Income and Wealth Concentration in Switzerland over the 20th Century

Fabien Dell, INSEE

Thomas Piketty, EHESS Emmanuel Saez, UC Berkeley and NBER

Abstract:

This paper presents homogeneous series on top shares of income and wealth in Switzerland since 1913 using personal income and wealth tax return statistics. In contrast to other countries such as Canada, France, the United Kingdom, the Netherlands or the United States, top income and wealth shares in Switzerland are strikingly flat over the century, and display no secular downtrend from the early part of the century to the post-World War II period. Switzerland hardly ever implemented a very progressive income and wealth tax structure and top income and wealth tax rates have been very low relative to other developed countries. Therefore, our findings for Switzerland lead much credence to the view that the development of very progressive taxation is the central factor explaining the sustained decline in wealth and income concentration in countries such as Canada, France, the United Kingdom, the Netherlands, or the United States.

Fabien Dell, INSEE. Thomas Piketty, EHESS. Emmanuel Saez, University of California at Berkeley, Department of Economics, 549 Evans Hall #3880, Berkeley, CA 94720, USA, saez@econ.berkeley.edu.

1. Introduction

The evolution of income and wealth inequality during the process of development has attracted enormous attention in the economics literature. Liberals have blamed income and wealth concentration because of concerns for equity and in particular for tilting the political process in the favor of the wealthy. They have proposed progressive taxation as an appropriate counter-force against wealth concentration. For conservatives, concentration of income and wealth is considered as a natural and necessary outcome of an environment that provides incentives for work, entrepreneurship, and wealth accumulation, key elements of macro-economic success. Progressive taxation may redistribute resources away from the rich and wealthy and reduce wealth concentration but it might also weaken those incentives and generate large efficiency costs. Therefore, it is of great importance to understand the forces driving income and concentration over time and understand whether wealth government interventions through taxation are effective and/or harmful to curb wealth inequality. This task is greatly facilitated by the availability of long and homogeneous series of income or wealth concentration.

A number of recent studies have constructed series for shares of income accruing to upper income groups (such as the top decile, top percentile, etc.) for various countries: Piketty (2001, 2003) for France, Atkinson (2001) for the United Kingdom, Piketty and Saez (2003) for the United States, Saez and Veall (2003) for Canada, Atkinson and Salverda (2003) for the Netherlands. Shares of wealth accruing to top wealth groups have also been constructed for some countries: Atkinson and Harrison (1978) and Atkinson and Gordon (200x) for the United Kingdom, Kopczuk and Saez (2003) for the United States, Piketty, Postel-Viney, and Rosenthal (2003) for France. All these series share two important and striking characteristics. First, in all those countries, a dramatic reduction in top income and wealth shares is observed from the early part of the century to the decades following World War II. In virtually all cases, the share of income or

wealth accruing to the top 1% has been divided by a factor two and sometimes, by a much greater factor. For example, in the United Kingdom, the top 1% income share falls from almost 20% in 1918 to 6% in the 1970s (Atkinson and Salverda, 2003, Table 2UK). Second, in all those countries as well, those dramatic decreases are concentrated in the very top groups of the income or wealth distribution. There are relatively little secular changes for the bottom part of the top decile or even the top percentile, and the majority of the decrease is actually concentrated in the top 0.1%.

In contrast, the evolution of top income shares in the recent decades has been different across countries: the United States, Canada, and the United Kingdom have experienced a large increase in top income shares while France, and the Netherlands display hardly any change in top income shares. For the United States (Piketty and Saez, 2003) and Canada (Saez, and Veall, 2003), this dramatic increase has been due to a dramatic increase in top wages and salaries. We suspect that such a surge in top wages and salaries is also the cause of the increase in top income shares in the United Kingdom [to be checked as soon as possible using the Inland Revenue public files for 1985 and 2000]. Kopczuk and Saez (2003) and Atkinson and Gordon (200x) show that in both the United States and the United Kingdom, the increase in top wealth shares has been very small and almost negligible relative to the dramatic increase in top income shares. This suggests that, although income concentration has increased sharply in the United States and the United Kingdom, it has not yet translated into a significant increase in wealth concentration.

Following Piketty (2001, 2003), most authors have argued that the dramatic increase in tax progressivity that has taken place in the inter-war period in all the countries studied and which remained in place after World War II period at least until the recent decades, has been the main factor preventing top income and wealth shares from coming back to the very high levels observed at the

beginning of the century.¹ Indeed, with marginal income tax rates in excess of 60%, and sometimes reaching even 90% for very high incomes, a wealthy individual has to pay in taxes a very large fraction of its returns on capital, and accumulating or sustaining a fortune requires much higher saving rates.

