.19	13,615.29	7.5%	5.5%	1.2%
Energy Subsidies*	0.22	19,757.10	10.9%	8.0%	1.7%
Manufacturing and Communications Subsidies*	0.55	5,791.00	3.2%	2.3%	0.5%
Agricultural Subsidies*	0.55	7,473.00	4.1%	3.0%	0.7%
Airline Subsidies*	0.80	2,300.00	1.3%	0.9%	0.2%
Total CEQ Social Spending	**-0.15**	**180,775.00**	--	--	**15.8%**
Total Redistributive Spending	**-0.05**	**246,728.00**	--	--	**21.5%**
Total Primary Spending	**N/A**	**430,401.00**	--	--	**37.6%**
Total Government Spending	**N/A**	**459,961.00**	--	--	**40.2%**

Notes:
* indicates that the source of spending was not captured by EPH, and thus it was estimated from other sources. See Pessino (2010).
N/A means not applicable; some elements of that spending definition were not captured by the survey so the concentration coefficient was not calculated.
CEQ (Commitment to Equity) Social Spending includes spending on Education, Health, Social Assistance and the Subsidized Portion of Social Security.

Figure 1b. Concentration coefficients: Bolivia

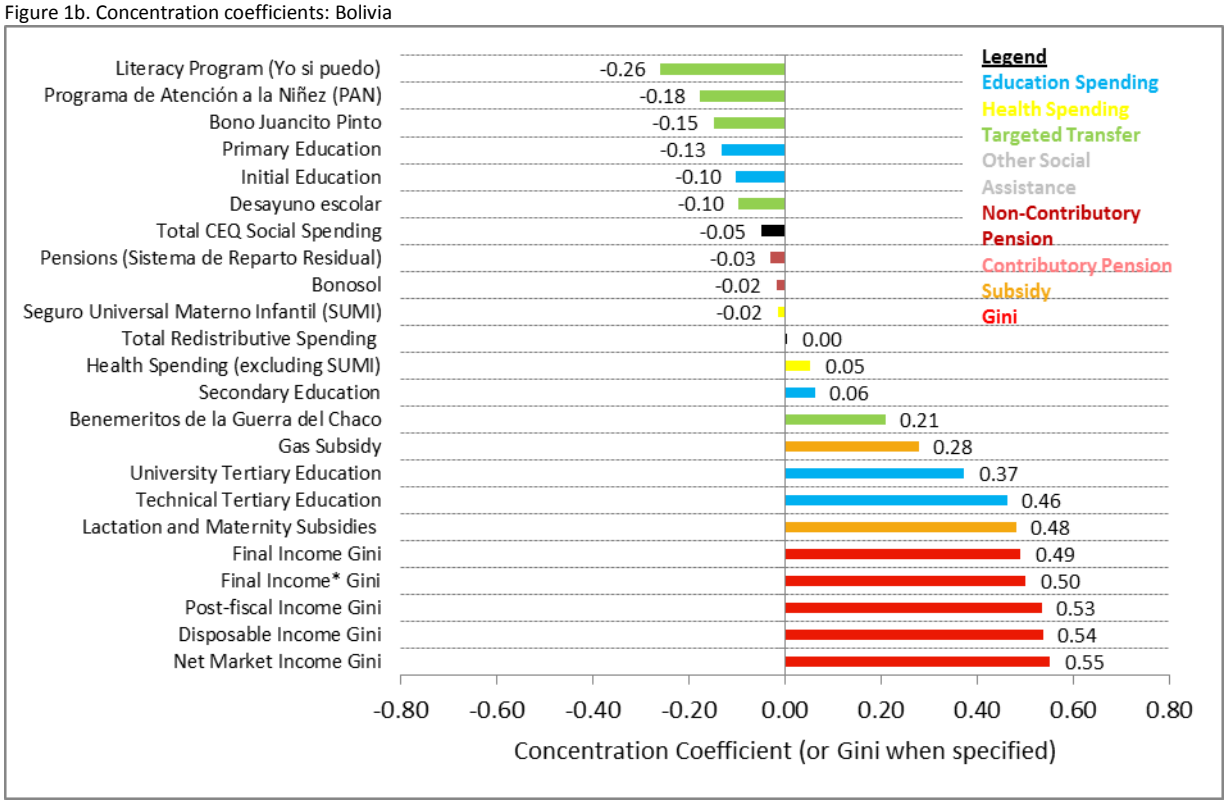

Table 5b. Concentration Coefficients and Budget: Bolivia

Program	Concentration Index	Size of Budget (millions of bolivianos)	As percent of CEQ social spending	As percent of redistributive spending	As percent of GDP
Literacy Program (Yo si puedo)	-0.26	73.08	0.5%	0.4%	0.1%
Programa de Atención a la Niñez (PAN)	-0.18	44.29	0.3%	0.3%	0.0%
Bono Juancito Pinto	-0.15	293.98	2.0%	1.8%	0.3%
Primary Education	-0.13	2,591.07	17.4%	15.6%	2.5%
Initial Education	-0.10	149.81	1.0%	0.9%	0.1%
Desayuno escolar	-0.10	8.09	0.1%	0.0%	0.0%
Pensions (Sistema de Reparto Residual)	-0.03	3,752.68	25.2%	22.6%	3.6%
Bonosol	-0.02	888.19	6.0%	5.4%	0.9%
Seguro Universal Materno Infantil (SUMI)	-0.02	230.70	1.6%	1.4%	0.2%
Health Spending (excluding SUMI)	0.05	3,372.80	22.7%	20.3%	3.3%
Secondary Education	0.06	631.75	4.2%	3.8%	0.6%
Benemeritos de la Guerra del Chaco	0.21	169.30	1.1%	1.0%	0.2%
Gas Subsidy	0.28	499.39	3.4%	3.0%	0.5%
University Tertiary Education	0.37	2,602.82	17.5%	15.7%	2.5%
Technical Tertiary Education	0.46	374.68	2.5%	2.3%	0.4%
Lactation and Maternity Subsidies	0.48	110.50	0.7%	0.7%	0.1%
Total CEQ Social Spending	**-0.05**	**14,864.89**	--	--	**14.4%**
Total Redistributive Spending	**0.00**	**16,597.15**	--	--	**16.1%**
Total Primary Spending	**N/A**	**41,798.50**	--	--	**40.6%**
Total Government Spending	**N/A**	**43,144.40**	--	--	**41.9%**

Notes: N/A means not applicable; some elements of that spending definition were not captured by the survey so the concentration coefficient was not calculated.

Figure 1c. Concentration coefficients: Brazil

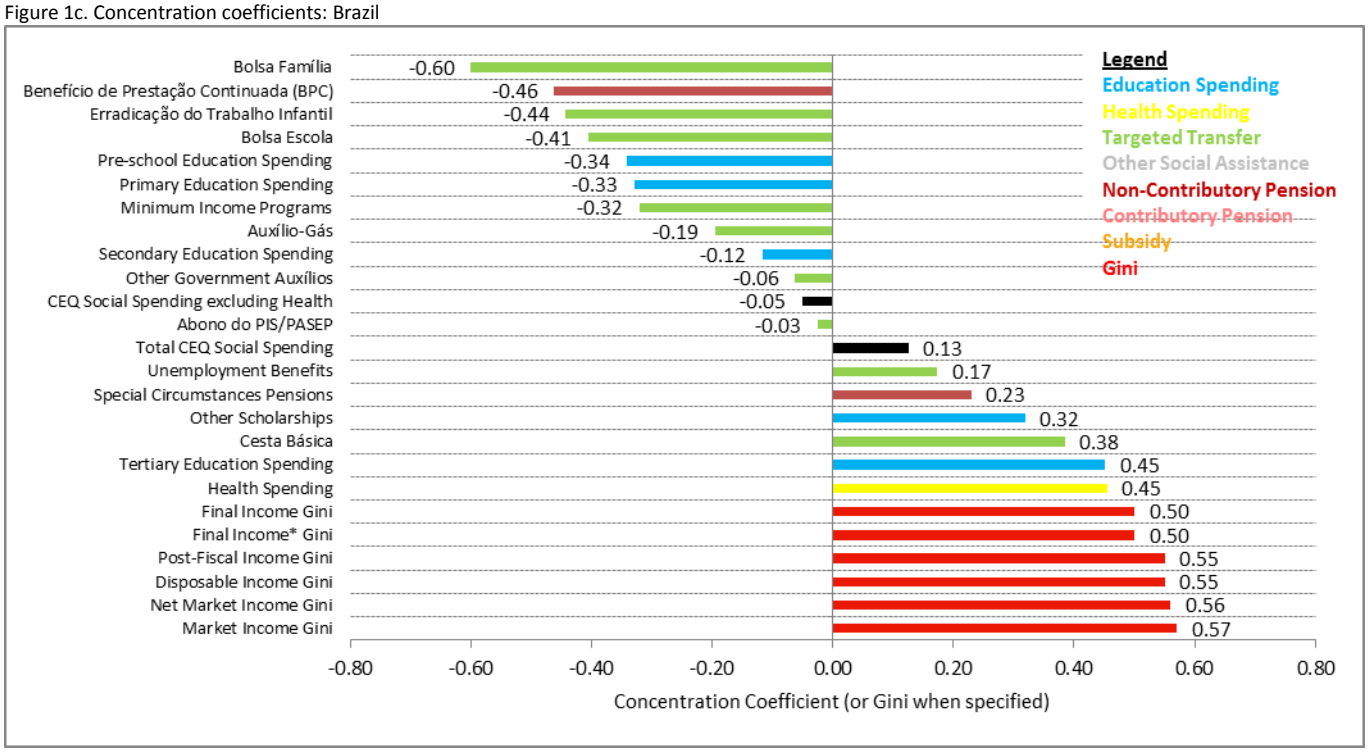

Table 5c. Concentration Coefficients and Budget Shares: Brazil

Program	Concentration Index	Size of Budget[a] (millions of reais)	As percent of CEQ social spending	As percent of redistributive spending	As percent of GDP
Bolsa Família	-0.60	12,299.82	2.3%	1.6%	0.4%
Benefício de Prestação Continuada (BPC)	-0.46	16,864.37	3.1%	2.2%	0.5%
Erradicação do Trabalho Infantil	-0.44	282.82	0.1%	0.0%	0.0%
Bolsa Escola	-0.41	0.36	0.0%	0.0%	0.0%
Pre-school Education Spending	-0.34	9,566.32	1.8%	1.3%	0.3%
Primary Education Spending	-0.33	75,081.87	13.8%	10.0%	2.4%
Minimum Income Programs[b]	-0.32	128.45	0.0%	0.0%	0.0%
Auxílio-Gás	-0.19	46.28	0.0%	0.0%	0.0%
Secondary Education Spending	-0.12	12,034.16	2.2%	1.6%	0.4%
Other Government Auxílios[c]	-0.06	419.93	0.1%	0.1%	0.0%
Abono do PIS/PASEP	-0.03	7,280.24	1.3%	1.0%	0.2%
Unemployment Benefits	0.17	18,599.90	3.4%	2.5%	0.6%
Special Circumstances Pensions	0.23	72,564.11	13.4%	9.7%	2.3%
Other Scholarships	0.32	3,540.46	0.7%	0.5%	0.1%
Cesta Básica	0.38	42.93	0.0%	0.0%	0.0%
Tertiary Education Spending	0.45	26,006.03	4.8%	3.5%	0.8%
Health Spending[d]	0.45	130,622.74	24.1%	17.4%	4.1%
CEQ Social Spending excluding Health[f]	**-0.05**	**412,299.76**	--	--	**12.9%**
Total CEQ Social Spending	**0.13**	**542,922.50**	--	--	**17.0%**
Total Redistributive Spending	**N/A[e]**	**750,204.22**	--	--	**23.6%**
Total Primary Spending	**N/A[e]**	**1,173,831.12**	--	--	**36.9%**
Total Government Spending	**N/A[e]**	**1,629,853.41**	--	--	**51.2%**

Notes:

a. Size of budget is for 2009 except for Auxílio-Gás and Bolsa Escola, which are for 2008. Note that Bolsa Familia was intended to absorb both of these programs; by 2009 both had essentially been eliminated but they still existed when the 2008-2009 POF survey began in 2008, and some families reported benefits from them.

b. Minimum income programs are administered at the sub-national (state and municipal) level and thus it is difficult to compile an aggregate for their size of budget. The figure given for size of budget here for Brazil's largest sub-national minimum-income program, São Paulo State's Renda Cidadã.

c. Other government auxílios includes a variety of additional government transfers, usually targeted to poor households to assist with: milk, communications, electricity, physical disability, medical plan, childbirth, droughts, closures, and obtaining an identification card (cartão cidadão). Given the lack of public accounts data on the size of budget of all of the different auxílio programs included, the size of budget for this category is based on benefits received according to the POF survey, multiplied by a scaling up factor of241/191, based on the finding by Barros, Cury, and Ulyssea (2007: Table 4) that direct transfers are underreported by that factor.

d. Overall health spending does not include *demais subfunções* to be consistent with the education budget (under education, demais subfunções is given as a sub-category of total education spending in public accounts, rather than distributed by level of education, thus spending by level is net of demais subfunções).

e. N/A means not applicable; some elements of redistributive spending were not captured by the survey so the concentration coefficient of redistributive spending was not calculated.

f. Brazil is the only country studied that does not include a question on its survey regarding use of health services or health coverage. Thus a secondary source (IBGE, 2009) was used to determine the distribution of health spending. Unfortunately this source does not break down health spending into sub-categories, some of which would probably be absolutely progressive while others would be relatively progressive (as we see in the other countries studied). Given the limitations of our secondary source, all of health spending must be considered relatively progressive. Thus we report figures both including and excluding health spending from the calculation.

