# Tax Evasion and Inequality Online Appendix* 

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July 31, 2018


#### Abstract

This Appendix supplements our paper "Tax Evasion and Inequality."


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This Appendix supplements our paper "Tax Evasion and Inequality." It is organized as follows. Sections A to J contains detailed description of the data we use and present robustness checks. Each of these sections is supplemented by an Excel file containing a large number of supplementary results, all posted online at http://gabriel-zucman.eu/leaks. Section K provides extension of the model of tax evasion presented in the main paper and omitted proofs.

## A Household Wealth and its Distribution in Scandinavia

In this Section we describe how we compute homogenous estimates of household wealth and its distribution in Scandinavia defined as the aggregate of Norway, Sweden, and Denmark. We start by laying out a number of general methodological principles that we apply in each of the three Scandinavian countries, before describing the way that we combine the three countries, and discussing the results. Country-specific methodological details and sources are discussed in Sections B (Norway), C (Sweden), and D (Denmark).

## A. 1 General methodological principles

## A.1.1 Definition of household wealth

We are interested in computing the distribution of total household wealth at market value, using the same concepts and definitions as those used by the World Wealth and Income Database (http://WID.world) so as to obtain wealth levels and shares for Scandinavia that are directly comparable to those estimated in the United States and other countries available on http: //WID.world. A general discussion of the methods involved is provided in Alvaredo et al. (2017).

The starting point involves constructing the aggregate amount of wealth, which we distribute to the entire adult population (and which we use when computing top shares). Following international standards codified in the System of National Accounts (United Nations, 2009), we include in wealth all the non-financial and financial assets over which ownership rights can be enforced and that provide economic benefits to their owners. This definition of wealth includes all funded pension wealth, but excludes all promises of future government transfers such as the present value of future Social Security income. As in other http://WID.world countries, we disregard human capital-which contrary to non-human wealth cannot be sold on markets-, the wealth of nonprofit institutions and of the government, ${ }^{1}$ consumer durables (about $10 \%$ of

[^1]household wealth), and valuables.

## A.1.2 Unit of observation

Our unit of analysis is the household, as in Saez and Zucman (2016). A household is either a single person aged 20 or above or a married couple, in both cases with children dependents if any. We define fractiles relative to the total number of households in the population, including those who do not have to pay any wealth tax. In 2006 (our benchmark year for the computation of our distributional tax gaps), there were 10.6 million households in Scandinavia, covering the full population of 19.2 million Scandinavian residents. The top $0.1 \%$ of the distribution, therefore, includes about 10,600 households, and the top $0.01 \%$ about 1,060 households. We have access to population-wide micro data for each of the three Scandinavian country (see below). Because children's assets are typically included with one of their parent's tax return, they are properly accounted for in our data.

## A. 2 Aggregate wealth and income in Scandinavia

Detailed statistics on aggregate income and wealth in Scandinavia and each of the Scandinavian country individually are presented in Appendix Tables A. 0 and A.1, and Appendix Figures A. 1 to A.15, see Online Appendix A data files. These figures show that Norway, Sweden, and Denmark are usually very similar in terms of their average income, average wealth, wealth composition, wealth distribution, and income distribution. The main difference is that Norway has a somewhat lower amount of aggregate private wealth (relative to national income), maybe because it has more public wealth (as it has a large sovereign wealth fund, financed by oil revenues). PPP-adjusted rates slightly reduce the weight of Norway (where the price level is relatively high) in the Scandinavian aggregate (e.g., Norway accounts for $24 \%$ of total Scandinavian wealth using market exchange rates, vs. $22 \%$ using PPP-adjusted rates in 2014 , see Appendix Tables A1d and A1e), but using PPP vs. market exchange rates does not significantly affect any of the main results of the paper.

## A. 3 The distribution of wealth in Scandinavia

To aggregate Norway, Sweden, and Denmark into a single Scandinavian "country", we use the generalized Pareto-interpolation techniques recently developed by Blanchet, Fournier et Piketty (2017). We proceed in two steps. First, we collapse the population-wide files or each raises complex conceptual questions that we leave for future research.

Scandinavian countries by generalized percentiles, or g-percentiles. There are 127 g-percentiles: 99 for the bottom 99 percentiles, 9 for the bottom 9 tenth-of-percentiles of the top percentile, 9 for the bottom 9 one-hundredth-of-percentiles of the top tenth-of- percentile, and 10 for the 10 one-thousandth-of-percentile of the top one-hundredth- of-percentile. For each g-percentile, we compute the minimum wealth, average wealth, and number of households. Wealth is converted to US\$ using current market exchange rates.

Second, we generate a synthetic Scandinavian population-wide file using the g-pinter tool available at http://wid.world/gpinter/, and the option "interpolate and merge countries". In practice, this tool first generates country-specific full-size datasets using the generalized Pareto-interpolation techniques of Blanchet, Fournier and Piketty (2017), and then appends the resulting files. We refer to http://wid.world/gpinter/ and to Blanchet, Fournier and Piketty (2017) for complete methodological details.

Detailed statistics for the distribution of wealth in Scandinavia in 2006 are presented in Appendix Table J. 8 and J.9, see Online Appendix J. Scandinavia is much more equal than the United States: strikingly, although both economies have the same average wealth per adult ( $\$ 290,000$ in 2014), the bottom $90 \%$ is twice richer in Scandinavia, while the top $0.1 \%$ appears twice poorer. These estimates are the best we can form on the basis of the information available to the tax and statistical authorities; they disregard the assets hidden from the authorities. One of our goals in this article is to investigate how tax evasion affects these results, which we do in Section 9 of the main paper.

## B Wealth in Norway: Data sources and Methods

## B. 1 Methodological issues and sources specific to Norway

## B.1.1 Macroeconomic totals

Total household wealth The Norwegian statistical institute, SSB, publishes comprehensive financial balance sheets, including a complete financial balance sheet for the household sector. It has recently started to publish estimates of households' non-financial assets (mainly housing). We combine these data to create the full balance sheet of Norwegian households over the 19802015 period in Appendix Table B.1; see Online Appendix B.

Two sources are used by SSB to estimate households' portfolio wealth in the financial accounts: the central securities depositories (VSP) and custodians. ${ }^{2}$ Portfolio wealth data are

[^2]based on security-by-security and holder-by-holder reporting. VSP is a for-profit public company that was established by law as Norway's sole central securities depository in 1986. It is the ultimate book-keeper for all domestic securities, plus the foreign securities which are listed on Oslo's stock exchange (which account for only a relatively small fraction of all foreign securities held by domestic residents). VSP, however, misses the foreign securities that are not listed in Norway, including all foreign mutual funds. VSP captures a small amount of unlisted domestic equities. It also captures equity certificates (that is, shares issued by savings banks and mutual insurance companies ${ }^{3}$ ). The VSP data are tabulated in very detailed online statistics (by sector of owner $\times$ sector of issue $\times$ instrument). ${ }^{4}$ One key characteristic of VSP is that all resident investors are registered on individual accounts, not nominee accounts, so that VSP can trace ownership of all domestic securities at the individual level (except those held by foreigners, which are registered on nominee accounts). By law, all resident holders of shares in both public limited and limited domestic companies are required to keep their shares in individual accounts; the same was true for bonds up to 2003 (and is still true in practice today).

Custodians capture the foreign securities missed by VSP but held domestically. However, there are two main issues. First, custodians do not adequately capture the foreign mutual fund shares held by households and small non-financial corporations, because it is possible to invest directly in those funds (i.e., without using a domestic custodian). ${ }^{5}$. Second, they miss all the portfolios held with offshore custodian banks (Zucman, 2013). For these reasons, the financial wealth of Norwegian households as published by SSB is under-estimated.

Since 2010, estimates of the stock of primary and secondary residences at market values are published. The market value of houses is determined as follows: it is computed as size of the property times an imputed rental value per square meter. The rental value is assessed as a function of property type and geographical zone, building on observed data on rented business property. The tax payer can assess this himself through an online calculator: ${ }^{6}$

Figure B. 1 shows the evolution of the ratio of household wealth (excluding offshore assets) to national income since 1995. In 2015, the household wealth to national income ratio reaches $266 \%$, a relatively low level in international perspective. Wealth to income ratios constructed using the same methodology are published in the World Wealth and Income Database (http:

[^3]//WID.world) for about 20 countries. Among those, Norway is one of the countries with the lowest ratio, alongside Mexico ( $237 \%$ in 2009) South Africa ( $255 \%$ in 2014) , and Finland ( $323 \%$ in 2014). For comparison, in the United States the household wealth/income ratio was $430 \%$ in 2013. Norway stands out as having a particularly high level of household debt (about $100 \%$ of national income, a level comparable to that of the United States) and relatively little privatelyowned financial assets. The main explanation for the relatively low level of private wealth is that Norway owns a great deal of public wealth; see Figure B.2. Most funded pension wealth is publicly owned (in contrast to other Scandinavian countries where it is privately owned). National wealth-the sum of private and public wealth-reaches $664 \%$ of national income in 2015, a high level in international perspectives.

## B.1.2 Wealth distribution

Because Norway has a wealth tax that applies to all forms of non-financial and financial assets (except pensions), the authorities collect detailed data on wealth for all residents. For the purpose of the wealth tax, some assets are not valued at current market prices but at tax value. We have taken care to systematically express all forms of wealth at market value. In most cases this is straightforward, because tax values are by law defined as a fixed fraction of market value. Fixed-income claims are taxed at $100 \%$ of their market value. Listed equities are taxed at $100 \%$ of their market value, except in 2005,2006 , and 2007 when they were taxed at $65 \%, 80 \%$, and $85 \%$ of their market value respectively. Unlisted equities are taxed at a fixed fraction of the firms' total assets. Since 2010, primary and secondary homes have been taxed at $25 \%$ of their market value. Leisures homes were taxed at $40 \%$ of their market value from 2010 to 2012, 50\% in 2013, and $60 \%$ in 2014. The market value of other non-financial assets, such as business assets, farm land, and forest can similarly be estimated using tax data and applying the proper tax/market ratios.

The main difficulty involves housing before 2010, when the tax value of real estate was based on the original cost price of the asset, with year-to-year adjustments to reflect changes in market prices. To infer market values then, we rely on information published by Statistics Norway on tax/market ratios for real estate at the local level and by type of house. These ratios were around 0.2 before 2010. Detailed results on Norway's wealth distribution are reported in Appendix Tables B.2, B.3, B.4, and B.5; see Online Appendix B.

## B. 2 Norwegian micro data sources

Norwegian micro data were delivered by the Norwegian Tax Administration (SKD) and Statistics Norway (SSB). ${ }^{7}$ All data were anonymized upon delivery; the personal identifiers are replaced by constructed serial numbers and the variables are rounded, grouped, merged to summary variables, or transformed to categorical variables in order to ensure anonymity in the data. The Norwegian micro data are stored separately and were not merged to the Swedish or Danish micro data. All our final datasets and results can be reproduced by other researchers who acquire access to these data, using the programs available at http://gabriel-zucman.eu/leaks.

Appendix Table B. 6 lists all the data sources used for constructing the final micro-data and which institution delivered them. The names of the datasets are found in the relevant do-files listed below. The annual datasets with individual and household characteristics used in the analysis are constructed in the following steps, where each step corresponds to a separate do-file.

STEP 1: constructs individual-level dataset with voluntary disclosure related variables. See makedata0_disclosers.do.

STEP 2: constructs annual datasets at the individual-level with socio-demographic and tax-related variables. See makedata1_individual_characteristics.do.

STEP 3: constructs annual datasets at the individual-level with income and tax related variables from the tax return. See makedata2_income.do.

STEP 4: constructs annual datasets at the individual-level with wealth and tax related variables from the tax return. Steps up tax assessed wealth to imputed market valued wealth by using national accounts information. See makedata2_wealth.do.

STEP 5: constructs annual datasets with firm-level information (i.e. sales, profits, employees). See makedata3_firm_info.do.

STEP 6: constructs firm-individual-level ownership shares that indicates each individuals total ownership in total 11 layers of ownership, through up to 10 layers of indirect ownership, and also indicates individual CEOs and board members in each firm. See makedata4_ownership.do.

STEP 7: add firm level info from STEP 3 to individual majority owners by STEP 6: ownership info, creates individual-level dataset with dummies indicating firm level tax avoidance and evasion. See makedata6_indlevelfirminfo.do.

STEP 8: merges the firm-level datasets created under STEP 4 and STEP 7: on the firm-

[^4]individual level dataset created under STEP 6. For each individual-firm pair, we observe not only the ownership share and roles of the individual in the firm, but also the firms transfers, profits and other outcomes. On this basis, transfers and other firm outcomes are allocated to individuals. See makedata7_profits_owners.do.

STEP 9: merges the individual-level datasets created in STEPS 1-4, 8-9, into a master data set. It then collapses the dataset created under STEP 6 at the individual-level and merges this information on the master dataset. These annual individual level datasets are collapsed to annual household level datasets. See do_smallfiles.do.

## B. 3 Norwegian data construction

The following programs construct the base individual and firm level data sets.

Program makedata0_disclosers.do This program cleans the raw voluntary disclosure data for multiple observations per case and generates one new individual-level variables with information on disclosed amounts, countries, timing, and most recent case status for individuals who disclosed during the period 2007-2016. The program also creates a dummy for ever being a discloser. This information is merged to family data to generate variables for parents ever being disclosers.

Program makedata1_individual_characteristics.do This program constructs annual datasets with individual level socio-economic variables from various sources for the years 2001-2013: emigration, immigration, county, education, number children, marital status, sex, household number, benefiting from a tax reduction under the wealth tax. This program also imputes individual age from the raw rounded age variable. For some variables the personal characteristics only exist from 2002 and we thus use those from 2002 also for 2001.

Program makedata2_income.do This program cleans the annual individual data income tax statements and constructs consistent income variables across the years 2001-2013. Program makedata2_wealth.do This program cleans the annual individual tax statement data sets and constructs consistent wealth variables across the years 2001-2013, and corrects final wealth variables for voluntary disclosers (from makedata0_disclosers.do) whose cases have been closed. This program also steps up tax value of wealth to imputed market value of individual wealth variables to match the macro totals for wealth from the national accounts.

Program makedata3_firm_info.do This program cleans firm level raw data from various sources and constructs one firm level data set with information on income, profits, and penalty tax (2000-2012), various firm characteristics, such as sector, whether holding company, foreign relations, county, number employees with positive wage (2002-2013), share capital, distributed dividends, and total shares (2004-2013). It also generates a variable identifying firms that maximized dividends payout up to the legal limit in 2005, prior to the announced introduction of $28 \%$ dividend tax in 2006 .

Program makedata4_ownership.do This program constructs direct ownership shares for all identifiable shareholders, both individuals and firms, for the years 2004-2013, as well as number of direct personal and firm owners in a firm. Next, this direct ownership info is combined to attribute corporate shareholders ownership shares to the ultimate individual owner through 10 indirect layers, generating total ownership of individual shareholders in a firm through 11 layers of ownership. It is not possible to attribute $100 \%$ of shares to individuals, as we cut out the very small ownership shares when imputing the indirect ownership shares and as also a considerable part of shares is held by institutions, public sector, and foreigners. This program also adds info on CEO and board members and constructs variables for CEO or board members working in the firm.

Program makedata6_indlevelfirminfo.do This program attributes firm level variables constructed in makedata3_firm_info.do to majority individual owners for the years 2004-2013, by utilizing the ultimate ownership shares constructed in makedata4_ownership.do. This program also constructs variables for individuals' tax avoidance through the firm.

Program makedata7_profits_owners.do This program follows the approach taken by Alstadsæter, Jacob, Kopczuk, and Telle (2016) to allocate retained profits in the firm to the ultimate individual owner for the years 2004-2012. This programs makes crude measure of profits net of dividends in order not to double count profits in the chain of firms, as one firm's dividend payments is another firms income and affects profits, and then just taking the sum of profits across all firms in the chain could potentially hugely overestimate true indirectly owned profits. The programs then allocates retained earnings and operating profits of nonpublicly traded corporations to ultimate individual shareholder utilizing the ownership shares constructed in makedata4_ownership.do.

Program do_smallfiles.do This program is the master-do file for data creation and is the console for running the makedata programs in sequence and merging the info together to one main individual level data set by year, for the years 2001-2013. This program also makes a household ID based on family info and collapses the individuals data sets to annual household level data sets. The program makedata8_disclosedwealth.do construct measures of household level hidden wealth for 2007 based on total disclosed wealth, which then are added to the annual household data sets in order to generate variables for total household wealth at market value, including disclosed wealth.

## C Wealth in Sweden: Data Sources and Methods

## C. 1 Swedish data sources

Swedish micro data are delivered by the Swedish Tax Administration (SKV) and Statistics Sweden (SCB). All data are anonymized upon delivery, where the personal identifiers are replaced by constructed serial. The Swedish micro data are stored separately at SCBs online delivery service for research data, MONA, and not merged to the Norwegian or Danish micro data.

All our final datasets and results can be reproduced by other researchers who acquire access to these data, using the programs posted online at http://gabriel-zucman.eu/leaks. Table C. 5 lists all the data sources used for constructing the final micro data and which institution delivered them. The exact names of the datasets are found in the relevant do-files listed below. The annual datasets with individual and household characteristics used in the analysis are constructed in the following steps, where each step corresponds to a separate do-file.

STEP 1 constructs individual-level dataset with info on audits related to hidden offshore wealth. See sw_makedata0_audits.do

STEP 2 constructs annual datasets at the individual-level with socio-demographic variables. See sw_makedata1_individual_characteristics.do

STEP 3 constructs annual datasets at the individual-level with income related variables from the tax return. See sw_makedata2_income.do

STEP 4 constructs annual datasets at the individual-level with wealth related variables from the tax return. Steps up tax assessed wealth to imputed market valued wealth by using national accounts information. See sw_makedata2_wealth.do

STEP 5 merges the individual-level datasets created in STEPS 1-4 into a master individual level data set. It then collapses to annual household level datasets. See sw_smallfiles.do

## C. 2 Swedish data construction

Program sw_makedata0_audits.do This program cleans the raw audit data for multiple observations per case and generates one variable per individual with information the most recent case status, payable taxes and penalty taxes based on the audit, tax year and number of years, and reason for audit. For some cases, both a firm ID and individual ID is registered, and we then use the individual ID as the unit of observation. Also construct a dummy indicating whether being on the Panama Papers list is the reason for the audit. Define caught offshore tax evaders as individuals with case closed and a positive payable tax in response to the audit.

Program sw_makedata1_individual_characteristics.do This program constructs annual datasets with individual level socio-economic variables for the years 2001-2015: emigration, immigration, county, continent background, education, number children, marital status, sex, age, household number.

Program sw_makedata2_income.do This program cleans the annual individual data income tax statements and constructs consistent income variables across the years 2001-2013.

Program sw_makedata2_wealth.do This program cleans the annual individual tax statement data sets and constructs consistent wealth variables across the years 1999-2007 and steps up tax value of wealth to imputed market value of individual wealth variables to match the macro totals for wealth from the national accounts.

Program sw_smallfiles.do This program is the master-do file for data creation and is the console for running the sw_makedata programs in sequence and merging the info together to one main individual level data set by year, for the years 1999-2015. This program also makes a household ID based on family info and collapses the individuals data sets to annual household level data sets.

## D Wealth in Denmark: Data Sources and Methods

We compute the distribution of Danish wealth following standardized, international guidelines codified in Alvaredo et al. (2016) in order to make the results comparable across countriesand in particular comparable to Sweden and Norway studied below. We distribute $100 \%$ of the macroeconomic amount of household wealth at market value recorded in Denmark's national
accounts. This total includes all the non-financial and financial assets that belong to Danish resident households, minus debts. It includes in particular all funded pension wealth and excludes consumer durables and valuables. In 2012, household wealth in Denmark amounted to $379 \%$ of national income; average household wealth per adult was US $\$ 242,000$ (using market exchange rates to convert Danish kronor to dollars), a level comparable to that of the United States (US\$ 234,000).

Our starting point to compute the wealth distribution is the detailed individual wealth records maintained by Danish authorities, a legacy of the period (before 1997) when Denmark had a wealth tax. We refer to Jakobsen et al. (2018) for complete methodological details. The results on Danish wealth distribution we report in Online Appendix D are extracted from Jakobsen et al. (2018).

## E The HSBC leak

In 2007 a systems engineer employed by HSBC, Hervé Falciani, extracted the complete internal records of this Swiss bank. Falciani turned the data over to the French government in 2008, who shared it with a number of foreign administrations when Christine Lagarde was Finance Minister in France (thus the "Falciani list" became known as the "Lagarde list"). The newspaper Le Monde obtained a version of the tax authority data and shared it with the International Consortium of Investigative Journalists. ICIJ assembled a global team of journalists and in January 2015 published the results of its investigation, called "Swiss leaks." A number of highprofile names appearing in the leak were disclosed by ICIJ, but the complete list of HSBC account-holders is not publicly available. By working with Scandinavian tax authorities and journalists, we were able to analyze the full portion of the Falciani/Lagarde list matched by the Scandinavian authorities to individual tax returns and administrative income and wealth data. In Denmark and Norway, the anonymized data we use are from the version of the HSBC list obtained by the tax authorities. In Sweden, they are from the list obtained by ICIJ-affiliated journalists. The leaked data were matched to both 2006 and 2007 adminsitrative records; we checked that using 2006 or 2007 as reference year makes no difference to the results.

## E. 1 Background information

Representativity of HSBC. As discussed in the main text of the paper, all available evidence suggests that at the time of the Falciani leak, HSBC Private Bank Switzerland was fairly representative of the Swiss private wealth management industry. However, its history is not
representative of the history of Swiss banking. HSBC Switzerland is a relatively recent player on this market. In 1999, it merged with two banks with a strong customer base in the United States and Brazil, the Republic National Bank of New York and Safra Republic Holdings SA, respectively. Before that, HSBC Switzerland had only a small private banking activity; it is only in the 2000s that its business boomed, in contrast to the overall Swiss offshore banking industry which experienced very strong growth in the 1980s and 1990s (Zucman 2015, chapter 1).

Legal vs. illegal use of offshore accounts Being a client of HSBC Private bank Switzerland does not imply tax evasion. In most countries, it is legal to own such accounts, as long as they are duly declared on tax returns. In addition, a number of HSBC Switzerland clients who appear in the leaked files were legal tax residents in tax havens that do not have income taxes (e.g., Monaco) or non-domiciled residents of the United Kingdom (hence not taxable on their offshore earnings). A number of clients are also persons exempt from paying taxes (King Abdullah II ben al-Hussein, His Holiness Karekin II Supreme Patriarch and Catholicos of All Armenians, etc.); and a number of clients were living in Switzerland and not taxable elsewhere. In Denmark and Norway, the tax authorities found that $90 \%$ to $95 \%$ of the accounts linked to individual tax returns were evading taxes.

Shell companies. A key feature of the HSBC leak is that the numerous bank accounts nominally owned by shell companies can in most cases be linked to their actual owners. The reason is the following. HSBC Private Bank Switzerland kept an internal list of its clients. A client, in HSBC's files, can - and often is - a shell company. Each client has a record and when the client is a shell company, the record would usually name the company's beneficial owners. For instance, according to the ICIJ, ${ }^{8}$ Arlette Ricci-heiress to the fortune of Nina Ricci, one of France's oldest fashion houses-appears as beneficial owner of the client account "Parita Compania Financiera S.A.," a shell company incorporated in Panama, and as an attorney for the account "Myr Associates Inc," a shell company incorporated in the British Virgin Islands. ${ }^{9}$ So although Arlette Ricci did not own any bank account directly in her own name, the leaked files make it possible to link her to the wealth she hid at HSBC Switzerland. In 2015, Arlette Ricci was sentenced to a year in prison and a 1 million euro fine for tax fraud.

Note however that the identification of beneficial owner is probably imperfect. First, a

[^5]sizable amount of wealth is assigned to the Bahamas, the British Virgin Islands, etc., in the complete file exploited by the ICIJ, suggesting that not all of it can be traced to actual persons. Second, in some cases the HSBC records only list non-controlling attorneys. This could account for part of the wealth assigned to Switzerland, the United Kingdom, and some tax havens. More broadly, although it was required by anti-money laundering regulations to identify all the beneficial owners of the assets it managed, it is likely that HSBC failed to do in a number of cases; by its own admission, due diligence processes were fairly limited at the time of the leak. ${ }^{10}$ Fourth, a number of shell companies were able to issue anonymous bearer shares, making their owners untraceable. HSBC (2015) acknowledges this problem in the memo it issues the time of the "Swiss leaks" revelations: "[In recent years,] we discontinued the hold mail service and we implemented a new policy to remediate any bearer shares in non-individual accounts."

Effect of the 2005 EU Saving Tax Directive. Over time, a large number of accounts initially owned by households directly in their own name were transferred to shell corporations. This process accelerated in 2005, when Swiss bankers moved the accounts of their European customers to shell companies in order for them to avoid a tax newly introduced by the European Union saving tax directive (see Johannesen, 2014). By virtue of this directive, Swiss accounts held by Europeans in their own name became subject to a tax on any interest earned, but the tax did not apply to interest earned on accounts nominally owned by shell corporations. This triggered a huge transfer of accounts to shell companies, which we observe clearly in the HSBC data. In both Denmark and Sweden (subject to the directive as EU members), we observe a spike in the number of accounts closed just before the introduction of the directive, but no such spike in Norway (not subject to the directive). And conversely, we observe a spike in the creation of accounts owned by Panama-incorporated shell entities in 2005 ( 653 such accounts created in 2005, vs. 15 in 2003, and 35 in 2004). The same pattern is observable for accounts owned by British Virgin Islands shells. This shifting explains why a number of accounts have no observable values in the files leaked by Falciani, as following such shifting, the identity of the beneficial remains observable in the leaked files but not the account details. Some accounts with no balance information may also correspond to accounts closed (e.g., transferred to another HSBC subsidiaries, or to another bank, potentially in Switzerland or other tax havens).

[^6]Numbered accounts. The Falciani leaks make it possible to identify in most cases the beneficial owners of numbered accounts. Numbered accounts are bank accounts for which the name of the owner doesn't appear on bank-issued statements. In the internal HSBC system, the client would be identified by a series of letters and numbers. But the associated client account file would list the beneficial owner. For instance, the Burundian national Aziza Kulsum Gulamali is listed as the joint holder of the numbered account 15208BAMA. ${ }^{11}$ As another example, the Formula One racing driver Fernando Alonso is linked to the numbered account MAFDAF 851 (that previously was held in the name "Fernando Alonso Diaz".)

Number of client accounts. A given person typically is connected to multiple "client accounts", i.e., multiple shell companies (which in turn own multiple accounts). Conversely, a given client account can have multiple owners (including corporate). For instance, French businessman Edouard Stern is linked to a client account under the name of "HF Investments Limited," together with 13 other persons ${ }^{12}$ As a result, the number of clients can be greater or less than the number of client accounts. In the statistics discloser by ICIJ, it is not always totally clear what is counted (client accounts vs. persons).

Source of the data used in this research In Denmark and Norway, the anonymized data we use are from the version of the HSBC list obtained by the tax authorities. Note that the Scandinavian tax authorities only obtained the list after the "Swiss leaks" broke in the Spring of 2015. In Sweden, the anonymized data are from the ICIJ-list obtained from the currently SVT-affiliated journalist Fredrik Laurin, who was head of the coverage of the "Swiss leaks" at Sveriges Radio when the "Swiss leaks" broke in January 2015. ${ }^{13}$

## E. 2 Representativity of HSBC

As discussed in the main paper, at the time of the leak, HSBC was fairly representative of the overall Swiss banking industry. The clearest indication that this is the case is that the country distribution of the foreign wealth held at HSBC is similar to the country distribution of the foreign wealth managed by all Swiss banks, as published by the Swiss National Bank (Figure 2 of the main paper). Here we provide more information about the country distribution of the wealth managed by all Swiss banks.

[^7]The key difficulty raised by the Swiss data is that they do not see through shell corporations; therefore accounts nominally owned by Panama shell companies are assigned to Panama in the Swiss statistics. This in contrast to the HSBC data, where as discussed above and in the main text, most of the wealth can be assigned to its beneficial owners. The use of shell companies by Europeans greatly increased after 2005, when in the context of a law known as the Saving Tax Directive, the European Union introduced a tax on the interest income earned by E.U. residents on their directly-owned Swiss bank accounts (Johannesen 2014; Roussille 2015). To address this issue, in Figure 2 of the main paper we estimate the country distribution of the offshore wealth managed by Swiss banks by using the data for 2003-2004, just before the EU Saving Tax Directive enters into force, and assuming that if a country owns $10 \%$ of the wealth not assigned to shell companies, it also owns $10 \%$ of the wealth assigned to shell companies. The timing difference (2003-2004 for the country distribution of the wealth managed by Swiss banks vs. 2007 for HSBC) may explain some of the differences between the two distributions reported on Figure 2 in the main paper.

## F The Panama Papers sample

## F. 1 Norway

The Norwegian Panama Papers data we use are from the public ICIJ data ${ }^{14}$ merged to publicly available tax lists. The Panama Papers observations are not merged to our anonymized micro data, but by comparing the resulting taxable wealth for Panama Papers individuals with aggregate wealth distribution tables constructed on our anonymized micro data we are then able to find the frequency of Panama Papers individuals by wealth group.

Norway has a century long tradition of making individual income and wealth tax data public, and from 2001 they were made available for open online searches. From 2011 restrictions applied, such that it no longer was possible for open searches through the web-newspapers, but any Norwegian taxpayer have to $\log$ on with his own user id to the tax administration service to conduct a search, and from 2014 anonymous tax searches were no longer available, and a notification is sent to the taxpayer in question that he is subject of a search along with the identity of the person conducting the search. Still, for a long time the web search engines for the tax lists until 2009 were operational. ${ }^{15}$

[^8]In June 2016 we utilized the then operational search engine for the tax year 2008 provided by the web newspaper Nettavisen, which was available at http://skatt.na24.no/. By utilizing various combinations of the searchable parameters name, age, and address, we were able to find taxable income and wealth for 2008 for 53 individuals from the ICIJ Panama Papers list for Norway. To check the accuracy of the search engine, Alstadsæter conducted an online search on herself, and the correct taxable income and wealth for 2008 was delivered by the search engine. We checked that using 2006 or 2007 as reference year does not affect the results.

Note that there is a gap between the leak (which occurred in 2016) and our reference year. Using the Panama Papers database, we have computed what fraction of the Norwegian and Swedish with Mossack-Fonseca shell company had created their shell companies before the end of 2006 (the incorporation date of the shell companies is publicly available on the ICIJ website). We found that in about $90 \%$ of the cases the shell companies were created before the end of 2006 and in almost all the remaining cases they were created in 2007. Therefore the time lag between the Panama Papers leak and our benchmark year is not a problem for our purposes.

## F. 2 Sweden

The Swedish Panama Papers data we use are from the Swedish tax administration, who have received information through various information exchange agreements. ${ }^{16}$ Skatteverket has made a dummy for all individuals and firms connected to a Panama Papers firm in their records, and this dummy was merged to our micro data base by SCB upon anonymization and delivery to us. For 2006, there were 117 individuals from Panama Papers list with match to the individual tax data, and when collapsing on household, we have 112 Panama papers observations. See Section C. 2 and program sw_makedata0_audits.do in this appendix for more info on the data construction.

## G Samples of Amnesty Participants

Both Norway and Sweden have long standing tax amnesties for individuals who voluntary disclosed previously unreported income or wealth. ${ }^{17}$ As long as no criminal activities have been conducted, tax evaders who come and voluntary disclose previously unreported income or wealth

[^9]are to pay due taxes for up to ten years back in time, but do not have to pay penalty taxes that would otherwise apply.

## G. 1 Norwegian amnesty

The Norwegian tax administration has delivered all voluntary disclosure cases to us, from 20072016, with information on all individuals who have voluntary disclosed previously hidden assets, information on timing, type of disclosure, amount, country in question, and decision status if available. In total we have information on 2049 individuals who have voluntary disclosed. This information is merged to our micro data before anonymization and delivery. For more on the data construction, see Section B. 2 and program makedata0_disclosers.do.

In a small number of cases, the tax authority deems the disclosures made by amnesty participants not worth investigating - either because it considers the amounts involved negligible or because it concludes that no tax evasion was actually committed. We exclude these cases from the analysis.

For the period 2001-2013, there are 1542 individual matches from the voluntary disclosure files for the period 2007-2016 to the annual administrative data sets for individuals who at some point voluntary disclose and whose cases are not later dropped. Not all these individuals are alive, of age, or tax residents every year in the period we consider. And we only have administrative micro data for the period 2001-2013, and not until 2016, which contains the most recent voluntary disclosure cases. In 2001, there are 1441 individual non-dropped evader matches to the administrative individual micro data, while there are 1479 matches in 2006 and 1505 matches in 2011. There are even fewer households matches, as some households can have more than one household member being a voluntary discloser.

Taking a closer look at 2006, there are then 1963 individuals who at some later point voluntary disclose. Removing the 484 individuals with case dropped leaves 1479 evaders. The household file in 2006 has 1883 households with at least one voluntary discloser, and removing 461 households with cases dropped leaves 1422 households.

## G. 2 Swedish amnesty

The Swedish tax administration has strict secrecy regulations regarding voluntary disclosure, and no central register of all the cases exists even within Skatteverket.

However, investigative journalists at the public national broadcaster SVT were able to construct a national list of around 9,000 voluntary disclosers by first backtracking the employees
in the department at Skatteverket responsible for the administrative treatment of voluntary disclosers. The journalists then under the Swedish Freedom of Information Act requested and eventually gained access to all tax decisions made by these case workers while they were working in this particular department. ${ }^{18}$ We have gained access to this list from Linda Larsson Kakuli and Joachim Dyfvermark at Uppdrag Granskning, SVT. This list of voluntary disclosers was merged to tax data for 2006 and then collapsed to an anonymized distribution table with frequency of voluntary disclosing households by wealth group before delivery to us.

## H Additional details on Danish random audits

## H. 1 Deliberate vs. non-deliberate evasion

The Danish random audit data contain an indication of whether mistakes found on the tax return were deliberate or not. Taxpayers can make honest mistakes; some also report too much taxable income and over-state their tax liability. At the end of each audit, SKAT rates the compliance of the audited taxpayer on a scale from 0 to 6 . Taxpayers with ratings between 0 and 2 are considered to be deliberate tax evaders; those with ratings between 3 and 6 make errors but are considered tax compliant (see SKAT, 2016).

