OXFORD

TOP INCOMES A GLOBAL PERSPECTIVE

Edited by A. B. ATKINSON & T. PIKETTY

6

The Rich in Argentina over the Twentieth Century, 1932–2004

Facundo Alvaredo

6.1 INTRODUCTION

This chapter presents series of top income shares in Argentina between 1932 and 2004. The use of long-run statistical information from the personal income tax, never exploited before in this country, allows us to cover a long time span and fill a gap in the analysis of the long-run dynamics of income concentration in Argentina. We find an increase in top income shares after the Great Depression, with maxima in 1942–4, and a substantial decline during the Peronist years. However, the limits of the Peronist redistributive policy are marked by the fact that in 1956 the top shares were, if lower than in 1945, still above the ones observed in the developed world; they were higher than in the United States, France, Australia, and even Spain. Since the mid 1990s, top income shares followed an increasing trend, similar to the pattern found in Anglo-Saxon economies.

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

1. So far, Banerjee and Piketty (2005) on India, Piketty and Qian (2009) on China, Leigh and van der Eng (2009) on Indonesia (Chapters 1, 2, and 4 in this volume), and this chapter on Argentina are the only works providing evidence for—currently—developing countries (see also Chapter 5 on Singapore). Argentina is the first case to be analysed in Latin America. To our knowledge, the statistical information on which these studies are built upon is not available in any other Latin American country over such a long period. Recently, the tax agencies of Brazil, Chile, and Ecuador have accepted to

I am grateful to Hildegart Ahumada, Tony Atkinson, Heber Camelo, Alfredo Canavese, Guillermo Cruces, Rafael Di Tella, Leonardo Gasparini, Daniel Heymann, Leandro Prados de la Escosura, Emmanuel Saez, José Antonio Sánchez Román, Walter Sosa Escudero, Analía Vasallo, anonymous referees, and seminar participants at PSE (Paris) and the 2006 World Bank Network of Income and Poverty Meeting for helpful comments. Special thanks go to Thomas Piketty for encouraging the work on Argentina.

produce (not always public) tabulations for a very limited number of years.[1] This reinforces the interest in looking at the Argentine experience.

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 1870 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.[2] It enjoyed its own Belle Époque between 1900 and 1914. The formula of success has been widely analysed: 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 for raw materials which translated into favourable terms of trade. In 1870, per capita income was only 60 per cent of the average per capita income of the world top ten economies.[3] Between 1875 and 1914 per capita GDP grew at an average rate above 4 per cent. During the fifty years following 1880 total population increased from 2.5 million to 11.9 million fostered by several immigration waves. Not only was per capita income high, but the growth rate was one of the highest in the world.[4] In 1913, Argentina's per capita income level ($4,519) was inferior to those of Great Britain ($5,855), the United States ($6,308), Canada ($5,290), Australia ($6,800), New Zealand ($6,130), Switzerland ($5,076), and Belgium ($5,021), 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).[5] These figures place Argentina's 1913 income level among or approaching the world's top ten. It was not a smooth process and the export-based growth model had its own limitations: high dependency rates, the need for external funding, a large but limited land stock.[6] Nevertheless, the circumstances helped create an

[1] The study of top incomes and personal income taxation in Latin America during recent years is part of an ongoing research project. In particular, we have recently found income tax tabulations (like the ones serving as primary data sources in this book) for Brazil, which cover several years of the second half of the twentieth century.

[2] 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 in the 1910s.

[3] We refer to the world top ten economies in terms of per capita income in 1870 according to Maddison (2001, 2003): Austria, Belgium, Denmark, France, the Netherlands, Switzerland, the United Kingdom, Australia, New Zealand, and the United States.

[4] See Diaz Alejandro (1970).

[5] Comparative data from Maddison (2001, 2003) expressed in 2000 US dollars.

[6] For an analysis of these limitations, see Taylor (1992).

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. While Western countries (including Mexico and Brazil and especially Australia and New Zealand) experienced significant growth after the Second World War, Argentina stagnated and later declined. 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 conflict of interests between the landed gentry and the industrialist elite, and 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 per cent; if we consider the figures in the aftermath of the 2001 macroeconomic crisis, the average income has virtually failed to grow in the last three decades while inequality has constantly increased (see Figures 6.1 and 6.10). By the end of 2002 the unemployment rate was well above 20 per cent; GDP sunk by 20 per cent and poverty skyrocketed, but recovery resumed rapidly, and the economy grew at annual rates of 7–9 per cent until 2007.

3. Thirdly, although the analysis presented in this chapter 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 programme jointly conducted by the Economic Commission for Latin America and the Caribbean (ECLAC) and the National Development Council (CONADE) published in 1965.[7] This study attempted to measure 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. It was not until 1972 that the National Bureau of Statistics began to conduct biannual household surveys. Before 1974, the survey was restricted to Greater Buenos Aires and it covered approximately 33 per cent of the population. Since then, other urban centres have progressively been incorporated so that today the fraction of represented households exceeds 60 per cent (70 per cent of urban population). Yet, micro-data displaying personal incomes are only available for 1980–2 and 1984–2006 with varying degree of detail. As a result, most studies about inequality and distribution are based on this survey, constrained to the analysis of the last twenty-five years and never focused on the top of the distribution.[8] In any case survey micro-data 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, our study is also the first in looking at the upper part of the distribution in Argentina.

[7] CONADE (1965).

[8] Survey micro data sets for 1972 3 and 1975 9 are not available.

4. Argentina has traditionally been identified as one of the economies with the lowest relative inequality in Latin America despite the recurrent macroeconomic crisis. It is indeed more egalitarian than Chile, Mexico, and Brazil.[9] 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.[10] Notwithstanding this trend, Argentina's human development index has remained top in Latin America since its publication in 1975.

Income tax data suffer from serious drawbacks.[11] 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. Capital incomes and capital gains are taxed at different degrees across time. These elements, which are common to all countries at different degrees, become critical in developing economies. 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 results based on income tax statistics must be read with caution, especially in the case of developing economies with important levels of tax evasion, 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. The reader should also bear in mind that the degree of detail provided by tax statistics in Argentina, especially for recent years, is notoriously inferior to the one offered by many developed economies (see Piketty and Saez 2003 for the United States or Piketty 2001 for France). This is not surprising but poses serious limitations when trying to explain facts in an overall convincing way.

The chapter is organized as follows: section 6.2 describes the data and methodology. Section 6.3 presents the main findings. Section 6.4 is devoted to the conclusions. Details about data sources, methods, and adjustments are presented in Appendices 6A–E.

6.2 DATA, METHODOLOGICAL ISSUES, AND CONTEXT

At the start of the inter-war period customs on imports constituted the largest fraction of government revenue in Argentina. As public income depended heavily

[9] See Gasparini (2004) for an account of inequality levels in Latin America.

[10] See Gasparini, Gutiérrez, and Tornarolli (2007).

[11] The methodological issues around the use of tax data and aggregate income data to estimate top income shares have been well canvassed in Atkinson (2007).

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 large increase in direct taxes on income and wealth. 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. The legal evolution of the tax is briefly described in Appendix 6A.

Table 6.1 displays the composition of tax receipts between 1932 and 2004, while Table 6.2 shows tax collections as percentage of GDP. The growing importance of the personal income tax until the mid-1940s (it moved from 6 per cent of national government revenues in 1932 to 19 per cent in 1943) mirrored the decline of international trade-based taxes (which went down from 40 per cent in 1932 to 7 per cent in 1945).[12] 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 (when Latin American countries developed a clear preference for non-personal taxation) 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, 1958, 1970 to 1973, and 1997 to 2004.[13] Unfortunately, the continuity of the publication has been lost since the 1960s, altered by increasing macroeconomic volatility, growing inflation, and political instability. The tabulations report, by ranges of income, the number of taxpayers, total assessed income, taxable income, tax paid, and personal deductions.

As the right tail of the income distribution is well approximated by Pareto distributions, we use simple parametric interpolations methods to estimate the thresholds and average income levels for several fractiles. This method follows the classical study by Kuznets (1953) and has been used here as well as in many of the top income studies presented in Atkinson and Piketty (2007) and in this volume.[14]

The Argentine income tax is individually based. 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 chapter, 'tax units' always refer to individuals. Thus, our top groups are expressed in relation to the total number of adults.

We define income as gross income before all deductions and including all income items reported on personal tax returns: salaries and pensions, self-employment and

[12] Tables 6.1 and 6.2 consider 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, Alvaredo, and Canavese 2000).

[13] Provisional tabulations exist for 1959, but they only include a fraction of total tax files.

[14] The Pareto interpolation can be done in different ways, yielding different results. Fortunately, with most data the choice does not matter much. The mean split histogram method has been used to estimate top shares in the cases of the UK, the Netherlands, Australia, and New Zealand. For a discussion on interpolation methods, see Atkinson (2005).

Table 6.1 Structure of tax revenues, Argentina, 1932 2004

	% of national government tax receipts							
	Personal income tax and corporate tax							
	Personal income tax (1)	Corporate income tax (2)	Total (1) + (2) (3)	Social contributions (4)	Property taxes (5)	Sales tax (6)	International trade (7)	Other taxes (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

Sources: 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 6.2 Structure of tax revenues as % GDP, Argentina, 1932 2004

	National government tax receipts as % of GDP							
	Personal income tax and corporate tax							
	Personal income tax (1)	Corporate income tax (2)	Total (1) + (2) (3)	Social contributions (4)	Property taxes (5)	Sales tax (6)	International trade (7)	Other taxes (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

(*continued*)

Table 6.2 Continued

	National government tax receipts as % of GDP							
	Personal income tax and corporate tax							
	Personal income tax (1)	Corporate income tax (2)	Total (1) + (2) (3)	Social contributions (4)	Property taxes (5)	Sales tax (6)	International trade (7)	Other taxes (8)
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

Sources: 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.

unincorporated business net income, dividends, interest, other investment income, and other smaller income items. Realized capital gains are excluded. Our income definition is before personal income taxes and personal payroll taxes but after employers' payroll taxes and corporate income taxes. Appendices 6A–E complete the information about data sources.

Table 6.3 displays the reference totals for population and income. 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 taxable threshold), minimum non-taxable income and personal allowances were regularly revised so that exemption levels remained high. By necessity our analysis focuses on the very top of the distribution.

Table 6.4 gives thresholds and average incomes for top fractiles in 2000. There were 23.8 million tax units, with an average income of $7,871. Column 2 reports the income thresholds corresponding to each of the percentiles in column 1. For example, an annual income of at least $200,274 was required to belong to the top 0.1 per cent while the average income above the top 0.01 per cent was $1,547,033. Table 6.5 presents the top income shares between 1932 and 2004.