Figure 1d. Concentration coefficients: Mexico

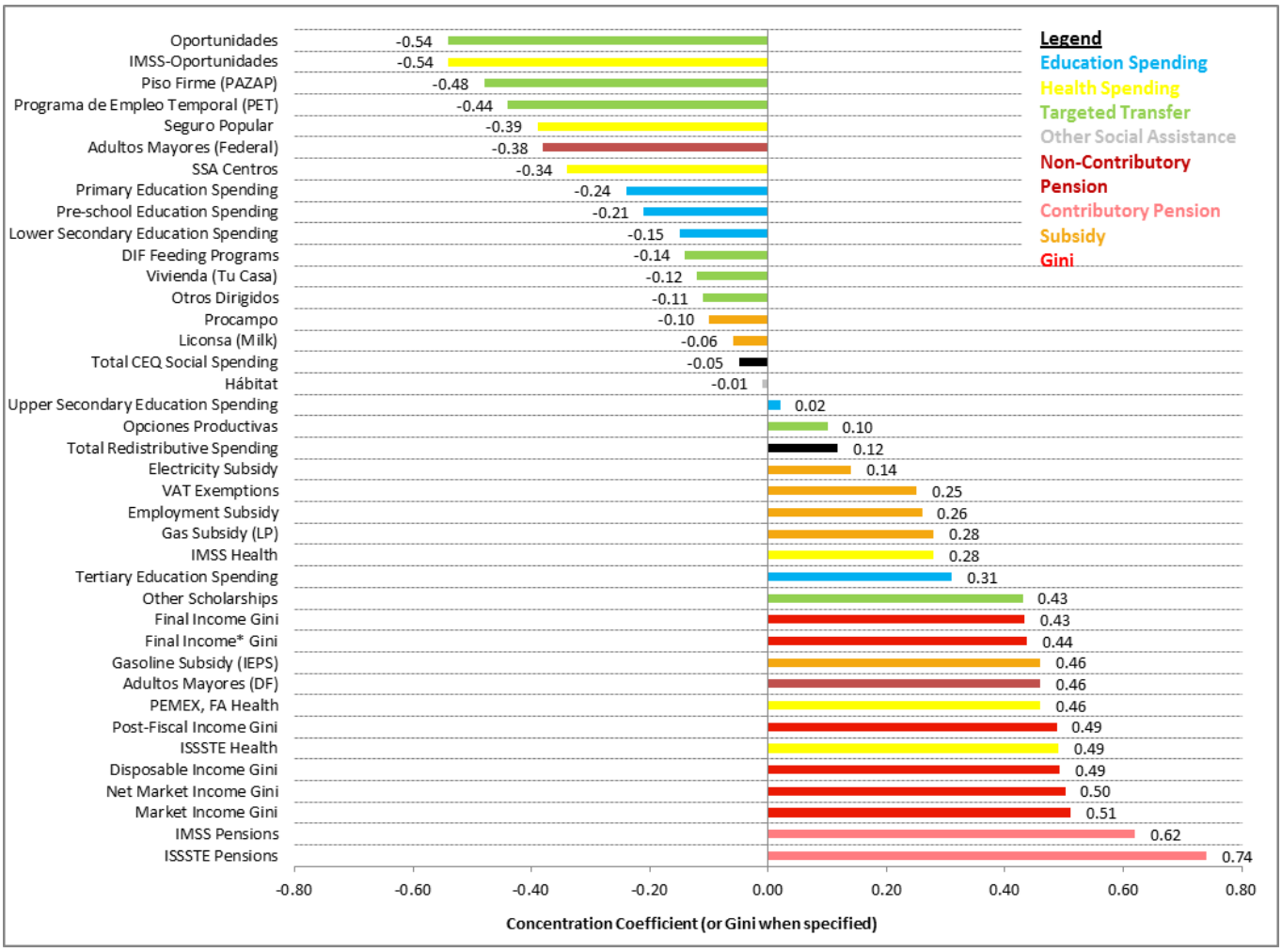

Table 5d. Concentration Coefficients and Budget Shares: Mexico

Program	Concentration Index	Size of Budget (millions of pesos)	As percent of CEQ social spending	As percent of redistributive spending	As percent of GDP
Oportunidades	-0.54	41,361.00	4.0%	2.4%	0.3%
IMSS-Oportunidades	-0.54	6,370.72	0.6%	0.4%	0.1%
Piso Firme (PAZAP)	-0.48	3,854.90	0.4%	0.2%	0.0%
Programa de Empleo Temporal (PET)	-0.44	1,281.00	0.1%	0.1%	0.0%
Seguro Popular	-0.39	36,428.87	3.5%	2.1%	0.3%
Adultos Mayores (Federal)	-0.38	9,536.77	0.9%	0.6%	0.1%
SSA Centros	-0.34	106,510.09	10.3%	6.3%	0.9%
Primary Education Spending	-0.24	209,879.56	20.4%	12.4%	1.7%
Pre-school Education Spending	-0.21	59,598.94	5.8%	3.5%	0.5%
Lower Secondary Education Spending	-0.15	129,699.56	12.6%	7.6%	1.1%
DIF Feeding Programs	-0.14	3,665.10	0.4%	0.2%	0.0%
Vivienda (Tu Casa)	-0.12	1,638.50	0.2%	0.1%	0.0%
Otros Dirigidos	-0.11	6,456.15	0.6%	0.4%	0.1%
Procampo	-0.10	14,198.50	1.4%	0.8%	0.1%
Liconsa (Milk)	-0.06	2,741.50	0.3%	0.2%	0.0%
Hábitat	-0.01	1,887.40	0.2%	0.1%	0.0%
Upper Secondary Education Spending	0.02	103,753.84	10.1%	6.1%	0.9%
Opciones Productivas	0.10	1,157.10	0.1%	0.1%	0.0%
Electricity Subsidy	0.14	99,934.00	9.7%	5.9%	0.8%
VAT Exemptions	0.25	210,998.00	20.5%	12.4%	1.7%
Employment Subsidy	0.26	34,756.00	3.4%	2.0%	0.3%
IMSS Health	0.28	44,267.23	4.3%	2.6%	0.4%
Gas Subsidy (LP)	0.28	24,262.00	2.4%	1.4%	0.2%
Tertiary Education Spending	0.31	89,437.55	8.7%	5.3%	0.7%
Other Scholarships	0.43	7,077.26	0.7%	0.4%	0.1%
PEMEX, FA Health	0.46	10,291.51	1.0%	0.6%	0.1%
Adultos Mayores (DF)	0.46	3,945.50	0.4%	0.2%	0.0%
Gasoline Subsidy (IEPS)	0.46	195,503.90	19.0%	11.5%	1.6%
ISSSTE Health	0.49	6,634.51	0.6%	0.4%	0.1%
IMSS Pensions	0.62	95,256.80	9.3%	5.6%	0.8%
ISSSTE Pensions	0.74	63,476.02	6.2%	3.7%	0.5%
Total CEQ Social Spending	**-0.05**	**1,029,746.00**	--	--	**8.4%**
Total Redistributive spending	**0.12**	**1,699,091.00**	--	--	**13.9%**
Total Primary Spending	**N/A[e]**	**2,667,693.92**	--	--	**21.9%**
Total Government Spending	**N/A[e]**	**2,894,806.50**	--	--	**23.7%**

Notes: N/A means not applicable; some elements of that spending definition were not captured by the survey so the concentration coefficient was not calculated.

Figure 1e. Concentration coefficients: Peru

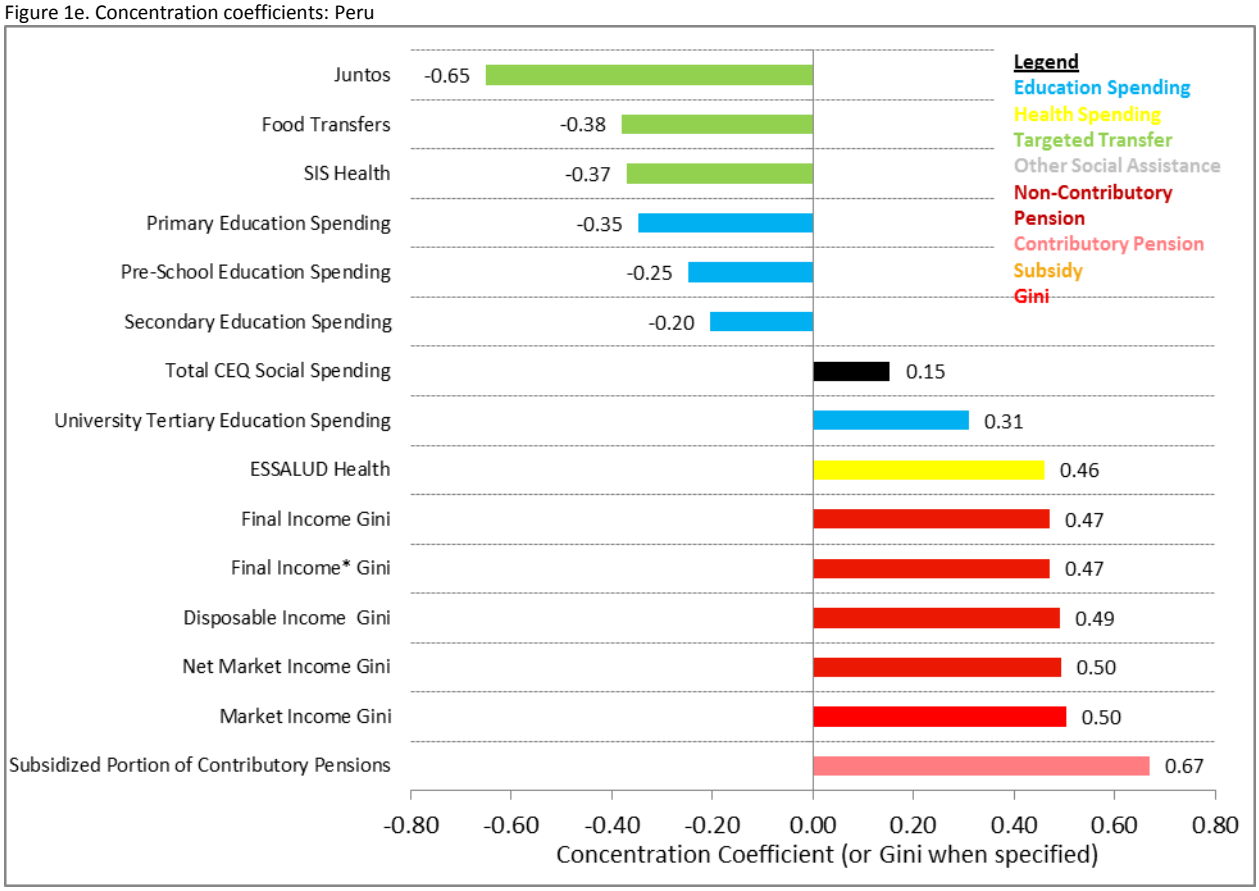

Table 5e. Concentration Coefficients and Budget Shares: Peru

Program	Concentration Index	Size of Budget (millions of pesos)	As percent of CEQ social spending	As percent of GDP
Juntos	-0.65	572.00	2.6%	0.1%
Food Transfers	-0.38	1,008.97	4.5%	0.3%
SIS	-0.37	464.20	2.1%	0.1%
Primary Education Spending	-0.35	5,086.73	22.8%	1.3%
Pre-School Education Spending	-0.25	1,357.08	6.1%	0.3%
Secondary Education Spending	-0.20	4,085.15	18.3%	1.0%
ESSALUD	0.46	5,156.68	23.1%	1.3%
University Tertiary Education Spending	0.31	1,156.85	5.2%	0.3%
	0.04	993.04	4.5%	0.3%
Pensions	0.67	2,006.00	9.0%	0.5%
Total CEQ Social Spending	**0.15**	**20,313.00**	**--**	**5.7%**
Total Primary Spending	**N/A**	**74,293.00**	**--**	**18.9%**
Total Government Spending	**N/A**	**79,304.00**	**--**	**20.2%**

Notes:
A figure for redistributive spending could not be generated for Peru because public accounts data estimating the size of the subsidy from IVA exemptions on food is not available.
N/A means not applicable; some elements of that spending definition were not captured by the survey so the concentration coefficient was not calculated.

