THE IMPACT OF DIRECT TAXES AND MONETARY TRANSFERS ON
INCOME DISTRIBUTION AND POVERTY IN ARGENTINA

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The CEQ logo is a stylized graphical representation of a Lorenz curve for a fairly unequal distribution of income (the bottom part of the C, below the diagonal) and a concentration curve for a very progressive transfer (the top part of the C).

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Darío Rossignolo[†]

ABSTRACT

Using standard fiscal incidence analysis, this paper estimates the impact of tax and expenditure policies on income distribution and poverty in Argentina with data from the National Household Survey on Incomes and Expenditures 2012-2013. The results show that fiscal policy has been a powerful tool in reducing inequality and poverty but that the unusually high levels of public spending may make the programs unsustainable. The impact of several policy measures carried out by the government have also been simulated.

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1. Introduction

Over the last decade, Argentina has carried out expansionary fiscal policies whose main effect has been the reduction in existing inequality levels regarding market incomes. Among these policies, Sistema Integrado Previsional Argentino y Movilidad Jubilatoria (SIPA), a periodical increase in pensions defined by law, and "pension moratorium" (an anticipated retirement program combined with a moratorium for those who have not fulfilled the mandatory 30 years of contributions to the pension system) have been implemented. Additionally, the creation of a universal program, Asignación Universal por Hijo (AUH), extended the benefits that formal workers receive based on the amount of dependents to the individuals who work in the informal sector and to the unemployed people.

On the tax side, the increase in the participation of Personal Income Tax, mainly due to the lack of adjustment in thresholds and brackets related to inflation; Corporate Income Tax, due to the lack of adjustment in corporations´ balance sheets; and the renationalization of the pension system have been the factors that have financed, especially in the first part of the decade, the aforementioned expansionary policies. In the second half of the decade, however, inflation tax significantly substituted that revenue from taxes.

Consolidated public expenditure rose to around 47% of GDP in 2015 considering the national and provincial governments, while tax burden rose to around 32% of GDP in 2015/16. This implies that fiscal deficit has increased to unprecedented levels in recent history (2.5% of GDP in 2014 at the national level, while for 2015 the most conservative estimations place it in the surroundings of around twice as high). Additionally, GDP growth stagnated (-2.5% in 2014; statistics for 2015 showed a 2.6% growth with a 2.3% fall in 2016).

Due to the effects of this stagnation on poverty and inequality levels, the government that took charge at the end of 2015 attempted to enhance the scope of the monetary transfers, while trying to alleviate the high level of taxes (through the elimination of export duties on almost all exported products and a slight reduction in Personal Income Tax in 2016).

This paper estimates the impact of direct taxes and expenditure policies, represented by monetary transfers, on income distribution and poverty amelioration in Argentina by applying CEQ methodology to data from the Permanent Household Survey (EPH) from the third quarter of 2016, which was conducted by the National Bureau of Statistics in Argentina. Consequently, the paper uses the codes for taxes and public expenditures from 2016.

The study is organized as follows: section 2 briefly reviews the results of previous studies on the impact of taxes and expenditures on income distribution. Section 3 describes the Argentine context in terms of economic growth and public sector surplus. Section 4 introduces the data source and incidence assumptions for the CEQ analysis of the impact of taxes and expenditures. Section 5 presents the regulatory framework for the taxes and expenditures included in the incidence analysis. Section 6 summarizes the results of the incidence analysis on income distribution and poverty reduction and section 7 concludes.

2. Results of Previous Studies on the Argentina Case

The latest research on the impact of taxes and public spending on income distribution shows that public policies greatly reduce inequities arising from market income. The net effect of taxes and public expenditures on income distribution has been calculated in Gasparini (1999), SPE (2002), Gaggero and Rossignolo (2011), and Gómez Sabaini, Harriague, and Rossignolo (2013), among others. Although the methodologies differ to a certain extent (one study considers a balanced budget; another effective tax collection), all the studies find that the two highest income quintiles transfer resources to the lowest ones. Although the studies find that the magnitude of the redistributive impact varies, all of them note a significant equalizing effect.

Following CEQ methodology, Lustig and Pessino (2013) assess the growing importance of noncontributory pensions in Argentina in the last decade, emphasizing the effect of government policies, such as the Asignación Universal por Hijo or the Moratoria Previsional through the Encuesta Permanente de Hogares. Rossignolo (2016) performs the estimation through the National Survey of Household Expenditures 2012-2013 and concludes that the Argentine tax and benefit system greatly reduces inequality and poverty.

Gómez Sabaini and Rossignolo (2009) consider the incidence of taxes for 2006, with per capita income adjusted for underreporting. Here, the impact of taxes is moderately progressive, mainly due to export taxes and the increased importance of Income Tax and Payroll taxes, measured by the Gini coefficient. However, since differences in extremes (that is, decile 10 versus decile 1) increase, the authors determine that the system continues to have a regressive impact. Gómez Sabaini, Harriague, and Rossignolo (2013) arrive at similar conclusions with information on taxes for 2008.

Regarding the tax system, these results contrast with results that take into consideration the tax structure in effect in the 1990s. Gasparini (1998) performs an analysis of the distributional impact of the tax system in 1996, taking per capita income and per capita consumption expenditures as welfare indicators. In the first case, taxes are highly regressive; meanwhile, when per capita consumption is considered, the incidence is moderately progressive. Gómez Sabaini, Santiere, and Rossignolo (2002) analyze the impact of taxes on income distribution for 1997, considering per capita income adjusted for underreporting as a welfare measure. The incidence is regressive in this case, chiefly because of VAT and indirect taxes.

SPE (2002) and SPER (1999) perform different estimations on public expenditures for Argentina; their results show an unequivocal reduction in inequality. Gasparini (1999) arrives at similar results; benefits of public expenditures are received more strongly by lower income brackets. It is important to note that the extent of social expenditures was much less generalized then.

3. The Economic and Fiscal Context

In Argentina, the crisis that resulted from the termination of the currency board regime ended with a devaluation of the Argentine peso and a slump in economic activity (real GDP fell by 15.5% in 2001-2002). Unemployment and poverty figures reached unprecedented levels (unemployment climbed to 18.4% of the labor force, and 24.7% of the population suffered from extreme poverty in 2001, according to official statistics), which brought about the necessity for expanding social expenditure programs.

The process of economic recovery began in 2003. Between 2003 and 2007, GDP grew 8.5% annually. In economic terms, Argentina's history has involved many crises and subsequent recoveries. As can be seen in Figure 1, from 2012 onwards, economic activity growth alternates between increases and decreases.

Figure 1
Economic Growth in Argentina 2004-2016
Annual Percentage Change in Real GDP
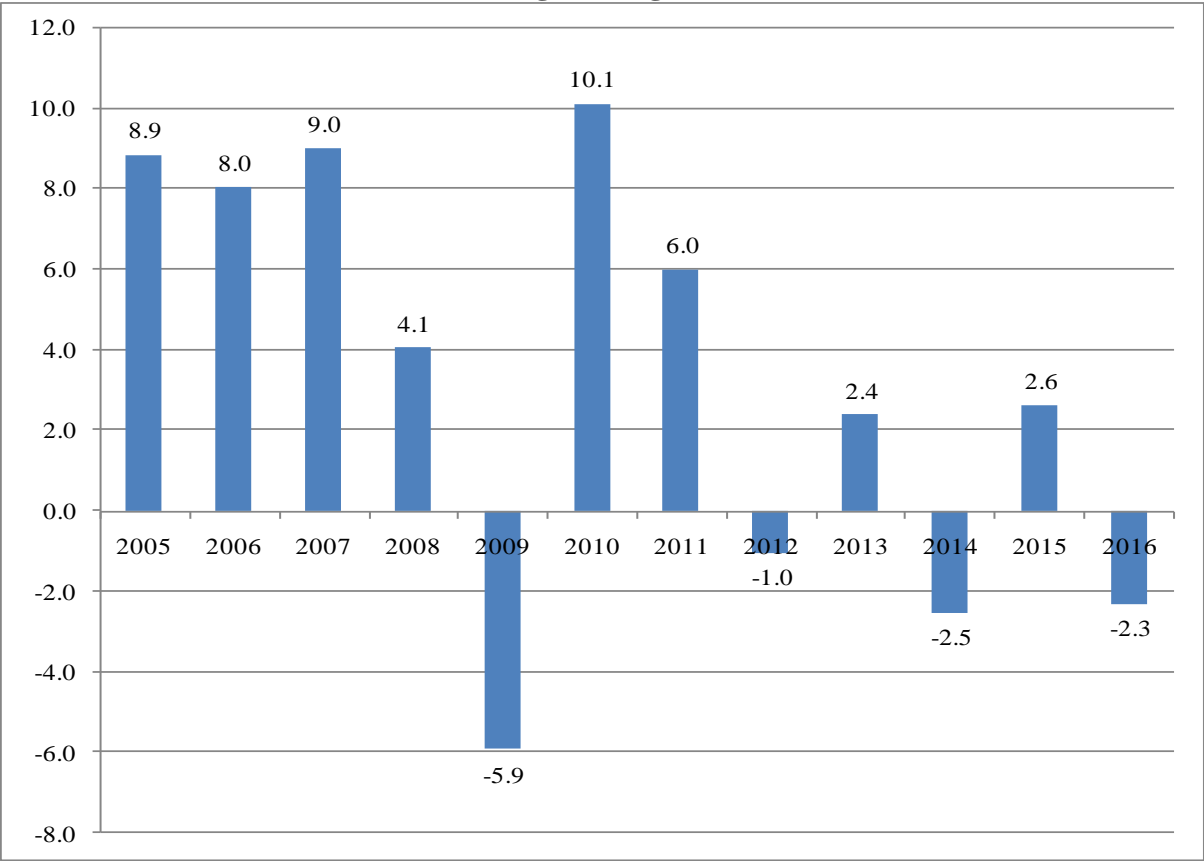

Source: INDEC.

