The Rich in Argentina over the twentieth century: From the Conservative Republic to the Peronist experience and beyond 1932-2004

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Abstract

This paper presents series of top income shares in Argentina from 1932 to 2004 based on personal income tax return statistics. The results suggest that income concentration was higher during the 1930s and the first half of the 1940s than it is today. The recovery of the economy after the Great Depression, favored by the international trade conditions during and after the Second World War, and the visible effects of the Peronist policy between 1945 and 1955 generated an inverted U shape in the dynamics of top incomes. There is evidence suggesting the limits of the Peronist redistributive policy: by 1956 the top income shares were still far from the ones observed in the developed world. Since then, and after a new upward movement between 1956 and 1959, the top shares seem to have described the U-shape pattern found in English-speaking economies.

JEL classification: D3, H2, N3, O1

1.Introduction

This paper presents series of top income shares in Argentina between 1932 and 2004. The use of statistical information from the Argentine personal income tax, never exploited before, allows us to cover a long span and fill a gap in the analysis of the long run dynamics of income concentration. We find an increase in top income shares after the Great Depression, with maxima in 1942-1943, and a substantial decline during the Peronist years. However, the limits of the Peronist redistributive policy are marked by the fact that in 1956, if lower than in 1945, the top shares were still far from the ones observed in the developed world; they were higher than in the US and much higher than in France, for instance. Since then, and after a new upward movement between 1956 and 1959, top shares seem to have described the U-shape pattern found in the developed English-speaking economies.

The evolution of the dynamics of top incomes has attracted much attention lately. The book recently edited by Atkinson and Piketty (2007) is an example of this interest. The countries studied in the volume are Anglo-Saxon (United Kingdom, Ireland, United States, Canada, New Zealand and Australia) and continental European countries (France, Germany, Netherlands, and Switzerland).[1] The authors found a drop in income concentration in the first part of the twentieth century (mainly between the Great Depression and the end of the Second World War) that was essentially the result of a fall in top capital incomes due to destruction, inflation, bankruptcies and fiscal policies to finance war debts.[2] The reason why capital incomes did not recover during the second half of the century is still an open question; Piketty (2003) and Piketty and Saez (2006) suggest that the introduction of generalized progressive income and estate taxation made

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1 Atkinson (2005), Atkinson and Leigh (2007 a,b), Dell (2007), Dell et al. (2007), Kopczuk and Saez (2004), Nolan (2007), Piketty et al. (2006), Piketty (1998), Piketty and Saez (2003), Saez and Veall (2005), Salverda and Atkinson (2007).
2 The timing and the magnitude of the decline vary across countries.

such a reversal impossible.[3] The last thirty years tell a different story. The United States, Canada and the United Kingdom have displayed a substantial increase in top shares driven by large increases in top wages, whereas this phenomenon did not happen in continental Europe or Japan. Research has also been done on the experiences of Spain, India, Portugal, Japan, Ireland, Sweden, Norway, China and Indonesia.[4]

The case of Argentina is unique and consequently worth studying on several grounds.

1. So far, Banerjee and Piketty (2005) on India, Piketty and Qian (2006) on China, Leigh and van der Eng (2007) on Indonesia, and this paper on Argentina are the only works providing evidence for –currently– developing countries. Argentina is the first case to be analyzed in Latin America.

2. Secondly, Argentina was once a relatively rich country that has consistently diverged from the industrial economies in the last fifty years; today it is indistinguishably a middle income emerging economy. The deterioration of the country's position is one of the puzzling cases in the economics of development.

Between 1880 and 1930, the economy displayed a growth process that changed its marginal position in the world and made many think that the country would play in South America the role the United States stood for in the north.[5] It enjoyed its own Belle Époque between 1900 and 1913. The formula of success

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3 In fact, Switzerland stayed neutral during wars and never implemented very progressive personal taxation schemes; top wealth shares were much more stable (see Dell et al. (2006)). According to Nolan (2007), Ireland did not experience a significant drop in top income shares during the Second World War, them being rather similar in 1920 and 1950; nevertheless, they sharply declined in post war decades in parallel with the enforcement of progressive taxation with very high top marginal rates.

4 Alvaredo (2007), Alvaredo and Saez (2006), Banerjee and Piketty (2005), Leigh and van der Eng (2007), Moriguchi and Saez (2007), Piketty and Qian (2006).

5 To make reference to one of the multiple examples of this optimism, both the First Bank of Boston and the City of New York Bank (Citibank) opened their two major overseas branches in Buenos Aires as early as the 1910s.

has been widely analyzed: a relatively literate and skilled population of immigrants, a seamless integration of domestic and world economies in trade through rail and shipping connections on land and sea financed with foreign investment, a large stock of fertile agricultural land, a considerable increase in the world demand of raw materials which translated into favorable terms of trade. Per capita income rose from 67% of developed-country standards in 1870, to 90% in 1900 and 100% in 1913. During the fifty years following 1880, GDP grew at an average rate of 6% while per capita GDP increased at an annual rate of 3%, despite total population increased from 3.43 millions to 11.05 millions fostered by several immigration waves. Not only was per capita income high, but the growth rate was one of the highest in the world.[6] In 1913, Argentina's per capita income level ($4,519) was inferior to those of Great Britain ($6,128), the United States ($6,308), Canada ($5,290), Australia ($6,800) and New Zealand ($6,130), but it surpassed the levels of other European economies, such as Germany, ($4,341), France ($4,147), Austria ($4,123), Denmark ($4,479), Finland ($2,512), Sweden ($3,684), Italy ($3,050) and Spain ($2,682).[7] These figures place Argentina's 1913 income level among the world's top ten. It was not a smooth process and the model had its own limitations: high dependency rates, the need on external funding, a large but limited land stock. Nevertheless, the circumstances helped create an atmosphere of unlimited growth possibilities, which was mutually shared by the ruling class, the people and the immigrants.

In contrast, the last fifty years are much more difficult to summarize. Political turmoil, institutional instability, macroeconomic volatility, income stagnation, high inflation and two hyperinflations dominated the scenario. Cycles of poor economic performance and continuous political upheavals were associated with the integration and final acceptance of the working classes into the social and political system. Between 1956 and 2004, per capita GDP only grew at an annual rate of less than 1%; if we consider the figures after the 2001 crisis, the economy

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6 See Diaz Alejandro (1970).
7 Comparative data from Maddison (1995) expressed in 2000 US Dollars.

has not virtually grown in the last three decades while inequality has constantly increased (see Figures 1 and 9). By the end of 2002, in the aftermath of the last macroeconomic crisis, the unemployment rate was well above 20%; GDP sunk by 20% and poverty skyrocketed, but recovery resumed rapidly, and the economy has been growing at annual rates of 9% in the last five years.

3. Thirdly, although this analysis concerns only the very rich, little is known about the long run evolution of the distribution of income in Argentina. The first study about inequality dates back to the research program jointly conducted by the Economic Commission for Latin America and the Caribbean (ECLAC) and the National Development Council (CONADE) published in 1965. This study tried to measure, for the whole economy, the distribution of income in 1953, 1959 and 1961 using a variety of sources, including national accounts, banking sector balance sheets, the 1963 income and expenditure survey and tax statistics.[8] It was not until 1972 that the national bureau of statistics began conducting biannual household surveys. Before 1974, the survey was restricted to Greater Buenos Aires and it covered approximately 33% of the population. Since then, other urban centers have progressively been incorporated so that today the fraction of represented households exceeds 60% (70% of urban population). Yet, microdata displaying personal incomes are only available for 1980-1982 and 1984-2006 with varying degree of detail. As a result, the vast majority of studies about inequality and distribution are based on this source, constrained to the analysis of the last twenty-five years and not focused on the top of the distribution.[9] Survey microdata exist for recent years, but they do not offer valuable information when targeting the top, as the rich are missing either for sampling reasons, low response rates or ex-post elimination of 'extreme' values. Therefore, this study is also the first on focusing in the upper part of the distribution.

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8 The ECLAC-CONADE study has been used to complete the series and check the soundness of the results.
9 Survey data sets for 1972-1973 and 1975-1979 are not available.

4. Argentina has traditionally been identified as one of the economies with one of the lowest relative inequality in Latin America despite the recurrent macroeconomic crisis. It is indeed more egalitarian than Chile, Mexico and Brazil.[10] A word of caution is in order, though. On the one side, Latin America is an area characterized by very high inequality levels when compared to Europe and Asia. On the other, during the last fifteen years, the increase in inequality in Argentina has outpaced Latin American averages. Finally, the periods of negative growth strongly hit the poor.[11] Notwithstanding this trend, Argentina's human development index has remained top in Latin America since its publication in 1975.

5. Finally, Argentina did not actively participate in the world wars, but it deeply suffered the consequences of the Great Depression and of several macroeconomic crises.[12] At the same time, it never developed a generalized progressive taxation system on income and wealth; the number of income tax payers has never exceeded 6 % of total adults, this figure being much smaller in the case of the wealth tax. No European country satisfies simultaneously these two conditions, i.e. exposure to shocks and absence of generalized progressive taxation. Consequently, the case of Argentina can provide some light on the discussion about the relative importance of war and other shocks vis-à-vis the implementation of progressive personal tax schemes on the dynamics on income distribution.

The paper is organized as follows: Section 2 describes the data and methodology; details are presented in the appendixes. Section 3 focuses on tax evasion and elusion issues that affect our results. Section 4 and 5 present the main findings. The last section is devoted to conclusions.

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10 See Gasparini (2004) for an account of inequality levels in Latin America.
11 See Gasparini et al. (2007).
12 Of course, Argentina was affected by the wars even if it did not participate directly (for instance, through capital disaccumulation due to the impossibility to import capital goods during the conflict); this is true for almost every western country.

Income tax data suffer from serious drawbacks. The definitions of taxable income and tax unit tend to change through time according to the tax laws. While there is a predisposition to under-reporting certain types of income, taxpayers also undertake a variety of avoidance responses, including planning, renaming and retiming of activities to legally reduce the tax liability. These elements, which are common to all countries, become critical in developing countries. However, alternative sources such as household surveys are not free of problems regarding under reporting, differential non-responses, unit design and information at the top of the distribution. Therefore, even if income tax data must be read with caution, especially in the case of developing economies, they can still be informative and remain a unique source to study the dynamics of income concentration during the first half of the twentieth century.

2.Data and methodology

At the start of the interwar period, customs on imports constituted the largest fraction of government revenue in Argentina. As public income depended heavily on international trade, it was cyclically correlated with trade conditions. The consequences of the Great Depression exposed the country to the commodity lottery and the worsening of the terms of trade. In order to moderate the adverse effects of the crisis on public finances, the government followed a conservative fiscal policy and sought orthodox budget balance by replacing the lost customs revenues with a dramatic increase in direct taxes on income and wealth, which moved from 5% of public revenue in 1920 to more than 23% in 1933. As part of this process, the first personal income tax was enforced in 1932 in Argentina as a policy response to the negative outcome that the world crisis had on the public budget. Appendix A describes the legal evolution of the tax.

Tables 1A displays the composition of tax receipts between 1932 and 2004, while Table 1B shows tax collections as percentage of GDP. The growing

importance of the personal income tax until 1943 (it moved from 6.04% of state revenues in 1932 to 19.33% in 1944) mirrored the decline of international trade-based taxes (which went down from 40.70% in 1932 to 7.50% in 1945).[13] Both facts, the creation of the personal income tax in 1932 (initially established as an emergency and temporary tax for only two years) and its declining importance during the second half of the century, shape the availability of data.

The tabulations of income tax returns published by the Argentine tax administration constitute the primary data source for this study. The data cover the years 1932 to 1954, 1956, 1959, 1970 to 1973 and 1997 to 2004. Unfortunately, the continuity of the publication was lost after 1960, altered by increasing macroeconomic volatility, growing inflation and political instability. The tables report, by intervals of income, the number of taxpayers, total income reported, taxable income, tax paid, exempted income and family deductions.

Taxation laws never allowed joint filing for married couples. Consequently, the number of tax units (the number of individuals had everybody been required to file) is approximated by the number of persons in the population aged 20 and over from the national census. Throughout the paper, 'tax units' always refer to individuals. Appendix B completes the information about data sources and definitions.

Table 2 displays the reference totals for population and income. The number of tax filers has always been rather small, ranging from 1.7%-2.0% of tax units in 1932-1935, 5.1%-5.3% in 1953-1958, 3.3%-4.1% in 1970-1973 and around 5% in 1997-1998 (column [4]). While the growing inflation (column [8]) happening during the second half of the century could have implied a rise in the obligation to file (by reducing the significance of the minimum threshold), minimum non-taxable income and family deductions were regularly updated so that exemption

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13 Tables 1A and 1B considers all legislated taxes. It is worth stressing the importance that the inflation tax had in the public revenue in Argentina during the second half of the century (see Ahumada et al. (2000)).

levels remained high. By necessity our analysis focuses on the very top of the distribution.

The Pareto extrapolation techniques described in Appendix C, were used to compute for each year the average income of the top percentile P99-100, the top 0.5% P99.5-100, the top 0.1% P99.9-100 and the top 0.01% P99.99-100 of the tax unit distribution of total income. We also estimated the income thresholds P99, P99.5, P99.9 and P99.99, and the average incomes of the intermediate fractiles P99-99.5, P99.5-99.9 and P99.9-99.99. Estimations for the top 5% are displayed for 1953, 1954, 1961 and 1997.

Table 3A gives thresholds and average incomes for top fractiles in 2000. There were 23,8 million tax units, with an average income of $7,155. Column [2] reports the income thresholds corresponding to each of the percentiles in column [1]. For example, an annual income of at least $163,468 was required to belong to the top 0.1% while the average income above the 0.01% is $1,402,012. Table 3B displays the results after adjustments for under-reporting. Table 6 presents the top income shares between 1932 and 2004.

3.Tax evasion

There is a firm conviction regarding the presence of important levels of tax evasion (fraudulent under-reporting or non reporting) and tax elusion (the use of legal means to reduce tax liability through planning, renaming or retiming of activities) that affect mainly the income and wealth taxes. On the one hand, legal responses to taxation cannot be neglected in either the developed or developing world. Slemrod (1992, 1995) and Auerbach and Slemrod (1997) have provided empirical evidence indicating the significance of avoidance responses to the

major US tax changes of the 1980s and 1990s.[14] On the other hand, the tendency to hide certain types of income to evade taxes is a standard feature in developing countries, where a non-trivial fraction of transactions is carried out in the informal sector. In this sense how much to tax the rich has always been a critical matter, as one would like to limit their incentives both to pursue less socially productive activities (Slemrod, 2000) and to carry out business in the shadow economy in order to avoid taxes.[15]

We are particularly concerned about tax evasion in Argentina. Because tax evasion means that we cannot observe the data, any quantitative assessment of its magnitude might be regarded as speculative. In any case we provide some elements for the analysis.

It is more likely that the phenomenon of evasion has been more relevant during the second half of the century. This presumption is based on several elements. Firstly, the official publications of the tax authority between 1932 and 1950 describe a rather extensive fiscal control; for instance, in 1939, 29,000 individuals were inspected over a total of 144,923 files. This information, if relevant, is inconclusive as soon as one accepts that the number of tax files is endogenous and that the probability of being audited is the fraction of inspected individuals over the total number of potential (and not the observed) tax reporters.

Secondly, existent measures of the size of the underground economy in Argentina show that the level of unreported activities increased markedly after 1950.[16] These studies indicate that there is a positive relationship between tax burden, state regulations and the incentive to hide transactions. In the first half of the century the tax rates (mainly the top marginal rates) were by far lower than

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14 For an analysis of the legal responses to taxation, from real substitution responses to avoidance responses, see Slemrod (2001) and Slemrod and Yitzhaki (2002).

15 In the developing world, the changes in personal income tax rates and corporation income tax rates may generate a shifting of income both between the personal tax base and the corporate tax base (as described in Gordon and Slemrod, 2000), and between the formal and informal sectors of the economy.

16 See Ahumada et al. (2003).

those in European and North American countries, and slightly lower than in neighboring countries such as Chile or Brazil. Finally, tax evasion is well connected with the environment of macroeconomic volatility and inflation distinctive of the post-1950 period. High inflation also provides strong incentives to postpone income reporting; even when this behavioral response is not strictly evasion, it can erode tax collections at a great extent.

The government seemed worried about the quantitative scope of evasion and elusion in the income tax by the end of the decade of 1950. Advice was requested from foreign experts (see Surrey and Oldman, 1960, 1961); the Central Bank published a first report on the issue in 1962 (Banco Central de la República Argentina, 1962). Nevertheless, to our knowledge, there is no statistical information about the level of evasion before 1950.