6.3 THE DYNAMICS OF TOP INCOMES

The Years 1932–1945

Figures 6.2 to 6.5 present the main findings. It is not the aim of this chapter to provide a detailed account of more than seventy years of economic history and economic policy. Nevertheless, to understand the evolution of top incomes, some historical landmarks are worth mentioning.

Table 6.3 Reference totals for population, income, and inflation, Argentina, 1932 2004

	Tax units and population				Total Income		Price Index	Inflation	Taxes
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Population ('000s)	Tax units ('000s)	Number of tax returns ('000s)	(3)/(2)(%)	Total income (million 2000 Pesos)	Average income (2000 Pesos)	CPI (2000:100)	(%)	Top Marginal Tax Rate (%)
1932	11,570	6,372	113	1.8	28,520	4,476	1.51E 12	10.3	12
1933	11,817	6,538	112	1.7	27,664	4,231	1.64E 12	8.2	12
1934	12,070	6,708	133	2.0	28,439	4,240	1.51E 12	7.6	12
1935	12,328	6,883	142	2.1	30,199	4,387	1.60E 12	6.0	12
1936	12,592	7,063	150	2.1	31,026	4,393	1.74E 12	8.5	12
1937	12,861	7,247	151	2.1	31,283	4,317	1.78E 12	2.6	12
1938	13,137	7,436	145	2.0	33,550	4,512	1.77E 12	0.6	12
1939	13,418	7,630	142	1.9	33,654	4,411	1.80E 12	1.5	12
1940	13,705	7,829	134	1.7	34,942	4,463	1.84E 12	2.2	12
1941	13,998	8,033	147	1.8	35,508	4,420	1.89E 12	2.6	12
1942	14,297	8,242	122	1.5	37,362	4,533	2.00E 12	5.7	12
1943	14,603	8,457	141	1.7	37,774	4,467	2.02E 12	1.1	25
1944	14,916	8,678	167	1.9	37,519	4,323	2.01E 12	0.3	25
1945	15,235	8,904	180	2.0	41,744	4,688	2.41E 12	19.8	25
1946	15,561	9,136	189	2.1	40,403	4,422	2.83E 12	17.6	27
1947	15,894	9,375	221	2.4	44,014	4,695	3.22E 12	13.6	27
1948	16,178	9,562	250	2.6	48,906	5,115	3.64E 12	13.1	27
1949	16,468	9,754	255	2.6	51,588	5,289	4.77E 12	31.1	27
1950	16,762	9,949	365	3.7	50,917	5,118	5.99E 12	25.6	27
1951	17,062	10,148	386	3.8	51,534	5,078	8.19E 12	36.7	27
1952	17,367	10,352	476	4.6	53,542	5,172	1.14E 11	38.7	32
1953	17,678	10,559	558	5.3	50,846	4,815	1.18E 11	4.0	32
1954	17,994	10,770	545	5.1	53,539	4,971	1.23E 11	3.8	32
1955	18,316	10,986	n/a	n/a	55,750	5,075	1.38E 11	12.3	40

1956	18,644	11,206	587	5.2	59,689	5,327	1.56E 11	13.4	40
1957	18,977	11,430	n/a	n/a	61,346	5,367	1.95E 11	24.7	40
1958	19,317	11,659	605	5.2	64,523	5,534	2.56E 11	31.6	40
1959	19,662	11,893	491	4.1	68,464	5,757	5.47E 11	113.7	40
1960	20,014	12,131	n/a	n/a	64,040	5,279	6.93E 11	26.6	40
1961	20,326	12,343	n/a	n/a	69,079	5,597	7.88E 11	13.7	40
1970	23,362	14,438	591	4.1	98,567	6,827	4.76E 10	13.6	46
1971	23,785	14,686	551	3.8	103,869	7,073	6.41E 10	34.7	46
1972	24,215	14,939	532	3.6	108,836	7,285	1.02E 09	58.5	46
1973	24,653	15,196	494	3.3	112,235	7,386	1.63E 09	60.3	46
1997	34,756	22,403	1,259	5.6	172,927	7,719	101.20	0.5	33
1998	35,126	22,869	1,114	4.9	186,946	8,175	102.14	0.9	33
1999	35,500	23,346	819	3.5	194,148	8,316	100.95	1.2	33
2000	35,878	23,833	786	3.3	187,578	7,871	100.00	0.9	35
2001	36,260	24,329	674	2.8	179,303	7,370	98.93	1.1	35
2002	36,646	24,836	728	2.9	159,769	6,433	124.53	25.9	35
2003	37,037	25,354	763	3.0	173,891	6,859	141.27	13.4	35
2004	37,431	25,882	748	2.9	189,539	7,323	147.49	4.4	35

Notes: Population and tax units estimates based on census. Tax units estimated as the number of adults aged 20 and over. The number of tax returns (column 3) excludes taxpayers with wage income only.

Table 6.4 Thresholds and average incomes in top income groups in Argentina 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	$7,871
Top 1%	$41,115	Top 1 0.5%	119,165	$52,078
Top 0.5%	$70,855	Top 0.5 0.1%	95,332	$105,314
Top 0.1%	$200,274	Top 0.1 0.01%	21,450	$324,660
Top 0.01%	$779,223	Top 0.01%	2,383	$1,547,033

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 $200,274 is required to belong to the top 0.1% tax units, etc.

Table 6.5 Top income shares in Argentina, 1932 2004

	Top 5% (2)	Top 1% (3)	Top 0.5%	Top 0.1% (5)	Top 0.01% (6)	Top 5 1% (8)	Top 1 0.5%	Top 0.5 0.1% (9)	Top 0.1 0.01% (11)	Top 0.01% (12)
1932		18.77	14.58	7.52	2.49		4.18	7.07	5.02	2.49
1933		17.18	13.35	6.80	2.39		3.83	6.55	4.41	2.39
1934		18.06	14.02	7.28	2.45		4.03	6.74	4.83	2.45
1935		18.44	14.32	7.41	2.49		4.12	6.91	4.92	2.49
1936		20.40	15.56	7.76	2.46		4.84	7.81	5.29	2.46
1937		20.44	15.84	8.11	2.60		4.60	7.73	5.51	2.60
1938		20.47	15.83	8.10	2.58		4.63	7.74	5.52	2.58
1939		20.88	16.23	8.34	2.72		4.66	7.89	5.62	2.72
1940		20.11	15.79	8.25	2.65		4.32	7.53	5.60	2.65
1941		22.43	17.85	9.44	3.09		4.58	8.41	6.35	3.09
1942		23.77	19.73	11.38	4.18		4.04	8.36	7.20	4.18
1943		25.96	20.90	11.62	4.16		5.06	9.27	7.46	4.16
1944		24.75	19.66	10.63	3.63		5.08	9.04	7.00	3.63
1945		23.39	18.34	9.76	3.31		5.04	8.59	6.45	3.31
1946		22.63	17.96	9.79	3.46		4.67	8.17	6.33	3.46
1947		24.02	19.06	10.51	3.72		4.96	8.54	6.80	3.72
1948		23.22	18.30	9.78	3.20		4.92	8.53	6.58	3.20
1949		19.34	15.11	7.87	2.40		4.23	7.24	5.48	2.40
1950		19.81	15.55	8.15	2.58		4.25	7.40	5.57	2.58
1951		16.96	13.25	6.85	2.14		3.70	6.41	4.70	2.14
1952		15.96	11.87	5.64	1.57		4.09	6.23	4.07	1.57
1953	29.07	15.35	11.21	5.12	1.42	13.71	4.15	6.09	3.70	1.42
1954	30.28	16.54	12.33	5.84	1.71	13.74	4.21	6.48	4.14	1.71
1956	28.96	15.66	11.66	5.42	1.54	13.31	4.00	6.23	3.89	1.54
1958		14.17	10.53	4.98	1.39		3.64	5.54	3.60	1.39
1959(a)	30.41	15.92	11.54	5.23	1.40	14.49	4.38	6.31	3.83	1.40
1961(a)	28.00	14.68	10.81	4.91	1.45	13.32	3.87	5.91	3.45	1.45

1970		12.18	7.66	2.60	0.51		4.52	5.06	2.09	0.51
1971		10.78	6.92	2.36	0.58		3.86	4.56	1.79	0.58
1972		9.44	6.06	2.15	0.55		3.37	3.91	1.60	0.55
1973		7.40	5.04	2.04	0.54		2.36	3.00	1.50	0.54
1997	22.45	12.39	9.02	4.27	1.39	10.07	3.37	4.74	2.88	1.39
1998		12.57	9.06	4.37	1.43		3.51	4.69	2.94	1.43
1999		13.53	10.32	5.22	1.78		3.22	5.10	3.44	1.78
2000		14.34	11.03	5.68	1.97		3.31	5.35	3.71	1.97
2001		12.91	10.03	5.22	1.82		2.88	4.81	3.40	1.82
2002		15.53	12.34	6.92	2.70		3.19	5.42	4.23	2.70
2003		16.85	13.41	7.40	2.79		3.44	6.01	4.61	2.79
2004		16.75	13.45	7.02	2.49		3.30	6.43	4.53	2.49

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.
(a) Results not based on income tax data but on CONADE (1965).

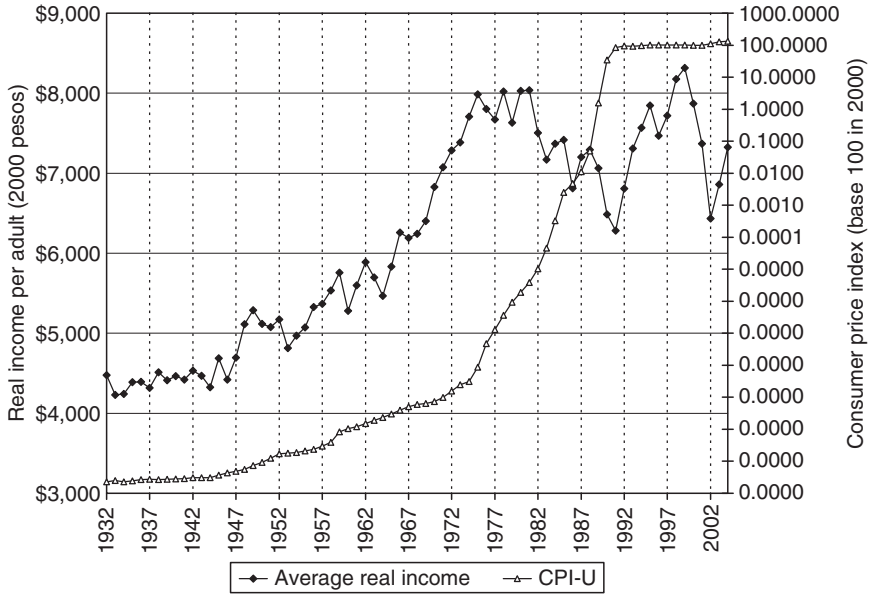

Figure 6.1 Average real income and consumer price index in Argentina, 1932 2004

Notes: Figure reports the average real income per adult (aged 20 and above), expressed in 2000 Pesos. CPI index is equal to 100 in 2000 (logarithmic scale).