The Argentinean public sector is marked by a long history of structural imbalances. Figure 2 shows the primary and total surplus's progression beginning in 2004. The public sector surplus declined from an average of 2.8% of GDP between 2004 and 2008 to 0.4% between 2009 and 2013, while the primary surplus represented a 1.4% average and a 1.1% average deficit for the

same periods. From 2009 on, budget surplus declined, with deficits for both cases from 2012 on.[3]

Figure 2
Primary and Total Surplus in Argentina 2004-2016
In percentages of GDP
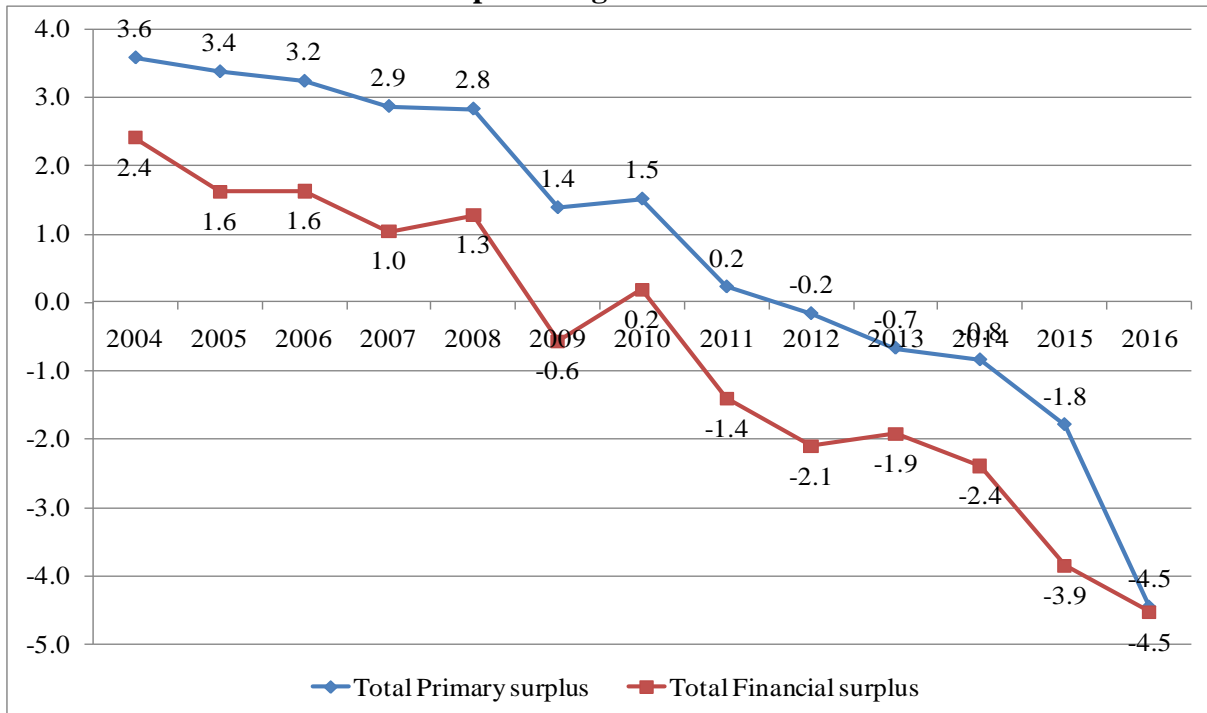
Source: Ministry of Public Finance

Argentina experienced exceptional growth in its tax burden over the last decade, reaching 32% of GDP in 2015.[4]The increase in tax burden over the last decade is related to the addition of taxes that were sporadically used in previous periods. These taxes include export duties (withholdings), banking transactions, the renationalization of the Social Security system, and to other provisions that impacted Corporate and Personal Income Tax (no inflation adjustments of financial statements and thresholds).

Although the government attempted to reduce tax burden through the elimination of export duties for all products except soybeans (including meat and oil), which have been partially reduced, and increased thresholds for Personal Income Tax (172% for the non-taxable income), Monotributo regime and Social Security contributions, due to figures from the regularization regime of tax debts that the government issued in 2016 remaining high (32.1% of GDP in 2016). However, these changes caused the share of direct taxes on total tax burden to fall from 6.6% of GDP in 2015 to 5.5% in 2016 (Figure 4).

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[3]The methodological change in the measurement of primary deficit, excluding rents from Central Bank and Public pension fund generated similar results for primary deficit and total surplus
[4]Gross Tax Burden, excluding reimbursements.

Public expenditures at all government levels have increased from 26% of GDP in 2004 to around 47% in 2015 (latest available at the consolidated level). The evolution of social expenditures in Argentina in the last decade can be divided in three stages (Gómez Sabaini, Harriague & Rossignolo, 2013).

Figure 3
National and Provincial Gross Tax Burden 2004-2016
In percentages of GDP
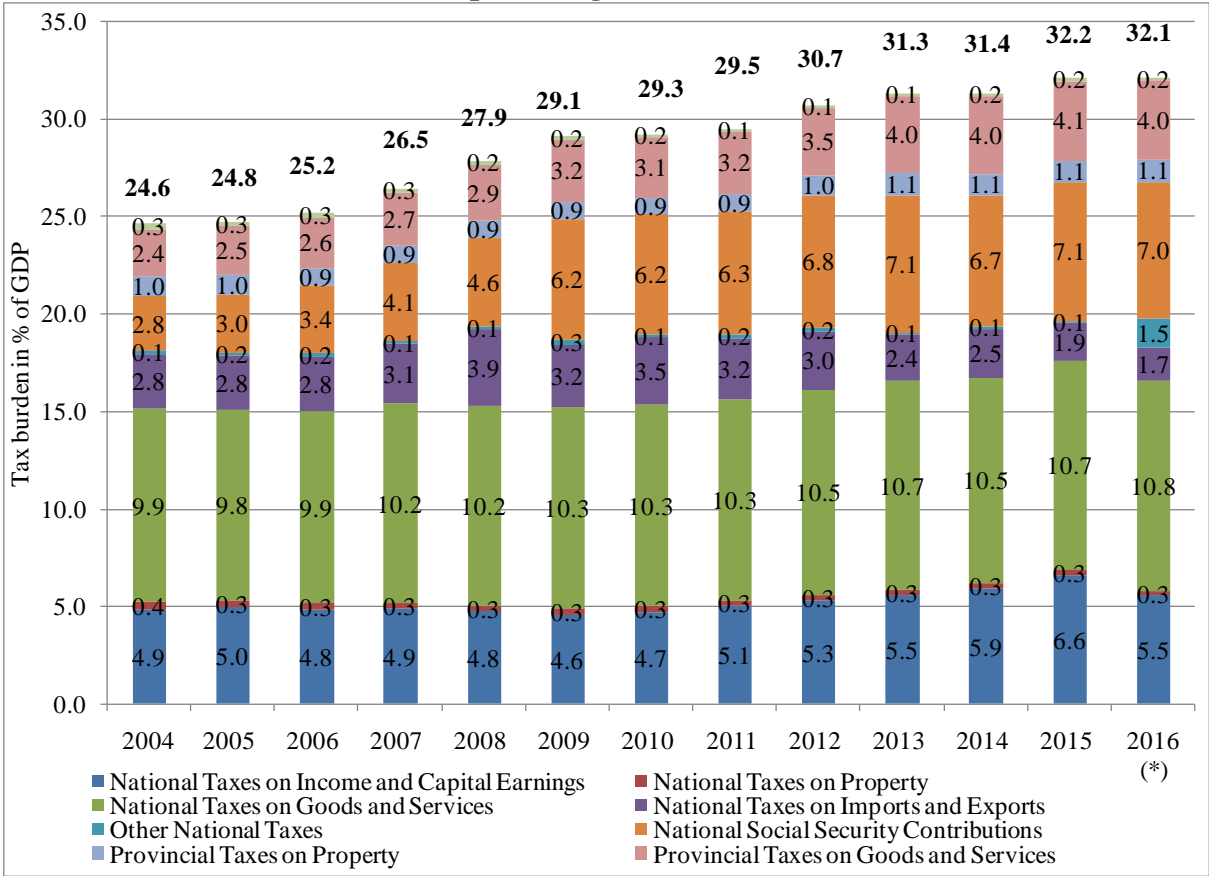
Source: Ministry of Public Finance

The first stage stems from the socioeconomic crisis that the country experienced at the beginning of the last decade, which led to the creation of several emergency programs, including Plan Jefes y Jefas de Hogar Desocupados (PJyJHD), Programa Ingreso para el Desarrollo Humano (IDH), ProgramaRemediar in the health arena, and Programa de Emergencia Alimentaria (PEA) in the nutritional arena. In the second stage, between the economic recovery and the economic crisis in 2008, more structural solutions were implemented, such as the Moratoria Previsional (a sort of "early retirement program" with a moratorium for those who do not complete the 30-year requirement), and the Ley de Financiamiento Educativo to increase education spending to 6% of GDP. Additionally, the Plan Jefes y Jefas de HogarDesocupados (PJyJHD) was divided in two components: Plan Familias por la Inclusión Social (PFIS) and Seguro de Capacitación y Empleo (SCE).

In the third stage, which started in 2008, the government's main goal is to maintain income and employment at pre-crisis levels. To that end, the previously-mentioned elimination of the capitalization system led to the creation of the Sistema Integrado Previsional Argentino y Movilidad Jubilatoria (SIPA) and a mandated periodic increase in pensions. Additionally, the creation of a universal program, Asignación Universal por Hijo (AUH), extended the benefits that formal workers receive relative to the number of children they have, to workers in the informal sector and the unemployed.

Figure 4
Consolidated Public Expenditure 2004-2015
In percentages of GDP
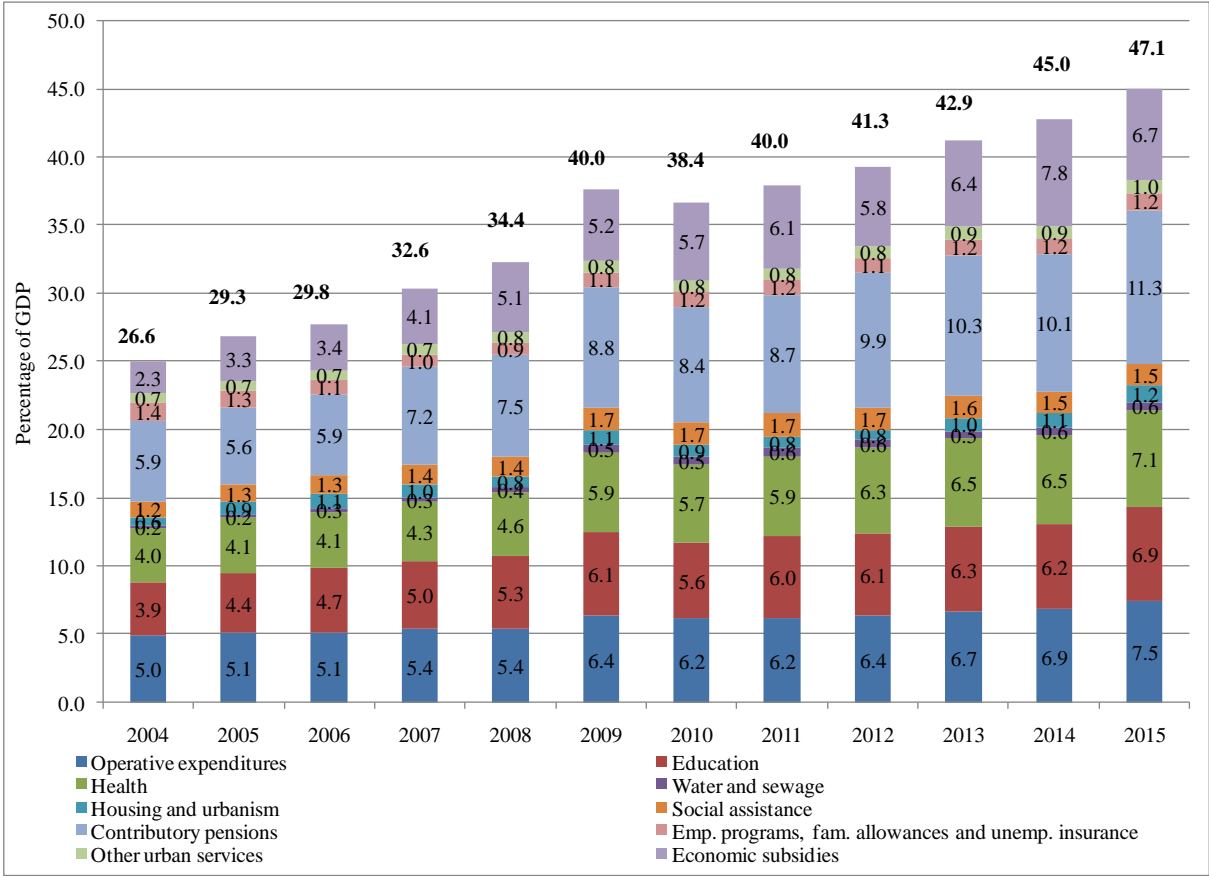
Source: Ministry of Public Finance

Aside from the increase in social expenditures, expenditures on economic services, such as subsidies to tariffs, have increased greatly, starting at2.3% of GDP in 2004 and reaching its peak in 2014 at 7.8% of GDP. These expenditures were primarily designed to prevent services' tariffs (mainly transportation and energy) from increasing in the area around greater Buenos Aires.