However, because the effects of taxes on wealth concentration are a longterm process, it is nearly impossible to provide a rigorous proof of this hypothesis. The goal of the present paper is to provide a simple test of this hypothesis by examining the case of Switzerland, a country which did not experience the shocks of the two World Wars and hence never established a very progressive tax structure. For most of the century, and is still true today, the majority of income taxes in Switzerland are levied at the local level (county level and municipal level). These local income and wealth taxes present a relatively flat rate structure with low marginal tax rates. Today, the combined county and municipal income tax rates are around 25% in general, and the top local wealth tax rate are in general less than 0.5%. Switzerland has also imposed federal income and wealth taxes (starting during World War I in 1915). However, the top marginal income tax rates have been around 10% for most of the period and the top wealth tax rates have in general been less than 0.5%, except for a very few years during the World Wars. There is no federal inheritance and estate taxes and most Cantons do not levy inheritance taxes between spouses and between parents and children, or levy only a very modest tax of below 10% for bequests to children. Thus over the 20th century, the marginal tax rate in Switzerland on capital income of the very wealthy including federal and local income, wealth, and inheritance taxes has been very low relative to other OECD countries.

Therefore, if the development of progressive taxation is the main factor which drove and kept top income and wealth shares at a much lower level than in early part of century, then we should not observe such a drop in Switzerland, a country which never experienced sustained progressive taxation. In order to answer this question, the present paper uses Swiss income and wealth tax

¹ Earlier studies of income and wealth concentration in the United States (Kuznets, 1955 and Lampman, 1962) also mentioned the development of progressive taxation as a factor explaining

statistics to construct homogeneous series of income and wealth shares for various upper income and wealth groups within the top decile. As personal income and wealth taxes in Switzerland are based on family income (and not individual income), our series measure inequality among families (which may be different from inequality among individuals). Our top wealth shares series start in 1913 and cover a large number of years up to year 1957, the last year a federal wealth tax was implemented. Since 1957, we have to rely of wealth surveys compiled by the federal administration from Cantonal wealth tax statistics. Unfortunately, such surveys were only made about once every ten years, and the latest year available is 1997. Our top income share series start in 1933² and end in 1996, the latest year available. Because federal income taxes in Switzerland have been assessed every two years on the average income of the two preceding years, our top income shares series are bi-annual. In contrast to the wealth share series, the income series are quasi-continuous and cover almost all the years in the period 1933-1997.

Our results strongly support the tax explanation discussed above: top wealth and income shares in Switzerland fell during the shocks of the World Wars and the Great Depression (although less than in other countries) but, most importantly, top wealth and income shares fully recovered from those shocks in the post World War II period. As a result, by 1969, the top wealth shares are almost as high as they were before World War I, and top income shares are higher in the early 1970s than in the pre-World War II period. As we mentioned above, these results offer a striking contrast with the experiences of France, the United Kingdom, the United States, and Canada. Thus, although Switzerland had relatively less income and wealth concentration in the early part of the century than those countries, by the 1960s, Switzerland displays significantly more income and especially wealth concentration than other countries. Interestingly, Switzerland does display a reduction in income and wealth concentration since

the decline of U.S. income and wealth concentration in the first half of the 20th century.

² Before 1933, Switzerland imposed federal income taxes but those taxes were based on labor income only and excluded capital income. As a result, these income tax statistics cannot be

the 1970s, suggesting that non-tax factors such as the aging of the population and the development of pensions might have reduced wealth concentration.

[ADD PARAGRAPH ON AVOIDANCE FROM FOREIGNERS USING SWITZERLAND BANK ACCOUNTS]

The paper is organized as follows. Section 2 describes our data sources and outlines our estimation methods. In Section 3, we present and analyze the trends in top income shares since 1933. Section 4 presents the evolution of top wealth shares since 1913. Section 5 discusses the evidence on capital income earned in Switzerland by non-residents. Finally, Section 6 offers a brief conclusion. All series and complete technical details about our methodology are gathered in appendices.

2. Data and Methodology

In this section, we describe briefly the data we use and the broad steps of our estimation methodology. Readers interested in the complete details of our methods are referred to the extensive appendices at the end of the paper.