Source: Table 6.3.

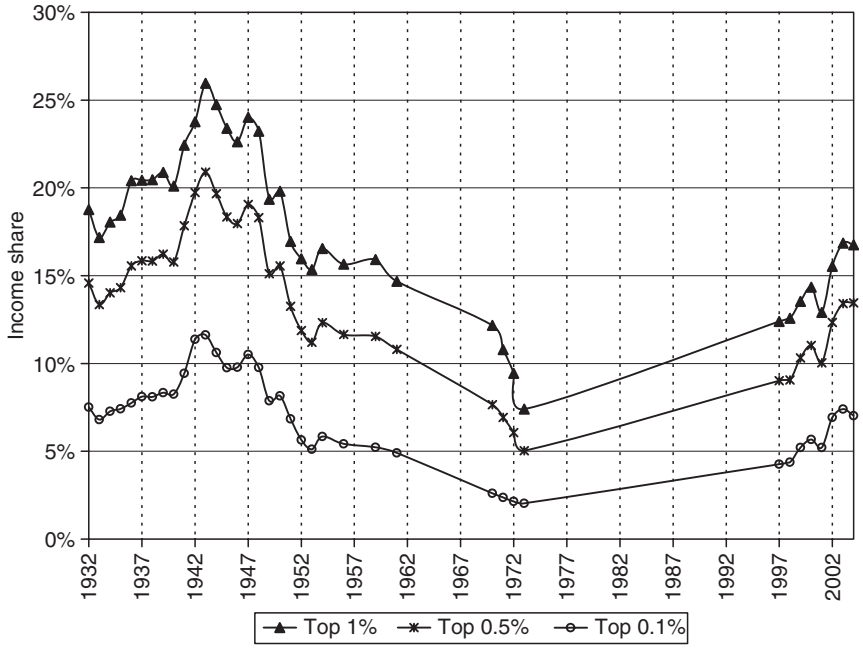

Figure 6.2 The top 1%, top 0.5%, and top 0.1% income shares in Argentina, 1932 2004
Note: Income excludes capital gains.
Source: Table 6.5.

The years between 1870 and 1930 (and more specifically between 1875 and 1914) 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. Together with the extension of the railway, all factors contributed to a striking increase in land prices so that many fortunes were made overnight.[15] 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 (mainly from the UK) 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.[16]

[15] See Sokoloff and Zolt (2007) for a general discussion on inequality and taxation in the Americas. Johnson and Frank (2006) analyse wealth inequality in Buenos Aires and Rio de Janeiro before 1860.

[16] For an account of the social life and customs of the wealthy Argentinean families in the beginning of the century, see Ocampo (1979), Luna (1958), Sebrelli (1985), Jauretche (1966).

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 favourable and successful pattern of international insertion.[17] It was also the result of the not-so-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 north-west, a cotton-oriented sector in the north-east and a vine area in the centre-west. Consequently, all competition against them, either through imports or through local production in Buenos Aires, was deliberately blocked.[18]

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 had been higher than the level of 1932 (18.7 per cent for the top 1 per cent) and probably even higher than the global maximum of 25.9 per cent in 1943.

In 1929, the Argentinean elite were 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 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, 1930–43, 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 United Kingdom. The result was the

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

[18] For detailed studies on the economic development of Argentina in this period, see Diaz Alejandro (1970), Cortés Conde and Gallo (1972), Cortés Conde (1979, 1997), Della Paolera and Taylor (2001, 2003), Rapoport (1980). For a sketch of the evolution of wealth concentration in Buenos Aires during the first half of the nineteenth century, see Johnson and Frank (2006).

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 sell-out to Britain, while others stress that the United Kingdom, by according privileges not given to any other country outside the empire, helped counter the recessionary situation. From the microeconomic side, it may be regarded as a successful mechanism to preserve the elite's (but also the state) sources of revenue. In any case, the Roca–Runciman agreement remains a historical landmark and the dynamics of top incomes reinforces the idea of the elite's favourable situation between 1933 and 1943.

Recovery began in 1933 after several years of negative growth.[19] By 1935, GDP had regained the 1928 level. The results of the current study 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 17 per cent in 1933 to 25 per cent in 1943. Figure 6.3 provides the comparison of the top 1 per cent income share with several countries of 'new settlement', which are the subject of permanent comparison among scholars when trying to understand and explain the divergence of Argentina. The levels of income concentration in Argentina, Canada, New Zealand, and the United States—but not in Australia—were remarkably similar in the early 1930s. Such communality in levels was rapidly lost, and by the mid 1940s the top 1 per cent income share in Argentina more than doubled the observed shares in those other economies.[20]

Figure 6.5 displays the top 0.01 per cent income shares in Argentina, France, the United States, and Spain. At least two facts can be noticed. First, the level of top shares in Argentina in 1942 (4.1 per cent) is not very far from the one observed in the United States in 1916 (4.4 per cent). Secondly, the dynamics in Argentina between 1932 and 1951 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 United States. This reinforces the idea that the pre-1930 figures in Argentina could reasonably be higher than that observed in 1932, in parallel with the evolution in the USA, where the top 0.01 per cent share declined from 4.4 per cent in 1916 to 1.69 per cent in 1921. It is also possible that the higher top shares in Argentina as compared to the USA correspond to lower marginal tax rates.

Consequently, while top shares started a sustained decrease by the beginning of the Second World War in the developed world, they kept growing in Argentina,

[19] The 1929 32 crisis was, until 2002, the longest contraction experienced by the economy, while the deepest contraction occurred in 1914 as a result of both external and internal shocks (bad crops, capital outflows, and the beginning of the First World War).

[20] The results for the United States, Canada, Australia, and New Zealand are taken, respectively, from Piketty and Saez (2003), Saez and Veall (2005), and Atkinson and Leigh (2007a, 2007b).

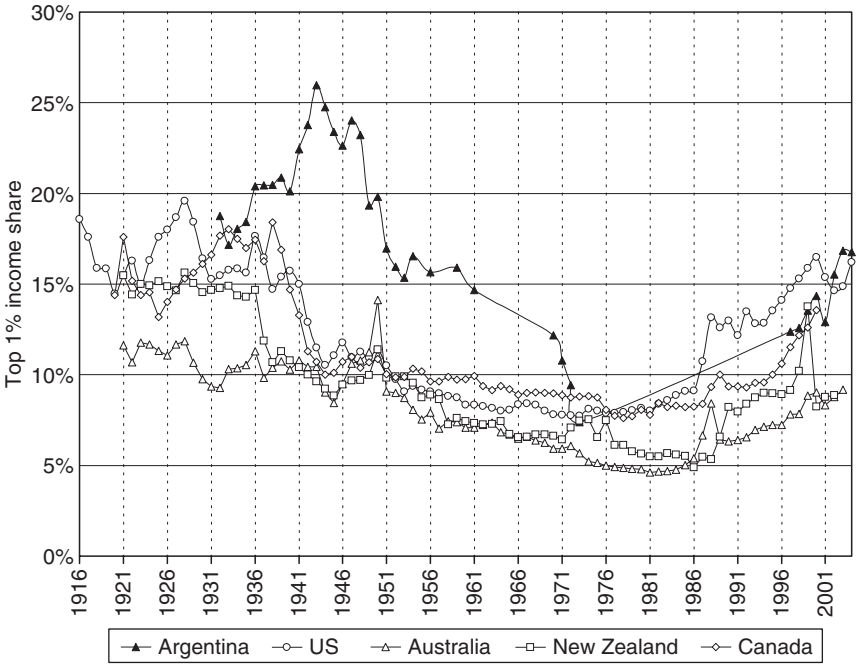

Figure 6.3 The top 1% income shares in Argentina, USA, Australia, New Zealand, and Canada

Sources: Argentina: Table 6.5; US: Piketty and Saez (2003); Australia: Atkinson and Leigh (2007a); New Zealand: Atkinson and Leigh (2007b); Canada: Saez and Veall (2005).

favoured 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 United Kingdom. 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 British ports.[21] In any case, the elite had been successful again: during the war, 40 per cent of the British meat and grain markets was supplied by Argentina (Rapoport 1980).

The strong connection between the relatively favourable world market conditions and the evolution of top incomes over this period can be seen from Figure 6.6, which displays the total real income reported by the top 1 per cent and top 0.1 per cent income earners along with total agricultural and livestock exports on a logarithmic scale from 1932 to 1956. The two series are highly correlated and

[21] For a detailed study on the conflict of interests in the triangular relationship between Argentina, the United Kingdom, and the United States during the Second World War, see Rapoport (1980, 1988).

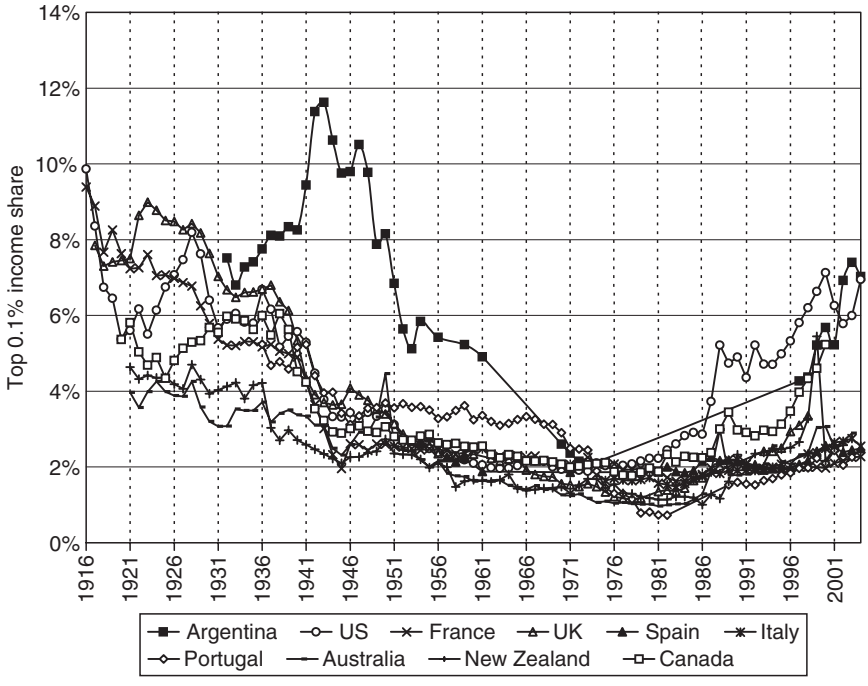

Figure 6.4 The top 0.1% income shares in Argentina, USA, France, Spain, Italy, Portugal, Canada, and UK

Sources: Argentina: Table 6.5; USA: Piketty and Saez (2003); France: Piketty (2001) and Landais (2007); UK: Atkinson (2007); Italy: Alvaredo and Pisano (2009) in Chapter 12; Portugal: Alvaredo (2009) and Chapter 11; Spain: Alvaredo and Saez (2009) and Chapter 10; Canada: Saez and Veall (2005); Australia: Atkinson and Leigh (2007a); New Zealand: Atkinson and Leigh (2007b).

show that when exports increased, high incomes got a disproportionate share of national income, explaining why top incomes followed exports cycles over this period.