In the main text, the results we report include all forms of mistake, whether deemed intentional or not, so as to improve comparability with the US random audit studies, which also include all errors. In the Online Appendix $H$ we provide additional results that restrict to deliberate tax evaders only. The distinction between deliberate tax evasion and unintentional error is interesting, as wealthy taxpayers with complex tax returns and income that is not all third-party-reported might be more likely to make unintentional mistakes and yet no more likely to be deliberately breaking the law. To our knowledge the literature so far has not been able to separate deliberate from unintentional mistakes. When focusing on deliberate evaders, the fraction of individuals caught evading taxes falls from $12.5 \%$ to $1.5 \%$ in 2012.

## H. 2 Construction of standard errors

In the data we have access to, tax evaders are matched to their rank in the wealth distribution in the tax year of the audit. Each observation is weighted by the corresponding audit weight.

We pool the three waves of audits (for tax years 2008, 2010, and 2012) and we construct standard errors for the estimated evasion rates in the random audit samples using bootstrap-

[^10]ping techniques. The main constraint is that we do not have direct access to the underlying individual-level datasets. The computations is therefore based on tabulations of the individuallevel observations by wealth group.

In a first step, we construct a simulated micro dataset with the same number of observations as in the full population of adults in the 3 cross-sections for which we have information on random audits (i.e. 2008, 2010 and 2012). The simulated micro dataset has the following properties:
(1) It has the same share of self-employed within each wealth group and year as in the true individual-level data.
(2) Within each cell defined by wealth group, year and employment status (i.e. self-employed vs wage earners), it has the same share of individuals with errors as predicted by the stratified random audits
(3) Within each cell defined by wealth group, year and employment status (i.e. self-employed vs wage earners), the errors of those individuals who have errors are random draws from a normal distribution with the mean and standard deviation predicted by the stratified random audits.

In a second step, we construct point estimates of the error rate as the ratio of "total taxes evaded" to the " total taxes liability" ("taxes paid" + "taxes evaded") within each wealth group. The marginal tax rates applied to "income evaded" to compute "taxes evaded" are taken from the income tax code. The average tax rates applied to "income not evaded" to compute "taxes paid" are consistent with the average tax payments in the true micro dataset.

In a third step, we compute standard errors using bootstrapping techniques. We repeatedly draw (with replacement) subsamples from the full population sample that have the same size as the random audit samples within each wealth group and year and compute error rates by wealth group. We repeat this exercise 1000 times and use the distribution of estimated error rates to compute standard errors of the point estimates.

## I Macro estimates of offshore wealth

We refer to our companion paper, Alstadsæter, Johannesen and Zucman (2017).

## J Distributional tax gaps: additional details and robustness

Complete details and extensive robustness checks are presented in the Online Appendix I data file.

## K A Model of Tax Evasion and Inequality

## K. 1 Baseline Model

To keep things simple, assume that there is a single firm-say, a Swiss bank-that sells wealth concealment services. ${ }^{19}$ Households differ in their wealth $y$ but are all willing to pay the same unit price $\theta$ to hide one dollar of wealth. $\theta$ can be interpreted as the effective tax rate on capital, which is saved by hiding wealth abroad (and is typically constant within the top $1 \%$ richest households). The wealth distribution is described by the density function $f(y)$ and the mass of households is normalized to one. The more clients the bank serves, the higher the probability that a leak occurs; we assume that when it serves $s$ clients, the bank has a probability $\lambda s$ to be caught breaking the law. If the bank is caught, it has to pay a fine equal to a fraction $\phi$ of the total assets it manages. Our model illustrates how, internalizing this cost, the bank will serve few but wealthy customers.

Assume that the bank is allowed to set different unit prices $p(y)$ across customers with different wealth $y$. Its expected profit function is:

$$
\begin{equation*}
\pi=\int y p(y) s(y) f(y) d y-\lambda s \phi \int y s(y) f(y) d y \tag{1}
\end{equation*}
$$

where $s(y)$ is the share of households at wealth level $y$ who hide assets in the bank. The first term captures the bank's revenue: at a given wealth level $y$, there are $s(y) f(y)$ households who each pay the bank $y p(y)$ for its services. The second term captures the bank's expected penalty: with probability $\lambda s$ it must pay a fine equal to a fraction $\phi$ of the wealth it manages. The bank's optimal pricing strategy extracts all surplus from customers who add to its profitability by quoting a price equal to the willingness to pay, $\theta$ - and deters households who reduces its

[^11]profitability from being customers-by quoting a prohibitive price above $\theta \cdot{ }^{20}$ Thus, we can think of the bank's problem as choosing the set of customers that maximizes expected profits given the price $\theta$. It follows directly from eq. (1) that, for a given level of total assets under management, the bank is more profitable when the number of customers is low. The bank optimally chooses to serve wealthier customers first, because they generate more revenue than less wealthy individuals and add the same risk. Letting $k(s)$ denote the total wealth owned by the wealthiest $s$ households, we can restate the bank's expected profit function as: ${ }^{21}$
\[

$$
\begin{equation*}
\pi=\theta k(s)-\lambda s \phi k(s) \tag{2}
\end{equation*}
$$

\]

The profit-maximizing number of customers, $s^{*}$, is determined by the first-order condition $d \pi / d s=0$, which can be expressed as follows:

$$
\begin{equation*}
\theta=\left(1+\frac{1}{\epsilon_{k}\left(s^{*}\right)}\right) \phi \lambda s^{*} \tag{3}
\end{equation*}
$$

where $\epsilon_{k}(s)=s k^{\prime}(s) / k(s)$ is the elasticity of the stock of wealth under management with respect to the number of customers. ${ }^{22}$

The left-hand side is the marginal revenue of managing more wealth and the right-hand side is the marginal cost (i.e., the increase in the expected penalty). The expected penalty increases when the bank manages more wealth both because the penalty applies to a larger stock in case of detection and because the probability of detection rises with the number of customers.

Proposition 1. In equilibrium, the $s^{*}$ wealthiest households face a unit price of $\theta$ for wealth concealment services and evade taxes, while all other households face a price higher than $\theta$ and do not evade.

To gain further insights, assume that wealth follows a Pareto distribution at the top with a Pareto coefficient $a>1$. This parameterization encompasses different levels of inequality: A high $a$ corresponds to a relatively equal distribution of wealth; a low $a$ corresponds to an

[^12]unequal distribution; when $a \rightarrow 1$, inequality tends to infinity. Income and wealth tend to follow Pareto distributions at the top, and a large literature estimates Pareto coefficients over time and across countries (see, e.g., Atkinson, Piketty and Saez 2011). A typical value of $a$ for the wealth distribution is $a=1.5$. When wealth is Pareto-distributed, the equilibrium number of tax evaders takes a simple closed-form expression:
\[

$$
\begin{equation*}
s^{*}=\frac{\theta}{\left(1+\frac{a}{a-1}\right) \lambda \phi} \tag{4}
\end{equation*}
$$

\]

This equation pins down $s^{*}$ as a function of the model's parameters: the penalty $\phi$, the probability of detection $\lambda$, and inequality $a$. We summarize the comparative statics in the following Proposition:

Proposition 2. The share $s^{*}$ of households who evade taxes (i) falls with the probability of detection $\lambda$ (ii) falls with the penalty rate $\phi$, and (iii) falls as wealth becomes more unequally distributed (i.e., as the Pareto coefficient falls).

The first result - that evasion falls when the probability of detection rises-is intuitive and also present in demand-side models of evasion (Allingham and Sandmo, 1972). In our context, however, it has new implications for recent and future trends in tax evasion. Since 2008, there has been a growing number of leaks from offshore financial institutions (see Johannesen and Stolper, 2017), maybe because technological change makes such leaks easier, or because of increases in the rewards offered to whistleblowers. ${ }^{23}$ This could lead to a reduction in tax evasion. But new technologies such as blockchain or improvements in the banks' internal IT systems might lead $\lambda$ to fall-making tax evasion accessible to less wealthy individuals. $\lambda$ might also be lower in small banks-where it might be easier to maintain a strong culture of secrecy-than in banking giants like HSBC. If wealth concealment services move to such small boutique banks, then enforcement might prove increasingly hard.

The second result - that evasion falls when penalties rise - has implications for policy-making. Although evasion also falls with penalties in standard demand-side models of tax evasion, increasing penalties for tax evaders has not proved to be a practical way to curb tax cheating. There are limits to the penalties that can be applied to persons conducting such crimes; and if the penalties set by law are too high, judges might require a stronger burden of proof from prosecutors, potentially leading to fewer convictions. Large sanctions against the suppliers of

[^13]tax evasion services may, by contrast, be a more practical way to curb tax evasion-if only because fewer cases need to be investigated. If policy-makers were willing to systematically put out of business the financial institutions found facilitating evasion, then $s^{*}$ could be reduced dramatically. It is, however, easier to close small banks than systematically important institutions. Since 2009, 80 Swiss banks have admitted helping U.S. persons to evade taxes; 16 others have been under criminal investigation by the Department of Justice. But the U.S. government has been able to shut down only three relatively small institutions (Wegelin, Neue Zürcher Bank, and Bank Frey); in 2014, Credit Suisse was able too keep its U.S. banking licence despite pleading guilty of a criminal conspiracy to defraud the IRS. In 2012, U.S. authorities similarly decided against indicting HSBC despite evidence that the bank had enabled Mexican drug cartels to move money through its American subsidiaries. ${ }^{24}$ If big financial institutions become "too big to indict" (because regulators fear that this would destabilize financial markets), tax evasion might flourish.

The third result - that the number of tax evaders falls when inequality increases - is specific to the supply-side model developed here. It holds true with any well-behaved distribution of wealth. Its intuition is the following: when inequality is high, a handful of individuals own the bulk of wealth; they generate a lot of revenue for the bank and are unlikely to be detected. Moving down the distribution would mean reaching a big mass of the population that would generate only relatively little additional revenue but would increase the risk of detection a lot; it is not worth it. As inequality rises, the fraction of households who evade taxes falls, but the fraction of wealth which is hidden increases. In the extreme case where inequality is infinite ( $a \rightarrow 1$ ), only one person evades taxes-but $100 \%$ of capital taxes owed are evaded.

This inequality effect could explain some of the observed trends in top-end evasion. The number of clients of Swiss banks seems to have declined over the last ten years; as shown by Appendix Figure E.6, it has been divided by 3 at HSBC Switzerland over the 2006-2014 period. While part of this fall probably owes to changes in $\lambda$ and $\phi$ (and in the specific case of HSBC, to the Falciani leak), one other contributing factor might be the rise in global wealth concentration. ${ }^{25}$ Indeed, while the number of HSBC clients fell, the average account value increased $80 \%$, from $\$ 3.7$ million in 2006 to $\$ 6.6$ million in 2014; the offshore wealth managed by Swiss banks has also increased significantly since 2000 (Zucman, 2015). As the world becomes

[^14]more unequal, offshore banks might choose to serve fewer but wealthier clients. Conversely, when wealth inequality was low in the 1950s and 1960s (following the destructions of World War II, nationalizations in Europe, and a number of other anti-capital policies), Swiss banks may have chosen to serve a broader segment of the population. This could explain why on top of ultra-rich households, we also observe a number of moderately wealthy, old evaders in the HSBC leak and the amnesty data.

Section K.3. below shows that introducing competition in our model does not affect the comparative statics summarized in Proposition 2. While the offshore banking sector continues to serve all households above a wealth threshold, competition prevents banks from appropriating the full economic rent associated with tax evasion and equilibrium unit prices in the market for wealth management are declining in the wealth level of the customers. Intuitively, prices for customers with more wealth are competed down to lower levels because they generate more revenue for the banks while adding the same detection risk as customers with less wealth. But introducing competition generates an additional insight. With competition, an exogenous increase in the number of suppliers of wealth concealment services-for instance due to market liberalization that lowers entry costs-increases the fraction of households who evade taxes by reducing unit prices for wealth concealment. Supply forces could thus help explain the rise in offshore tax evasion through the 1980s, 1990s, and 2000s.

## K. 2 Proof of proposition 2

Proof. By definition $k(s)=\int_{z \geqslant y} z f(z) d z$ and $s=1-F(y)=\int_{z \geqslant y} f(z) d z$, therefore $k^{\prime}(s)=y$ and

$$
\frac{1}{\epsilon_{k}(s)}=\frac{1}{s k^{\prime}(s) / k(s)}=\frac{\int_{z \geqslant y} z f(z) d z}{(1-F(y)) y}
$$

When $y$ is Pareto distributed above wealth $y_{\text {min }}$ with Pareto coefficient $a$, then the probaility density function is $f(y)=a y_{\min }^{a} / y^{1+a}$, the survival function is $1-F(y)=\left(y_{\min } / y\right)^{a}$, and straightforward integration shows that

$$
\int_{z \geqslant y} z f(z) d z=\frac{a}{a-1} y(1-F(y))
$$

Therefore:

$$
\frac{1}{\epsilon_{k}(s)}=\frac{a}{a-1}
$$

That is, the Pareto distribution has the unique property that $\epsilon_{k}$ is constant and equal to one over the inverted Pareto-Lorenz coefficient $a /(a-1)$.

## K. 3 Competition in the supply of tax evasion services

We extend the formal model presente above to include several offshore banks that compete in the market for wealth management. We assume that the number of offshore banks $B$ is large enough for banks to behave as price-takers. Households are assumed to be perfectly mobile across banks.

The expected profit function of the representative offshore bank $i$ can be written as:

$$
\begin{equation*}
\pi_{i}=\int y p(y) s_{i}(y) f(y) d y-\lambda s_{i} \phi k_{i} \tag{5}
\end{equation*}
$$

where $s_{i}(y)$ is the share of households at wealth level $y$ with an account in bank $i ; s_{i}$ is the total number of households with an account in this bank, $s_{i} \equiv \int s_{i}(y) f(y) d y$; and $k_{i}$ is the total wealth under management in this bank, $k_{i} \equiv \int y s_{i}(y) f(y) d y$. The first term of eq. (5) captures the revenue of bank $i$ : at a given wealth level $y$, there are $s_{i}(y) f(y)$ households who each pay the bank $y p(y)$ for its wealth management services. The second term captures the expected penalty of bank $i$ : with probability $\lambda s_{i}$ the bank pays a penalty equal to a fraction $\phi$ of its assets under management.

The representative bank takes prices $p(y)$ for given and maximizes expected profits over the number of customers it serves at each wealth level. The first-order condition at a given wealth level, $\partial \pi / \partial s_{i}(y)=0$, can be restated as:

$$
\begin{equation*}
y p(y)=\lambda \phi\left\{y s_{i}+k_{i}\right\} \tag{6}
\end{equation*}
$$

The left-hand side expresses the revenue generated by the marginal customer at wealth level $y$ while the right-hand side expresses the increase in expected penalties. Expected penalties increase when the bank adds a customer both because the penalty applies to a larger stock of wealth in case of detection (first term) and because the probability of detection rises with the number of customers (second term).

We are searching for a market equilibrium: a distribution of prices $p(y)$ and a symmetric allocation of customers across banks satisfying that (i) all banks maximize profits with respect to the number of customers at each wealth level and (ii) all households who desire an offshore account at the market price applying to their wealth level are offered such an account.

In such an equilibrium, the first-order condition eq. (6) must hold for customers at different wealth levels simultaneously. This implies that equilibrium prices differ across customers with different wealth. Specifically, for given values of $s_{i}$ and $k_{i}$, eq. (6) implicitly defines the value of $p(y)$ that is consistent with equilibrium at each wealth level. It follows directly that wealthier
customers pay lower unit prices. Intuitively, each new customer raises the expected penalties associated with existing customers by the same amount $\lambda \phi k_{i}$; hence, in order for banks to be indifferent between customers at different wealth levels, they need to be associated with the same expected revenue $y\left(p(y)-\lambda \phi s_{i}\right)$. This shows that $p(y)$ is higher at lower levels of $y$.

Who holds an offshore bank account in the equilibrium? For a given distribution of prices $p(y)$, households choose to hold an offshore bank account when the unit price applying to their wealth level is equal to or below their willingness to pay $\theta$. Since unit prices are decreasing in wealth, there is a wealth level $\widetilde{y}$ above which all households have an offshore bank account and below which no household has an offshore bank account.

Note that eq. (6) determines the distribution of prices $p(y)$ given values of $s_{i}$ and $k_{i}$, which in turn depend on $\widetilde{y}$. With a symmetric allocation of customers across banks, each bank has $1 / B$ of the customers at each wealth level so that:

$$
\begin{align*}
s_{i} & =\frac{1}{B} \int_{\widetilde{y}}^{\infty} f(y) d y  \tag{7}\\
k_{i} & =\frac{1}{B} \int_{\widetilde{y}}^{\infty} y f(y) d y \tag{8}
\end{align*}
$$

The unique value of $\widetilde{y}$ that closes the model is the value satisfying that the marginal customer with wealth $\widetilde{y}$ faces a price that is exactly equal to the willingness to pay $\theta$ :

$$
\begin{equation*}
p(\widetilde{y})=\theta \tag{9}
\end{equation*}
$$

To see that such a value exists, note that as $\widetilde{y} \rightarrow \infty, s_{i}$ and $k_{i}$ both approach zero implying that $p(y)$ approaches zero for all wealth levels such that $p(\widetilde{y})<\theta$. Conversely, as $\widetilde{y} \rightarrow 0, s_{i}$ and $k_{i}$ become very large implying that $p(y)$ becomes large at all wealth levels such that $p(\widetilde{y})>\theta$ for plausible values of $\theta$. Since $s_{i}$ and $k_{i}$ are monotonous functions of $\widetilde{y}$ and $p(y)$ at any given wealth level is monotonous functions of $s_{i}$ and $k_{i}$, there is a unique value $\widetilde{y}$ securing that $p(\widetilde{y})=\theta$.

Having solved the model for a fixed number of banks, we note that banks earn positive profits in the equilibrium: the marginal customer generates no profits in expectation, but inframarginal customers do. We may think of $B$ as being endogenously determined as the highest number of banks that allow expected profits to cover the fixed costs of entry on the banking market.

It follows directly from this analysis that also in a setting with many banks and perfect competition, offshore banks serve all households above a wealth threshold. The main qualitative differences are that banks do not appropriate the full economic rent associated with offshore tax evasion and that unit prices for wealth management are declining in the wealth level of
the customers. Intuitively, prices for customers with more wealth are competed further down because they generate more revenue for the banks while adding the same detection risk as customers with less wealth.

To study how the penalty rate and the probability of detection shape the equilbrium, we differentiate the system consisting of eq. (6) evaluated at $\widetilde{y}$ and eq. (7)-(9) with respect to $\phi$, $\lambda$ and $\widetilde{y}$ and rearrange to obtain:

$$
\frac{d \widetilde{y}}{(d \lambda+d \phi)}=\frac{\widetilde{y} s_{i}+k_{i}}{p(\widetilde{y})-\lambda \phi s_{i}+\lambda \phi \widetilde{y} \frac{1}{B} f(\widetilde{y})+\lambda \phi \frac{1}{B} \widetilde{y} f(\widetilde{y})}
$$

which is unambiguously positive since $p(\widetilde{y})$ must be strictly larger than $\lambda \phi s_{i}$ in order for eq. (6) to hold. Hence, consistent with our previous findings, the model with perfect competition on the market for offshore banks predicts that increasing the penalty rate and the probability of detection induces banks to serve a narrower segment of households.

To study how inequality affects the equilibrium, we let $\bar{y}$ denote the highest wealth level and derive how an increase in this wealth level propagates in the model. Differentiating the same system of 4 equations with respect to $\bar{y}$ and $\widetilde{y}$ and rearranging, we obtain:

$$
\frac{d \widetilde{y}}{d \bar{y}}=\frac{\lambda \phi\left\{\frac{1}{B} f(\bar{y})\right\}}{\left\{p(\widetilde{y})-\lambda \phi s_{i}+\lambda \phi \widetilde{y} \frac{1}{B} f(\widetilde{y})+\lambda \phi \frac{1}{B} \widetilde{y} f(\widetilde{y})\right\}}
$$

which is unambiguously positive since $p(\widetilde{y})$ must be strictly larger than $\lambda \phi s_{i}$ in order for eq. (6) to hold. Hence, consistent with our previous findings, the model with perfect competition on the market for offshore banks predicts that increasing inequality induces banks to serve a narrower segment of households.

Finally, to study how the number of banks affects the equilibrium (for instance through a change in the entry costs), we differentiate the same system of 4 equations with respect to $\widetilde{y}$ and $B$ and rearrange to obtain:

$$
\frac{d \widetilde{y}}{d B}=-\frac{\widetilde{y} s_{i}+k_{i}}{B\left\{p(\widetilde{y})-\lambda \phi s_{i}+\frac{\widetilde{y}}{B} f(\widetilde{y})+\frac{1}{B} f(\widetilde{y})\right\}}
$$

which is unambiguously negative since $p(\widetilde{y})$ must be strictly larger than $\lambda \phi s_{i}$ in order for eq. (6) to hold. Hence, this is a new result showing that an increase in the number of offshore banks, increases the segment of households engaged in offshore tax evasion. Intuitively, with the market shared by more banks, each bank has a smaller balance sheet and thus faces a smaller increase in the expected penalty by taking on additional customers. This lowers equilibrium prices for offshore banking and induce more households to evade taxes.

## Appendix References (not cited in the main text)

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Johannesen, Niels. 2014. "Tax Evasion and Swiss Bank Deposits," Journal of Public Economics, 111, 46-62.

Figure A1: National income in Scandinavia


Figure A1b: National income in Scandinavia
(\% of Scandinavian total, PPP exchange rates)


Figure A2: Household wealth in Scandinavia
(\% of Scandinavian total, market exchange rate)


Figure A2b: Household wealth in Scandinavia
(\% of Scandinavian total, PPP exchange rate)


Figure A3: Scandinavian Population
(\% of Scandinavian total)


Figure A4: Per adult national income in Scandinavia
(\% of Scandinavian average, market exchange rates)


Figure A4b: Per adult national income in Scandinavia vs. US
(\% of Scandinavian average, market exchange rates)


Figure A4c: Per adult national income in Scandinavian vs. US
(\% of Scandinavian average, PPP exchange rates)


Figure A5: Per adult household wealth in Scandinavia
(\% of Scandinavian average, market exchange rates)


Figure A5b: Per adult household wealth: Scandinavia vs. US
(\% of Scandinavian average, market exchange rates)


Figure A5c: Per adult household wealth: Scandinavia vs. US (\% of Scandinavian average, PPP exchange rates)


Figure A6: Household wealth in Scandinavia
(\% national income)


Figure A7: National wealth in Scandinavia
(\% national income)


Figure A8: Government wealth in Scandinavia (\% national income)


Figure A9: Gross housing wealth in Scandinavia (\% national income)


Figure A10: Real housing price index in Scandinavia


Figure A11: Household debt in Scandinavia (\% national income)


Figure A12: Household equity assets in Scandinavia (\% national income)


Figure A13: Household business assets in Scandinavia (\% national income)


Figure A14: Household pension assets in Scandinavia (\% national income)


Figure A15: Household currency, deposits \& bonds in Scandinavia (\% national income)


Figure A.16: Distribution of wealth in Scandinavia (Year 2006, households, matching macro wealth)


Figure A.17: Distribution of taxable income, by wealth bin (Year 2006, households, taxable income including capital gains)


Figure B1: Recorded household wealth and its composition in


This figure depicts the evolution of the ratio of total household wealth (as of December 31st) to national income in Norway, using national accounts data. Wealth is at market value and excludes hidden offshore wealth.

Figure B2: The structure of national wealth in Norway, 1980-2015


This figure depicts the evolution of the ratio of national wealth (i.e., the sum of household wealth and net governetn wealth) to national income in Norway. Wealth excludes hidden offshore wealth.

Figure B3: Composition of the top $0.1 \%$ wealth share in Norway


Figure B4: Composition of the top $0.01 \%$ wealth share in Norway


Figure B5: Top 0.1\% wealth share in Norway (annual series)


Figure B6: Top 0.01\% wealth share in Norway (annual series)


Figure C1: Recorded household wealth and its composition in Sweden


This figure depicts the evolution of the ratio of total household wealth (as of December 31st) to national income in Sweden, using national accounts data. Wealth is at market value and excludes hidden offshore wealth.

Figure C2: Composition of the top $0.1 \%$ wealth share in Sweden


Figure C3: Composition of the top $0.01 \%$ wealth share in Sweden


Figure C4: Top 0.1\% wealth share in Sweden


Figure E.1: Probability to own an unreported HSBC account, by wealth group (All accounts vs. only accounts with known value)


Figure E.2: Probability to own an unreported HSBC account, by wealth group (All matched accounts, including vs. excl. account value)


Figure E.3: Probability to own an unreported HSBC account, by wealth group (Only accounts with known value, incl. vs. excl. acct value)


Figure E.4: Probability to own an unreported HSBC account, by wealth group (All accounts, country-by-country)


Figure E.4b: Probability to own an unreported HSBC account, by wealth group (All accounts, country-by-country)


Figure E.5: Share of HSBC wealth owned by each wealth group


Figure E.6: Number of clients and average account value at HSBC Private Bank Switzerland


Figure F.1: Probability to be in the Panama Papers
Norway vs. Sweden


Figure G.1: Probability to disclose hidden wealth in Norway, by wealth group (Including vs. excluding disclosed wealth)


Figure G.2: Probability to voluntarily disclose hidden wealth, Norway vs. Sweden (disclosed wealth excluded from wealth)


Figure G.3: Probability to voluntarily disclose hidden wealth, Norway vs. Sweden (disclosed wealth included in wealth)


Figure G.4: Average wealth disclosed in the amnesty, by wealth group (\% of total wealth (including disclosed), Norway)


Figure G.5: Probability to disclose hidden wealth or own an HSBC Switzerland account, by wealth group


Net wealth group [millions of US\$]

Figure G.6: Probability to disclose hidden wealth in Norway, by wealth group (various wealth measures)


Figure H.1: Taxes evaded, \% of taxes owed (stratified random audits)


Figure H.2: Fraction of income mis-reported (stratified random audits)


Figure H.3: Fraction of income undeclared: Denmark vs. USA (stratified random audits)


Figure H.4: Fraction of tax evaders by wealth group (stratified random audits, all errors)


Figure H.5: Fraction of households who evade taxes (stratified random audits, deliberate evasion only)


Figure H.6: Fraction of income undeclared, conditional on


Figure H.7: Taxes evaded, \% taxes owed (stratified random audits, deliberate vs. non-deliebrate evasion )


Figure H.7b: Fraction of income undeclared (stratified random audits, deliberate evasion only)


Figure H.8: Fraction of tax evaders by wealth group
(stratified random audits, deliberate evasion only)


Figure H.9: Fraction of tax evaders by wealth group (stratified random audits, deliberate evaders only)


Figure H.10: The share of self-employment income in GDP in OECD countries (Gross mixed income as a \% of factor-cost GDP)


Figure J.1: Marginal tax rate on capital (capital income + wealth tax)


Figure J.2: Marginal tax rate on labor income


Figure J.3: Average tax rates, by wealth bin


Figure J.4: Taxes paid vs. taxes owed (random audits + leaks)


Table A0: Income, wealth, and population in Scandinavia

|  | [1] [2] |  | [3] | [4] | [5] [6] |  | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (current billions US\$) |  | (2014 billions \$US) (national income deflator) |  | (current US\$) |  |  |  | (2014 US\$) (National income deflator) |  |  |  | Ratio(householdwealth) $/$(nationalincome)$\beta_{t}=W_{t} / Y_{t}$ | Population (thousands) | $\begin{gathered} \text { Adult } \\ \text { population } \\ (20-\mathrm{yr}+\text { ) } \\ \text { (thousands) } \end{gathered}$ | US national income price index (2014 = 1) |
|  | National income | $\begin{gathered} \text { Household } \\ \begin{array}{c} \text { wealth } \\ \mathrm{Y}_{\mathrm{t}} \\ \mathrm{~W}_{\mathrm{t}} \end{array} \end{gathered}$ | National income $Y_{t}$ | Household wealth $W_{t}$ | Per capita national income | Per capita private wealth | Per adult national income $y_{t}$ | Per adult household wealth $\mathrm{w}_{\mathrm{t}}$ | Per capita national income | Per capita private wealth | Per adult national income $y_{t}$ | Per adult household wealth $\mathbf{w}_{\mathrm{t}}$ |  |  |  |  |
| 1980 | 231 | 477 | 594 | 1,226 | 13,196 | 27,212 | 17,996 | 37,111 | 33,932 | 69,973 | 46,277 | 95,430 | 206\% | 17,519 | 12,846 | 0.389 |
| 1981 | 211 | 412 | 496 | 968 | 12,027 | 23,472 | 16,338 | 31,883 | 28,279 | 55,186 | 38,413 | 74,963 | 195\% | 17,539 | 12,912 | 0.425 |
| 1982 | 195 | 377 | 432 | 835 | 11,110 | 21,467 | 15,014 | 29,009 | 24,617 | 47,563 | 33,266 | 64,274 | 193\% | 17,554 | 12,990 | 0.451 |
| 1983 | 186 | 369 | 396 | 784 | 10,614 | 21,017 | 14,267 | 28,250 | 22,523 | 44,597 | 30,275 | 59,947 | 198\% | 17,570 | 13,071 | 0.471 |
| 1984 | 190 | 363 | 388 | 742 | 10,797 | 20,647 | 14,431 | 27,597 | 22,053 | 42,172 | 29,476 | 56,366 | 191\% | 17,589 | 13,160 | 0.490 |
| 1985 | 200 | 399 | 395 | 788 | 11,368 | 22,675 | 15,114 | 30,145 | 22,435 | 44,748 | 29,827 | 59,490 | 199\% | 17,615 | 13,250 | 0.507 |
| 1986 | 263 | 547 | 509 | 1,059 | 14,902 | 31,004 | 19,723 | 41,033 | 28,817 | 59,955 | 38,140 | 79,350 | 208\% | 17,657 | 13,341 | 0.517 |
| 1987 | 321 | 655 | 606 | 1,235 | 18,140 | 36,996 | 23,914 | 48,773 | 34,188 | 69,728 | 45,071 | 91,923 | 204\% | 17,714 | 13,437 | 0.531 |
| 1988 | 349 | 768 | 636 | 1,397 | 19,642 | 43,186 | 25,820 | 56,768 | 35,734 | 78,566 | 46,972 | 103,275 | 220\% | 17,786 | 13,531 | 0.550 |
| 1989 | 354 | 778 | 619 | 1,359 | -19,816 | 43,517 | 25,987 | 57,068 | -34,621 | 76,030 | 45,402 | 99,706 | 220\% | 17,878 | 13,632 | 0.572 |
| 1990 | 423 | 924 | 711 | 1,553 | 23,551 | 51, $\overline{475}$ | 30,846 | 67,420 | -39,563 | 86,473 | 51,818 | 113,259 | 219\% | 17,959 | 13,712 | 0.595 |
| 1991 | 434 | 923 | 704 | 1,496 | 24,064 | 51,137 | 31,499 | 66,936 | 39,029 | 82,937 | 51,087 | 108,561 | 213\% | 18,040 | 13,782 | 0.617 |
| 1992 | 459 | 968 | 726 | 1,531 | 25,344 | 53,419 | 33,138 | 69,847 | 40,059 | 84,436 | 52,379 | 110,404 | 211\% | 18,128 | 13,864 | 0.633 |
| 1993 | 383 | 856 | 591 | 1,320 | 21,041 | 46,988 | 27,494 | 61,400 | 32,437 | 72,440 | 42,386 | 94,658 | 223\% | 18,225 | 13,947 | 0.649 |
| 1994 | 419 | 921 | 632 | 1,389 | 22,860 | 50,199 | 29,875 | 65,603 | 34,486 | 75,729 | 45,068 | 98,966 | 220\% | 18,338 | 14,032 | 0.663 |
| 1995 | 497 | 1,105 | 735 | 1,634 | 27,008 | 60,075 | 35,275 | 78,464 | 39,918 | 88,794 | 52,137 | 115,973 | 222\% | 18,402 | 14,089 | 0.677 |
| 1996 | 530 | 1,206 | 767 | 1,746 | 28,680 | 65,286 | 37,444 | 85,235 | 41,529 | 94,535 | 54,219 | 123,422 | 228\% | 18,465 | 14,144 | 0.691 |
| 1997 | 495 | 1,223 | 704 | 1,738 | 26,758 | 66,074 | 34,921 | 86,230 | 38,007 | 93,851 | 49,601 | 122,480 | 247\% | 18,515 | 14,188 | 0.704 |
| 1998 | 495 | 1,267 | 694 | 1,777 | 26,654 | 68,241 | 34,774 | 89,032 | 37,373 | 95,686 | 48,760 | 124,838 | 256\% | 18,567 | 14,231 | 0.713 |
| $\underline{1999}$ | 507 | 1,431 | 700 | 1,975 | 27, 233 | 76,839 | 35,517 | 100,212 | 37,591 | 106,064 | 49,026 | 138,327 | 282\% | 18,620 | 14,277 | 0.724 |
| 2000 | 494 | 1,340 | $6 \overline{66}$ | 1,807 | 26,435 | 71,699 | 34,478 | 93,514 | 35, $\overline{4} 9$ | 96,691 | 46,495 | 126,110 | 271\% | 18,691 | 14,331 | 0.742 |
| 2001 | 481 | 1,345 | 633 | 1,770 | 25,653 | 71,710 | 33,466 | 93,550 | 33,747 | 94,336 | 44,025 | 123,067 | 280\% | 18,762 | 14,382 | 0.760 |
| 2002 | 530 | 1,484 | 685 | 1,918 | 28,157 | 78,774 | 36,749 | 102,811 | 36,394 | 101,819 | 47,499 | 132,888 | 280\% | 18,833 | 14,430 | 0.774 |
| 2003 | 654 | 1,880 | 827 | 2,378 | 34,570 | 99,434 | 45,126 | 129,794 | 43,719 | 125,749 | 57,069 | 164,145 | 288\% | 18,911 | 14,488 | 0.791 |
| 2004 | 754 | 2,230 | 928 | 2,744 | 39,723 | 117,472 | 51,856 | 153,351 | 48,869 | 144,519 | 63,795 | 188,658 | 296\% | 18,986 | 14,544 | 0.813 |
| 2005 | 819 | 2,593 | 978 | 3,095 | 42,960 | 135,982 | 56,060 | 177,449 | 51,286 | 162,337 | 66,926 | 211,841 | 317\% | 19,066 | 14,610 | 0.838 |
| 2006 | 897 | 2,967 | 1,040 | 3,440 | 46,766 | 154,663 | 60,977 | 201,658 | 54,222 | 179,319 | 70,698 | 233,807 | 331\% | 19,181 | 14,711 | 0.862 |
| 2007 | 1,032 | 3,491 | 1,165 | 3,939 | 53,446 | 180,769 | 69,603 | 235,418 | 60,312 | 203,991 | 78,545 | 265,660 | 338\% | 19,311 | 14,828 | 0.886 |
| 2008 | 1,130 | 3,462 | 1,250 | 3,830 | 58,044 | 177,844 | 75,453 | 231,182 | 64,203 | 196,714 | 83,459 | 255,712 | 306\% | 19,469 | 14,977 | 0.904 |
| -2009 | 949 | 3,210 | 1,038 | 3,510 | 48,288 | 163,347 | 62,644 | 211,911 | 52,804 | 178,621 | 68,502 | 231,727 | 338\% | 19,651 | 15,148 | 0.914 |
| 2010 | 1,045 | 3,580 | 1,125 | 3,853 | 52,772 | 180,735 | 68,334 | 234,033 | 56,797 | 194,522 | 73,547 | 251,885 | 342\% | 19,809 | 15,297 | 0.929 |
| 2011 | 1,191 | 3,921 | 1,255 | 4,130 | 59,860 | 197,051 | 77,436 | 254,908 | 63,062 | 207,592 | 81,579 | 268,545 | 329\% | 19,897 | 15,381 | 0.949 |
| 2012 | 1,167 | 3,930 | 1,207 | 4,063 | 58,416 | 196,681 | 75,459 | 254,066 | 60,391 | 203,332 | 78,011 | 262,658 | 337\% | 19,982 | 15,469 | 0.967 |
| 2013 | 1,228 | 4,298 | 1,249 | 4,372 | 61,173 | 214,139 | 78,897 | 276,180 | 62,230 | 217,837 | 80,259 | 280,948 | 350\% | 20,069 | 15,561 | 0.983 |
| 2014 | 1,211 | 4,506 | 1,211 | 4,506 | 60,072 | 223,580 | 77,349 | 287,882 | 60,072 | 223,580 | 77,349 | 287,882 | 372\% | 20,152 | 15,651 | $\begin{aligned} & 1.000 \\ & 1.011 \end{aligned}$ |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: all monetary values in this table are converted to US\$ using year-average market exchange rates.