3. Top Income Shares

4. Top Wealth Shares

5. Foreign Capital Income and Foreigners in Switzerland

6. Conclusion

APPENDIX

A. Income and Wealth Federal Taxation and Statistical Sources

B. Total Number of Tax Units and Total Income

C. Estimating Top Income Shares

D. Estimating Top Wealth Shares

E. Non-Residents and Impot Anticipe

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	Adult po			al Wealth	Inflation (11)				
		(1) (2)		(3) (4)					
	Population	Tax Units	Total Income	Average Income	CPI				
	(aged 20+)		(Millions Fr.)	per tax unit	(2000 base)				
	('000s)	('000s)		(2000 Fr.)					
	(1)	(2)	(3)	(4)	(5)				
1901	1,971	1,431	24,214	16,926	8.848				
1902	1,997	1,447	24,611	17,006	8.848				
1902	2,022	1,464	24,989	17,071	8.955				
1904	2,022	1,481	25,359	17,129	8.955				
1904	2,047	1,497	26,134	17,456	9.061				
1905	2,072	1,514	26,073	17,224	9.275				
1900	2,123	1,530	26,417	17,261	9.701				
1907	2,123	1,530	26,761	17,297	9.914				
1908			27,091		10.021				
	2,173	1,564		17,324					
1910	2,198	1,580	27,407	17,342	10.234				
1911	2,224	1,597	27,744	17,372	10.554				
1912	2,242	1,611	28,054	17,409	10.767				
1913	2,261	1,626	28,344	17,433	10.660				
1914	2,279	1,640	28,128	17,148	10.660				
1915	2,298	1,655	28,506	17,227	11.845				
1916	2,317	1,669	28,418	17,025	13.706				
1917	2,335	1,684	25,278	15,015	17.091				
1918	2,354	1,698	25,238	14,863	21.490				
1919	2,373	1,712	26,976	15,753	23.352				
1920	2,391	1,727	28,667	16,601	23.774				
1921	2,410	1,741	27,960	16,057	20.872				
1922	2,440	1,761	30,688	17,426	17.841				
1923	2,469	1,781	32,386	18,185	17.131				
1924	2,499	1,801	33,484	18,594	17.690				
1925	2,528	1,821	35,802	19,664	17.580				
1926	2,558	1,841	37,385	20,312	17.063				
1927	2,587	1,860	39,151	21,044	16.734				
1928	2,616	1,880	41,003	21,807	16.828				
1929	2,646	1,900	43,121	22,694	16.812				
1930	2,675	1,920	43,487	22,649	16.551				
1931	2,705	1,940	42,110	21,708	15.694				
1932	2,730	1,955	40,154	20,538	14.529				
1933	2,755	1,970	42,638	21,641	13.787				
1934	2,780	1,986	42,817	21,565	13.573				
1935	2,806	2,001	42,790	21,387	13.390				
1936	2,831	2,016	41,885	20,776	13.662				
1937	2,856	2,031	44,419	21,868	14.174				
1938	2,881	2,046	44,382	21,687	14.320				
1939	2,906	2,062	44,339	21,507	14.519				
1940	2,931	2,077	43,943	21,158	15.887				
1941	2,956	2,092	42,924	20,517	18.139				
1942	2,982	2,107	41,465	19,676	20.161				
1943	3,014	2,125	42,528	20,018	21.216				
1944	3,047	2,142	43,569	20,343	21.650				
1945	3,080	2,159	46,148	21,376	21.796				
1946	3,113	2,176	50,697	23,298	21.781				
1947	3,145	2,193	54,426	24,816	22.752				
1948	3,178	2,210	54,905	24,840	23.450				
1949	3,211	2,210	53,443	23,992	23.199				
1949	3,244	2,225	57,108	25,441	22.819				
1950 1951	3,244 3,277	2,245	59,670	26,381	23.887				

Table 1: Reference	e Totals for Population.	Income, and Inflation i	n Switzerland, 1901-2002
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2001 5,540 3,872 101.367						
				211,010	01,201	
		0,010	0,012			
						101.001

Notes: All details in the appendices. Tax units defined as adult individuals (aged 20+) less half of married individuals. Population, adults, married individuals from decenal census from <u>Annuaire Statistique de la Suisse</u>, 1993 (p. 47). Year 2000 from http://www.statistik.admin.ch/stat_ch/ber01/fufr01.htm

Total income computed as total income on tax returns before deductions (Revenu Net) + 20% of average income imputed to non-filers for period 1971-on. From 1921-1970, total income defined as 75% of National Income. Total income in 1901-1920 imputed from Madison series on GDP per capita (pasted to 1921, 75% of National Income). Consumer Price Index from globalfindata.com (1) (average of maximum and mininum value for each year).