A first comparison can be made between the results for 1953 from income tax data and those from a different data source. We have already mentioned that the first study about inequality dates back to the research program jointly conducted by ECLAC/CONADE published in 1965.[17] This study, which included top earners, attempted to measure, for the whole economy, the distribution of income in 1953, 1959 and 1961. It used a variety of sources, including national accounts, banking sector balance sheets, the 1963 income and expenditure survey and income tax information. In 1953, the top 5% received 24.22% of total income according to the tax statistics; the share turns out to be 28.64% according to ECLAC/CONADE (see Table 6); this implies a divergence of 4.42%. When we look at the income shares for the top 1%, top 0.5%, top 0.1% and top 0.01%, the results based on ECLAC/CONADE are higher than those from the tax statistics by 1.52%, 1.40%, 0.64% and 0.17%, respectively.[18]

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17 Consejo Nacional de Desarrollo and Comisión Económica para América Latina y el Caribe (1965).

18 In 1953, the income shares for the top 5%, top 1%, top 0.5%, top 0.1% and top 0.01% are: (a) according to tax statistics, 24.22%, 12.79%, 9.34%, 4.27% and 1.19% respectively; (b) according to ECLAC/CONADE, 28.64%, 14.31%, 10.74%, 4.91% and 1.36%, respectively. See Table 6.

For 1959, the estimates from tax data can be contrasted not only to ECLAC/CONADE but also to official estimations of evasion based on fiscal amnesties. During the decades of 1960 and 1970 two official attempts were made to measure the degree of income unreporting in the tax. These observations show that income hidden from tax files cannot be neglected during the second half of the century.

In 1962, a fiscal amnesty invited taxpayers to report income that had been hidden between 1956 and 1961.[19] The strategy was the following: the individual had to make a statement of the actual amount and composition of his net worth as of 12/31/1961; the difference between the actual wealth and the wealth reported in the tax file for 1961, net of consumption financed with hidden income, was considered the capitalization of non-reported income. Using this information, the tax bureau estimated the level of evasion by income brackets for 1959. Results are shown in Table 4.[20] The last column reports the percentage of hidden income as a percentage of declared income. Unreporting, with values between 27% and 40%, described an inverse U pattern, with maxima for the brackets in the middle of the scale. This suggests that evasion, if important across all income levels, shows a lower impact at the bottom (where income from wage sources dominates) and at the top of the tax scale (where inspections from the tax administration agency might be more frequent and enforcement through other taxes higher).

The results for 1959 (from tax statistics) were adjusted using the information in Table 4, by correcting the declared gross income in the tax files with the under-reporting measure by income brackets mentioned in the previous paragraph. In this case we see that the income shares from the tax statistics, after the evasion adjustment, are slightly higher than those from ECLAC/CONADE. For instance,

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19 The fiscal regularization did not compromise income obtained before 1956 because the tax could only be levied retroactively up to a period of six years.
20 Table 4 presents the results as published by the tax bureau (Presidencia de la Nación, 1967); no further information is currently available.

the percentage of total income accruing to the top 1% is 18.40% and 17.69%, respectively.[21]

A new amnesty followed in 1970, for the tax evaded between 1964 and 1969.[22] Unfortunately, the tax authorities did not publish the results in detail either. Over a total of 589 thousand taxpayers, 300 thousand individuals declared 65% of unreported income (with respect to reported income). If we assume that those who did not make recourse to the fiscal facility had nothing to declare, then the average unreported income was 33% (0.65x300/589).[23] We up-scaled the information for 1970, 1971, 1972 and 1973 by 33%.[24]

I now turn to the problem of evasion for 1997-2004. In this period, there has been no official attempt to quantify the distance that separates true from declared income, so the correction is extremely exploratory and given as an approximation.[25] As it is usually the case, household surveys are of little help when focusing on the very rich and do not offer valuable information when trying to get an idea of unreported income in tax data.[26] The rich are missing from surveys either for sampling reasons or because they refuse to cooperate with the time-consuming task of completing or answering to a long form. When found, they are sometimes intentionally excluded so as to minimize bias problems generated by outliers. The practice of eliminating extreme observations, usually seen as data contamination, relies in many cases on expert judgment.[27] Groves

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21 In 1959, the income shares for the top 1%, top 0.5%, top 0.1% and top 0.01% are: (a) according to tax statistics after the adjustment for evasion, 18.40%, 13.81%, 6.62% and 1.96% respectively; (b) according to ECLAC/CONADE, 17.69%, 12.82%, 5.81% and 1.55%, respectively. See Table 6.

22 The amnesty served primarily to close a temporary fiscal imbalance. This time, declaring net assets placed in foreign countries was not mandatory (Law 18.529 of 12/31/1969). For a theoretical analysis of the efficiency and equity consequences of permanent and non-permanent tax amnesties, see Andreoni (1991).

23 Ministerio de Economía (1973).

24 This is of course less satisfactory, as we do not have a measure of evasion by level of income.

25 Recent official efforts to measure tax evasion targeted the sales tax, which is not surprising given the importance of this tax in public revenues. See, for instance, Salim and D'Angela (2005, 2006).

26 It has already been mentioned that periodic households surveys are only available since 1974.

27 See Cowell and Feser (1996).

and Couper (1998) report that the probability of response is negatively correlated with almost all measures of socioeconomic status.[28] Székeley and Hilgert (1999) have analyzed a large number of Latin American surveys to confirm that the top reported incomes generally correspond to the prototype of highly educated professionals rather than capital owners. They find that, in sixteen countries, total income of the ten richest households in the survey is very similar to the average wage of a manager of a medium to large size firm.[29]

To get a sense of the mismatch, we quantified the gap between top incomes from Argentinean household surveys and top incomes from tax tabulations. This was by applying the statutory income tax schedule to the actual income of each individual in the survey, after deducting exempted income, the main allowances and family deductions and selecting those individuals with positive taxable income, as they are the ones present in the tax statistics. Appendix B.4 describes the procedure in more detail. Table 5 presents the results of the comparison for 1997. While there were 698 tax files with income above $1,000,000 and 26 tax files with above $5,000,000, the survey's top 160 individuals only have income between $500,000 and $1,000,000.

As aggregated income from surveys are usually below the corresponding aggregate income from the national accounts, a standard procedure to overcome this problem is to adjust surveys using the information from national accounts as a first stage and then to get estimates of evasion in the income tax by comparing tax tabulations with adjusted surveys. However, a word of caution is necessary here. The fact that means of consumption and income from household surveys and national accounts differ is not only because the rich might not be present in the surveys: the two sources of information are different and they measure different concepts. National accounts track money and are more likely to capture

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28 They also report how, while survey interviewers in poor countries can usually collect data in very poor areas, penetrating the gated communities in which many rich people live is often impossible.
29 In ten cases, total income of the richest households in the survey is below the average salary of a manager.

large transactions, while surveys follow people and are less likely to include large transactors. In the developing world, surveys detect almost exclusively wages and pensions, self-employment income and public transfers, while capital income is largely neglected. Deaton (2005) analyzes the issue in detail and acknowledges that extensive prior adjustments of the national accounts mean income (or consumption) are required before using them to up scaling survey estimates.[30] The Canberra Expert Group on Household Income Statistics (2001) has also examined the relationships between the definition of income in national accounts and the income appropriate for distribution analysis. Here, we used aggregated wages, pensions, self-employment income, dividends and rents from the national accounts to correct the survey counterparts. This gives a correction factor for underreporting in the survey by income source, assumed constant for all individuals and for all levels of income.

Once the survey incomes had been adjusted, we applied the tax schedule to the survey (as described in Appendix B.4) and kept the individuals with highest taxable income so that the number of selected individuals from the survey matches the number of the observed tax returns.[31] The difference between total income reported in the tax files and the total income found from the adjusted income in the survey is the measure of hidden income in tax files. We find an average of 53% of underreporting in the income tax for 1997-2004. These results

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30 Deaton (2005) has found that the ratio of survey to national accounts consumption is generally higher in the poorest countries and lower in the richest. In general consumption measured from surveys frequently grows less rapidly than consumption measured from national accounts. Additionally, there exists a negative relationship between the ratio of survey to national accounts on the one hand, and the level of per capita GDP on the other. This relationship is steepest among the poorest countries, is flatter in the middle-income countries and resumes its downward slope among the rich economies. One of the reasons is that consumption is easier to measure in surveys than is income in poorer countries where many people are self-employed, while the opposite is true in rich countries. Deaton's remarks are, however, mainly directed at the measurement of poverty. For example, the system of national accounts recommends, in measuring production for own consumption, that the effort be made only when the amounts produced are likely to be quantitatively important in relation to the total supply of goods in the country. This rule makes little sense when we are worried about poor households.

31 The difference between the number of tax files from the tax statistics and the number of individuals with positive taxable income from the survey corresponds to the number of total tax evaders. In eliminating the individuals with lowest taxable income we are assuming that the lower the income the higher the probability of being a total evader.

are close to those found in Gasparini (1999) and Cont and Susmel (2006) and are not far from the general belief. This procedure implies a constant level of evasion across income levels. This is clearly unsatisfactory and should be understood as an approximation. Probably the 53% figure is too high, due to the different concepts embodied in the national accounts, and should be read as an upper bound.[32]

4.The dynamics of top incomes

Figures 2 to 5 and Tables 6 present the main findings. It is not the aim of this paper to provide a detailed account of more than seventy years of economic history and policy. Nevertheless, to understand the evolution of the top incomes shares, some historical landmarks are worth mentioning.

The fifty years between 1880 and 1930 were the golden period of the development process of the country. Falling transportation costs and the expansion of world trade made it possible for land-abundant countries to benefit from their strong comparative advantage in rural activities. Argentina was one of the prototypical examples. The economy flourished, based on the exports of raw materials, mainly grains and chilled beef, but also wool, wood, and their derivatives, and the imports of manufactures from Europe and the United States. The wealthy owners of the large *estancias* of the *Pampas* built urban palaces in Buenos Aires in the image and likeness of those they saw in Europe during their long-lasting trips. Many independent observers have extensively commented about the extreme wealth of the wealthy Argentineans of the beginning of the century.[33]

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32 Engel et al. (1997) and Penchman and Okner (1974) suggest other adjustment mechanisms to get estimates of evasion by income level. Their implementation is not feasible here given the structure of the available data. Another example of ad hoc corrections for tax evasion can be found in Ott (2004).

33 For an account of the social life and customs of the wealthy Argentinean families in the beginning of the century, see Ocampo (2005), Luna (1958), Sebrelli (1985), Jauretche (1966).

The initial land policy was to play a key role in shaping the dynamics that wealth and income concentration would describe during the golden years. It also marked a striking difference from the strategy followed by other economies that never imposed major obstacles to acquiring land. In the US, the Homestead Act (1862) made land free for small-scale farms, while the Dominion Lands Act in Canada (1872) pursued similar results.[34] On the contrary, while also committed to the attraction of immigrants from Europe, the government of Argentina chose to dispose of public lands by making grants of large blocs available to individuals and private companies. Private agents with control of large land holdings could set higher land prices than public authorities. This made it clear that the objective was far from creating a class of small and middle proprietors. Adelman (1994) argues that the process by which large landholdings might have broken up in absence of scale economies may have operated very slowly in Argentina. Once the land was in private hands, the development of grazing increased their values to levels not affordable by immigrants, given the limited reach of financial institutions and the lack of credit. Additionally, the dramatic increase of livestock production since the late nineteenth century strengthened the economies of scale and helped maintain the large estates. Together with the extension of the railway, all factors contributed to a striking increase in land prices so that many fortunes were made overnight. [35]

Nevertheless, the source of the concentration of wealth has to be sought not only in the land ownership structure in the *Pampas* combined with the favorable and successful pattern of international insertion.[36] It was also the result of the not-so-

34 Gates (1968) thoroughly describes US land policy, while Solberg (1987) and Adelman (1994) discuss the case of Canada.

35 See Sokoloff and Zolt (2007) for a discussion on inequality and taxes in the Americas. Johnson and Frank (2004) analyze wealth inequality in Buenos Aires and Rio de Janeiro before 1860.

36 The occupation of the territory to the south, accomplished in 1880, was financed mainly by wealthy families, who eventually came into possession of large estates in the newly incorporated areas. For instance, General Roca, in charge of the expedition, received as compensation a 100-km-long property, which he named "La Larga," "The Long One"; see Luna (1989). These methods

peaceful construction process of the nation. By 1880, the political organization and the occupation of the territory had been achieved on the grounds of an alliance between the Buenos Aires elite and the provincial oligarchies: the *Pampas*-driven export-oriented economy granted, for the powerful regional groups, the protection of specific local products for domestic consumption. Thus, a rich sector devoted to the production of sugar cane developed in the northwest, a cotton-oriented sector in the northeast and a vine area in the center-west. Consequently, all competition against them, either through imports or through production in Buenos Aires, was systematically blocked.[37]

By 1910, per capita income was among the world's top ten, the country attracted immigrants by the millions, and an atmosphere of unlimited growth possibilities was mutually shared by the ruling class, the people and the immigrants. The pre First World War migration waves responded elastically to the wage gap between the country and Europe. At the same time, Argentina was highly dependent on external finance. When British lending collapsed between 1914 and 1919, investment and capital formation rates declined markedly.

It is likely that before 1930 the share of top incomes was higher than the level of 1932 (20.85% for the top 1%) and probably even higher than the global maximum of 28.84% in 1943. By 1935, top shares were comparable to those found for the United States for 1920s (Piketty and Saez, 2003) and higher than those in France (Piketty, 2001).

In 1929, the Argentinean elite was suddenly shocked by the Great Depression and the dramatic downturn of conditions in the international sphere. The democratic government could not cope with the crisis, and was deposed by the

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of land occupation and distribution were not new: Rosas' Campaign to the Desert fifty years before had followed the same lines.

37 For detailed studies about the economic development of Argentina in this period, see Diaz Alejandro (1970), Cortés Conde and Gallo (1972), Cortés Conde (1970), Della Paolera and Taylor (2001), Rappoport, (1980). For a sketch of the evolution of wealth concentration in Buenos Aires during the first half of the 19th century, see Johnson and Frank (2004).

first coup d'état that ended sixty-eight years of constitutional order. The inability of the elite to understand and adapt to the new situation within the constitution, the fear of anarchism and socialism and the necessity to regain political control shaped the following thirteen years, 1930-1943, known as the Conservative Restoration and the Infamous Decade. It was a period of electoral fraud, union conflicts and the increasing importance of the army in political affairs.

Great Britain, the principal destination for exports, abandoned free trade practices and made preferential agreements with the ex-colonies during the Imperial Economic Conference celebrated in Ottawa in 1932 to promote trade within the limits of the empire. Argentina was set aside. The rich landowners pressured for a rapid accord with London to secure the exports to the UK. The result was the Roca-Runciman agreement, signed between the Argentinean vice president and the British minister of trade, which guaranteed Argentina a fixed share in the British meat market and eliminated tariffs on Argentine cereals. In return, Argentina agreed to restrictions with regard to trade and currency exchange, and preserved Britain's commercial interests in the country. From the macroeconomic point of view, the nature and consequences of this agreement and the true impact on the economic performance are still controversial. There are those who see the treaty as a sellout to Britain, while others stress that the UK, by according privileges not given to any other country outside the empire, helped revert the recessionary situation. From the microeconomic side, it was undoubtedly a successful mechanism to preserve the elite's (but also the state) sources of revenue. In any case, the Roca-Runcimann agreement remains a historical landmark and the dynamics of top incomes reinforces the idea of the elite's favorable situation between 1933 and 1943.

Recovery began in 1933 after several years of negative growth.[38] By 1935, output had regained the 1928 level. The results of the current study strikingly coincide with the political and economic phase. The positive slope displayed by top income shares between 1933 and 1943 is consistent with the marked recuperation of the economy after the Great Depression. The top percentile increased from 19.09% in 1933 to 28.84% in 1943. The tax office estimated that in 1940 the top 3.4% of individuals received 37.9% of income.[39] Figure 5 displays the top 0.01% income shares in Argentina and the US. Two facts can be noticed. Firstly, the magnitudes in Argentina in 1942 (4.64%) are not very far from those in the US in 1916 (4.4%). Secondly, the dynamics in Argentina between 1932 and 1959 seem to reproduce the shape of US top income shares between 1922 and 1940 but at higher levels, as if the Argentine cycle lagged around 10-13 years with respect to the US. This reinforces the idea that the pre-1930 figures in Argentina could reasonably be much higher than the observed in 1932, in parallel with the evolution in the US, where the top 0.01% participation declined from 4.4% in 1916 to 1.69% in 1921.[40] It is also possible that the higher top shares in Argentina as compared to the U.S. correspond to lower marginal tax rates.