As described in Atkinson and Piketty (2007), the drop in income concentration between 1914 and 1945 in Anglo-Saxon and continental Europe countries was primarily 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. 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 such a reversal impossible. For most of the period, the data for Argentina do not offer information about the composition of income by brackets. This is unfortunate, as economic mechanisms can be very different for the distribution of income from labour, capital, business, and rents, and limits the interpretation and comparison of results. Figure 6.7 displays the

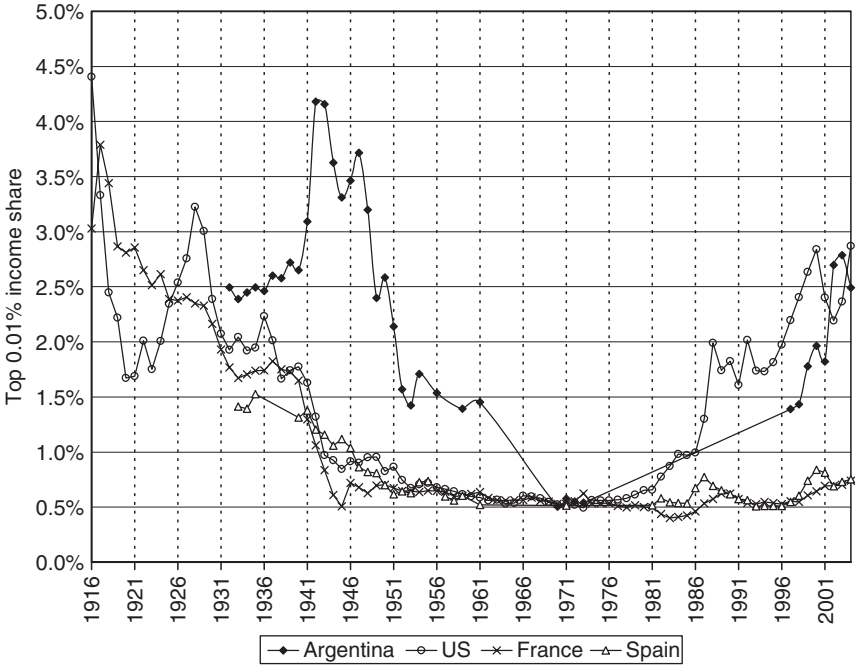

Figure 6.5 The top 0.01% income shares in Argentina, USA, Spain, and France

Sources: Argentina: Table 6.5; US: Piketty and Saez (2003); France: Piketty (2001) and Landais (2007); Spain: Alvaredo and Saez (2009) and Chapter 10.

evolution of the components of total assessed income between 1932 and 1958. For 1932–49, this covers the top 1.7–2.6 per cent of tax units, as shown in Table 6.3, column 4. In Argentina, the shares of wages, self-employment income, and capital income remained stable throughout this period, while the increase in business income (including agricultural activities), which moved from 30 per cent in 1932 to 60 per cent 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 6.6 shows the distribution of tax filers by country of origin between 1932 and 1946. On average, 40–5 per cent of individuals and reported income corresponded to foreigners. We can also get a rough idea of the relative distribution across nationalities within the top. In 1932, 2.25 per cent of tax filers were French and 1.61 per cent were British, while they both received income proportionally higher than their participation in the number of files (3.12 per cent of declared income each). In contrast, Spanish and Italian citizens represented 28.19 per cent of filers, with 22.38 per cent of assessed income.

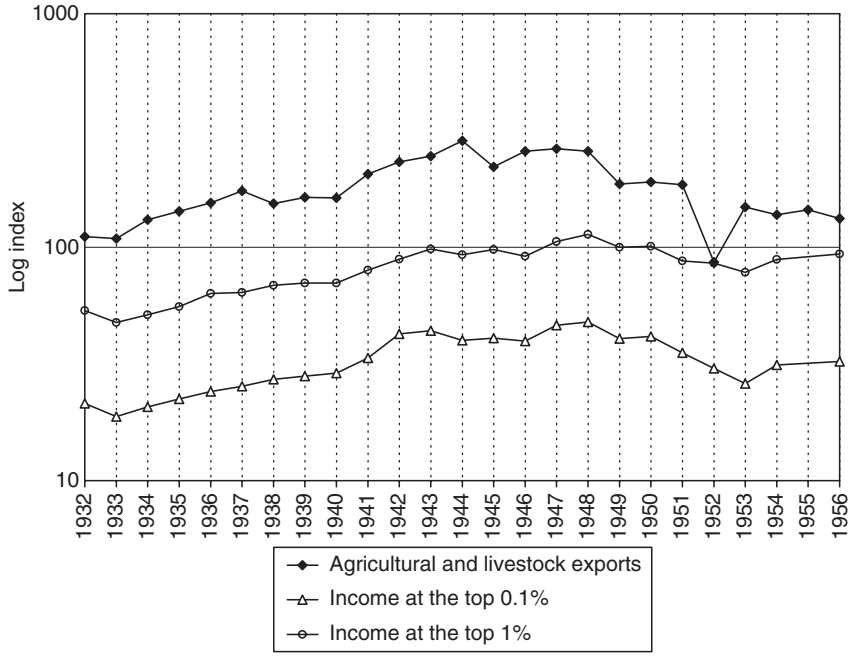

Figure 6.6 Agricultural and livestock exports and income at the top, Argentina, 1932 1956

Sources: Table 6.3 and 6.5 for income and Vazquez Presedo (1988) for exports. Income at the top 1% and 0.1% is the real amount of income reported by the top 1% and 0.1% income earners. Exports expressed as an index equal to 100 in 1930. The vertical axis is expressed in logarithmic scale.

The Years 1946–1955

The Perón years (1946–55) coincide with a clear decline in the share of the top percentile, which moved down to 15.3 per cent in 1953.[22] Mainly at the expense of rural rents and favoured by the accumulation of foreign reserves and the advantageous terms of trade in the world markets after the Second World War and the Korean War, 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.[23] A deliberate inward-looking policy to

[22] Perón was also part of the de facto government in power between 1943 and 1946, first as secretary of labour and later as minister of war and vice president.

[23] The true situation of Argentina's economy after 1945 should not be overstated. During the Second World War the country was under a United States blockade and cut off from continental Europe, while the United Kingdom had to devote all its resources to the war effort and could afford to sell very few industrial goods to Argentina. The trade surplus and the accumulation of foreign reserves achieved during the war 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 ageing capital stock.

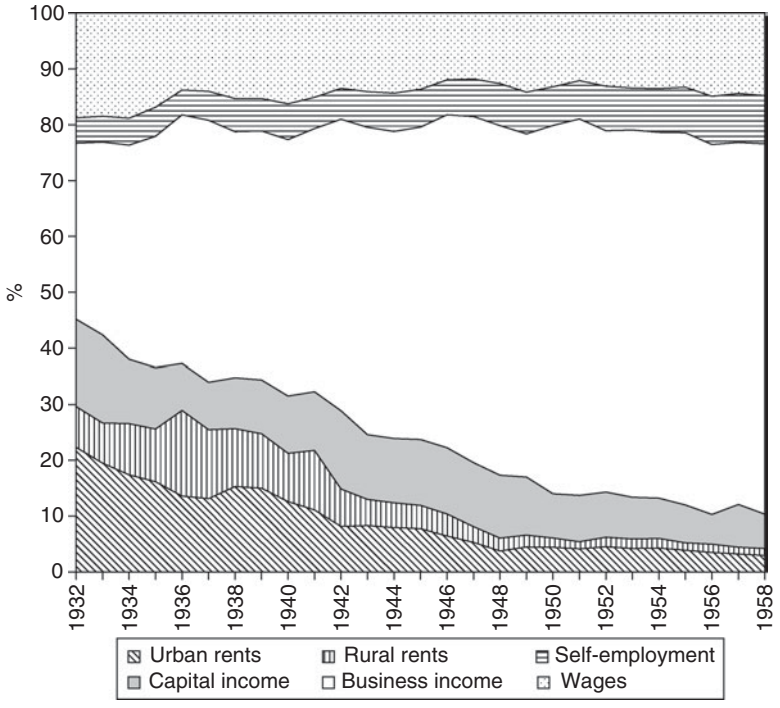

Figure 6.7 Composition of assessed income in Argentina, 1932 1958

Notes: The figure displays the composition of total assessed income. Thus, it covers 1.7%–2.6% of top income earners between 1932 and 1949, and 3.7%–5.2% between 1950 and 1958.

Source: Dirección Nacional de Impuestos a los Réditos, Memoria, several years.

finance industrialization and social improvements with rural rents was also to modify the structure of the wealthy sector. New industrial families appeared, but also the old names, traditionally attached to land wealth, diversified to industrial production. One important instrument of the Peronist policy was the IAPI, Institute for the Promotion of Trade, which established a state monopoly on exports and limited the gains of large estates proprietors.

Here it is worth noticing a striking contrast between Argentina and Australia. As Atkinson and Leigh (2007a) describe, the effect of the commodity price boom after the Second World War directly affected top shares in Australia, generating a clear spike in 1950, mainly due to the peak of wool prices which sheep farmers received in that year (Figures 6.3 and 6.4). The state management of exports in Argentina seems to have been a powerful tool in extracting a fraction of the surplus from exporters. The IAPI was disbanded as soon as Perón was deposed in 1955.

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

Table 6.6 Country of origin of income tax payers, Argentina, 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 assessed 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

Note: information for 1941 missing.

Source: Dirección Nacional de Impuestos a los Réditos, Memoria, several years.