The government introduced a series of reforms, with the aim of reducing economic subsidies through a tariff increase while protecting low income sectors with social tariffs. Additionally, the extent of Asignación Universal por Hijo(AUH) was increased (by a rise in amounts paid)

by including Monotributo taxpayers (originally excluded) and allowing beneficiaries of other programs to receive AUH.

Contributory pensions, unemployment insurance, and family allowances were also raised, in addition to a reduction of VAT in the basic food basket which restricted its scope to the beneficiaries of monetary transfers.

It is interesting to point out, as a comparison, the percentage of cash benefits transfers in OECD countries and Argentina, because this issue may explain the results of this paper. Figure 5 shows that Argentina´s expenditure in monetary transfers is well above the OECD average and is among the countries that have spent the most on this issue.

Figure 5
Cash benefit expenditures for OECD countries and Argentina
In percentage of GDP
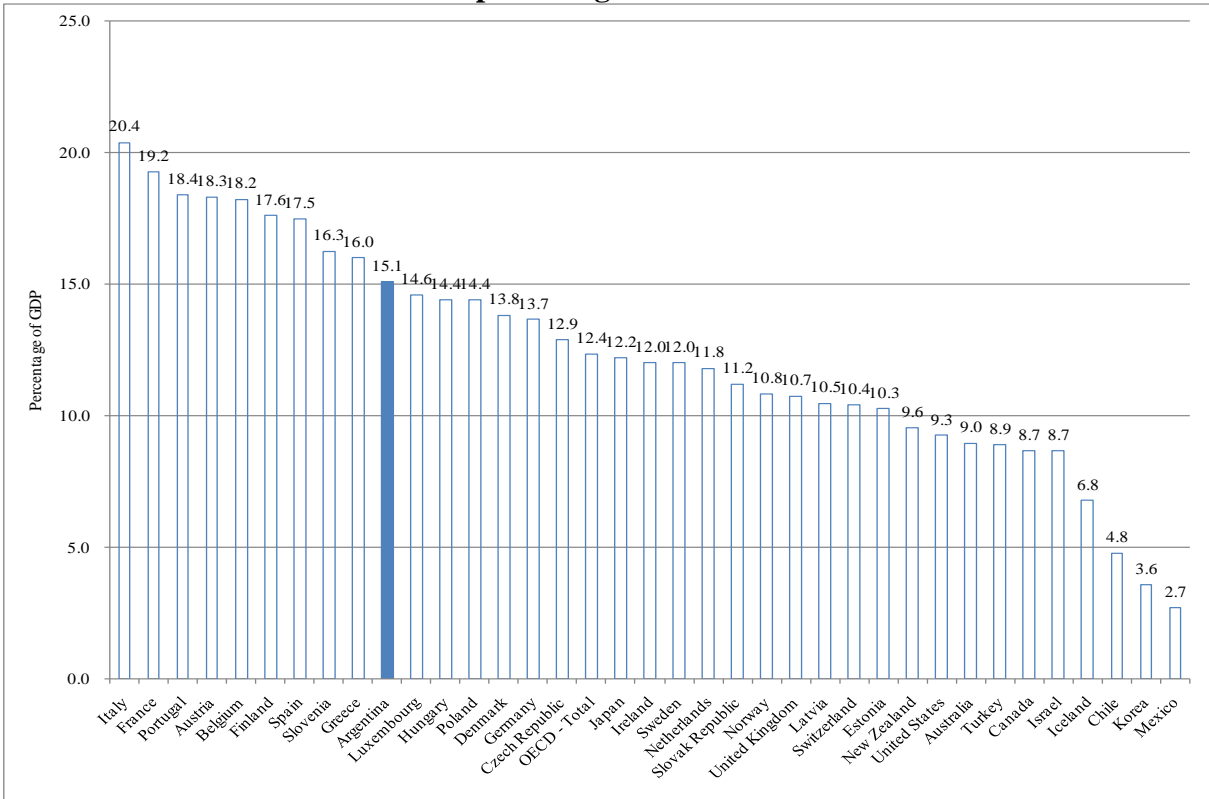
Source: OECD Stat and Ministry of Public Finance- Latest year available (2013 for OECD; 2015 for Argentina)

Figure 6
Cash benefit expenditures in percentage of GDP and per capita GDP
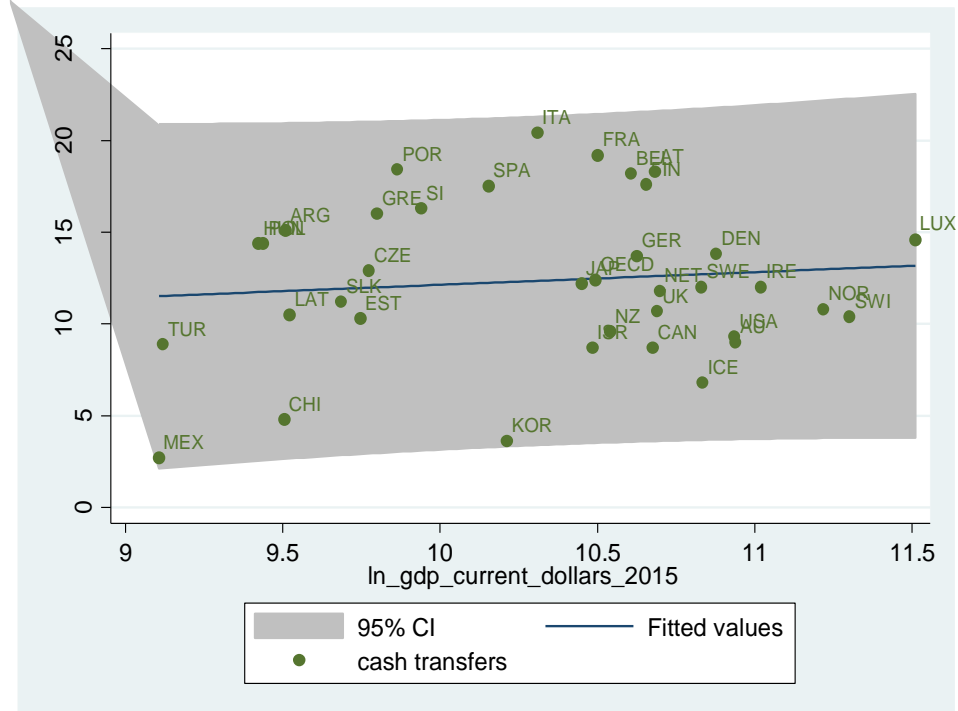
Source: Author´s calculations. Data OECD Stat, Ministry of Public Finance and World Development Indicators. Latest year available (2013 for OECD; 2015 for Argentina)

When comparing among OECD countries with similar per capita GDP, Argentina´s expenditure is high, and it can be clearly compared with the level of expenditures in cash benefits carried out by countries with a higher per capita GDP (Figure 6).

4. Incidence Analysis: Methodological Notes

The following section summarizes the main features of the data source employed, following CEQ methodology.

4.1. Data Source

The main source of information for this report was the Permanent Household Survey (Encuesta Permanente de Hogares, EPH) conducted by the Federal Statistics and Census Institute (Instituto Nacional de Estadística y Censos, INDEC) for the third quarter of 2016. The survey sample takes into account 31 urban agglomerations that represent around 70% of urban population (around 60% of total population). Although mean incomes from the rest of urban population would not be exactly equivalent to the ones included in the sample they do not seem to have a significant difference in structure (as well as rural population).

The units analyzed by the survey are individual households in the country. An "individual household" is made up of any person or group of people, related or un-related, living in the same home under a family system and consuming food paid for by the same budget.

The main variable included in the survey is income; others include occupational status, educational situation, etc. However, as the reference timespan for the questions asked in the survey is the previous week, great variability should be expected when comparing consecutive surveys due to seasonal variations.[5] Additionally, as EPH does not survey consumption expenditures, it is not suitable for analyzing the impact of indirect taxes and economic subsidies (ENGHo survey should be used, as in Rossignolo, 2016).

4.2. Incidence Assumptions

The methodology used here to estimate the incidence of taxes and expenditures adopts different assumptions about the shifting of the tax burden because, in most cases, the person liable for the tax or the person entitled to receive the benefit is not the person who ultimately bears the tax burden or effectively gets an increase in their income.

In order to account for the incidence of direct taxes, it is commonly assumed that the burden of PIT and other taxes related to income falls on the person required to pay them (income earner), i.e. the economic incidence is the same as the statutory incidence.

Information on direct taxes is rarely gathered directly by surveys; instead, surveys report earnings. Depending on the source of income, the amount reported is usually, though not always, after taxes. Salaried workers in the formal sector report income after taxes. For informal salaried workers, employers, independent workers, capital income earners, social security beneficiaries and people receiving pensions and transfers, reported income reflects earnings before taxes. To get at the tax burden, tax revenues should be computed from all these income sources, assuming that they are taxable income.

On the expenditure side, it is assumed that the beneficiaries of a program are the users and their families who receive free or subsidized public provisions. This assumption means that the potential benefits that could accrue to production factors are ignored, as are the externalities that may arise from the consumption of publicly provided goods (ideally, the equivalent variation for every individual would be calculated to assess the complete incidence).

5. Regulatory and Methodological Considerations of Taxes and Expenditures in the Incidence Analysis

This section explains the characteristics of the taxes and expenditures analyzed in this study. The direct taxes analyzed were Personal Income Tax, payroll taxes and other minimum taxes on income ("Monotributo"). On the expenditure side, the monetary transfers included were Asignación Universal por Hijo, Family Allowances, Plan de Inclusión Previsional y Moratoria

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[5] Consequently, the results obtained in this paper are not strictly comparable to the ones obtained in other studies that used ENGHo survey, in which reference time for incomes is the previous semester. The ENGHo is a large-scale survey that obtains detailed answers from about 20,960 households across the country (around 36.1 million total inhabitants) and it is a representative sample of 86.8% of the population. A percentage of the urban population and rural towns with fewer than 5000 inhabitants were excluded from the sample due to high administrative costs (INDEC, 2012).

Previsional, Contributory Pensions, Seguro de Capacitación y Empleo, Becas Estudiantiles, Programa Jóvenes con Más y Mejor Trabajo and Unemployment insurance.