Consequently, while top shares started a sustained decrease by the beginning of the Second World War in the central economies, they kept growing in Argentina until 1944, favored by the export demand from Europe. The country was officially neutral during most of the war for several reasons. On the one hand, a relevant sector of the army showed a clear preference for the Axis. On the other, the British interests in Argentina encouraged neutrality, as it ensured the continuation of normal trade with Europe and mainly with the UK. Great Britain opposed all US proposals of economic sanctions against Argentina, based on the fact that Argentina's neutrality was crucial for ensuring the safe arrival of shipments to UK

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38 The 1929-1932 crisis was, until 2000, the longest contraction experienced by the economy, while the deepest contraction occurred in 1914 as a result of both external and internal problems (bad crops, capital outflows and the beginning of the First World War).
39 Preamble to Decree 18.229 of 12/31/1943.
40 The results for the US are taken from Piketty and Saez (2003).

ports.[41] In any case, the elite had been successful again: during the war, 40% of the British meat and grain markets were supplied by Argentina (Rapoport, 1980).

The drop in income concentration between 1914 and 1945 in the central economies was primary due to the fall in top capital incomes, as capital owners incurred severe shocks from destruction of infrastructure, inflation, bankruptcies and fiscal policy for financing war debts. For most of the period, the data do not include tabulations reporting the composition of income (wages, salaries, business income, dividends, rents, etc.) by income brackets. This is unfortunate, as economic mechanisms can be very different for the distribution of income from labor, capital, business and rents. Figure 6 displays the evolution of the components of total reported income. For 1932-1949, this covers the top 1.7%-2.6% of tax units, as shown in Table 2, column [4]. In Argentina, the shares of wages, professional income and capital income remained stable throughout this period, while the increase in business income (including agricultural activities), which moved from 30% in 1932 to 60% in 1949, was made at the expense of rural and urban rents.

Due in part to immigration, but also because of strong economic interests in the country, there was a substantial presence of foreign citizens among the top income earners. Table 7 shows the distribution of tax filers by country of origin between 1932 and 1946. On average, 40%-45% of individuals and reported income corresponded to foreigners. We can also get a rough idea of the relative distribution across nationalities within the top brackets. In 1932, 2.25% of tax filers were French and 1.61% were British, while they both received income proportionally higher than their participation in the number of files (3.12 % of declared income each). In contrast, Spanish and Italian citizens represented 28.19% of filers, with 22.38% of declared income.

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41 For a detailed study on the conflict of interests in the triangular relationship between Argentina, the UK and the US, see Rapoport (1980).

The Peron years (1946-1955) coincide with a clear decline in the share of the top percentile, which moved back to 14.31% in 1953.[42] Mainly at the expense of rural rents and favored by the accumulation of foreign reserves and the advantageous terms of trade in the world markets after the Second World War and the War of Korea, the Peronist government deepened the industrialization process that had begun many years before, fostered by the impossibility of getting necessary imports from Europe during the war.[43] A deliberate inward-looking policy to finance industrialization and social improvements with rural rents was also to modify the structure of the wealthy sector.[44] Changes may not have been very radical. New industrial families appeared, but also the old names, traditionally attached to land wealth, diversified to industrial production.

The government embarked upon a large redistributive policy during the three-year period between 1946 and 1949 and set the grounds for the welfare state and the development of the powerful middle class that characterized the country by the end of decade of 1960. It is this period that remained in the 'collective memory' as the clearest expression of the economic policies of Peronism. After the frantic expansion of the economy during the first three years (see Figure 1), a crisis in the external sector in 1949 forced major changes in the economic policy; initially the expansion of the public sector was held back while attempts were made to retain the policy of increasing wages. A new crisis took place in 1952 (negative trade balance, recession and demonetisation). Thereafter, redistribution and credit policies became more prudent and incentives were introduced to favor the agricultural sector (which would always be the main

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42 We refer here to the ECLAC/CONADE results, the percentage of total income accruing to the top 1% being 12.79% according to tax statistics.
43 The true situation of Argentina's economy after 1945 should not be overstated. During the war the country was under a US blockade and cut off from continental Europe, while the UK had to devote all its resources to the war effort and could afford to sell very little industrial goods to Argentina. The trade surplus and the accumulation of foreign reserves achieved during World War II were not due to the growth of exports but the result of a low level of exports and an even lower level of imports. As a result of the impossibility of purchasing new equipment, large amounts of international reserves reflected, then, an aging capital stock.
44 One important instrument of the peronist policy was the IAPI, Institute for the Promotion of Trade, which established a state monopoly on exports. The IAPI system was disbanded as soon as Perón was deposed in 1955.

export sector and, as such, the main provider of foreign reserves). These factors inaugurated a new recovery of the top shares, which seems to have started before the end of Perón's government and became more apparent soon afterward.

The development of a progressive personal taxation system played a secondary role, the redistribution being achieved by direct public assistance, subsidized interest rate in the credit market, price controls, minimum wage policy, and the state management of exports.[45] Even if income tax rates steadily increased, the number of taxpayers was kept low. On the eve of Perón's presidency, the top marginal rate doubled, jumping from 12% to 25% between 1942 and 1943 and to 27% in 1946 (similar to the levels found in Chile and Brazil). At the time of the reform, in 1943, the authorities explicitly recognized that the top marginal rate and the tax scale as a whole were among the lowest in the world (see Figure 7).[46] From 1952 to 1954, the highest incomes were affected by a top marginal rate of 32%, this rate being 40% at the end of Perón's rule, in 1955.

Along with many other relevant transformations, social and labor rights were enforced, unions gained in power, and the first national pension system was organized. The Peronist redistributive policy was successful and visible among the working class; this is a widely acknowledged phenomenon. The use of the income tax statistics let us numerically assess the magnitude of the losses experienced by the richest during the Peronist phase. The top percentile share moved down from 27.5% in 1944 to 13.79% in 1954. The most affected seem to have been the richest among the rich: the top 0.1% decreased from 11.81% to 4.87% and the top 0.01% declined from 4.03% to 1.42% in the same period. The

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[45]Notwithstanding the secondary role in terms of redistribution, many changes were accomplished in the tax policy arena: (i) the organization of a centralized tax agency (the Dirección General de Impuestos a los Réditos and the Administración General de Impuestos Internos became the Dirección General Impositiva); (ii) the creation of a tax on extraordinary profits, aimed to tap the increase in profits after the WWII; (iii) the enforcement of a proportional tax on capital gains in 1946 (Impuesto a las Ganancias Eventuales), on revenues exempted from the income tax.

[46] Preamble to Decree 18.229 of 12/31/1943.

reduction in income concentration was far from trivial. What is also new is the evidence showing the limited effect on the upper part of the distribution compared to international standards: by 1954 the top percentile shares were still higher than those found in the US and much higher than in France.

However, these limits may also have to be reconsidered in the light of the new evidence on the dynamics of top incomes for other countries. The immediate post Second World War period saw the effects of the commodity price boom in the world markets: as a result of this process, in Australia, the percentage of income accruing to the top percentiles steadily increased from 1945 to 1950; the top 1% share moved up from 8.44% to 14.13% over the same years, with a clear spike in 1950, mainly due to the peak wool prices which sheep farmers received in that year (see Atkinson and Leigh, 2007). Argentina also benefited from the favorable international situation; nevertheless, it seems that the economic policy managed to prevent a new upsurge of top incomes.

Even if our data do not allow to go beyond searching for a detailed explanation of what was happening below the top 1%, the drop in the top shares that took place until the middle of the decade of 1950 coincided with a general improvement in terms of income distribution, as indicated by the fact that the participation of wages in total income in national accounts increased 8% between 1945 and 1954 (Altimir and Beccaria (1999)). The ratio of wages in GDP reached a historical maximum of 50.8% in 1954, one year before the military coup that deposed Perón (see Figure 8).

After 1955, the intrinsic limits of the import-substitution industrialization strategy (which began to become apparent by the end of Perón's period) resulted in a sequence of oscillating economic policies with deep social and political

implications during the following twenty years.[47] It seemed evident that neither the pro-industrialization sector nor the agricultural-based exporter sector (whose interests did not coincide) was powerful enough to permanently dominate the other. Repeated cycles of short expansions and contractions, increasing inflation and institutional weakness dominated the period.

The agrarian activities were responsible of generating the surpluses to foster industry and finance the imports of inputs and capital goods demanded by the expanding manufacturing sector. The exchange rate was usually fixed, to help maintain low levels of inflation and high stability of import prices (denominated in local currency). At the same time, extensive and deliberate foreign trade protection secured the industry from external competition even in the face of the appreciation of the exchange rate. As exports were mainly based on food products, any devaluation implied a real loss for wage earners. Consequently, a fixed exchange rate, with a tendency to appreciation, favored both workers and industrialists (protected from external competition) while it acted as a clear disincentive to agriculture. The economic tensions translated to the political arena.

Under this scheme, any acceleration of the economy led to fewer exports (more exportable goods were demanded internally) and more imports of inputs and capital goods. Consuming more tradable goods, together with the discouragement of agriculture, generated recurrent balance of payment crises and output contractions. Sometimes the endogenous limits in this development strategy were reinforced by the international conditions (drop in world prices of commodities) so that crises also occurred even if the economy was not growing rapidly. The way out of the crisis always implied a tightening of fiscal and monetary policies together with large devaluations that corrected the distortion in prices. This process favored land-based activities again, drastically reduced the

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47 Between 1955 and 1976 the country underwent three democratic governments (none of them completed the constitutional period), one military-controlled civilian government and three military regimes.

real value of wages, increased exports and let the government regain foreign reserves. Then the process could restart.

The "stop-and-go" nature of economic policy, which eventually ended by the middle of the 1970s (to inaugurate a decade of stagnation and very high inflation), expressed therefore the limits to industrialization.[48] It was, nevertheless, a period of reasonable income growth (see Figure 1) vis-à-vis the poor performance that the economy displayed between 1981 and 1991.[49] The sudden movements of the nominal exchange rate ultimately led to violent redistributions between workers, the manufacturing sector and the export-oriented agricultural sector.[50]

For the following twenty years, we only have observations for 1959, 1961 and 1970-1973.[51] It was generally accepted, for this period, that for the Argentine economy the trajectory of real wages served to measure the changes in income distribution. A comparison of time changes in top shares with labor income provides more evidence of this fact.[52] Firstly, part of the improvements generated during the initial Peronist years were rapidly reversed. The data appear to indicate that the worsening in income concentration started in 1953, together with a decline in real wages. By 1959, the top 1% shares had regained 17-18%. Between 1953 and 1961, only the higher income groups improved their position while the lower ones lost ground. It seems that 1959 constituted a turning point of considerable importance. That year, a heavy recession led to a fall in real wages, whose participation in GDP dropped drastically, as shown in Figure 8. In fact,

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48 For an analytic approach to the "stop-and-go" model, see Braun and Joy (1967).
49 For an analysis of the political economy and the economic policy during the period, see Diaz Alejandro (1970), Mallon and Sourrouille (1975), Di Tella and Dornbusch (1983), Di Tella and Zymelman(1967, 1973).
50 The determination of the nominal exchange rate began to play a key and privileged role in all spheres of the economy. Di Tella (1987) has characterized the styled fact of the policy: a "repressed stage," when key prices were controlled to tame inflation, and a "loosening state" when controls collapsed and inflation jumped.
51 We remind the reader that the top income shares for 1961 are estimated from ECLAC/CONADE, and not from tax statistics; they should be compared to the estimates for 1953 and 1959 from the same source.
52 See Petrecolla (1977) and Dieguez and Petrecolla (1979).

between 1959 and 1965, the share of wages in GDP attained minimum levels not experienced before and which would only be experienced again in the mid-1970s. In 1974, during the third Peronist period, the share of wages in GDP reached the second highest value of the century, 48.4%, a level not achieved since 1955.[53]

There was a marked increase in the shares at the top 0.1% and top 0.01% when 1973 and 2004 are compared. However, we cannot disentangle what happened in the meantime. Between 1953 and 2004, the share of the top 0.01% has doubled. As it is not possible fill the gap between 1973 and 1997 with a continuous series coming from income tax tabulations, we would like to read our results in perspective of the distribution based on household surveys. As mentioned before, the area of the Greater Buenos Aires is the only one that has been regularly covered by a survey since 1972. It has served as basis for multiple studies on inequality and, due to the geographical distribution of the population (highly concentrated in Buenos Aires) it has reflected well the dynamics of income distribution in the whole country.[54] Figure 9 depicts the evolution of the Gini coefficient between 1980 and 2004. Available statistical evidence shows a relative stability during the decade of 1960 and the first half of the decade of 1970, when per capita GDP growth exceeded 3% per year.[55] On the contrary, between 1975 and 1980 income inequality experienced a sharp raise, and the trend of growing inequality continued until the maximum in 1989 (hyperinflationary crisis). In terms of growth, the 1980s were the 'lost decade.'

With a half-century of inflationary experience, the country reached the highest inflation rates in the 1980s together with two hyperinflationary episodes in 1989 and 1990. In 1991, Argentina put its money supply under a dollar exchange

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53 In recent years, an increasing share of wages in aggregated income per se has ceased to be an indicator of diminishing income concentration, since the rise of top shares in English-speaking economies has been the result of sharp increases in top wages.
54 See Gasparini et al. (2001), Gasparini et al. (2004), Lugo (2006), Altimir (1986), Altimir and Beccaria (1999), González Rozada and Menéndez (2006).
55 See Altimir and Beccaria (1999).

standard, adopting a fixed exchange rate between the local currency and the US dollar, and restricting the issue of money by the Central Bank. This rigorous monetary policy, together with a series of structural reforms (mass privatization of public services, trade openness, attempts to create a domestic capital market) started a decade of price stability and rapid growth until 1998-1999. This policy was not neutral in terms of income distribution. Growth and stabilization only implied a temporary and mild improvement in inequality after 1990, and by 1995 the Gini coefficient was 10% higher than in 1985. Overall inequality steadily grew in the last years, together with unemployment and poverty levels. The macroeconomic crisis of 2001-2002 pushed those indicators to unprecedented levels.

Tables 8A and 8B show the top 10%, top 1% and top 0.1% income shares based on household surveys. Results in table 8B use the income reported by the individual without adjustments while table 8A is based on adjusted incomes as described in the end of section 3. Top 1% shares have remained more or less stable around 18%-22%. These values are, of course, similar to those found from the tax tabulations (Table 6) adjusted for underreporting. The figures should be read with caution, though; the limited number of observations in the survey introduces large sample variability when focusing on the very top.

The factors behind the constant increase in inequality during the last two decades have been broadly analyzed and they include both macroeconomic and microeconomic explanations. Firstly, unemployment rates skyrocketed in the decade of 1990, and have remained very high since then. Figure 10 displays the unemployment rate together with the top 0.01% income share. Although there is a widespread belief that changes in labor market participation have been one of the main causes of the strong increase in inequality, Gasparini et al. (2004) suggest that these ideas should be scaled down. Even if the unemployment rate has jumped since 1992, the employment rate did not change much, so that there was a minor change in the number of individuals without earnings. Changes in

the hours of work seem to have had more significant unequalizing effects, while the effect of unemployment translated into more inequality through the fall in the relative wages of the poorest. Secondly, changes in the returns to education and experience, the transformation of the educational structure of the population and the fall in work hours among the low-income groups have all had important roles. Also relevant, an observed decrease in the wage gap between genders, a potential force for reducing inequality, has not induced any important change. Thirdly, the two dramatic crises of 1989 and 2002 cannot be neglected. As a result, inequality has been rising during positive growth years, and increasing even more during recessions.

Table 9 presents the composition of income by top groups between 2001 and 2004. Income is divided into rents (urban and rural), capital income, business income and wages. Between 1997 and 2004, top incomes again show an increasing trend with a drop in 2001 mainly due the reduction of capital and business income after the 2001-2002 crash. However, with the rapid recovery of the economy since 2003, the top shares have soon regained the pre-crisis levels and the top fractiles within the top 1% seem to be the most favored by the process. While top 1% passed from 18.03% in 1997 to 23.47 in 2003, the top 0.01% share almost doubled, going from 2.10% to 4.09%. Here again, all sectors connected with exports have seen their relative income increase as long as the nominal exchange rate tripled during the crisis but the inflation rate between 2000 and 2004 remained below 50%.

6.Final Remarks

This paper has attempted to analyze the evolution of top shares from a long-run perspective and to fill the gap in the analysis of the dynamics of income concentration in Argentina since 1932. So far, the only available source of information about distributive issues came from observations for 1953, 1959,

1961, and from the population surveys started in 1972. Until 1974 the survey was restricted to the Greater Buenos Aires area. Other urban centers have progressively been incorporated, so that today the fraction of represented individuals exceeds 70% of the urban population (60% of total population). Yet, microdata showing personal income with some detail are only available for 1980-1982 and 1984-2006. Despite the existence of survey data for recent years, they do not offer valuable information as the rich are missing either for sampling reasons, low response rates or ex-post elimination of 'extreme' values. Therefore, this study is the first in covering such a long span of years and in focusing on the upper part of the distribution. Since income tax statistics are the primary data source, the analysis has had to be restricted to the top 1%.