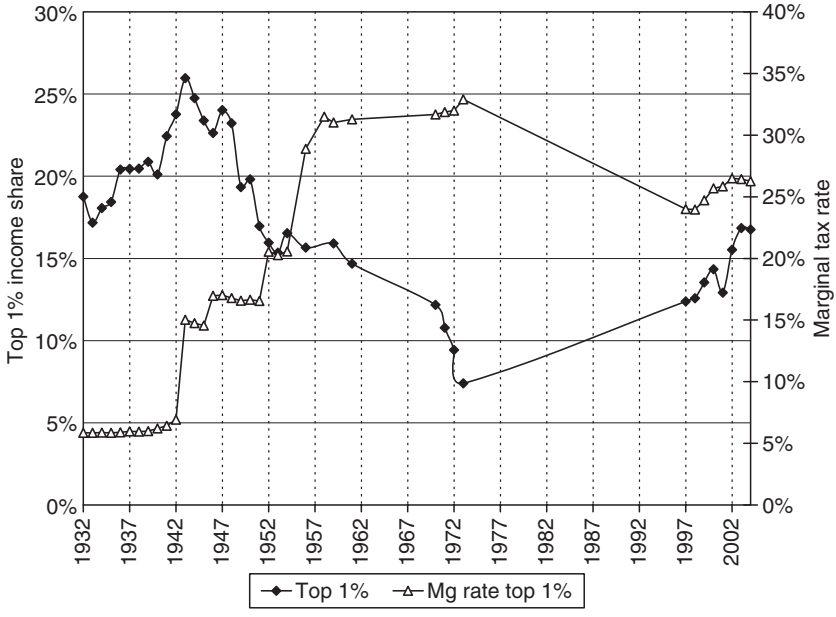

Figure 6.8 The top 1% income share in Argentina and income weighted marginal tax rate.
Sources: Top 1% income share from Table 6.5. Top marginal tax rate from author's computations.

the development of the powerful middle class that characterized the country by the end of the decade of 1960. It is this period that remained in the 'collective memory' as the clearest expression of the economic policies of Peronism.[24] 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 markets, price controls, minimum wage policy, and the state management of exports.[25] 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 per cent to 25 per cent between 1942 and 1943 and to 27 per cent 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

[24] Despite the negative remarks of an anonymous referee, I have decided to keep the expression 'collective memory', a concept developed by Maurice Halbwachs (Halbwachs 1950).

[25] 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 new tax on profits (*beneficios extraordinarios*), aimed at capping the increase in profits after the Second World War; (iii) the enforcement of a proportional tax on capital gains in 1946 (*impuesto a las ganancias eventuales*). For an account of the evolution of taxation during Perón's presidency, see Sánchez Román (2007).

rate and the tax scale as a whole were among the lowest in the world.[26] Figure 6.8 displays the income-weighted marginal tax rate for the top 1 per cent incomes. From 1952 to 1954, the highest incomes were affected by a top statutory marginal rate of 32 per cent, this rate being 40 per cent at the end of Perón's rule, in 1955.

Along with many other transformations, social and labour 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 25.9 per cent in 1943 to 15.3 per cent in 1953. The most affected seem to have been the richest among the rich: the top 0.1 per cent decreased from 11.6 per cent to 5.1 per cent and the top 0.01 per cent declined from 4.1 per cent to 1.4 per cent in the same period. The 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 when compared to international standards: by 1954 the top percentile shares were still higher than those found in the United States, France, Canada, Australia, or Spain.

After the frantic expansion of the economy during the first three years (see Figure 6.1), 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 demonetization). The sharp reduction in agricultural and livestock exports is clearly depicted in Figure 6.6. Thereafter, redistribution and credit policies became more prudent and incentives were introduced to favour the agricultural sector (which would always be the main export sector and, as such, the main provider of foreign reserves), which explains the moderate impact of the drop in exports on top incomes shown in Figure 6.6 that year. Some recovery of top shares seems to have started even before the end of Perón's government.

Even if our data do not allow to go beyond searching for a detailed explanation of what was happening below the top 1 per cent, 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 by 8 per cent between 1945 and 1954 (Altimir and Beccaria 1999). The ratio of wages to GDP reached a historical maximum of 50.8 per cent in 1954, one year before the military coup that deposed Perón (see Figure 6.9).[27]

[26] Preamble to Decree 18229 of 12/31/1943.

[27] 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 a driving force of the sharp increase in top wages.

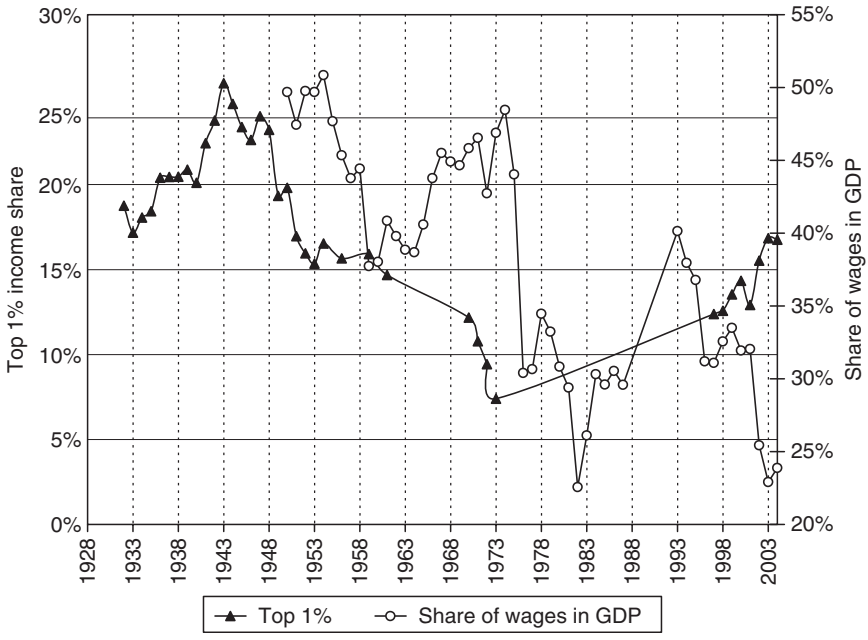

Figure 6.9 The top 1% income share in Argentina and share of wages in GDP, 1932 2004

Note: Income does not include capital gains.

Sources: Top 1% income share from Table 6.5. Share of wages in GDP from Lindemboim et al. (2005).

The Years 1956–2004

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.[28] It became 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 for 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

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

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, favoured both workers and industrialists (protected from external competition) while it acted as a clear disincentive to landowners. 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 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, favouring land-based activities again, drastically reducing the real value of wages, increasing exports, and regaining 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.[29] It was, nevertheless, a period of reasonable income growth *vis-à-vis* the poor performance that the economy displayed between 1981 and 1991.[30] The sudden movements of the nominal exchange rate ultimately led to violent redistributions between workers, the manufacturing sector, and the export-oriented agricultural sector.[31]

We only have observations for 1958, 1959, 1961, and 1970–3, a period in which top shares declined.[32] We cannot precisely assess which fraction of such a reduction is due to the increase in marginal rates, in tax evasion, or to other factors. This is a serious limitation and the results must be read with caution.

There was a marked increase in the shares at the top 0.1 per cent and top 0.01 per cent when 1973 and 2004 are compared. Between 1953 and 2004, the share of the top 0.01 per cent doubled. As it is not possible to fill the gap between 1973 and 1997 with a continuous series from income tax tabulations, we would like to read our results in perspective of the distribution based on household surveys, keeping in mind all the warnings about the use of survey-based data to study top incomes (see Appendix 6E). The Greater Buenos Aires is the only area that has been

[29] For an analytic approach to the 'stop and go' model, see Braun and Joy (1967).

[30] 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).

[31] 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 pendular policy: a 'repressed stage', when key prices were controlled to tame inflation, and a 'loosening state' when controls collapsed and inflation jumped.

[32] Top income shares for 1959 and 1961 are estimated from CONADE (1965), and not from tax statistics.

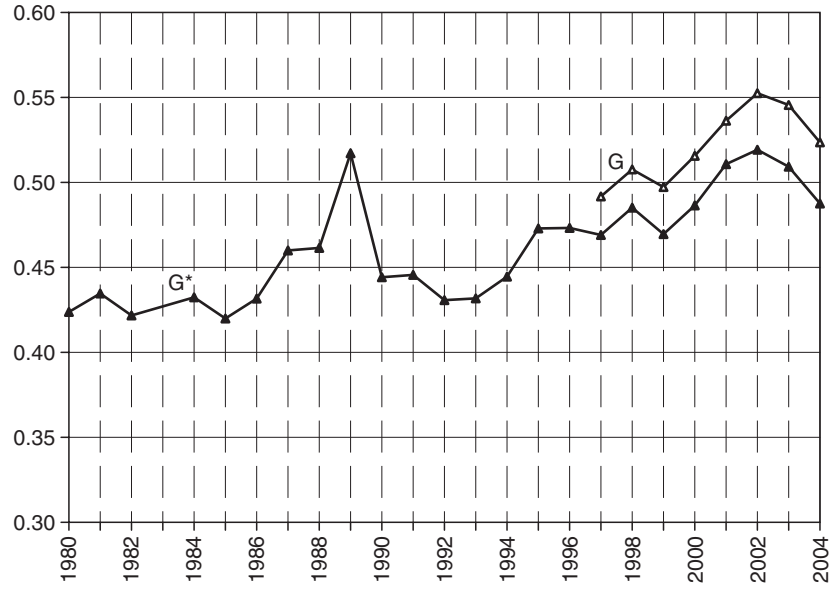

Figure 6.10 Gini coefficient 1980 2004 Greater Buenos Aires.

Notes: The black triangle denotes the Gini coefficient G* of individual income based on the Greater Buenos Aires household survey, own calculations. Database for 1983 is missing. All results correspond to October surveys, except for 2003 (May). Only income earners with positive income were considered and no further adjustments were applied. The white triangle denotes the Gini coefficient $G = S+(1–S)G^*$, where S is the estimate of the top 0.1% income share (Table 6.5). See section 6.3 in the main text for details.

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.[33] Figure 6.10 depicts the evolution of the Gini coefficient between 1980 and 2004. Available statistical evidence shows a relative stability of inequality during the decade of 1960 and the first half of the decade of 1970, when per capita GDP growth exceeded 3 per cent per year.[34] On the contrary, between 1975 and 1980 income inequality experienced a sharp rise, and the growing trend continued, attaining a 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. Regrettably, available data do not allow us to examine the interesting potential effects of very high inflation on top incomes.[35] In 1991, Argentina put

[33] See Gasparini, Marchionnini, and Sosa Escudero (2001, 2004), Altimir (1986), Altimir and Beccaria (1999), González Rozada and Menéndez (2006).

[34] See Altimir and Beccaria (1999).

[35] Ahumada, Alvaredo, and Canavese (2000) analyse the redistributive effects of the inflationary tax in Argentina in the 1980s using household survey data.

its money supply under a dollar exchange standard, adopting a fixed exchange rate between the local currency and the United States 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 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 12 per cent higher than in 1985. Overall inequality steadily grew in the last years, together with unemployment and poverty levels. The macroeconomic crisis of 2001–2 pushed those indicators to unprecedented levels.