5.1. Direct Taxes

Personal Income Tax: PIT is a global type tax, structured with progressive rates; its taxable base was expanded by several pieces of legislation. The Income Tax Act delineates four categories of income based on their source (land rent, capital gains, company and certain business brokers' income, and personal income). A single taxpayer may generate income corresponding to one or more income categories at the same time. The calculation of the taxable income is based on the income and expenses corresponding to the four categories and on the participating interests in companies or activities.[6]

The tax is determined by taxable net income bracket, based on a sliding scale consisting of a fixed amount plus a rate increasing from 9% to 35% on the excess of each income bracket bottom level (Tables A.1 and A.2 in the Appendix show the actual figures). Individuals paying income tax fall into one of the two following categories: self-employed taxpayers or salaried workers. Self-employed taxpayers (that is, independent workers registered as income tax payers) must pay income tax each fiscal year in five bi-monthly advanced payments.

The methodology for the incidence estimation is as follows. The first thing to check is if the gross income of the individual is higher than the minimum threshold; should it be higher, deductions, credits, and refunds, were applied according to the characteristics of the household; the tax code was applied to gross income to get at taxable income. Reported income from main occupation in EPH *("p21")* was divided among its sources: formal salaried workers, informal salaried workers, self-employed workers, employers and rent earners, which are excluded from the tax base. Self-employed and employers whose income was inferior to $600.000 annually were also excluded and included in Monotributo regime, as will be explained later. Salaried workers whose employers reported contributions to social security system *("pp07h")* as withholdings were considered as formal.

Once taxable income was calculated, that is, gross income after deductions and allowances over the threshold, tax rates to taxable income were applied. In order to calculate taxes paid, tax revenues from each taxpayer were applied. So, if the marginal income tax rate is 9% for salaried (formal sector) workers (see tables), and the reported (taxable) income is after-tax, then the income taxes paid are equal to 0.09*(reported -taxable-income)*(1.09). As the schedule is graduated – e.g., 9% up to AR$ 10,000, 14% on the next 10,000, etc. – the calculation was straightforward (the minimum tax from the previous bracket was added up).

For independent, self-employed workers, employers, social security beneficiaries and capital income earners (depending on whether these earnings are taxed in one's own country or not),

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[6]Among the exemptions can be cited those on interest accrued on saving accounts deposits, special saving accounts and term deposits, income derived from securities, shares, bonds, bills of exchange, notes and other securities issued or to be issued in the future by a governmental authority, the rental value of the residence when occupied by its owners, etc., which has obvious redistributive consequences. The following items are not exempt: pensions, retirement payments, subsidies, and salaries received during medical leave.

reported income is before taxes, so just the threshold and deductions were applied to get at the taxable income, according to the tax bracket in which this income lies, and generate the tax revenue.

The calculation of the tax burden was produced by adding up the revenues obtained from all income sources within the household, dividing them by the amount of individuals in the household to get at the per capita tax, and then dividing that by the per capita welfare indicator.

Other income taxes ("Monotributo"): One group of taxpayers, referred to here as small taxpayers, is subject to a simplified tax regime called Monotributo. This regime replaces the Income Tax and Value Added Tax with a single fixed-amount monthly tax plus contributions for Social Security and Health Insurance. Under this regime, the single tax payment is based on an income bracket and no further rules related to the assessment of income, deductions for dependents or special deductions are applied.

The tax levied is a fixed amount established according to the Monotributo category into which taxpayers fall. These categories are determined based on invoicing and/or the surface area of the facilities and/or the use of power during production (see Table A.3 in the Appendix).

Income from the self-employed and employers was categorized according to Table A.3 in the Appendix and the amounts due (including taxes, social security and health system contributions) were assigned. It is assumed that self-employed workers that have attained a university degree are professionals who are engaged in activities related to the hiring and/or performance of services; the rest of independent workers are related to other activities.

Payroll taxes: Taxes on wages were also analyzed, including contributions made by both the employee and the employer. In both cases, the amount collected is deposited into the Federal Tax Administration and that revenue is distributed according to the corresponding legal provisions.

Calculation of payroll taxes, and the corresponding social security contributions, was divided in two parts: the revenue generated by formal workers and the amount paid by independent workers. In order to account for the first ones, the household survey informs whether the employer has withheld at source the contributions made by the employee, consequently, these are the ones bearing the tax burden. For the independent workers, as no evasion is assumed, the calculations imply that independent workers are making contributions to social security system so long as they have not been included in the Monotributo regime.

For formal sector employees, the items considered are contributions to the social security system (11%), health insurance (3%), and the national pensions fund (3%), up to a ceiling of AR\$ 63,995.73 monthly (maximum taxable base). This amounts to a total rate of 17%.

In the case of employers, the items considered are contributions to the social security system (12.71%), health insurance (6%), the national pension fund (1.62%), the fund for family allowances (5.56%), and the national employment fund (1.11%), which amounts to 27% of

earnings in the formal sector. This rate pertains to employers whose activity is concentrated in the services sector; for other employers, the rate is 23%.

Incidence estimation for this case made use of the theoretical rates, which were applied to the income for salaried workers, reported in the survey, net of Personal Income Tax. The formula applied was the following, where *tax_rate* is the rate for the contributions of employers and employees.

$$gross\_income = net\_income/(1 - tax\_rate)$$

As we are assuming that the burden is entirely borne by employees, we should include contributions made by the employee and that of the employer as well. Tax revenue for this type of tax is calculated by subtracting Gross income from Net income[7], or by multiplying Gross income by tax rates for the employers and employees, and then summing up. Tax burden for this type of tax is calculated by dividing the tax revenue by the welfare indicator in per capita terms.

In the case of independent workers, the items considered are their contributions to the social security system (27%) and the national pensions fund (5%). These rates are applied to a scaled tax base that is progressive and differs between professionals and traders. These workers have been identified in the household survey by years of education. As in the case of these type of income earners, reported earnings are before tax, the calculation was straightforward, and was carried out over reported income.

5.3. Monetary transfers

In the case of monetary transfers, it is assumed that they are perceived by the legally entitled to receive them. Consequently, market income increases in the amount of these transfers. Several transfers are identified in the survey, while others had to be simulated according to the regulatory requirements. It is assumed that the beneficiaries are the ones who are qualified for the program according to the requirements, which would overestimate coverage given the fact that it is assumed that the program reaches its potential targeted population.

Asignación Universal por Hijo

Target population: Parents with dependent children under the age of 18 who are informal workers with an income lower than the minimum salary of the formal sector, unemployed people without unemployment benefits, and domestic service workers.

Targeting mechanism: A monthly monetary transfer of AR$ 966 per child in March 2016, raised to AR$ 1103 in September 2016. Benefits are received for each of up to five children. The first 80% of the benefit are received by direct deposit into a bank account; the remaining 20% is transferred with proof that the children are attending school and have received the compulsory vaccines. This benefit includes a means-testing mechanism in the sense that

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[7]Obtained in the previous stage, net from PIT.

beneficiaries cannot receive other social benefits while receiving Asignación Universal porHijo (see Table A.5 in the Appendix).

The household survey does not identify the households that receive AUH, so the potential beneficiaries had to be simulated according to the regulations provided by law. In order not to duplicate the impact of transfers, the amount assigned to every household was deducted from the aggregated monetary transfers reported in the survey and the additional amount was added to the transfers received by the households.

Plan de InclusiónPrevisional y Moratoria Previsional

Target population: In 2005, the government instituted an early retirement program through a moratorium for those who had not completed 30years of service (Programa de Inclusión Previsional). In 2007, a program that allowed workers who had completed the required 30years of service, but who were at least five years younger than the official retirement age (65 for men, 60 for women) to receive the pension (Jubilación Anticipada) was also instituted.

Targeting mechanism: For the Jubilación Anticipada, the transfer is equivalent to 50% of the corresponding benefit that the person would be entitled to receive at full retirement age, although it cannot be lower than the minimum pension. For the Prestación por Moratoria, the beneficiaries receive their transfer with a reduction that corresponds to the number of years the person has not contributed to the system. As years of contribution cannot be established in this paper, the program simulated here compensates the pensioners who are receiving a lower-than-minimum pension in order to reach the minimum threshold.

Household surveys do not report whether households have been included in this program, so the amount received was estimated by considering it as a transfer for the amount of contributory pensions reported in the survey that does not exceed minimum pension (this procedure is followed in Lustig and Pessino, 2013, and Rossignolo, 2016).

Family Allowances

Target population: Salaried workers in the formal sector who have children up to 18 years of age and salaries under the limit, as well as pensioners and unemployment compensation beneficiaries with children under 18. The program covers marriage, children, adoption, disabled children, among other monthly transfers, and school attendance for children, paid once a year.

Targeting mechanism: Formal salaried workers receive their benefits according to their income level and to the number of beneficiaries they declare. For instance, the fixed amount for every child in March 2016 was AR$ 966 if the worker's salary was between AR$200 and AR$ 17,124 (see Table A.4 in the Appendix); the amount decreased to AR$ 741 for a salary between AR$ 17,124 and AR$ 25,116, and to AR$ 446 for a salary between AR$ 25,116 and AR$ 28,997 (in familiar terms). These amounts varied by geographical zone, being higher in the southern region of the country. A household might be excluded from this benefit in the absence of either children or a head of household working in the formal sector, if the head of household

is retired or unemployed and receiving unemployment benefits, or if the head of household is earning an income higher than the maximum allowed for the benefit (AR\$ 7,560 per month in September 2016).

As the EPH survey does not identify the households that receive Family Allowances, the same procedure as the one followed for AUH was performed in this case, again netting out these transfers from those reported in the survey.

Seguro de Capacitación y Empleo

Target population: Beneficiaries of the previous Programa Jefes y Jefas de Hogar, including those with greater employment prospects.

Targeting mechanism: The beneficiaries of the Jefes y Jefas de Hogar Program, which was created in 2002 to ameliorate effects of rising unemployment, were divided in two groups according to their employment potential. Those considered more "employable" were assigned to the Seguro de Capacitación y Empleo, a 24-month monetary transfer of AR\$ 900 for the first 18 months then reduced for the remaining six months. The beneficiaries must comply with regulations such as attending courses to increase their employable skills. The potential beneficiaries for this program were simulated according to the regulation of the program.

Scholarships

Target population: Programa Nacional de Becas Universitarias (PNBU) is for university students attending an officially recognized program at any national university; it excludes students in their last year of study and those planning to start their careers.

Targeting mechanism: Beginning in 2009, students received AR\$ 3000 in 10 installments throughout the year. There are other two compensation programs, Programa de Becas Bicentenario, for students preparing for scientific careers, and Programa Nacional de Becas de Grado, for information technology students. The beneficiaries were obtained from the survey where they are identified.

ProgramaJóvenes con Más y Mejor Trabajo

Target population: People between 18 and 24 years of age who neither work nor study.

Targeting mechanism: The beneficiaries must be unemployed, with incomplete primary or secondary education, and between 18 and 24 years of age. The amount of the transfer is AR\$ 450 a month for 2 to18 months. In addition, transfers are made against the presentation of a project for which the beneficiary receives AR\$ 4,000 per project. The potential beneficiaries for this program were simulated according to the regulation of the program.

Seguro de Desempleo

Target population: Workers who have lost their jobs through no fault of their own and have been unemployed for at least 36 months.

Targeting mechanism: A transfer of between AR$ 1,875 and AR$ 3,000, calculated as a percentage of the highest previous salary. Maximum coverage lasts one year. The beneficiaries were obtained from the survey where they are identified.