Table 6– Description of All Programs in Tables 5 and Figures 1

Argentina:

Program Jefes y Jefas	Cash transfer program for unemployed with dependent children
Program Familias	CCT Program for families with dependent children, subject to vaccination and schooling conditions
Asignacion Universal por Hijo Simulated (AUH)	CCT Program for families with dependent children, subject to vaccination and schooling conditions more universal than Familias
Seguridad Alimentaria	Nutrition program for poor families, usually as IN Kind boxes or School/Communities Restaurants
Primary Education	Consolidated Spending on Primary Education
Health Primary Attention	Consolidated Spending on Health, including Hospitals and Public Health but not Obras Sociales
"Inclusion" Scholarships (Becas)	Scholarships for Students from 13 to 19 years of age to to stimulate the permanence, promotion and graduation from secondary school to children that assist to public schools and are at risk of educative failure and poverty
Moratorium/Non Contrib Pensions	Cash transfers for the elderly who had not fulfilled the requirement to receive contributory pensions of 30 years of contributions to the system, usually their amount is equal or less than the minimum contributory pension
PAMI-INSSJyP - Social assistance	Social Programs managed by the Institute of Health Insurance for the Elderly (PAMI-INSSJyP)
Secondary Education	Consolidated Spending on Secondary Education
Unemployment Insurance	Unemployment Insurance Program for the Unemployed in the Formal Sector
Obras sociales – Social	Social Programs managed by the Obras Sociales for formal workers
Other Federal Social Protection Programs	Other Programs not included such as Community Programs not easily targeted to population
Water and Sanitation	Consolidated Spending on Water Provision, sewages and sanitation
Housing	Consolidated Spending on providing subsidies in cash or in kind for improving or getting new housing (FONAVI is a major program included)
Municipal and Provincial Programs	All Municipal and Provincial Social Programs that are not easily included in the rest of Social programs
PAMI Health	Health Insurance and provision of health for the elderly managed by the Institute of Health Insurance for the Elderly (PAMI-INSSJyP)
Other Urban Services	Rest of Urban Services
Transportation Subsidies	Consolidated spending on subsidies to Buses, Trains and Subways mainly
Other Education	All Education Spending not included in Primary, Secondary and Tertiary Spending, including spending on Science and Technology
University Tertiary Education	Consolidated Spending on Tertiary University Education
Energy Subsidies	Consolidated spending on subsidies to Electricity, Gas, and Fuels
Subsidy Manufacturing Communications	Consolidated Spending on Subsidies to Firms in the Private Sector and Communications
Subsidies to Agriculture	Consolidated spending on subsidies to Agricultural Firms

Bolivia:

Literacy Program (Yo si puedo)	Literacy program. Created in 2006 in order to eradicate illiteracy. Beneficiaries of the program are people excluded and marginated from education system. The program concluded in December 2008. Since 2009 a Post literacy phase was implemented in order to achieve the initial phase.
Programa de Atención a la Niñez (PAN)	Created in 1998. The program is aimed at improving nutrition, health, education and protection conditions to children less than 6 years old. Initially administrated at the Central Government level, since 2006 it was implemented at local levels (municipalities).
Bono Juancito Pinto	Conditional cash transfer of 200 bolivianos per year. Created in 2006 with the objective to incentive school assistance during the eight first schooling years. Initially financed by Government Enterprises YPFB and COMIBOL. In 2007 it reached 1, 3 beneficiaries from 13.565 schools (81,5% in rural areas and 18,5% in urban areas). Since its implementation it has amplified its beneficiary universe including special education. Regular assistance must be proven in order to receive the transfer.
Primary Education	Primary education includes eight grades grouped into three sublevels, it is free and compulsory. First sublevel includes basic learning for children between 6 and 8 years old. Second sublevel includes essential learning and lasts three years. Third sublevel includes applied learning. In 2007, primary education spending accounted for 39% of total resources assigned to this sector.
Initial Education	Initial education. In 2007, this education level was organized in two sublevels. The first sublevel was oriented to children from 0 to 4 years old, at was not part of the formal system. The second sublevel (initial systematic learnings) was oriented to children from 4 to 6 years old and was a responsibility of Ministerio de Educación. The main responsibility of this public institution with respect to initial education is to extend coverage with quality and equity. With the new Education Law *Avelino Siñani-Elizardo Pérez*(2010) this level is free and compulsory.

Table 6– Description of All Programs in Tables 5 and Figures 1 Cont.

Desayuno escolar	Food Program for population between 4 and 19 years old. The program gives beneficiaries breakfast. It was initially financed by the international cooperation. It was executed and implemented by Central Government since 2005. Actually it is administrated by local governments at department and municipal levels.
Pensions (Sistema de Reparto Residual)	Sistema de Reparto Residual is the residual "pay as you go system" reformed in 1996. The actual log run social security is private and administrated by Administradoras de Fondos de Pension (AFP).
Bonosol	Non Contributory Pension, created in 1994. Beneficiaries are citizens 65 or more years old. It is cash transfer of 1,800 bolivianos per year. Initially financed by utilities from capitalized public enterprises. Since 2008 Bonosol was substituted by the Renta Dignidad, a transfer 600 bolivianos higher than Bonosol. In 2007 it represented 5% of Redistributive Spending.
Seguro Universal Materno Infantil (SUMI)	SUMI was created in 2003 with the objective to bring universal free health security to pregnant and reproductive age women and children less than 5 years old. The program was aimed at reducing maternal and child mortality by increasing health services utilization through the elimination of economic barriers.
Health (excluding SUMI)	Health includes the following public services: first level, free public security system, immunization programs, third level and Health Funds. In 2007 health spending represented 22% of Redistributive Spending.
Secondary Education	In 2007, Secondary Education was organized into two sectors: technological learning and differentiated learning. It lasts four grades. Secondary Education accounted for 9,5% of total Education Spending . With the new Education Law *Avelino Siñani-Elizardo Pérez* (2010), this level is free and compulsory.
Beneméritos de la Guerra del Chaco	Transfer to war veterans of the *Guerra del Chaco* war occurred between 1932 and 1935. In 2007 the program gave 1500 bolivianos to each beneficiary once a year. This transfer was created in 1971. Resources for this transfer come from Tesoro General de la Nación accounts.
Gas subsidy	Includes public resources assigned to liquefied gas, diesel and gasoline.
University Tertiary Education	At Tertiary Education level, public Universities four categories of academic degrees: Técnico medio universitario (two years of study); técnico universitario superior (three years of study); bachiller en ciencias o artes (four years of study); y licenciatura (4 to 5 years of study). In 2007 University Terciary Education Accounted for 39% of total Education Spending.
Technical Tertiary Education	Technical Tertiary Education. In 2007 this Education level accounted for 5% of total Education Spending.
Lactation and maternity subsidies	These two subsidies have been implemented since 1956 and were recognized as "Asignaciones familiares" by the Social Security Code. Beneficiaries are children of public and private workers affiliated to Health Funds (Cajas de Salud). Maternity subsidy gives a transfer equivalent to one minimum wage per child born alive. Lactation Subsidy consists in products assigned monthly through Health Funds (Cajas de salud).

Brazil:

Bolsa Família	CCT program for poor families with children, conditional on school attendance, vaccinations, and pre- and post-natal care. Also has an unconditional cash transfer component for extremely poor households, regardless of whether the household has children.
Benefício de Prestação Continuada (BPC)	Non-contributory pension for elderly poor. Beneficiaries receive one minimum salary per month.
Erradicação do Trabalho Infantil	Child labor eradication programs. Includes PETI, a CCT program mostly absorbed by Bolsa Família but only gradually phased out, and other social initiatives and cash transfers aiming to eradicate child labor.
Bolsa Escola	CCT program for poor families with children. This program has been gradually absorbed by Bolsa Família; it was very small in 2008 and almost non-existent in 2009. We include it in the analysis because some families report receiving benefits.
Pre-school education spending	Includes both *creche* (early childhood development) and *infantil* (pre-primary) education benefits; grouped into one category because in public accounts, spending is grouped into this category. Includes spending at the federal, state, and municipal levels.
Primary education spending	Spending on *ensino fundamental* (grades 1 through 9) at the federal, state, and municipal levels.
Minimum income programs	Includes a number of sub-national minimum income programs, which can be conditional or unconditional cash transfers, as well as *Bolsa Renda*. The largest sub-national program is São Paulo State's *Renda Cidadã,* implemented in 2001. In 2011, Rio de Janeiro State implemented the minimum income program *Renda Melhor*.
Auxílio-Gás	Unconditional cash transfer to extremely poor families intended to subsidize the cost of gas. This program was absorbed by the unconditional component of Bolsa Família, but it still existed in 2008 and some families report receiving benefits.
Secondary education spending	Spending on *ensino médio* (grades 10 through 12) at the federal, state, and municipal levels.
Other government auxílios	Includes a variety of additional government transfers, usually targeted to poor households to assist with: milk, communications, electricity, physical disability, medical plan, childbirth, droughts, closures, and obtaining an identification card (*cartão cidadão).*
Abono do PIS/PASEP	Transfer to formal sector workers earning less than 2 minimum salaries and enrolled in the system for at least 5 years. Note that PIS/PASEP is a contributory system, but *abonos* are considered to be a non-contributory element of the system, while *rendimento* and *saque* from PIS/PASEP are the contributory elements and are included in market income.
Unemployment benefits	Includes *seguro desemprego, salário desemprego, auxílio desemprego*, and the program for the young unemployed *Agente Jovem.* The budget size listed is for its largest component only, *seguro desemprego.*
Special circumstances pensions	These pensions (*pensões* and *outros benefícios*) are funded by the contributory pension system, but they are considered non-contributory, as opposed to the normal pensions paid by the system (*aposentadorias* and benefício mensal*).* The special circumstances pensions are paid in the case of an accident at work, sickness, or related idiosyncratic shock.
Other scholarships	Other education-related scholarships paid for by the government, excluding Bolsa Família and Bolsa Escola. Also includes *credito educativo* (education credit). A full list of the included scholarships is available upon request.
Cesta básica	Transfer program to assist families with buying the basic food basket. In normal times it is targeted but during times of high food prices it can be more lenient.

Table 6– Description of All Programs in Tables 5 and Figures 1 Cont.

Tertiary education spending	Includes both university spending and technical tertiary education spending, which are grouped together in public accounts.
Health spending	Health spending at the federal, state, and municipal levels. The size of budget is net of *demais subfunções* (other subfunctions) to be consistent with the education budget (under education, *demais subfunções* is given as a sub-category of total education spending in public accounts, rather than distributed by level of education, thus spending by level is net of *demais subfunções*).