The factors behind the constant increase in inequality during the last two decades have been broadly analysed and include both macroeconomic and microeconomic explanations. First, unemployment rates skyrocketed in the decade of 1990, and have remained high since then. Although there is a widespread belief that changes in labour market participation have been one of the main causes of the strong increase in inequality, Gasparini, Marchionnini, and Sosa Escudero (2004) suggest that these ideas should be scaled down. Even if the unemployment rate has been augmenting 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 disequalizing 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, there were the two dramatic crises of 1989 and 2002. As a result, inequality has been rising during positive growth years, and increasing even more during recessions.

Table 6.7 shows the top 10 per cent, top 1 per cent, and top 0.1 per cent income shares based on household surveys. The limited number of observations in the survey introduces large sample variability when focusing on the very top. Table 6.8 presents the composition of income by top groups between 2001 and 2004 from tax statistics. Income is divided into rents (urban and rural), capital income, business income, and wages. Between 1997 and 2004, top incomes again show (Table 6.5) an increasing trend with a drop in 2001 mainly due the reduction of capital and business income following the 2001 crash. However, with the rapid recovery of the economy since 2003, top shares soon regained and surpassed the pre-crisis levels, the top fractiles within the top 1 per cent being the most favoured by the process. While top 1 per cent share passed from 12.4 per cent in 1997 to 16.8 per cent in 2003, the top 0.01 per cent share doubled, going from 1.4 per cent to 2.8 per cent. It is not surprising that 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

Table 6.7 Income shares and composition in top Argentina income groups based on household survey, Greater Buenos Aires, 1982 2003

				Top 10%			Top 1%			Top 0.1%		
	Top 10%	Top 1%	Top 0.1%	Wage	Business	Capital + rents	Wage	Business	Capital + rents	Wage	Business	Capital + rents
1980												
1981												
1982	42.11	11.17	2.90	58.84	36.34	5.12	36.70	49.16	14.18	5.91	57.85	36.19
1983												
1984	44.24	13.90	4.81									
1985	43.49	10.37	2.55	59.90	36.98	3.28	51.20	42.90	5.88	68.89	30.93	0.00
1986	44.23	11.61	2.38	53.84	42.40	3.61	35.18	60.00	4.57	17.45	75.75	6.88
1987	46.07	11.77	2.21	81.59	35.12	3.19	81.59	35.12	3.19	57.28	37.71	5.08
1988	45.39	11.28	2.31	63.59	33.91	2.56	52.66	42.02	5.32	52.66	42.02	5.32
1989	46.37	12.68	3.21	61.61	34.45	3.98	47.14	44.19	8.77	39.52	38.36	22.47
1990	45.24	12.57	2.99	63.79	34.53	1.58	56.29	40.76	2.61	43.95	53.18	2.88
1991	45.95	13.44	4.32	60.92	35.97	2.88	45.69	47.41	6.87	20.54	63.75	15.80
1992	43.15	10.63	2.08	55.88	41.81	2.57	37.51	57.57	4.92	24.72	69.20	6.08
1993	42.53	10.14	2.11	56.76	41.14	2.08	51.70	45.12	3.17	37.55	58.62	3.85
1994	43.07	10.58	2.40	60.30	36.88	2.99	48.06	46.63	5.36	36.85	49.28	13.60
1995	41.83	11.96	2.44	81.27	36.62	2.11	57.30	41.04	1.66	65.20	34.80	0.00
1996	41.68	11.29	2.36	61.80	35.63	2.58	52.72	42.13	5.15	57.01	42.99	0.00
1997	42.15	9.61	2.30	63.08	33.89	3.03	56.61	37.47	5.92	56.33	35.00	8.67
1998	44.02	10.84	1.97	62.34	35.81	1.85	49.65	47.25	3.10	25.45	71.71	2.84
1999	42.45	9.79	2.01	67.59	30.15	2.26	52.75	42.47	4.78	45.03	54.97	0.00
2000	43.22	10.50	2.01	68.88	28.36	2.76	63.05	32.78	4.17	65.39	25.29	9.32
2001	47.12	10.62	1.98	72.22	25.46	2.33	57.01	39.84	3.15	61.86	38.14	0.00
2002	44.29	10.97	2.32	76.08	22.31	1.62	62.06	35.87	2.07	46.50	51.24	2.25
2003	42.59	10.81	2.20	71.68	26.23	2.09	56.61	38.06	3.33	41.18	52.74	8.08

Notes: Fractiles defined in terms of the number of tax units. Survey incomes with no adjustments.

Source: Household survey, Greater Buenos Aires (INDEC). October waves, except for 2003 (May).

Table 6.8 Composition in top income groups, Argentina, 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 0.01%				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.

remained below 50 per cent. The crisis generated a massive redistribution in favour of the very rich, who have a significant portion of their income denominated in foreign currency due to the involvement in international trade.

Even when 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 can be approximated as $G \approx S + (1–S)\, G^{\star}$, where $G^{\star}$ is the Gini for the rest of the population.[36] The comparison between tax tabulations and household income surveys presented in Appendix 6E reveals that it is not an exaggeration to assume that the top 0.1 per cent earners' income is not considered in the survey. Under such an assumption, let $G^{\star}$ be the survey-based Gini.[37] Then, one can compute G by applying our estimates of top income shares to the approximation mentioned above. For instance, $G^{\star}$ was 0.469 in 1997 and 0.509 in 2003 (an increase of 8 per cent). Therefore G turned out to be 0.491 in 1997 and 0.545 in 2003 (an increase of 11 per cent).[38] In this case, the behaviour of top shares amplified the rise in survey-measured inequality. This means that when the participation of the rich in total income is important, changes in their income shares are potentially relevant in explaining changes in overall distribution. Figure 6.10 differentiates between G and $G^{\star}$ over the period 1997–2004.

6.4 CONCLUSIONS

This chapter has attempted to describe 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 household surveys started in 1972. Until 1974 the survey was restricted to the Greater Buenos Aires area. Other urban centres have progressively been incorporated, so that today the fraction of represented individuals exceeds 70 per cent of the urban population (60 per cent of total population). Yet, micro-data showing personal income with some detail are only available for 1980–2 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 dynamic analysis has had to be restricted to the top 1 per cent.

[36] We borrow this explanation from Atkinson (2007).

[37] As shown in Cruces and Gasparini (2008), the Gini coefficients computed from the Greater Buenos Aires survey and from the all urban centre survey are almost identical.

[38] In 1997, the top 0.1% income share was 4.27% (Table 6.5). For $G^{\star}$ equal to 0.469 that year, then G ≈ 0.0427 + (1 0.0427) 0.469 0.491.

The 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. Any interpretation of this performance in terms of Kuznets's hypothesis (Kuznets 1955) would be, at best, difficult to accept in the light of inequality trends in the following years. Since then top shares seem to have followed a U-shape pattern, although several gaps in the data put a limit on the interpretation of such movements. Interestingly, the share of the top 1 per cent in 1954 was very similar to the level found in 2004, although they reflect two very different moments in history. The first corresponds 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.

APPENDIX 6A: THE INCOME TAX

The Great Depression forced fundamental changes both in the economic policy and in the successful model of international insertion that Argentina had displayed since 1870. 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 30 were drastically reduced between 1931 and 1933. The government followed a conser vative fiscal policy and sought orthodox budget balance by replacing the lost customs revenues with a large increase in direct taxes on income and wealth. In this context, the first personal income tax (*impuesto de emergencia a los réditos*) was established in 1932 (Law 1/ 19/1932) during the de facto 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.[39]

Taxable 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 proprietor of the land. Total revenue from this source could not be lower than 5 per cent of the cadastral value established for local taxes. The second category included capital income, royalties, fixed claim asset income, dividends, annuities, and subsidies. The third category corresponded to self employment and business income and farm income from rented land. The fourth category referred to wages, salaries, and pensions.[40]

Exemptions include income derived from patents, copyrights, and other intellectual property, profits from cooperatives, severance payments, local and federal treasury bonds interest, low interest saving accounts (this exemption extended later to all saving accounts and time deposits), dividends, and severance payments. Capital gains, in practice, have always been exempted too. The initial 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. Tax filing was strictly individual, but income under joint tenancy was allocated to the husband.

The exemption on local government bonds and national treasury bonds interest was eliminated in 1942 (Law 12808). The first major reform, motivated by the need of increasing fiscal revenues, was accomplished between 1943 and 1946 (Decree 18299 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 more than doubled, jumping from 12 per cent to 25 per cent. The new top marginal rate was similar to those in force, at the time, in Chile (27 per cent) and Brazil (21.4 per cent) but considerably lower

[39] 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 (2008, 2009). Cf. the case of Spain (Alvaredo and Saez 2009 and Chapter 10), where the first personal income tax was enforced during the Second Republic.

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

than those in the United States, Canada, the UK, and France. Classification of income suffered some changes: professional income was transferred from the third to the fourth category while farm income both from owned and rented land was completely included in the third category (Decree 14338 of 5/20/1946).[41]

While the growing inflation started by the second half of the twentieth century could have implied a rise in the number of taxpayers (by reducing the significance of the minimum threshold), non taxable income and family allowances were regularly updated. As only those with positive taxable income were obliged to file, the percentage of tax filers with respect to total tax filers remained low (see Table 6.3, column 4). At the same time, the brackets in the tax scale remained stable, whereas the rates were increased again in 1946, 1952, and1955 (Law 14393 of 12/31/1954) as shown in Table 6.3, column 9.

The tax scale was revised again in 1969 (Law 18527 of 12/31/1969), when marginal rates ranged from 12 per cent to 46 per cent, and in 1974, establishing a scale going from 7 per cent to 46 per cent (Law 20628 of 12/27/1973, which abolished the old *impuesto sobre los réditos personales* and created a new *impuesto a las ganancias de las personas fisicas y de las sucesiones indivisas*). The maximum marginal tax rate moved down to 45 per cent in 1985 (Law 23260 of 9/25/1985).

By 1997, the top marginal rate had been reduced to 33 per cent and increased to 35 per cent again in 2000 (Decree 450 of 3/31/1986; Decree 2352 of 12/18/1986; Decree 649/97 of 8/6/1997; Law 25239 of 12/31/1999).

[41] Among the regulations that introduced important changes in the income tax during the first half of the twentieth century, the reader may refer to: Law 1/19/1932 (creation of the income tax); Law 11586 of 7/2/1932 (ordering of the tax); Law 11757 of 10/11/1933 (on the exemption on local government bonds and national treasury bonds); Law 11682 of 1/2/1933 and Decree 12578 of 5/4/1938 (classification of income and redefinition of the progressive tax scale); Decree 18299 of 12/31/1943 (change in tax scale); Decree 14338 of 5/20/1946 (reclassification of income).