Contributory Pensions

Target population: Criteria to receive the contributory pension is related to age: 65 years for males plus 30 years of services during which one contributes to the system; for women the age is between 60 to 65 with 30 years of contributions.

Targeting mechanism: The system includes a mobility mechanism which increases pensions twice a year (March and September) that includes not only minimum and maximum levels but also all transfers. The increase varies in accordance with the increase in system resources and salaries increase. In March 2016, the minimum pension was AR$ 4,958,57. It was raised to AR$ 5,661 in September. The beneficiaries were obtained from the survey where they are identified.

6. Monetary Transfers and Direct Taxes: Effects on Inequality and Poverty Reduction

This section presents several results of the CEQ analysis of the impact of taxes and public spending on poverty and inequality in Argentina. It is important to note that the methodology entails subtracting direct taxes from market income to get at net market income; then, by adding up monetary transfers, disposable income is attained. The results will focus on the benchmark case, in which pensions are a part of market income. Results from the sensitivity analysis, where pensions are treated as a government transfer, will be presented as well.

It is important to note that the welfare indicator considered in this case is per capita income, considering the square root of the quantity of members in the household as a proxy for the economies of scale within the household and in order to keep consistent with OECD methodology.

6.1. Impact on Inequality and Poverty

The evolution of the Gini coefficient and headcount ratio (using the international poverty lines of US$2.50 PPP and US$4 PPP per day (2011 international lines) and the national moderate poverty lines) for the benchmark scenario and sensitivity analysis are presented in Tables 1 and 2.

As shown in Tables 1 and 2, market income Gini is higher than the net market income Gini, indicating that direct taxes (Personal Income Tax, Social Security Contributions and Monotributo) reduce inequality. The aforementioned inequities reduce more when pensions are considered as a monetary transfer because the starting point is a more unequal distribution; i.e., individuals are ranked according to their per capita familiar income including pensions in market income in the first case, and excluding them while considering as a monetary transfer in the second case.

Regarding poverty, however, the effect is the inverse, because a reduction in income due to direct taxes (mainly, in this case, Monotributo), results in a higher number of households

below the poverty line. It is important to note that these results do not coincide with the official figures, because in this case national poverty lines are strictly compared with per capita income indicator and not with familiar income as in the official statistics.

Table 1
Gini and Headcount Index for Different Income Concepts
Benchmark scenario (pensions as a part of market income)

	Market income	Net market income	Disposable income
Gini Benchmark scenario	0.470	0.426	0.362
Headcount index			
Benchmark scenario $2.5 PPP	4.7%	4.8%	0.7%
Benchmark scenario $4 PPP	6.3%	6.6%	1.2%
National Moderate PL (INDEC)	20.6%	23.3%	11.7%
Other Moderate PL (FIEL)	18.4%	20.7%	9.7%

Source: Author´s calculations based on EPH.

Table 2
Gini and Headcount Index for Different Income Concepts
Sensitivity analysis (pensions as a monetary transfer)

	Market income	Net market income	Disposable income
Gini Sensitivity analysis	0.516	0.470	0.362
Headcount index			
Sensitivity analysis $2.5 PPP	10.3%	10.5%	0.7%
Sensitivity analysis $4 PPP	12.4%	12.7%	1.2%
National Moderate PL (INDEC)	28.5%	32.3%	11.7%
Other Moderate PL (FIEL)	26.3%	29.3%	9.7%

Source: Author´s calculations based on EPH.

When direct transfers are included in disposable income, reductions in both inequality and poverty are evident; disposable income Gini declines to around 23% and 30%, respectively. The reduction in poverty is further propelled by monetary transfers; when pensions are considered a government transfer, the impact is markedly higher as the headcount ratio shows a decline of more than 90% from market to disposable income (Figures 7 and 8).

Figure 7
Evolution of inequality through different income concepts

a. Gini coefficient
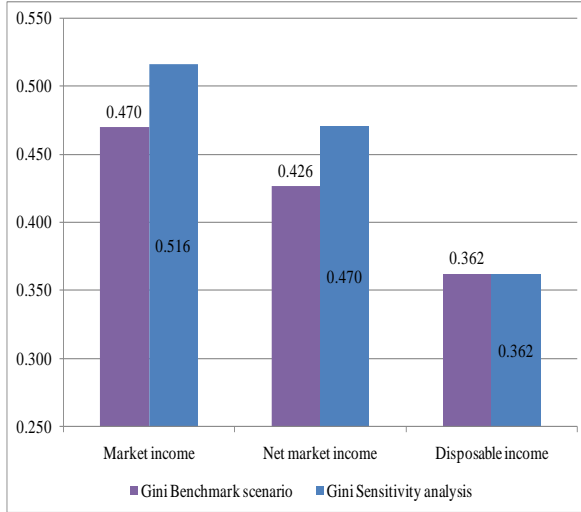
b. Percent change in Gini
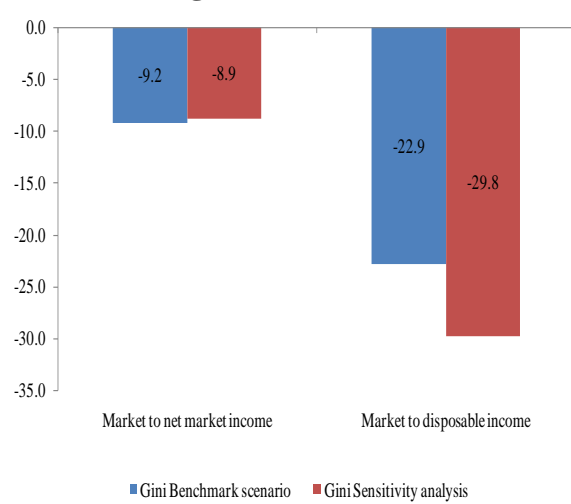
Source: Author´s calculations based on EPH

Figure 8
Evolution of poverty through different income concepts

a. Headcount index
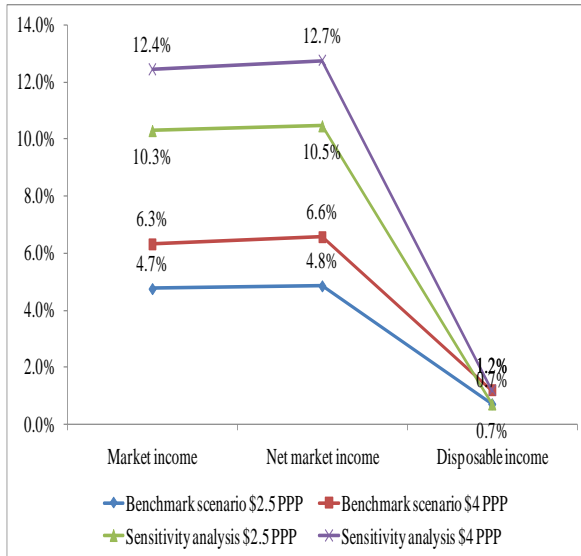
b. Percent change in Headcount index
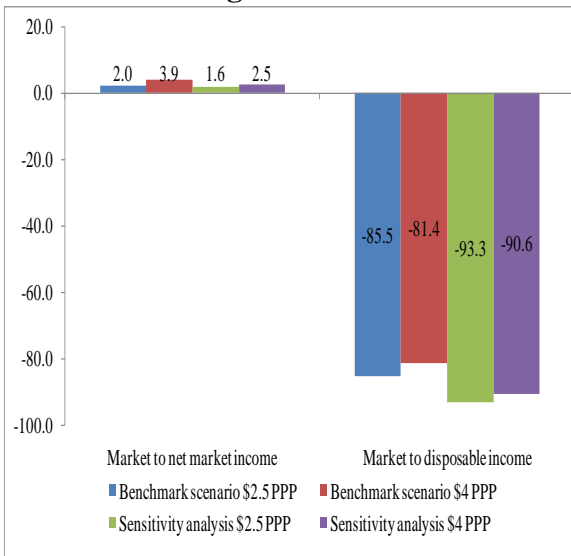
Source: Author´s calculations based on EPH

6.2. Incidence Analysis

The incidence analysis is calculated through the ratio of benefits to market income by market income deciles. The effect of direct taxes and direct transfers leads to a reduction in inequality; the highest decile by market income ranking is the one that bears the highest proportion of direct taxes. Meanwhile, in the case of direct transfers, the effect is the inverse, since the lowest market income deciles receive the highest proportion of transfers.

On the tax side, it can be clearly seen that Personal Income Tax is progressive (it is paid by the richest 20% of population), as well as social security contributions (it is assumed that they are borne by the employee). Monotributo, on the other hand, although it is paid in a higher absolute value by highest income earners, has a regressive feature.

Table 3
Incidence of Taxes and Transfers on Income Distribution in Percentages (Benchmark Case)

		Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Family allowances	Asignación Universal por Hijo	Pension moratorium	Unemployment insurance	Seguro de capacitación y empleo	Scholarships	Youth employment and training programs	Other Direct Transfers (Targeted or Not)	All Direct Transfers
Deciles	1	0.0%	-3.2%	-0.4%	-3.7%	2.3%	63.3%	475.8%	1.2%	2.3%	1.9%	1.3%	35.1%	583.2%
	2	0.0%	-1.4%	-3.1%	-4.5%	4.2%	13.6%	17.8%	1.5%	0.2%	0.7%	0.2%	8.0%	46.0%
	3	0.0%	-0.9%	-6.4%	-7.4%	3.9%	4.7%	12.6%	0.1%	0.1%	0.5%	0.1%	3.3%	25.4%
	4	0.0%	-0.5%	-11.5%	-12.0%	3.6%	1.6%	6.5%	0.0%	0.1%	0.3%	0.0%	1.6%	13.8%
	5	0.0%	-0.4%	-14.3%	-14.6%	3.1%	0.8%	3.4%	0.0%	0.0%	0.2%	0.1%	1.0%	8.6%
	6	0.0%	-0.4%	-14.3%	-14.7%	1.8%	0.2%	3.0%	0.0%	0.0%	0.1%	0.0%	0.5%	5.6%
	7	0.0%	-0.4%	-16.4%	-16.8%	1.3%	0.1%	1.7%	0.0%	0.0%	0.1%	0.0%	0.2%	3.4%
	8	0.0%	-0.2%	-19.4%	-19.6%	1.2%	0.1%	1.0%	0.0%	0.0%	0.0%	0.0%	0.1%	2.5%
	9	-0.4%	-0.3%	-18.3%	-19.0%	0.5%	0.1%	1.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.7%
	10	-14.4%	-0.1%	-21.4%	-35.9%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Population		-5.1%	-0.3%	-17.6%	-23.0%	1.1%	0.9%	4.1%	0.1%	0.0%	0.1%	0.0%	0.7%	7.1%

Source: Author´s calculations based on EPH

As expected, when pensions are considered a government transfer, the impact is outstanding for the lowest deciles of income distribution; and is markedly higher than that of the benchmark case (Table 4). It is important to note that, once monetary transfers are subtracted from income reported in the household survey, no market income accrues to individuals included in the first decile. Consequently, the ratios over income cannot be calculated.