| Table A1: National Income and Wealth in Scandinavia |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
|  | Billion current US\$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  | National income | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 1980 | 231 | 622 | 477 | 39 | 108 | 205 | 78 | 47 | 158 | 2 | 143 | 327 | 185 |
| 1981 | 211 | 547 | 412 | 39 | 100 | 162 | 64 | 46 | 143 | 2 | 133 | 299 | 165 |
| 1982 | 195 | 504 | 377 | 37 | 92 | 142 | 58 | 47 | 133 | 2 | 125 | 274 | 149 |
| 1983 | 186 | 489 | 369 | 45 | 90 | 131 | 53 | 50 | 129 | 2 | 117 | 257 | 140 |
| 1984 | 190 | 485 | 363 | 42 | 93 | 122 | 53 | 53 | 132 | 3 | 119 | 258 | 138 |
| 1985 | 200 | 531 | 399 | 49 | 101 | 133 | 55 | 61 | 147 | 3 | 128 | 273 | 145 |
| 1986 | 263 | 719 | 547 | 80 | 140 | 170 | 72 | 86 | 215 | 4 | 168 | 363 | 196 |
| 1987 | 321 | 865 | 655 | 91 | 172 | 194 | 89 | 110 | 279 | 5 | 205 | 436 | 231 |
| 1988 | 349 | 1,003 | 768 | 129 | 188 | 222 | 100 | 130 | 318 | 5 | 230 | 488 | 258 |
| 1989 | 354 | 1,018 | 778 | 150 | 183 | 205 | 104 | 137 | 316 | 5 | 235 | 494 | 259 |
| 1990 | $4 \overline{2} 3$ | 1,199 | $92 \overline{4}$ | 145 | 217 | $2 \overline{63}$ | $12 \overline{7}$ | 172 | $37 \overline{1}$ | $\overline{6}$ | $2 \overline{69}$ | 580 | $\overline{11}$ |
| 1991 | 434 | 1,215 | 923 | 123 | 218 | 273 | 123 | 185 | 359 | 6 | 287 | 592 | 305 |
| 1992 | 459 | 1,297 | 968 | 124 | 236 | 264 | 133 | 212 | 378 | 7 | 321 | 656 | 335 |
| 1993 | 383 | 1,115 | 856 | 133 | 208 | 203 | 110 | 202 | 321 | 7 | 251 | 553 | 302 |
| 1994 | 419 | 1,187 | 921 | 130 | 214 | 237 | 122 | 217 | 328 | 8 | 258 | 575 | 317 |
| 1995 | 497 | 1,447 | 1,105 | 159 | 250 | 293 | 146 | 257 | 372 | 10 | 332 | 660 | 328 |
| 1996 | 530 | 1,590 | 1,206 | 192 | 260 | 309 | 154 | 290 | 393 | 11 | 374 | 721 | 347 |
| 1997 | 495 | 1,601 | 1,223 | 225 | 229 | 316 | 144 | 309 | 374 | 11 | 367 | 680 | 313 |
| 1998 | 495 | 1,657 | 1,267 | 233 | 224 | 336 | 141 | 333 | 387 | 12 | 378 | 696 | 318 |
| 1999 | 507 | 1,844 | 1,431 | 317 | 218 | 382 | 145 | 368 | 394 | 13 | 400 | 712 | 311 |
| 2000 | $4 \overline{9} 4$ | 1,765 | 1,340 | $2 \overline{67}$ | $19 \overline{4}$ | $\overline{3} 2$ | $13 \overline{9}$ | $\overline{3} \overline{5}$ | $37 \overline{4}$ | 11 | $\overline{4} 14$ | 699 | 285 |
| 2001 | 481 | 1,787 | 1,345 | 226 | 205 | 421 | 146 | 349 | 398 | 11 | 431 | 704 | 273 |
| 2002 | 530 | 1,954 | 1,484 | 204 | 234 | 474 | 166 | 405 | 461 | 13 | 457 | 772 | 314 |
| 2003 | 654 | 2,493 | 1,880 | 290 | 298 | 569 | 208 | 515 | 588 | 16 | 596 | 997 | 401 |
| 2004 | 754 | 2,972 | 2,230 | 366 | 340 | 663 | 247 | 614 | 702 | 20 | 721 | 1,179 | 457 |
| 2005 | 819 | 3,494 | 2,593 | 513 | 374 | 740 | 259 | 707 | 795 | 24 | 877 | 1,342 | 465 |
| 2006 | 897 | 4,034 | 2,967 | 626 | 409 | 906 | 285 | 741 | 897 | 28 | 1,040 | 1,559 | 519 |
| 2007 | 1,032 | 4,766 | 3,491 | 659 | 498 | 1,120 | 358 | 856 | 1,083 | 33 | 1,243 | 1,812 | 569 |
| 2008 | 1,130 | 4,791 | 3,462 | 487 | 537 | 1,110 | 384 | 944 | 1,206 | 31 | 1,298 | 1,935 | 637 |
| 2009 | 949 | 4,535 | 3,210 | 565 | 502 | 916 | 338 | 890 | 1,154 | 30 | 1,295 | 1,855 | 561 |


|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Billion current US\$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  | National income | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 2010 | 1,045 | 5,063 | 3,580 | 647 | 532 | 1,032 | 358 | 1,011 | 1,227 | 34 | 1,449 | 2,064 | 615 |
| 2011 | 1,191 | 5,587 | 3,921 | 612 | 595 | 1,131 | 403 | 1,179 | 1,379 | 37 | 1,629 | 2,268 | 639 |
| 2012 | 1,167 | 5,653 | 3,930 | 646 | 604 | 1,097 | 388 | 1,195 | 1,356 | 38 | 1,685 | 2,338 | 653 |
| 2013 | 1,228 | 6,318 | 4,298 | 793 | 592 | 1,200 | 402 | 1,311 | 1,431 | 43 | 1,977 | 2,665 | 688 |
| 2014 | 1,211 | 6,725 | 4,506 | 852 | 587 | 1,200 | 418 | 1,448 | 1,429 | 44 | 2,175 | 2,846 | 671 |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 2017 \\ & 2018 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2020 |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^15]Table A1b: The composition of national wealth in Scandinavia


|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of Scandinavian national income |  |  |  |  |  |  |  |  |  |  |  |
|  | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 2006 | 450\% | 331\% | 70\% | 46\% | 101\% | 32\% | 83\% | 100\% | 3\% | 116\% | 174\% | 58\% |
| 2007 | 462\% | 338\% | 64\% | 48\% | 108\% | 35\% | 83\% | 105\% | 3\% | 120\% | 176\% | 55\% |
| 2008 | 424\% | 306\% | 43\% | 48\% | 98\% | 34\% | 84\% | 107\% | 3\% | 115\% | 171\% | 56\% |
| 2009 | 478\% | 338\% | 60\% | 53\% | 96\% | 36\% | 94\% | 122\% | 3\% | 136\% | 196\% | 59\% |
| 2010 | 484\% ${ }^{-}$ | 342\% | 62\% | 51\% | 99\% | 34\% | 97\% | 117\% | 3\% | 139\% | 197\% | 59\% |
| 2011 | 469\% | 329\% | 51\% | 50\% | 95\% | 34\% | 99\% | 116\% | 3\% | 137\% | 190\% | 54\% |
| 2012 | 484\% | 337\% | 55\% | 52\% | 94\% | 33\% | 102\% | 116\% | 3\% | 144\% | 200\% | 56\% |
| 2013 | 515\% | 350\% | 65\% | 48\% | 98\% | 33\% | 107\% | 117\% | 4\% | 161\% | 217\% | 56\% |
| 2014 | 555\% | 372\% | 70\% | 49\% | 99\% | 35\% | 120\% | 118\% | 4\% | 180\% | 235\% | 55\% |
| $\begin{aligned} & 2015 \\ & 2020 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: wealth is at the end of the year and does not include offshore wealth.

Table A1c: The composition of household wealth in Scandinavia

|  | [1] [2] |  | [3] | [4] | [5] | [6] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of total net household wealth |  |  |  |  |  |
|  | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions |
| 1980 | 100\% | 8.1\% | 22.6\% | 43.0\% | 16.4\% | 9.9\% |
| 1981 | 100\% | 9.6\% | 24.3\% | 39.3\% | 15.6\% | 11.3\% |
| 1982 | 100\% | 9.9\% | 24.5\% | 37.6\% | 15.5\% | 12.5\% |
| 1983 | 100\% | 12.2\% | 24.2\% | 35.4\% | 14.5\% | 13.7\% |
| 1984 | 100\% | 11.7\% | 25.5\% | 33.7\% | 14.5\% | 14.6\% |
| 1985 | 100\% | 12.4\% | 25.4\% | 33.2\% | 13.9\% | 15.2\% |
| 1986 | 100\% | 14.7\% | 25.5\% | 31.1\% | 13.1\% | 15.6\% |
| 1987 | 100\% | 13.9\% | 26.2\% | 29.6\% | 13.5\% | 16.7\% |
| 1988 | 100\% | 16.8\% | 24.5\% | 28.9\% | 13.0\% | 16.9\% |
| 1989 | 100\% | 19.3\% | 23.5\% | 26.4\% | 13.3\% | 17.5\% |
| 1990 | 100\% | 15.7\% | 23.5\% | 28.5\% | 13.7\% | 18.6\% |
| 1991 | 100\% | 13.4\% | 23.6\% | 29.6\% | 13.4\% | 20.1\% |
| 1992 | 100\% | 12.8\% | 24.4\% | 27.2\% | 13.7\% | 21.9\% |
| 1993 | 100\% | 15.5\% | 24.3\% | 23.7\% | 12.9\% | 23.6\% |
| 1994 | 100\% | 14.1\% | 23.3\% | 25.8\% | 13.2\% | 23.6\% |
| 1995 | 100\% | 14.4\% | 22.6\% | 26.5\% | 13.2\% | 23.3\% |
| 1996 | 100\% | 15.9\% | 21.6\% | 25.7\% | 12.8\% | 24.1\% |
| 1997 | 100\% | 18.4\% | 18.7\% | 25.8\% | 11.8\% | 25.3\% |
| 1998 | 100\% | 18.4\% | 17.7\% | 26.5\% | 11.1\% | 26.3\% |
| 1999 | 100\% | 22.1\% | 15.3\% | 26.7\% | 10.1\% | 25.8\% |
| 2000 | 100\% | 20.0\% | 14.5\% | 28.5\% | 10.4\% | 26.7\% |


|  | [1] | [2] | [3] | [4] | [5] | [6] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of total net household wealth |  |  |  |  |  |
|  | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions |
| 2001 | 100\% | 16.8\% | 15.2\% | 31.3\% | 10.9\% | 25.9\% |
| 2002 | 100\% | 13.8\% | 15.8\% | 32.0\% | 11.2\% | 27.3\% |
| 2003 | 100\% | 15.4\% | 15.8\% | 30.2\% | 11.1\% | 27.4\% |
| 2004 | 100\% | 16.4\% | 15.3\% | 29.7\% | 11.1\% | 27.5\% |
| 2005 | 100\% | 19.8\% | 14.4\% | 28.5\% | 10.0\% | 27.3\% |
| 2006 | 100\% | 21.1\% | 13.8\% | 30.5\% | 9.6\% | 25.0\% |
| 2007 | 100\% | 18.9\% | 14.3\% | 32.1\% | 10.3\% | 24.5\% |
| 2008 | 100\% | 14.1\% | 15.5\% | 32.1\% | 11.1\% | 27.3\% |
| 2009 | 100\% | 17.6\% | 15.6\% | 28.5\% | 10.5\% | 27.7\% |
| 2010 | 100\% | 18.1\% | 14.8\% | 28.8\% | 10.0\% | 28.3\% |
| 2011 | 100\% | 15.6\% | 15.2\% | 28.9\% | 10.3\% | 30.1\% |
| 2012 | 100\% | 16.4\% | 15.4\% | 27.9\% | 9.9\% | 30.4\% |
| 2013 | 100\% | 18.4\% | 13.8\% | 27.9\% | 9.4\% | 30.5\% |
| $\begin{aligned} & 2014 \\ & 2015 \end{aligned}$ |  |  |  |  |  |  |

Table A1d: Aggregate income, wealth and population in Scandinavia (market exchange rates)

| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] | [18] | [19] | [20] | [21] | [22] | [23] | [24] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Household wealth |  |  |  |  |  |  |  | National income |  |  |  |  |  |  |  | Population |  |  |  |  |  |  |  |
| billion | (marke | t exchang | rates) |  | \% of total S | Scandinavia |  | billion USS | US\$ (marke | et exchange | e rates) |  | \% of total S | candinavia |  |  | Thous | sands |  |  | \% of total S | Scandinavia |  |
| Scandinavia | Sweden | Norway | Denmark | Scandina- <br> via | Sweden | Norway | Denmark | Scandinavi <br> a | Sweden | Norway | Denmark | Scandina- <br> via | Sweden | Norway | Denmark | Scandina- <br> via | Sweden | Norway | Denmark | Scandina- <br> via | Sweden | Norway | Denmark |
| 477 | 265 | 98 | 114 | 100\% | 55.5\% | 20.5\% | 24.0\% | 231 | 118 | 52 | 61 | 100\% | 51.1\% | 22.6\% | 26.3\% | 17,519 | 8,318 | 4,079 | 5,122 | 100\% | 47.5\% | 23.3\% | 29.2\% |
| 412 | 216 | 106 | 90 | 100\% | 52.5\% | 25.8\% | 21.8\% | 211 | 107 | 52 | 52 | 100\% | 50.9\% | 24.5\% | 24.6\% | 17,539 | 8,323 | 4,092 | 5,124 | 100\% | 47.5\% | 23.3\% | 29.2\% |
| 377 | 182 | 109 | 86 | 100\% | 48.4\% | 28.9\% | 22.7\% | 195 | 94 | 50 | 50 | 100\% | 48.2\% | 25.9\% | 25.9\% | 17,554 | 8,327 | 4,107 | 5,119 | 100\% | 47.4\% | 23.4\% | 29.2\% |
| 369 | 163 | 103 | 104 | 100\% | 44.1\% | 27.9\% | 28.1\% | 186 | 86 | 50 | 51 | 100\% | 46.1\% | 26.7\% | 27.2\% | 17,570 | 8,331 | 4,123 | 5,116 | 100\% | 47.4\% | 23.5\% | 29.1\% |
| 363 | 161 | 100 | 102 | 100\% | 44.3\% | 27.5\% | 28.2\% | 190 | 90 | 50 | 49 | 100\% | 47.4\% | 26.6\% | 26.0\% | 17,589 | 8,343 | 4,134 | 5,112 | 100\% | 47.4\% | 23.5\% | 29.1\% |
| 399 | 170 | 106 | 124 | 100\% | 42.5\% | 26.5\% | 31.0\% | 200 | 94 | 54 | 52 | 100\% | 47.0\% | 26.8\% | 26.1\% | 17,615 | 8,358 | 4,146 | 5,111 | 100\% | 47.4\% | 23.5\% | 29.0\% |
| 547 | 236 | 157 | 155 | 100\% | 43.1\% | 28.7\% | 28.3\% | 263 | 125 | 64 | 74 | 100\% | 47.7\% | 24.2\% | 28.1\% | 17,657 | 8,382 | 4,159 | 5,116 | 100\% | 47.5\% | 23.6\% | 29.0\% |
| 655 | 287 | 192 | 177 | 100\% | 43.7\% | 29.3\% | 27.0\% | 321 | 154 | 76 | 92 | 100\% | 47.8\% | 23.6\% | 28.6\% | 17,714 | 8,414 | 4,176 | 5,125 | 100\% | 47.5\% | 23.6\% | 28.9\% |
| 768 | 381 | 187 | 200 | 100\% | 49.6\% | 24.4\% | 26.0\% | 349 | 173 | 80 | 96 | 100\% | 49.6\% | 22.9\% | 27.5\% | 17,786 | 8,459 | 4,198 | 5,129 | 100\% | 47.6\% | 23.6\% | 28.8\% |
| 778 | 428 | 160 | 190 | 100\% | 55.1\% | 20.6\% | 24.4\% | 354 | 181 | 81 | 93 | 100\% | 51.1\% | 22.7\% | 26.2\% | 17,878 | 8,527 | 4,221 | 5,130 | 100\% | 47.7\% | 23.6\% | 28.7\% |
| 924 | 524 | $17 \overline{6}$ | 224 | 100\% | 56.7\% | 19.0\% | 24.2\% | $42 \overline{3}$ | 216 | 94 | 113 | 100\% | 51.0\% | 22.3\% | 26.7\% | 17,959 | 8,591 | 4,233 | 5,135 | 100\% | 47.8\% | 23.6\% | 28.6\% |
| 923 | 519 | 167 | 237 | 100\% | 56.3\% | 18.1\% | 25.7\% | 434 | 225 | 96 | 113 | 100\% | 51.9\% | 22.1\% | 26.0\% | 18,040 | 8,644 | 4,250 | 5,146 | 100\% | 47.9\% | 23.6\% | 28.5\% |
| 968 | 551 | 169 | 248 | 100\% | 56.9\% | 17.5\% | 25.6\% | 459 | 230 | 104 | 125 | 100\% | 50.2\% | 22.7\% | 27.1\% | 18,128 | 8,692 | 4,274 | 5,162 | 100\% | 47.9\% | 23.6\% | 28.5\% |
| 856 | 419 | 168 | 270 | 100\% | 48.9\% | 19.6\% | 31.5\% | 383 | 171 | 96 | 117 | 100\% | 44.5\% | 25.0\% | 30.5\% | 18,225 | 8,745 | 4,299 | 5,181 | 100\% | 48.0\% | 23.6\% | 28.4\% |
| 921 | 437 | 195 | 289 | 100\% | 47.4\% | 21.2\% | 31.4\% | 419 | 189 | 102 | 128 | 100\% | 45.0\% | 24.4\% | 30.6\% | 18,338 | 8,816 | 4,325 | 5,197 | 100\% | 48.1\% | 23.6\% | 28.3\% |
| 1,105 | 491 | 244 | 371 | 100\% | 44.4\% | 22.1\% | 33.6\% | 497 | 221 | 124 | 153 | 100\% | 44.4\% | 24.9\% | 30.7\% | 18,402 | 8,837 | 4,348 | 5,216 | 100\% | 48.0\% | 23.6\% | 28.3\% |
| 1,206 | 545 | 267 | 393 | 100\% | 45.2\% | 22.1\% | 32.6\% | 530 | 240 | 134 | 155 | 100\% | 45.4\% | 25.4\% | 29.2\% | 18,465 | 8,844 | 4,370 | 5,251 | 100\% | 47.9\% | 23.7\% | 28.4\% |
| 1,223 | 557 | 274 | 393 | 100\% | 45.5\% | 22.4\% | 32.1\% | 495 | 219 | 133 | 143 | 100\% | 44.3\% | 26.9\% | 28.8\% | 18,515 | 8,848 | 4,393 | 5,275 | 100\% | 47.8\% | 23.7\% | 28.5\% |
| 1,267 | 582 | 270 | 415 | 100\% | 45.9\% | 21.3\% | 32.7\% | 495 | 223 | 126 | 146 | 100\% | 45.0\% | 25.5\% | 29.5\% | 18,567 | 8,854 | 4,418 | 5,295 | 100\% | 47.7\% | 23.8\% | 28.5\% |
| 1,431 | 670 | 310 | 450 | 100\% | 46.8\% | 21.7\% | 31.5\% | 507 | 226 | 134 | 147 | 100\% | 44.6\% | 26.4\% | 29.0\% | 18,620 | 8,861 | 4,445 | 5,314 | 100\% | 47.6\% | 23.9\% | 28.5\% |
| 1,340 | 630 | 300 | 411 | 100\% | 47.0\% | 22.4\% | 30.6\% | 494 | 217 | 143 | 134 | 100\% | 43.9\% | 29.0\% | 27.2\% | 18,691 | 8,883 | 4,478 | 5,3"30 | 100\% | 47.5\% | 24.0\% | 28.5\% |
| 1,345 | 636 | 313 | 397 | 100\% | 47.3\% | 23.2\% | 29.5\% | 481 | 199 | 148 | 135 | 100\% | 41.3\% | 30.6\% | 28.0\% | 18,762 | 8,909 | 4,503 | 5,349 | 100\% | 47.5\% | 24.0\% | 28.5\% |
| 1,484 | 705 | 359 | 420 | 100\% | 47.5\% | 24.2\% | 28.3\% | 530 | 219 | 165 | 146 | 100\% | 41.3\% | 31.2\% | 27.5\% | 18,833 | 8,941 | 4,524 | 5,368 | 100\% | 47.5\% | 24.0\% | 28.5\% |
| 1,880 | 910 | 424 | 546 | 100\% | 48.4\% | 22.6\% | 29.0\% | 654 | 280 | 195 | 179 | 100\% | 42.8\% | 29.8\% | 27.3\% | 18,911 | 8,976 | 4,552 | 5,384 | 100\% | 47.5\% | 24.1\% | 28.5\% |
| 2,230 | 1,061 | 492 | 676 | 100\% | 47.6\% | 22.1\% | 30.3\% | 754 | 319 | 226 | 209 | 100\% | 42.3\% | 30.0\% | 27.7\% | 18,986 | 9,011 | 4,577 | 5,398 | 100\% | 47.5\% | 24.1\% | 28.4\% |
| 2,593 | 1,180 | 560 | 852 | 100\% | 45.5\% | 21.6\% | 32.9\% | 819 | 328 | 269 | 222 | 100\% | 40.0\% | 32.9\% | 27.1\% | 19,066 | 9,048 | 4,606 | 5,411 | 100\% | 47.5\% | 24.2\% | 28.4\% |
| 2,967 | 1,323 | 651 | 993 | 100\% | 44.6\% | 21.9\% | 33.5\% | 897 | 359 | 299 | 239 | 100\% | 40.0\% | 33.4\% | 26.7\% | 19,181 | 9,113 | 4,640 | 5,427 | 100\% | 47.5\% | 24.2\% | 28.3\% |
| 3,491 | 1,583 | 772 | 1,136 | 100\% | 45.4\% | 22.1\% | 32.5\% | 1,032 | 423 | 343 | 266 | 100\% | 41.0\% | 33.2\% | 25.8\% | 19,311 | 9,183 | 4,681 | 5,447 | 100\% | 47.6\% | 24.2\% | 28.2\% |
| 3,462 | 1,609 | 755 | 1,098 | 100\% | 46.5\% | 21.8\% | 31.7\% | 1,130 | 443 | 395 | 292 | 100\% | 39.2\% | 34.9\% | 25.9\% | 19,469 | 9,256 | 4,737 | 5,476 | 100\% | 47.5\% | 24.3\% | 28.1\% |
| 3,210 | 1,440 | 769 | 1,001 | 100\% | 44.9\% | 24.0\% | 31.2\% | 949 | 358 | 326 | 265 | 100\% | 37.8\% | 34.3\% | 27.9\% | 19,651 | 9,341 | 4,799 | 5,511 | 100\% | 47.5\% | 24.4\% | 28.0\% |
| 3,580 | 1,701 | 864 | 1,015 | 100\% | 47.5\% | 24.1\% | 28.4\% | $\overline{1,045}$ | 412 | 365 | 269 | 100\% | 39.4\% | 34.9\% | 25.7\% | 19,809 | 9,416 | 4,858 | 5,535 | 100\% | 47.5\% | 24.5\% | 27.9\% |
| 3,921 | 1,876 | 999 | 1,046 | 100\% | 47.8\% | 25.5\% | 26.7\% | 1,191 | 477 | 425 | 289 | 100\% | 40.1\% | 35.7\% | 24.2\% | 19,897 | 9,416 | 4,920 | 5,561 | 100\% | 47.3\% | 24.7\% | 27.9\% |
| 3,930 | 1,837 | 1,061 | 1,032 | 100\% | 46.7\% | 27.0\% | 26.3\% | 1,167 | 460 | 435 | 272 | 100\% | 39.4\% | 37.3\% | 23.3\% | 19,982 | 9,416 | 4,986 | 5,581 | 100\% | 47.1\% | 25.0\% | 27.9\% |
| 4,298 | 2,086 | 1,112 | 1,100 | 100\% | 48.5\% | 25.9\% | 25.6\% | 1,228 | 494 | 446 | 288 | 100\% | 40.2\% | 36.3\% | 23.4\% | 20,069 | 9,416 | 5,051 | 5,603 | 100\% | 46.9\% | 25.2\% | 27.9\% |
| 4,506 | 2,230 | $\begin{gathered} 1,085 \\ 897 \end{gathered}$ | 1,191 | 100\% | 49.5\% | 24.1\% | 26.4\% | 1,211 | 485 | $\begin{aligned} & 434 \\ & 338 \end{aligned}$ | 291 | 100\% | 40.1\% | 35.9\% | 24.1\% | 20,152 | 9,416 | 5,109 | 5,627 | 100\% | 46.7\% | 25.4\% | 27.9\% |

Table A1e: Aggregate income, wealth and population in Scandinavia (PPP-adjusted exchange rates)

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] | [18] | [19] | [20] | [21] | [22] | [23] | [24] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Household wealth |  |  |  |  |  |  |  | National income |  |  |  |  |  |  |  | Population |  |  |  |  |  |  |  |
|  | billion US\$ (PPP) |  |  |  | \% of total Scandinavia |  |  |  | billion US\$ (PPP) |  |  |  | \% of total Scandinavia |  |  |  | Thousands |  |  |  | \% of total Scandinavia |  |  |  |
|  | $\begin{array}{\|c\|} \hline \text { Scandinavi } \\ \mathrm{a} \end{array}$ | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandina- via | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandina- <br> via | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| 1980 | 338 | 162 | 89 | 87 | 100\% | 47.9\% | 26.3\% | 25.8\% | 166 | 72 | 47 | 46 | 100\% | 43.6\% | 28.6\% | 27.9\% | 17,519 | 8,318 | 4,079 | 5,122 | 100\% | 47.5\% | 23.3\% | 29.2\% |
| 1981 | 347 | 154 | 108 | 85 | 100\% | 44.4\% | 31.2\% | 24.4\% | 179 | 77 | 53 | 49 | 100\% | 42.9\% | 29.6\% | 27.5\% | 17,539 | 8,323 | 4,092 | 5,124 | 100\% | 47.5\% | 23.3\% | 29.2\% |
| 1982 | 369 | 158 | 120 | 90 | 100\% | 42.9\% | 32.6\% | 24.5\% | 191 | 82 | 56 | 53 | 100\% | 42.8\% | 29.2\% | 28.0\% | 17,554 | 8,327 | 4,107 | 5,119 | 100\% | 47.4\% | 23.4\% | 29.2\% |
| 1983 | 408 | 165 | 125 | 117 | 100\% | 40.4\% | 30.7\% | 28.8\% | 205 | 87 | 61 | 58 | 100\% | 42.5\% | 29.5\% | 28.1\% | 17,570 | 8,331 | 4,123 | 5,116 | 100\% | 47.4\% | 23.5\% | 29.1\% |
| 1984 | 431 | 169 | 133 | 129 | 100\% | 39.2\% | 30.8\% | 29.9\% | 224 | 95 | 67 | 62 | 100\% | 42.3\% | 30.0\% | 27.8\% | 17,589 | 8,343 | 4,134 | 5,112 | 100\% | 47.4\% | 23.5\% | 29.1\% |
| 1985 | 484 | 179 | 146 | 159 | 100\% | 36.9\% | 30.2\% | 32.9\% | 241 | 99 | 74 | 67 | 100\% | 41.3\% | 30.8\% | 27.9\% | 17,615 | 8,358 | 4,146 | 5,111 | 100\% | 47.4\% | 23.5\% | 29.0\% |
| 1986 | 546 | 202 | 191 | 153 | 100\% | 36.9\% | 35.0\% | 28.1\% | 258 | 107 | 78 | 73 | 100\% | 41.5\% | 30.1\% | 28.4\% | 17,657 | 8,382 | 4,159 | 5,116 | 100\% | 47.5\% | 23.6\% | 29.0\% |
| 1987 | 564 | 215 | 204 | 145 | 100\% | 38.1\% | 36.2\% | 25.7\% | 271 | 115 | 80 | 75 | 100\% | 42.5\% | 29.7\% | 27.8\% | 17,714 | 8,414 | 4,176 | 5,125 | 100\% | 47.5\% | 23.6\% | 28.9\% |
| 1988 | 621 | 270 | 190 | 161 | 100\% | 43.5\% | 30.6\% | 25.9\% | 281 | 123 | 81 | 77 | 100\% | 43.7\% | 28.9\% | 27.5\% | 17,786 | 8,459 | 4,198 | 5,129 | 100\% | 47.6\% | 23.6\% | 28.8\% |
| 1989 | 647 | 313 | 170 | 165 | 100\% | 48.3\% | 26.2\% | 25.5\% | 298 | 132 | 85 | 81 | 100\% | 44.3\% | 28.6\% | 27.0\% | 17,878 | 8,527 | 4,221 | 5,130 | 100\% | 47.7\% | 23.6\% | 28.7\% |
| 1990 | $66 \overline{8}$ | 331 | 169 | $\overline{168}$ | 100\% | 49.5\% | 25.3\% | 25.1\% | 311 | 136 | 91 | 85 | 100\% | 43.7\% | 29.2\% | 27.2\% | 17,959 | 8,591 | 4,233 | 5,135 | 100\% | 47.8\% | 23.6\% | 28.6\% |
| 1991 | 670 | 317 | 168 | 185 | 100\% | 47.3\% | 25.1\% | 27.6\% | 323 | 137 | 97 | 88 | 100\% | 42.6\% | 30.0\% | 27.3\% | 18,040 | 8,644 | 4,250 | 5,146 | 100\% | 47.9\% | 23.6\% | 28.5\% |
| 1992 | 680 | 325 | 169 | 186 | 100\% | 47.7\% | 24.9\% | 27.4\% | 334 | 136 | 104 | 93 | 100\% | 40.7\% | 31.3\% | 28.0\% | 18,128 | 8,692 | 4,274 | 5,162 | 100\% | 47.9\% | 23.6\% | 28.5\% |
| 1993 | 737 | 323 | 192 | 222 | 100\% | 43.9\% | 26.1\% | 30.1\% | 338 | 132 | 110 | 96 | 100\% | 39.0\% | 32.5\% | 28.4\% | 18,225 | 8,745 | 4,299 | 5,181 | 100\% | 48.0\% | 23.6\% | 28.4\% |
| 1994 | 794 | 334 | 227 | 233 | 100\% | 42.1\% | 28.6\% | 29.3\% | 367 | 144 | 119 | 103 | 100\% | 39.4\% | 32.5\% | 28.1\% | 18,338 | 8,816 | 4,325 | 5,197 | 100\% | 48.1\% | 23.6\% | 28.3\% |
| 1995 | 863 | 346 | 253 | 265 | 100\% | 40.1\% | 29.3\% | 30.7\% | 393 | 155 | 128 | 109 | 100\% | 39.6\% | 32.7\% | 27.7\% | 18,402 | 8,837 | 4,348 | 5,216 | 100\% | 48.0\% | 23.6\% | 28.3\% |
| 1996 | 935 | 367 | 275 | 293 | 100\% | 39.2\% | 29.5\% | 31.3\% | 416 | 162 | 139 | 115 | 100\% | 38.9\% | 33.4\% | 27.7\% | 18,465 | 8,844 | 4,370 | 5,251 | 100\% | 47.9\% | 23.7\% | 28.4\% |
| 1997 | 1,073 | 433 | 308 | 333 | 100\% | 40.3\% | 28.7\% | 31.0\% | 441 | 171 | 150 | 121 | 100\% | 38.7\% | 34.0\% | 27.4\% | 18,515 | 8,848 | 4,393 | 5,275 | 100\% | 47.8\% | 23.7\% | 28.5\% |
| 1998 | 1,164 | 478 | 330 | 355 | 100\% | 41.1\% | 28.4\% | 30.5\% | 462 | 183 | 154 | 125 | 100\% | 39.6\% | 33.4\% | 27.0\% | 18,567 | 8,854 | 4,418 | 5,295 | 100\% | 47.7\% | 23.8\% | 28.5\% |
| 1999 | 1,352 | 578 | 373 | 401 | 100\% | 42.8\% | 27.6\% | 29.6\% | 487 | 195 | 161 | 131 | 100\% | 40.1\% | 33.0\% | 26.9\% | 18,620 | 8,861 | 4,445 | 5,314 | 100\% | 47.6\% | 23.9\% | 28.5\% |
| 2000 | 1,393 | 610 | 361 | $\overline{42} 1$ | 100\% | 43.8\% | 25.9\% | 30.3\% | 520 | 210 | 172 | 138 | 100\% | 40.4\% | 33.1\% | 26.5\% | 18,691 | 8, $\overline{8} 8 \overline{3}$ | 4,478 | 5,330 | 100\% | 47.5\% | 24.0\% | 28.5\% |
| 2001 | 1,502 | 696 | 388 | 419 | 100\% | 46.3\% | 25.8\% | 27.9\% | 543 | 217 | 183 | 143 | 100\% | 40.0\% | 33.7\% | 26.3\% | 18,762 | 8,909 | 4,503 | 5,349 | 100\% | 47.5\% | 24.0\% | 28.5\% |
| 2002 | 1,553 | 724 | 409 | 421 | 100\% | 46.6\% | 26.3\% | 27.1\% | 560 | 225 | 188 | 146 | 100\% | 40.2\% | 33.7\% | 26.1\% | 18,833 | 8,941 | 4,524 | 5,368 | 100\% | 47.5\% | 24.0\% | 28.5\% |
| 2003 | 1,666 | 778 | 426 | 461 | 100\% | 46.7\% | 25.6\% | 27.7\% | 586 | 240 | 196 | 151 | 100\% | 40.9\% | 33.4\% | 25.7\% | 18,911 | 8,976 | 4,552 | 5,384 | 100\% | 47.5\% | 24.1\% | 28.5\% |
| 2004 | 1,827 | 845 | 458 | 524 | 100\% | 46.3\% | 25.0\% | 28.7\% | 626 | 254 | 210 | 162 | 100\% | 40.6\% | 33.6\% | 25.8\% | 18,986 | 9,011 | 4,577 | 5,398 | 100\% | 47.5\% | 24.1\% | 28.4\% |
| 2005 | 2,119 | 980 | 471 | 667 | 100\% | 46.3\% | 22.2\% | 31.5\% | 673 | 272 | 227 | 174 | 100\% | 40.5\% | 33.7\% | 25.8\% | 19,066 | 9,048 | 4,606 | 5,411 | 100\% | 47.5\% | 24.2\% | 28.4\% |
| 2006 | 2,393 | 1,101 | 516 | 776 | 100\% | 46.0\% | 21.6\% | 32.4\% | 723 | 299 | 237 | 187 | 100\% | 41.3\% | 32.8\% | 25.9\% | 19,181 | 9,113 | 4,640 | 5,427 | 100\% | 47.5\% | 24.2\% | 28.3\% |
| 2007 | 2,585 | 1,215 | 558 | 813 | 100\% | 47.0\% | 21.6\% | 31.4\% | 763 | 324 | 248 | 191 | 100\% | 42.5\% | 32.5\% | 25.0\% | 19,311 | 9,183 | 4,681 | 5,447 | 100\% | 47.6\% | 24.2\% | 28.2\% |
| 2008 | 2,402 | 1,187 | 485 | 730 | 100\% | 49.4\% | 20.2\% | 30.4\% | 775 | 327 | 254 | 194 | 100\% | 42.2\% | 32.7\% | 25.1\% | 19,469 | 9,256 | 4,737 | 5,476 | 100\% | 47.5\% | 24.3\% | 28.1\% |
| 2009 | 2,540 | 1,251 | 587 | 702 | 100\% | 49.3\% | 23.1\% | 27.6\% | 746 | 311 | 249 | 186 | 100\% | 41.7\% | 33.3\% | 24.9\% | 19,651 | 9,341 | 4,799 | 5,511 | 100\% | 47.5\% | 24.4\% | 28.0\% |
| 2010 | 2,745 | 1,396 | 608 | 741 | 100\% | 50.9\% | 22.1\% | 27.0\% | 791 | 338 | 257 | 196 | 100\% | 42.7\% | 32.5\% | 24.8\% | 19,809 | 9,416 | 4,858 | 5,535 | 100\% | 47.5\% | 24.5\% | 27.9\% |
| 2011 | 2,735 | 1,381 | 624 | 730 | 100\% | 50.5\% | 22.8\% | 26.7\% | 818 | 351 | 266 | 201 | 100\% | 42.9\% | 32.4\% | 24.6\% | 19,897 | 9,416 | 4,920 | 5,561 | 100\% | 47.3\% | 24.7\% | 27.9\% |
| 2012 | 2,877 | 1,425 | 678 | 774 | 100\% | 49.5\% | 23.6\% | 26.9\% | 839 | 357 | 278 | 204 | 100\% | 42.6\% | 33.1\% | 24.3\% | 19,982 | 9,416 | 4,986 | 5,581 | 100\% | 47.1\% | 25.0\% | 27.9\% |
| 2013 | 3,101 | 1,582 | 711 | 807 | 100\% | 51.0\% | 22.9\% | 26.0\% | 871 | 375 | 285 | 211 | 100\% | 43.0\% | 32.8\% | 24.2\% | 20,069 | 9,416 | 5,051 | 5,603 | 100\% | 46.9\% | 25.2\% | 27.9\% |
| 2014 | 3,453 | 1,815 | 755 | 883 | 100\% | 52.6\% | 21.9\% | 25.6\% | 913 | 395 | 302 | 216 | 100\% | 43.3\% | 33.1\% | 23.7\% | 20,152 | 9,416 | 5,109 | 5,627 | 100\% | 46.7\% | 25.4\% | 27.9\% |