Mexico: Table 6 – Description of All Programs in Table 5 and Figure 1

Health and Pensions	
IMSS	The principal social security institution providing health services (and other benefits) to private sector workers, created in 1943. Its pension system was reformed in 1997 to a "fully-funded", defined contributions scheme administered by private entities.
ISSSTE	The principal social security system covering federal and state government bureaucracy and workers.
Health Services SSA	Health services for the uninsured provided by the state and federal government Health Ministries.
Seguro Popular	Health program created in 2004 to provide basic health insurance to the (formally) uninsured, with a projected coverage of 12 million households by 1010.
IMSS-Oportunidades	System of rural health clinics for the uninsured targeted at poorer localities, administered by IMSS but funded by the Health Ministry, created in 1970's as IMSS-Coplamar.
Consumption Subsidies	
Gasoline and other fuels subsidy	Special tax on gasoline (IEPS) has become a negative tax, or a subsidy, since 2006, as price adjustments lagged the increase.
VAT exemptions	Fiscal spending associated to value-added tax (VAT) exemptions on food and prescription drugs, principally.
Agricultural Subsidies	
Procampo	Agricultural subsidy created in 1994 to compensate producers of basic crops for the opening up of agricultural markets under the North American Free Trade Agreement, providing a direct transfer per hectare (instead of output as it used to). Agricultural Ministry.
Agricultural Subsidy (Ingreso Objetivo)	Agricultural subsidy based on a target price. Agricultural Ministry.
Programs Targeted to the Poor	
Oportunidades	CCT program created in 1997, currently covering 5 million households, providing direct monetary transfers conditional on school attendance and health visits. Originally targeted at poor rural communities, and basic education in 2001 it was gradually extended to urban localities and higher education services. Social Development Ministry.
Vivienda (Tu Casa)	Housing credit program targeted to the uninsured. Social Development Ministry.
DIF Feeding Programs	School breakfast and kitchen program.
Liconsa (Milk)	Targeted milk subsidy program, providing rations of milk at half price in urban localities. Social Development Ministry.
Programa de Empleo Temporal (PET)	Workfare program created in 1995, providing a maximum of 88 days of work for low wage (originally 90 percent of the minimum wage, at present 99 percent).
Opciones Productivas	Support for productive projects: organization, technical assistance, credit. Social Development Ministry.
Rural Old Age Pension	Universal rural non-contributive basic pension for the population 70 years or older created in 2007, with a 500 pesos (37 US dollars) pension per month.
Other Scholarships	This category refers to the scholarship income reported by households in the ENIGH income and expenditure survey, excluding Oportunidades scholarships.
Piso Firme (PAZEP)	Programa de Apoyo a Zonas de Atención Prioirtaria. Provides a cement finance to purchase material inputs to build cement floors for houses with dirt floors in poor rural localities.
Hábitat	Urban development, infrastructure and participation program. Social Development Ministry.
Microrregiones	Rural development program providing infrastructure and productive inputs to detonate local economic development. Social Development Ministry.

Peru: Table 6 – Description of All Programs in Table 5 and Figure 1

Juntos	CCT program for poor families with children, conditional on education and health requirements.
Programa Integral de Nutrición (PIN)	Food program (part of Programa Nacional de Asistencia Alimentaria [PRONAA]) that gives beneficiaries food baskets and food supplements through health posts, pre-schools and schools.
Programa de Complementación Alimentaria (PCA)	Food program (part of Programa Nacional de Asistencia Alimentaria [PRONAA]) that gives food and supplements through kitchens and shelters, among others.
Vaso de Leche	Food program that gives breakfast to beneficiaries 5 times a week. It is run directly by all provincial and district municipalities. It relies heavily on mothers' clubs.
ESSALUD	Public contributory health insurance system.
SIS	Social program that guarantees free health care to Peruvians who are living in poverty and extreme poverty.

Table 7. Composition of Spending and Revenues by Progressivity

		Argentina		Bolivia	Brazil[e]		Mexico		Peru
					Including health	Excluding health			
CEQ Social Spending excluding contributory pensions[a]	Progressive - Absolute	60.4%		31.8%	34.8%	52.6%	72.2%		63.2%
	Progressive - Relative	39.6%		68.2%	65.2%	47.4%	27.8%		36.8%
	Regressive	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%
	Total	100.0%		100.0%	100.0%	100.0%	100.0%		100.0%
CEQ Social Spending including subsidized portion of contributory pensions[b]	Progressive - Absolute	N/A[g]		N/A[g]	N/A[g]	N/A[g]	56.7%		57.45%
	Progressive - Relative	N/A		N/A	N/A	N/A	27.3%		33.38%
	Regressive	N/A		N/A	N/A	N/A	16.0%		9.17%
	Total	N/A		N/A	N/A	N/A	100.0%		100.0%
Redistributive Spending including subsidized portion of contributory pensions[c]	Progressive - Absolute	44.5%		50.9%			42.8%		
	Progressive - Relative	49.2%		49.1%			40.8%		
	Regressive	6.2%		0.0%			16.4%		
	Total	100.0%		100.0%			100.0%		
Tax Revenues including social security contributions[d]		Lower bound	Upper bound				Excl. oil "poll tax"	Incl. oil "poll tax"	
	Progressive	6.4%	15.9%		52.3%		34.5%	16.6%	
	Regressive	93.6%	84.1%		47.7%		65.5%	83.4%	
	Total	100.0%	100.0%		100.0%		100.0%	100.0%	
Tax Revenues excluding social security contributions		Lower bound	Upper bound				Excl. oil "poll tax"	Incl. oil "poll tax"	
	Progressive	8.2%	20.4%		34.8%		36.5%	17.1%	
	Regressive	91.8%	79.6%		65.2%		63.5%	82.9%	
	Total	100.0%	100.0%		100.0%		100.0%	100.0%	
Spending as a percent of GDP	Total Spending	40.2%		41.9%	51.2%		23.7%		20.2%
	Primary Spending	37.6%		40.6%	36.9%		21.9%		18.9%
	Redistributive Spending including subsidized portion of contributory pensions	21.5%		16.1%	17.4%		11.5%		Not available[f]
	CEQ Social Spending including subsidized portion of contributory pensions	15.8%		14.4%	17.0%		8.4%		5.7%
	Direct transfers	3.1%		5.1%	4.1%		0.6%		0.4%
Spending as a percent of social spending	Direct transfers	19.5%		35.1%	24.3%		7.3%		6.4%

Notes:

General note: the incidence of taxes was obtained from secondary sources mainly so the estimates of progressive and regressive shares should be viewed with great caution

a. Defined as the sum of education, health, and social assistance spending. Social security spending is not included.

b. Defined as the sum of education, health, social assistance spending, and the subsidized portion of social security spending.

c. Redistributive spending includes various categories that are not included in "CEQ Social Spending excluding contributory pensions": the subsidized portion of social security, indirect consumer subsidies (e.g., food, electricity and gasoline subsidies), some producer subsidies (e.g., agricultural producer subsidies), and "social" tax expenditures (e.g., exemption of VAT for certain foodstuffs).

d. For Argentina, the incidence of taxes is taken from various secondary studies including Pessino (2010) and Gasparini (1998). These were not ranked by market income, hence we are not able to distribute taxes exactly based on progressivity/regressivity as defined here, so for Argentina we give an approximated range based on available information. The column "lower bound" corresponds to the lower bound of progressivity, when inflation tax (regressive in relative terms) is included in the calculation and export taxes are considered relatively regressive. The column "upper bound" corresponds to the upper bound of progressivity, when export taxes are considered relatively progressive. For Peru and Bolivia, the percent of tax revenues that are progressive or regressive was not calculated because indirect taxes are not captured by the survey and secondary sources were insufficient. Indirect taxes are treated as an aggregate group; disaggregating them results in a higher percent of tax revenues that is progressive because a portion of indirect taxes are progressive, but they are regressive as an aggregate group. For Mexico, the two columns report the percentages when an oil "poll tax" is excluded and included; see Scott (2010) for more detail about the treatment of an oil "poll tax".

e. Brazil is the only country studied that does not include a question on its survey regarding use of health services or health coverage. Thus a secondary source (IBGE, 2009) was used to determine the distribution of health spending. Unfortunately this source does not break down health spending into sub-categories, some of which would probably be absolutely progressive while others would be relatively progressive (as we see in the other countries studied). Given the limitations of our secondary source, all of health spending must be considered relatively progressive. Thus we report figures both including and excluding health spending from the calculation.

f. A figure for redistributive spending could not be generated for Peru because public accounts data estimating the size of the subsidy from IVA exemptions on food is not available.

g. N/A indicates not applicable because that country did not have a social security deficit in the year of the survey.

Table 8. Coverage and Leakages of Flagship Programs

		Share of benefits going to...			Percent of beneficiaries who are...			Percent of poor who are beneficiaries			Percent of	
		Poor <2.5	Poor <4	Non-poor	Poor <2.5	Poor <4	Non-poor	Poor <2.5	Poor <4	Total Population	CEQ Social Spending	GDP
ARGENTINA												
Jefas y Jefes de Hogar		37.70%	57.80%	42.20%	37.71%	58.11%	41.89%	4.71%	4.28%	1.83%	0.5%	0.1%
Familias		39.40%	62.50%	37.50%	39.98%	61.91%	38.09%	34.17%	31.20%	12.53%	0.6%	0.1%
Unemployment Insurance		28.70%	40.90%	59.10%	28.86%	41.93%	58.07%	1.97%	1.68%	1.00%	0.5%	0.1%
Becas		25.20%	39.80%	60.20%	19.07%	33.91%	66.09%	1.36%	1.42%	1.04%	0.1%	0.0%
Non Contributory Pensions		38.80%	48.10%	51.90%	28.92%	40.67%	59.33%	38.63%	32.04%	19.58%	14.7%	2.3%
Food		39.70%	58.90%	41.10%	42.37%	63.85%	36.15%	19.48%	17.31%	6.74%	4.1%	0.7%
Asignación Universal Por Hijo (simulated)		37.60%	60.00%	40.00%	33.35%	54.55%	45.45%	48.26%	46.55%	21.22%	2.8%	0.4%
Above transfers[b]		38.40%	51.10%	48.90%	30.61%	47.19%	52.81%	83.32%	75.75%	39.91%		
BOLIVIA												
Bono Juancito Pinto		38.15%	61.36%	38.64%	38.15%	61.36%	38.6%	19.97%	19.30%	13.58%	2.0%	0.3%
Desayuno Escolar		32.64%	54.87%	45.13%	33.43%	55.73%	44.27%	33.09%	33.14%	25.69%	0.1%	0.0%
PAN		47.98%	62.02%	37.98%	47.98%	62.02%	37.98%	1.70%	1.32%	0.92%	0.3%	0.0%
Bono Sol		40.11%	52.60%	47.40%	40.11%	52.60%	47.40%	8.01%	6.31%	5.18%	6.0%	0.9%
Subsidio de Lactancia		0.15%	9.74%	90.26%	0.34%	9.90%	90.10%	0.01%	0.11%	0.47%	0.7%	0.1%
Bono de Natalidad		0.00%	10.50%	89.50%	0.00%	10.50%	89.50%	0.00%	0.09%	0.36%		
Above transfers		34.90%	51.10%	48.90%	34.40%	54.72%	45.28%	42.82%	40.91%	32.29%		
BRAZIL												
Bolsa Família		49.26%	72.23%	27.77%	46.84%	70.29%	29.71%	54.67%	47.07%	17.80%	2.3%	0.4%
Other scholarships		16.22%	19.72%	80.28%	18.04%	30.62%	69.38%	1.67%	1.62%	1.41%	0.7%	0.1%
Benefício de Prestação Continuada (BPC)[a]		37.02%	56.88%	43.12%	38.42%	57.67%	42.33%	5.43%	4.68%	2.16%	3.1%	0.5%
Unemployment Benefits		6.21%	13.59%	86.41%	10.64%	19.73%	80.27%	3.18%	3.38%	10.32%	3.4%	0.6%
Special circumstances pensions from INSS		9.91%	16.43%	83.57%	17.94%	29.07%	70.93%	12.15%	11.29%	4.56%	13.4%	2.3%
Other social programs		11.17%	18.38%	81.62%	12.96%	22.98%	77.02%	2.42%	2.46%	2.85%	1.4%	0.2%
Above transfers		15.36%	24.28%	75.72%	30.56%	47.27%	52.73%	69.29%	61.48%	34.58%		1.4%
MEXICO												
Principal Monetary Transfers	Oportunidades	41.33%	65.61%	34.39%	42.38%	66.41%	33.59%	61.85%	49.58%	19.70%	4.0%	0.3%
	Adultos Mayores	35.20%	53.51%	46.49%	27.28%	42.34%	57.66%	8.85%	7.02%	4.38%	0.9%	0.1%
	Procampo	29.30%	43.20%	56.80%	48.71%	66.86%	33.14%	13.84%	9.71%	3.83%	1.4%	0.1%
	Above transfers	37.80%	58.95%	41.05%	38.49%	60.64%	39.36%	66.79%	53.82%	23.42%		
Becas (excluding Oportunidades)		13.70%	19.39%	80.61%	10.39%	23.43%	76.57%	3.57%	4.12%	4.64%	0.7%	0.1%
Other social programs		25.68%	38.53%	61.47%	33.29%	47.65%	52.35%	3.88%	2.84%	1.57%	0.0%	0.0%
Seguro Popular		29.31%	52.10%	47.90%	29.31%	52.10%	47.90%	41.49%	37.72%	19.10%	3.5%	0.3%
Contributory Health Insurance		1.70%	8.51%	91.49%	1.68%	6.86%	93.14%	4.85%	10.17%	39.10%		
Contributory Pensions (Imputed by pensioner)		0.60%	3.77%	96.23%	0.73%	3.87%	95.40%	0.16%	0.44%	2.98%	4.8%	0.8%
Contributory Pensions (Imputed by pension income)		0.22%	1.58%	98.42%	0.73%	3.87%	95.40%	0.16%	0.44%	2.98%		
PERU												
Juntos		56.00%	81.00%	19.00%	58.61%	83.17%	16.83%	35.74%	26.59%	9.20%	2.6%	0.1%
Food Transfers		32.00%	54.00%	46.00%	29.05%	50.88%	49.12%	39.44%	36.21%	20.47%	4.5%	0.3%
Above transfers		46.88%	70.63%	29.38%	34.22%	56.77%	43.23%	57.65%	50.15%	25.41%		