Table 4
Incidence of Taxes and Transfers on Income Distribution in Percentages (Sensitivity Analysis)

	Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Family allowances	Asignación Universal por Hijo	Pension moratorium	Unemployment insurance	Seguro de capacitación y empleo	Scholarships	Youth employment and training programs	Other Direct Transfers (Targeted or Not)	Contributory pensions	All Direct Transfers
Deciles 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	0.0%	-3.8%	-0.5%	-4.3%	11.2%	46.1%	207.7%	0.9%	1.2%	1.5%	0.7%	26.9%	615.5%	911.7%
3	0.0%	-1.7%	-3.1%	-4.8%	3.8%	14.8%	17.8%	0.2%	0.2%	0.8%	0.2%	8.2%	44.6%	90.7%
4	0.0%	-1.1%	-8.5%	-9.6%	4.9%	4.7%	9.4%	0.9%	0.1%	0.5%	0.2%	3.8%	22.7%	47.2%
5	0.0%	-0.7%	-14.3%	-15.0%	3.3%	1.9%	6.3%	0.1%	0.1%	0.4%	0.0%	1.7%	17.5%	31.2%
6	0.0%	-0.5%	-18.4%	-18.9%	3.1%	0.7%	3.2%	0.0%	0.0%	0.3%	0.1%	0.9%	9.3%	17.6%
7	0.0%	-0.4%	-20.3%	-20.7%	2.1%	0.2%	2.4%	0.0%	0.0%	0.1%	0.0%	0.4%	10.1%	15.4%
8	0.0%	-0.4%	-20.8%	-21.2%	1.4%	0.2%	1.1%	0.1%	0.0%	0.1%	0.0%	0.1%	4.7%	7.7%
9	-0.1%	-0.3%	-21.9%	-22.2%	0.7%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.1%	4.1%	5.7%
10	-15.2%	-0.1%	-23.3%	-38.6%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	2.7%
Population	-6.0%	-0.4%	-20.3%	-26.6%	1.3%	1.1%	4.8%	0.1%	0.0%	0.1%	0.0%	0.8%	15.7%	23.9%

Source: Author´s calculations based on EPH

6.3. Progressivity

Figures 9 and 10 present an analysis of social spending by program. The concentration coefficient for social spending shows progressivity in absolute terms (a pro-poor characteristic).

Most direct cash transfers are progressive in absolute terms; Asignación Universal por Hijo, Youth employment programs, pension moratorium, Seguro de capacitación y empleo, and other transfers (reported by the survey) are the most progressive programs. In the case of the family allowances, they are moderately progressive in the benchmark case, and also very moderately regressive in the sensitivity analysis, given the fact that they are related to the distribution of formal workers and pensioners.

Figure 9
Concentration Coefficient by Spending Category (Benchmark case)

Concentration Coefficients with respect to market income

Category	Value
Scholarships	-0.20738078
Asignación Universal por Hijo	-0.5758824
Unemployment insurance	-0.28085707
Other Direct Transfers (Targeted or Not)	-0.45945321
Seguro de capacitación y empleo	-0.4397913
Youth employment and training programs	-0.43313738
Family allowances	-0.0135706
Pension moratorium	-0.44542554
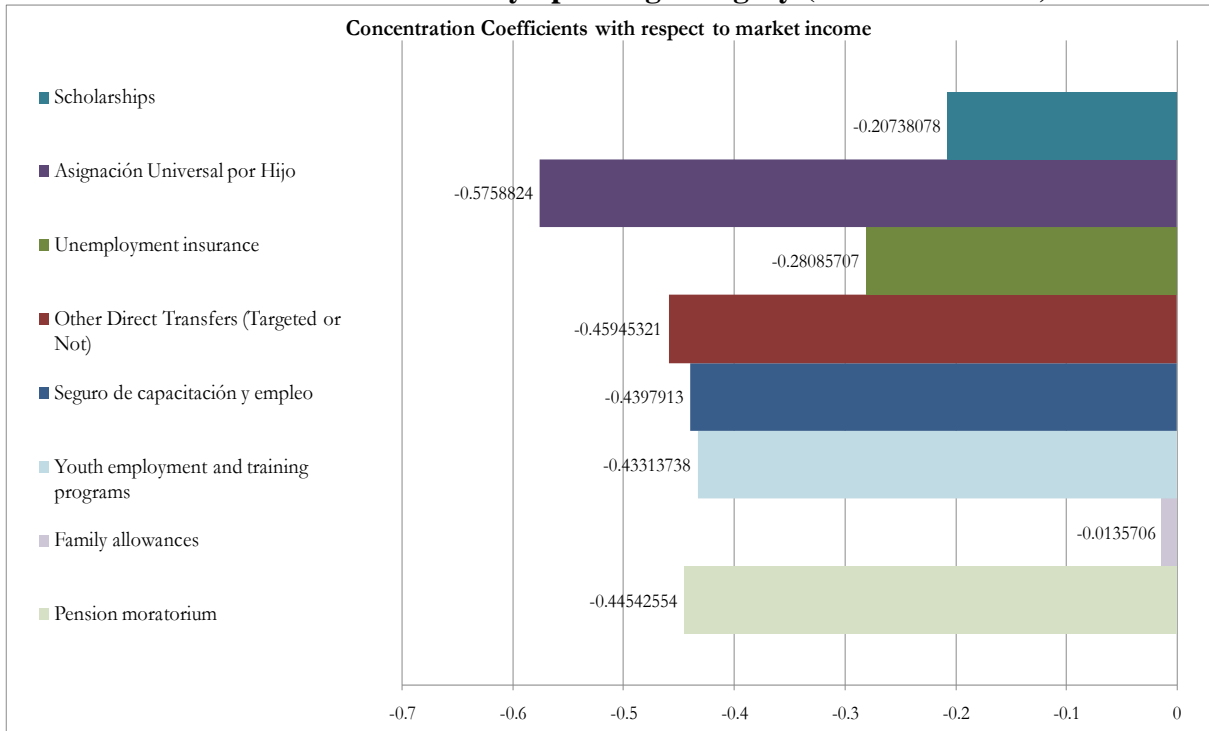
Source: Author´s calculations based on EPH.

Figure 10
Concentration Coefficient by Spending Category (Sensitivity analysis)

Concentration Coefficients with respect to market income

Category	Value
Contributory pensions	-0.329953
Asignación Universal por Hijo	-0.444140
Other Direct Transfers (Targeted or Not)	-0.339525
Pension moratorium	-0.412227
Youth employment and training programs	-0.299514
Unemployment insurance	-0.280857
Seguro de capacitación y empleo	-0.207489
Family allowances	0.055792
Scholarships	-0.106962

Source: Author´s calculations based on EPH

Income distribution by decile is presented in Table 5 for the Benchmark case and in Table 6 for the Sensitivity analysis. For instance, the first two deciles concentrate 2.7% of market income for the Benchmark case, and 0.5% of market income when considering pensions as a government transfer.

After government intervention, the first quintile concentrates 7.1% and 13% of disposable income, which shows the high impact of government intervention when pensions are considered as a government transfer.

The richest decile concentrates 35.3% of market income in the benchmark case, and 39.1% in the Sensitivity analysis; taxes and public expenditures reduce its share to 27.1% and 25.7% of disposable income.

Table 5
Income, taxes and expenditure distribution by decile (Benchmark Case)

Deciles	Market Income	Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Net Market Income	Family allowances	Asignación Universal por Hijo	Pension moratorium	Unemployment insurance	Seguro de capacitación y empleo	Scholarships	Youth employment and training programs	Other Direct Transfers (Targeted or Not)	All Direct Transfers	Disposable Income
1	0.4%	0.0%	4.2%	0.0%	0.1%	0.5%	0.8%	27.4%	46.3%	8.9%	29.6%	7.7%	23.7%	20.9%	33.1%	3.2%
2	2.3%	0.0%	10.6%	0.4%	0.4%	2.8%	8.3%	33.6%	9.9%	61.3%	13.8%	15.3%	16.9%	27.1%	14.9%	3.9%
3	3.7%	0.0%	10.9%	1.4%	1.2%	4.5%	12.9%	19.1%	11.4%	7.9%	11.3%	17.9%	21.2%	18.3%	13.4%	5.2%
4	5.1%	0.0%	8.4%	3.3%	2.6%	5.8%	16.1%	8.8%	8.1%	2.8%	12.2%	16.6%	9.6%	11.7%	9.9%	6.1%
5	6.4%	0.0%	7.2%	5.2%	4.0%	7.0%	17.2%	5.3%	5.3%	3.6%	4.1%	15.1%	17.1%	9.0%	7.7%	7.1%
6	7.8%	0.0%	10.5%	6.4%	5.0%	8.7%	12.2%	2.0%	5.7%	0.2%	5.6%	9.5%	6.2%	5.4%	6.2%	8.5%
7	9.7%	0.0%	11.1%	9.1%	7.1%	10.5%	10.8%	1.2%	3.9%	8.3%	4.9%	10.1%	1.3%	3.1%	4.7%	10.1%
8	12.3%	0.0%	9.0%	13.6%	10.5%	12.8%	12.5%	1.8%	3.0%	7.0%	8.9%	4.7%	1.3%	1.4%	4.3%	12.1%
9	17.0%	1.3%	15.1%	17.7%	14.0%	17.9%	7.3%	0.9%	4.2%	0.0%	0.9%	0.6%	0.2%	2.3%	4.0%	16.7%
10	35.3%	98.7%	13.1%	43.0%	55.0%	29.4%	1.9%	0.1%	2.2%	0.0%	8.4%	2.5%	2.4%	0.7%	1.7%	27.1%
pulat	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%

Source: Author´s calculations based on EPH

Table 6
Income, taxes and expenditure distribution by decile (Sensitivity Analysis)

Deciles	Market Income	Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Net Market Income	Family allowances	Asignación Universal por Hijo	Pension moratorium	Unemployment insurance	Seguro de capacitación y empleo	Scholarships	Youth employment and training programs	Other Direct Transfers (Targeted or Not)	Contributory pensions	All Direct Transfers	Disposable Income
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	5.7%	33.5%	4.0%	13.1%	2.9%	8.3%	5.3%	35.1%	30.3%	7.4%
2	0.5%	0.0%	5.6%	0.0%	0.1%	0.7%	4.5%	22.8%	23.2%	7.3%	17.4%	7.2%	13.5%	18.4%	20.8%	20.3%	5.5%
3	2.4%	0.0%	11.3%	0.4%	0.4%	3.2%	7.0%	33.7%	9.1%	8.4%	11.3%	17.5%	20.2%	25.7%	6.9%	9.2%	4.7%
4	4.1%	0.0%	11.9%	1.7%	1.5%	5.0%	15.1%	17.9%	8.1%	56.4%	13.0%	16.3%	25.2%	19.9%	5.9%	8.0%	5.8%
5	5.8%	0.0%	11.0%	4.1%	3.3%	6.7%	14.4%	10.0%	7.7%	4.9%	14.4%	18.4%	7.3%	12.4%	6.5%	7.6%	6.9%
6	7.6%	0.0%	9.5%	6.8%	5.4%	8.4%	17.9%	5.2%	5.1%	7.4%	7.4%	16.8%	15.6%	8.6%	4.5%	5.6%	7.7%
7	9.7%	0.0%	9.5%	9.7%	7.6%	10.5%	15.3%	2.0%	4.9%	1.0%	4.0%	9.9%	5.2%	4.6%	6.3%	6.3%	9.5%
8	12.8%	0.0%	13.3%	13.1%	10.2%	13.8%	13.3%	1.8%	3.1%	14.5%	3.3%	7.2%	2.1%	2.3%	3.8%	4.1%	11.4%
9	18.0%	0.2%	13.6%	19.4%	15.0%	19.1%	9.1%	0.7%	3.0%	0.0%	7.9%	0.9%	0.2%	1.9%	4.7%	4.3%	15.5%
10	39.1%	99.7%	14.3%	44.8%	56.6%	32.7%	2.4%	0.1%	2.5%	0.0%	8.2%	3.0%	2.4%	0.9%	5.6%	4.3%	25.7%
pulat	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%

Source: Author´s calculations based on EPH

6.4. Poverty

Tables 7 and 8 shows the results on poverty. The picture is roughly similar to that of inequality; most impoverished households benefit strongly from direct transfers; the richest

receive a greatly reduced proportion of these benefits. The impact on the lowest deciles is much higher when considering pensions as a public transfer. Given the reduced market income of the poorest households, the impact in terms of transfers received over that mean income is very high (several times higher than mean market income).