From the quantitative point of view, even if the number of well-off individuals may be regarded as very small when considering the whole economy, they cannot be neglected. If an infinitesimal (in term of members) richest group owns a finite share S of total income, then the Gini coefficient turns out to be close to $G \approx S + (1-S) G^*$, where G^* is the Gini for the rest of the population. Let's assume that $G^*=0.30$; then a rise of 5% in the top share (as the one experienced by the top 0.1% in Argentina between 1933 and 1943) translates into a rise of 0.035 in the Gini of the whole population.[56] This means that when the participation of the rich in total income is important, changes in their income shares turn out to be potentially relevant in explaining changes in overall distribution.

Top income shares are very volatile in the short run. This is more remarkable when compared with the experience of other countries. The magnitude of large short-run jumps happened in the central economies only under the exceptional circumstances of the World Wars, the 1929 crash or the world prices booms. In Argentina, the external shocks and the swings of economic policy (with large

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56 We borrow this explanation from Atkinson (2007). The percentage of total income accruing to the top 0.1% moved up from 7.55% in 1933 to 12.91% in 1943. For a hypothetical and fixed $G^*=0.30$, then G increases more than 10%, from 0.352 to 0.390. For a $G^*=0.40$, then G rises from 0.445 to 0.477.

corrections of relative prices and mainly of the exchange rate) are at the roots of violent functional and personal redistribution, both of income and of wealth.

The current results suggest that income concentration was higher during the 1930s and first half of the 1940s than it is today. The recovery of the economy after the Great Depression and the visible effects of the Peronist policy between 1945 and 1955 generated an inverted U shape in the dynamics of top shares, with a new decrease during the first half of the decade of 1970. Quite interestingly, the levels of concentration in 1953 were very similar to those found in 1997, although they reflect two very different moments in history. The first belongs to a period when the economy was on a path of improvement of social conditions and inequality, while the general belief that dominates the second is of a clear regression in these areas.

It is worth noticing that even when we consider the evolution of the top shares without any adjustments for under-reporting, a clear increase is observed between the mid 1970s and the end of the 1990s, for the top fractiles within the top 1%.

A final comment on evasion. It is clearly true that income under-reporting implies that our estimates may not measure the level of income shares correctly. However, it is hard to argue that the levels of evasion have displayed enormous variability to so as to change the description of the time evolution of top shares.

APPENDIX

A. The Income Tax

At the start of the interwar period import customs constituted a large share of government revenues, as is typical in developing countries. The Great Depression forced fundamental changes both in the economic policy and in the successful model of international insertion Argentina had displayed between 1880 and 1930. As tax collection was cyclically correlated with trade conditions (mainly through taxes on imports), the world crisis exposed the country to the commodity lottery and the worsening terms of trade. By December 1929, the current account imbalance was severe and the exchange rate was left to float after a two-year resumption of the gold standard. High public expenditures in 1928-1930 were drastically reduced between 1931-1933. The government followed a conservative fiscal policy and sought orthodox budget balance by replacing the lost customs revenues with a dramatic increase in direct taxes on income and wealth, which moved from 5% of public income in 1920 to 15% in 1933.

In this context, the first personal income tax (Impuesto de Emergencia a los Réditos) was established in 1932 (Law 1/19/1932) during the presidency of José E. Uriburu, who had deposed President Yrigoyen two years before in the first military coup d'état against the constitutional order started in 1862.[57]

Taxed income was classified in four categories. The first category referred to rents and income obtained from agricultural and other rural activities when performed by the owner of the land. Total revenue from this source could not be lower than 5% of the cadastral value established for local taxes. The second category included royalties, fixed claim assets, dividends, annuities and subsidies. The third category corresponded to professional and business income and rural business income from rented land. The fourth category represented dependent labor income (wages, salaries and pensions).[58]

Exemptions included income derived from patents, copyrights and other intellectual property, profit from cooperative societies, severance payments, local and federal treasury bonds interest, low-interest saving accounts (this exemption extended later to all saving accounts and time deposits) and dividends. The tax structure was rather rudimentary: there was a flat rate for income in the first three categories, and a three-bracket progressive scale for wages, salaries and pensions.

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57 Several attempts to create a personal income tax between 1916 and 1930 (in 1917,1920, 1922, 1924, and 1928) were systematically blocked in the senate, dominated by the Conservative party. For a detailed account on the political reasons for the failure of any fiscal reform concerning the income tax before 1932, see Sánchez Román (2007). Cf. the case of Spain (Alvaredo and Saez (2006)) where the first personal income tax was enforced during the Second Republic.

58 Throughout the years the classification of income in the four categories is a key element as each category is affected by different deductions.

Tax filing was strictly individual, but income coming from elements under joint tenancy was allocated to the husband.

While the exemption on local and national treasury bonds interest was eliminated in 1942 (law 12.808), the first major reform was accomplished between 1943 and 1946 in order to increase tax revenues (Decree 18.299 of 12/31/1943). The tax scale was radically modified, maintaining the existing rates on the lowest incomes and increasing them at the top. The top marginal rate tripled, jumping from 7% to 22%. It should be noted that this rate was similar to those in force, at the time, in Chile (27%) and Brazil (21.4%) but considerably lower than those in US, Canada, UK and France. Classification of income suffered some changes: professional income was transferred from the third to the fourth category while rural business income –from owned and rented land- was completely included in the third category (decree 14.338 of 5/20/1946).[59]

While the growing inflation started by the second half of the century could have implied a rise in the number of taxpayers (by reducing the significance of the minimum threshold), non-taxable income and family deductions were regularly updated. As only those with positive taxable income were obliged to file, the percentage of tax filers with respect to total tax units remained low (see table 2, column [2]). At the same time, the brackets in the tax scale remained stable, whereas the rates were increased again in 1955 (Law 14.393 of 12/31/1954) as shown in table 2, column [7].

In 1962 the government offered the possibility of regularizing the fiscal situation and reporting all income that had been hidden by taxpayers between 1956 and 1961.[60] The strategy was the following: the individual made a formal statement of the "actual" amount and composition of his net wealth by 12/31/1961; he also had to approximate the consumption afforded with hidden income during the previous six years. The difference between the actual wealth and the wealth reported in the tax file for 1961 was considered as the capitalization of non-reported income. Using this information, the tax bureau estimated the level of tax evasion by income brackets in 1959. Results are shown in Table 4.

The same strategy was followed in 1970 for the tax evaded between 1964 and 1969. This time and quite surprisingly, reporting net assets placed in a foreign country was not mandatory (Law 18.529 of 12/31/1969). Unfortunately the tax authorities did not publish the estimation of the level of tax evasion in detail. Over a total of 589 thousand taxpayers, 300 thousand individuals declared 65% of unreported income.

Tax scale was revised again in 1969 (law 18.527 of 12/31/1969), when marginal rates ranged from 12% to 46%, and in 1974, establishing a scale going from 7% to 46% (Law 20.628 of 12/27/1973, which abolished the old *Impuesto*

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59 Among the regulations that introduced important changes in the income tax regulation, the reader may refer to: Law 1/19/1932 (creation of the income tax); law 11.586 of 7/2/1932 (ordering of the tax); law 11.757 of 10/11/1933 (on the exemption of local and national treasury bonds); law 11.682 of 1/2/1933 and decree 112.578 of 5/4/1938 (classification of income and redefinition of the progressive tax scale); decree 18.299 of 12/31/1943 (change in tax scale); decree 14.338 of 5/20/1946 (re-classification of income).

60 Decree 6.480 (1962).

sobre los Réditos Personales and created a new *Impuesto a las Ganancias de las Personas Físicas y de las Sucesiones Indivisas*). The maximum tax rate moved down to 45% in 1985 (Law 23.260 of 9/25/1985)

By 1997, the top marginal rate had been reduced to 33% and increased to 35% again in 2000 (Decree 450 of 3/31/1986; Decree 2352 of 12/18/1986; Decree 649/97 of 8/6/1997; Law 25.239 of 12/31/1999).

B. References on data sources for Argentina

B.1. Tax Statistics

Statistical information covering the income tax for years 1932-1950 has been regularly published between 1935 and 1950: Dirección General de Impuestos a los Réditos, *Memoria 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946*; Dirección General Impositiva, *Memoria 1947, 1948, 1949, 1950*. Tables display the distribution of taxpayers by brackets of income together with net income, taxable income, family deductions, minimum exempted income and tax paid.

The continuity of the publication was lost between 1950 and 1997. The Tabulations for 1951-1954, and 1956 were published in Dirección General Impositiva, *Boletín 1957, 1958, 1959, 1961, 1962 (April), 1962 (October)*. While information for 1959 was obtained from InterAmerican Development Bank and Consejo Nacional de Desarrollo, *Estudio sobre Política Fiscal en Argentina*, volumes I-VII, Buenos Aires (1967).

The data for 1953, 1959 and 1961 which do not come from tax statistics (as pointed out in the main text and in the tables) correspond to Consejo Nacional de Desarrollo, *Distribución del Ingreso y Cuentas Nacionales en la Argentina-Investigación Conjunta CONADE-CEPAL*, volumes I-V, Buenos Aires (1965). This study attempted to measure, for the whole economy, the distribution of income in 1953, 1959 and 1961 using a variety of sources, including national accounts, banking sector balance sheets, the 1963 income and expenditure survey and income tax statistics as the ones used in this paper. Consequently, the source of information for those years is not restricted to tax tabulations.

The information for 1970, 1971, 1972 and 1973 was obtained from Dirección General Impositiva, Ministerio de Economía, *Estadísticas Tributarias Ejercicios 1972/73* and Departamento de Estudios, División Estadística, Ministerio de Economía, 1973, *Boletín Estadístico Número Especial, Aporte de la DGI a las III Jornadas Tributarias del Colegio de Graduados de Ciencias Económicas de Buenos Aires*.

More detailed data describe the evolution of the income and wealth taxes between 1997 and 2004: Administración Federal de Ingresos Públicos, Ministerio de Economía, *Estadísticas Tributarias 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005.*

B.2. Total number of tax units

The income tax in Argentina has never allowed joint filing for married couples. Consequently, the reference total for tax units, defined as the number of individuals had everybody been required to file, is computed as the number of persons in the Argentine population aged 20 and over. These series are based on census linear interpolations and reported in Table 2, column [2]. National censuses were conducted in 1914, 1947, 1960, 1970, 1980, 1991 and 2001. Column [3] indicates the total number of tax returns actually filled as well as the fraction of the adult population filing a tax return (Column [3]).

Comisión Nacional del Censo, *Tercer censo nacional: levantado el 1 de junio de 1914, ordenado por la Ley no. 9108 bajo la presidencia del Dr. Roque Saenz Pena, ejecutado durante la presidencia del Dr. Victorino de la Plaza*, Buenos Aires (1919); Dirección Nacional de Estadística y Censos, *IV Censo General de Población 1947*, Buenos Aires (1951); Dirección Nacional de Estadística y Censos, *Censo General de Población 1960*, Buenos Aires (1965); Instituto Nacional de Estadística y Censos, *Censo Nacional de Población y Vivienda 1991. Resultados definitivos, Total del país*, Serie B n° 25, Buenos Aires (1993); Instituto Nacional de Estadística y Censos, *Censo Nacional de Población, Hogares y Vivienda 2001, Resultados Generales Total del País*, Buenos Aires.

B.3. Income and Prices

Income: To relate the amounts recorded in the tax tabulations to a comparable reference income, we tried to build up the series of personal income from the national accounts. Information comes from the National Accounts System 1993. Starting from total GDP, minus indirect and direct taxes not paid by families, minus depreciation, minus employers' social security contributions, minus imputed rents on owner-occupied houses, minus financial intermediation services consumed by the public sector, minus undistributed profits, plus social transfers minus interest paid by the financial system (interest is not included in tax statistics), minus 33% of unincorporated profits. This procedure generates a reference income of 60% of GDP for recent years. The level of desegregation of information required to compute income is not available for all the years. Consequently we applied the 60% factor to the GDP in current prices taken from Administración Federal de Ingresos Públicos (2002), based on information from Secretaría de Política Económica, Banco Central de la República Argentina and Instituto Nacional de Estadística y Censos.[61]
As pointed out in Atkinson (2005), given the increasing significance of items such as employers' contributions, non-household institutions such as pension funds and public transfers, it is not evident that a constant percentage computed on recent information is appropriate to describe the situation during the first half of the century.

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[61] In the case of Spain the reference total income also turns out to be roughly equal to 60% of GDP with deviations of less than 1% (see Alvaredo and Saez (2006)).

Prices: The first official consumer price index dates back to 1943. The CPI is published monthly by the Instituto Nacional de Estadística. The annual index was computed as the arithmetic average of monthly indices from 1943 to 2004. For 1935-1942, the price index was taken from Vazquez Presedo (1971) column [1], Table V-2.15; for 1932-1934 it corresponds to Della Paolera and Taylor (2001), chapter 13.

B.4. Household Surveys

Household surveys correspond to Encuesta Permanente de Hogares (EPH), October, Instituto Nacional de Estadística y Censos.
The last two columns of Table 5 are based on the October 1997 EPH (all urban centers). We proceeded in the following way. We corrected the October 1997 survey weights so that the adult population covered by the survey matches our reference total for tax units. As survey income refers to monthly values, annual income was computed by up scaling dependent labor income and pensions by a factor of 13 (twelve months plus a year-end bonus). Income from all other sources was multiplied by 12. Family deductions established by the tax schedule were calculated using the household composition information. Deduction for spouse was $2,400; deduction for each dependent was $1,200. Personal allowance was $4,800. Since other allowances permitted by law vary according to personal characteristics, expenses, and sources of income, it is not possible to know exactly the individual amount to be deducted. We computed the ratio allowances/income by brackets from the tax tabulations, and applied them to survey incomes. Individuals with taxable income below 0 were eliminated. The remaining individuals were organized by levels of income so as to make the comparison with the tax tabulations.
To adjust the survey incomes so that aggregated income matches the National Accounts counterpart, the following factors were applied: wages and salaries, 1.4; pensions, 1.05; profits, 5.5; entrepreneurs (including self employment), 1.2. These correction factors result from comparing aggregated wages, pensions, self-employment income, dividends and rents from the national accounts to the corresponding totals in the survey.

C. Estimating Top Shares

C.1. Basic Pareto Interpolation

The general interpolation technique is based on the well known empirical regularity that the top tail of the income distribution is very closely approximated by a Pareto distribution. A Pareto distribution has a cumulative distribution function of the form $F(y)=1-(k/y)^a$ where k and a are constants, and a is the Pareto parameter of the distribution. Such a distribution has the key property that the average income above a given threshold y is always exactly proportional to y. The coefficient of proportionality is equal to $b=a/(a-1)$.

The first step consists then in estimating the income thresholds corresponding to each of the percentiles P90, P95, P99, …, P99.99, that define our top income groups. For each percentile p, we look first for the published income bracket [s,t] containing the percentile p. We estimate then the parameters a and k of the Pareto distribution by solving the two equations: $k=s\,p^{(1/a)}$ and $k=t\,q^{(1/a)}$ where p is the fraction of tax returns above s and q the fraction of tax returns above t.[62] Pareto parameters k and a may vary from bracket to bracket. Once the density distribution on [s,t] is estimated, it is possible to estimate the income threshold, y_p, corresponding to targeted percentile p.

The second step consists of estimating the amounts of income reported above income threshold y_p. We estimate the amount reported between income y_p and t (the upper bound of the published bracket [s,t] containing y_p) using the estimated Pareto density with parameters a and k. We then add to that amount the amounts in all the published brackets above t.

Once the total amount above y_p is obtained, we obtain directly the mean income above percentile p by dividing the amount by the number of individuals above percentile p. Finally, the share of income accruing to individuals above percentile p is obtained by dividing the total amount above y_p by our income denominator series. Average incomes and income shares for intermediate fractiles (P90-95, P95-99, etc.) are obtained by subtraction.

The composition for 2001-2004 is estimated from the published tables in indicating for each income bracket not only the number of taxpayers and the total amount of their total income but also the separate amounts for each type of income as well as the deductions. The composition of income within each group was estimated from these tables using a simple linear interpolation method. Such a method is less satisfactory than the Pareto interpolation method used to estimate top income levels (no obvious law seems to fit composition patterns in a stable way). See Piketty and Saez (2003) for a more precise discussion of this method where it is systematically compared with direct estimates using micro data.

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62 This is the standard method of Pareto interpolation used by Kuznets (1953) and Feenberg and Poterba (1993).