Notes:

a. Recipients of BPC often mis-report this income source as a pension from the contributory system.
b. With "Share of benefits going to…" all transfers refers to all transfers above. "With Percent of beneficiaries who are… " and Percent of poor who are beneficiaries," all transfers refers to at least one of the above

Table 9. Description of Flagship Transfer Programs

Program Name	Type of Program	Target Population	Number of Beneficiaries (year of survey)	Year of First Implementation	Budget (year of survey, local currency per year)	Acting Mechanism	Estimated Impact
Argentina							
Jefes y Jefas de Hogar Desocupados (JJHD)	Cash transfer (theoretically conditional but not in practice)	Those formally deemed eligible to participate were unemployed household heads with dependents (children aged less than 18 or incapacitated), regardless of whether the family lived in poverty; contrary to its predecessor, Jefes did not have an explicitly stated poverty focus (Galasso and Ravallion, 2004).	450,000 approximately according to public accounts; the number continues to decrease as beneficiaries move to the labor force and other programs. The number according to the survey is not reported here because the survey only covers urban areas.	2002 (It evolved from the Programs Trabajar I, II and III, 1996-1999)	878 million pesos	In order to enroll, the potential participants had to request participation through the local municipality or through local offices of the Ministry of Labor. JJHD gives 150 pesos to each beneficiary. The co-responsibility or condition that must be met by the beneficiary could be related to work, skills-training, or education. Among the former, efforts related to productive or community projects run by municipalities or other public or private non-profit organizations stand out, as well as (to a lesser extent) the incorporation of beneficiaries into companies through formal employment contracts. The other possible co-responsibilities involve attending classes for skills-training or formal education at the primary or secondary level. The daily commitment to the co-responsibilities must be not less than four hours and not greater than six. Although the program originally required workfare in exchange for the transfer, it is not clear that the condition was fulfilled by most.	The aim of only targeting unemployed heads of households with dependents was clearly not realized; indeed, Galasso and Ravallion (2004) results suggest that a large share of participants were women who would have not otherwise have been in the labor force. About half of the employment gain due to the program came from unemployment and half from inactivity. We estimate that the program reduced Argentina's unemployment rate by about 2.5 percentage points. This is less than half of previous estimates that have assumed that all Jefes participants would have otherwise been unemployed. Factoring in the foregone incomes, the program had a small effect on the overall poverty rate, though a more sizeable impact on the incidence of extreme poverty (see Galasso and Ravallion (2004) for the early evaluation of the program). Most authors following this initial evaluation (see Bertranou and Paz (2007)) emphasize the increase in labor force participation brought about by this Program, especially from women. See Bertranou and Paz (2007) for a thorough review of other aspects in the evaluation of this program.
Familias para la Inclusion Social	Conditional Cash Transfer (CCT)	Poor families with children younger than 19 years old.	695,177 families according to public accounts. The number according to the survey is not reported here because the survey only covers urban areas.	2006 (successor of the Programa de Ingreso para el Desarrollo Humano (IDH) and a partial recipient of beneficiaries from Programa Jefes y Jefas de Hogar Desocupados (JJHD))	2,160 million pesos	The amount of the transfer depends on the quantity of children. The average beneficiary household had 2.9 children younger than 19 years old and received 215 pesos (in October 2007). The objective is to reduce the intergenerational transmition of poverty; the conditions are based on education conditions (minimum level of school attendance for children between 5 and 18 years old) and health (requirements for children and pregnant women).	In 2006 an evaluation of the impact of Plan Familias para la Inclusión Social was released, four years after the program was launched (see Rosas, 2007). The evaluation was supervised by SIEMPRO and carried out by the Universidad Nacional de Tres de Febrero. An increase in school attendance, especially in the initial levels (EGB1 and EGB2), is an important accomplishment of the program. However, it should be noted that among beneficiary adolescents between the ages of 15 to 17, the percent that are not a part of the education system is still significant (13%). More information can be found in the study mentioned.

Table 9.Description of Flagship Transfer Programs Cont.

Asignacion Universal por Hijo (AUH)	CCT	Boys, girls, and adolescents in families that are unemployed or in the informal sector and do not receive another form of family allowance. If employed in the informal sector the salary should be inferior to the minimum wage.	Goal: 1,650,000 families	December 2009	Budgetary goal: 7000 million pesos	The program is funded by the Fondo de Garantía de Sustentabilidad del ANSES. Among the characteristics of this program, it stands out that recipients of AUH cannot receive any other type of social plan and that the spirit of the program is to gradually phase out several others and replace them. The program explicitly excludes workers in the informal sector that earn more than the monthly minimum salary (Salario Mínimo Vital y Móvil). With respect to the health and education conditions, 20% of the benefit will be paid (credited to a bank account) at the beginning of each school year, as long as the beneficiary presents the required certification of vaccinations and school attendance. The current benefit is 180 pesos per month per child with a maximum of five children per family	N/A
Non-contributory pensions	Non-contributory pension	Various; see "Acting Mechanism"	In the year 2008, 117,936 beneficiaries of Pensiones Graciables (given by Congressmen), 204,680 beneficiaries from Special Laws and 365,964 given by the Ministry of Social Development. From 2004 to 2008 the latter increased from 393,700 beneficiaries to 688,580 beneficiaries.	1948	6093 million pesos (estimated using number of pensioners in 2008)	These pensions have a long history in Argentina and are regulated by special laws. A portion of them are called “Pensiones Graciables” and are given by Congressmen to whom they consider deserving (supposedly poor) , another part were instituted by different laws and given to ex-presidents, veterans of Malvinas, families of the disappeared, some bishops, and others, and the last part are social protection non-contributory pensions given by the Ministry of Social Development for the disabled, old age (more than 70), and mothers of seven or more children.	

Table 9.Description of Flagship Transfer Programs Cont.

Moratoria Previsional	Non-contributory or partially contributory pension	Elderly who had not fulfilled the requirement to receive contributory pensions of 30 years of contributions to the system.	Approximately 2,000,000 beneficiaries at the end of 2009 (by mid-2010 there were reported 2,332,295 beneficiaries of the program).	2005	20540 million pesos	The moratorium law which is still in place allows an individual to pay its accumulated debt with the social security system at a discount as long as the debt was accumulated prior to 1993 and the amount is calculated between the year in which the individual was 18 years old and 1993. This moratorium law was enacted in 1995, but in 2005 it was transformed into a permanent entitlement. The number of beneficiaries will decline over time and eventually reach zero since it has a fixed date until when the moratorium is applied. For an eligible individual, he or she will receive 800 pesos per month (moratorium pension in 2009 equivalent to roughly 250 dollars per month) minus the moratorium contribution.	According to data from the Administración Nacional de Seguridad Social, since 2005, when the new moratoria of the Plan de Inclusión Previsional was implemented, a total of 2.5 million people were integrated into the pension system. The coverage rate of the pension system is 86.7%, reaching 6,326,543 beneficiaries, between retired people, national pensioners and non-contributory pension recipients. In 2003, before the moratoria previsional was introduced, the coverage rate of Argentina's pension system was only 57% (ANSES).
Bolivia							
Bono Juancito Pinto	Conditional Cash Transfer	Children between 6 and 17 years old attending public schools	1,324,000 individuals according to program reports; 1,317,522 according to the survey	2006	294 million bolivianos	The program gives 200 bolivianos to each student once a year conditioned on having attended school during the year.	Previous evaluations have found low effects in reducing poverty and inequality (Yañez, 2010).
Desayuno Escolar	Food Program	Population between 4 and 19 years old.	1,985,158 according to program evaluation report 2008, not available for 2007; 2,491,371 according to the survey	2006	8.1 million bolivianos	The program gives beneficiaries breakfast. It was initially financed by the international cooperation. It was executed and implemented by Central Government since 2005. Actually it is administrated by local governments, at department and municipal levels.	Nutrition effects must be improved by introducing new products oriented to each targeted group. Parents must be informed about the limits of the program since some results of the evaluation find that beneficiaries of the program receive less food at home that the received portion before the program. This substitution effect must be avoided in future interventions (FAM, 2008)
Programa de Atención a la Niñez (PAN)	In-kind transfer	Children less than six years old.	53,021 from program evaluation report 2008, not available for 2007; 89,288 according to the survey	1998	44.3 million bolivianos	The program is aimed at improving nutrition, health, education and protection conditions to children.	The lack of systematization of local practices has not permitted a consistent impact evaluation of the program.

Table 9.Description of Flagship Transfer Programs Cont.

Bonosol	Non Contributory Pension	All citizens 65 or more years old	493,437 according to program reports; 502,820 according to survey	1994	888 million bolivianos	The program gives 1,800 bolivianos to citizens once a year. Note that the program was replaced by the Renta Dignidad in 2008.The amount of Renta Dignidad is 600 bolivianos higher than Bonosol.	Previous evaluations found distributive and reducing poverty effects (Jemio, 2006). This evaluation finds a small Gini reduction in household income from 0,5210 to 0,5168 for household survey 2003-04 data. The distribution of benefits of this transfer favors poorer households. 40% of the beneficiary households belong to the three poorest deciles, this percentage increases to 60% in rural areas; showing a huger distributive effect in these areas.
Maternity subsidy	Cash Transfer program	Children of public and private workers affiliated to Health Funds (Cajas de Salud)	35,325 according to survey	1956	111 million bolivianos	Administrated by Health Funds.	Lack of information did not allow previous evaluations.
Lactation Subsidy	In-kind transfer	Children of public and private workers affiliated to Health Funds (Cajas de Salud)	45,593 according to survey	1956	111 million bolivianos	Products assigned monthly through Health Funds (Cajas de salud).	Lack of information did not allow previous evaluations.
Brazil							
Bolsa Família	CCT	Poor families with children under 18 or pregnant women, and all extreme poor (the latter group is regardless of having children).	12.37 million households according to public accounts; 7,958,558 million households according to survey	2003	12.45 billion reais	Eligibility is determined through partially-verified means testing. Families in the program have an electronic card they can used to withdraw the monthly transfer at ATM machines. The transfer amount was, in September 2009, 22 reais per child 0-15 (up to three children), 33 reais per adolescent 16-17 (up to two adolescents) for families with income below 140 reais per capita per month and at least one child under 18 or pregnant woman (the "variable benefit"), and an additional 68 reais for households with income below 70 reais per capita per month, regardless of whether there are children (the "fixed benefit"). The conditions are pre-natal and post-natal care sessions for pregnant women, adherence to a calendar of vaccinations for children 0-5, and a minimum level of school attendance for children ages 6-17. There are no conditions for the "fixed benefit" given to extremely poor households.	On poverty: Higgins (2011) finds that in 2009, Bolsa Família caused between a 12 and 18% decrease in the headcount index, between a 19 and 26% decrease in the poverty gap, and between a 24 and 31% decline in the squared poverty gap at the national level, and it should be noted that the impact was much higher in rural areas. On inequality: Barros et al (2010) find Bolsa Família and its predecessor programs were responsible for 13% of the observed reduction in inequality from 2001-2007; also see Soares, Ribas, and Soares (2010), Soares et al. (2009), and Barros, Carvalho, and Franco (2007). On adult labor supply: negligible or no impact (Foguel and Barros, 2010, Teixeira, 2008, Tavares, 2010). On child labor supply: some impact on decision to work (Kassouf, Ferro, and Levinson, 2010). Various studies show increased school attendance among recipient children; there is a lack of comprehensive evaluations of education outcomes. On health outcomes: no significant impact.

Table 9.Description of Flagship Transfer Programs Cont.