Table 7
Incidence of Taxes and Transfers on Poverty in Percentages (Benchmark Analysis)

Group	Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Family allowances	Asignación Universal por Hijo	Pension moratorium	Unemployment insurance	Seguro de capacitación y empleo	Scholarships	Youth employment and training programs	Other Direct Transfers (Targeted or Not)	All Direct Transfers
y < 1.25	0.0%	-2.0%	0.0%	-2.0%	0.0%	1390.1%	30467.0%	70.1%	115.2%	59.3%	51.0%	1022.1%	33174.8%
1.25 < = y < 2.	0.0%	-9.7%	0.0%	-9.7%	0.0%	119.1%	276.5%	0.8%	0.6%	3.4%	0.1%	68.1%	468.5%
2.50 <= y < 4.0	0.0%	-4.1%	-0.2%	-4.3%	0.1%	61.9%	88.2%	0.3%	0.0%	1.9%	0.7%	30.2%	183.2%
4.00 <= y < 10	0.0%	-1.8%	-1.9%	-3.7%	4.4%	21.8%	30.6%	0.3%	0.4%	1.0%	0.3%	10.6%	69.3%
10.00 <= y < 5	0.0%	-0.5%	-13.6%	-14.1%	2.4%	1.3%	4.6%	0.1%	0.0%	0.2%	0.0%	1.2%	9.9%
50.00 <= y	-8.2%	-0.2%	-20.2%	-28.6%	0.3%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
Total Populatio	-5.1%	-0.3%	-17.6%	-23.0%	1.1%	0.9%	4.1%	0.1%	0.0%	0.1%	0.0%	0.7%	7.1%

Source: Author´s calculations based on EPH

Table 8
Incidence of Taxes and Transfers on Poverty in Percentages (Sensitivity Analysis)

Group	Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Family allowances	Asignación Universal por Hijo	Pension moratorium	Unemployment insurance	Seguro de capacitación y empleo	Scholarships	Youth employment and training programs	Other Direct Transfers (Targeted or Not)	Contributory pensions	All Direct Transfers
y < 1.25	0.0%	-8.5%	0.0%	-8.5%	229.3%	936.2%	21285.0%	38.9%	79.0%	54.4%	31.4%	730.4%	74401.7%	97786.3%
1.25 < = y <	0.0%	-10.8%	0.0%	-10.8%	31.5%	84.9%	199.0%	0.5%	0.3%	3.2%	0.0%	48.8%	297.9%	666.2%
2.50 <= y <	0.0%	-4.3%	-0.2%	-4.5%	10.1%	54.5%	76.9%	1.2%	0.0%	1.5%	0.5%	24.9%	123.5%	293.1%
4.00 <= y <	0.0%	-1.9%	-2.1%	-4.0%	4.0%	19.5%	26.5%	0.1%	0.3%	0.9%	0.3%	9.5%	64.6%	125.7%
10.00 <= y	0.0%	-0.6%	-17.1%	-17.6%	2.7%	1.4%	4.2%	0.2%	0.0%	0.2%	0.0%	1.3%	12.4%	22.6%
50.00 <= y	-9.5%	-0.2%	-22.7%	-32.4%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	3.8%
Total Popula	-6.0%	-0.4%	-20.3%	-26.6%	1.3%	1.1%	4.8%	0.1%	0.0%	0.1%	0.0%	0.8%	15.7%	23.9%

Source: Author´s calculations based on EPH

As a comparison to the income distribution analysis by decile, Tables 9 and 10 present the distribution by socioeconomic group based on poverty analysis. The greater proportion of population lies in the fifth bracket (10 to 50), meanwhile fiscal system reduces income concentrated by groups below poverty lines, even in the highest bracket.

The population over $50 PPP in the benchmark case concentrated 62% of market income. That percentage reduces to 53.8% when considering disposable income.

Regarding the sensitivity analysis, the population over $50 PPP concentrated 62.5% of market income; that proportion fell to 45.9% when viewing consumable income On the other hand,

the poorest population significantly increases their share of income when considering disposable income rather than market income.

Table 9
Poverty distribution by Socioeconomic Group (Benchmark Case)

Group:	Market Income	Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Net Market Income	Family allowances	Asignación Universal por Hijo	Pension moratorium	Unemployment insurance	Seguro de capacitación y empleo	Scholarships	Youth employment and training programs	Other Direct Transfers (Targeted or Not)	All Direct Transfers	Disposable Income
y < 1.25	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.8%	38.6%	6.6%	19.3%	3.2%	11.9%	7.9%	24.5%	2.1%
1.25 < = y <	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	3.5%	1.9%	0.4%	0.5%	0.9%	0.1%	2.8%	1.8%	0.2%
2.50 <= y < 4	0.1%	0.0%	1.3%	0.0%	0.0%	0.1%	0.0%	6.4%	2.1%	0.5%	0.0%	1.8%	3.1%	4.3%	2.5%	0.3%
4.00 <= y < 1	1.2%	0.0%	6.9%	0.1%	0.2%	1.5%	4.5%	27.5%	8.7%	5.9%	15.1%	12.5%	16.5%	18.4%	11.5%	2.3%
10.00 <= y <	36.3%	0.0%	54.9%	28.0%	22.1%	40.5%	76.6%	52.2%	40.2%	85.8%	46.8%	76.4%	64.4%	62.4%	50.7%	41.3%
50.00 <= y	62.4%	100.0%	36.0%	71.8%	77.6%	57.9%	18.9%	2.4%	8.6%	0.8%	18.3%	5.2%	3.9%	4.1%	8.9%	53.8%
Total Populat	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%

Source: Author´s calculations based on EPH

Table 10
Poverty distribution by Socioeconomic Group (Sensitivity Analysis)

Group:	Market Income	Personal Income Tax	Monotributo	Social Security Contributions	Total Direct Taxes	Net Market Income	Family allowances	Asignación Universal por	Pension moratorium	Unemployment insurance	Seguro de capacitación y	Scholarships	Youth employment and training	Other Direct Transfers	Contributory pensions	All Direct Transfers	Disposable Income
y < 1.25	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	1.9%	9.5%	48.6%	6.6%	23.8%	5.2%	13.2%	10.2%	51.5%	44.5%	10.9%
1.25 < = y <	0.1%	0.0%	1.6%	0.0%	0.0%	0.1%	1.3%	4.2%	2.2%	0.4%	0.5%	1.5%	0.1%	3.3%	1.0%	1.5%	0.4%
2.50 <= y < 4	0.2%	0.0%	1.8%	0.0%	0.0%	0.2%	1.2%	7.7%	2.5%	2.9%	0.0%	2.0%	3.1%	4.9%	1.2%	1.9%	0.6%
4.00 <= y < 1	1.6%	0.0%	8.4%	0.2%	0.2%	2.1%	4.8%	28.7%	8.8%	3.5%	14.9%	12.9%	15.8%	19.2%	6.5%	8.3%	3.6%
10.00 <= y <	35.7%	0.0%	55.3%	30.0%	23.7%	40.1%	74.0%	48.1%	31.7%	86.6%	42.7%	73.8%	63.9%	59.0%	28.3%	33.8%	38.6%
50.00 <= y	62.5%	100.0%	32.7%	69.8%	76.1%	57.5%	17.0%	1.8%	6.3%	0.0%	18.1%	4.6%	3.9%	3.3%	11.5%	10.0%	45.9%
Total Populat	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%

Source: Author´s calculations based on EPH

7. Conclusions

After the crisis in 2001, which generated an increase in poverty indicators and inequality, Argentina instituted a series of policies intended to ameliorate inequality and reduce poverty in the last decade, which were continued in 2016 when the new government took charge. Among the most effective policies introduced were programs such as Asignación Universal por Hijo and Moratoria Previsional. These cash benefits constitute a significant proportion of GDP and makes the Argentine case. comparable to OECD countries with high public expenditure levels

On the tax side, an increase in revenue from direct taxes (income tax, social security contributions) through expansions in tax bases was partially used as a means to finance public transfers and the increase has been a tool to moderate inequality.

This study has introduced the CEQ methodology to analyze the impact of public expenditures and taxes on income distribution and poverty in Argentina using EPH survey data from 2016 (third quarter). Two scenarios have been presented: the benchmark case, in which pensions have been considered as a part of market income, and a sensitivity analysis, where pensions have been regarded as a monetary transfer.

The results show a high degree of correction in both welfare indicators: market inequality is strongly reduced and poverty is highly ameliorated; the impact is markedly higher in the sensitivity analysis. This correction is consistent with the high participation rate of the public sector in the economy through monetary transfers and direct taxes.

References

Cetrángolo, O. y Gómez Sabaini, J. C. (2010): "Argentina: Un análisis de lostributosdirectos y cálculo de evasión", en Jiménez, J. P., Gómez Sabaini, J. C. y Podestá, A. (comp.): "Evasión y equidadenAmérica Latina", Documento de proyecto CEPAL GTZ

Cowell, F. (1995). "Measuring inequality." LSE Handbooks in Economic Series, Prentice Hall/Harvester Wheatsheaf.

Demery, L. (2003). "Analyzing the Impact of Social Spending," In F. Bourguignon& L. P. Da Silva,*The Impact of Economic Policies on Poverty and Income Distribution*. World Bank and Oxford University Press.

Dirección Nacional de Investigaciones y Análisis Fiscal (DNIAF), Ministry of Economy and Public Finance. (2016). "Tributosvigentesen Argentina 2016."

Flood,C., Gasparini, L., Harriague, M.,& Velez, B. (1994). "El impactodistributivo del gastopúblico social en Argentina." Ministerio de Economía y Obras y ServiciosPúblicos.

Gaggero, J. & Rossignolo, D. (2011): "Impacto del presupuestosobre la equidad. Cuadro de situación, Argentina 2010" Documento de Trabajo N° 40, CEFID-AR

Gasparini, L. (1998). "Incidenciadistributiva del sistemaimpositivoargentino." In *La reformatributariaen la Argentina*. Fundación de InvestigacionesEconómicasLatinoamericanas.

Gasparini, L. (1999). "Incidenciadistributiva del gastopúblico social y de la políticatributariaargentina." In *La distribución del ingresoen la Argentina" Fundación de InvestigacionesEconómicasLatinoamericanas.*

Gasparini, L., & Cruces, G. (2009)."Desigualdaden Argentina. Una revisión de la evidenciaempírica." *DesarrolloEconómico,*48-49(192-193).