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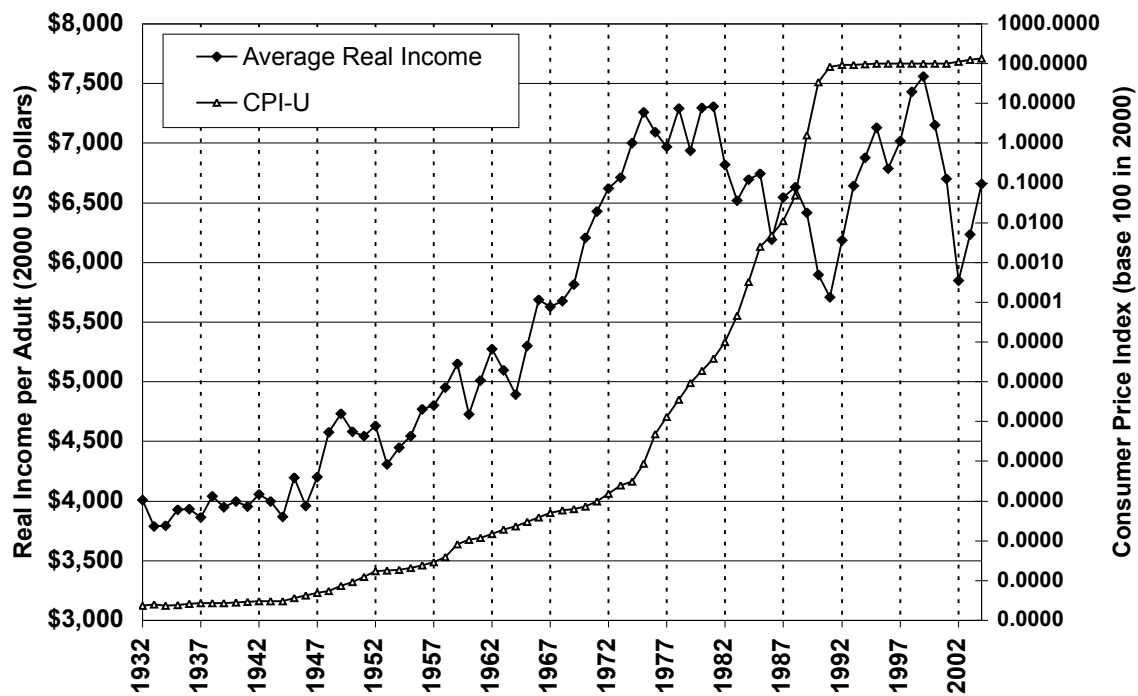
FIGURE 1.

Average Real Income and Consumer Price Index in Argentina, 1932-2004

Figure reports the average real income per adult (aged 20 and above), expressed in 2000 US Dollars. CPI index is equal to 100 in 2000 (logarithmic scale).
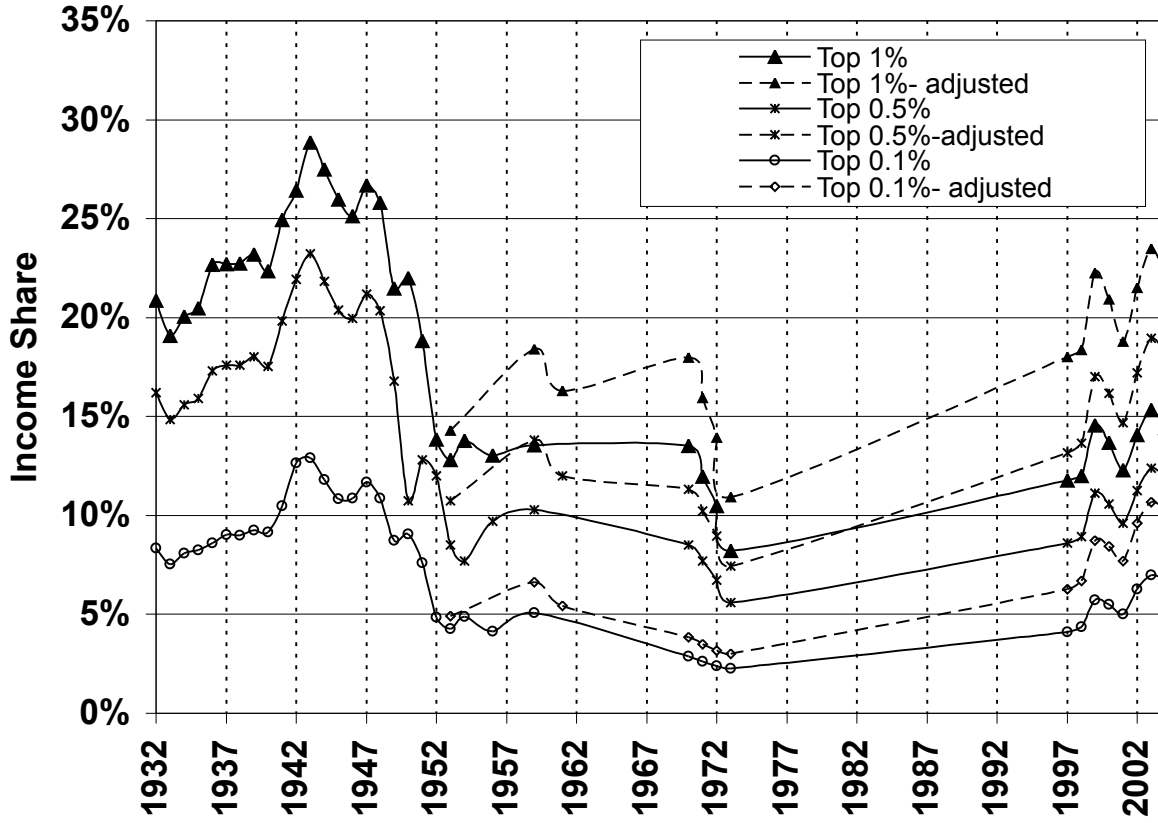
FIGURE 2
The Top 1% ,Top 0.5% and Top 0.1% Income Shares in Argentina, 1932-2004
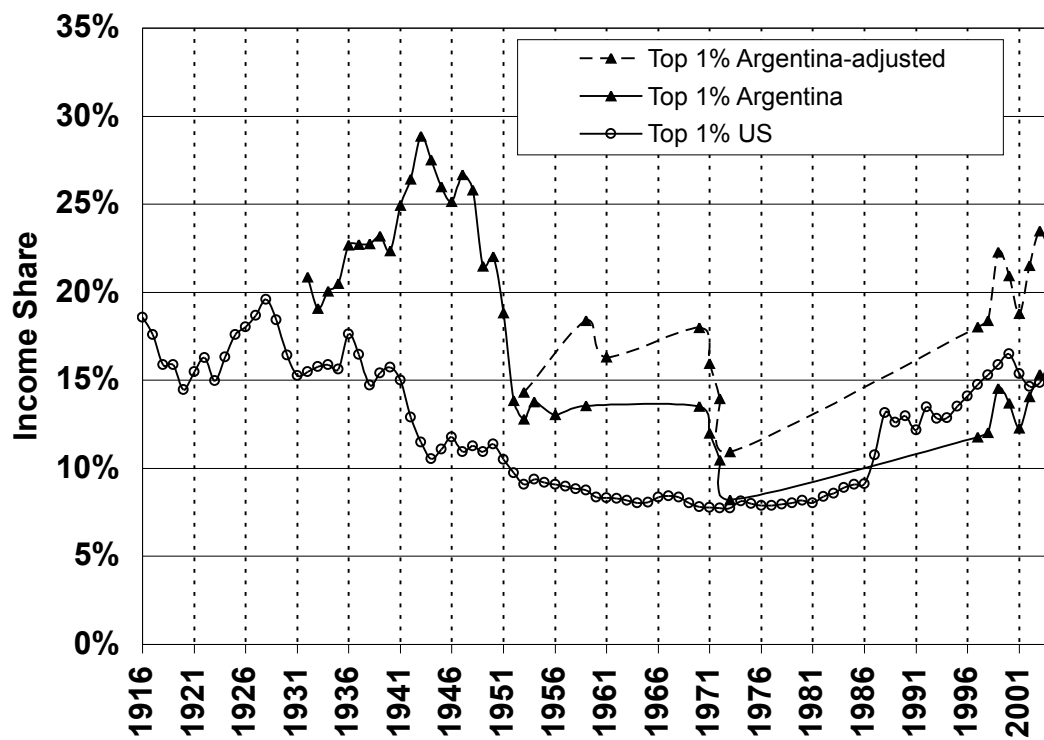
FIGURE 3
The Top 1% Income Shares in Argentina and the United States

Source: Argentina: author's calculations. US: Piketty and Saez (2003)
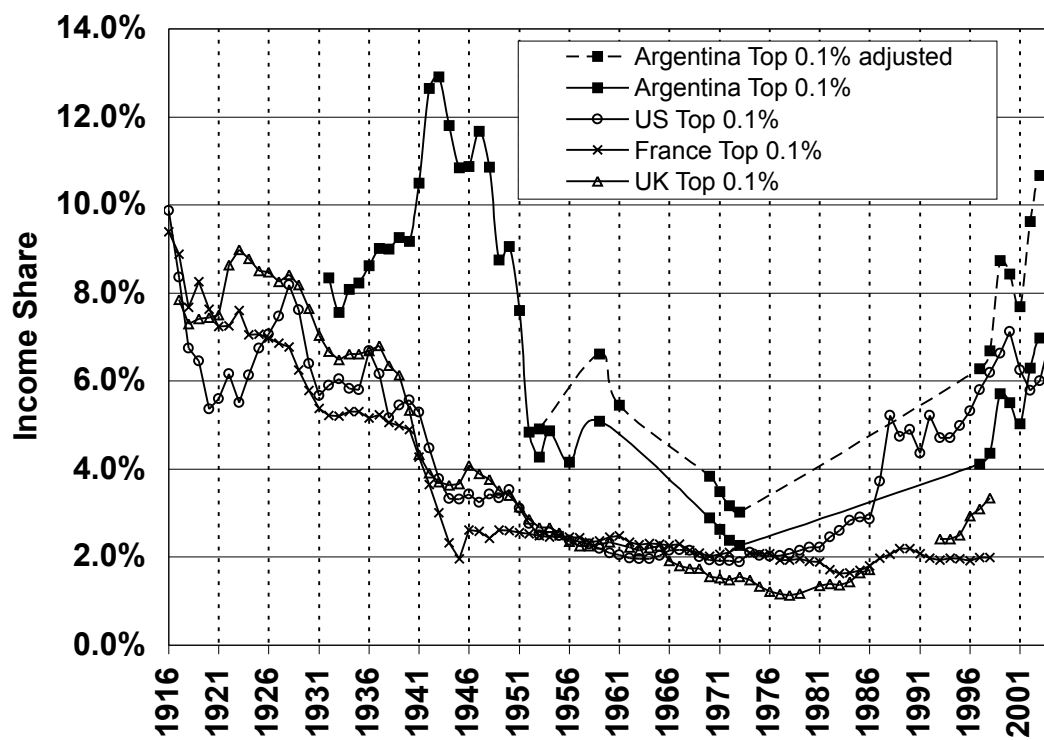
FIGURE 4
The Top 0.1% Income Shares in Argentina, the United States
France and UK
Source: Argentina: author's calculations. US: Piketty and Saez (2003)
France: Piketty (2001); UK: Atkinson (2005).
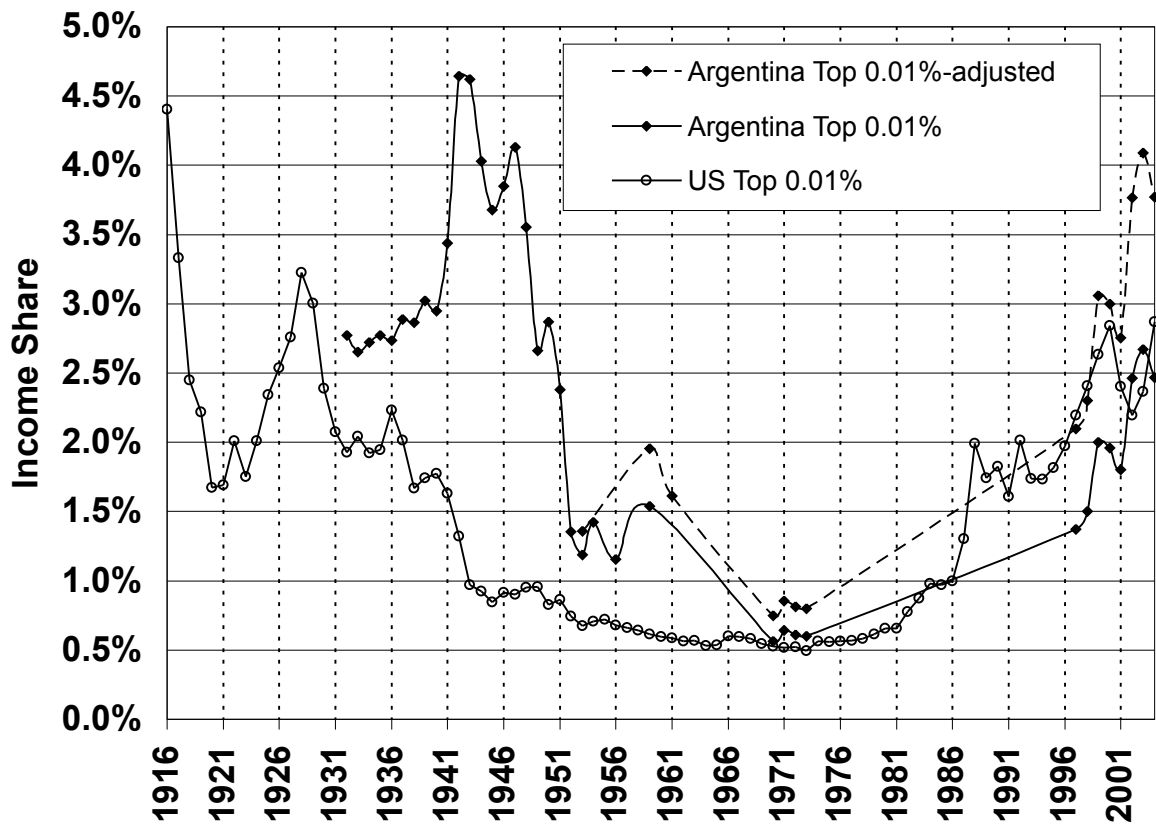
FIGURE 5
The Top 0.01% Income Shares in Argentina and the United States

Source: Argentina: author's calculations. US: Piketty and Saez (2003)
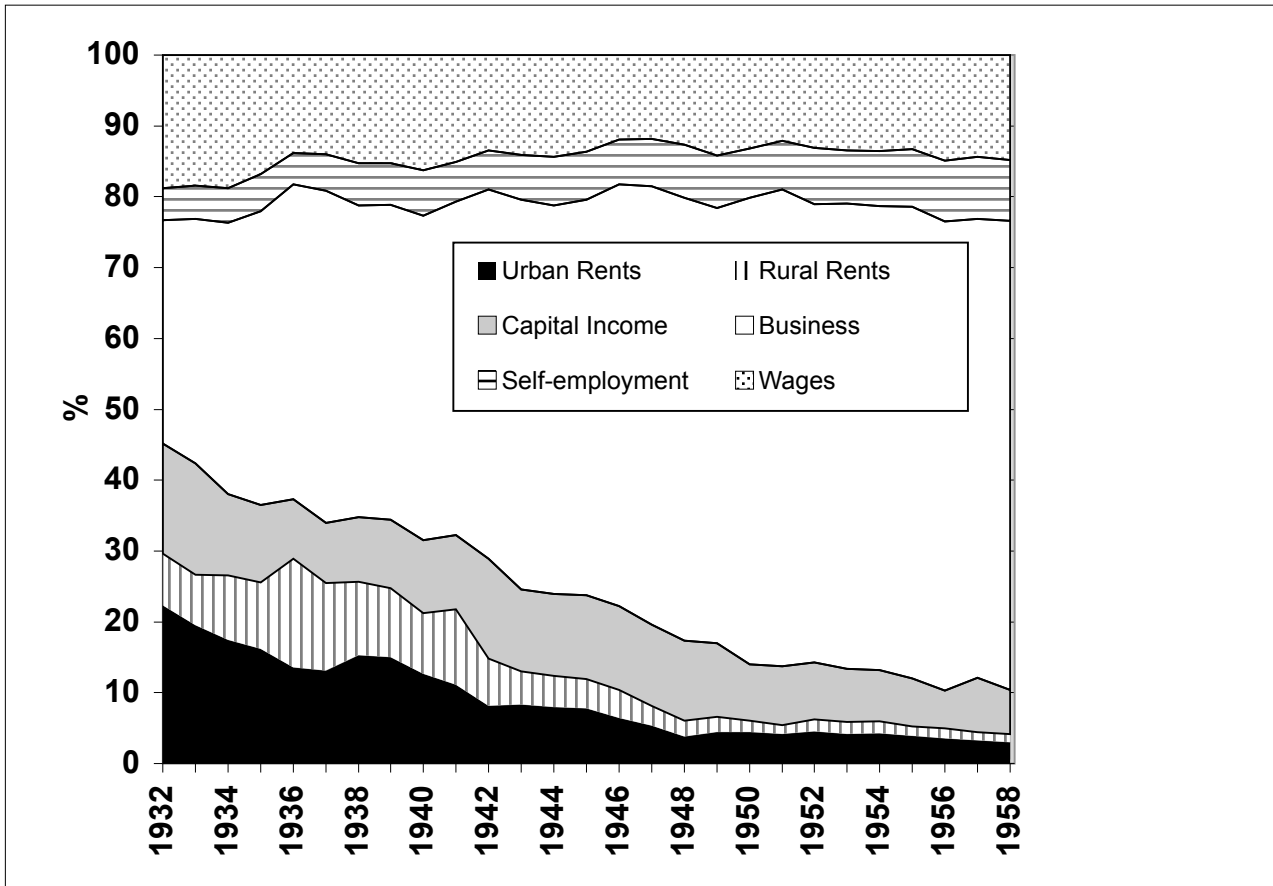
FIGURE 6