Benefício de Prestação Continuada (BPC)	Non-contributory pension	Elderly poor (over 65 years old) and incapacitated poor deemed incapable of working	3,166,845 beneficiaries; 1,297,785 according to survey (note it has been documented that some households mis-report BPC under INSS pensions).	1995 (written into the 1988 constitution but effectively implemented in 1995 [Medeiro, Britto and Soares, 2008])	16.86 billion reais	Monthly monetary transfer of one minimum salary (465 reais per month in September, 2009) to elderly poor or incapacitated poor. Elderly means over 65 years old and incapacitated is determined by doctors based on ability to work. The definition of poor for BPC is household per capita income of less than one quarter minimum salary (116.25 reais per month in September, 2009).	On inequality: Barros et al (2010) find that BPC was responsible for 10% of the observed reduction in inequality in Brazil from 2001-2007.
Brasil Sem Miséria	Mixed	Extreme poor (household per capita income of 70 reais per month or less) who are excluded from the current safety net system	0	2011	0	Poverty mapping will be extensively used to identify areas with high concentrations of poor excluded from safety net system, and professional teams will be in charge of locating excluded extreme poor in assigned areas. One goal is that an estimated 800,000 extremely poor families eligible for Bolsa Família but not receiving benefits will be enrolled. In rural areas, the program will provide professional technical assistance to farmers, improve irrigation systems, assist in the production of food products and access to markets, provide improved seeds and other agricultural technology to poor farmers, and provide a biannual monetary transfer of 2400 reais to each eligible family for two years to buy inputs and equipment. In urban areas, the program will focus on the insertion of Bolsa Família recipients in the labor market. 200 types of free certification courses will be offered, along with free learning materials, lunch, and transportation. The government will produce an "opportunities map" to help locate labor market opportunities, and incentives will be provided for public and private companies that hire Bolsa Família recipients.	N/A

Table 9.Description of Flagship Transfer Programs Cont.

Mexico							
Oportunidades	CCT	Originally targeted at poor rural communities, and basic education in 2001 it was gradually extended to urban localities and higher education services. Social Development Ministry.	Administrative data: 5.0492 million families and 23.3 million beneficiaries in 2008. Survey: 20.9 million beneficiaries.	1997	41,361 million pesos	Provides direct monetary and in kind transfers conditional on school attendance and health visits. Targeted geographically and at the household level through a proxy-means test calibrated to match the official poverty measure in Mexico. Scholarships cover the last three years of basic education and high-school, with increasing values for higher levels, designed to approximate labor opportunity costs. Conditional on school inscription and attendance. Beneficiary households also receive a per household transfer conditional of attending health services, as well as nutritional supplements targeted at infants and pregnant woman.	Reduction of 8% in poverty due to program benefits in rural communities. Positive effect on school enrollment for primary and secondary education. Increase in probability of 42% and 33% of entering secondary education for children 12 and 14 years old in rural areas, respectively. Terminal efficiency of secondary education has increased 23% in areas where Oportunidades operates. Decrease in the proportion of dropout for 16 to 19 year old adolescents in urban areas. Increase of one year of schooling for adolescents (15 to 19 years old) who received program support for 5 years approximately in rural areas. Oportunidades families increased their preventive and curative visits up to 35% in rural areas. Adults increased preventive visits by 26% in urban areas. National maternal and infant mortality decreased by 11% and 2%, respectively. Increase of 1.42 cm in height for children under 2 years old in urban areas. Reduction of 20% of sick days for children under 5 years old in rural areas. More than 90% of children receiving nutritional supplements show adequate consumption levels of iron, zinc and A and C Vitamins.
Procampo	Delinked per hectare transfer to agricultural producers.	All producers cultivation one of nine basic crops in 1993, representing most of the agricultural producers in the country.	Administrative data: 2.39 million beneficiaries in 2008. Survey: 823,257.	1994	14,198 million pesos	Direct monetary transfer per hectare, originally set at close to 100 dollars per hectar to all beneficiaries identified in the original 1993 survey on the basis of cultivation of nine basic crops. Conditional on cultivation of the land, but after 1995 not conditional on particular crops.	Significant multiplier effect on producer income.
Programa 70 y más	Universal rural non-contributory pension.	All the population of 70 years and older living in localities of less than 30,000.	Administrative data: 1.031 million beneficiaries in 2008. Survey: 991,795.	2007	9536.7 million pesos	All the population of 70 years and older living in localities of 30,000 or less are eligible for this universal rural non-contributory basic pension of 500 pesos (37 US dollars) per month.	N/A

Table 9.Description of Flagship Transfer Programs Cont.

Peru							
Juntos	CCT	Poor and extremely poor families with children under 14 or pregnant women	409,610 households according to public accounts	2005	512 million nuevos soles	Juntos gives 200 soles to each family every two months conditioned to complying health and educational conditions. Families selected have to be poor or extremely poor according to the national poverty line. Geographical targeting and community assessments are used to identify beneficiaries.	Significant effects over: consumption and poverty indicators, school attendance, health checks and likelihood to seek medical help among children under 6, doctor assisted deliveries and the use of contraceptives among women of childbearing age
Programa Integral de Nutrición (PIN)	Food program (part of Programa Nacional de Asistencia Alimentaria [PRONAA])	Poor and extremely poor: children under 12, pregnant and lactating mothers and those at high nutritional risk	3,792,261 total beneficiaries: 567,920 children from 0-3; 555,572 children from 3-6; 2,467,216 children from 6-12; 201,853 pregnant and lactating mothers, according to public accounts	2006 (A fusion of 6 other food programs that started operating in 1992)	509 million nuevos soles	The program gives beneficiaries food baskets and food supplements through health posts, pre-schools and schools	Past evaluations of the programmes that now are part of the PIN found: i) PANFAR program: nutritional effects conditioned to proper attention; ii) School breakfast: improved dietary intake and short-term memory. Increased attendance to school was non-significant.
Programa de Complementación Alimentaria (PCA)	Food program (part of Programa Nacional de Asistencia Alimentaria [PRONAA])	Poor and extremely poor: children, people with TB, elderly, persons with disabilities, other vulnerable groups (victims of family violence, etc.)	306,762 public lunch recipients; 9,223 lunch recipients from benefic organizations; 6,957 lunch recipients at public shelters; 25,287 lunch recipients with TB, according to public accounts	2003 (Programs operating since 1992 were transferred to local governments that year)	128 million nuevos soles	The program has been transferred to local governments. Beneficiaries receive food and supplements through kitchens, shelters, among others.	The program has not been evaluated.
Vaso de Leche	Food program	Poor and extremely poor: children between 0 and 13, pregnant mothers, elderly or those suffering from TB	3,215,100 beneficiaries according to public accounts	1985	363 million nuevos soles	Gives breakfast to beneficiaries 5 times a week. It is run directly by all provincial and district municipalities. It relies heavily on mothers' clubs.	The program has not been recently evaluated. Past evaluations found non-significant effects over nutritional variables

Appendix A: Description of Household Surveys and Methods and Sources to Construct Income Categories and their Components

	Argentina	Bolivia	Brazil	Mexico	Peru
	2009	2007	2009	2008	2009
Survey info					
Survey name	Encuesta Permanente de Hogares	Encuesta de hogares	Pesquisa de Orçamentos Familiares	Encuesta Nacional de Ingreso y Gasto de los Hogares	Encuesta Nacional de Hogares
Acronym	EPH		POF	ENIGH	ENAHO
Year	1st Semester 2009	2007 (from november the 1st to november 30th)	2008-2009	2008	2009
Observations	93168 individuals	4.148 households	190,159 individuals; 56,091 households (source: microdata)	35,146 households	22,640 households
Coverage	Urban	National	National	National	National
INCOME MEASURE USED IN INCIDENCE ANALYSIS					
Pre-incidence Analysis Income	Net Market Income	Net Market Income=Market Income (see description in "Direct Taxes" and "Employee Contributions to SS" below)	Market Income	Net Market Income	Market Income
INCOME CONCEPTS: DEFINITIONS, METHODS AND SOURCES					
MARKET INCOME					
Autoconsumption	Not included	Not included	Included; reported in survey	Included	Included
Imputed rent for owner occupied housing	Not included	Not included	Included; reported in survey ("What do you think you would be paying to rent this dwelling?")	Included	Included
Earned and Unearned Incomes of All Possible Sources Including Social Security Pensions and Excluding Government Transfers	Included but all incomes are assumed to be net of income taxes and employee contributions to social security	Included	Included	Included but all incomes are assumed to be net of income taxes and employee contributions to social security	Included
NET MARKET INCOME=MARKET INCOME - (DIRECT TAXES AND EMPLOYEE CONTRIBUTIONS TO SOCIAL SECURITY)					
Direct Taxes	Not reported in the survey and not included in the incidence analysis at the micro-data level. Argentina used Net Market Income as the pre-incidence income. Whenever results are reported on incidence of direct taxes they come from Secondary Sources. The incidence is from Gasparini (1998). Where applicable, the amount is from Dirección Nacional de Investigaciones y Análysis Fiscal, Ministerio de Economía Argentina.	Not applicable. There are no direct taxes applied to personal income. A tax that, in some way, substitutes a direct tax applied to personal income is the "Regimen Complementario al Valor Agregado (RC-IVA)". In 2007 this tax accounted for 1.4% of total tax revenues. However this tax is not included in the analysis.	Subtracted from Market Income to generate Net Market Income. Direct Identification Method. For wages/salary, "imposto de renda" and for other sources of market income "deduções". If the person reports receiving an income tax refund that is subtracted out of taxes paid.	Not reported in the survey and not included in the incidence analysis at the micro-data level. Mexico used Net Market Income as the pre-incidence income. Whenever results are reported on incidence of direct taxes they come from Secondary Sources. Taxes not reported in survey. Estimates based on official estimates by the finance ministry (SHCP, 2010), imputed by applying the tax law to the ENIGH data. Methodology used is consistent with imputations made for spending in present study.	Subtracted from Market Income to generate Net Market Income. Direct Identification Method. Under "tax payments."

Appendix A: Description of Household Surveys and Methods and Sources to Construct Income Categories and their Components cont.

Employee contributions to social security	Not reported in the survey and not included in the incidence analysis at the micro-data level. Argentina used Net Market Income as the pre-incidence income. Whenever results are reported on incidence of social security contributions they come from Secondary Sources. The incidence is from Gasparini (1998). Where applicable, the amount is from Dirección Nacional de Investigaciones y Análysis Fiscal, Ministerio de Economía Argentina.	Not applicable. Contributions to government-run social security in Bolivia were almost zero in the year of the survey.	Subtracted from Market Income to generate Net Market Income. Direct Identification Method. For wages/salary, "Previdência Pública" and "outras deduções". For other sources of market income it is assumed the deductions were direct taxes since there's only one category. If the person reports receiving a Previdência Pública tax refund that is subtracted out of contributions.	Not reported in the survey and not included in the incidence analysis at the micro-data level. Mexico used Net Market Income as the pre-incidence income. Whenever results are reported on incidence of contributions to social security they come from Secondary Sources. Estimates based on official estimates by the finance ministry (SHCP, 2010), imputed by applying the tax law to the ENIGH data. Methodology used is consistent with imputations made for spending in present study.	Subtracted from Market Income to generate Net Market Income. Direct Identification Method. Under legal deductions specified as "social security contributions."
DISPOSABLE INCOME = NET MARKET INCOME + DIRECT GOVERNMENT TRANSFERS					
Non-contributory pensions	Inference Method. The incidence is estimated from the EPH survey assuming that those reporting receiving the minimum pension or less under pensions on the survey are recipients of non-contributory pensions or moratorium pensions	Direct Identification Method. This transfer corresponds to the Sistema de Reparto Residual and is captured by the survey under "non labor income".	Direct Identification Method. Under other income Benefício de Prestação Continuada (BPC) is one of the categories.	For Mexico, non-contributory pensions were included in the column Targeted Monetary Transfers.	Not applicable. There are no non-contributory pensions in Peru.
Targeted monetary transfers	Direct Identification Method. For Argentina, targeted monetary transfers include Jefes y Jefas de Hogar, Familias, Becas, and unemployment insurance. These are reported on the survey.	Simulation Method. For Bolivia this column only includes Bono Juancito Pinto. All other transfers are under "other direct transfers". The method used was a simulation consisting of identifying eligible beneficiaries.	Direct Identification Method. For Brazil this column only includes Bolsa Familia; all other transfers are under "other direct transfers".	Direct Identification Method and Alternate Survey Method. The largest transfers are reported in the survey (direct identification method). Non-contributory pensions are also reported in the survey (direct identification method). Smaller transfers are imputed by the author, with the distribution being based on the micro-data of a special module of the equivalent 2006 survey (alternate survey method).	Direct Identification Method. Directly from survey under "JUNTOS transfer". In Peru targeted monetary transfers include only JUNTOS.