	Aggregate Series						Top groups shares							Intermediate groups shares					
	Consumer Price Index	Number of Tax Units ('000s)	Total Real Income (millions Fr.)	Real Income per family (2000 Fr.)	% Tax Units Covered in statistics	10%	5%	1%	0.5%	0.10%	0.01%	10-5%	5-1%	1-0.5%	0.5-0.1%	0.1-0.01%	0.01%		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)		
1933	13.787	1,986	42,638	21,475	13.7	31.16	21.92	9.98	7.19	3.27	0.94	9.24	11.94	2.79	3.92	2.33	0.94		
1934-35	13.573	2,008	42,515	21,169	13.2	30.92	21.59	9.69	6.94	3.14	0.91	9.33	11.90	2.75	3.80	2.23	0.91		
1936-37	13.662	2,039	43,984	21,573	13.3	30.47	21.46	9.94	7.21	3.35	0.98	9.01	11.52	2.73	3.86	2.37	0.98		
1939-40	14.519	2,085	46,212	22,169	32.5	32.94	23.77	11.78	8.78	4.36	1.52	9.17	11.99	3.00	4.42	2.84	1.52		
1943-44	21.216	2,150	43,494	20,227	53.0	32.59	22.70	10.54	7.67	3.71	1.43	9.89	12.17	2.87	3.96	2.29	1.43		
1945-46	21.796	2,185	48,404	22,157	62.6	33.24	23.36	10.49	7.50	3.44	1.10	9.89	12.87	2.98	4.06	2.34	1.10		
1947-48	22.752	2,219	55,507	25,015	54.2	31.58	21.95	10.01	7.15	3.26	1.03	9.63	11.94	2.86	3.89	2.23	1.03		
1949-50	23.199	2,253	54,808	24,324	42.7	31.34	21.71	9.88	7.08	3.22	0.96	9.63	11.84	2.80	3.86	2.26	0.96		
1951-52	23.887	2,299	61,448	26,726	47.5	31.54	21.84	9.91	7.13	3.36	1.07	9.70	11.93	2.78	3.78	2.29	1.07		
1953-54	24.310	2,349	66,984	28,515	48.8	30.60	21.36	9.78	7.03	3.29	1.05	9.24	11.58	2.75	3.74	2.25	1.05		
1955-56	24.740	2,399	75,066	31,291	48.8	30.66	21.38	9.78	7.01	3.23	0.97	9.28	11.59	2.77	3.78	2.27	0.97		
1957-58	25.607	2,449	81,297	33,199	38.2	30.99	21.79	10.11	7.24	3.31	1.03	9.20	11.69	2.87	3.93	2.28	1.03		
1959-60	25.908	2,499	91,022	36,429	46.5	31.47	22.35	10.54	7.58	3.51	1.09	9.11	11.82	2.95	4.08	2.42	1.09		
1961-62	26.904	2,564	107,103	41,773	48.9	31.56	22.70	10.87	7.85	3.62	1.06	8.87	11.83	3.02	4.23	2.56	1.06		
1963-64	28.882	2,634	120,331	45,677	48.0	31.72	22.83	10.91	7.88	3.64	1.12	8.90	11.92	3.04	4.24	2.52	1.12		
1965-66	30.824	2,705	132,118	48,845	55.7	31.60	22.60	10.67	7.67	3.50	1.05	9.01	11.92	3.00	4.17	2.45	1.05		
1967-68	33.593	2,775	138,905	50,051	63.1	32.29	23.01	10.86	7.81	3.58	1.08	9.27	12.15	3.05	4.23	2.50	1.08		
1969-70	35.326	2,846	156,414	54,965	62.8	32.70	23.32	11.00	7.92	3.66	1.14	9.38	12.32	3.09	4.26	2.52	1.14		
1971-72	39.017	2,903	180,234	62,089	69.0	32.49	23.03	10.81	7.79	3.62	1.14	9.47	12.22	3.02	4.16	2.48	1.14		
1973-74	45.703	2,956	187,907	63,578	76.0	30.96	21.51	9.77	6.98	3.20	1.04	9.45	11.75	2.79	3.78	2.16	1.04		
1975-76	52.714	3,008	174,529	58,017	78.9	30.29	20.47	8.79	6.15	2.68	0.83	9.82	11.68	2.64	3.47	1.85	0.83		
1977-78	54.447	3,061	181,723	59,369	81.4	29.93	20.12	8.49	5.90	2.56	0.79	9.80	11.63	2.59	3.34	1.77	0.79		
1979-80	56.666	3,114	191,423	61,479	83.6	29.89	20.06	8.40	5.82	2.51	0.76	9.83	11.66	2.58	3.31	1.75	0.76		
1981-82	62.835	3,207	198,122	61,770	86.9	29.87	20.02	8.40	5.85	2.58	0.84	9.85	11.62	2.55	3.27	1.75	0.84		
1983-84	68.752	3,315	201,365	60,746	87.5	29.88	20.00	8.39	5.85	2.62	0.86	9.88	11.61	2.54	3.23	1.76	0.86		
1985-86	73.057	3,422	203,694	59,519	90.7	30.35	20.64	9.05	6.48	3.16	1.25	9.72	11.59	2.57	3.32	1.91	1.25		
1987-88	74.809	3,530	215,591	61,078	88.1	30.78	20.93	9.07	6.41	2.94	0.96	9.85	11.86	2.67	3.47	1.97	0.96		
1989-90	78.895	3,637	231,711	63,705	88.6	30.78	20.96	9.22	6.59	3.15	1.15	9.81	11.74	2.63	3.44	2.01	1.15		
1991-92	87.533	3,695	233,597	63,215	86.4	29.99	20.14	8.60	6.09	2.85	1.00	9.85	11.54	2.51	3.24	1.85	1.00		
1993-94	93.743	3,737	227,639	60,916	90.8	29.65	19.87	8.42	5.87	2.54	0.77	9.78	11.45	2.55	3.33	1.77	0.77		
1995-96	96.384	3,779	218,126	57,728	84.0	29.22	19.27	7.76	5.28	2.17	0.61	9.95	11.51	2.47	3.12	1.56	0.61		

Table 2: Top Income Shares in Switzerland, 1933-1995/96

Notes: Computations by authors based on wealth tax return statistics. See Appendix for details.

Consumer Price Index from globalfindata.com (mean from Table 1 over corresponding years). Total income based on means from Table 1.

Percentage of tax units covered by tax statistics reported on column (5).

Columns (6) to (17) display the top of total income accruing to each upper income group for corresponding years.

Top 0.1% and above estimates for years 1993-94, 1995-96 not reliable because top bracket contains more than 1% of tax units.