## Table A1f: Par adult national income in Scandinavia (market exchange rate)




Table A1h: Par adult household wealth in Scandinavia (market exchange rates)

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] | [18] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Per adult wealth, local currency |  |  | Per adult real wealth, local currency (2014 prices) |  |  | Per adult wealth growth in local currency |  |  |  | Per adult wealth (current US\$) |  |  |  | Per adult wealth (current US\$, \% Scandinavia) |  |  |  |
|  | Sweden | Norway | Denmark | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| 1980 | 176,534 | 169,131 | 176,506 | 553,404 | 723,350 | 464,555 |  |  |  |  | 37,111 | 41,738 | 34,242 | 31,318 | 100\% | 112\% | 92\% | 84\% |
| 1981 | 171,805 | 211,533 | 174,038 | 480,382 | 801,474 | 410,663 | -7.1\% | -13.2\% | 10.8\% | -11.6\% | 31,883 | 33,930 | 36,856 | 24,432 | 100\% | 106\% | 116\% | 77\% |
| 1982 | 178,871 | 242,508 | 193,337 | 460,759 | 831,452 | 411,455 | -1.0\% | -4.1\% | 3.7\% | 0.2\% | 29,009 | 28,471 | 37,575 | 23,203 | 100\% | 98\% | 130\% | 80\% |
| 1983 | 193,730 | 256,923 | 255,479 | 458,072 | 823,535 | 508,780 | 6.4\% | -0.6\% | -1.0\% | 23.7\% | 28,250 | 25,268 | 35,212 | 27,936 | 100\% | 89\% | 125\% | 99\% |
| 1984 | 205,350 | 276,626 | 284,088 | 449,571 | 834,849 | 534,871 | 0.9\% | -1.9\% | 1.4\% | 5.1\% | 27,597 | 24,825 | 33,894 | 27,431 | 100\% | 90\% | 123\% | 99\% |
| 1985 | 224,006 | 305,946 | 349,248 | 456,788 | 877,711 | 632,745 | 7.3\% | 1.6\% | 5.1\% | 18.3\% | 30,145 | 26,035 | 35,587 | 32,959 | 100\% | 86\% | 118\% | 109\% |
| 1986 | 256,543 | 386,900 | 329,845 | 501,909 | 1,116,103 | 591,275 | 9.2\% | 9.9\% | 27.2\% | -6.6\% | 41,033 | 36,013 | 52,321 | 40,767 | 100\% | 88\% | 128\% | 99\% |
| 1987 | 276,302 | 427,123 | 315,537 | 518,633 | 1,149,151 | 540,122 | -0.2\% | 3.3\% | 3.0\% | -8.7\% | 48,773 | 43,578 | 63,395 | 46,129 | 100\% | 89\% | 130\% | 95\% |
| 1988 | 353,150 | 398,480 | 348,738 | 626,424 | 1,022,317 | 572,830 | 9.0\% | 20.8\% | -11.0\% | 6.1\% | 56,768 | 57,637 | 61,145 | 51,807 | 100\% | 102\% | 108\% | 91\% |
| 1989 | 414,251 | 357,409 | 357,706 | 690,418 | 868,223 | 562,248 | 0.8\% | 10.2\% | -15.1\% | -1.8\% | 57,068 | 64,256 | 51,765 | 48,933 | 100\% | 113\% | 91\% | 86\% |
| 1990 | 4 $\overline{62, \overline{6} 11}$ | 353, 556 | 356,742 | 697,878 | 827, $\overline{3} \overline{30}$ | $548, \overline{810}$ | -1.3\% | 1.1\% | -4.7\% | -2.4\% | 67,420 | 78,160 | 56,481 | 57,645 | 100\% | 116\% | 84\% | $8 \overline{6} \%$ |
| 1991 | 465,366 | 345,052 | 387,844 | 642,175 | 789,958 | 580,706 | -3.2\% | -8.0\% | -4.5\% | 5.8\% | 66,936 | 76,952 | 53,225 | 60,634 | 100\% | 115\% | 80\% | 91\% |
| 1992 | 473,305 | 333,005 | 381,578 | 638,508 | 767,287 | 567,288 | -1.6\% | -0.6\% | -2.9\% | -2.3\% | 69,847 | 81,270 | 53,585 | 63,216 | 100\% | 116\% | 77\% | 91\% |
| 1993 | 478,567 | 373,500 | 442,935 | 616,897 | 841,305 | 654,350 | 5.0\% | -3.4\% | 9.6\% | 15.3\% | 61,400 | 61,485 | 52,649 | 68,313 | 100\% | 100\% | 86\% | 111\% |
| 1994 | 491,424 | 428,625 | 463,352 | 619,863 | 966,979 | 669,288 | 4.4\% | 0.5\% | 14.9\% | 2.3\% | 65,603 | 63,689 | 60,732 | 72,848 | 100\% | 97\% | 93\% | 111\% |
| 1995 | 509,435 | 477,919 | 521,376 | 626,703 | 1,046,160 | 742,775 | 5.6\% | 1.1\% | 8.2\% | 11.0\% | 78,464 | 71,417 | 75,439 | 93,064 | 100\% | 91\% | 96\% | 119\% |
| 1996 | 531,528 | 529,658 | 568,211 | 650,908 | 1,112,026 | 798,247 | 5.5\% | 3.9\% | 6.3\% | 7.5\% | 85,235 | 79,262 | 82,120 | 97,990 | 100\% | 93\% | 96\% | 115\% |
| 1997 | 616,883 | 593,716 | 643,069 | 751,416 | 1,212,736 | 886,618 | 12.7\% | 15.4\% | 9.1\% | 11.1\% | 86,230 | 80,798 | 83,936 | 97,369 | 100\% | 94\% | 97\% | 113\% |
| 1998 | 669,922 | 622,369 | 686,635 | 817,327 | 1,280,098 | 932,076 | 7.0\% | 8.8\% | 5.6\% | 5.1\% | 89,032 | 84,268 | 82,486 | 102,470 | 100\% | 95\% | 93\% | 115\% |
| 1999 | 800,062 | 733,874 | 773,992 | 971,443 | 1,415,123 | 1,031,226 | 14.5\% | 18.9\% | 10.5\% | 10.6\% | 100,212 | 96,831 | 94,096 | 110,947 | 100\% | 97\% | 94\% | 111\% |
| $2000-$ | 8 $\overline{30}, \overline{5} 0 \overline{8}$ | 795, $\overline{8} \mathbf{3}$ - | 815,949 | $\overline{998,616}$ | $\overline{1}, \overline{3} 2 \overline{9}, 359$ | 1,057,154 | 0.6\% | 2.8\% | -6.1\% | 2.5\% | 93, $\overline{514}$ | - $90, \overline{645}$ | 90,413 | 100,944 | 100\% | 97\% | $\overline{97} \%$ | 108\% |
| 2001 | 942,522 | 843,312 | 809,739 | 1,106,292 | 1,385,984 | 1,022,576 | 5.2\% | 10.8\% | 4.3\% | -3.3\% | 93,550 | 91,249 | 93,788 | 97,291 | 100\% | 98\% | 100\% | 104\% |
| 2002 | 980,294 | 854,897 | 812,921 | 1,126,379 | 1,429,247 | 1,008,024 | 1.2\% | 1.8\% | 3.1\% | -1.4\% | 102,811 | 100,676 | 107,079 | 102,970 | 100\% | 98\% | 104\% | 100\% |
| 2003 | 1,046,239 | 891,614 | 880,705 | 1,179,369 | 1,449,140 | 1,079,892 | 4.6\% | 4.7\% | 1.4\% | 7.1\% | 129,794 | 129,384 | 125,930 | 133,690 | 100\% | 100\% | 97\% | 103\% |
| 2004 | 1,102,938 | 980,087 | 992,154 | 1,238,710 | 1,505,112 | 1,194,530 | 6.3\% | 5.0\% | 3.9\% | 10.6\% | 153,351 | 150,082 | 145,396 | 165,606 | 100\% | 98\% | 95\% | 108\% |
| 2005 | 1,239,837 | 1,058,549 | 1,250,254 | 1,386,003 | 1,494,680 | 1,474,772 | 12.1\% | 11.9\% | -0.7\% | 23.5\% | 177,449 | 165,907 | 164,307 | 208,483 | 100\% | 93\% | 93\% | 117\% |
| 2006 | 1,359,255 | 1,215,042 | 1,441,682 | 1,499,010 | 1,577,228 | 1,661,489 | 8.8\% | 8.2\% | 5.5\% | 12.7\% | 201,658 | 184,225 | 189,456 | 242,431 | 100\% | 91\% | 94\% | 120\% |
| 2007 | 1,475,802 | 1,305,018 | 1,504,135 | 1,593,017 | 1,643,818 | 1,688,748 | 4.5\% | 6.3\% | 4.2\% | 1.6\% | 235,418 | 218,354 | 222,636 | 276,307 | 100\% | 93\% | 95\% | 117\% |
| 2008 | 1,446,935 | 1,211,300 | 1,355,187 | 1,509,558 | 1,381,420 | 1,478,980 | -9.9\% | -5.2\% | -16.0\% | -12.4\% | 231,182 | 219,529 | 214,770 | 265,820 | 100\% | 95\% | 93\% | 115\% |
| 2009 | 1,485,598 | 1,355,609 | 1,289,467 | 1,554,143 | 1,630,883 | 1,395,577 | 4.2\% | 3.0\% | 18.1\% | -5.6\% | 211,911 | 194,099 | 215,575 | 240,533 | 100\% | 92\% | 102\% | 114\% |
| $2010{ }^{-}$ | $\overline{1}, \overline{635,518}$ | 1,442,592 | $-1,3 \overline{6} 5, \overline{3} 5 \overline{3}$ | 1, $\overline{6} 8 \overline{9}, \overline{3} \overline{1}$ | $\overline{1}, \overline{63} \overline{7}, 855$ | 1,442,485 | 5.2\% | 8.7\% | 0.4\% | 3.4\% | 2 $34, \overline{0} 3 \overline{3}$ | 226, $\overline{91} \overline{8}$ | 238, $\overline{675}$ | 242,769 | 100\% | 97\% | -102\% | 104\% |
| 2011 | 1,624,841 | 1,523,387 | 1,334,086 | 1,635,554 | 1,620,067 | 1,383,170 | -2.9\% | -3.2\% | -1.1\% | -4.1\% | 254,908 | 250,224 | 271,810 | 248,493 | 100\% | 98\% | 107\% | 97\% |
| 2012 | 1,659,853 | 1,652,200 | 1,411,625 | 1,656,237 | 1,699,880 | 1,429,234 | 2.8\% | 1.3\% | 4.9\% | 3.3\% | 254,066 | 244,996 | 284,005 | 243,700 | 100\% | 96\% | 112\% | 96\% |
| 2013 | 1,812,527 | 1,719,663 | 1,448,035 | 1,809,366 | 1,725,326 | 1,456,520 | 5.2\% | 9.2\% | 1.5\% | 1.9\% | 276,180 | 278,252 | 292,709 | 257,827 | 100\% | 101\% | 106\% | 93\% |
| 2014 | 2,040,699 | 1,775,043 | 1,553,396 | 2,040,699 | 1,775,043 | 1,553,396 | 8.6\% | 12.8\% | 2.9\% | 6.7\% | 287,882 | 297,444 | 281,678 | 276,776 | 100\% | 103\% | 98\% | 96\% |
| 2015 |  | 1,850,799 |  |  | 1,894,454 |  |  |  |  |  |  |  | 229,509 |  |  |  |  |  |
| 2017 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table A1i: Par adult household wealth in Scandinavia (PPP exchange rates)

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Per adult household wealth (2014 US\$, PPP) |  |  |  | Per adult real wealth growth (US\$ PPP) |  |  |  | Per adult wealth (current US\$, PPP) |  |  |  | Per adult wealth (current US\$, \% Scandinavia) |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| 1980 | 67,722 | 65,669 | 79,863 | 61,389 |  |  |  |  | 26,336 | 25,538 | 31,058 | 23,873 | 100\% | 97\% | 118\% | 91\% |
| 1981 | 63,551 | 57,004 | 88,488 | 54,268 | -7.1\% | -13.2\% | 10.8\% | -11.6\% | 27,029 | 24,245 | 37,636 | 23,081 | 100\% | 90\% | 139\% | 85\% |
| 1982 | 63,273 | 54,675 | 91,798 | 54,372 | -1.0\% | -4.1\% | 3.7\% | 0.2\% | 28,557 | 24,676 | 41,431 | 24,540 | 100\% | 86\% | 145\% | 86\% |
| 1983 | 66,687 | 54,356 | 90,924 | 67,234 | 6.4\% | -0.6\% | -1.0\% | 23.7\% | 31,426 | 25,616 | 42,848 | 31,684 | 100\% | 82\% | 136\% | 101\% |
| 1984 | 67,512 | 53,348 | 92,173 | 70,682 | 0.9\% | -1.9\% | 1.4\% | 5.1\% | 33,054 | 26,119 | 45,128 | 34,606 | 100\% | 79\% | 137\% | 105\% |
| 1985 | 72,788 | 54,204 | 96,905 | 83,615 | 7.3\% | 1.6\% | 5.1\% | 18.3\% | 36,884 | 27,467 | 49,105 | 42,370 | 100\% | 74\% | 133\% | 115\% |
| 1986 | 79,938 | 59,558 | 123,225 | 78,135 | 9.2\% | 9.9\% | 27.2\% | -6.6\% | 41,337 | 30,798 | 63,722 | 40,405 | 100\% | 75\% | 154\% | 98\% |
| 1987 | 79,787 | 61,543 | 126,874 | 71,375 | -0.2\% | 3.3\% | 3.0\% | -8.7\% | 42,334 | 32,654 | 67,318 | 37,871 | 100\% | 77\% | 159\% | 89\% |
| 1988 | 83,823 | 74,334 | 112,871 | 75,698 | 9.0\% | 20.8\% | -11.0\% | 6.1\% | 46,076 | 40,860 | 62,043 | 41,609 | 100\% | 89\% | 135\% | 90\% |
| 1989 | 83,027 | 81,927 | 95,858 | 74,299 | 0.8\% | 10.2\% | -15.1\% | -1.8\% | 47,522 | 46,893 | 54,866 | 42,526 | 100\% | 99\% | 115\% | 89\% |
| 1990 ${ }^{-}$ | 81,881 | 82,813 | - $91, \overline{3} 4 \overline{3}$ | 72,523 | -1.3\% | 1.1\% | -4.7\% | -2.4\% | 48,742 | 49,296 | $54, \overline{3} 7 \overline{4}$ | $4 \overline{3}, 171$ | 100\% | 101\% | 112\% | 89\% |
| 1991 | 78,950 | 76,203 | 87,217 | 76,738 | -3.2\% | -8.0\% | -4.5\% | 5.8\% | 48,679 | 46,985 | 53,776 | 47,315 | 100\% | 97\% | 110\% | 97\% |
| 1992 | 77,648 | 75,768 | 84,714 | 74,965 | -1.6\% | -0.6\% | -2.9\% | -2.3\% | 49,124 | 47,934 | 53,594 | 47,427 | 100\% | 98\% | 109\% | 97\% |
| 1993 | 81,618 | 73,203 | 92,886 | 86,470 | 5.0\% | -3.4\% | 9.6\% | 15.3\% | 52,942 | 47,484 | 60,251 | 56,089 | 100\% | 90\% | 114\% | 106\% |
| 1994 | 85,606 | 73,555 | 106,761 | 88,444 | 4.4\% | 0.5\% | 14.9\% | 2.3\% | 56,747 | 48,758 | 70,770 | 58,628 | 100\% | 86\% | 125\% | 103\% |
| 1995 | 90,830 | 74,367 | 115,503 | 98,155 | 5.6\% | 1.1\% | 8.2\% | 11.0\% | 61,453 | 50,315 | 78,146 | 66,409 | 100\% | 82\% | 127\% | 108\% |
| 1996 | 96,048 | 77,239 | 122,775 | 105,486 | 5.5\% | 3.9\% | 6.3\% | 7.5\% | 66,331 | 53,341 | 84,789 | 72,849 | 100\% | 80\% | 128\% | 110\% |
| 1997 | 107,754 | 89,166 | 133,894 | 117,164 | 12.7\% | 15.4\% | 9.1\% | 11.1\% | 75,863 | 62,776 | 94,266 | 82,487 | 100\% | 83\% | 124\% | 109\% |
| 1998 | 115,005 | 96,987 | 141,332 | 123,171 | 7.0\% | 8.8\% | 5.6\% | 5.1\% | 82,019 | 69,169 | 100,795 | 87,843 | 100\% | 84\% | 123\% | 107\% |
| 1999 | 131,047 | 115,275 | 156,239 | 136,273 | 14.5\% | 18.9\% | 10.5\% | 10.6\% | 94,938 | 83,512 | 113,189 | 98,724 | 100\% | 88\% | 119\% | 104\% |
| $2000{ }^{-}$ | 131, $\overline{319}$ | 118,499 | 146, 770 | 139,700- | 0.6\% | 2.8\% | -6.1\% | 2.5\% | 97,377 | 87,871 | 1008,835 | 103,591 | 100\% | 90\% | 112\% | 106\% |
| 2001 | 137,595 | 131,276 | 153,022 | 135,130 | 5.2\% | 10.8\% | 4.3\% | -3.3\% | 104,594 | 99,791 | 116,321 | 102,720 | 100\% | 95\% | 111\% | 98\% |
| 2002 | 139,329 | 133,660 | 157,799 | 133,207 | 1.2\% | 1.8\% | 3.1\% | -1.4\% | 107,794 | 103,408 | 122,083 | 103,058 | 100\% | 96\% | 113\% | 96\% |
| 2003 | 145,558 | 139,948 | 159,995 | 142,704 | 4.6\% | 4.7\% | 1.4\% | 7.1\% | 115,097 | 110,661 | 126,513 | 112,840 | 100\% | 96\% | 110\% | 98\% |
| 2004 | 154,703 | 146,990 | 166,175 | 157,853 | 6.3\% | 5.0\% | 3.9\% | 10.6\% | 125,751 | 119,481 | 135,075 | 128,311 | 100\% | 95\% | 107\% | 102\% |
| 2005 | 173,236 | 164,468 | 165,023 | 194,886 | 12.1\% | 11.9\% | -0.7\% | 23.5\% | 145,111 | 137,767 | 138,232 | 163,247 | 100\% | 95\% | 95\% | 112\% |
| 2006 | 188,767 | 177,878 | 174,137 | 219,560 | 8.8\% | 8.2\% | 5.5\% | 12.7\% | 162,811 | 153,419 | 150,193 | 189,370 | 100\% | 94\% | 92\% | 116\% |
| 2007 | 196,831 | 189,033 | 181,489 | 223,162 | 4.5\% | 6.3\% | 4.2\% | 1.6\% | 174,425 | 167,514 | 160,829 | 197,759 | 100\% | 96\% | 92\% | 113\% |
| 2008 | 177,243 | 179,129 | 152,518 | 195,442 | -9.9\% | -5.2\% | -16.0\% | -12.4\% | 160,240 | 161,946 | 137,887 | 176,694 | 100\% | 101\% | 86\% | 110\% |
| 2009 | 183,356 | 184,420 | 180,061 | 184,421 | 4.2\% | 3.0\% | 18.1\% | -5.6\% | 167,676 | 168,650 | 164,663 | 168,650 | 100\% | 101\% | 98\% | 101\% |
| 2010 | 192,899 | 200,467 | 180, $\overline{8} 3 \overline{1}$ | 190, $\overline{620}$ | 5.2\% | 8.7\% | 0.4\% | 3.4\% | 179,228 | 186,259 | 168,015 | 177, 110 | 100\% | 104\% | 94\% | 99\% |
| 2011 | 187,160 | 194,080 | 178,867 | 182,781 | -2.9\% | -3.2\% | -1.1\% | -4.1\% | 177,656 | 184,225 | 169,784 | 173,500 | 100\% | 104\% | 96\% | 98\% |
| 2012 | 192,184 | 196,535 | 187,679 | 188,869 | 2.8\% | 1.3\% | 4.9\% | 3.3\% | 185,897 | 190,106 | 181,539 | 182,691 | 100\% | 102\% | 98\% | 98\% |
| 2013 | 202,404 | 214,706 | 190,488 | 192,474 | 5.2\% | 9.2\% | 1.5\% | 1.9\% | 198,969 | 211,061 | 187,255 | 189,207 | 100\% | 106\% | 94\% | 95\% |
| 2014 | 220,150 | 242,156 | 195,977 | 205,276 | 8.6\% | 12.8\% | 2.9\% | 6.7\% | 220,150 | 242,156 | 195,977 | 205,276 | 100\% | 110\% | 89\% | 93\% |
| 2015 |  |  | 209,161 |  |  |  |  |  |  |  | 211,475 |  |  |  |  |  |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table A1j: The structure of national wealth in Scandinavia

|  | [1] | [2] [3] [4] |  |  | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \% of natio | nal income |  |  |  |  |  |  |  |
|  | National wealth |  |  |  | Private wealth |  |  |  | Of which: household wealth |  |  |  | Government wealth |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| 1980 | 269\% | 298\% | 282\% | 201\% | 207\% | 224\% | 190\% | 189\% | 206\% | 224\% | 187\% | 188\% | 62\% | 74\% | 92\% | 12\% |
| 1981 | 259\% | 275\% | 300\% | 186\% | 196\% | 201\% | 208\% | 174\% | 195\% | 201\% | 205\% | 173\% | 63\% | 74\% | 92\% | 12\% |
| 1982 | 258\% | 269\% | 315\% | 183\% | 194\% | 194\% | 219\% | 171\% | 193\% | 194\% | 216\% | 169\% | 64\% | 75\% | 96\% | 12\% |
| 1983 | 262\% | 262\% | 309\% | 218\% | 199\% | 189\% | 210\% | 206\% | 198\% | 189\% | 207\% | 204\% | 63\% | 72\% | 99\% | 12\% |
| 1984 | 255\% | 248\% | 301\% | 222\% | 193\% | 179\% | 201\% | 210\% | 191\% | 179\% | 198\% | 208\% | 63\% | 70\% | 100\% | 12\% |
| 1985 | 265\% | 249\% | 306\% | 251\% | 201\% | 180\% | 201\% | 239\% | 199\% | 180\% | 197\% | 237\% | 64\% | 69\% | 105\% | 12\% |
| 1986 | 273\% | 256\% | 366\% | 223\% | 210\% | 188\% | 250\% | 211\% | 208\% | 188\% | 246\% | 209\% | 64\% | 68\% | 116\% | 12\% |
| 1987 | 269\% | 253\% | 378\% | 206\% | 205\% | 186\% | 257\% | 194\% | 204\% | 186\% | 253\% | 192\% | 64\% | 67\% | 120\% | 12\% |
| 1988 | 287\% | 287\% | 366\% | 222\% | 221\% | 220\% | 237\% | 210\% | 220\% | 220\% | 234\% | 208\% | 66\% | 67\% | 128\% | 12\% |
| 1989 | 287\% | 304\% | 328\% | 219\% | 221\% | 237\% | 202\% | 207\% | 220\% | 237\% | 199\% | 205\% | 66\% | 68\% | 127\% | 12\% - |
| 1990 | 284\% | 307\% | 316\% | 213\% | 220\% | 243\% | 189\% | 201\% | 219\% | $2 \overline{4} \%$ | 186\% | $198 \%$ | 64\% | 63\% | $12 \overline{6} \%$ | 12\% |
| 1991 | 280\% | 301\% | 297\% | 224\% | 214\% | 231\% | 177\% | 212\% | 213\% | 231\% | 174\% | 209\% | 66\% | 70\% | 120\% | 12\% |
| 1992 | 282\% | 319\% | 282\% | 214\% | 212\% | 239\% | 166\% | 202\% | 211\% | 239\% | 162\% | 199\% | 70\% | 80\% | 117\% | 12\% |
| 1993 | 291\% | 323\% | 287\% | 246\% | 225\% | 245\% | 178\% | 234\% | 223\% | 245\% | 175\% | 231\% | 66\% | 78\% | 109\% | 12\% |
| 1994 | 283\% | 299\% | 307\% | 241\% | 222\% | 231\% | 194\% | 229\% | 220\% | 231\% | 190\% | 226\% | 62\% | 68\% | 113\% | 12\% |
| 1995 | 291\% | 300\% | 316\% | 258\% | 224\% | 222\% | 201\% | 246\% | 222\% | 222\% | 197\% | 243\% | 67\% | 78\% | 115\% | 12\% |
| 1996 | 300\% | 309\% | 319\% | 270\% | 230\% | 227\% | 202\% | 258\% | 228\% | 227\% | 199\% | 254\% | 71\% | 82\% | 117\% | 12\% |
| 1997 | 323\% | 337\% | 333\% | 293\% | 249\% | 254\% | 209\% | 279\% | 247\% | 254\% | 205\% | 275\% | 74\% | 83\% | 124\% | 13\% |
| 1998 | 335\% | 346\% | 353\% | 303\% | 258\% | 261\% | 218\% | 289\% | 256\% | 261\% | 214\% | 284\% | 76\% | 84\% | 135\% | 14\% |
| 1999 | 364\% | 381\% | 373\% | 329\% | 285\% | 296\% | 236\% | 311\% | 282\% | 296\% | 232\% | 306\% | 79\% | 84\% | 137\% | 18\% |
| $20 \overline{0}$ | $357 \%$ | 374\% | $353 \%$ | 335\% | 273\% | 291\% | 213\% | 310\% | 271\% | 291\% | 209\% | $3 \overline{0} \%$ | 84\% | 83\% | 140\% | 25\% |
| 2001 | 371\% | 399\% | 373\% | 328\% | 282\% | 320\% | 215\% | 298\% | 280\% | 320\% | 212\% | 294\% | 89\% | 79\% | 158\% | 29\% |
| 2002 | 368\% | 393\% | 375\% | 324\% | 282\% | 322\% | 221\% | 292\% | 280\% | 322\% | 217\% | 288\% | 86\% | 71\% | 154\% | 32\% |
| 2003 | 381\% | 397\% | 393\% | 344\% | 290\% | 325\% | 222\% | 310\% | 288\% | 325\% | 218\% | 306\% | 91\% | 72\% | 171\% | 34\% |
| 2004 | 394\% | 408\% | 400\% | 366\% | 298\% | 333\% | 222\% | 329\% | 296\% | 333\% | 218\% | 324\% | 96\% | 75\% | 178\% | 37\% |
| 2005 | 427\% | 441\% | 405\% | 431\% | 319\% | 360\% | 212\% | 390\% | 317\% | 360\% | 208\% | 384\% | 107\% | 81\% | 193\% | 41\% |
| 2006 | 450\% | 453\% | 430\% | 470\% | 334\% | 369\% | 222\% | 422\% | 331\% | 369\% | 217\% | 415\% | 116\% | 84\% | 208\% | 48\% |
| 2007 | 462\% | 455\% | 447\% | 492\% | 341\% | 375\% | 229\% | 434\% | 338\% | 375\% | 225\% | 427\% | 120\% | 81\% | 217\% | 58\% |
| 2008 | 424\% | 437\% | 393\% | 445\% | 309\% | 363\% | 195\% | 382\% | 306\% | 363\% | 191\% | 376\% | 115\% | 74\% | 199\% | 63\% |
| $\underline{2009}$ | 478\% | 490\% | 486\% | 451\% | 341\% | 402\% | 241\% | 384\% | 338\% | 402\% | 236\% | 378\% | 136\% | 88\% | 245\% |  |
| $20 \overline{10}$ | $4 \overline{84} \%$ | 499\% | 495\% | 447\% | 346\% | 413\% | 241\% | 385\% | 342\% | 413\% | 237\% | 378\% | 139\% | - $86 \%$ | 254\% | 63\% - |
| 2011 | 469\% | 478\% | 487\% | 428\% | 332\% | 393\% | 239\% | 369\% | 329\% | 393\% | 235\% | 363\% | 137\% | 85\% | 248\% | 59\% |
| 2012 | 484\% | 490\% | 506\% | 440\% | 340\% | 399\% | 248\% | 387\% | 337\% | 399\% | 244\% | 379\% | 144\% | 91\% | 258\% | 53\% |
| 2013 | 515\% | 516\% | 561\% | 441\% | 354\% | 422\% | 254\% | 390\% | 350\% | 422\% | 249\% | 382\% | 161\% | 93\% | 307\% | 51\% |
| 2014 | 555\% | 563\% | 605\% | 469\% | 376\% | 460\% |  | 417\% | 372\% | 460\% |  | 409\% | 180\% | 103\% |  | 52\% |
| $\begin{aligned} & 2015 \\ & 2016 \end{aligned}$ |  |  | 664\% |  |  |  | $271 \%$ |  |  |  | 266\% |  |  |  | $394 \%$ |  |
| 2107 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table A1k: Housing wealth and debt in Scandinavia