Gasparini, L., & Lustig, N. (2011)."The rise and fall of income inequality in Latin America." *Handbook of Latin American Economics*. Oxford University Press.

Gasparini, L.,& Porto, A. (1992). "Impactodistributivo del gastopúblico social." *DesarrolloEconómico*, 31(110).

Gómez Sabaini, J. C., Harriague, M.,& Rossignolo, D. (2013). "Argentina. La situación fiscal y losefectosen la distribución del ingreso." *DesarrolloEconómico*, 52(207-208).

Gómez Sabaini, J. C. & Rossignolo, D. (2001): "Análisis de la incidencia de losimpuestos y de la política fiscal sobre la distribución del ingresoen Argentina", NovenoCongresoTributario del CPCECABA

Gómez Sabaini, J. & Rossignolo, D. (2009). "Argentina. Análisis de la situacióntributaria y propuestas de reformasimpositivasdestinadas a mejorar la distribución del ingreso." In S. Keifman, *Reflexiones y propuestas para mejorar la distribución del ingresoen Argentina*. Oficina de la OrganizaciónInternacional del Trabajoen Buenos Aires.

Gómez Sabaini, J. & Rossignolo, D. (2014). "La tributaciónsobre las altasrentasenAmérica Latina." SerieEstudios y Perspectivas No. 13, ECLAC Montevideo Office.

Gómez Sabaini, J., Santiere, J.,& Rossignolo, D. (2002). "La equidaddistributiva y el sistematributario: un análisis para el casoargentino." ILPES-CEPAL, SerieGestiónPública.

Goñi, E., Lopez, H. & Servén, L. (2008). "Fiscal Redistribution and Income Inequality in Latin America." World Bank.

INDEC. (2012). "MuestraMaestra Urbana de viviendas de la República Argentina. Mmuvra 2011, DocumentoMetodológico." I Reunión del Grupo de TrabajoSobreEncuestas a Hogares de la ConferenciaEstadística de las Américas, Buenos Aires, October 2012.

Lambert, P. (1993). *The Distribution and Redistribution of Income*. Manchester University Press.

Lustig, N., & Higgins, S. (2013). "Commitment to Equity Assessment (CEQ): Estimating the Incidence of Social Spending, Subsidies and Taxes Handbook. "CEQ Working Paper No. 1, Center for Inter-American Policy and Research and Department of Economics, Tulane University and Inter-American Dialogue, September.

Lustig, N., & Higgins, S. (2013). "Measuring Impoverishment: An Overlooked Dimension of Fiscal Incidence." CEQ Working Paper No. 14.

Lustig, N., & Pessino, C. (2013). "Social Spending and Income Redistribution in Argentina in the 2000s: The Rising Role of Noncontributory Pensions." CEQ Working Paper No. 5.

Lustig, N. & Pessino, C. (2013)."¿Es la Argentina un modelo de políticasredistributivas?" PublicadoenBastión Digital Argentina.

Martínez-Vázquez, J. (2001). "El impacto de lospresupuestossobrelospobres. Incidencia fiscal y de beneficios." mimeo Georgia State University

Maurizio, R. (2009). "Políticas de transferenciasmonetariasen Argentina: Evaluación de suimpactosobre la pobreza y la desigualdad, y evaluación de suscostos." In S. Keifman, *Reflexiones y propuestas para mejorar la distribución del ingresoen Argentina*. Oficina de la OrganizaciónInternacional del Trabajoen Buenos Aires.

Rossignolo, D. (2016). "Taxes, Expenditures, Poverty And Income Distribution In Argentina", CEQ Working Paper 45

Rossignolo, D. & Ramos, M. (2015). "Efectosdistributivos de cambiosdiscrecionalesen la política fiscal en Argentina." *Revista de EconomíaPolítica de Buenos Aires*, 9(15).

Secretaria de PolíticaEconómica, DNPGS. (2002). "El impactoredistributivo de la Política Social en Argentina." Serie: GastoPúblico, Documento de trabajo: Nº GP/ 12.

Secretaría de PolíticaEconómica, DGSC. (2001). "Caracterización y Evolución del GastoPúblico Social 2000.". Ministerio de Economía, Buenos Aires.

Secretaría de ProgramaciónEconómica y Regional, DNPGS. (1999). "El impactoredistributivo del gastopúblicoenlosSectoresSociales. Resultadosprovisorios." Serie: GastoPúblico, Documento de trabajo: Nº GP/ 08.

Sahn, D., & Younger, S. (2003)."Estimating the Incidence of Indirect Taxes in Developing Countries." In F. Bourguignon& L.P. Da Silva, *The Impact of Economic Policies on Poverty and Income Distribution*. World Bank and Oxford University Press.

Appendix

Table A.1

Personal allowances for income tax on individuals- Annual amounts in AR$

Legislation	2016
Non taxable income	42,318
Spouse	39,778
Children	19,889
Special deduction for self employed taxpayers	42,318
Special deduction for employees and retirees	203,126
Other family deductions	19,889

Source: Ministry of Economy and Public Finance

Table A.2

Applicable income tax according to income bracket

Accumulated taxable net income		Payment		
Over AR$	Up to AR$	AR$	Plus %	In excess of AR$
0	10,000	-	9	-
10,000	20,000	900	14	10,000
20,000	30,000	2,300	19	20,000
30,000	60,000	4,200	23	30,000
60,000	90,000	11,100	27	60,000
90,000	120,000	19,200	31	90,000
120,000	above	28,500	35	120,000

Source: Ministry of Economy and Public Finance

Table A.3
Monotributo regime
Taxes according to activities related to hiring and/or performance of services or other activities in 2016

Category	Gross income	Tax according to activities related to the hiring and/or performance of services	Tax according to other activities	Social security contributions	Health system contributions	Total according to activities related to the hiring and/or performance of services	Total according to other activities
B	Up to $ 48,000	$ 39	$ 39	$ 157	$ 419	$ 615	$ 615
C	Up to $ 72,000	$ 75	$ 75	$ 157	$ 419	$ 651	$ 651
D	Up to $ 96,000	$ 128	$ 118	$ 157	$ 419	$ 704	$ 694
E	Up to $ 144,000	$ 210	$ 194	$ 157	$ 419	$ 786	$ 770
F	Up to $ 192,000	$ 400	$ 310	$ 157	$ 419	$ 976	$ 886
G	Up to $ 240,000	$ 550	$ 405	$ 157	$ 419	$ 1,126	$ 981
H	Up to $ 288,000	$ 700	$ 505	$ 157	$ 419	$ 1,276	$ 1,081
I	Up to $ 400,000	$ 1,600	$ 1,240	$ 157	$ 419	$ 2,176	$ 1,816
J	Up to $ 470,000	-	$ 2,000	$ 157	$ 419	-	$ 2,576
K	Up to $ 540,000	-	$ 2,350	$ 157	$ 419	-	$ 2,926
L	Up to $ 600,000	-	$ 2,700	$ 157	$ 419	-	$ 3,276

Source: Ministry of Economy and Public Finance

Table A.4
Family allowances for formal salaried workers

ASIGNACIONES FAMILIARES	VALOR GRAL.	ZONA 1	ZONA 2	ZONA 3	ZONA 4
MATERNIDAD					
Sin tope de Ingreso Grupo Familiar (IGF)	Remuneración Bruta				
NACIMIENTO					
IGF entre $ 200,00.- y $ 60.000.-	$ 1,285	$ 1,285	$ 1,285	$ 1,285	$ 1,285
ADOPCION					
IGF entre $ 200,00.- y $ 60.000.-	$ 7,704	$ 7,704	$ 7,704	$ 7,704	$ 7,704
MATRIMONIO					
IGF entre $ 200,00.- y $ 60.000.-	$ 1,926	$ 1,926	$ 1,926	$ 1,926	$ 1,926
PRENATAL					
IGF entre $ 200,00.- y $ 17.124.-	$ 1,103	$ 1,103	$ 2,380	$ 2,205	$ 2,380
IGF entre $ 17.124,01.- y $ 25.116.-	$ 741	$ 981	$ 1,472	$ 1,958	$ 1,958
IGF entre $ 25.116,01.- y $ 28.997.-	$ 446	$ 883	$ 1,326	$ 1,768	$ 1,768
IGF entre $ 28.997,01.- y $ 60.000.-	$ 228	$ 451	$ 677	$ 897	$ 897
HIJO					
IGF entre $ 200,00.- y $ 17.124.-	$ 1,103	$ 1,103	$ 2,380	$ 2,205	$ 2,380
IGF entre $ 17.124,01.- y $ 25.116.-	$ 741	$ 981	$ 1,472	$ 1,958	$ 1,958
IGF entre $ 25.116,01.- y $ 28.997.-	$ 446	$ 883	$ 1,326	$ 1,768	$ 1,768
IGF entre $ 28.997,01.- y $ 60.000.-	$ 228	$ 451	$ 677	$ 897	$ 897
HIJO CON DISCAPACIDAD					
IGF entre $ 200,00.- y $ 17.124.-	$ 3,597	$ 3,597	$ 5,393	$ 7,191	$ 7,191
IGF entre $ 17.124,01.- y $ 25.116.-	$ 2,453	$ 3,469	$ 5,202	$ 6,935	$ 6,935
IGF superior a $ 25.116.-	$ 1,603	$ 3,340	$ 5,009	$ 6,678	$ 6,678
AYUDA ESCOLAR ANUAL					
IGF entre $ 200,00.- y $ 60.000.-	$ 923	$ 1,232	$ 1,542	$ 1,844	$ 1,844
AYUDA ESCOLAR ANUAL PARA HIJO CON DISCAPACIDAD					
Sin tope de IGF	$ 923	$ 1,232	$ 1,542	$ 1,944	$ 1,944
CONYUGE					
IGF entre $ 200,00.- y $ 60.000.-	$ 264	$ 528			

Source: ANSES

Table A.5
Asignación Universal por Hijo

ASIGNACIONES	VALOR GRAL	80%	20%	ZONA 1	80%	20%
EMBARAZO PARA PROTECCION SOCIAL	$ 1,103	$ 882.40	$ 220.60	$ 1,434	$ 1,147.20	$ 286.80
HIJO PARA PROTECCION SOCIAL	$ 1,103	$ 882.40	$ 220.60	$ 1,434	$ 1,147.20	$ 286.80
HIJO CON DISCAPACIDAD PARA PROTEC	$ 3,597	$ 2,877.60	$ 719.40	$ 4,677	$ 3,741.60	$ 935.40
AYUDA ESCOLAR ANUAL	$ 923	$ 738.40	$ 184.60	$ 923	$ 738.40	$ 184.60

Source: ANSES

Table A. 6
Family Allowances for Monotributo Taxpayers

ASIGNACIONES FAMILIARES	CATEGORIAS				
	A, B, C, D	E	F	G,H	I,J,K
PRENATAL	$ 1,103	$ 741	$ 446	$ 228	
HIJO	$ 1,103	$ 741	$ 446	$ 228	
HIJO CON DISCAPACIDAD	$ 3,597	$ 2,543	$ 1,603	$ 1,603	$ 1,603
AYUDA ESCOLAR ANUAL	$ 923	$ 923	$ 923	$ 923	$ 923

Source: ANSES