		Aggregate	e Wealth			s	Intermediate groups shares									
	Consumer Price Index (1)	Total Real Wealth (millions Fr.) (2)	Real wealth per family (2000 Fr.) (3)	% Wealth Covered in statistics (4)	10% (5)	5% (6)	1% (7)	0.5% (8)	0.10% (9)	0.01%	10-5% (11)	5-1% (12)	1-0.5% (13)	0.5-0.1% (14)	0.1-0.01% (15)	0.01% (16)
1913	10.660	123,457	75,264	100.0	84.81	73.57	46.65	37.15	19.13	5.43	11.24	26.92	9.50	18.03	13.70	5.43
1915	11.845	138,587	83.028	90.6	80.46	68.62	42.25	33.56	17.68	5.50	11.84	26.37	8.69	15.89	12.18	5.50
1919	23.351	77,263	44.743	100.0	76.25	62.29	36.42	28.33	14.25	4.12	13.96	25.88	8.08	14.09	10.13	4.12
1921	22.538	90,548	51,415	85.8	77.02	63.98	38.05	29.44	14.56	4.26	13.04	25.93	8.61	14.88	10.29	4.26
1925	17.732	116,670	63,388	87.3	75.83	64.55	40.68	32.48	16.49	5.09	11.28	23.87	8.19	15.99	11.41	5.09
1929	16.854	133,760	69,667	88.3	76.71	66.50	41.95	32.93	17.14	5.96	10.20	24.56	9.02	15.79	11.18	5.96
1934	13.698	147,470	73,707	62.7	80.45	67.96	40.43	31.16	15.49	4.57	12.48	27.53	9.27	15.67	10.92	4.57
1936	13.552	142,804	70,305	61.8	80.85	68.14	40.10	30.81	15.24	4.42	12.71	28.04	9.29	15.56	10.82	4.42
1938	14.399	136,655	66,284	62.4	86.39	73.30	44.43	34.57	17.54	5.20	13.09	28.87	9.86	17.02	12.35	5.20
1940	15.067	156,472	74,791	100.0	80.84	67.58	40.39	31.20	15.73	4.82	13.26	27.19	9.19	15.47	10.91	4.82
1941	17.021	130,795	62,066	89.3	81.91	69.31	41.45	31.85	15.90	5.22	12.61	27.85	9.61	15.95	10.68	5.22
1945	21.786	145,357	66,800	93.3	78.25	64.31	37.14	28.40	14.35	4.92	13.94	27.17	8.74	14.05	9.44	4.92
1947	22.183	153,294	69,353	93.5	79.04	65.38	38.30	29.47	15.08	5.49	13.66	27.08	8.83	14.39	9.59	5.49
1949	23.378	155,046	69,072	94.0	78.77	65.06	37.82	29.10	14.99	5.22	13.71	27.23	8.73	14.11	9.77	5.22
1951	23.263	157,976	69,082	80.9	79.89	66.22	38.97	30.16	15.65	5.47	13.67	27.25	8.80	14.52	10.18	5.47
1953	24.353	164,779	70,520	81.4	79.85	66.63	39.99	31.23	16.46	5.78	13.22	26.64	8.76	14.77	10.68	5.78
1955	24.711	182,995	76,680	82.2	79.94	67.32	41.50	32.67	17.50	6.16	12.62	25.82	8.83	15.17	11.33	6.16
1957	25.385	202,305	83,037	83.8	79.90	67.35	41.85	33.05	17.89	6.36	12.55	25.50	8.80	15.16	11.52	6.36
1969	35.002	389,835	137,844	100.0	78.91	66.71	41.56	32.79	17.92	6.66	12.21	25.15	8.77	14.87	11.26	6.66
1981	61.142	508,318	159,822	100.0	69.58	56.63	33.04	25.56	13.45	5.18	12.96	23.59	7.48	12.11	8.27	5.18
1991	85.553	619,626	168,153	100.0	69.94	56.58	33.57	26.51	14.93	6.48	13.36	23.01	7.05	11.58	8.46	6.48
1997	97.980	765,423	200,913	100.0	71.31	57.98	34.80	27.64	15.98	7.29	13.33	23.19	7.16	11.66	8.69	7.29

Table 3: Top Wealth Shares in Switzerland, 1913-1997

Notes: Computations by authors based on wealth tax return statistics. See Appendix for details.

Number of tax units define fractiles same as in Table 1.

Consumer Price Index from globalfindata.com (Jan 1st). Total real wealth extrapolated using years with complete coverage.

Wealth covered by tax statistics reported on column (4).

Columns (5) to (16) display the top of total net-worth accruing to each upper wealth group on January 1st of each year.

Top 0.01% estimates for years 1981, 1991, and 1997 not reliable because top bracket contains more than .1% of tax units.