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of national income |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Gross housing wealth |  |  |  | Gross debt |  |  |  | Housing price index (nominal) |  |  | Housing price index (real) |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Sweden | Norway | Denmark | Sweden | Norway | Denmark |
| 1980 | 157\% | 153\% | 153\% | 168\% | 68\% | 56\% | 56\% | 102\% | 49 | 45 | 69 | 101 | 82 | 119 |
| 1981 | 145\% | 130\% | 172\% | 146\% | 68\% | 58\% | 56\% | 101\% | 48 | 57 | 65 | 88 | 93 | 100 |
| 1982 | 141\% | 121\% | 185\% | 134\% | 68\% | 59\% | 58\% | 94\% | 49 | 67 | 65 | 84 | 98 | 90 |
| 1983 | 139\% | 112\% | 176\% | 149\% | 69\% | 59\% | 61\% | 95\% | 50 | 70 | 83 | 78 | 96 | 107 |
| 1984 | 134\% | 105\% | 166\% | 155\% | 69\% | 57\% | 63\% | 98\% | 52 | 75 | 94 | 76 | 96 | 116 |
| 1985 | 139\% | 102\% | 167\% | 179\% | 73\% | 57\% | 69\% | 108\% | 54 | 84 | 113 | 72 | 103 | 133 |
| 1986 | 146\% | 100\% | 219\% | 164\% | 82\% | 62\% | 79\% | 118\% | 58 | 111 | 118 | 76 | 137 | 138 |
| 1987 | 147\% | 104\% | 234\% | 148\% | 87\% | 64\% | 89\% | 123\% | 67 | 127 | 108 | 83 | 146 | 120 |
| 1988 | 155\% | 129\% | 216\% | 150\% | 91\% | 71\% | 96\% | 124\% | 79 | 119 | 112 | 93 | 130 | 120 |
| 1989 | 147\% | 138\% | 177\% | 138\% | 89\% | 70\% | 96\% | 122\% | 92 | 103 | 108 | 102 | 107 | 110 |
| 1990 | 150\% | 156\% | 163\% | $127 \%$ | 88\% | 68\% | 94\% | 121\% | 100 | 100 | 100 | 100 | 100 | 100 |
| 1991 | 146\% | 155\% | 148\% | 126\% | 83\% | 63\% | 89\% | 116\% | 106 | 95 | 104 | 97 | 93 | 101 |
| 1992 | 140\% | 155\% | 137\% | 114\% | 82\% | 63\% | 90\% | 111\% | 90 | 91 | 98 | 80 | 89 | 95 |
| 1993 | 137\% | 143\% | 143\% | 122\% | 84\% | 63\% | 85\% | 113\% | 86 | 98 | 107 | 74 | 95 | 103 |
| 1994 | 135\% | 137\% | 149\% | 120\% | 78\% | 57\% | 80\% | 108\% | 90 | 108 | 113 | 75 | 104 | 106 |
| 1995 | 134\% | 129\% | 149\% | 129\% | 75\% | 53\% | 74\% | 108\% | 89 | 116 | 126 | 72 | 109 | 117 |
| 1996 | 133\% | 121\% | 150\% | 135\% | 74\% | 53\% | 71\% | 109\% | 92 | 129 | 141 | 74 | 115 | 129 |
| 1997 | 139\% | 128\% | 153\% | 144\% | 76\% | 54\% | 71\% | 113\% | 99 | 143 | 153 | 80 | 124 | 138 |
| 1998 | 146\% | 131\% | 163\% | 154\% | 78\% | 54\% | 75\% | 118\% | 109 | 152 | 168 | 88 | 134 | 148 |
| 1999 | 153\% | 135\% | 177\% | 159\% | 78\% | 56\% | 74\% | 115\% | 119 | 181 | 177 | 95 | 149 | 153 |
| 2000 | 153\% | 141\% | 162\% | $163 \%$ | 76\% | 57\% | 68\% | 114\% | $13 \overline{3}$ | 198 | 190 | $10 \overline{6}$ | 141 | 160 |
| 2001 | 170\% | 172\% | 167\% | 171\% | 83\% | 65\% | 72\% | 120\% | 139 | 213 | 197 | 108 | 150 | 162 |
| 2002 | 176\% | 180\% | 173\% | 175\% | 87\% | 67\% | 80\% | 125\% | 152 | 219 | 205 | 116 | 157 | 165 |
| 2003 | 177\% | 176\% | 173\% | 183\% | 90\% | 68\% | 84\% | 130\% | 161 | 228 | 213 | 121 | 159 | 170 |
| 2004 | 181\% | 177\% | 174\% | 195\% | 93\% | 72\% | 85\% | 134\% | 177 | 252 | 243 | 132 | 166 | 190 |
| 2005 | 187\% | 184\% | 167\% | 218\% | 97\% | 77\% | 84\% | 142\% | 197 | 273 | 307 | 146 | 165 | 236 |
| 2006 | 201\% | 187\% | 177\% | 251\% | 100\% | 80\% | 86\% | 147\% | 216 | 318 | 352 | 158 | 176 | 264 |
| 2007 | 213\% | 205\% | 184\% | 265\% | 105\% | 81\% | 92\% | 159\% | 240 | 342 | 352 | 172 | 184 | 257 |
| 2008 | 205\% | 211\% | 157\% | 262\% | 107\% | 84\% | 89\% | 164\% | 231 | 318 | 313 | 160 | 155 | 222 |
| 2009 | 218\% | 223\% | 193\% | 241\% | 122\% | 97\% | 102\% | 179\% | 257 | 355 | 298 | 179 | 183 | 210 |
| 2010 | 216\% | 228\% | 195\% | 227\% | 117\% | 96\% | 101\% | 171\% | $27 \overline{3}$ | $\overline{37} 9$ | $3 \overline{06}$ | 187 | 184 | $2 \overline{10}$ |
| 2011 | 211\% | 220\% | 198\% | 214\% | 116\% | 96\% | 101\% | 170\% | 270 | 409 | 289 | 180 | 186 | 195 |
| 2012 | 210\% | 215\% | 208\% | 206\% | 116\% | 99\% | 102\% | 168\% | 280 | 436 | 293 | 185 | 192 | 193 |
| 2013 | 214\% | 222\% | 211\% | 206\% | 117\% | 100\% | 105\% | 162\% | 299 | 441 | 303 | 198 | 189 | 198 |
| 2014 | 217\% |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |





|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population: households |  |  |  |  |  |  |  |  |  |  |  |
|  | (\% of net total household wealth) |  |  |  |  |  |  |  |  |  |  |  |
|  | Top 10\% |  |  | Top 1\% |  |  | Top 0.1\% |  |  | Top 0.01\% |  |  |
|  | Sweden | Norway | Denmark | Sweden | Norway | Denmark | Sweden | Norway | Denmark | Sweden | Norway | Denmark |
| $-\overline{2000}{ }^{-}$ | 50.7\% | 52.8\% ${ }^{-}$ | 56.1\% ${ }^{-}$ | - $\overline{17.5} \%$ | 19.6\% | 23.2\% | $\overline{7 .} \overline{4} \%$ | 8.1\% | 11.7\% ${ }^{-}$ | 3.4\% | 4.1\% | 5.9\% - |
| 2001 | 50.3\% | 50.4\% | 54.2\% | 16.7\% | 16.9\% | 19.7\% | 6.9\% | 7.6\% | 8.9\% | 3.4\% | 3.5\% | 4.4\% |
| 2002 | 49.0\% | 48.6\% | 53.8\% | 16.0\% | 16.3\% | 18.7\% | 6.6\% | 7.1\% | 8.3\% | 3.1\% | 3.1\% | 4.0\% |
| 2003 | 50.7\% | 49.4\% | 53.0\% | 17.5\% | 16.7\% | 18.0\% | 7.7\% | 7.3\% | 7.5\% | 3.8\% | 3.1\% | 3.4\% |
| 2004 | 51.6\% | 49.9\% | 52.9\% | 18.3\% | 17.2\% | 18.7\% | 8.2\% | 7.8\% | 8.0\% | 4.2\% | 3.6\% | 3.4\% |
| 2005 | 52.0\% | 50.5\% | 53.7\% | 19.4\% | 17.9\% | 21.6\% | 9.0\% | 8.2\% | 10.3\% | 4.7\% | 3.7\% | 4.9\% |
| 2006 | 53.1\% | 49.7\% | 53.5\% | 20.9\% | 17.7\% | 22.1\% | 10.1\% | 8.8\% | 10.0\% | 5.3\% | 4.5\% | 4.4\% |
| 2007 | 51.4\% | 51.3\% | 54.0\% | 18.7\% | 19.2\% | 22.1\% | 8.4\% | 9.9\% | 10.3\% | 4.2\% | 5.2\% | 4.8\% |
| 2008 | 51.1\% | 53.5\% | 52.0\% | 16.2\% | 19.8\% | 18.3\% | 7.3\% | 9.8\% | 7.1\% | 3.7\% | 4.8\% | 3.0\% |
| 2009 | 58.4\% | -52.1\% | 54.2\% | 20.4\% | 18.6\% | 20.3\% | 9.2\% | 8.8\% - | 8.5\% | 4.6\% | 4.2\% | 3.6\% |
| 2010 | 57.5\% | 53.9\% | 54.3\% ${ }^{-}$ | 18.8\% | 19.6\% | 21.7\% | 8.5\% | 9.1\% | 10.6\% | 4.3\% | 4.3\% | $5.7 \%$ |
| 2011 | 57.6\% | 53.9\% | 53.1\% | 19.4\% | 19.2\% | 19.7\% | 8.7\% | 8.6\% | 8.8\% | 4.4\% | 4.0\% | 4.0\% |
| 2012 | 59.9\% | 52.8\% | 52.4\% | 19.1\% | 18.4\% | 20.0\% | 8.6\% | 8.0\% | 9.2\% | 4.4\% | 3.6\% | 4.3\% |
| 2013 |  | 54.3\% |  |  | 18.7\% |  |  | 7.9\% |  |  | 3.5\% |  |
| 2014 |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: See notes to the country-specific series in the relevant Appendix.

| Table A2b: Top wealth shares excluding offshore wealth in Scandinavia (decennial averages) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
|  | Population: households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Top 10\% |  |  |  | Top 1\% |  |  |  | Top 0.1\% |  |  |  | Top 0.01\% |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| 1910 |  |  | 76.3\% |  |  |  | 37.2\% |  |  |  | 18.0\% |  |  |  | 8.7\% |  |
| 1920 | 91.7\% | 91.7\% |  |  | 51.5\% | 51.5\% |  |  | 25.4\% | 25.4\% |  |  |  |  |  |  |
| 1930 | 85.5\% | 86.5\% | 84.6\% |  | 42.0\% | 46.4\% | 37.6\% |  | 16.3\% | 20.5\% | 12.0\% |  |  |  | 3.8\% |  |
| 1940 | 79.6\% | 80.8\% | 78.4\% |  | 35.0\% | 35.5\% | 34.6\% |  | 13.4\% | 13.5\% | 13.2\% |  |  |  | 5.0\% |  |
| 1950 | 76.1\% | 76.1\% |  |  | 32.5\% | 32.5\% |  |  | 12.1\% | 12.1\% |  |  |  |  |  |  |
| 1960 | 64.8\% | 63.2\% | 66.4\% |  | 24.5\% | 23.4\% | 25.5\% |  | 9.1\% | 9.0\% | 9.2\% |  |  |  | 3.3\% |  |
| 1970 | 56.7\% | 55.5\% | 57.9\% |  | 18.9\% | 17.9\% | 19.8\% |  | 6.4\% | 6.2\% | 6.6\% |  |  |  | 2.2\% |  |
| 1980 | 53.3\% | 54.8\% | 56.9\% | 48.3\% | 17.0\% | 17.5\% | 18.5\% | 15.1\% | 6.0\% | 6.8\% | 5.5\% | 5.8\% |  |  | 1.6\% | 2.4\% |
| 1990 | 54.9\% | 57.7\% | 51.1\% | 55.9\% | 19.8\% | 20.1\% | 18.4\% | 20.9\% | 8.3\% | 8.2\% | 7.1\% | 9.7\% | 3.8\% | 4.0\% | 2.9\% | 4.5\% |
| 2000 | 52.1\% | 51.8\% | 50.8\% | 53.8\% | 18.8\% | 18.2\% | 18.0\% | 20.3\% | 8.5\% | 8.1\% | 8.3\% | 9.1\% | 4.1\% | 4.1\% | 4.0\% | 4.2\% |
| 2010 | 55.1\% | 58.3\% | 53.7\% | 53.3\% | 19.5\% | 19.1\% | 19.0\% | 20.5\% | 8.8\% | 8.6\% | 8.4\% | 9.5\% | 4.3\% | 4.3\% | 3.8\% | 4.7\% |

[^16]Table A.3: Summary of the methods used to compute the distribution of wealth

|  | Norway (our data) | Norway (tax authority data) | Sweden (our data) | Sweden (SCB) | Denmark (DST data) | Denmark (tax authority data) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unit of observation | Adults 20+, married couples collapsed (incl. kids) | Adults 20+, married couples collapsed | Adults 20+, married couples (+ cohabiting partners w. kids) collapsed | Adults 20+, married couples (+ cohabiting partners w. kids) collapsed | Adults 20+, married couples collapsed | Adults 20+, married couples collapsed |
| Time of observation | End of year | End of year | End of year | End of year | End of year | End of year |
| Business assets | Scale up taxable business assets | Scale up taxable business assets | Capitalize business income | Capitalize business income | Capitalize business income as in JJKZ (2018) | Capitalize business income as in JJKZ (2018) |
| Equity assets | Convert tax values to market values, scale up to macro total (very small residual) | Convert tax values to market values, scale up to macro total (very small residual) | Gap between reported equities and macro values allocated proportionally to dividends | Gap between reported equities and macro values allocated proportionally to dividends | 2001-on: gap between reported equities and macro values proportionally to dividends (as in JJKZ 2018) | Unlisted equities proportionally to unlisted dividends; listed equities scaled up to macro values |
| Fixed-income assets | Scale up to macro total (very small residual) | Scale up to macro total (very small residual) | Scale up to macro total (very small residual) | Scale up to macro total (very small residual) | Scale up to macro total (very small residual) as in JJKZ 2018 | Scale up to macro total (very small residual) as in JJKZ 2018 |
| Pension assets | Proportionally to wages and occupational pensions | Proportionally to wages and occupational pensions | Proportionally to wages and occupational pensions | Proportionally to wages and occupational pensions | Proportionally to wages and occupational pensions as in JJKZ (2018) | Proportionally to wages and occupational pensions as in JJKZ (2018) |
| Housing assets | Scale up to macro total (alternative computations post-2010 use different factors for primary vs. Secondary) | Scale up to macro total | Scale up to macro total (very small residual) | Scale up to macro total (very small residual) | Scale up to macro total (small residual) as in JJKZ 2018 | Scale up to macro total (small residual) as in JJKZ 2018 |
| Debts | Scale up to macro total (very small residual) | Scale up to macro total (very small residual) | Scale up to macro total (small residual) | Scale up to macro total (small residual) | Scale up to macro total (very small residual) as in JJKZ (2018) | Scale up to macro total (very small residual) as in JJKZ (2018) |

Table A.4: count of households with offshore wealth by bin of wealth

| Wealth bin | HSBC | Norway | Sweden | Denmark | Panama Papers | Norway | Sweden | Amnesty | Norway | Sweden |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P0-10 | 17 | 3 | 11 | 3 | 9 | 0 | 9 | 203 | 49 | 154 |
| P10-20 | 8 | 0 | 2 | 6 | 7 | 0 | 7 | 100 | 21 | 79 |
| P20-30 | 6 | 2 | 3 | 1 | 24 | 19 | 5 | 97 | 15 | 82 |
| P30-40 | 10 | 1 | 7 | 2 | 7 | 0 | 7 | 124 | 20 | 104 |
| P40-50 | 15 | 1 | 6 | 8 | 10 | 2 | 8 | 186 | 34 | 152 |
| P50-60 | 20 | 5 | 6 | 9 | 5 | 0 | 5 | 246 | 41 | 205 |
| P60-70 | 15 | 2 | 6 | 7 | 6 | 0 | 6 | 279 | 40 | 239 |
| P70-80 | 35 | 1 | 21 | 13 | 16 | 4 | 12 | 542 | 76 | 466 |
| P80-90 | 61 | 9 | 38 | 14 | 16 | 4 | 12 | 969 | 113 | 856 |
| P90-91 | 7 | 0 | 5 | 2 | 2 | 1 | 1 | 155 | 18 | 137 |
| P91-92 | 10 | 1 | 8 | 1 | 3 | 1 | 2 | 171 | 19 | 152 |
| P92-93 | 8 | 0 | 7 | 1 | 3 | 1 | 2 | 233 | 28 | 205 |
| P93-94 | 13 | 1 | 9 | 3 | 0 | 0 | 0 | 255 | 25 | 230 |
| P94-95 | 9 | 0 | 3 | 6 | 2 | 0 | 2 | 241 | 24 | 217 |
| P95-96 | 20 | 0 | 13 | 7 | 4 | 1 | 3 | 362 | 39 | 323 |
| P96-97 | 17 | 3 | 9 | 5 | 1 | 1 | 0 | 426 | 52 | 374 |
| P97-98 | 29 | 2 | 20 | 7 | 7 | 0 | 7 | 570 | 86 | 484 |
| P98-99 | 46 | 0 | 29 | 17 | 3 | 1 | 2 | 855 | 124 | 731 |
| P99-99.1 | 8 | 2 | 4 | 2 | 3 | 0 | 3 | 124 | 22 | 102 |
| P99.1-99.2 | 7 | 0 | 4 | 3 | 2 | 1 | 1 | 120 | 27 | 93 |
| P99.2-99.3 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 136 | 26 | 110 |
| P99.3-99.4 | 13 | 1 | 10 | 2 | 2 | 1 | 1 | 162 | 35 | 127 |
| P99.4-99.5 | 10 | 0 | 5 | 5 | 1 | 1 | 0 | 167 | 45 | 122 |
| P99.5-99.6 | 10 | 0 | 7 | 3 | 2 | 1 | 1 | 181 | 48 | 133 |
| P99.6-99.7 | 19 | 1 | 12 | 6 | 1 | 0 | 1 | 227 | 64 | 163 |
| P99.7-99.8 | 24 | 3 | 13 | 8 | 3 | 1 | 2 | 264 | 64 | 200 |
| P99.8-99.9 | 22 | 1 | 12 | 9 | 7 | 4 | 3 | 327 | 90 | 237 |
| P99.9-99.91 | 4 | 1 | 3 | 0 | 0 | 0 | 0 | 47 | 9 | 38 |
| P99.91-99.92 | 1 | 0 | 0 | 1 | 3 | 2 | 1 | 49 | 21 | 28 |
| P99.92-99.93 | 4 | 1 | 0 | 3 | 2 | 0 | 2 | 24 | 8 | 16 |
| P99.93-99.94 | 11 | 1 | 5 | 5 | 0 | 0 | 0 | 41 | 11 | 30 |
| P99.94-99.95 | 8 | 0 | 5 | 3 | 2 | 1 | 1 | 51 | 17 | 34 |
| P99.95-99.96 | 6 | 1 | 1 | 4 | 0 | 0 | 0 | 48 | 14 | 34 |
| P99.96-99.97 | 7 | 0 | 4 | 3 | 0 | 0 | 0 | 48 | 14 | 34 |
| P99.97-99.98 | 3 | 0 | 0 | 3 | 2 | 1 | 1 | 60 | 23 | 37 |
| P99.98-99.99 | 6 | 1 | 3 | 2 | 2 | 1 | 1 | 68 | 29 | 39 |
| P99.99-100 | 10 | 1 | 7 | 2 | 7 | 4 | 3 | 75 | 31 | 44 |
| Total | 520 | 45 | 299 | 176 | 165 | 53 | 112 | 8233 | 1422 | 6811 |

Notes: In this table, wealth bins are country specific (unlike in our main paper tables where we pool Norway, Sweden, and Denmark together, or Norway ans Sweden together).

Table B0: National income, household wealth, population, and price in Norway


|  | [1] | [2] | [3] | [4] | B1: Nat [5] | tional Incom [6] | e and We <br> [7] | alth in No [8] | way | [10] | [11] | [12] | [13] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Billion current NOK |  |  |  |  |  |  |  |  |  |  |  |  |
|  | National income | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 1980 | 258 | 728 | 483 | 15 | 102 | 252 | 71 | 43 | 144 | 7 | 238 | 393 | 156 |
| 1981 | 297 | 889 | 609 | 17 | 114 | 347 | 81 | 49 | 165 | 9 | 272 | 434 | 161 |
| 1982 | 326 | 1,025 | 703 | 16 | 128 | 413 | 89 | 57 | 189 | 9 | 312 | 468 | 156 |
| 1983 | 363 | 1,120 | 752 | 25 | 144 | 416 | 100 | 67 | 222 | 11 | 358 | 522 | 164 |
| 1984 | 412 | 1,239 | 816 | 33 | 168 | 422 | 113 | 79 | 261 | 13 | 411 | 597 | 186 |
| 1985 | 462 | 1,412 | 910 | 40 | 194 | 454 | 127 | 95 | 317 | 17 | 486 | 704 | 218 |
| 1986 | 471 | 1,724 | 1,161 | 47 | 213 | 659 | 129 | 113 | 372 | 18 | 545 | 821 | 276 |
| 1987 | 510 | 1,928 | 1,294 | 48 | 236 | 740 | 140 | 130 | 452 | 19 | 615 | 873 | 258 |
| 1988 | 521 | 1,906 | 1,220 | 47 | 251 | 625 | 143 | 154 | 501 | 16 | 670 | 942 | 273 |
| 1989 | 556 | 1,825 | 1,105 | 60 | 264 | 454 | 153 | 175 | 532 | 17 | 704 | 1,002 | 298 |
| $\overline{1990}$ | 590 | 1,864 | 1,101 | 61 | $2 \overline{76}$ | 409 | 162 | 193 | 556 | 17 | $7 \overline{46}$ | 1,042 | 296 |
| 1991 | 622 | 1,844 | 1,081 | 55 | 279 | 367 | 171 | 209 | 554 | 17 | 746 | 1,058 | 312 |
| 1992 | 648 | 1,830 | 1,052 | 55 | 289 | 306 | 178 | 224 | 583 | 22 | 756 | 1,122 | 366 |
| 1993 | 681 | 1,954 | 1,190 | 65 | 293 | 395 | 187 | 251 | 577 | 23 | 741 | 1,228 | 487 |
| 1994 | 723 | 2,219 | 1,376 | 114 | 296 | 501 | 213 | 251 | 577 | 27 | 816 | 1,265 | 449 |
| 1995 | 784 | 2,474 | 1,545 | 163 | 300 | 590 | 241 | 251 | 577 | 31 | 898 | 1,309 | 410 |
| 1996 | 866 | 2,765 | 1,721 | 203 | 309 | 681 | 253 | 275 | 614 | 32 | 1,012 | 1,415 | 403 |
| 1997 | 943 | 3,145 | 1,938 | 278 | 316 | 777 | 261 | 305 | 666 | 36 | 1,172 | 1,563 | 391 |
| 1998 | 952 | 3,362 | 2,041 | 272 | 340 | 835 | 271 | 323 | 715 | 37 | 1,285 | 1,665 | 380 |
| 1999 | 1,043 | 3,892 | 2,420 | 331 | 374 | 1,076 | 281 | 358 | 772 | 41 | 1,430 | 1,850 | 420 |
| 2000 | 1,261 | 4,448 | 2,641 | $35 \overline{5}$ | $4 \overline{10}$ | 1,17 $\overline{9}$ | 300 | $3 \overline{96}$ | 863 | 42 | 1,765 | 2,312 | 547 |
| 2001 | 1,326 | 4,949 | 2,812 | 360 | 447 | 1,250 | 323 | 431 | 961 | 42 | 2,094 | 2,657 | 563 |
| 2002 | 1,320 | 4,948 | 2,864 | 332 | 492 | 1,231 | 347 | 462 | 1,053 | 53 | 2,031 | 2,705 | 674 |
| 2003 | 1,381 | 5,420 | 3,005 | 353 | 524 | 1,231 | 385 | 511 | 1,160 | 58 | 2,358 | 3,199 | 841 |
| 2004 | 1,525 | 6,105 | 3,320 | 392 | 553 | 1,366 | 429 | 579 | 1,291 | 65 | 2,720 | 3,696 | 975 |
| 2005 | 1,735 | 7,029 | 3,608 | 460 | 591 | 1,428 | 482 | 646 | 1,463 | 72 | 3,349 | 4,374 | 1,025 |
| 2006 | 1,919 | 8,249 | 4,173 | 542 | 644 | 1,745 | 537 | 706 | 1,656 | 80 | 3,997 | 5,375 | 1,378 |
| 2007 | 2,011 | 8,984 | 4,524 | 661 | 697 | 1,837 | 570 | 759 | 1,857 | 86 | 4,374 | 5,781 | 1,408 |
| 2008 | 2,227 | 8,763 | 4,257 | 624 | 750 | 1,502 | 584 | 796 | 1,988 | 76 | 4,431 | 5,997 | 1,567 |
| 2009 | 2,047 | 9,950 | 4,837 | 723 | 768 | 1,864 | 619 | 862 | 2,095 | 90 | 5,023 | 6,313 | 1,290 |
| $20 \overline{10}$ | 2,205 | 10,907 | 5,220 | 785 | 807 | 2,067 | 637 | 924 | 2,238 | 96 | 5,591 | 6,989 | 1,398 |
| 2011 | 2,383 | 11,599 | 5,598 | 781 | 866 | 2,319 | 653 | 980 | 2,405 | 96 | 5,905 | 6,981 | 1,076 |
| 2012 | 2,531 | 12,815 | 6,175 | 837 | 933 | 2,673 | 670 | 1,062 | 2,583 | 107 | 6,533 | 7,723 | 1,190 |
| 2013 | 2,622 | 14,697 | 6,531 | 906 | 1,006 | 2,774 | 692 | 1,153 | 2,762 | 122 | 8,043 | 9,300 | 1,257 |
| 2014 | 2,736 | 16,555 | 6,838 | 973 | 1,083 | 2,810 | 721 | 1,251 | 2,939 | 132 | 9,585 | 10,812 | 1,227 |
| 2015 | 2,723 | 18,086 | 7,231 | 1,043 | 1,150 | 2,955 | 756 | 1,327 | 3,120 | 140 | 10,715 | 12,122 | 1,407 |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: Wealth estimates from offiicial national accounts and tax-based balance sheets. Does not include offshore wealth. Wealth is at the end of the year.

Table B1b: The composition of national wealth in Norway

|  | [1] [2] |  | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of national income |  |  |  |  |  |  |  |  |  |  |  |
|  | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 1980 | 282\% | 187\% | 6\% | 40\% | 97\% | 27\% | 17\% | 56\% | 3\% | 92\% | 152\% | 60\% |
| 1981 | 300\% | 205\% | 6\% | 38\% | 117\% | 27\% | 17\% | 56\% | 3\% | 92\% | 146\% | 54\% |
| 1982 | 315\% | 216\% | 5\% | 39\% | 127\% | 27\% | 18\% | 58\% | 3\% | 96\% | 144\% | 48\% |
| 1983 | 309\% | 207\% | 7\% | 40\% | 115\% | 27\% | 18\% | 61\% | 3\% | 99\% | 144\% | 45\% |
| 1984 | 301\% | 198\% | 8\% | 41\% | 102\% | 27\% | 19\% | 63\% | 3\% | 100\% | 145\% | 45\% |
| 1985 | 306\% | 197\% | 9\% | 42\% | 98\% | 27\% | 21\% | 69\% | 4\% | 105\% | 152\% | 47\% |
| 1986 | 366\% | 246\% | 10\% | 45\% | 140\% | 27\% | 24\% | 79\% | 4\% | 116\% | 174\% | 59\% |
| 1987 | 378\% | 253\% | 9\% | 46\% | 145\% | 27\% | 25\% | 89\% | 4\% | 120\% | 171\% | 51\% |
| 1988 | 366\% | 234\% | 9\% | 48\% | 120\% | 27\% | 30\% | 96\% | 3\% | 128\% | 181\% | 52\% |
| 1989 | 328\% | 199\% | 11\% | 47\% | 82\% | 27\% | 32\% | 96\% | 3\% | 127\% | 180\% | 54\% - |
| 1990 | 316\% | 186\% | 10\% | 47\% | 69\% | 27\% | 33\% | 94\% | 3\% | 126\% | 176\% | 50\% - |
| 1991 | 297\% | 174\% | 9\% | 45\% | 59\% | 27\% | 34\% | 89\% | 3\% | 120\% | 170\% | 50\% |
| 1992 | 282\% | 162\% | 8\% | 45\% | 47\% | 27\% | 35\% | 90\% | 3\% | 117\% | 173\% | 56\% |
| 1993 | 287\% | 175\% | 10\% | 43\% | 58\% | 27\% | 37\% | 85\% | 3\% | 109\% | 180\% | 72\% |
| 1994 | 307\% | 190\% | 16\% | 41\% | 69\% | 29\% | 35\% | 80\% | 4\% | 113\% | 175\% | 62\% |
| 1995 | 316\% | 197\% | 21\% | 38\% | 75\% | 31\% | 32\% | 74\% | 4\% | 115\% | 167\% | 52\% |
| 1996 | 319\% | 199\% | 23\% | 36\% | 79\% | 29\% | 32\% | 71\% | 4\% | 117\% | 163\% | 47\% |
| 1997 | 333\% | 205\% | 30\% | 33\% | 82\% | 28\% | 32\% | 71\% | 4\% | 124\% | 166\% | 41\% |
| 1998 | 353\% | 214\% | 29\% | 36\% | 88\% | 28\% | 34\% | 75\% | 4\% | 135\% | 175\% | 40\% |
| 1999 | 373\% | 232\% | 32\% | 36\% | 103\% | 27\% | 34\% | 74\% | 4\% | 137\% | 177\% | 40\% |
| 2000 | 353\% ${ }^{-}$ | 209\% | 28\% | 33\% | $9 \overline{3} \%$ | 24\% | 31\% | 68\% | 3\% | 140\% | 183\% | $\overline{43} \%$ - |
| 2001 | 373\% | 212\% | 27\% | 34\% | 94\% | 24\% | 33\% | 72\% | 3\% | 158\% | 200\% | 42\% |
| 2002 | 375\% | 217\% | 25\% | 37\% | 93\% | 26\% | 35\% | 80\% | 4\% | 154\% | 205\% | 51\% |
| 2003 | 393\% | 218\% | 26\% | 38\% | 89\% | 28\% | 37\% | 84\% | 4\% | 171\% | 232\% | 61\% |
| 2004 | 400\% | 218\% | 26\% | 36\% | 90\% | 28\% | 38\% | 85\% | 4\% | 178\% | 242\% | 64\% |
| 2005 | 405\% | 208\% | 27\% | 34\% | 82\% | 28\% | 37\% | 84\% | 4\% | 193\% | 252\% | 59\% |
| 2006 | 430\% | 217\% | 28\% | 34\% | 91\% | 28\% | 37\% | 86\% | 4\% | 208\% | 280\% | 72\% |
| 2007 | 447\% | 225\% | 33\% | 35\% | 91\% | 28\% | 38\% | 92\% | 4\% | 217\% | 287\% | 70\% |
| 2008 | 393\% | 191\% | 28\% | 34\% | 67\% | 26\% | 36\% | 89\% | 3\% | 199\% | 269\% | 70\% |
| 2009 | 486\% | 236\% | 35\% | 38\% | 91\% | 30\% | 42\% | 102\% | 4\% | 245\% | 308\% | 63\% - |
| 2010 | 495\% ${ }^{-}$ | 237\% | 36\% | 37\% | 94\% | 29\% | 42\% | 101\% | 4\% | 254\% | 317\% | 63\% |
| 2011 | 487\% | 235\% | 33\% | 36\% | 97\% | 27\% | 41\% | 101\% | 4\% | 248\% | 293\% | 45\% |
| 2012 | 506\% | 244\% | 33\% | 37\% | 106\% | 26\% | 42\% | 102\% | 4\% | 258\% | 305\% | 47\% |
| 2013 | 561\% | 249\% | 35\% | 38\% | 106\% | 26\% | 44\% | 105\% | 5\% | 307\% | 355\% | 48\% |
| 2014 | 605\% | 250\% | 36\% | 40\% | 103\% | 26\% | 46\% | 107\% | 5\% | 350\% | 395\% | 45\% |
| 2015 | 664\% | 266\% | 38\% | 42\% | 109\% | 28\% | 49\% | 115\% | 5\% | 394\% | 445\% | 52\% |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2017 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2018 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2019 |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: wealth is at the end of the year.