Composition of Reported Income in Argentina, 1932-1958

Notes: It covers 1.7%-2.6% of top income earners between 1932 and 1949,
and 3.7%-5.2% between 1950 and 1958. See Table 2, colum [4].
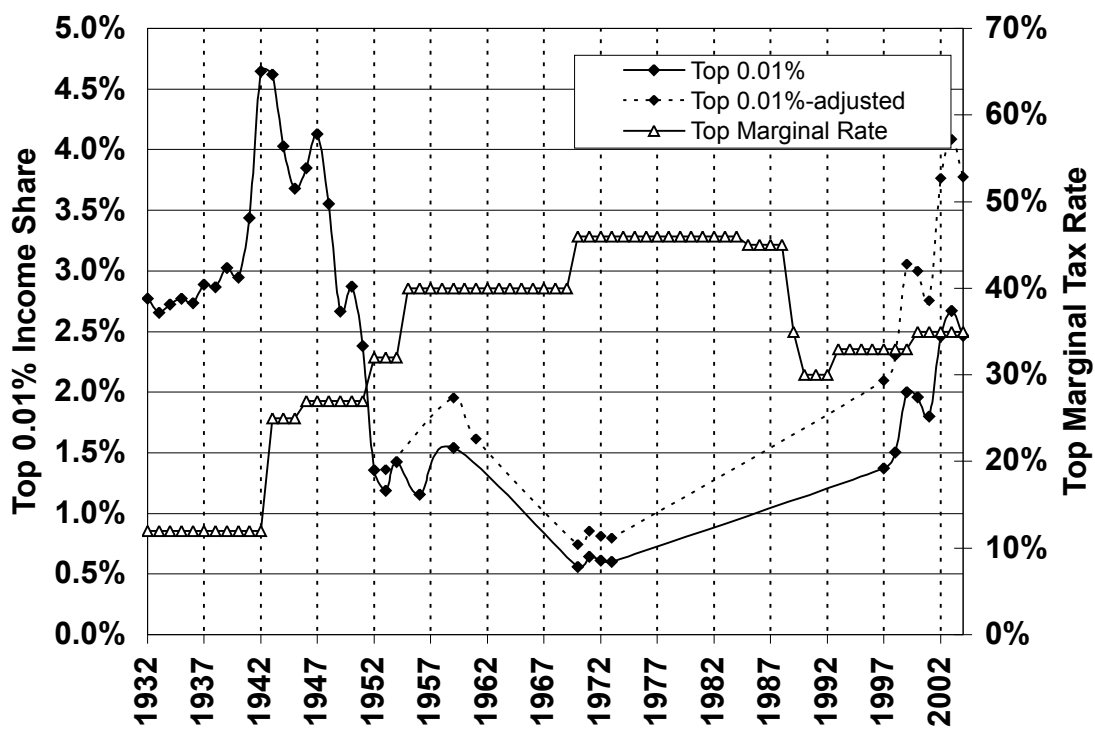
FIGURE 7
The Top 0.01% Income Share in Argentina and Top Marginal Rates, 1932-2004

Source: Top 0.01% income share from Table 6.
Top Marginal tax rate is from Table 2, Column [9].
Top 0.01% income share excludes realized capital gains.
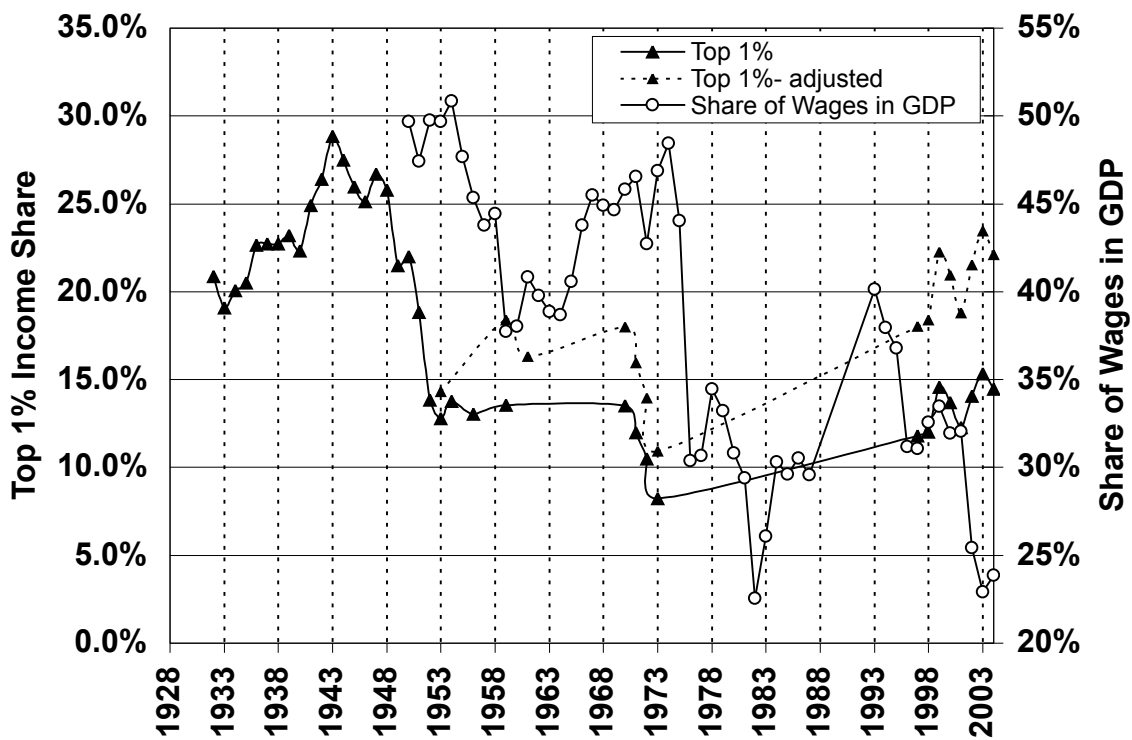
FIGURE 8

The Top 1% Income Share in Argentina and share of Wages in GDP, 1932-2004

Source: Top 1% income share from Table 6.
Share of Wages on GDP from Lindemboin et al (2005)
Income does not include realized capital gains.
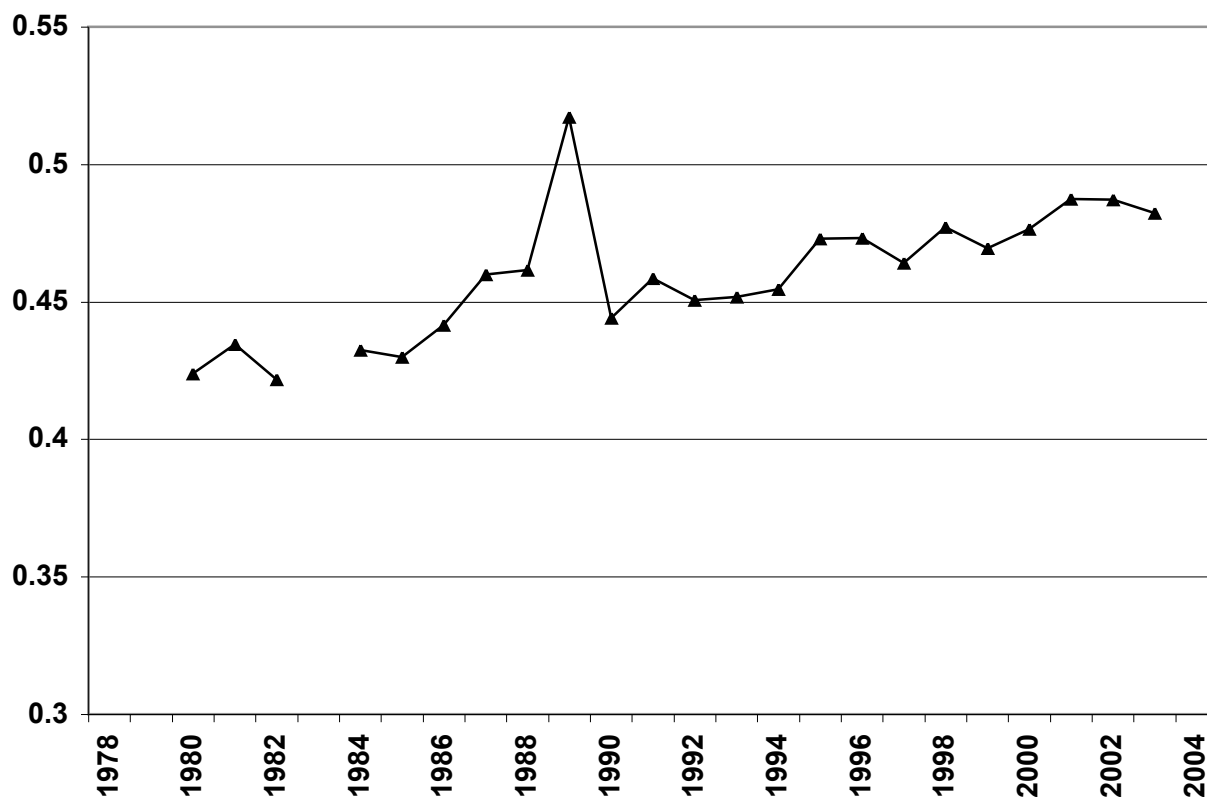
FIGURE 9
Gini Coefficient 1980-2004 Greater Buenos Aires
Notes: The triangle denotes the Gini coefficient in the Greater Buenos Aires, own calculations
based on household surveys. Database for 1983 is missing. All results correspond to
October surveys, except for 2003 (May).
Only perceptors with positive income were considered and no further adjustments were applied.
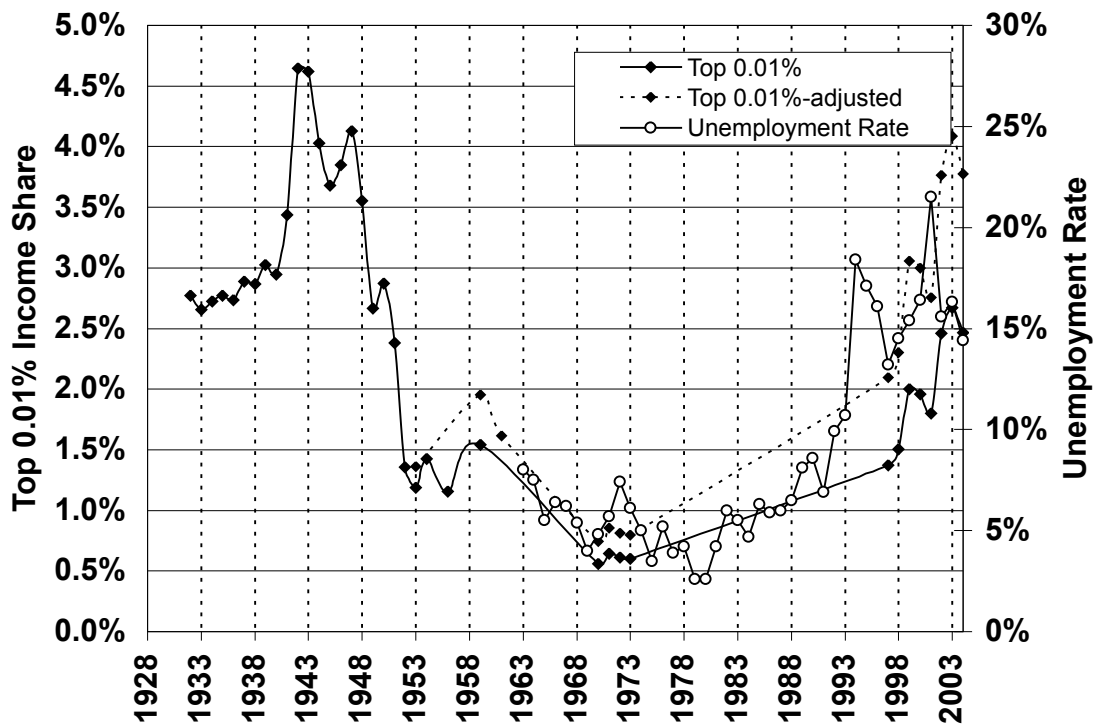
FIGURE 10
The Top 0.01% Income Share and Unemployment Rate in Argentina, 1932-2004

Income does not include realized capital gains.

TABLE 1A. Structure of Tax Revenues. Argentina 1932-2004

	% of National Government Tax Receipts							
	Personal Income Tax and Corporate Tax			Social Contributions	Property Taxes	Sales Tax	International Trade	Other Taxes
	Personal Income Tax	Corporate Income Tax	Total (1)+(2)					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1932	6.04	0.12	6.16	15.97	1.53	24.48	40.70	11.16
1933	5.97	2.31	8.28	14.99	1.42	25.01	40.35	9.95
1934	7.18	1.30	8.48	14.89	1.74	26.03	38.84	10.01
1935	6.74	2.64	9.38	14.08	1.67	30.89	35.22	8.76
1936	7.88	1.06	8.94	14.34	2.08	32.78	33.09	8.76
1937	8.17	2.01	10.18	12.92	1.55	31.91	36.58	6.86
1938	7.39	4.81	12.20	13.41	1.68	32.50	33.58	6.63
1939	8.08	4.90	12.98	14.13	1.66	34.72	29.39	7.12
1940	8.09	5.66	13.75	15.36	1.51	36.43	25.55	7.41
1941	11.10	2.85	13.95	16.05	2.15	39.17	20.88	7.79
1942	13.73	4.63	18.36	15.95	2.25	39.07	17.01	7.36
1943	19.33	11.01	30.34	15.54	2.31	35.70	9.78	6.33
1944	18.59	10.50	29.09	16.09	2.38	36.69	7.97	7.78
1945	15.96	8.64	24.60	27.39	1.63	31.84	7.50	7.05
1946	16.82	17.08	33.90	23.80	1.74	24.94	9.96	5.66
1947	15.78	12.57	28.35	32.38	1.07	20.31	13.30	4.60
1948	15.08	12.36	27.44	36.09	1.16	20.44	9.45	5.42
1949	13.92	10.80	24.72	38.08	0.90	26.98	4.55	4.77
1950	16.51	8.27	24.78	34.61	4.86	28.91	3.40	3.44
1951	15.08	9.67	24.75	31.98	3.20	31.78	5.19	3.09
1952	12.03	15.29	27.32	32.21	3.64	30.82	3.11	2.91
1953	11.74	10.61	22.35	35.33	4.49	32.49	1.78	3.56
1954	11.40	9.72	21.12	37.21	4.23	32.65	2.27	2.53
1955	10.91	10.50	21.41	37.54	3.64	31.40	2.75	3.26
1956	12.39	11.86	24.25	37.87	2.61	28.67	2.87	3.74
1957	15.78	8.53	24.31	33.32	1.78	31.53	3.42	5.65
1958	18.05	7.50	25.55	32.75	1.95	30.82	4.35	4.58
1959	16.06	10.44	26.50	34.05	1.48	27.37	6.51	4.11
1960	10.43	14.65	25.08	29.10	5.69	32.36	4.18	3.59
1961			23.28	31.66	4.30	33.59	3.58	3.59
1962			19.43	29.01	3.10	33.44	12.07	2.95
1963			17.84	28.42	2.39	34.67	13.64	3.03
1964			14.59	34.86	1.97	28.72	17.22	2.64
1965			19.95	30.89	1.89	29.41	14.67	3.20
1966			19.83	27.27	3.86	34.44	11.62	2.98
1967			17.54	30.83	5.34	28.27	15.28	2.74
1968			14.79	30.30	4.72	33.61	13.43	3.15
1969			15.23	28.86	4.88	34.16	13.34	3.52
1970	5.80	12.73	18.53	28.59	6.01	31.90	11.87	3.10
1971	6.00	8.15	14.14	32.19	5.59	32.50	12.74	2.84
1972	5.61	7.33	12.95	29.93	4.85	31.80	17.82	2.66
1973	4.70	9.04	13.74	33.84	5.08	29.28	15.11	2.95
1974			14.99	32.37	4.57	33.06	11.99	3.03
1975			8.21	39.36	0.51	35.35	13.83	2.73
1976			9.25	30.59	4.67	31.01	17.92	6.57
1977			11.80	24.07	6.07	38.76	10.51	8.80
1978			11.15	27.57	5.39	44.23	7.95	3.72
1979			7.83	31.16	4.89	44.12	8.97	3.03
1980			9.17	29.35	4.70	43.79	10.21	2.77
1981			10.62	15.77	5.12	54.75	11.51	2.23
1982			9.53	13.76	8.47	54.36	11.75	2.15
1983			7.49	14.84	7.08	49.69	16.62	4.28
1984			4.26	19.77	6.39	51.43	14.29	3.87
1985			6.00	22.33	6.92	43.80	18.40	2.56
1986			7.79	21.10	8.37	45.10	15.07	2.56
1987			9.84	24.51	8.42	41.03	12.09	4.12
1988			8.90	20.89	12.42	43.01	10.19	4.60
1989			10.39	14.76	12.56	34.16	22.86	5.27
1990			4.82	22.31	9.08	44.98	13.06	5.75
1991			4.54	23.76	12.16	46.62	6.43	6.50
1992			7.63	23.48	4.92	53.93	6.12	3.93
1993			11.15	24.34	1.78	52.86	6.41	3.47
1994			12.86	29.71	1.43	47.55	6.18	2.27
1995			14.62	27.45	1.21	49.94	4.42	2.36
1996			15.74	23.62	1.84	53.22	5.25	0.33
1997	3.60	13.52	17.12	21.78	1.26	53.92	5.77	0.14
1998	3.54	15.36	18.90	20.50	1.77	52.93	5.60	0.29
1999	3.41	17.40	20.81	19.29	2.10	52.04	4.84	0.91
2000	4.11	18.61	22.72	18.10	2.47	51.75	4.14	0.83
2001	3.40	19.87	23.27	17.76	8.25	46.27	3.64	0.82
2002	5.32	13.04	18.36	16.02	10.58	42.17	12.26	0.61
2003	5.24	16.65	21.89	13.41	10.36	38.62	15.35	0.38
2004	4.26	19.20	23.46	13.29	9.48	39.72	13.53	0.51