		te Wealth		Fractio	n Specia	l in Top	groups	Fraction Special in intermediate groups						
	number of Special taxpayers	Fraction Special (percent)	10%	5%	1%	0.5%	0.10%	0.01%	10-5%	5-1%	1-0.5%	0.5-0.1%	0.1-0.01%	0.01%
	(1)	(2)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
1949-50	4,644	0.21												
1951-52	5,234	0.23												
1953-54	6,427	0.27												
1955-56	6,964	0.29												
1957-58	8,187	0.33	2.34	3.01	4.61	5.26	6.41	8.11	0.64	1.54	2.93	4.27	5.64	8.11
1959-60		0.00	2.42	3.08	4.7	5.23	6.52	9.65	0.69	1.56	3.31	4.1	5.11	9.65
1961-62		0.00	2.54	3.18	4.61	4.97	5.79	8.06	0.8	1.81	3.65	4.26	4.85	8.06
1963-64		0.00												
1965-66		0.00	3.28	4.08	5.93	6.36	7.66	8.85	1.14	2.34	4.81	5.25	7.15	8.85
1967-68		0.00	3.73	4.56	6.28	6.6	8.3	11.5	1.55	2.95	5.45	5.14	6.91	11.5
1969-70		0.00	4.44	5.43	7.47	8.08	10.32	12.78	1.86	3.54	5.88	6.13	9.2	12.78
1971-72		0.00	4.85	5.94	8.13	8.94	11.95	14.19	2.2	4	6.04	6.32	10.92	14.19
1973-74		0.00	5.23	6.49	9.21	10.28	13.25	15.64	2.36	4.23	6.54	7.76	12.09	15.64
1975-76		0.00	5.4	6.86	10.19	11.41	15.15	20.38	2.36	4.36	7.35	8.52	12.81	20.38
1977-78		0.00	5.18	6.59	9.85	11.1	14.51	19.52	2.29	4.21	7.01	8.49	12.28	19.5
1979-80		0.00	5.57	7.08	10.58	12.08	16.42	22.03	2.49	4.56	7.2	8.79	13.98	22.03
1981-82		0.00	5.86	7.5	11.18	12.69	16.58	19.8	2.53	4.84	7.72	9.62	15.04	19.8
1983-84		0.00	5.56	7.08	10.89	12.55	16.46	20.1	2.48	4.33	7.06	9.38	14.69	20.1
1985-86		0.00	5.89	7.48	11.45	13.21	17.13	19.9	2.51	4.38	7.01	9.48	15.31	19.9
1987-88		0.00	4.1	5.33	8.46	9.84	12.86	14.41	1.49	2.94	5.14	7.28	12.1	14.4
1989-90		0.00	5.99	7.69	11.75	13.48	16.9	18.39	2.36	4.5	7.41	10.34	16.05	18.39
1991-92 1993-94 1995-96	88,072	2.38	6.35	8.18	12.35	14.11	18.06	20.07	2.61	5.07	8.08	10.63	16.98	20.0

Table 4: Fraction of non-residents and residents with income abroad in top income groups in Switzerland, 1913-1997

Notes: Computations by authors based on wealth tax return statistics. See Appendix for details.

Special taxpayers defined as Cas Speciaux (autres): residents with income abroad and non-residents with income in Switzerland.

Column (1) report the total number of special taxpayers and column (2) the fraction Special (relative to all tax units, col. (2) in Table 2).

Columns (3) to (13) report the fraction of Special taxpayers (income weighted) in all top income groups.

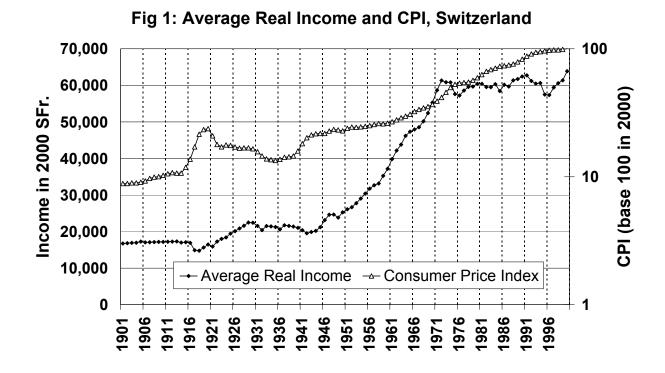
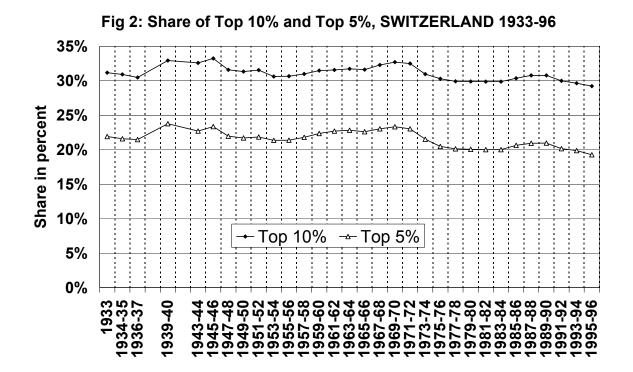


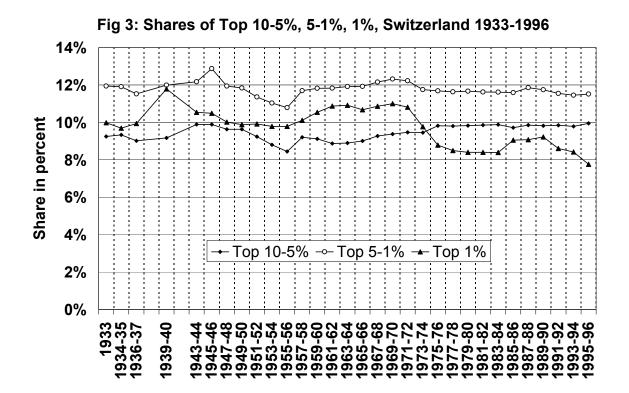
FIGURE 1 Average Real Income and Consumer Price Index in Switzerland, 1901-2000