| Table B1c: The composition of household wealth in Norway |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] |
|  | \% of total net household wealth |  |  |  |  |  |
|  | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions |
| 1980 | 100\% | 3.2\% | 21.2\% | 52.1\% | 14.7\% | 8.9\% |
| 1981 | 100\% | 2.8\% | 18.8\% | 57.0\% | 13.4\% | 8.1\% |
| 1982 | 100\% | 2.3\% | 18.2\% | 58.7\% | 12.7\% | 8.1\% |
| 1983 | 100\% | 3.3\% | 19.2\% | 55.3\% | 13.2\% | 8.9\% |
| 1984 | 100\% | 4.1\% | 20.7\% | 51.7\% | 13.9\% | 9.7\% |
| 1985 | 100\% | 4.4\% | 21.3\% | 49.9\% | 13.9\% | 10.5\% |
| 1986 | 100\% | 4.0\% | 18.3\% | 56.8\% | 11.1\% | 9.7\% |
| 1987 | 100\% | 3.7\% | 18.3\% | 57.2\% | 10.8\% | 10.0\% |
| 1988 | 100\% | 3.8\% | 20.5\% | 51.2\% | 11.7\% | 12.7\% |
| 1989 | 100\% | 5.4\% | 23.9\% | 41.1\% | 13.8\% | 15.9\% |
| 1990 | 100\% | $5.5 \%$ | 25.1\% | 37.1\% | 14.7\% | 17.6\% |
| 1991 | 100\% | 5.1\% | 25.8\% | 34.0\% | 15.8\% | 19.3\% |
| 1992 | 100\% | 5.2\% | 27.5\% | 29.1\% | 16.9\% | 21.3\% |
| 1993 | 100\% | 5.5\% | 24.6\% | 33.2\% | 15.7\% | 21.1\% |
| 1994 | 100\% | 8.3\% | 21.5\% | 36.4\% | 15.5\% | 18.2\% |
| 1995 | 100\% | 10.6\% | 19.4\% | 38.2\% | 15.6\% | 16.3\% |
| 1996 | 100\% | 11.8\% | 17.9\% | 39.6\% | 14.7\% | 16.0\% |
| 1997 | 100\% | 14.4\% | 16.3\% | 40.1\% | 13.5\% | 15.8\% |
| 1998 | 100\% | 13.3\% | 16.6\% | 40.9\% | 13.3\% | 15.8\% |
| 1999 | 100\% | 13.7\% | 15.5\% | 44.5\% | 11.6\% | 14.8\% |
| 2000 | 100\% | 13.5\% | 15.5\% | 4 $\overline{4} .6$ \% | 11.4\% | 15.0\% |
| 2001 | 100\% | 12.8\% | 15.9\% | 44.5\% | 11.5\% | 15.3\% |
| 2002 | 100\% | 11.6\% | 17.2\% | 43.0\% | 12.1\% | 16.1\% |
| 2003 | 100\% | 11.7\% | 17.4\% | 41.0\% | 12.8\% | 17.0\% |
| 2004 | 100\% | 11.8\% | 16.7\% | 41.1\% | 12.9\% | 17.5\% |
| 2005 | 100\% | 12.8\% | 16.4\% | 39.6\% | 13.4\% | 17.9\% |
| 2006 | 100\% | 13.0\% | 15.4\% | 41.8\% | 12.9\% | 16.9\% |
| 2007 | 100\% | 14.6\% | 15.4\% | 40.6\% | 12.6\% | 16.8\% |
| 2008 | 100\% | 14.7\% | 17.6\% | 35.3\% | 13.7\% | 18.7\% |
| 2009 | 100\% | 14.9\% | 15.9\% | 38.5\% | 12.8\% | 17.8\% |
| 2010 | 100\% | 15.0\% | 15.5\% | 39.6\% | 12.2\% | 17.7\% |
| 2011 | 100\% | 13.9\% | 15.5\% | 41.4\% | 11.7\% | 17.5\% |
| 2012 | 100\% | 13.6\% | 15.1\% | 43.3\% | 10.9\% | 17.2\% |
| 2013 | 100\% | 13.9\% | 15.4\% | 42.5\% | 10.6\% | 17.7\% |
| $\begin{array}{r} 2014 \\ 2015 \\ \hline \end{array}$ |  |  |  |  |  |  |

Notes: Wealth is at the end of the year and does not include offshore wealth.



|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population: households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \hline \text { Bottom } \\ 90 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Bottom } \\ 50 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Middle } \\ 40 \% \\ \hline \end{gathered}$ | Top 10\% | Top 5\% | Top 1\% | Top 0.5\% | Top 0.1\% | Top 0.01\% | $\begin{array}{\|c} \hline \text { Top 10\% to } \\ 1 \% \\ \hline \end{array}$ | $\begin{gathered} \hline \text { Top } 10 \% \text { to } \\ 5 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 5\% to } \\ 1 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 1\% to } \\ 0.1 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 1\% to } \\ 0.5 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 0.5\% to } \\ 0.1 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 0.1\% to } \\ 0.01 \% \\ \hline \end{gathered}$ |
| 1992 | 48.4\% |  |  | 51.6\% | 38.7\% | 17.9\% |  | 6.4\% | 2.3\% | 33.7\% | 12.9\% | 20.7\% | 11.6\% |  |  | 4.0\% |
| 1993 | 52.3\% |  |  | 47.7\% | 34.6\% | 17.0\% |  | 6.9\% | 2.8\% | 30.6\% | 13.1\% | 17.6\% | 10.1\% |  |  | 4.1\% |
| 1994 | 51.4\% |  |  | 48.6\% | 35.5\% | 17.7\% |  | 7.4\% | 3.1\% | 30.9\% | 13.1\% | 17.8\% | 10.4\% |  |  | 4.3\% |
| 1995 | 51.3\% |  |  | 48.7\% | 35.5\% | 18.0\% |  | 7.6\% | 3.2\% | 30.7\% | 13.3\% | 17.5\% | 10.4\% |  |  | 4.4\% |
| 1996 | 51.1\% |  |  | 48.9\% | 35.9\% | 18.3\% |  | 7.8\% | 3.4\% | 30.6\% | 13.1\% | 17.6\% | 10.5\% |  |  | 4.5\% |
| 1997 | 50.5\% |  |  | 49.5\% | 36.7\% | 19.1\% |  | 8.4\% | 3.7\% | 30.4\% | 12.8\% | 17.6\% | 10.7\% |  |  | 4.7\% |
| 1998 | 48.3\% |  |  | 51.7\% | 35.7\% | 18.7\% |  | 7.4\% | 3.6\% | 33.1\% | 16.0\% | 17.1\% | 11.3\% |  |  | 3.8\% |
| 1999 | 47.5\% |  |  | 52.5\% | 36.6\% | 19.2\% |  | 7.8\% | 3.8\% | 33.3\% | 15.9\% | 17.4\% | 11.4\% |  |  | 4.0\% |
| 2000 | 47.2\% |  |  | 52.8\% | 37.0\% | 19.6\% |  | 8.1\% | 4.1\% | 33.2\% | 15.7\% | 17.5\% | 11.4\% |  |  | 4.1\% |
| 2001 | 49.6\% | -4\% | 53.1\% | 50.4\% | 35.1\% | 16.9\% | 13.0\% | 7.6\% | 3.5\% | 33.6\% | 15.3\% | 18.3\% | 9.2\% | 3.8\% | 5.4\% | 4.1\% |
| 2002 | 51.4\% | -2\% | 53.8\% | 48.6\% | 33.9\% | 16.3\% | 12.6\% | 7.1\% | 3.1\% | 32.2\% | 14.7\% | 17.6\% | 9.2\% | 3.8\% | 5.4\% | 4.0\% |
| 2003 | 50.6\% | -3\% | 53.5\% | 49.4\% | 34.6\% | 16.7\% | 12.9\% | 7.3\% | 3.1\% | 32.7\% | 14.8\% | 17.9\% | 9.5\% | 3.9\% | 5.6\% | 4.1\% |
| 2004 | 50.1\% | -3\% | 53.2\% | 49.9\% | 35.0\% | 17.2\% | 13.4\% | 7.8\% | 3.6\% | 32.7\% | 14.8\% | 17.8\% | 9.4\% | 3.8\% | 5.6\% | 4.2\% |
| 2005 | 49.5\% | -3\% | 52.7\% | 50.5\% | 35.8\% | 17.9\% | 14.0\% | 8.2\% | 3.7\% | 32.6\% | 14.7\% | 17.9\% | 9.7\% | 3.9\% | 5.8\% | 4.5\% |
| 2006 | 50.3\% | -3\% | 52.9\% | 49.7\% | 35.2\% | 17.7\% | 14.1\% | 8.8\% | 4.5\% | 32.0\% | 14.6\% | 17.4\% | 9.0\% | 3.7\% | 5.3\% | 4.3\% |
| 2007 | 48.7\% | -3\% | 52.1\% | 51.3\% | 36.7\% | 19.2\% | 15.4\% | 9.93\% | 5.2\% | 32.1\% | 14.6\% | 17.6\% | 9.3\% | 3.8\% | 5.5\% | 4.7\% |
| 2008 | 46.5\% | -5\% | 51.6\% | 53.5\% | 38.4\% | 19.8\% | 15.8\% | 9.8\% | 4.8\% | 33.7\% | 15.1\% | 18.6\% | 10.0\% | 4.1\% | 6.0\% | 5.0\% |
| 2009 | 47.9\% | -3\% | 51.1\% | 52.1\% | 37.1\% | 18.6\% | 14.6\% | 8.8\% | 4.2\% | 33.5\% | 15.1\% | 18.5\% | 9.8\% | 4.0\% | 5.8\% | 4.7\% |
| 2010 | 46.1\% | -1\% | 47.3\% | 53.9\% | 39.0\% | 19.6\% | 15.3\% | 9.1\% | 4.3\% | 34.2\% | 14.9\% | 19.3\% | 10.6\% | 4.4\% | 6.2\% | 4.8\% |
| 2011 | 46.1\% | -1\% | 47.4\% | 53.9\% | 38.7\% | 19.2\% | 14.8\% | 8.6\% | 4.0\% | 34.7\% | 15.1\% | 19.6\% | 10.6\% | 4.4\% | 6.2\% | 4.6\% |
| 2012 | 47.2\% | 0\% | 47.4\% | 52.8\% | 37.8\% | 18.4\% | 14.1\% | 8.0\% | 3.6\% | 34.4\% | 15.0\% | 19.4\% | 10.4\% | 4.4\% | 6.0\% | 4.4\% |
| 2013 | 45.7\% | -1\% | 46.9\% | 54.3\% | 38.9\% | 18.7\% | 14.2\% | 7.9\% | 3.5\% | 35.5\% | 15.4\% | 20.1\% | 10.9\% | 4.6\% | 6.3\% | 4.4\% |
| 2014 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: From 2001-on, we report our estimates matching total household wealth, excluding offshore wealth. Before 2001: data from Roine and Waldenstrom (2015) based on adjusted tax statistics. There is a small discontinuity in 2001 (around 1 percentage point) for the top $10 \%$, top $5 \%$ and top $1 \%$ shares (but not for the top $0.1 \%$ and top $0.01 \%$ ) that we do not correct (i.e., we just paste the two series). The Roine-Waldenstrom ( 2015 ) series have a break in 1993 (switch from tabulated series of taxable net wealth pre-1993 to Statistics Norway tabulations of gross wealth post-1993). We smooth the discontinuity by replacing the 1992 estimates by the average of 1993 and 1991. Generally speaking, the raw data source is of high quality for the pre-1993 period, post-2001 period, but less so for the 1993-2001 period (extrapolations based on the dynamic of gross wealth). In future research we plan to mprove the 1993-2001 wealth shares by applying the same methodology as the one applied post-2001.

|  | Table B2b: Top wealth shares excluding offshore wealth in Norway (decennial averages) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
|  | Population: households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \text { Bottom } \\ 90 \% \end{gathered}$ | $\begin{gathered} \text { Bottom } \\ 50 \% \end{gathered}$ | Middle 40\% | Top 10\% | Top 5\% | Top 1\% | Top 0.5\% | Top 0.1\% | Top 0.01\% | $\begin{array}{\|c} \hline \text { Top } 10 \% \text { to } \\ 1 \% \end{array}$ | $\begin{gathered} \text { Top } 10 \% \text { to } \\ 5 \% \end{gathered}$ | $\begin{gathered} \text { Top } 5 \% \text { to } \\ 1 \% \end{gathered}$ | $\begin{gathered} \text { Top 1\% to } \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \text { Top 1\% to } \\ 0.5 \% \end{gathered}$ | $\begin{aligned} & \text { Top 0.5\% } \\ & \text { to } 0.1 \% \end{aligned}$ | $\begin{aligned} & \text { Top 0.1\% } \\ & \text { to 0.01\% } \end{aligned}$ |
| $\begin{aligned} & 1910 \\ & 1920 \end{aligned}$ | 23.7\% |  |  | 76.3\% | 69.2\% | 37.2\% |  | 18.0\% | 8.7\% | 39.1\% | 7.2\% | 32.0\% | 19.2\% |  |  | 9.3\% |
| 1930 | 15.4\% |  |  | 84.6\% | 70.6\% | 37.6\% |  | 12.0\% | 3.8\% | 47.0\% | 14.0\% | 33.0\% | 25.6\% |  |  | 8.2\% |
| $\begin{aligned} & 1940 \\ & 1950 \end{aligned}$ | 21.6\% |  |  | 78.4\% | 62.4\% | 34.6\% |  | 13.2\% | 5.0\% | 43.8\% | 16.0\% | 27.8\% | 21.4\% |  |  | 8.3\% |
| 1960 | 33.6\% |  |  | 66.4\% | 51.0\% | 25.5\% |  | 9.2\% | 3.3\% | 40.9\% | 15.4\% | 25.5\% | 16.4\% |  |  | 5.9\% |
| 1970 | 42.1\% |  |  | 57.9\% | 42.8\% | 19.8\% |  | 6.6\% | 2.2\% | 38.1\% | 15.2\% | 23.0\% | 13.2\% |  |  | 4.4\% |
| 1980 | 43.1\% |  |  | 56.9\% | 43.5\% | 18.5\% |  | 5.5\% | 1.6\% | 38.5\% | 13.4\% | 25.0\% | 13.0\% |  |  | 3.8\% |
| 1990 | 48.9\% |  |  | 51.1\% | 37.5\% | 18.4\% |  | 7.1\% | 2.9\% | 32.7\% | 13.6\% | 19.1\% | 11.2\% |  |  | 4.2\% |
| 2000 | 49.2\% | -3.3\% | 52.7\% | 50.8\% | 35.9\% | 18.0\% | 14.0\% | 8.3\% | 4.0\% | 32.8\% | 14.9\% | 17.9\% | 9.6\% | 3.9\% | 5.6\% | 4.4\% |
| 2010 | 46.3\% | -0.9\% | 47.2\% | 53.7\% | 38.6\% | 19.0\% | 14.6\% | 8.4\% | 3.8\% | 34.7\% | 15.1\% | 19.6\% | 10.6\% | 4.4\% | 6.2\% | 4.6\% |

Notes: 1910 denotes the average of 1910, ... 1919; ... ; 2010 the average of 2010-2013

| Table B3: Wealth composition (bottom 90\%, top 10\% and top 5\%) excluding offshore wealth in Norway |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] | [18] | [19] |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { Bottom } \\ & 90 \% \end{aligned}$ | Equities | Fixed income claims | Housing | Business assets | Pensions | Memo: Equites \& fixed income claims | Top 10\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions | Top 5\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions |
| 2000 | 49.6\% | 2.4\% | 9.6\% | 22.6\% | 5.4\% | 9.6\% | 12.0\% | 50.4\% | 10.4\% | 6.3\% | 21.9\% | 6.1\% | 5.7\% | 35.1\% | 9.8\% | 4.5\% | 12.0\% | 5.0\% | 3.8\% |
| 2002 | 51.4\% | 1.9\% | 9.8\% | 24.3\% | 5.7\% | 9.8\% | 11.7\% | 48.6\% | 9.7\% | 7.4\% | 18.7\% | 6.4\% | 6.3\% | 33.9\% | 9.1\% | 5.2\% | 10.1\% | 5.3\% | 4.1\% |
| 2003 | 50.6\% | 2.1\% | 9.9\% | 22.6\% | 5.6\% | 10.3\% | 12.0\% | 49.4\% | 9.6\% | 7.6\% | 18.3\% | 7.2\% | 6.7\% | 34.6\% | 8.9\% | 5.4\% | 9.9\% | 6.0\% | 4.4\% |
| 2004 | 50.1\% | 2.1\% | 9.5\% | 22.4\% | 5.4\% | 10.6\% | 11.7\% | 49.9\% | 9.7\% | 7.1\% | 18.7\% | 7.5\% | 6.9\% | 35.0\% | 9.0\% | 5.1\% | 10.1\% | 6.4\% | 4.5\% |
| 2005 | 49.5\% | 2.4\% | 9.5\% | 21.5\% | 5.2\% | 10.8\% | 11.9\% | 50.5\% | 10.4\% | 6.8\% | 18.1\% | 8.1\% | 7.1\% | 35.8\% | 9.6\% | 4.8\% | 9.6\% | 7.1\% | 4.6\% |
| 2006 | 50.3\% | 2.4\% | 9.1\% | 23.1\% | 5.4\% | 10.3\% | 11.5\% | 49.7\% | 10.5\% | 6.4\% | 18.8\% | 7.5\% | 6.6\% | 35.2\% | 9.8\% | 4.5\% | 10.2\% | 6.4\% | 4.3\% |
| 2007 | 48.7\% | 2.4\% | 8.9\% | 21.8\% | 5.4\% | 10.2\% | 11.3\% | 51.3\% | 12.2\% | 6.5\% | 18.8\% | 7.2\% | 6.6\% | 36.7\% | 11.4\% | 4.6\% | 10.2\% | 6.2\% | 4.3\% |
| 2008 | 46.5\% | 2.3\% | 9.7\% | 17.4\% | 5.9\% | 11.1\% | 12.0\% | 53.5\% | 12.4\% | 7.9\% | 17.9\% | 7.8\% | 7.6\% | 38.4\% | 11.6\% | 5.6\% | 9.7\% | 6.5\% | 5.0\% |
| 2009 | 47.9\% | 2.7\% | 9.1\% | 19.8\% | 5.8\% | 10.6\% | 11.7\% | 52.1\% | 12.3\% | 6.8\% | 18.7\% | 7.0\% | 7.2\% | 37.1\% | 11.4\% | 4.7\% | 10.4\% | 5.9\% | 4.7\% |
| 2010 | 46.1\% | 2.5\% | 8.7\% | 19.7\% | 4.8\% | 10.4\% | 11.2\% | 53.9\% | 12.6\% | 6.8\% | 19.9\% | 7.4\% | 7.3\% | 39.0\% | 11.6\% | 4.6\% | 12.2\% | 6.1\% | 4.5\% |
| 2011 | 46.1\% | 2.1\% | 8.7\% | 20.4\% | 4.6\% | 10.3\% | 10.8\% | 53.9\% | 11.8\% | 6.7\% | 21.1\% | 7.0\% | 7.2\% | 38.7\% | 10.9\% | 4.5\% | 13.1\% | 5.7\% | 4.4\% |
| 2012 | 47.2\% | 2.1\% | 8.6\% | 22.0\% | 4.3\% | 10.2\% | 10.6\% | 52.8\% | 11.5\% | 6.5\% | 21.3\% | 6.5\% | 7.0\% | 37.8\% | 10.6\% | 4.4\% | 13.3\% | 5.3\% | 4.3\% |
| 2013 | 45.7\% | 2.2\% | 8.8\% | 20.0\% | 4.2\% | 10.6\% | 11.0\% | 54.3\% | 11.7\% | 6.6\% | 22.5\% | 6.4\% | 7.1\% | 38.9\% | 10.8\% | 4.3\% | 14.4\% | 5.2\% | 4.2\% |
| $\begin{aligned} & 2014 \\ & 2015 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Table B3b: Wealth composition (top 1\% and top 0.5\%) excluding offshore wealth in Norway |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |
|  | Top 1\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions | Top 0.5\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions |
| 2001 | 16.9\% | 8.3\% | 2.1\% | 2.1\% | 3.2\% | 1.0\% | 13.0\% | 7.6\% | 1.6\% | 0.8\% | 2.6\% | 0.5\% |
| 2002 | 16.3\% | 7.6\% | 2.4\% | 1.9\% | 3.5\% | 0.9\% | 12.6\% | 6.9\% | 1.7\% | 0.8\% | 2.8\% | 0.4\% |
| 2003 | 16.7\% | 7.3\% | 2.4\% | 1.9\% | 4.1\% | 1.0\% | 12.9\% | 6.6\% | 1.7\% | 0.8\% | 3.3\% | 0.4\% |
| 2004 | 17.2\% | 7.5\% | 2.3\% | 1.9\% | 4.5\% | 1.0\% | 13.4\% | 6.8\% | 1.6\% | 0.8\% | 3.8\% | 0.4\% |
| 2005 | 17.9\% | 7.9\% | 2.1\% | 1.6\% | 5.3\% | 1.0\% | 14.0\% | 7.1\% | 1.5\% | 0.6\% | 4.5\% | 0.4\% |
| 2006 | 17.7\% | 8.2\% | 2.0\% | 1.9\% | 4.6\% | 1.0\% | 14.1\% | 7.5\% | 1.5\% | 0.8\% | 3.9\% | 0.4\% |
| 2007 | 19.2\% | 9.7\% | 2.1\% | 2.0\% | 4.4\% | 1.0\% | 15.4\% | 8.9\% | 1.5\% | 0.8\% | 3.7\% | 0.4\% |
| 2008 | 19.8\% | 9.9\% | 2.5\% | 1.9\% | 4.5\% | 1.1\% | 15.8\% | 9.0\% | 1.8\% | 0.8\% | 3.8\% | 0.4\% |
| 2009 | 18.6\% | 9.4\% | 2.0\% | 2.2\% | 4.0\% | 1.0\% | 14.6\% | 8.5\% | 1.4\% | 1.0\% | 3.3\% | 0.4\% |
| 2010 | 19.6\% | 9.4\% | 1.8\% | 3.4\% | 4.0\% | 1.0\% | 15.3\% | 8.5\% | 1.3\% | 1.8\% | 3.3\% | 0.4\% |
| 2011 | 19.2\% | 9.0\% | 1.8\% | 3.8\% | 3.7\% | 0.9\% | 14.8\% | 8.1\% | 1.2\% | 2.1\% | 3.0\% | 0.4\% |
| 2012 | 18.4\% | 8.6\% | 1.7\% | 3.9\% | 3.4\% | 0.9\% | 14.1\% | 7.7\% | 1.1\% | 2.2\% | 2.7\% | 0.4\% |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |


| Table B3c: Wealth composition (top 0.1\% and top $0.01 \%$ ) excluding offshore wealth in Norway |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Top 0.1\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions | Memo: other than equities \& business assets | Top 0.01\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions | Memo: other than equities \& business assets |
| 2001 | 7.6\% | 5.6\% | 0.7\% | -0.1\% | 1.4\% | 0.1\% | 0.6\% | 3.5\% | 3.1\% | 0.2\% | -0.2\% | 0.4\% | 0.0\% | 0.0\% |
| 2002 | 7.1\% | 4.9\% | 0.7\% | 0.0\% | 1.4\% | 0.0\% | 0.8\% | 3.1\% | 2.5\% | 0.2\% | -0.1\% | 0.4\% | 0.0\% | 0.2\% |
| 2003 | 7.3\% | 4.6\% | 0.7\% | 0.1\% | 1.8\% | 0.0\% | 0.9\% | 3.1\% | 2.4\% | 0.2\% | 0.0\% | 0.6\% | 0.0\% | 0.2\% |
| 2004 | 7.8\% | 4.9\% | 0.7\% | 0.0\% | 2.1\% | 0.0\% | 0.8\% | 3.6\% | 2.7\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 0.2\% |
| 2005 | 8.2\% | 5.1\% | 0.7\% | -0.1\% | 2.6\% | 0.1\% | 0.6\% | 3.7\% | 2.7\% | 0.2\% | -0.1\% | 0.9\% | 0.0\% | 0.1\% |
| 2006 | 8.8\% | 5.8\% | 0.7\% | 0.0\% | 2.3\% | 0.0\% | 0.7\% | 4.5\% | 3.5\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% |
| 2007 | 9.9\% | 6.9\% | 0.7\% | 0.0\% | 2.2\% | 0.1\% | 0.8\% | 5.2\% | 4.2\% | 0.2\% | 0.0\% | 0.9\% | 0.0\% | 0.2\% |
| 2008 | 9.8\% | 6.7\% | 0.7\% | 0.1\% | 2.2\% | 0.1\% | 0.9\% | 4.8\% | 3.8\% | 0.3\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% |
| 2009 | 8.8\% | 6.0\% | 0.5\% | 0.1\% | 2.0\% | 0.1\% | 0.7\% | 4.2\% | 3.2\% | 0.2\% | 0.0\% | 0.8\% | 0.0\% | 0.2\% |
| 2010 | 9.1\% | 6.1\% | 0.5\% | 0.3\% | 2.0\% | 0.1\% | 0.9\% | 4.3\% | 3.3\% | 0.2\% | 0.0\% | 0.7\% | 0.0\% | 0.2\% |
| 2011 | 8.6\% | 5.8\% | 0.5\% | 0.4\% | 1.8\% | 0.1\% | 1.0\% | 4.0\% | 3.1\% | 0.2\% | 0.1\% | 0.7\% | 0.0\% | 0.2\% |
| 2012 | 8.0\% | 5.4\% | 0.5\% | 0.5\% | 1.6\% | 0.1\% | 1.0\% | 3.6\% | 2.8\% | 0.1\% | 0.1\% | 0.6\% | 0.0\% | 0.2\% |
| $\begin{aligned} & 2013 \\ & 2014 \end{aligned}$ | 7.9\% | 5.3\% | 0.4\% | 0.6\% | 1.5\% | 0.1\% | 1.1\% | 3.5\% | 2.7\% | 0.1\% | 0.1\% | 0.6\% | 0.0\% | 0.2\% |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth shares including offshore wealth (\% of net household wealth) |  |  |  |  |  |  | Distribution of offshore wealth (\% of offshore wealth) |  |  |  |  |  |  | Memo: <br> European wealth in Switzerland | European wealth in all tax havens |
|  | Hidden <br> wealth of <br> Norwegians | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.1\% | Top 0.01\% | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.5\% | Top 0.1\% | Top 0.01\% |  |  |
| 1951 | 0.6\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1952 | 0.6\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1953 | 0.6\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1954 | 0.6\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| 1955 | 0.6\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| 1956 | 0.7\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.1\% | 2.1\% |
| 1957 | 0.7\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.2\% | 2.2\% |
| 1958 | 0.7\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.3\% | 2.3\% |
| 1959 | 0.8\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.5\% | 2.5\% |
| 1960 | 0.8\% | $3 \overline{3} . \overline{3} \bar{\square}$ | $\overline{6} 6.7$ \% | $\overline{51.4 \%}$ | 26.1\% | 9.7\% | $\overline{3} .7 \%$ | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.6\% | 2.6\% |
| 1961 | 0.8\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.7\% | 2.7\% |
| 1962 | 0.9\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.8\% | 2.8\% |
| 1963 | 0.9\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.9\% | 2.9\% |
| 1964 | 1.0\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.1\% | 3.1\% |
| 1965 | 1.0\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.2\% | 3.2\% |
| 1966 | 1.0\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.3\% | 3.3\% |
| 1967 | 1.1\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.5\% | 3.5\% |
| 1968 | 1.1\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.6\% | 3.6\% |
| 1969 | 1.2\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.7\% | 3.7\% |
| 1970 | 1.2\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | $9 \mathrm{0} .1{ }^{\text {\% }}$ | 7 $\overline{6} .9 \%$ | 51.6\% | 3.9\% | 3.9\% |
| 1971 | 1.2\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.0\% | 4.0\% |
| 1972 | 1.3\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.1\% | 4.1\% |
| 1973 | 1.3\% | 40.8\% | 59.2\% | 44.7\% | 22.5\% | 8.6\% | 3.4\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.3\% | 4.3\% |
| 1974 | 1.4\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.4\% | 4.4\% |
| 1975 | 1.4\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.5\% | 4.5\% |
| 1976 | 1.5\% | 42.4\% | 57.7\% | 43.1\% | 20.6\% | 7.4\% | 2.8\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.6\% | 4.7\% |
| 1977 | 1.5\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.7\% | 4.8\% |
| 1978 | 1.5\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.8\% | 4.9\% |
| 1979 | 1.6\% | 41.3\% | 58.7\% | 42.9\% | 19.6\% | 6.8\% | 2.5\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.9\% | 5.0\% |
| 1980 | 1.6\% |  |  |  |  |  |  | 1.6\% | $\overline{98} . \overline{4} \%$ | 97.4\% | 93.6\% | 90.1\% | 7 $\overline{6} .9 \%$ | 51.6\% | 5.0\% | 5.1\% |
| 1981 | 1.6\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.1\% | 5.2\% |
| 1982 | 1.7\% | 40.7\% | 59.3\% | 46.4\% | 19.3\% | 6.1\% | 2.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.2\% | 5.3\% |
| 1983 | 1.7\% | 42.8\% | 57.2\% | 45.3\% | 18.8\% | 6.1\% | 2.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.3\% | 5.4\% |
| 1984 | 1.7\% | 42.2\% | 57.9\% | 43.6\% | 19.3\% | 6.5\% | 2.4\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.4\% | 5.5\% |
| 1985 | 1.8\% | 41.9\% | 58.1\% | 44.0\% | 20.2\% | 7.1\% | 2.7\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 5.6\% |
| 1986 | 1.8\% | 42.5\% | 57.5\% | 44.0\% | 20.0\% | 7.0\% | 2.6\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 5.7\% |
| 1987 | 1.8\% | 42.3\% | 57.7\% | 44.4\% | 20.1\% | 6.9\% | 2.6\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 5.8\% |
| 1988 | 1.9\% | 42.9\% | 57.2\% | 44.2\% | 20.3\% | 7.1\% | 2.7\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 5.9\% |
| 1989 | 1.9\% | 43.5\% | 56.5\% | 43.9\% | 20.3\% | 7.2\% | 2.7\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.0\% |
| 1990 | 1.9\% | 43.3\% | 56.7\% | 44.1\% | 20.3\% | 7.1\% | 2.7\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | $90.1 \%$ | 76.9\% | 51.6\% | 5.5\% | 6.1\% |
| 1991 | 2.0\% | 43.6\% | 56.4\% | 43.8\% | 20.3\% | 7.2\% | 2.8\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.3\% |
| 1992 | 2.0\% | 47.5\% | 52.6\% | 39.9\% | 19.4\% | 7.8\% | 3.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.4\% |
| 1993 | 2.0\% | 51.3\% | 48.7\% | 35.9\% | 18.6\% | 8.3\% | 3.8\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.5\% |
| 1994 | 2.1\% | 50.4\% | 49.6\% | 36.8\% | 19.3\% | 8.8\% | 4.1\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.6\% |
| 1995 | 2.1\% | 50.2\% | 49.8\% | 36.8\% | 19.6\% | 9.1\% | 4.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.7\% |
| 1996 | 2.1\% | 50.0\% | 50.0\% | 37.2\% | 19.9\% | 9.3\% | 4.4\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.8\% |



Notes: 1910 denotes the average of $1910, \ldots 1919 ; \ldots ; 2010$ the average of 2010-2013. The source for cols. 15 and 16 is Zucman (2015), The Hidden Wealth of Nations, Figure 1 (decennial averages). Cols. 15 and 16 are expressed as a fraction of Europe's financial wealth. Starting from our estimate of Norway's offshore wealth in 2006 (see Appendix I), we assume that Norway's offshore wealth follows the evolution of Europe's offshore wealth before and after 2006

| Table B4b: Wealth composition (top 1\%, top 0.1\%, and top 0.01\%) including offshore wealth in Norway |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Top 1\% wealth | Equities | Fixed income claims | Housing | $\begin{aligned} & \text { Business } \\ & \text { assets } \end{aligned}$ | Pensions | Offshore | Top 0.1\% wealth | Equities | Fixed income claims, housing, pensions | Business assets | Offshore | Top 0.01\% wealth | Equities | Fixed income claims, housing, pensions | Business assets | Offshore |
| 2001 | 18.6\% | 8.1\% | 2.1\% | 2.1\% | 3.2\% | 1.0\% | 2.1\% | 9.2\% | 5.5\% | 0.6\% | 1.3\% | 1.8\% | 4.6\% | 3.1\% | 0.0\% | 0.4\% | 1.2\% |
| 2002 | 18.1\% | 7.5\% | 2.3\% | 1.9\% | 3.4\% | 0.9\% | 2.2\% | 8.8\% | 4.8\% | 0.8\% | 1.4\% | 1.8\% | 4.2\% | 2.5\% | 0.2\% | 0.4\% | 1.2\% |
| 2003 | 18.5\% | 7.2\% | 2.4\% | 1.9\% | 4.0\% | 0.9\% | 2.2\% | 8.9\% | 4.5\% | 0.9\% | 1.7\% | 1.8\% | 4.3\% | 2.3\% | 0.2\% | 0.5\% | 1.2\% |
| 2004 | 19.0\% | 7.3\% | 2.2\% | 1.8\% | 4.4\% | 1.0\% | 2.2\% | 9.5\% | 4.8\% | 0.8\% | 2.1\% | 1.8\% | 4.7\% | 2.6\% | 0.2\% | 0.7\% | 1.2\% |
| 2005 | 19.7\% | 7.7\% | 2.1\% | 1.6\% | 5.2\% | 1.0\% | 2.3\% | 9.9\% | 4.9\% | 0.6\% | 2.5\% | 1.9\% | 4.9\% | 2.7\% | 0.1\% | 0.8\% | 1.2\% |
| 2006 | 19.6\% | 8.0\% | 2.0\% | 1.9\% | 4.5\% | 0.9\% | 2.3\% | 10.5\% | 5.6\% | 0.7\% | 2.2\% | 1.9\% | 5.7\% | 3.5\% | 0.2\% | 0.8\% | 1.3\% |
| 2007 | 21.1\% | 9.5\% | 2.1\% | 1.9\% | 4.3\% | 1.0\% | 2.4\% | 11.7\% | 6.7\% | 0.7\% | 2.2\% | 2.0\% | 6.4\% | 4.1\% | 0.2\% | 0.8\% | 1.3\% |
| 2008 | 21.8\% | 9.6\% | 2.4\% | 1.8\% | 4.4\% | 1.0\% | 2.5\% | 11.6\% | 6.5\% | 0.8\% | 2.2\% | 2.0\% | 6.0\% | 3.7\% | 0.2\% | 0.8\% | 1.4\% |
| 2009 | 20.7\% | 9.2\% | 1.9\% | 2.1\% | 3.9\% | 1.0\% | 2.6\% | 10.7\% | 5.9\% | 0.7\% | 2.0\% | 2.1\% | 5.5\% | 3.1\% | 0.1\% | 0.8\% | 1.4\% |
| 2010 | 21.8\% | 9.2\% | 1.8\% | 3.3\% | 3.9\% | 0.9\% | 2.7\% | 11.0\% | 6.0\% | 0.9\% | 2.0\% | 2.2\% | 5.6\% | 3.2\% | 0.2\% | 0.7\% | 1.5\% |
| 2011 | 21.4\% | 8.7\% | 1.7\% | 3.7\% | 3.6\% | 0.9\% | 2.7\% | 10.6\% | 5.6\% | 1.0\% | 1.8\% | 2.2\% | 5.4\% | 3.0\% | 0.2\% | 0.7\% | 1.5\% |
| 2012 | 20.7\% | 8.3\% | 1.6\% | 3.8\% | 3.3\% | 0.9\% | 2.8\% | 10.1\% | 5.3\% | 1.0\% | 1.5\% | 2.3\% | 5.1\% | 2.7\% | 0.2\% | 0.6\% | 1.5\% |
| $\begin{aligned} & 2013 \\ & 2014 \end{aligned}$ | 21.0\% | 8.3\% | 1.6\% | 4.4\% | 3.1\% | 0.8\% | 2.9\% | 10.0\% | 5.1\% | 1.1\% | 1.5\% | 2.4\% | 5.0\% | 2.6\% | 0.2\% | 0.6\% | 1.6\% |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table B5: Norwegian wealth tax base (taxable wealth at tax value for individuals with net taxable wealth above exemption threshold)