Source: Dirección General de Impuestos a los Réditos, Memoria, several years; Dirección General Impositiva, Memoria, several years; Administración Federal de Ingresos Públicos, Estadísticas Tributarias, several years.

TABLE 1B. Structure of Tax Revenues. Argentina 1932-2004

	National Government Tax Receipts as % of GDP							
	Personal Income Tax and Corporate Tax			Social Contributions	Property Taxes	Sales Tax	International Trade	Other Taxes
	Personal Income Tax	Corporate Income Tax	Total (1)+(2)					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1932	0.61	0.01	0.62	1.62	0.16	2.48	4.12	1.13
1933	0.58	0.22	0.80	1.46	0.14	2.43	3.92	0.97
1934	0.64	0.12	0.76	1.34	0.16	2.33	3.48	0.90
1935	0.68	0.27	0.94	1.42	0.17	3.11	3.54	0.88
1936	0.74	0.10	0.84	1.34	0.19	3.07	3.10	0.82
1937	0.77	0.19	0.96	1.22	0.15	3.00	3.44	0.65
1938	0.73	0.48	1.21	1.33	0.17	3.23	3.34	0.66
1939	0.76	0.46	1.22	1.33	0.16	3.26	2.76	0.67
1940	0.72	0.50	1.22	1.37	0.13	3.24	2.27	0.66
1941	0.88	0.23	1.11	1.28	0.17	3.11	1.66	0.62
1942	1.05	0.35	1.40	1.21	0.17	2.98	1.30	0.56
1943	1.63	0.93	2.56	1.31	0.19	3.02	0.83	0.54
1944	1.58	0.89	2.47	1.37	0.20	3.12	0.68	0.66
1945	1.49	0.81	2.30	2.56	0.15	2.97	0.70	0.66
1946	1.87	1.90	3.77	2.65	0.19	2.77	1.11	0.63
1947	2.19	1.75	3.94	4.49	0.15	2.82	1.85	0.64
1948	2.24	1.84	4.08	5.37	0.17	3.04	1.41	0.81
1949	2.14	1.66	3.80	5.86	0.14	4.15	0.70	0.73
1950	2.85	1.43	4.27	5.97	0.84	4.99	0.59	0.59
1951	2.59	1.66	4.26	5.50	0.55	5.47	0.89	0.53
1952	1.90	2.41	4.30	5.07	0.57	4.85	0.49	0.46
1953	1.84	1.67	3.51	5.54	0.70	5.10	0.28	0.56
1954	1.91	1.63	3.54	6.23	0.71	5.47	0.38	0.42
1955	1.73	1.67	3.40	5.97	0.58	5.00	0.44	0.52
1956	1.98	1.89	3.87	6.04	0.42	4.58	0.46	0.60
1957	2.13	1.15	3.28	4.49	0.24	4.25	0.46	0.76
1958	2.20	0.91	3.11	3.98	0.24	3.75	0.53	0.56
1959	1.93	1.25	3.18	4.08	0.18	3.28	0.78	0.49
1960	1.25	1.76	3.01	3.49	0.68	3.88	0.50	0.43
1961			2.83	3.84	0.52	4.08	0.44	0.44
1962			2.12	3.17	0.34	3.65	1.32	0.32
1963			2.08	3.32	0.28	4.05	1.59	0.35
1964			1.54	3.68	0.21	3.03	1.82	0.28
1965			2.31	3.58	0.22	3.41	1.70	0.37
1966			2.50	3.43	0.49	4.33	1.46	0.37
1967			2.54	4.47	0.77	4.10	2.22	0.40
1968			1.99	4.08	0.64	4.53	1.81	0.42
1969			1.94	3.68	0.62	4.35	1.70	0.45
1970	0.92	2.02	2.94	4.54	0.95	5.07	1.89	0.49
1971	0.84	1.15	1.99	4.53	0.79	4.57	1.79	0.40
1972	0.70	0.91	1.61	3.73	0.60	3.96	2.22	0.33
1973	0.62	1.19	1.81	4.47	0.67	3.86	1.99	0.39
1974			2.35	5.08	0.72	5.19	1.88	0.48
1975			0.88	4.21	0.05	3.78	1.48	0.29
1976			1.18	3.90	0.59	3.95	2.28	0.84
1977			1.39	2.84	0.71	4.57	1.24	1.04
1978			1.31	3.24	0.63	5.19	0.93	0.44
1979			0.89	3.54	0.56	5.02	1.02	0.34
1980			1.16	3.72	0.60	5.55	1.29	0.35
1981			1.24	1.84	0.60	6.37	1.34	0.26
1982			0.95	1.37	0.84	5.40	1.17	0.21
1983			0.70	1.38	0.66	4.62	1.55	0.40
1984			0.40	1.84	0.59	4.78	1.33	0.36
1985			0.76	2.82	0.87	5.53	2.32	0.32
1986			0.95	2.58	1.02	5.51	1.84	0.31
1987			1.19	2.97	1.02	4.97	1.46	0.50
1988			0.94	2.21	1.31	4.54	1.08	0.49
1989			1.21	1.72	1.46	3.98	2.66	0.61
1990			0.51	2.38	0.97	4.80	1.39	0.61
1991			0.58	3.06	1.57	6.00	0.83	0.84
1992			1.14	3.51	0.74	8.07	0.92	0.59
1993			1.84	4.02	0.29	8.74	1.06	0.57
1994			2.30	5.30	0.25	8.49	1.10	0.40
1995			2.46	4.62	0.20	8.40	0.74	0.40
1996			2.54	3.82	0.30	8.60	0.85	0.05
1997	0.61	2.28	2.89	3.68	0.21	9.10	0.97	0.02
1998	0.60	2.61	3.21	3.48	0.30	8.98	0.95	0.05
1999	0.58	2.97	3.56	3.30	0.36	8.90	0.83	0.16
2000	0.72	3.25	3.97	3.17	0.43	9.05	0.72	0.14
2001	0.58	3.41	3.99	3.05	1.42	7.94	0.62	0.14
2002	0.88	2.16	3.05	2.66	1.76	6.99	2.03	0.10
2003	1.03	3.27	4.30	2.63	2.04	7.59	3.02	0.07
2004	0.96	4.31	5.27	2.98	2.13	8.92	3.04	0.11

Source: Dirección General de Impuestos a los Réditos, Memoria, several years; Dirección General Impositiva, Memoria, several years; Administración Federal de Ingresos Públicos, Estadísticas Tributarias.

TABLE 2. Reference Totals for Population, Income and Inflation, 1932-2004

	Tax Units and Population				Total Income		Price Index	Inflation	Taxes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Population	Tax Units	Number of tax returns	(3)/(2) (%)	Total income (million 2000 US Dollars)	Average income (2000 US Dollars)	CPI (2000:100)	(%)	Top Marginal Tax Rate
	('000s)	('000s)	('000s)						(%)
1932	11,570	6,372	113	1.8	25,927	4,069	1.51E-12	-10.3	12
1933	11,817	6,538	112	1.7	25,149	3,847	1.64E-12	8.2	12
1934	12,070	6,708	133	2.0	25,854	3,854	1.51E-12	-7.6	12
1935	12,328	6,883	142	2.1	27,454	3,989	1.60E-12	6.0	12
1936	12,592	7,063	150	2.1	28,205	3,993	1.74E-12	8.5	12
1937	12,861	7,247	151	2.1	28,439	3,924	1.78E-12	2.6	12
1938	13,137	7,436	145	2.0	30,500	4,102	1.77E-12	-0.6	12
1939	13,418	7,630	142	1.9	30,595	4,010	1.80E-12	1.5	12
1940	13,705	7,829	134	1.7	31,766	4,057	1.84E-12	2.2	12
1941	13,998	8,033	147	1.8	32,280	4,018	1.89E-12	2.6	12
1942	14,297	8,242	122	1.5	33,965	4,121	2.00E-12	5.7	12
1943	14,603	8,457	141	1.7	34,340	4,061	2.02E-12	1.1	25
1944	14,916	8,678	167	1.9	34,108	3,930	2.01E-12	-0.3	25
1945	15,235	8,904	180	2.0	37,949	4,262	2.41E-12	19.8	25
1946	15,561	9,136	189	2.1	36,730	4,020	2.83E-12	17.6	27
1947	15,894	9,375	221	2.4	40,013	4,268	3.22E-12	13.6	27
1948	16,178	9,562	250	2.6	44,460	4,650	3.64E-12	13.1	27
1949	16,468	9,754	255	2.6	46,899	4,808	4.77E-12	31.1	27
1950	16,762	9,949	365	3.7	46,289	4,653	5.99E-12	25.6	27
1951	17,062	10,148	386	3.8	46,850	4,617	8.19E-12	36.7	27
1952	17,367	10,352	476	4.6	48,675	4,702	1.14E-11	38.7	32
1953	17,678	10,559	558	5.3	46,224	4,378	1.18E-11	4.0	32
1954	17,994	10,770	545	5.1	48,671	4,519	1.23E-11	3.8	32
1955	18,316	10,986	n/a	n/a	50,682	4,613	1.38E-11	12.3	40
1956	18,644	11,206	587	5.2	54,263	4,842	1.56E-11	13.4	40
1957	18,977	11,430	n/a	n/a	55,769	4,879	1.95E-11	24.7	40
1958	19,317	11,659	605	5.2	58,658	5,031	2.56E-11	31.6	40
1959	19,662	11,893	491	4.1	62,240	5,233	5.47E-11	113.7	40
1960	20,014	12,131	n/a	n/a	58,218	4,799	6.93E-11	26.6	40
1961	20,326	8,402	n/a	n/a	42,748	5,088	7.88E-11	13.7	40
1970	23,362	14,438	591	4.1	89,606	6,206	4.76E-10	13.6	46
1971	23,785	14,686	551	3.8	94,426	6,430	6.41E-10	34.7	46
1972	24,215	14,939	532	3.6	98,941	6,623	1.02E-09	58.5	46
1973	24,653	15,196	494	3.3	102,032	6,714	1.63E-09	60.3	46
1997	34,756	22,403	1,259	5.6	157,207	7,017	101.20	0.5	33
1998	35,126	22,869	1,114	4.9	169,951	7,432	102.14	0.9	33
1999	35,500	23,346	819	3.5	176,498	7,560	100.95	-1.2	33
2000	35,878	23,833	786	3.3	170,526	7,155	100.00	-0.9	35
2001	36,260	24,329	674	2.8	163,003	6,700	98.93	-1.1	35
2002	36,646	24,836	728	2.9	145,245	5,848	124.53	25.9	35
2003	37,037	25,354	763	3.0	158,083	6,235	141.27	13.4	35
2004	37,431	25,882	748	2.9	172,308	6,657	147.49	4.4	35

Notes: Population and tax units estimates based on census.

Tax units estimated as number of adults aged 20 and over.

TABLE 3A.

Thresholds and Average Incomes in Top Income Groups in 2000

Percentile threshold (1)	Income threshold (2)	Income Groups (3)	Number of adults (aged 20+) (4)	Average income in each group (5)
		Full Adult Population	23,833,000	$7,155
Top 1%	$33,935	Top 1-0.5%	119,165	$44,511
Top 0.5%	$58,940	Top 0.5-0.1%	95,332	$90,630
Top 0.1%	$163,468	Top 0.1-0.01%	21,450	$282,252
Top 0.01%	$665,964	Top 0.01%	2,383	$1,402,012

Notes: Computations based on income tax return statistics.

Amounts are expressed in 2000 US Dollars.

Column (2) reports the income thresholds corresponding to each of the percentiles in column (1). For example,

an annual income of at least $163,468 is required to belong to the top 0.1% tax units, etc.

TABLE 3B.

Thresholds and Average Incomes in Top Income Groups in 2000

adjusted for under-reporting

Percentile threshold (1)	Income threshold (2)	Income Groups (3)	Number of adults (aged 20+) (4)	Average income in each group (5)
		Full Adult Population	23,833,000	$7,155
Top 1%	$51,921	Top 1-0.5%	119,165	$68,102
Top 0.5%	$90,178	Top 0.5-0.1%	95,332	$138,665
Top 0.1%	$250,106	Top 0.1-0.01%	21,450	$431,846
Top 0.01%	$1,018,924	Top 0.01%	2,383	$2,145,079

Notes: Computations based on income tax return statistics.

Amounts are expressed in 2000 US Dollars.

Column (2) reports the income thresholds corresponding to each of the percentiles in column (1). For example,

an annual income of at least $250,106 is required to belong to the top 0.1% tax units, etc.

Incomes adjusted for under-reporting as described in text.

TABLE 4. Under-reporting in Income Tax. 1959

Income Levels				un-reported income
in 1959 m$n		in 2000 US Dollars		
(from	to)	(from	to)	(% of reported income)
	30,000		6,667	33
30,001	40,000	6,667	8,889	34
40,001	60,000	8,889	13,333	36
60,001	90,000	13,334	20,000	38
90,001	120,000	20,000	26,667	39
120,001	200,000	26,667	44,444	40
200,001	300,000	44,445	66,667	40
300,001	700,000	66,667	155,556	36
700,001	2,000,000	155,556	444,444	31
2,000,001		444,445		27

Source: Presidencia de la Nación (1967), volume V
Notes: m$n refers to 'pesos moneda nacional', the legal currency in 1959

TABLE 5. Income Tax Tabulation and Household Survey 1997

Income Brackets in 1997 US Dollars		Tax Statistics		Survey Statistics	
		#	th.US Dollars	#	th. US Dollars
	10,000	356,793	2,002,216	278,573	2,520,039
10,000	20,000	359,544	5,219,874	1,084,653	15,600,000
20,000	30,000	198,613	4,877,585	327,086	8,131,826
30,000	40,000	113,129	3,914,582	117,165	4,139,473
40,000	50,000	68,388	3,054,019	42,057	1,882,858
50,000	60,000	42,882	2,344,636	21,110	1,158,234
60,000	80,000	48,631	3,350,531	19,238	1,329,835
80,000	100,000	26,136	2,329,231	8,196	732,496
100,000	150,000	23,466	2,818,377	3,834	428,004
150,000	200,000	8,555	1,467,866	976	152,213
200,000	300,000	6,616	1,596,016		
300,000	500,000	3,849	1,455,500	1,345	487,354
500,000	1,000,000	1,895	1,259,405	160	115,200
1,000,000	1,500,000	411	488,769		
1,500,000	2,000,000	181	337,018		
2,000,000	3,000,000	31	85,207		
3,000,000	5,000,000	49	186,703		
5,000,000		26	226,908		
Total		1,259,195	37,014,443	1,904,393	36,677,531

Source: AFIP, Estadísticas Tributarias 1998 and EPH October 1997.