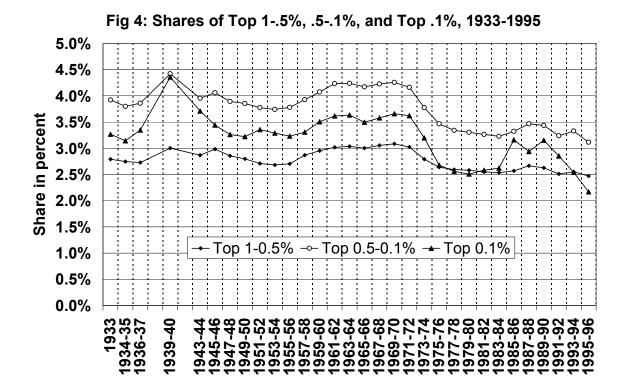
Note: No real growth from 1901 to 1914, recession and big inflation from 1915 to 1920, growth in the 1920s Mild but long depression: no growth from 1930 to 1944, inflation from 1939 to 1943 Fast post-WWII growth from 1943 to 1972 (accelerating inflation is early 1970s)

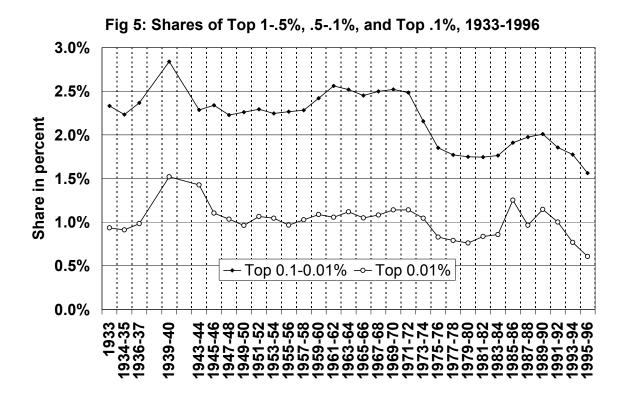
Hardly any growth since 1972

Real income per tax unit multiplied by 3.7 between 1901 and 2000, small relative to France, US, Canada (factor 5) but Switzerland much richer than all those countries in 1901 (only slightly richer in 2000)









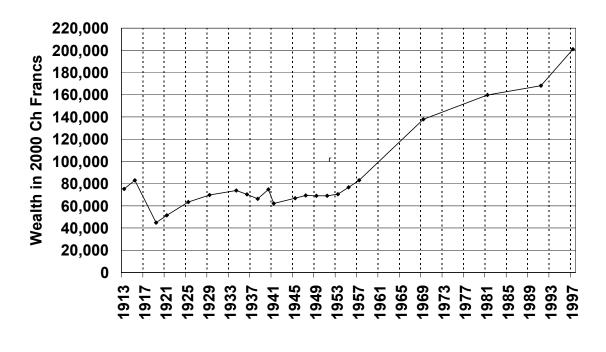


Fig 6: Average Real Wealth, SWITZERLAND 1913-1997

FIGURE 6 Average Real Wealth in Switzerland, 1913-1997

These are based on the denominator and might not be completely accurate: fall from 1915 to 1919 seems too big However, CPI multiplied by 2 from 1915 to 1920 so nominal wealth did not fall and bonds must have plunged in real