Table B6: Norwegian data source

| Source data | Units | Source | Steps |
| :--- | :--- | :--- | :--- |
| Voluntary disclosures | Individuals | SKD | N1, N9 |
| Family relations | Individuals | SKD | N1, N2, N9 |
| Population register | Individuals | SKD | N2, N9 |
| Education | Individuals | SSB | N2, N9 |
| Tax return | Individuals | SKD | N3, N4, N9 |
| Tax return | Firms | SSB | N5, N7, N8, N9 |
| Firm characteristics | Firms | SKD | N5, N7, N8, N9 |
| Tax variables | Individuals and firms | SKD | N2, N4, N5, N7, N9 |
| Shareholder info | Individuals and firms | SSB | N5, N6, N7, N8, N9 |
| Employee info | Individuals and firms | SKD | N5, N9 |
| Board and CEO info | Individuals and firms | SKD | N5, N6, N9 |
| Tax audits | Individuals and firms | SKD | N5, N7, N9 |

SKD: Skatteetaten / Norwegian Tax Administration
SSB: Statistics Norway

Table C0: National income, household wealth, population, and price in Sweden


| Table C1: National Income and Wealth in Sweden |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
|  | Billion current kr |  |  |  |  |  |  |  |  |  |  |  |  |
|  | National income | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions \& insurance | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 1980 | 500 | 1,488 | 1,119 | 132 | 270 | 484 | 147 | 86 | 282 | 0 | 369 | 734 | 365 |
| 1981 | 543 | 1,497 | 1,094 | 161 | 301 | 395 | 132 | 105 | 314 | 0 | 403 | 810 | 407 |
| 1982 | 591 | 1,588 | 1,145 | 192 | 326 | 364 | 136 | 127 | 351 | 0 | 442 | 879 | 437 |
| 1983 | 659 | 1,725 | 1,247 | 256 | 352 | 352 | 134 | 154 | 386 | 0 | 478 | 948 | 470 |
| 1984 | 745 | 1,852 | 1,330 | 266 | 389 | 353 | 139 | 183 | 427 | 0 | 521 | 1,029 | 507 |
| 1985 | 810 | 2,021 | 1,459 | 305 | 426 | 368 | 148 | 211 | 458 | 0 | 561 | 1,097 | 536 |
| 1986 | 893 | 2,284 | 1,679 | 446 | 495 | 340 | 152 | 245 | 550 | 0 | 605 | 1,157 | 552 |
| 1987 | 974 | 2,466 | 1,817 | 448 | 531 | 386 | 174 | 277 | 626 | 0 | 649 | 1,232 | 584 |
| 1988 | 1,062 | 3,044 | 2,335 | 609 | 567 | 617 | 218 | 324 | 750 | 0 | 709 | 1,385 | 676 |
| 1989 | 1,167 | 3,550 | 2,762 | 726 | 597 | 800 | 266 | 374 | 817 | 0 | 788 | 1,525 | 737 |
| $19 \overline{9} 0^{-}$ | 1,27 $\overline{\mathbf{6}}$ | 3,912 | 3,104 | $\overline{6} 20$ | $62 \overline{3}$ | 1,13̄ | $30 \overline{6}$ | $\overline{4} \overline{25}$ | 86 $\overline{2}$ | 0 | $\overline{8} 07$ | 1, $\overline{6} 35$ | $\overline{8} 2 \overline{7}$ |
| 1991 | 1,361 | 4,094 | 3,139 | 477 | 651 | 1,245 | 292 | 474 | 860 | 0 | 955 | 1,759 | 804 |
| 1992 | 1,342 | 4,282 | 3,208 | 499 | 656 | 1,228 | 296 | 529 | 848 | 0 | 1,074 | 1,884 | 810 |
| 1993 | 1,328 | 4,295 | 3,259 | 669 | 668 | 1,066 | 268 | 588 | 839 | 0 | 1,035 | 1,853 | 817 |
| 1994 | 1,456 | 4,352 | 3,368 | 574 | 693 | 1,164 | 291 | 646 | 832 | 0 | 983 | 1,851 | 868 |
| 1995 | 1,574 | 4,725 | 3,500 | 636 | 708 | 1,202 | 309 | 645 | 829 | 0 | 1,225 | 1,909 | 685 |
| 1996 | 1,612 | 4,986 | 3,656 | 717 | 745 | 1,095 | 347 | 751 | 857 | 0 | 1,330 | 2,099 | 769 |
| 1997 | 1,676 | 5,641 | 4,251 | 941 | 707 | 1,235 | 382 | 986 | 907 | 0 | 1,390 | 2,191 | 801 |
| 1998 | 1,772 | 6,123 | 4,627 | 1,000 | 699 | 1,365 | 378 | 1,184 | 964 | 0 | 1,495 | 2,410 | 914 |
| 1999 | 1,871 | 7,118 | 5,537 | 1,517 | 689 | 1,474 | 426 | 1,431 | 1,047 | 0 | 1,581 | 2,506 | 926 |
| 2000 | 1,985 | 7,424 | 5,768 | 1,36̄ $\overline{3}$ | 632 | 1,675 | 497 | 1,601 | 1,126 | 0 | 1,656 | 2,580 | 924 |
| 2001 | 2,053 | 8,201 | 6,570 | 1,386 | 701 | 2,192 | 593 | 1,699 | 1,336 | 0 | 1,631 | 2,584 | 954 |
| 2002 | 2,131 | 8,381 | 6,862 | 1,120 | 740 | 2,414 | 644 | 1,945 | 1,429 | 0 | 1,519 | 2,516 | 997 |
| 2003 | 2,265 | 8,996 | 7,359 | 1,454 | 785 | 2,429 | 666 | 2,025 | 1,547 | 0 | 1,637 | 2,666 | 1,030 |
| 2004 | 2,346 | 9,569 | 7,800 | 1,661 | 800 | 2,451 | 754 | 2,135 | 1,694 | 0 | 1,768 | 2,825 | 1,056 |
| 2005 | 2,451 | 10,804 | 8,820 | 2,162 | 870 | 2,610 | 690 | 2,489 | 1,890 | 0 | 1,985 | 3,066 | 1,081 |
| 2006 | 2,646 | 11,977 | 9,759 | 2,609 | 976 | 2,851 | 794 | 2,528 | 2,107 | 0 | 2,218 | 3,336 | 1,118 |
| 2007 | 2,857 | 13,008 | 10,701 | 2,340 | 1,172 | 3,535 | 909 | 2,745 | 2,321 | 0 | 2,307 | 3,468 | 1,161 |
| 2008 | 2,919 | 12,769 | 10,608 | 1,693 | 1,267 | 3,683 | 1,011 | 2,954 | 2,466 | 0 | 2,161 | 3,378 | 1,217 |
| 2009 | 2,743 | 13,446 | 11,023 | 2,203 | 1,311 | 3,475 | 1,033 | 3,000 | 2,652 | 0 | 2,423 | 3,711 | 1,288 |


|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Billion current kr |  |  |  |  |  |  |  |  |  |  |  |  |
|  | National income | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions \& insurance | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 2010 | 2,968 | 14,823 | 12,261 | 2,463 | 1,366 | 3,894 | 1,097 | 3,440 | 2,860 | 0 | 2,562 | 3,908 | 1,345 |
| 2011 | 3,100 | 14,819 | 12,181 | 2,080 | 1,438 | 3,819 | 1,188 | 3,655 | 2,989 | 0 | 2,639 | 4,053 | 1,414 |
| 2012 | 3,118 | 15,274 | 12,443 | 2,292 | 1,528 | 3,604 | 1,203 | 3,816 | 3,093 | 0 | 2,831 | 4,319 | 1,488 |
| 2013 | 3,216 | 16,592 | 13,588 | 2,631 | 1,594 | 3,935 | 1,206 | 4,221 | 3,219 | 0 | 3,004 | 4,562 | 1,558 |
| 2014 | 3,329 | 18,735 | 15,298 | 2,992 | 1,657 | 4,241 | 1,397 | 5,012 | 3,384 | 0 | 3,437 | 5,089 | 1,652 |
| 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: Wealth estimates from official national accounts and tax-based balance sheets and excludes offshore wealth. Wealth is at the end of the year.

Table C1b: The composition of national wealth in Sweden


|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of national income |  |  |  |  |  |  |  |  |  |  |  |
|  | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 2006 | 453\% | 369\% | 99\% | 37\% | 108\% | 30\% | 96\% | 80\% | 0\% | 84\% | 126\% | 42\% |
| 2007 | 455\% | 375\% | 82\% | 41\% | 124\% | 32\% | 96\% | 81\% | 0\% | 81\% | 121\% | 41\% |
| 2008 | 437\% | 363\% | 58\% | 43\% | 126\% | 35\% | 101\% | 84\% | 0\% | 74\% | 116\% | 42\% |
| 2009 | 490\% | 402\% | 80\% | 48\% | 127\% | 38\% | 109\% | 97\% | 0\% | 88\% | 135\% | 47\% |
| 2010 | 499\% | 413\% | 83\% | 46\% | 131\% | 37\% | 116\% | 96\% | 0\% | 86\% | 132\% | 45\% |
| 2011 | 478\% | 393\% | 67\% | 46\% | 123\% | 38\% | 118\% | 96\% | 0\% | 85\% | 131\% | 46\% |
| 2012 | 490\% | 399\% | 74\% | 49\% | 116\% | 39\% | 122\% | 99\% | 0\% | 91\% | 139\% | 48\% |
| 2013 | 516\% | 422\% | 82\% | 50\% | 122\% | 37\% | 131\% | 100\% | 0\% | 93\% | 142\% | 48\% |
| $\begin{aligned} & 2014 \\ & 2015 \end{aligned}$ | 563\% | 460\% | 90\% | 50\% | 127\% | 42\% | 151\% | 102\% | 0\% | 103\% | 153\% | 50\% |

[^17]Table C1c: The composition of household wealth in Sweden

|  | [1] | [2] [3] |  | [4] | [5] | [6] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of total net household wealth |  |  |  |  |  |
|  | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions |
| 1980 | 100\% | 11.8\% | 24.1\% | 43.3\% | 13.1\% | 7.7\% |
| 1981 | 100\% | 14.7\% | 27.5\% | 36.1\% | 12.1\% | 9.6\% |
| 1982 | 100\% | 16.8\% | 28.5\% | 31.8\% | 11.9\% | 11.1\% |
| 1983 | 100\% | 20.5\% | 28.2\% | 28.2\% | 10.7\% | 12.3\% |
| 1984 | 100\% | 20.0\% | 29.2\% | 26.5\% | 10.4\% | 13.8\% |
| 1985 | 100\% | 20.9\% | 29.2\% | 25.3\% | 10.1\% | 14.5\% |
| 1986 | 100\% | 26.6\% | 29.5\% | 20.3\% | 9.1\% | 14.6\% |
| 1987 | 100\% | 24.6\% | 29.2\% | 21.3\% | 9.6\% | 15.2\% |
| 1988 | 100\% | 26.1\% | 24.3\% | 26.4\% | 9.3\% | 13.9\% |
| 1989 | 100\% | 26.3\% | 21.6\% | 29.0\% | 9.6\% | 13.5\% |
| 19990 | 100\% | 20. 0 \% | 20.1\% | 36. 4 \% | 9.9\% | 13.7\% |
| 1991 | 100\% | 15.2\% | 20.8\% | 39.7\% | 9.3\% | 15.1\% |
| 1992 | 100\% | 15.6\% | 20.5\% | 38.3\% | 9.2\% | 16.5\% |
| 1993 | 100\% | 20.5\% | 20.5\% | 32.7\% | 8.2\% | 18.1\% |
| 1994 | 100\% | 17.1\% | 20.6\% | 34.5\% | 8.6\% | 19.2\% |
| 1995 | 100\% | 18.2\% | 20.2\% | 34.4\% | 8.8\% | 18.4\% |
| 1996 | 100\% | 19.6\% | 20.4\% | 30.0\% | 9.5\% | 20.6\% |
| 1997 | 100\% | 22.1\% | 16.6\% | 29.1\% | 9.0\% | 23.2\% |
| 1998 | 100\% | 21.6\% | 15.1\% | 29.5\% | 8.2\% | 25.6\% |
| 1999 | 100\% | 27.4\% | 12.4\% | 26.6\% | 7.7\% | 25.8\% |
| 2000 | 100\% | 23.6\% | 11.0\% | 29.0\% | 8.6\% | 27.8\% |


|  | [1] | [2] | [3] | [4] | [5] | [6] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of total net household wealth |  |  |  |  |  |
|  | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions |
| 2001 | 100\% | 21.1\% | 10.7\% | 33.4\% | 9.0\% | 25.9\% |
| 2002 | 100\% | 16.3\% | 10.8\% | 35.2\% | 9.4\% | 28.3\% |
| 2003 | 100\% | 19.8\% | 10.7\% | 33.0\% | 9.0\% | 27.5\% |
| 2004 | 100\% | 21.3\% | 10.3\% | 31.4\% | 9.7\% | 27.4\% |
| 2005 | 100\% | 24.5\% | 9.9\% | 29.6\% | 7.8\% | 28.2\% |
| 2006 | 100\% | 26.7\% | 10.0\% | 29.2\% | 8.1\% | 25.9\% |
| 2007 | 100\% | 21.9\% | 11.0\% | 33.0\% | 8.5\% | 25.7\% |
| 2008 | 100\% | 16.0\% | 11.9\% | 34.7\% | 9.5\% | 27.8\% |
| 2009 | 100\% | 20.0\% | 11.9\% | 31.5\% | 9.4\% | 27.2\% |
| 2010 | 100\% | 20.1\% | 11.1\% | 31.8\% | 8.9\% | 28.1\% |
| 2011 | 100\% | 17.1\% | 11.8\% | 31.4\% | 9.8\% | 30.0\% |
| 2012 | 100\% | 18.4\% | 12.3\% | 29.0\% | 9.7\% | 30.7\% |
| 2013 | 100\% | 19.4\% | 11.7\% | 29.0\% | 8.9\% | 31.1\% |
| $\begin{aligned} & 2014 \\ & 2015 \end{aligned}$ |  |  |  |  |  |  |

Notes: wealth is at the end of the year and excludes offshore wealth.



|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population: households |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \hline \text { Bottom } \\ 90 \% \end{gathered}$ | $\begin{gathered} \hline \text { Bottom } \\ 50 \% \end{gathered}$ | Middle 40\% | Top 10\% | Top 5\% | Top 1\% | Top 0.1\% | Top 0.01\% | $\begin{array}{\|c} \hline \text { Top } 10 \% \text { to } \\ 1 \% \end{array}$ | $\begin{gathered} \text { Top 10\% to } \\ 5 \% \end{gathered}$ | $\begin{gathered} \hline \text { Top 5\% to } \\ 1 \% \end{gathered}$ | $\begin{gathered} \text { Top 1\% to } \\ 0.1 \% \end{gathered}$ | $\begin{gathered} \hline \text { Top 0.1\% to } \\ 0.01 \% \end{gathered}$ |
| 1992 | 42.3\% |  |  | 57.7\% | 40.9\% | 19.5\% | 7.9\% |  | 38.2\% | 16.8\% | 21.4\% | 11.6\% |  |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 | 38.9\% |  |  | 61.1\% | 44.1\% | 20.3\% | 7.3\% | 3.6\% | 40.8\% | 17.0\% | 23.8\% | 13.0\% |  |
| 1998 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1999 | 46.7\% | 5.0\% | 41.7\% | 53.3\% | 39.2\% | 19.8\% | 9.0\% | 4.4\% | 33.6\% | 14.1\% | 19.4\% | 10.8\% | 4.5\% |
| 2000 | 49.3\% | 5.6\% | 43.7\% | 50.7\% | 36.5\% | 17.5\% | 7.4\% | 3.4\% | 33.2\% | 14.2\% | 19.0\% | 10.1\% | 3.9\% |
| 2001 | 49.7\% | 5.6\% | 44.1\% | 50.3\% | 35.9\% | 16.7\% | 6.9\% | 3.4\% | 33.6\% | 14.4\% | 19.2\% | 9.8\% | 3.6\% |
| 2002 | 51.0\% | 6.0\% | 45.0\% | 49.0\% | 34.8\% | 16.0\% | 6.6\% | 3.1\% | 33.0\% | 14.2\% | 18.8\% | 9.4\% | 3.5\% |
| 2003 | 49.3\% | 5.0\% | 44.3\% | 50.7\% | 36.4\% | 17.5\% | 7.7\% | 3.8\% | 33.2\% | 14.3\% | 18.9\% | 9.8\% | 3.8\% |
| 2004 | 48.4\% | 4.7\% | 43.7\% | 51.6\% | 37.4\% | 18.3\% | 8.2\% | 4.2\% | 33.3\% | 14.3\% | 19.1\% | 10.1\% | 4.0\% |
| 2005 | 48.0\% | 4.9\% | 43.2\% | 52.0\% | 38.0\% | 19.4\% | 9.0\% | 4.7\% | 32.6\% | 13.9\% | 18.6\% | 10.4\% | 4.3\% |
| 2006 | 46.9\% | 4.8\% | 42.1\% | 53.1\% | 39.4\% | 20.9\% | 10.1\% | 5.3\% | 32.2\% | 13.7\% | 18.5\% | 10.8\% | 4.9\% |
| 2007 | 48.6\% | 5.2\% | 43.3\% | 51.4\% | 37.4\% | 18.7\% | 8.4\% | 4.2\% | 32.8\% | 14.0\% | 18.7\% | 10.2\% | 4.2\% |
| 2008 | 48.9\% | 5.3\% | 43.6\% | 51.1\% | 37.2\% | 16.2\% | 7.3\% | 3.7\% | 34.9\% | 13.9\% | 20.9\% | 8.9\% | 3.6\% |
| 2009 | 41.6\% | 4.5\% | 37.1\% | 58.4\% | 42.5\% | 20.4\% | 9.2\% | 4.6\% | 38.0\% | 15.9\% | 22.1\% | 11.2\% | 4.6\% |
| $2 \overline{0} 1 \overline{0}$ | 42.5\% | 4. $\overline{6} \%$ | - $\overline{7} . \overline{9} \%$ | 57.5\% | 41.8\% | 18.8\% | 8.5\% | 4.3\% | 38.7\% | 15.7\% | 23.0\% |  | 4.2\% |
| 2011 | 42.4\% | 4.6\% | 37.9\% | 57.6\% | 41.8\% | 19.4\% | 8.7\% | 4.4\% | 38.2\% | 15.7\% | 22.5\% | 10.6\% | 4.3\% |
| 2012 | 40.1\% | 4.3\% | 35.8\% | 59.9\% | 43.6\% | 19.1\% | 8.6\% | 4.4\% | 40.8\% | 16.4\% | 24.4\% | 10.5\% | 4.3\% |
| 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: 1999-2007: our computations using Swedish administrative data (same method and results as applied by SCB for year 2006). After 2007: based on 2007 data point and following evolution of top shares reported by Lundberg and Waldenstrom (ROIW forthcoming). Before 1999: Roine and Waldenstrom (2015).

|  | Table C2b: Top wealth shares excluding offshore wealth in Sweden (decennial averages) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
|  | Population: households |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \hline \text { Bottom } \\ 90 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Bottom } \\ 50 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Middle } \\ 40 \% \end{gathered}$ | Top 10\% | Top 5\% | Top 1\% | Top 0.1\% | Top 0.01\% | $\begin{array}{\|c\|} \hline \text { Top } 10 \% \text { t } \\ 1 \% \\ \hline \end{array}$ | $\begin{gathered} \text { Top } 10 \% \text { to } \\ 5 \% \end{gathered}$ | $\begin{gathered} \hline \text { Top 5\% to } \\ 1 \% \end{gathered}$ | $\begin{gathered} \text { Top 1\% to } \\ 0.1 \% \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Top 0.1\% } \\ & \text { to 0.01\% } \end{aligned}$ |
| 1910 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1920 | 8.3\% |  |  | 91.7\% | 79.3\% | 51.5\% | 25.4\% |  | 40.2\% | 12.4\% | 27.7\% | 26.1\% |  |
| 1930 | 13.5\% |  |  | 86.5\% | 74.0\% | 46.4\% | 20.5\% |  | 40.1\% | 12.5\% | 27.7\% | 25.9\% |  |
| 1940 | 19.2\% |  |  | 80.8\% | 64.0\% | 35.5\% | 13.5\% |  | 45.3\% | 16.8\% | 28.6\% | 21.9\% |  |
| 1950 | 23.9\% |  |  | 76.1\% | 59.8\% | 32.5\% | 12.1\% |  | 43.6\% | 16.3\% | 27.3\% | 20.4\% |  |
| 1960 | 36.8\% |  |  | 63.2\% | 46.9\% | 23.4\% | 9.0\% |  | 39.8\% | 16.3\% | 23.5\% | 14.4\% |  |
| 1970 | 44.5\% |  |  | 55.5\% | 39.6\% | 17.9\% | 6.2\% |  | 37.6\% | 15.9\% | 21.7\% | 11.7\% |  |
| 1980 | 45.2\% |  |  | 54.8\% | 38.5\% | 17.5\% | 6.8\% |  | 37.3\% | 16.3\% | 21.0\% | 10.7\% |  |
| 1990 | 42.3\% | 5.0\% | 41.7\% | 57.7\% | 41.7\% | 20.1\% | 8.2\% |  | 37.6\% | 16.0\% | 21.6\% | 11.9\% |  |
| 2000 | 48.2\% | 5.2\% | 43.0\% | 51.8\% | 37.5\% | 18.2\% | 8.1\% | 4.1\% | 33.7\% | 14.3\% | 19.4\% | 10.1\% | 4.0\% |
| 2010 | 41.7\% | 4.5\% | 37.2\% | 58.3\% |  | 19.1\% | 8.6\% |  | 39.2\% |  |  | 10.5\% |  |

Notes: 1910 denotes the average of 1910, ... 1919; ... ; 2010 the average of 2010-2013

| Table C3: Wealth composition (bottom 90\%, top 10\% and top 5\%) excluding offshore wealth in Sweden |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] | [18] | [19] |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Bottom 90\% | Housing | Fixed income claims | Equities | Business assets | Pensions | Memo: Equites \& fixed income claims | Top 10\% wealth | Housing | Fixed income claims | Equities | Business assets | Pensions | Top 5\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions |
| $\underline{1999}$ | 46.7\% | 12.0\% | 5.1\% | 7.8\% | 2.1\% | 19.7\% | 12.9\% | 53.3\% | 14.7\% | 7. $\frac{3}{5 \%}$ | 19.6\% | 5.5\% | 6.1\% | 39.2\% | 9.8\% | 5.7\% | 16.3\% | 3.9\% | $\frac{3.5}{3}$ |
| $20 \overline{0}$ | 49.3\% | 13.5\% | $5.0 \%$ | 7.5\% | 2.1\% | 21.1\% | 12.6\% | 50.7\% | 15.5\% | $5.9 \%$ | 16.1\% | 6.5\% | 6.7\% | 36.5\% | 10.2\% | 4.5\% | 13.2\% | 4.8\% | 3.8\% |
| 2001 | 49.7\% | 15.7\% | 5.1\% | 7.1\% | 2.1\% | 19.8\% | 12.1\% | 50.3\% | 17.6\% | 5.6\% | 14.0\% | 7.0\% | 6.0\% | 35.9\% | 11.7\% | 4.2\% | 11.4\% | 5.2\% | 3.4\% |
| 2002 | 51.0\% | 16.1\% | 5.2\% | 5.8\% | 2.0\% | 22.0\% | 11.0\% | 49.0\% | 19.1\% | 5.6\% | 10.6\% | 7.4\% | 6.3\% | 34.8\% | 12.9\% | 4.1\% | 8.6\% | 5.7\% | 3.5\% |
| 2003 | 49.3\% | 15.1\% | 5.2\% | 6.1\% | 2.3\% | 20.7\% | 11.3\% | 50.7\% | 17.9\% | 5.5\% | 13.6\% | 6.8\% | 6.9\% | 36.4\% | 12.0\% | 4.1\% | 11.4\% | 5.1\% | 3.8\% |
| 2004 | 48.4\% | 14.6\% | 4.5\% | 6.3\% | 2.3\% | 20.6\% | 10.9\% | 51.6\% | 16.8\% | 5.7\% | 14.9\% | 7.4\% | 6.8\% | 37.4\% | 11.2\% | 4.3\% | 12.6\% | 5.6\% | 3.7\% |
| 2005 | 48.0\% | 13.3\% | 4.3\% | 6.9\% | 2.4\% | 21.2\% | 11.2\% | 52.0\% | 16.3\% | 5.5\% | 17.7\% | 5.5\% | 7.1\% | 38.0\% | 11.0\% | 4.2\% | 15.1\% | 3.9\% | 3.8\% |
| 2006 | 46.9\% | 13.1\% | 5.3\% | 6.6\% | 2.3\% | 19.6\% | 11.8\% | 53.1\% | 16.1\% | 4.8\% | 20.2\% | 5.8\% | 6.3\% | 39.4\% | 10.8\% | 3.5\% | 17.6\% | 4.2\% | 3.4\% |
| 2007 | 48.6\% | 15.0\% | 6.1\% | 5.6\% | 2.4\% | 19.4\% | 11.7\% | 51.4\% | 18.0\% | 4.9\% | 16.2\% | 6.1\% | 6.2\% | 37.4\% | 12.2\% | 3.4\% | 14.0\% | 4.4\% | 3.4\% |
| 2008 | 48.9\% | 15.2\% | 6.1\% | 5.7\% | 2.4\% | 19.6\% | 11.8\% | 51.1\% | 17.9\% | 4.8\% | 16.1\% | 6.1\% | 6.2\% | 37.2\% | 12.2\% | 3.4\% | 13.9\% | 4.4\% | 3.3\% |
| 2009 | 41.6\% | 12.9\% | 5.2\% | 4.8\% | 2.0\% | 16.6\% | 10.0\% | 58.4\% | 20.4\% | 5.5\% | 18.4\% | 6.9\% | 7.1\% | 42.5\% | 13.9\% | 3.8\% | 15.9\% | 5.0\% | 3.8\% |
| 2010 | 42.5\% | 13.2\% | 5.3\% | 4.9\% | 2.1\% | 17.0\% | 10.2\% | 57.5\% | 20.1\% | 5.5\% | 18.1\% | 6.8\% | 7.0\% | 41.8\% | 13.7\% | 3.8\% | 15.7\% | 4.9\% | 3.8\% |
| 2011 | 42.4\% | 13.2\% | 5.3\% | 4.9\% | 2.1\% | 17.0\% | 10.2\% | 57.6\% | 20.1\% | 5.5\% | 18.2\% | 6.8\% | 7.0\% | 41.8\% | 13.7\% | 3.8\% | 15.7\% | 4.9\% | 3.8\% |
| 2012 | 40.1\% | 12.4\% | 5.0\% | 4.7\% | 2.0\% | 16.0\% | 9.7\% | 59.9\% | 21.0\% | 5.7\% | 18.9\% | 7.1\% | 7.2\% | 43.6\% | 14.3\% | 3.9\% | 16.3\% | 5.1\% | 3.9\% |
| 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: After 2007, assume same composition of wealth as in 2007 (but shares themselves vary following Lundberg-Waldenstrom).

| Table C3b: Wealth composition (top 1\% and top 0.5\%) excluding offshore wealth in Sweden |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
|  | (\% of total net household wealth) |  |  |  |  |  |  |  |  |  |  |  |
|  | Top 1\% wealth | Housing | Fixed income claims | Equities | Business assets | Pensions | Top 0.5\% wealth | Equities | Fixed income claims | Housing | Business assets | Pensions |
| 1999 | 19.8\% | 3.8\% | 3.3\% | 10.6\% | 1.1\% | 1.0\% | 15.2\% | 2.6\% | 2.7\% | 8.8\% | 0.5\% | 0.6\% |
| $20 \overline{0} 0$ | 17.5\% | 3.9\% | 2.6\% | $\overline{8} .4 . \overline{\%}$ | 1. $\overline{4} \%$ | 1.1\% | 13.2\% | 2.7\% | 2.2\% | 6.9\% | 0.8\% | 0.7\% ${ }^{-}$ |
| 2001 | 16.7\% | 4.5\% | 2.4\% | 7.2\% | 1.7\% | 0.9\% | 12.5\% | 3.1\% | 1.9\% | 6.0\% | 0.9\% | 0.6\% |
| 2002 | 16.0\% | 5.3\% | 2.2\% | 5.6\% | 1.9\% | 0.9\% | 11.9\% | 3.8\% | 1.8\% | 4.8\% | 1.0\% | 0.5\% |
| 2003 | 17.5\% | 4.7\% | 2.3\% | 7.8\% | 1.7\% | 1.0\% | 13.3\% | 3.3\% | 1.8\% | 6.7\% | 0.9\% | 0.5\% |
| 2004 | 18.3\% | 4.4\% | 2.4\% | 8.8\% | 1.8\% | 0.9\% | 14.0\% | 3.1\% | 1.9\% | 7.5\% | 1.0\% | 0.5\% |
| 2005 | 19.4\% | 4.4\% | 2.3\% | 10.6\% | 1.2\% | 0.9\% | 15.0\% | 3.0\% | 1.9\% | 9.0\% | 0.7\% | 0.5\% |
| 2006 | 20.9\% | 4.2\% | 1.8\% | 12.9\% | 1.2\% | 0.8\% | 16.5\% | 2.9\% | 1.4\% | 11.2\% | 0.6\% | 0.4\% |
| 2007 | 18.7\% | 5.0\% | 1.5\% | 10.0\% | 1.3\% | 0.8\% | 14.4\% | 3.5\% | 1.1\% | 8.7\% | 0.7\% | 0.4\% |
| 2008 | 16.2\% | 4.3\% | 1.3\% | 8.7\% | 1.2\% | 0.7\% |  |  |  |  |  |  |
| 2009 | 20.4\% | 5.4\% | 1.7\% | 11.0\% | 1.5\% | 0.9\% |  |  |  |  |  |  |
| 2010 | 18.8\% | 5.0\% | 1.5\% | 10.1\% | 1.4\% | 0.8\% |  |  |  |  |  |  |
| 2011 | 19.4\% | 5.2\% | 1.6\% | 10.4\% | 1.4\% | 0.8\% |  |  |  |  |  |  |
| 2012 | 19.1\% | 5.1\% | 1.6\% | 10.3\% | 1.4\% | 0.8\% |  |  |  |  |  |  |
| $\begin{aligned} & 2013 \\ & 2014 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |



| Table C4: Top wealth shares corrected for offshore wealth in Sweden |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth shares including offshore wealth (\% of net household wealth) |  |  |  |  |  | Distribution of offshore wealth (\% of offshore wealth) |  |  |  |  |  |  | Memo: <br> European wealth in Switzerland | European wealth in all tax havens |
|  | Hidden wealth of Swedes | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.1\% Top 0.01\% | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.5\% | Top 0.1\% | Top 0.01\% |  |  |
| Annual series |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1910 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.4\% | 0.4\% |
| 1911 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.4\% | 0.4\% |
| 1912 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.4\% | 0.4\% |
| 1913 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.4\% | 0.4\% |
| 1914 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.4\% | 0.4\% |
| 1915 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.4\% | 0.4\% |
| 1916 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.5\% | 0.5\% |
| 1917 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.6\% | 0.6\% |
| 1918 | 0.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.7\% | 0.7\% |
| - 1919 | 0.2\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.8\% | 0.8\% |
| $-1920$ | 0.2\% | $\overline{8} .3 \%$ | 91.7\% | $\overline{79.3} \%$ | $5 \overline{1.6 \%}$ | 25.5\% | 1.6\% | 98.4\% | 97.7\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.9\% | 0.9\% |
| 1921 | 0.2\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.0\% | 1.0\% |
| 1922 | 0.2\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.1\% | 1.1\% |
| 1923 | 0.2\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.2\% | 1.2\% |
| 1924 | 0.2\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.3\% | 1.3\% |
| 1925 | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.4\% | 1.4\% |
| 1926 | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.5\% | 1.5\% |
| 1927 | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.5\% | 1.5\% |
| $1928$ | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.6\% | 1.6\% |
| $\text { - } 1929$ | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% - | 1.7\% | 1.7\% |
| $-193 \overline{0}$ | 0.3\% | 10.5\% | 89.5\% | 77.4\% | $50 . \overline{2 \%}{ }^{-}$ | 22.5\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.8\% | 1.8\% |
| 1931 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1932 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1933 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| 1934 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.1\% | 2.1\% |
| 1935 | 0.4\% | 16.4\% | 83.6\% | 70.9\% | 43.0\% | 19.0\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.2\% | 2.2\% |
| 1936 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.1\% | 2.1\% |
| 1937 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.1\% | 2.1\% |
| 1938 1939 | $0.4 \%$ $0.4 \%$ |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| $-{ }^{19} 1939$ | 0.4\% |  |  |  |  | -------- | 1.6\% | $\frac{98.4 \%}{98.4}$ | $\frac{97.4 \%}{97}$ | -93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| 1941 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1942 | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.8\% | 1.8\% |
| 1943 | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.8\% | 1.8\% |
| 1944 | 0.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.7\% | 1.7\% |
| 1945 | 0.3\% | 16.8\% | 83.2\% | 66.0\% | 37.9\% | 15.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.6\% | 1.6\% |
| 1946 | 0.3\% | 18.6\% | 81.4\% | 65.9\% | 37.8\% | 15.0\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.7\% | 1.7\% |
| $1947$ | 0.3\% | 20.4\% | 79.6\% | 63.6\% | 34.9\% | 13.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.7\% | 1.7\% |
| 1948 1949 | 0.3\% | 19.2\% | 80.8\% | 63.2\% | 34.3\% | 12.7\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.7\% | 1.7\% |
| $-{ }^{1949} 9$ | 0.3\% | $-\frac{20.8 \%}{22.6 \%}$ | 79.2\% | $\frac{61.9 \%}{60.7} \%$ | 33.4\% | $\frac{12.4 \%}{12.3 \%}-----$ | 1. 1.6 | $-\frac{98.4 \%}{98.4 \%}$ | 97.4\% | 93.6\% | - $\frac{90.1 \%}{90}$ | 76.9\% | 51.6\% | - $\frac{1.8 \%}{1.8 \%}$ | 1.8\% |
| 1950 | 0.4\% | 22.6\% | 77.4\% | 60.7\% | 33.0\% | 12.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.8\% | 1.8\% |