Table 6. Top Income Shares in Argentina, 1932-2004

	Top 5%	Top 1%	Top 0.5%	Top .1%	Top .01%	Top 5-1%	Top 1-0.5%	Top 0.5-0.1%	Top 0.1-.01%	Top .01%
	(2)	(3)		(5)	(6)	(8)		(9)	(11)	(12)
A. Results from tax statistics										
1932		20.85	16.21	8.35	2.77		4.65	7.85	5.58	2.77
1933		19.09	14.83	7.55	2.65		4.25	7.28	4.90	2.65
1934		20.06	15.58	8.09	2.72		4.48	7.49	5.37	2.72
1935		20.49	15.91	8.23	2.77		4.58	7.68	5.46	2.77
1936		22.67	17.29	8.62	2.74	5.36	5.38	8.68	5.88	2.74
1937		22.71	17.61	9.01	2.89		5.11	8.59	6.12	2.89
1938		22.74	17.59	9.00	2.87		5.15	8.60	6.13	2.87
1939		23.21	18.03	9.27	3.02		5.18	8.76	6.24	3.02
1940		22.34	17.54	9.17	2.95		4.80	8.37	6.22	2.95
1941		24.92	19.83	10.49	3.44		5.09	9.34	7.06	3.44
1942		26.41	21.93	12.64	4.64		4.49	9.29	8.00	4.64
1943		28.84	23.22	12.91	4.62		5.63	10.30	8.29	4.62
1944		27.50	21.85	11.81	4.03		5.65	10.04	7.78	4.03
1945		25.98	20.38	10.84	3.68		5.60	9.54	7.16	3.68
1946		25.15	19.96	10.88	3.85		5.19	9.08	7.03	3.85
1947		26.69	21.17	11.68	4.13		5.52	9.49	7.55	4.13
1948		25.80	20.34	10.86	3.55		5.46	9.47	7.31	3.55
1949		21.49	16.79	8.75	2.66		4.70	8.05	6.08	2.66
1950		22.01	17.28	9.06	2.87		4.73	8.22	6.19	2.87
1951		18.84	14.73	7.61	2.38		4.12	7.12	5.23	2.38
1952		13.85	10.25	4.84	1.36		3.60	5.41	3.48	1.36
1953	24.22	12.79	9.34	4.27	1.19	11.43	3.46	5.07	3.08	1.19
1954	25.24	13.79	10.27	4.87	1.42	11.45	3.51	5.40	3.45	1.42
1956	24.14	13.05	9.71	4.52	1.28	11.09	3.34	5.19	3.24	1.28
1959		13.55	10.27	5.09	1.54		3.28	5.18	3.55	1.54
1970		13.53	8.51	2.89	0.56		5.02	5.62	2.33	0.56
1971		11.98	7.69	2.63	0.64		4.29	5.07	1.98	0.64
1972		10.48	6.74	2.39	0.61		3.75	4.35	1.78	0.61
1973		8.22	5.60	2.27	0.60		2.62	3.33	1.67	0.60
1997	20.12	11.78	8.60	4.11	1.37	8.34	3.18	4.49	2.74	1.37
1998		12.02	8.92	4.37	1.50		3.10	4.55	2.86	1.50
1999		14.55	11.12	5.71	2.00		3.43	5.41	3.71	2.00
2000		13.69	10.58	5.51	1.96		3.11	5.07	3.55	1.96
2001		12.28	9.60	5.02	1.80		2.68	4.58	3.22	1.80
2002		14.07	11.26	6.29	2.46		2.81	4.97	3.83	2.46
2003		15.34	12.38	6.98	2.67		2.96	5.41	4.30	2.67
2004		14.44	11.89	6.73	2.47		2.55	5.16	4.26	2.47
B. Results from other sources and adjusted for under-reporting										
1953(a)	28.64	14.31	10.74	4.91	1.36	14.32	3.57	5.83	3.55	1.36
1959(a)	33.79	17.69	12.82	5.81	1.55	16.10	4.87	7.01	4.26	1.55
1959(b)		18.40	13.81	6.62	1.96					
1961(a)	31.12	16.31	12.01	5.45	1.62	14.80	4.30	6.56	3.84	1.62
1970		18.00	11.31	3.84	0.75		6.68	7.47	3.10	0.75
1971		15.94	10.23	3.49	0.86		5.71	6.74	2.64	0.86
1972		13.94	8.96	3.18	0.81		4.98	5.79	2.36	0.81
1973		10.93	7.45	3.02	0.80		3.49	4.43	2.22	0.80
1997	30.77	18.03	13.16	6.29	2.10	12.74	4.87	6.87	4.19	2.10
1998		18.38	13.64	6.68	2.30		4.75	6.96	4.38	2.30
1999		22.27	17.02	8.74	3.06		5.25	8.28	5.68	3.06
2000		20.94	16.18	8.43	3.00		4.76	7.75	5.43	3.00
2001		18.79	14.69	7.69	2.76		4.10	7.00	4.93	2.76
2002		21.53	17.22	9.62	3.77		4.31	7.60	5.86	3.77
2003		23.47	18.94	10.67	4.09		4.53	8.27	6.58	4.09
2004		22.10	18.19	10.29	3.77		3.91	7.90	6.52	3.77

Notes: Taxpayers are ranked by gross income.
The Table reports the percentage of total income accruing to each of the top groups. Top 1% denotes top percentile,
Income does not include capital gains.
Panel A displays the estimates from tax statistics.
Panel B displays the results according to ECLAC/CONADE (1953(a), 1959(a) and 1961(a))
and according to adjustments for evation (1959(b), 1970-1973 and 1997-2004).

TABLE 7. Country of origin of income tax payers 1932-1946

	year													
	1932	1933	1934	1935	1936	1937	1938	1939	1940	1942	1943	1944	1945	1946
Distribution of tax returns by nationality (%)														
Argentina	54.40	54.65	54.41	54.56	53.80	55.74	57.56	55.91	58.00	57.91	59.85	60.13	60.47	59.86
Germany	1.13	1.20	1.15	1.16	0.97	1.18	1.24	1.20	1.28	1.30	1.35	1.36	1.28	1.22
Belgium	0.17	0.17	0.17	0.15	0.13	0.14	0.14	0.14	0.17	0.15	0.18	0.15	0.16	0.13
Spain	14.27	14.36	14.39	14.58	14.90	15.53	14.63	14.56	14.68	13.86	12.51	12.59	12.69	11.79
United States	0.20	0.33	0.33	0.34	0.30	0.35	0.35	0.36	0.40	0.41	0.46	0.42	0.38	0.37
France	2.25	2.16	1.99	1.88	1.82	1.90	1.76	1.72	1.76	1.49	1.62	1.56	1.48	1.36
United Kingdom	1.61	1.73	1.52	1.49	1.29	1.44	1.41	1.39	1.55	1.37	1.53	1.42	1.34	1.25
Italy	13.92	13.42	13.40	12.86	14.61	13.65	13.10	11.01	11.41	9.79	9.57	9.37	9.20	10.70
URSS	0.95	0.99	1.02	1.04	1.03	1.17	1.13	1.12	1.15	1.22	1.18	1.22	1.21	1.23
Syria	1.04	1.05	1.20	1.30	1.34	1.34	1.33	1.32	1.37	1.39	1.34	1.31	1.30	1.15
Switzerland	0.53	0.54	0.49	0.48	0.48	0.52	0.53	0.48	0.52	0.47	0.52	0.51	0.48	0.46
Uruguay	1.23	1.19	1.14	1.09	1.01	1.10	1.04	1.05	1.07	1.03	1.10	1.04	0.99	0.88
Other	2.35	2.56	2.77	3.21	3.22	3.48	3.29	3.45	3.60	4.48	4.19	4.71	5.23	5.14
Not determined	5.94	5.65	6.03	5.87	5.11	2.44	2.50	6.28	3.04	5.12	4.59	4.21	3.80	4.46
Distribution of reported income by nationality (%)														
Argentina	57.51	56.90	56.74	57.94	55.51	58.55	60.31	58.30	59.64	58.15	59.63	60.27	62.69	60.62
Germany	1.13	1.41	1.35	1.34	1.21	1.42	1.46	1.30	1.49	1.25	1.32	1.38	1.23	1.07
Belgium	0.42	0.28	0.25	0.22	0.35	0.45	0.32	0.38	0.39	0.40	0.41	0.33	0.33	0.26
Spain	11.90	12.39	12.75	12.64	13.10	13.74	12.85	12.39	13.17	12.10	11.42	11.44	8.13	11.15
United States	0.57	0.85	0.86	0.89	0.69	0.67	0.81	0.84	0.94	0.95	1.00	0.88	0.74	0.68
France	3.12	3.10	2.70	2.57	2.60	2.69	2.83	2.37	2.59	2.10	1.96	2.13	2.13	1.88
United Kingdom	3.12	3.24	3.06	2.91	2.17	2.46	2.34	2.30	2.74	3.30	2.56	2.42	2.13	1.85
Italy	10.48	10.28	10.05	9.96	12.40	10.98	10.59	8.80	9.17	8.05	8.17	7.72	8.30	7.75
URSS	0.42	0.42	0.49	0.56	0.52	0.67	0.65	0.61	0.63	0.85	0.91	0.96	1.02	1.07
Syria	0.57	0.56	0.86	0.78	0.87	0.90	0.89	0.84	1.10	1.35	1.32	1.25	1.02	1.33
Switzerland	0.85	0.99	0.37	0.56	0.61	0.67	0.81	0.69	0.78	0.65	0.78	0.79	0.90	0.75
Uruguay	1.56	1.41	1.47	1.23	1.39	1.42	1.37	1.38	1.41	1.45	1.37	1.25	1.31	1.20
Other	1.84	2.11	2.45	1.90	2.78	2.99	2.59	2.83	3.29	4.40	4.84	5.05	5.80	5.51
Not determined	6.52	6.06	6.62	6.49	5.81	2.39	2.18	6.96	2.66	5.00	4.29	4.13	4.29	4.89

Source: Dirección Nacional de Impuestos a los Réditos, Memoria, several years.
Note: information for 1941 missing.

Table 8A: Income Shares and Composition in Top Income Groups based on Household Survey, 1987-2003

survey incomes adjusted for underreporting based on National Accounts

	Top 10%	Top 1%	Top .1%	Top 10%			Top 1%			Top 0.1%		
				Wage	Business	Capital+Rents	Wage	Business	Capital+Rents	Wage	Business	Capital+Rents
1987	61.2	25.8	7.1	61.2	25.8	7.1	31.3	43.4	25.3	6.7	51.4	41.9
1988	59.2	23.5	7.1	59.2	23.5	7.1	34.5	43.5	22.0	8.8	51.6	39.7
1989												
1990	57.1	22.3	7.7	57.1	22.3	7.7	40.7	44.5	14.8	10.5	60.9	28.7
1991	61.6	31.3	15.5	61.6	31.3	15.5	32.3	47.1	20.6	7.5	57.0	35.1
1992	59.3	24.7	5.8	59.3	24.7	5.8	30.3	47.4	22.3	2.8	57.7	39.5
1993	57.6	23.0	5.6	57.6	23.0	5.6	28.6	52.7	18.7	5.1	61.7	33.2
1994	58.4	24.3	7.2	58.4	24.3	7.2	32.0	46.5	21.4	8.1	51.7	40.2
1995	61.3	26.1	5.7	61.3	26.1	5.7	29.5	48.0	22.5	5.9	58.5	35.6
1996	60.5	24.2	6.5	60.5	24.2	6.5	30.5	45.0	24.5	5.8	51.7	42.6
1997	60.2	25.3	6.2	60.2	25.3	6.2	28.8	44.8	26.4	5.0	47.7	47.3
1998	58.7	24.4	6.8	58.7	24.4	6.8	29.8	49.4	20.8	3.7	63.2	33.1
1999	59.5	24.1	7.1	59.5	24.1	7.1	33.2	43.2	23.6	5.2	56.7	38.1
2000	60.0	23.5	7.3	60.0	23.5	7.3	33.8	37.4	28.8	4.8	41.6	53.6
2001	61.9	24.5	5.2	61.9	24.5	5.2	34.7	38.4	26.9	5.1	53.1	41.8
2002	56.3	22.9	6.5	56.3	22.9	6.5	39.3	38.1	22.6	6.7	56.1	37.2
2003	56.0	22.6	6.9	56.0	22.6	6.9	35.6	40.3	24.1	4.9	57.2	37.8

Table 8B: Income Shares and Composition in Top Income Groups based on Household Survey, 1987-2003

survey incomes with no adjustment

	Top 10%	Top 1%	Top .1%	Top 10%			Top 1%			Top 0.1%		
				Wage	Business	Capital+Rents	Wage	Business	Capital+Rents	Wage	Business	Capital+Rents
1987	44.1	11.8	2.1	44.1	11.8	2.1	63.0	33.8	3.2	56.9	37.9	5.2
1988	45.0	11.1	2.3	45.0	11.1	2.3	63.5	34.0	2.5	52.1	42.6	5.3
1989												
1990	44.5	12.1	2.7	44.5	12.1	2.7	64.7	33.6	1.5	60.3	37.0	2.6
1991	45.4	13.7	4.5	45.4	13.7	4.5	60.1	37.5	2.7	48.7	45.5	6.0
1992	43.1	10.6	2.1	43.1	10.6	2.1	55.7	41.8	2.6	37.5	57.6	4.9
1993	40.5	10.2	2.0	40.5	10.2	2.0	56.2	41.7	2.1	53.6	43.3	3.1
1994	41.9	10.2	2.3	41.9	10.2	2.3	60.2	36.9	2.9	47.9	46.6	5.5
1995	41.8	12.0	2.4	41.8	12.0	2.4	61.3	36.6	2.1	57.3	41.0	1.7
1996	41.7	11.3	2.4	41.7	11.3	2.4	61.8	35.6	2.6	52.7	42.1	5.2
1997	42.2	9.8	2.3	42.2	9.8	2.3	63.1	33.9	3.0	56.6	37.5	5.9
1998	44.0	10.8	2.0	44.0	10.8	2.0	62.3	35.8	1.8	49.7	47.3	3.1
1999	42.5	9.8	2.0	42.5	9.8	2.0	67.6	30.2	2.3	52.7	42.5	4.8
2000	43.2	10.5	2.0	43.2	10.5	2.0	68.9	28.4	2.8	63.1	32.8	4.2
2001	47.1	10.6	2.0	47.1	10.6	2.0	72.2	25.5	2.3	57.0	39.8	3.2
2002	44.3	11.0	2.3	44.3	11.0	2.3	76.1	22.3	1.6	62.1	35.9	2.1
2003	42.6	10.6	2.2	42.6	10.6	2.2	71.7	26.2	2.1	58.6	38.1	3.3

Notes: Fractiles defined in terms of the number of tax units.

Table 9: Composition in Top Income Groups, 2001-2004

	Top 1%				Top 0.5%				Top 0.1%				Top 0.01%			
	Rents	Capital	Business	Wages	Rents	Capital	Business	Wages	Rents	Capital	Business	Wages	Rents	Capital	Business	Wages
2001	6.2	10.0	34.7	49.2	5.0	8.5	39.7	46.8	2.5	6.7	54.9	35.9	0.9	7.5	64.8	26.8
2002	5.9	19.7	36.7	37.7	4.5	19.1	43.2	33.3	2.7	16.1	54.4	26.7	1.0	9.9	67.2	21.9
2003	5.3	19.6	41.4	33.6	4.5	19.1	45.2	31.2	2.2	14.9	59.1	23.7	0.7	9.4	69.5	20.4
2004	5.7	19.0	45.0	30.3	4.9	17.8	48.1	29.1	1.9	11.6	63.8	22.7	0.8	9.3	71.2	18.7

	Top 1-0.5%				Top 0.5-0.1%				Top 0.1-.01%				Top 0.01%			
	Rents	Capital	Business	Wages	Rents	Capital	Business	Wages	Rents	Capital	Business	Wages	Rents	Capital	Business	Wages
2001	10.7	15.9	14.5	58.9	7.6	10.3	24.2	57.9	3.7	6.1	47.7	42.5	0.9	7.5	64.8	26.8
2002	10.8	21.8	14.3	53.1	7.4	24.0	24.3	44.4	3.5	18.9	48.8	28.8	1.0	9.9	67.2	21.9
2003	11.1	23.2	14.6	51.0	7.6	24.8	26.3	41.3	3.1	18.1	53.2	25.6	0.7	9.4	69.5	20.4
2004	13.2	29.1	16.7	40.9	8.8	25.8	28.5	36.9	2.8	13.5	57.8	25.9	0.8	9.3	71.2	18.7

Source: Computations based on income tax return statistics