APPENDIX 6B: REFERENCES ON DATA SOURCES

Tax Statistics

Statistical information covering the income tax for years 1932 50 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 reported gross income, taxable income, family allow ances, minimum exempted income, and tax paid. The continuity of the publication was lost between 1950 and 1997. Similar tabulations for 1951 4, 1956 1958, and 1959 were published in Dirección General Impositiva, *Boletín 1957*, *1958*, *1959*, *1961*, *1962 (April)*, *1962 (October)*.

The data for 1959 and 1961 were taken from Consejo Nacional de Desarrollo (1965), *Distribución del ingreso y cuentas nacionales en la Argentina: investigación conjunta CONADE CEPAL*, volumes i v, Buenos Aires.

The information for 1970, 1971, 1972, and 1973 was obtained from Dirección General Impositiva, Ministerio de Economía, *Estadísticas tributarias ejercicios 1972/73* and Depar tamento de Estudios, División Estadística, Ministerio de Economía, 1973, *Boletín estadís tico 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 tax and wealth tax between 1997 and 2004: Administración Federal de Ingresos Públicos, Ministerio de Economía, *Estadísticas tributarias 1998*, *1999*, *2000*, *2001*, *2002*, *2003*, *2004*, *2005*.

Individuals with wages and salaries as the only income sources have never been obliged to fill a tax return, although they have been subject to income tax withholdings. They are not included in the tax tabulations. Cont and Susmel (2006) analyse this issue. Using administrative records from earnings, they estimate the distribution of wages and salaries for non tax filers. Their results let us argue that the impact on our top income shares is small.

Total Number of Individuals and Tax Units

The income tax in Argentina has always been individually based. 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 6.3, 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. The fraction of the adult population filing a tax return is presented in column 4.

Comisión Nacional del Censo (1919), *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; Dirección Nacional de Estadística y Censos (1951), *IV Censo General de Población 1947*; Dirección Nacional de Estadística y Censos (1965), *Censo General de Población 1960*, Buenos Aires; Instituto Nacional de Estadística y Censos (1993), *Censo Nacional de Población y Vivienda 1991: resultados definitivos, Total del País*, Serie B n° 25; Instituto Nacional de Estadística y Censos, *Censo Nacional de Población, Hogares y Vivienda 2001, resultados generales total del país*, Buenos Aires.

Income Denominator

To relate the amounts recorded in the tax tabulations to a comparable reference income, we 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 inter mediation services consumed by the public sector, minus undistributed profits, plus social transfers, minus 33 per cent of unincorporated profits. This procedure generates a refer ence income of about 60 per cent of GDP for recent years. The level of desegregation of information required to compute income is not available for most of the years. Conse quently we applied the 60 per cent 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.[42]

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.

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 42, the price index was taken from Vazquez Presedo (1971: column 1, table V 2.15); for 1932 1934 it comes from Della Paolera and Taylor (2001: chapter 13).

[42] 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 2009).

APPENDIX 6C: ESTIMATING TOP SHARES

We follow the basic Pareto interpolation technique described in Chapter 10, Appendix 10D.

APPENDIX 6D: THE ISSUE OF TAX EVASION

In the developing world there is a generalized idea 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 indi cating the significance of avoidance responses to the major US tax changes of the 1980s and 1990s.[43] 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.[44]

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 is very speculative. In any case we provide some elements for the analysis.

First, 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 out of 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 only observed) taxpayers. Notwithstanding this fact, an audit rate of 20 per cent is much higher than the ones observed today in countries such as Spain, as is discussed in Chapter 10. It is likely that audit rates were even higher for top taxpayers. 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). The Central Bank published a first report on the issue in the early 1960s (Banco Central de la República Argentina 1962). Nevertheless, a serious quantitative assessment of income tax evasion is missing in those publications.

Secondly, existing measures of the size of the underground economy in Argentina show that the level of unreported activities might have increased during the second half of the twentieth century.[45] 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

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

[44] 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.

[45] See Ahumada et al. (2003) and Ahumada, Alvaredo, and Canavese (2007).

Table 6D.1 Under reporting in income tax, Argentina, 1959

Income levels				
in 1959 m$n		in 2000 US dollars		
(from	to)	(from	to)	un reported income (% 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

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

century the tax rates (mainly the top marginal rates) were far lower than those in European and North American countries, and slightly lower than in neighbouring countries such as Chile or Brazil. Finally, tax evasion is well connected with the environment of macroeco nomic volatility and inflation distinctive of the post 1950 period. High inflation also provides strong incentives to postpone income reporting; even when this behavioural response is not strictly evasion, it can erode tax collections to a great extent.

A first comparison can be made between the results for 1953 from income tax data and those from CONADE (1965). This study is certainly not the absolute truth (in fact it contains many ad hoc adjustments) but provides some elements for judgement. Our estimates for the top shares in 1953 based on tax data (the top 1 per cent share being 15.3 per cent) are indeed slightly higher than those obtained from the cited study (the top 1 per cent being 12.8 per cent).

Using information from the 1962 tax amnesty (which attempted to uncover all income that had been evaded by taxpayers between 1956 and 1961), the authorities estimated evasion in 1959.[46] Results (very limited) are reproduced in Table 6D.1. The last column reports hidden income as percentage of declared income. Un reporting, with values be tween 27 per cent and 40 per cent, 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 source 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). However, these figures might exaggerate true evasion. On the one hand, it is not possible to know exactly how the authorities arrived at the figures in Table 6D.1: no data are available to replicate the computations. On the other hand, the notion of 'potential tax collection' (the tax collection had all income been declared) used by the tax agency contaminates the interpretation.

[46] Decree 6480/1962.

A new amnesty followed in 1970, for the tax evaded between 1964 and 1969.[47] Unfortunately, the tax authorities did not publish the results in detail either. Over a total of 589,000 taxpayers, 300,000 individuals declared 65 per cent of unreported income (with respect to reported income). Under the extreme assumption that those who did not have recourse to the amnesty had nothing to declare, then the average unreported income was 33 per cent ($0.65 \times 300/589$).[48]

It is difficult to provide better evidence for Argentina. However, it is unlikely that such high percentages of evasion represent the situation among top income earners. As also discussed in Chapter 10, the rich are very visible for tax authorities.

[47] The amnesty served primarily to close a temporary fiscal imbalance. This time, declaring net assets placed in foreign countries was not mandatory (Law 18529 of 12/31/1969). For a theoretical analysis of the efficiency and equity consequences of permanent and non permanent tax amnesties, see Andreoni (1991).

[48] Ministerio de Economía (1973).

APPENDIX 6E: COMPARISON BETWEEN TAX TABULATIONS AND HOUSEHOLD SURVEYS

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. 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 contamin ation, relies in many cases on expert judgement.[49] Groves and Couper (1998) report that the probability of response is negatively correlated with almost all measures of socio economic status. 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. Székeley and Hilgert (1999) analyse 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.[50]

To get a sense of the mismatch, we quantified the gap between top incomes from Argentine household surveys and top incomes from tax tabulations. This was done by applying the statutory income tax schedule to the actual income of each individual in the survey, after subtracting 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. Household surveys correspond to Encuesta Permanente de Hogares (EPH), October, Instituto Nacional de Estadística y Censos.

We proceeded in the following way. We corrected the October 1997 survey weights so that the adult population covered by the survey matched our reference total for tax units. As survey income refers to monthly values, annual income was computed by upscaling labour 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 and allowances established by the tax schedule were calculated using the household composition information. Deduction for spouse was $2,400; deduction for each dependent child 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 ranges of income from the tax tabulations, and applied those ratios to survey incomes. Finally, individuals were organized by levels of income so as to reproduce the tax tabulations.[51]

Table 6E.1 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 income above $5,000,000, the survey's top 160 individuals only have income between $500,000 and $1,000,000.

[49] See Cowell and Victoria Feser (1996).

[50] In ten cases, total income of the richest households in the survey is below the average salary of a manager.

[51] A similar procedure has been followed in Engel, Galetovic, and Raddatz (1999).

Table 6E.1 Income tax tabulation and household survey, Argentina, 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

Sources: AFIP, Estadísticas Tributarias 1998 and INDEC, Household survey, October 1997.

Survey information generally differs also from National Accounts data. 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 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 employ ment income, and public transfers, while capital income is largely neglected. Deaton (2005) analyses the issue in detail and acknowledges that extensive prior adjustments of the National Accounts mean income (or consumption) are required before using them to upscaling survey estimates.[52] 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.

[52] 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 recom mends, 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.

REFERENCES

Administración Federal de Ingresos Públicos (2002). *Estadísticas tributarias*. Buenos Aires.

Ahumada, H., F. Alvaredo, and A. Canavese (2000). 'Un análisis comparativo del impacto distributivo del impuesto inflacionario y de un impuesto sobre el consumo', *Economica*, 46(2), July/December.

(2007). 'The Monetary Method and the Size of the Shadow Economy', *Review of Income and Wealth*, 53(2): 363 71.

and P. Canavese (2003). 'Estimación del tamano de la economía oculta por medio de la demanda de circulante: una revisión de la metodología con una ilustración para Argentina', *Revista de análisis económico*, 18(1): 103 15.

Altimir, O. (1986). 'Estimaciones de la distribución del ingreso en la Argentina, 1953 1980', *Desarrollo económico*, 25(100): 521 66.

and L. Beccaria (1999). 'Distribución del ingreso en la Argentina', Serie Reformas Económicas, CEPAL.

Alvaredo, F. (2009). 'Top Incomes and Earnings in Portugal 1936 2005', *Explorations in Economic History*, 46(4): 404 17.

and E. Saez (2009). 'Income and Wealth Concentration in Spain from a Historical and Fiscal Perspective', *Journal of the European Economic Association*, 7(5): 1140 67.

Andreoni, J. (1991). 'The Desirability of a Permanent Tax Amnesty', *Journal of Public Economics*, 45(2): 143 59.

Atkinson, A. B. (2005). 'Top Incomes in the United Kingdom over the Twentieth Century', *Journal of the Real Statistical Society*, Series A, 168(2): 325 43.

(2007). 'Measuring Top Incomes: Methodological Issues', in Atkinson and Piketty (2007).

and A. Leigh (2007a). 'The Distribution of Top Incomes in Australia', in Atkinson and Piketty (2007).

(2007b). 'The Distribution of Top Incomes in New Zealand', in Atkinson and Piketty (2007).

and T. Piketty (2007). *Top Incomes over the Twentieth Century: A Contrast between European and English Speaking Countries*. Oxford: Oxford University Press.

Auerbach, A. and J. Slemrod (1997). 'The Economic Effects of the Tax Reform Act of 1986', *Journal of Economic Literature*, 35: 589 632.