Other direct transfers	Simulation Method. For Argentina, this column includes Asignación Universal por Hijo (AUH), which was not captured by the survey (it was implemented later in 2009) but is simulated according to the program rules, assuming perfect coverage and targeting.	Direct Identification Method and Simulation Method. The direct identification method was used for the following monetary transfers: Bono de natalidad, Pago a Beneméritos, Pensions (Sistema de Reparto Residual) and Bonosol, and the following non-monetary transfers: Bono de lactancia. The simulation method was used for the following non-monetary transfers: D49Desayuno escolar	Direct Identification Method. Includes: PETI, Bolsa Escola, Bolsa de estudo, other scholarships (credito-educativo, auxilio-educação, auxilio-escola, auxilio-creche), special circumstances pensions (pensão do INSS, pensão da previdência pública, acidente de trabalho previdência pública, auxilio-doença da previdência pública), unemployment benefits (seguro desemprego, salário desemprego, auxílio desemprego, agente jovem - programa governamental para jovem desempregado), minimum income programs (programas de renda mínima, bolsa-renda), cesta básica, abono do PIS/PASEP, auxílio-gás, other government auxílios (estiagem, leite, comunicação, energia eletrica, a portadores de deficiência física, para plano medico, moradia, maternidade, natalidade, defeso, cartão cidadão)	Imputation Method and Alternate Survey Method. Employment subsidy is imputed to formal sector workers using the subsidy table as defined in the 2008 tax code. Opciones productivas is based on benefits reported in the 2006 survey, adjusted to total amount reported in Cuenta Publica Federal.	Direct Identification Method. Directly from survey under "food transfers". Includes: Vaso de Leche program and PRONAA.

POST-FISCAL INCOME = DISPOSABLE INCOME + INDIRECT SUBSIDIES - INDIRECT TAXES					
Indirect subsidies	Income-only survey and hence not included in the incidence analysis at the micro-data level; available by quintiles or deciles only. Whenever results are reported on incidence of indirect taxes and subsidies they come from Secondary Sources. Incidence is estimated using several secondary sources and assumptions: for energy we use quintile incidence on access and expenditure of electricity and natural gas (based on the ENGHO expenditure survey for 1996-1997) from Marchionni et al (2004) and Foster (2004). For transportation we use quintile incidence from Foster (2004) except the airlines subsidy (going entirely to Aerolineas Argentinas) where it is assumed that the entire subsidy accrues to the fifth quintile. For agricultural subsidies, it is based on administrative data from ONCCA (the government agency that administers agricultural subsidies) and Nogues (2008). Only few agricultural producers and agroindustries, and supposedly landowners, received these subsidies (see Scott (2008) on the incidence of agricultural subsidies--even targeted ones--in Mexico) and hence we assumed 75% goes to the upper quintile and the rest is divided evenly among the rest of quintiles. The same assumption is made for subsidies to manufacturing and communications.	Not included in the incidence analysis at the micro-data level; available by deciles only. Imputation Method. Subsidio al gas licuado (GLP). Imputations based on subsidized cost estimated for GLP unit consumed by household. (Medinacelli, sf).	Not included in the incidence analysis at the micro-data level; available by deciles only. Used Secondary Sources; the incidence and distribution in the columns for Indirect Taxes are actually the net effect of indirect subsidies and indirect taxes, based on secondary sources described under "indirect taxes."	Not included in the incidence analysis at the micro-data level; available by deciles only. Imputation Method and Alternate Survey Method. Imputed using household spending reported in the subsidized goods and services. In the case of residential electricity subsidies the imputation is based on a study of the 2006 survey which takes into account the complex tariff structure(Scott, 2009).	Not included.
Indirect taxes	Income-only survey and hence not included in the incidence analysis at the micro-data level; available by quintiles or deciles only. Whenever results are reported on incidence of indirect taxes and subsidies they come from Secondary Sources. The incidence is from Gasparini (1998).	Not included in the incidence analysis at the micro-data level; available by deciles only. Secondary Sources. Effective rates applied by consumption and income deciles based on Cossio (2006). The rates include the aggregation effect of the following indirect taxes: Impuesto al Valor Agregado (IVA), Impuesto a las Transacciones (IT), Impuesto Especial a los Hidrocarburos y sus derivados (IEHD)and Impuesto al Consumo Específico (ICE).	Not included in the incidence analysis at the micro-data level; available by deciles only. Secondary Sources. Based on the study Siqueira, Nogueira, and Souza (2005) who use POF 2002-2003 and calculate the decile incidence of indirect subsidies and taxes (broken up into 17 categories). In the future we will calculate directly from survey but the analysis is complex because of different tax rates for different items and in different states.	Not included in the incidence analysis at the micro-data level; available by deciles only. Secondary Sources. Taxes not reported in survey. Estimates based on official estimates by the finance ministry (SHCP, 2010), imputed by applying the tax law to the ENIGH data. Methodology used is consistent with imputations made for spending in present study.	Effective rates applied to consumption reported on the survey. Evasion of indirect taxes is considered through two main assumptions: (i) people who live in villages under 410 households do not pay taxes and (ii) all spending made on street vendors, "farmers markets" or other informal conditions does not pay taxes.

FINAL INCOME = POST-FISCAL INCOME + GOVERNMENT IN-KIND TRANSFERS/FINAL INCOME* = DISPOSABLE INCOME + GOVERNMENT IN-KIND TRANSFERS					
In-kind education	Imputation Method. The education benefit is based on cost per student by level and it is imputed for students who report attending public school. For those who report attending public school: if they attend primary school including pre-school for age 5 that is mandatory also until age 12, the benefit is 5484 pesos per year; for those between ages 13 and 17 (corresponding to secondary school) the benefit is 8528 pesos per year. For those that attend Tertiary/university the benefit is 8443 pesos per year. The latter category is used to impute education benefits but is not included in the calculation of the education coverage gap, in accordance with the CEQ Handbook.	Imputation Method. Imputations based on cost per student by level, for those who report attending public school. 58.57 bolivianos per capita; Primary Education: 122.49 bolivianos per capita; Secondary Education: 97.97 bolivianos per capita, University: 792.22 bolivianos per capita , Technical Superior Education: 630,69.bolivianos per capita.	Imputation Method. Per the CEQ Handbook, the education benefit is based on cost per student by level. This benefit is applied to students who report attending public school. For those who report attending public school: if they attend creche (early childhood) the benefit is 2276 reais per year; for those between ages 4 and 6 (corresponding to pre-school) the benefit is 2276 reais per year (note 2276 is the average government spending for initial which includes early childhood and pre-school); for those between ages 7 and 10 (corresponding to lower primary) the benefit is 3204 reais per year; for those between ages 11 and 14 (corresponding to upper primary) the benefit is 3342 reais per year; for those between ages of 15 and 18 (corresponding to secondary) the benefit is 2336 reais per year (unless the student reports attending tertiary); for students who attend tertiary the benefit is 15,582 reais per year.	Imputation Method. Imputed based on attendance of public school at each level reported in the survey and federal and local spending per student at the relevant level reported in the public accounts and education ministry (local spending). Spending is: Primary (ages 7-12): 11,400 pesos (per year); Lower Secondary (ages 13-15): 17,600; Higher Secondary (ages 16-18): 23,600; University: 53,900.	Imputation Method. Per the CEQ Handbook, the education benefit is based on cost per student by level. This benefit is applied to students who report attending public school. For those who report attending public school: if they attend elementary school, 1044 soles per year; if they attend primary school, 1254 soles per year; if they attend secondary school 1367 soles per year; if they attend university, 3914 soles per year; if they attend technical superior education, 2711 soles per year.

Appendix A: Description of Household Surveys and Methods and Sources to Construct Income Categories and their Components cont.

In-kind health	Imputation Method. Per capita government expenditure on health (PPP int. $ of 2006) from World Health Statistics 2009 (WHO 2009) actualized with Consumer Price Index until 2009, that amounts to 1190 pesos per capita per year in 2009. This cost was similar to the cost of one of the least expensive health insurance programs provided in the Province of Buenos Aires by IOMA, of 1200 pesos per capita per year in 2009. Instituto de Obra Médico Asistencial (IOMA) (the public health provider for Buenos Aires Province) which costs a little more than 1200 pesos per person a year, the health insurance for those that pay the Monotributo (equivalent to a simplified tax and social security regime for part of the self-employed who receive low incomes) (less than 600 pesos per person yearly), and the low end Prepagas, which offered plans starting at about 2100$ pesos per person a year. This shows that the cost estimated by WHO seems to be in between the costs of various providers that could offer health insurance to the poor, so we deemed it appropriate and adopted it for this study. To calculate the health gap after transfers, on the basis of the EPH question about the health insurance coverage, the poor without health insurance privately paid or discounted from their wage is considered uncovered (or what is similar, it is the population that would be attended at public hospitals or paying health privately).For the in-kind health benefits, individuals that declared not having health insurance (either private or from Obras Sociales) receive the imputed benefit	Imputation Method. Imputations based on average cost of basic health package, for those who report to have attended a public health service during the last month. Imputations based on normal child birth for first level, second level and private house attention. The average cost of basic health service is imputed monthly based on the annual per capita cost estimated by OMS in 343 bolivianos . For normal child birth attention, imputations are based on three different average costs: 72 bolivianos for first level health establishments, 97 bolivianos for second level health establishments, and 34 bolivianos for professional attention in private house.	Secondary Sources. In POF there are no questions about use of health services or health insurance coverage. We used a study (IBGE, 2009) on the distribution of use (*consultas* and *internações*) of public health facilities by income group from PNAD 2008. To impute the health benefit to households we assigned them a share of health spending corresponding to the distribution of use.	Imputation Method. Imputed based on affiliation to public health insurance institutions (IMSS, ISSSTE, PEMEX, Army, Seguro Popular) and use of public health services for the uninsured (SSA, IMSS-Oportunidades) identified by institution in the survey and federal and local public spending reported in the public accounts (federal) and health ministry (federal and local spending). The corresponding value of benefits are: IMSS-Oportunidades 2,151 pesos; SSA 2,394; Seguro Popular 1,787 (added to SSA); IMSS 4,218; ISSSTE 4,472; PEMEX, Army 10,774.	Direct Identification Method. Directly from survey under the amount of health spending covered by health insurance (contributive and non-contributive).
Housing and urban	Secondary Sources. The incidence is from Gasparini (2004), except in the case of housing, where Gasparini (2004) used the ECV 2001 to impute housing loans estimating a CC of -0.0761, slightly pro-poor. The EPH does not count with data on loans for housing; however since the year 2000, the funds for FONAVI are from "free disponibility" and provinces can assign expenditure to the purpose they want. According to different sources, housing construction and loans from these plans have been decreasing and hence we assume equal incidence by quintile with CC of zero. Where applicable, the amount is based on public accounts.	Not included	Not included	Imputation Method. Imputed based on beneficiaries reported in ENIGH, using spending on these programs reported in form Cuenta Pública.	Not included.

Subsidized portion of social security (social security "deficit" as a percent of total social security spending)	Basically 0 in 2009	100% (negligible contributions to the social security system in 2007). Thus social security is considered a direct transfer in the case of Bolivia.	0% based on the following analysis: total federal INSS social security benefits paid in 2009 was 237,349 million reais. We divide this into two categories: regular contributory pensions (*aposentadorias* and *benefício mensal*, totaling 164,825 million reais) and special circumstances pensions (*pensões* and *outros benefícios* totaling 72,564 million reais). The latter are paid in the case of serious illness, hospitalization, accident at work, death of a spouse, etc.; i.e., they are intended to smooth idiosyncratic shocks. Because of their nature we consider these to be 100% government-subsidized and treat them as a direct transfer. The benefits paid for regular contributory pensions are less than contributions to social security (over 190,000 million reais), which means that there is no social security deficit for regular contributory pensions; they are entirely funded by contributions.	44.8% (49.7%)*; *Including state enterprises, assuming proportion subsidized is equal to ISSSTE, the principal social security institution serving public sector workers). For the analysis the proportion is allowed to vary by institution. Imputation Method. Subsidies to contributory social security pension systems are imputed based on reported pensions (which are not identified by source) combined with reported affiliation to the corresponding social security institutions. The proportion that is subsidized varies by institution.	56%. Imputation Method. From public accounts, we calculate that 56% of pensions are subsidized by the government. We impute this subsidy to households, using the amount of pensions they report receiving from the contributory system, and assuming that the subsidy is distributed equivalently to pensions themselves (i.e., the government subsidized 56% of each pension recipient's pension).
SCALED-UP INCOMES, TAXES AND TRANSFERS FOR INCIDENCE ANALYSIS INCLUDING GOVERNMENT IN-KIND TRANSFERS					
Scaling up factor and method	As EPH is Urban and does not even cover the whole Urban Population, EPH has first to be scaled to match up the population and then to match a comparable definition of income in National Accounts. Since only GDP is available in National Accounts, that definition is scaled down to Net Market Income and then compared to the expanded Net Market Income (for the whole population) from the EPH. The scaling up factor used was 1.414 uniform for all income	The scaling up factor value is 1.2648. Calculations are based on 2007 national accounts. However since there is no disaggregated information on income structure we use the average structure of years 2000, 2001, 2002 and 2003; for which the disaggregated structure was available.	1052/1049. Underreporting in POF is very low compared to an equivalent income definition in national accounts since the questions are so extensive. Barros, Cury, and Ulyssea (2007) compare total income in the 2002-2003 POF to a very comparable definition of income in national accounts for 2003 (they break it down by sub-category in their paper; see Table 4). Total income according to POF is 1049 billion reais and according to national accounts is 1052 billion reais. (Note: underreporting is much more prevalent in PNAD; total income according to the 2003 PNAD was 830 billion reais).	8,249,423/3,750,891. Underreporting of total current household income in ENIGH compared to the closest equivalent in NAs is large, a factor of 2.2. This factor is applied to all household income to ensure comparability between market income from the ENIGH and public taxes/spending form the federal public account.	Total household income in ENAHO tends to be underreported by a large margin (a factor of 1.63) when compared to the closest equivalent concept in the National Accounts. Income and transfers reported from survey were scaled up when they differed in more than 10% from closest public account estimation.