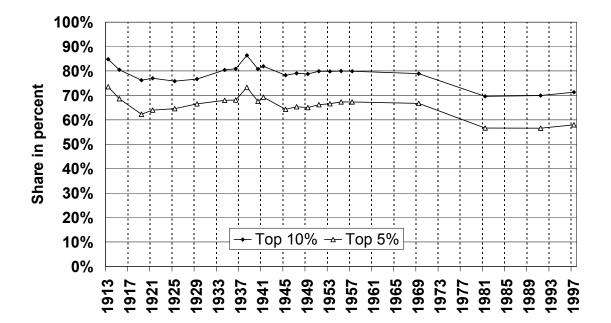


Fig 7: Wealth Shares of Top 5% and 10%, 1913-1997

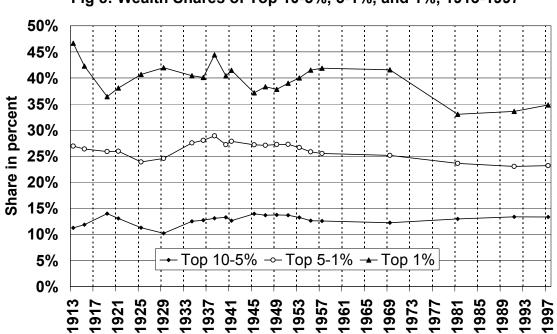
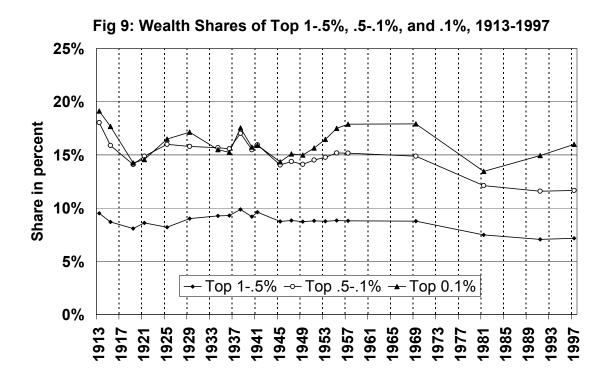
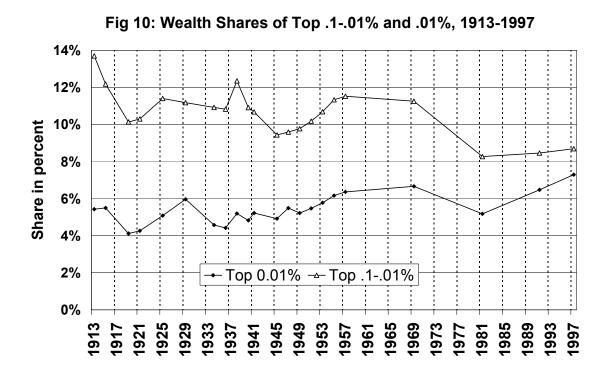


Fig 8: Wealth Shares of Top 10-5%, 5-1%, and 1%, 1913-1997





Careful here: there are not enough brackets in 1925, 1929, 1941, 1947, 1981, 1991, and 1997 to get good approximation f For 1925 and 1929, tabulations have been published but we don't have them yet

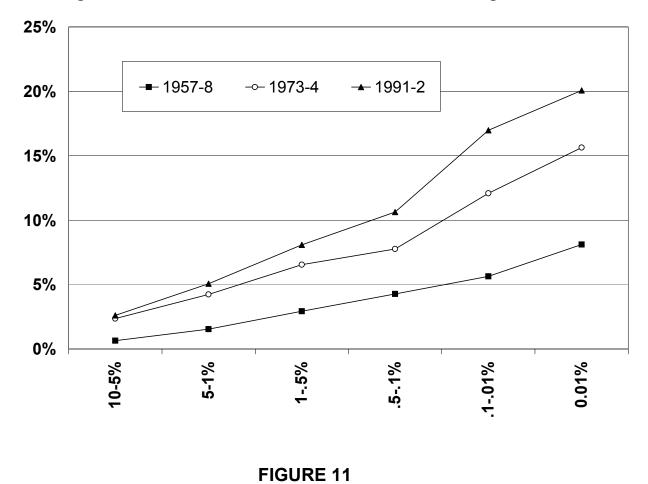


Fig 11: Share of Non-Residents or Residents with Foreign Income

Capital income does not include capital gains. Source: Table 3, rows 1946 and 2000.

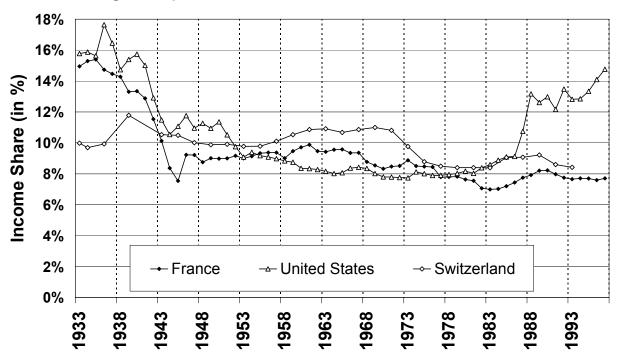


Fig 12: Top 1% Income Shares in US, France, Switzerland

FIGURE 12 The Top 1% Income Share in the United States, the United Kingdom, and Switzerland

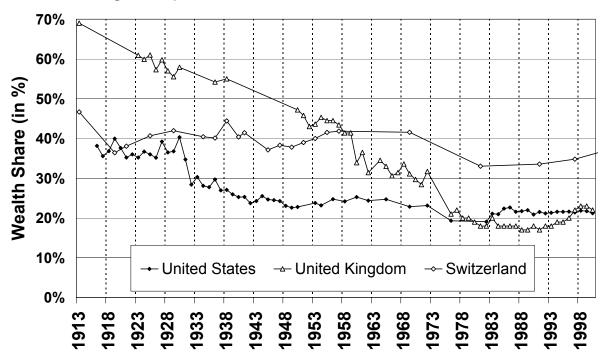


Fig 13: Top 1% Wealth Shares in US, UK, and Switzerland

FIGURE 13

The Top 1% Wealth Share in the United States, the United Kingdom, and Switzerland

Sources: United States, Kopczuk and Saez (2003), Table B1, column Top 1%

United Kingdom: 1913-1972, Atkinson and Harrison (1978), p. 159, Column Top 1%, England and Wales.

1976-2000: Inland Revenue Personal Wealth (Top 1% Marketable net worth series for adult population,

Table 13.5) http://www.inlandrevenue.gov.uk/stats/personal_wealth/dopw_t05_1.htm

Series 1913-1989 reproduced in Lindert (2000), Table 2, pp. 181-182.

Switzerland: Table 3, Top 1% Wealth share

Note: US and UK shares based on individual level while Swiss shares based on the family level