Banco Central de la República Argentina (1962). *Boletín estadístico*, January.

Banerjee, A. and T. Piketty (2005). 'Top Indian Incomes 1922 2000', *World Bank Economic Review*, 19(1): 1 20.

Braun, O. and L. Joy (1967). 'A Model of Economic Stagnation: A Case Study of the Argentine Economy', *Economic Journal*, 78(312): 868 87.

Canberra Expert Group on Household Income Statistics (2001). *Final Report and Recom mendations*. Ottawa.

CONADE Consejo Nacional de Desarrollo and Comisión Económica para América Latina y el Caribe (1965). *Distribución del ingreso y cuentas nacionales en la Argentina*, 5 vols. Buenos Aires.

Cont, W. and N. Susmel (2006). 'Evasión impositiva en impuestos directos personales: ganancias de las personas y seguridad social', in Fundación de Investigaciones Latino americanas (ed.) *La presion tributaria sobre el sector formal de la economía*. Buenos Aires: chapter 8.

Cortés Conde, R. (1979). *El progreso argentino*. Buenos Aires: Editorial Sudamericana.

Cortés Conde, R. (1997). *La economía argentina en el largo plazo (siglos XIX y XX)*. Buenos Aires: Editorial Sudamericana.

and E. Gallo (1972). *La república conservadora*. Buenos Aires: Paidós.

Cowell, F. and M. Victoria Feser (1996). 'Robustness Property of Inequality Measures', *Econometrica*, 64(1): 77 101.

Cruces, G. and L. Gasparini (2008). 'A Distribution in Motion: The Case of Argentina', Documento de Trabajo 78, Centro de Estudios Distributivos, Laborales y Sociales, Universidad de La Plata.

Deaton, A. (2005). 'Measuring Poverty in a Growing World (or Measuring Growth in a Poor World)', *Review of Economics and Statistics*, 87(1): 1 19.

Della Paolera, G. and Taylor, A. (2001). *Straining at the Anchor: The Argentine Currency Board and the Search for Macroeconomic Stability 1880 1935*. Chicago: University of Chicago Press.

(2003). *A New Economic History of Argentina*. Cambridge: Cambridge University Press.

Diaz Alejandro, C. (1970). *Essays on the Economic History of the Argentine Republic*. New Haven: Yale University Press.

Di Tella, G. (1987). 'Argentina's Most Recent Inflationary Cycle, 1975 1987', in R. Thorp and L. Whitehead (eds.) *Latin American Debt and the Adjustment Crisis*. Pittsburgh: University of Pittsburgh Press: 162 207.

and R. Dornbusch (1983). *The Political Economy of Argentina 1946 1983*. Pittsburgh: University of Pittsburgh Press.

and M. Zymelman (1967). *Las etapas del desarrollo económico Argentino*. Buenos Aires: Editorial Universitaria de Buenos Aires.

(1973). *Los ciclos económicos argentinos*. Buenos Aires: Paidós.

Engel, E., A. Galetovic, and C. Raddatz (1999). 'Taxes and Income Distribution in Chile: Some Unpleasant Redistributive Arithmetic', *Journal of Development Economics*, 59(1): 155 92.

Gasparini, L. (1999). 'Incidencia distributiva del sistema impositivo Argentino', in Funda ción de Investigaciones Latinoamericanas (ed.) *La reforma tributaria en la Argentina*. Buenos Aires.

(2004). 'Different Lives: Inequality in Latin America and the Caribbean', in D. Ferranti, G. Perry, and F. Ferreira (eds.) *Breaking with History? Inequality in Latin America and the Caribbean*. Washington, DC: World Bank: chapter 2.

F. Gutiérrez, and L. Tornarolli (2007). 'Growth and Income Poverty in Latin America and the Caribbean: Evidence from Household Surveys', *Review of Income and Wealth*, 53(2): 209 45.

M. Marchionnini and W. Sosa Escudero (2001). *La distribución del ingreso en la Argentina: perspectivas y efectos sobre el bienestar*. Buenos Aires: Fundación Arcor.

(2004). 'Characterization of Inequality Changes through Microecono metric Decompositions: The Case of Greater Buenos Aires', in F. Bourguignon, F. Ferreira, and N. Lustig (eds.) *The Microeconometrics of Income Distribution Dynamics in East Asia and Latin America*. New York: Oxford University Press.

and W. Sosa Escudero (2003). 'Implicit Rents from Own Housing and Income Distribution: Econometric Estimates for Greater Buenos Aires', *Journal of Income Distribution*, 12.

González Rozada, M. and M. Menéndez (2006). 'Why have Poverty and Income Inequality Increased so Much? Argentina, 1991 2001', *Economic Development and Cultural Change*, 55(1): 109 38.

Gordon, R. and J. Slemrod (2000). 'Are "Real" Responses to Taxes Simply Income Shifting between Corporate and Personal Tax Bases?', in Slemrod (2000).

Groves, R. and M. Couper (1998). *Nonresponse in Household Interview Surveys*. New York: Wiley.

Halbwachs, M. (1950). *La Mémoire collective*. Paris: Les Presses Universitaires de France.

Jauretche, A. (1966). *El medio pelo en la sociedad Argentina*. Buenos Aires: A. Pena Lillo Editor.

Johnson, L. and Z. Frank (2006). 'Cities and Wealth in the South Atlantic: Buenos Aires and Rio de Janeiro before 1860', *Comparative Studies in Society and History*, 48: 634 68.

Kuznets, S. (1953). *Shares of Upper Income Groups in Income and Savings*. National Bureau of Economic Research.

(1955). 'Economic Growth and Income Inequality', *American Economic Review*, 45(1): 1 28.

Landais, C. (2007). 'Les Hauts Revenus en France (1998 2006): une explosion des inéga lités?', Paris School of Economics, mimeo.

Leigh, A. and P. van der Eng (2009). 'Inequality in Indonesia: What Can We Learn from Top Incomes', *Journal of Public Economics*, 93: 209 12.

Lindemboim, J., J. Grana, and D. Kennedy (2005). 'Distribución funcional del ingreso en Argentina: ayer y hoy', Documentos de Trabajo, 4, Centro de Estudios sobre Población, Empleo y Desarrollo, Instituto de Investigaciones Económicas, Facultad de Ciencias Económicas, Universidad de Buenos Aires.

Luna, F. (1958). *Alvear*. Buenos Aires: Libros Argentinos.

(1989). *Soy Roca*. Buenos Aires: Sudamericana.

(2003). *The World Economy: Historical Statistics*. Paris: OECD.

Mallon, R. and J. Sourrouille (1975). *Economic Policymaking in a Conflict Society: The Argentine Case*. Cambridge, Mass.: Center for International Affairs, Harvard University Press.

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', Departamento de Estudios, División Estadística.

Ocampo, V. (1979 84). *Autobiografía*, 6 vols. Buenos Aires: Revista Sur.

Organización de Estados Americanos and Banco Interamericano de Desarrollo (1967). *Estudio sobre política fiscal en la Argentina*, 7 vols. Buenos Aires.

Piketty, T. (2001). *Les Hauts Revenus en France au 20ème siecle: inégalités et redistributions, 1901 1998*. Paris: Éditions Grasset.

(2003). 'Income Inequality in France 1901 1998', *Journal of Political Economy*, 111 (5): 1004 42.

and N. Qian (2009). 'Income Inequality and Progressive Income Taxation in China and India: 1986 2015' (forthcoming), *American Economic Journal: Applied Economics*.

and E. Saez (2003). 'Income Inequality in the United States, 1913 1998', *Quarterly Journal of Economics*, 118(1): 1 39.

(2006). 'The Evolution of Top Incomes: A Historical and International Per spective', *American Economic Review*, 96(2): 200 5.

Presidencia de la Nación República Argentina (1967). *Estudio de política fiscal en la Argentina, preparado por el programa conjunto de tributación OEA/BID, 1963*, 7 vols. Buenos Aires.

Rapoport, M. (1980). *1949 1945 Gran Bretana, Estados Unidos y las clases dirigentes argentinas*. Buenos Aires: Editorial de Belgrano.

Rapoport, M. (1988). *Aliados o neutrales? La Argentina frente a la Segunda Guerra Mundial*. Buenos Aires: Editorial Universitaria de Buenos Aires.

Saez, E. and M. Veall (2005). 'The Evolution of Top Incomes in Northern America: Lessons from Canadian Evidence', *American Economic Review*, 95(3): 831–49.

Sánchez Román, J. (2007). 'Taxation and Peronism', mimeo.

(2008). 'Shaping Taxation: Economic Elites and Fiscal Decision Making in Argentina, 1920–1945', *Journal of Latin American Studies*, 40(1): 83–108.

(2009). 'Economic Elites, Regional Cleavages and the First Attempts at Introducing the Income Tax in Argentina', *Hisparic American Historical Review*, 89(2): 253–83.

Sebrelli, J. (1985). *La Saga de los Anchorena*. Buenos Aires: Sudamericana.

Slemrod, J. (1992). 'Do Taxes Matter? Lessons from the 1980s', *American Economic Review*, 82(2): 250–6.

(1995). 'Income Creation or Income Shifting? Behavioral Responses to the Tax Reform Act of 1986', *American Economic Review*, 85(2): 175–80.

(2000). *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*. Cambridge, Mass.: Harvard University Press.

(2001). 'A General Model of the Behavioral Response to Taxation', *International Tax and Public Finance*, 8(2): 119–28.

and S. Yitzhaki (2002). 'Tax Avoidance, Evasion, and Administration', in A. J. Auerbach and M. Feldstein (eds.) *Handbook of Public Economics*. Amsterdam: Elsevier: chapter 22.

Sokoloff, K. and E. Zolt (2007). 'Inequality and the Evolution of Institutions of Taxation in the Americas', in S. Edwards, G. Esquivel, and G. Marquez (eds.) *Growth, Institutions and Crises: Latin America from a Historic Perspective*. Chicago: University of Chicago Press: chapter 3.

Surrey, S. and O. Oldman (1960). *Examen preliminar del sistema impositivo de la República Argentina*. Buenos Aires: Dirección General Impositiva.

Székeley, M. and M. Hilgert (1999). 'What's Behind the Inequality We Measure: An Investigation Using Latin American Data', Research Department Working Paper 409, Inter American Development Bank.

Taylor, A. (1992). 'External Dependence, Demographic Burdens and Argentine Economic Decline after the Belle Epoque', *Journal of Economic History*, 52(4): 907–36.

Vazquez Presedo, V. (1971). *Estadísticas históricas argentinas*, 2 vols. Buenos Aires: Ed. Macchi.

(1988). *Estadísticas históricas argentinas: compendio 1873 1973*. Buenos Aires: Academia Nacional de Ciencias Económicas.