Appendix B: Public Accounts and Other Country Information

	Argentina	Bolivia	Brazil	Mexico	Peru
	2009	2007	2009	2008	2009
Macroeconomic Data: GDP, GNI and Population					
GDP in LCU - yr of survey	1,145,458,336,366	103,009,182,446	3,185,125,000,000	12,200,100	392,565
units	pesos	bolivianos	reais	millions pesos	million soles
GDP/cap. in LCU - yr of survey	28,544	10,482	16,718	83,963	13,475
GNI in LCU - yr of survey	1,110,233,876,588	109,775,035,955	3,121,048,000,000		369,195
GNI/cap. in PPP - yr of survey	14,030	4,069	10,140	14,530	8,349
GNI/cap. in current US$ (market exchange rates, Atlas method) - yr of survey	7,540	1,230	8,090	10,050	4,240
PPP conversion factor - yr of survey	1.965	2.745	1.712	8.136	1.700
Population - yr of survey	40,130,000	9,827,522	190,519,297	106,719,348	29,132,013
Government Spending info (millions of local currency units)					
Total spending (includes debt servicing)	459,961	43,144	1,629,853	2,894,807	79,304
Primary spending (without debt servicing (interests and amortizations))	430,401	41,799	1,173,831	2,667,694	74,293
Notes	Spending includes estimation of central government, provincial, and municipal spending from different sources and using 2007 spending for several projections	Resources include central government, departmental, and municipal spending and revenues.	Includes federal, state, municipal. Excludes debt refinancing (internal and external), *outros encargos especiais*, *outros encargos: demais subfunções.*	Includes federal, state and municipal spending financed from federal tax revenues, excludes state and municipal spending financed from local taxes or fees.	Includes the three levels of government spending: local, regional, national.
Government Revenues by Category (millions of local currency units)					
Direct Taxes	97,783.44	4,325.10	187,395.80	265,947.60	20,346.00
(Notes and source)	Includes federal and provincial direct taxes (Income Tax, Taxes on property, Wealth and Payroll Taxes) Source: Dirección Nacional de Investigaciones y Análisis Fiscal, Ministerio de Economia, MEyFP	Direct Taxes include: Impuesto a las Utilidades, Impuestos Municipales, Regimen Complementario al IVA (RC-IVA). Source: "Dossier semestral 2010". Ministerio de Economía y Finanzas Públicas & "Memoria de la Economia Boliviana 2010". Minsierio de Economia y Finanzas Publicas.	Includes federal, state, municipal. Source: Balanço do Setor Público Nacional (BSPN), Brazilian Treasury (STN), 2010.	Federal personal income tax. Source: Cuenta de la Hacienda Pública Federal 2008, Secretaría de Hacienda y Crédito Público (SHCP).	Source: Nota Tributaria, Superintendencia Nacional de Administración Tributaria (SUNAT), 2011.
Employee Contributions to Social Security	28,902.00	N/A	197,583.52	46,688.19	2,074.00
(Notes and source)	Source: Dirección Nacional de Investigaciones y Análisis Fiscal, Ministerio de Economia, MEyFP	N/A	Includes federal and sub-national social security systems. Source: BSPN, Brazilian Treasury (STN) and Anuario Estatistico da Previdencia Social, 2009.	Employee contributions to IMSS and ISSSTE. Source: Cuarto Inform de Gobierno, Presidencia de la República, 2010.	Source: Nota Tributaria, Superintendencia Nacional de Administración Tributaria (SUNAT), 2011.

Appendix B: Public Accounts and Other Country Information cont.

Indirect Taxes	144,669.11	10,762.40	350,987.97	531,626.10	33,768.00
(Notes and source)	Includes federal and provincial indirect taxes (VAT, Specific Consumption Taxes, Provincial Gross Receipts Taxes and Export and Import Taxes) Source: Dirección Nacional de Investigaciones y Análisis Fiscal, Ministerio de Economia, MEyFPThe amount is from Dirección Nacional de Investigaciones y Análisis Fiscal, Ministerio de Economía Argentina.	Indirect Taxes include: Impuesto al Valor Agregado mercado interno (IVA), Impuesto al Valor Agregado mercado externo (IVA), Impuesto a las Transferencias (IT), Impuesto a las Transacciones Financieras (ITF), Impuesto al Consumo Específico (ICE). Source: We aggregate the mentioned taxes using tax revenue information from "Dossier semestral 2010". Minsiterio de Economia y Finanzas Públicas.	Includes federal, state, municipal. Source: Balanço do Setor Público Nacional (BSPN), Brazilian Treasury (STN), 2010.	Federal VAT tax, IEPS, ISAN, and Tenencia Vehícular. Source: Cuenta de la Hacienda Pública Federal 2008, Secretaría de Hacienda y Crédito Público (SHCP).	Source: Nota Tributaria, Superintendencia Nacional de Administración Tributaria (SUNAT), 2011.
Government Social Spending (definition used by CEQ) by Category and Indirect Subsidies (millions of local currency units)					
Direct Transfers	35,285.00	5,222.74	132,069.68	74,233.00	1,423.00
(Notes and source)	Includes Jefes y Jefas de Hogar, Familias, Becas, unemployment insurance, Non-contributory pensions (including those estimated from Moratorium Pensions) and the Simulation of the Asignacion Universal por Hijo (AUH). Source: Estimated on the basis of Direccion de Analisis de Gasto Publico y Programas Sociales, MEyFP	Direct Transfers include two categories: i) Monetary transfers (Bono Juancito Pinto, Bonosol, Pensions (Sistema de Reparto Residual), Beneméritos y Bono de natalidad. Ii) Non Monetary transfers (Desayuno escolar, Bono de lactancia). Source: We aggregate many transfers which come from the information system Sistema Integrado de Gestión y Modernización Administrativa (SIGMA)of Minsiterio de Economía y Finanzas Públicas.	Includes all categories from Table 7 except the categories corresponding to health spending, education spending, and contributory pensions. Source: various (we aggregate many transfers which come from different parts of Brazil's public accounts).	Includes Oportunidades, Programa 70 y más, Procampo, Becas, Subsidio al empleo, and other smaller social programs. Source: Cuenta de la Hacienda Pública Federal 2008, Secretaría de Hacienda y Crédito Público (SHCP).	Source: Sistema Integrado de Información Financiera (SIAF), Ministerio de Economía y Finanzas (MEF), 2011.

Appendix B: Public Accounts and Other Country Information cont.

Health Spending	35,840.00	3,492.98	130,622.74	333,417.00	6,469.00
(Notes and source)	Health includes spending in public attention of health, which includes hospitals and other public health facilities' spending and public health campaigns, and it also includes PAMI-Health Coverage for Pensioners and Handicapped spending. Although this last spending is in theory financed by contributions from the active and passive (formal) population, it has traditionally run high deficits and its spending has been broadened to cover not only contributory individuals but also those without contributions and the handicapped. This definition of health spending does not include however, Obras Sociales spending that is fully contributed by workers and it is not subsidized by government. Source: Estimated on the basis of Direccion de Analisis de Gasto Publico y Programas Sociales, MEyFP	Source: We aggregate the following accounts: Health Service Administration, first, second and third levels of health services, Health Funds and Immunization Programs .Data comes from Sistema Integrado de Gestión y Modernización Administrativa (SIGMA) of Minsiterio de Economía y Finanzas Públicas.	Includes federal, state, municipal. Net of *demais subfunções;* including *demais subfunções* is 166,012.21. Source: Balanço do Setor Público Nacional (BSPN), Brazilian Treasury (STN), 2010.	Includes federal and state spending. Source: Cuentas Nacionales de Salud, SSA; Cuenta de la Hacienda Pública Federal 2008, Secretaría de Hacienda y Crédito Público (SHCP).	Source: Sistema Integrado de Información Financiera (SIAF), Ministerio de Economía y Finanzas (MEF), 2011.
Education Spending	58,787.00	6,669.07	125,036.71	599,447.00	12,257.00
(Notes and source)	Education includes spending in primary, secondary and tertiary education. It does not include spending or investment in Science and Technology and other educational expenditure not explicitly included in the above items. Source: Estimated on the basis of Direccion de Analisis de Gasto Publico y Programas Sociales, MEyFP	Source: We aggregate the following accounts: Education Service Administration, Initial Education, Secondary Education, University, Superior Technical Education and Literay Program "Yo si puedo". Data come from Sistema Integrado de Gestión y Modernización Administrativa (SIGMA) of Minsiterio de Economía y Finanzas Públicas.	Includes federal, state, municipal. Includes early childhood and pre-school (infantil), primary (fundamental), secondary (médio), tertiary (profissional and superior), additional (educação de jovens e adultos, educação especial); does not include demais subfunções. Net of demais subfunções is 169,190.49. Source: Balanço do Setor Público Nacional (BSPN), Brazilian Treasury (STN), 2010.	Includes federal and state spending on pre-school (preprimaria), basic (primaria & secundaria), high school (media-superior) and tertiary education. Source: Principales Cifras Ciclo ESCOLAR 2009-2010; SEP; Cuenta de la Hacienda Pública Federal 2008, Secretaría de Hacienda y Crédito Público (SHCP).	Source: Sistema Integrado de Información Financiera (SIAF), Ministerio de Economía y Finanzas (MEF), 2011.

Appendix B: Public Accounts and Other Country Information cont.

Housing and Urban	23,694.11	344.68	39,166.29	3,526	564.00
(Notes and source)	Housing and Urban includes spending in house subsidies, water and sanitation and other urban services. Source: Estimated on the basis of Direccion de Analisis de Gasto Publico y Programas Sociales, MEyFP	Source: We aggregate the following accounts: Urban Housing , Water and Basic Sanitation. Data come from Sistema Integrado de Gestión y Modernización Administrativa (SIGMA) of Minsiterio de Economía y Finanzas Públicas.	Includes rural and urban housing (habitação) and urban spending (urbanismo). Urban spending includes urban infrastructure, urban services, and collective urban transport. Both categories include *demais subfunções*; net of *demais subfunçoes* is 32,659.88. Source: Balanço do Setor Público Nacional (BSPN), Brazilian Treasury (STN), 2010. 39166.29+	Includes "Habitat" and "Tu Casa" progerams. Source: Cuarto Inform de Gobierno, Presidencia de la República, 2010.	Includes subsidies to mortgages (449 million) and urban improvement programs (115 million). Source: Sistema Integrado de Información Financiera (SIAF), Ministerio de Economía y Finanzas(MEF), 2009.
Indirect Subsidies	60,658.10	499.39	Not included in the analysis	319,699.90	Not included.
(Notes and source)	The amount of targeted monetary transfers is estimated from Direccion de Analisis de Gasto Publico y Programas Sociales, MEyFP, Minister of the Economy Argentina. Includes what is called "Subsidios Economicos" in Argentine fiscal accounts, and includes subsidies to energy, transportation and communications, agricultural and industrial firms	Includes liquefied gas (GLP), gasoline and diesel. Source: Sistema Integrado de Gestión y Modernización Administrativa (SIGMA) of Minsiterio de Economía y Finanzas Públicas.	N/A	Includes domestic electricity, gasoline and LP gas subsidies. Does not include implicit subsidies of fiscal spending on VAT. Including them it would be 530,698. Source: Cuarto Informe de Gobierno, Presidencia de la República; PEMEX; Informe de Gastos Fiscales, Secretaría de Hacienda y Crédito Público (SHCP).	N/A