|  | [1] | [2] | [3] | [4] | [5] | [6] [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth shares including offshore wealth (\% of net household wealth) |  |  |  |  |  | Distribution of offshore wealth (\% of offshore wealth) |  |  |  |  |  |  | Memo: <br> European wealth in Switzerland | European wealth in all tax havens |
|  | Hidden wealth of Swedes | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.1\% Top 0.01\% | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.5\% | Top 0.1\% | Top 0.01\% |  |  |
| 1951 | 0.4\% | 25.0\% | 75.0\% | 59.1\% | 32.4\% | 12.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1952 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1953 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.9\% | 1.9\% |
| 1954 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| 1955 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| 1956 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.1\% | 2.1\% |
| 1957 | 0.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.2\% | 2.2\% |
| 1958 | 0.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.3\% | 2.3\% |
| 1959 | 0.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.5\% | 2.5\% |
| 1960 | 0.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% ${ }^{-}$ | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.6\% | 2.6\% |
| 1961 | 0.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.7\% | 2.7\% |
| 1962 | 0.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.8\% | 2.8\% |
| 1963 | 0.6\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.9\% | 2.9\% |
| 1964 | 0.6\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.1\% | 3.1\% |
| 1965 | 0.6\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.2\% | 3.2\% |
| 1966 | 0.6\% | 36.5\% | 63.5\% | 47.2\% | 23.9\% | 9.4\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.3\% | 3.3\% |
| 1967 | 0.7\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.5\% | 3.5\% |
| 1968 | 0.7\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.6\% | 3.6\% |
| 1969 | 0.7\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.7\% | 3.7\% |
| $197 \overline{0}$ | 0.7\% | 41.8\% | $5 \overline{8} .2 \%$ | $\overline{4} 2.5 \%$ | 20.6\% ${ }^{-}$ | 8.0\% | 1.6\% | 98.4\% | 97.4\% ${ }^{-}$ | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.9\% | 3.9\% |
| 1971 | 0.8\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.0\% | 4.0\% |
| 1972 | 0.8\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.1\% | 4.1\% |
| 1973 | 0.8\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.3\% | 4.3\% |
| 1974 | 0.8\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.4\% | 4.4\% |
| 1975 | 0.9\% | 45.6\% | 54.4\% | 38.5\% | 17.7\% | 6.6\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.5\% | 4.5\% |
| 1976 | 0.9\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.6\% | 4.7\% |
| 1977 | 0.9\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.7\% | 4.9\% |
| 1978 | 1.0\% | 45.1\% | 54.9\% | 39.2\% | 17.4\% | 5.8\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.8\% | 5.1\% |
| 1979 | 1.0\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% - | 4.9\% | 5.2\% |
| 1980 | 1.0\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% - | $5.0 \%$ | $5.4 \%$ |
| 1981 | 1.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.1\% | 5.6\% |
| 1982 | 1.1\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.2\% | 5.7\% |
| 1983 | 1.1\% | 45.0\% | 55.0\% | 39.1\% | 18.6\% | 7.5\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.3\% | 5.9\% |
| 1984 | 1.2\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.4\% | 6.1\% |
| 1985 | 1.2\% | 46.1\% | 53.9\% | 37.7\% | 17.4\% | 7.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.2\% |
| 1986 | 1.2\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.4\% |
| 1987 | 1.3\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.6\% |
| 1988 | 1.3\% | 42.9\% | 57.2\% | 40.9\% | 19.4\% | 8.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.7\% |
| 1989 | 1.3\% |  |  |  |  |  | 1.6\% | 98.4\% | - $97.4 \%$ | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.9\% |
| 1990 | 1.4\% | $\overline{40} . \overline{8} \%$ | 59.3\% | $\overline{43.4} \overline{\%}$ | 21.7\% | 9.5\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 7.1\% |
| 1991 | 1.4\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 7.2\% |
| 1992 | 1.4\% | 41.7\% | 58.3\% | 41.7\% | 20.6\% | 8.9\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 7.4\% |
| 1993 | 1.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 7.6\% |
| 1994 | 1.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 7.8\% |
| 1995 | 1.5\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 7.9\% |
| 1996 | 1.6\% |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 8.1\% |


|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth shares including offshore wealth (\% of net household wealth) |  |  |  |  |  |  | Distribution of offshore wealth (\% of offshore wealth) |  |  |  |  |  |  | Memo: <br> European wealth in Switzerland | European wealth in all tax havens |
|  | Hidden wealth of Swedes | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.1\% | Top 0.01\% | Bottom 90\% | Top 10\% | Top 5\% | Top 1\% | Top 0.5\% | Top 0.1\% | Top 0.01\% |  |  |
| 1997 | 1.6\% | 38.3\% | 61.7\% | 45.0\% | 21.5\% | 8.4\% |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.6\% | 8.3\% |
| 1998 | 1.6\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.6\% | 8.4\% |
| 1999 | 1.7\% | 45.9\% | 54.1\% | 40.2\% | 21.0\% | 10.1\% | 5.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.6\% | 8.6\% |
| 2000 | 1.7\% | 48.5\% | $5 \overline{1.5 \%}{ }^{-}$ | 37.5\% | 18.8\% | 8.5\% | 4.3\% | 1.6\% | 98.4\% | 97.4\% ${ }^{-}$ | 93.6\% | 90.1\% | 76.9\% | 51.6\% | $5.7 \%$ | 8.8\% |
| 2001 | 1.7\% | 48.9\% | 51.1\% | 37.0\% | 18.0\% | 8.1\% | 4.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.7\% | 8.9\% |
| 2002 | 1.8\% | 50.2\% | 49.9\% | 35.9\% | 17.4\% | 7.8\% | 3.9\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.8\% | 9.1\% |
| 2003 | 1.8\% | 48.5\% | 51.6\% | 37.5\% | 18.8\% | 8.9\% | 4.7\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.8\% | 9.3\% |
| 2004 | 1.8\% | 47.5\% | 52.5\% | 38.5\% | 19.7\% | 9.5\% | 5.1\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.8\% | 9.4\% |
| 2005 | 1.9\% | 47.2\% | 52.8\% | 39.1\% | 20.8\% | 10.3\% | 5.6\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.9\% | 9.6\% |
| 2006 | 1.9\% | 46.0\% | 54.0\% | 40.5\% | 22.3\% | 11.4\% | 6.1\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.9\% | 9.8\% |
| 2007 | 1.9\% | 47.7\% | 52.4\% | 38.6\% | 20.1\% | 9.7\% | 5.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.9\% | 10.0\% |
| 2008 | 2.0\% | 48.0\% | 52.0\% |  | 17.7\% | 8.7\% | 4.6\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.9\% | 10.1\% |
| 2009 | 2.0\% | 40.8\% | 59.2\% |  | 21.9\% | 10.6\% | 5.6\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 6.0\% | 10.3\% |
| $2 \overline{0} 10$ | 2.0\% | 41.7\% | 58.4\% ${ }^{-}$ |  | 20.3\% | 9.8\% | 5.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 6.0\% | 10.5\% |
| 2011 | 2.1\% | 41.6\% | 58.4\% |  | 20.9\% | 10.1\% | 5.4\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 6.0\% | 10.7\% |
| 2012 | 2.1\% | 39.3\% | 60.8\% |  | 20.7\% | 10.1\% | 5.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 6.0\% | 10.9\% |
| 2013 | 2.1\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 6.0\% | 11.0\% |
| 2014 | 2.2\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11.2\% |
| 2015 | 2.2\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 11.4\% |
| Decennial averages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1910 | 0.1\% |  |  |  |  |  |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 0.4\% | 0.4\% |
| 1920 | 0.3\% | 8.3\% | 91.7\% | 79.3\% | 51.6\% | 25.5\% |  |  | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.4\% | 1.4\% |
| 1930 | 0.4\% | 13.4\% | 86.6\% | 74.1\% | 46.6\% | 20.8\% |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.2\% | 2.2\% |
| 1940 | 0.3\% | 19.1\% | 80.9\% | 64.1\% | 35.7\% | 13.8\% |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 1.6\% | 1.6\% |
| 1950 | 0.4\% | 23.8\% | 76.2\% | 59.9\% | 32.7\% | 12.3\% |  |  | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 2.0\% | 2.0\% |
| 1960 | 0.6\% | 36.5\% | 63.5\% | 47.2\% | 23.9\% | 9.4\% |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 3.2\% | 3.2\% |
| 1970 | 0.9\% | 44.2\% | 55.8\% | 40.1\% | 18.5\% | 6.8\% |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 4.5\% | 4.5\% |
| 1980 | 1.2\% | 44.6\% | 55.4\% | 39.2\% | 18.5\% | 7.7\% |  | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 6.2\% |
| 1990 | 1.5\% | 41.7\% | 58.3\% | 42.6\% | 21.2\% | 9.2\% | 5.2\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.5\% | 7.9\% |
| 2000 | 1.8\% | 47.3\% | 52.7\% | 38.1\% | 19.5\% | 9.3\% | 4.9\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.9\% | 9.6\% |
| 2010 | 2.1\% | 40.9\% | 59.2\% |  | 20.6\% | 10.0\% | 5.3\% | 1.6\% | 98.4\% | 97.4\% | 93.6\% | 90.1\% | 76.9\% | 51.6\% | 5.7\% | 11.4\% |

Notes: 1910 denotes the average of $1910, \ldots 1919 ; \ldots ; 2010$ the average of 2010-2013. The source for cols. 15 and 16 is Zucman (2015), The Hidden Wealth of Nations, Figure 1 (decennial averages). Cols. 15 and 16 are expressed as a fraction of Europe's financial wealth. Starting from our estimate of Sweden's offshore wealth in 2006 (see Appendix I), we assume that Sweden's offshore wealth follows the evolution of Europe's offshore wealth before and after 2006


Table D0: National income, household wealth, population, and price in Denmark

|  | [1] [2] |  | [3] [4] |  | [5] [6] |  | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (current billi | ions DKK) | (2014 b (national in | ons DKK) ome deflator) |  | (curren | t DKK) |  | (2014 | DKK) (Natio | al income de | flator) |  |  | Adult |  |  |
|  | $\text { \|income } \quad Y_{t}$ | Household wealth Wt | National income $Y_{t}$ | Household wealth $W_{t}$ | Per capita national income | Per capita private wealth | Per adult national income $y_{t}$ | Per adult household wealth $\mathbf{w}_{\mathrm{t}}$ | Per capita national income | Per capita private wealth | Per adult national income $y_{t}$ | Per adult household wealth $w_{t}$ | wealth)/ <br> (national <br> income) $\beta_{t}=W_{t} / Y_{t}$ | $\mathrm{N}_{\mathrm{t}}$ | $\mathrm{Nt}^{20+}$ | $\begin{aligned} & \text { income price } \\ & \text { index } \\ & (2014=1) \end{aligned}$ | market exchange rate |
| 1980 | 342 | 644 | 901 | 1,696 | 66,815 | 125,773 | 93,766 | 176,506 | 175,853 | 331,028 | 246,787 | 464,555 | 188\% | 5,122 | 3,650 | 0.380 | 5.64 |
| 1981 | 370 | 639 | 873 | 1,507 | 72,226 | 124,613 | 100,873 | 174,038 | 170,427 | 294,040 | 238,022 | 410,663 | 173\% | 5,124 | 3,669 | 0.424 | 7.12 |
| 1982 | 421 | 713 | 895 | 1,517 | 82,193 | 139,242 | 114,124 | 193,337 | 174,922 | 296,333 | 242,877 | 411,455 | 169\% | 5,119 | 3,687 | 0.470 | 8.33 |
| 1983 | 465 | 947 | 925 | 1,887 | 90,802 | 185,157 | 125,289 | 255,479 | 180,831 | 368,736 | 249,509 | 508,780 | 204\% | 5,116 | 3,708 | 0.502 | 9.14 |
| 1984 | 511 | 1,061 | 962 | 1,997 | 99,996 | 207,492 | 136,910 | 284,088 | 188,269 | 390,659 | 257,769 | 534,871 | 208\% | 5,112 | 3,734 | 0.531 | 10.36 |
| 1985 | 555 | 1,314 | 1,005 | 2,381 | 108,492 | 257,075 | 147,392 | 349,248 | 196,559 | 465,751 | 267,035 | 632,745 | 237\% | 5,111 | 3,762 | 0.552 | 10.60 |
| 1986 | 599 | 1,252 | 1,073 | 2,244 | 117,002 | 244,711 | 157,706 | 329,845 | 209,736 | 438,665 | 282,702 | 591,275 | 209\% | 5,116 | 3,796 | 0.558 | 8.09 |
| 1987 | 629 | 1,209 | 1,076 | 2,070 | 122,662 | 235,962 | 164,028 | 315,537 | 209,967 | 403,909 | 280,776 | 540,122 | 192\% | 5,125 | 3,832 | 0.584 | 6.84 |
| 1988 | 647 | 1,346 | 1,063 | 2,210 | 126,155 | 262,348 | 167,697 | 348,738 | 207,220 | 430,927 | 275,457 | 572,830 | 208\% | 5,129 | 3,859 | 0.609 | 6.73 |
| 1989 | 677 | 1,386 | 1,065 | 2,178 | 132,048 | 270,149 | 174,846 | 357,706 | 207,555 | 424,624 | 274,825 | 562,248 | 205\% | 5,130 | 3,874 | 0.636 | 7.31 |
| 1990 | 699 | 1,387 | 1,076 | 2,134 | 136,210 | 270,103 | 179,901 | 356,742 | 209,545 | 415,526 | 276,759 | 548,870 | 198\% | 5,135 | 3,888 | 0.650 | $\overline{6} . \overline{19}$ |
| 1991 | 723 | 1,514 | 1,083 | 2,267 | 140,520 | 294,249 | 185,216 | 387,844 | 210,396 | 440,570 | 277,319 | 580,706 | 209\% | 5,146 | 3,905 | 0.668 | 6.40 |
| 1992 | 752 | 1,499 | 1,118 | 2,228 | 145,712 | 290,305 | 191,525 | 381,578 | 216,629 | 431,593 | 284,738 | 567,288 | 199\% | 5,162 | 3,927 | 0.673 | 6.04 |
| 1993 | 757 | 1,750 | 1,119 | 2,585 | 146,217 | 337,732 | 191,764 | 442,935 | 216,007 | 498,933 | 283,293 | 654,350 | 231\% | 5,181 | 3,950 | 0.677 | 6.48 |
| 1994 | 815 | 1,839 | 1,177 | 2,656 | 156,785 | 353,794 | 205,336 | 463,352 | 226,468 | 511,037 | 296,597 | 669,288 | 226\% | 5,197 | 3,968 | 0.692 | 6.36 |
| 1995 | 855 | 2,078 | 1,218 | 2,961 | 163,953 | 398,489 | 214,513 | 521,376 | 233,574 | 567,704 | 305,604 | 742,775 | 243\% | 5,216 | 3,986 | 0.702 | 5.60 |
| 1996 | 898 | 2,282 | 1,261 | 3,205 | 170,996 | 434,488 | 223,625 | 568,211 | 240,223 | 610,387 | 314,157 | 798,247 | 254\% | 5,251 | 4,015 | 0.712 | 5.80 |
| 1997 | 942 | 2,593 | 1,299 | 3,575 | 178,564 | 491,606 | 233,580 | 643,069 | 246,192 | 677,792 | 322,043 | 886,618 | 275\% | 5,275 | 4,033 | 0.725 | 6.60 |
| 1998 | 977 | 2,778 | 1,326 | 3,770 | 184,527 | 524,581 | 241,531 | 686,635 | 250,487 | 712,096 | 327,867 | 932,076 | 284\% | 5,295 | 4,045 | 0.737 | 6.70 |
| 1999 | 1,025 | 3,141 | 1,366 | 4,185 | -192,964 | 591,154 | 252,646 | 773,992 | 257,095 | 787,622 | 336,613 | 1,031,226 | 306\% | 5,314 | 4,058 | 0.751 | 6.98 |
| 2000 | 1,085 | 3, 319 | 1,405 | 4,300 | 203,510 | 622,681 | 266,675 | 815,949 | 2 $\overline{6} 3, \overline{6} 7 \overline{0}$ | 806,754 | 345,508 | 1,057,154 | 306\% | 5,330 | 4,068 | 0.772 | $\overline{8} . \overline{8}$ |
| 2001 | 1,124 | 3,300 | 1,419 | 4,168 | 210,050 | 616,965 | 275,681 | 809,739 | 265,260 | 779,132 | 348,143 | 1,022,576 | 294\% | 5,349 | 4,076 | 0.792 | 8.32 |
| 2002 | 1,153 | 3,317 | 1,430 | 4,113 | 214,838 | 617,918 | 282,637 | 812,921 | 266,400 | 766,220 | 350,471 | 1,008,024 | 288\% | 5,368 | 4,081 | 0.806 | 7.89 |
| 2003 | 1,177 | 3,597 | 1,443 | 4,410 | 218,646 | 668,065 | 288,240 | 880,705 | 268,097 | 819,159 | 353,430 | 1,079,892 | 306\% | 5,384 | 4,084 | 0.816 | 6.59 |
| 2004 | 1,251 | 4,053 | 1,506 | 4,880 | 231,731 | 750,869 | 306,196 | 992,154 | 278,999 | 904,028 | 368,652 | 1,194,530 | 324\% | 5,398 | 4,085 | 0.831 | 5.99 |
| 2005 | 1,330 | 5,112 | 1,569 | 6,030 | 245,749 | 944,650 | 325,251 | 1,250,254 | 289,880 | 1,114,288 | 383,659 | 1,474,772 | 384\% | 5,411 | 4,089 | 0.848 | 6.00 |
| 2006 | 1,423 | 5,907 | 1,640 | 6,808 | 262,123 | 1,088,373 | 347,214 | 1,441,682 | 302,088 | 1,254,312 | 400,152 | 1,661,489 | 415\% | 5,427 | 4,097 | 0.868 | 5.95 |
| 2007 | 1,449 | 6,182 | 1,627 | 6,941 | 266,050 | 1,134,949 | 352,593 | 1,504,135 | 298,704 | 1,274,249 | 395,869 | 1,688,748 | 427\% | 5,447 | 4,110 | 0.891 | 5.44 |
| 2008 | 1,490 | 5,599 | 1,626 | 6,111 | 272,161 | 1,022,520 | 360,706 | 1,355,187 | 297,022 | 1,115,925 | 393,656 | 1,478,980 | 376\% | 5,476 | 4,132 | 0.916 | 5.10 |
| 2009 | 1,420 | 5,365 | 1,537 | 5,806 | 257,721 | 973,382 | 341,410 | 1,289,467 | 278,928 | 1,053,482 | 369,504 | 1,395,577 | 378\% | 5,511 | 4,160 | 0.924 | 5.36 |
| 2010 | 1,512 | 5,711 | 1,597 | 6,033 | 273,096 | 1,031,770 | 361,391 | 1,365,353 | $2 \overline{88,524}$ | 1,090,058 | 381,807 | 1,442,485 | 378\% | 5,535 | 4,182 | 0.947 | 5.62 |
| 2011 | 1,549 | 5,615 | 1,606 | 5,822 | 278,549 | 1,009,827 | 367,993 | 1,334,086 | 288,798 | 1,046,980 | 381,532 | 1,383,170 | 363\% | 5,561 | 4,209 | 0.965 | 5.37 |
| 2012 | 1,576 | 5,978 | 1,596 | 6,053 | 282,394 | 1,071,252 | 372,121 | 1,411,625 | 285,917 | 1,084,615 | 376,763 | 1,429,234 | 379\% | 5,581 | 4,235 | 0.988 | 5.79 |
| 2013 | 1,616 | 6,178 | 1,625 | 6,215 | 288,418 | 1,102,784 | 378,714 | 1,448,035 | 290,108 | 1,109,245 | 380,933 | 1,456,520 | 382\% | 5,603 | 4,267 | 0.994 | 5.62 |
| $\begin{aligned} & 2014 \\ & 2015 \end{aligned}$ | 1,634 | 6,682 | 1,634 | 6,682 | 290,395 | 1,187,515 | 379,867 | 1,553,396 | 290,395 | 1,187,515 | 379,867 | 1,553,396 | 409\% | 5,627 | 4,302 | 1.000 | $5.61$ |

Notes: Wealth as of the end of the year (December 31st).

| Table D.1: National Income and Wealth in Denmark |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
|  | Billion current DKK |  |  |  |  |  |  |  |  |  |  |  |  |
|  | National income | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 1980 | 342 | 689 | 644 | 24 | 130 | 224 | 165 | 102 | 350 | 4 | 41 | 417 | 376 |
| 1981 | 370 | 688 | 639 | 33 | 148 | 166 | 170 | 122 | 375 | 5 | 44 | 451 | 406 |
| 1982 | 421 | 770 | 713 | 35 | 171 | 166 | 191 | 150 | 397 | 6 | 50 | 512 | 462 |
| 1983 | 465 | 1,012 | 947 | 75 | 218 | 255 | 205 | 194 | 439 | 9 | 56 | 566 | 510 |
| 1984 | 511 | 1,133 | 1,061 | 64 | 260 | 290 | 229 | 219 | 501 | 11 | 61 | 622 | 561 |
| 1985 | 555 | 1,393 | 1,314 | 98 | 309 | 393 | 248 | 266 | 597 | 13 | 66 | 675 | 609 |
| 1986 | 599 | 1,336 | 1,252 | 92 | 334 | 270 | 266 | 290 | 709 | 13 | 72 | 729 | 657 |
| 1987 | 629 | 1,297 | 1,209 | 90 | 362 | 161 | 277 | 320 | 773 | 13 | 75 | 765 | 690 |
| 1988 | 647 | 1,438 | 1,346 | 150 | 384 | 170 | 284 | 359 | 802 | 15 | 77 | 788 | 710 |
| 1989 | 677 | 1,484 | 1,386 | 209 | 379 | 114 | 295 | 389 | 824 | 17 | 81 | 825 | 744 |
| 1990 | 699 | 1,489 | 1,387 | 191 | 419 | $4 \overline{3}$ | $30 \overline{3}$ | $\overline{4} \overline{3}$ | $84 \overline{6}$ | 19 | $8 \overline{4}$ | $85 \overline{1}$ | $\overline{7} \overline{6}$ |
| 1991 | 723 | 1,622 | 1,514 | 229 | 429 | 66 | 312 | 478 | 842 | 21 | 86 | 880 | 794 |
| 1992 | 752 | 1,611 | 1,499 | 179 | 462 | 22 | 323 | 512 | 838 | 22 | 90 | 916 | 826 |
| 1993 | 757 | 1,866 | 1,750 | 244 | 525 | 67 | 321 | 593 | 857 | 25 | 91 | 922 | 832 |
| 1994 | 815 | 1,964 | 1,839 | 250 | 526 | 99 | 343 | 621 | 878 | 28 | 97 | 992 | 894 |
| 1995 | 855 | 2,208 | 2,078 | 247 | 580 | 178 | 360 | 713 | 925 | 27 | 102 | 1,041 | 939 |
| 1996 | 898 | 2,424 | 2,282 | 309 | 586 | 234 | 367 | 786 | 983 | 35 | 107 | 1,093 | 986 |
| 1997 | 942 | 2,758 | 2,593 | 411 | 606 | 294 | 378 | 903 | 1,065 | 39 | 126 | 1,134 | 1,008 |
| 1998 | 977 | 2,957 | 2,778 | 480 | 611 | 357 | 386 | 943 | 1,148 | 48 | 132 | 1,153 | 1,021 |
| 1999 | 1,025 | 3,372 | 3,141 | 633 | 607 | 457 | 402 | 1,042 | 1,176 | 51 | 180 | 1,195 | 1,015 |
| 2000 | 1,085 | 3,6̄3 | $\overline{3}, \overline{3} 19$ | $\overline{6} 3$ | $6 \overline{3}$ | 531 | 412 | 1,112 | 1,2 $\overline{40}$ | 48 | $2 \overline{6} \bar{\square}$ | 1,254 | $\overline{9} 8 \overline{7}$ |
| 2001 | 1,124 | 3,683 | 3,300 | 427 | 724 | 577 | 439 | 1,134 | 1,343 | 51 | 331 | 1,314 | 983 |
| 2002 | 1,153 | 3,739 | 3,317 | 376 | 761 | 570 | 443 | 1,168 | 1,443 | 50 | 371 | 1,378 | 1,006 |
| 2003 | 1,177 | 4,054 | 3,597 | 401 | 834 | 623 | 471 | 1,268 | 1,533 | 55 | 402 | 1,421 | 1,018 |
| 2004 | 1,251 | 4,578 | 4,053 | 489 | 895 | 762 | 486 | 1,421 | 1,679 | 63 | 462 | 1,474 | 1,011 |
| 2005 | 1,330 | 5,738 | 5,112 | 912 | 997 | 1,014 | 548 | 1,639 | 1,888 | 76 | 551 | 1,518 | 967 |
| 2006 | 1,423 | 6,689 | 5,907 | 1,115 | 1,049 | 1,471 | 559 | 1,712 | 2,098 | 94 | 688 | 1,596 | 907 |
| 2007 | 1,449 | 7,127 | 6,182 | 1,087 | 1,121 | 1,541 | 690 | 1,743 | 2,300 | 100 | 844 | 1,699 | 855 |
| 2008 | 1,490 | 6,629 | 5,599 | 608 | 1,082 | 1,452 | 648 | 1,809 | 2,446 | 89 | 941 | 1,829 | 888 |
| 2009 | 1,420 | 6,412 | 5,365 | 868 | 1,116 | 884 | 558 | 1,938 | 2,544 | 86 | 961 | 1,966 | 1,005 |


|  | [1] [2] |  | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Billion current DKK |  |  |  |  |  |  |  |  |  |  |  |  |
|  | National income | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 2010 | 1,512 | 6,760 | 5,711 | 985 | 1,173 | 844 | 565 | 2,144 | 2,589 | 104 | 945 | 2,054 | 1,109 |
| 2011 | 1,549 | 6,632 | 5,615 | 818 | 1,178 | 694 | 557 | 2,369 | 2,628 | 108 | 909 | 2,138 | 1,229 |
| 2012 | 1,576 | 6,927 | 5,978 | 951 | 1,261 | 612 | 552 | 2,602 | 2,641 | 113 | 836 | 2,163 | 1,327 |
| 2013 | 1,616 | 7,129 | 6,178 | 1,317 | 988 | 697 | 557 | 2,619 | 2,624 | 125 | 825 | 2,145 | 1,320 |
| 2014 | 1,634 | 7,670 | 6,682 | 1,471 | 976 | 762 | 562 | 2,911 | 2,632 | 131 | 857 | 2,179 | 1,322 |
| $\begin{aligned} & 2015 \\ & 2016 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: Wealth estimates from official national accounts and tax-based balance sheets. Does not include offshore wealth. Wealth is at the end of the year, except non-profits and government wealth which are mid-year estimates.

Table D.1b: The composition of national wealth in Denmark

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of national income |  |  |  |  |  |  |  |  |  |  |  |
|  | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 1980 | 201\% | 188\% | 7\% | 38\% | 65\% | 48\% | 30\% | 102\% | 1\% | 12\% | 122\% | 110\% |
| 1981 | 186\% | 173\% | 9\% | 40\% | 45\% | 46\% | 33\% | 101\% | 1\% | 12\% | 122\% | 110\% |
| 1982 | 183\% | 169\% | 8\% | 41\% | 39\% | 45\% | 36\% | 94\% | 2\% | 12\% | 122\% | 110\% |
| 1983 | 218\% | 204\% | 16\% | 47\% | 55\% | 44\% | 42\% | 95\% | 2\% | 12\% | 122\% | 110\% |
| 1984 | 222\% | 208\% | 12\% | 51\% | 57\% | 45\% | 43\% | 98\% | 2\% | 12\% | 122\% | 110\% |
| 1985 | 251\% | 237\% | 18\% | 56\% | 71\% | 45\% | 48\% | 108\% | 2\% | 12\% | 122\% | 110\% |
| 1986 | 223\% | 209\% | 15\% | 56\% | 45\% | 44\% | 48\% | 118\% | 2\% | 12\% | 122\% | 110\% |
| 1987 | 206\% | 192\% | 14\% | 58\% | 26\% | 44\% | 51\% | 123\% | 2\% | 12\% | 122\% | 110\% |
| 1988 | 222\% | 208\% | 23\% | 59\% | 26\% | 44\% | 55\% | 124\% | 2\% | 12\% | 122\% | 110\% |
| 1989 | 219\% | 205\% | 31\% | 56\% | 17\% | 43\% | 57\% | 122\% | 2\% | 12\% | 122\% | 110\% |
| 1990 | 213\% | 198\% | 27\% | 60\% | 6\% | 43\% | 62\% | 121\% | 3\% | 12\% | 122\% | 110\% |
| 1991 | 224\% | 209\% | 32\% | 59\% | 9\% | 43\% | 66\% | 116\% | 3\% | 12\% | 122\% | 110\% |
| 1992 | 214\% | 199\% | 24\% | 61\% | 3\% | 43\% | 68\% | 111\% | 3\% | 12\% | 122\% | 110\% |
| 1993 | 246\% | 231\% | 32\% | 69\% | 9\% | 42\% | 78\% | 113\% | 3\% | 12\% | 122\% | 110\% |
| 1994 | 241\% | 226\% | 31\% | 65\% | 12\% | 42\% | 76\% | 108\% | 3\% | 12\% | 122\% | 110\% |
| 1995 | 258\% | 243\% | 29\% | 68\% | 21\% | 42\% | 83\% | 108\% | 3\% | 12\% | 122\% | 110\% |
| 1996 | 270\% | 254\% | 34\% | 65\% | 26\% | 41\% | 87\% | 109\% | 4\% | 12\% | 122\% | 110\% |
| 1997 | 293\% | 275\% | 44\% | 64\% | 31\% | 40\% | 96\% | 113\% | 4\% | 13\% | 120\% | 107\% |
| 1998 | 303\% | 284\% | 49\% | 63\% | 37\% | 40\% | 97\% | 118\% | 5\% | 14\% | 118\% | 104\% |
| 1999 | 329\% | 306\% | 62\% | 59\% | 45\% | 39\% | 102\% | 115\% | 5\% | 18\% | 117\% | 99\% |
| 2000 | 335\% | 306\% | 58\% | 58\% | 49\% | 38\% | 102\% | 114\% | 4\% | 25\% | 116\% | 91\% |
| 2001 | 328\% | 294\% | 38\% | 64\% | 51\% | 39\% | 101\% | 120\% | 5\% | 29\% | 117\% | 87\% |
| 2002 | 324\% | 288\% | 33\% | 66\% | 49\% | 38\% | 101\% | 125\% | 4\% | 32\% | 119\% | 87\% |
| 2003 | 344\% | 306\% | 34\% | 71\% | 53\% | 40\% | 108\% | 130\% | 5\% | 34\% | 121\% | 87\% |
| 2004 | 366\% | 324\% | 39\% | 72\% | 61\% | 39\% | 114\% | 134\% | 5\% | 37\% | 118\% | 81\% |
| 2005 | 431\% | 384\% | 69\% | 75\% | 76\% | 41\% | 123\% | 142\% | 6\% | 41\% | 114\% | 73\% |


|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of national income |  |  |  |  |  |  |  |  |  |  |  |
|  | National wealth | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions | Memo: debt | Nonprofits wealth | Government wealth | Government assets | Government debt |
| 2006 | 470\% | 415\% | 78\% | 74\% | 103\% | 39\% | 120\% | 147\% | 7\% | 48\% | 112\% | 64\% |
| 2007 | 492\% | 427\% | 75\% | 77\% | 106\% | 48\% | 120\% | 159\% | 7\% | 58\% | 117\% | 59\% |
| 2008 | 445\% | 376\% | 41\% | 73\% | 97\% | 43\% | 121\% | 164\% | 6\% | 63\% | 123\% | 60\% |
| 2009 | 451\% | 378\% | 61\% | 79\% | 62\% | 39\% | 136\% | 179\% | 6\% | 68\% | 138\% | 71\% |
| 2010 | 447\% | 378\% | 65\% | 78\% | 56\% | 37\% | 142\% | 171\% | 7\% | 63\% | 136\% | 73\% |
| 2011 | 428\% | 363\% | 53\% | 76\% | 45\% | 36\% | 153\% | 170\% | 7\% | 59\% | 138\% | 79\% |
| 2012 | 440\% | 379\% | 60\% | 80\% | 39\% | 35\% | 165\% | 168\% | 7\% | 53\% | 137\% | 84\% |
| 2013 | 441\% | 382\% | 82\% | 61\% | 43\% | 34\% | 162\% | 162\% | 8\% | 51\% | 133\% | 82\% |
| 2014 | 469\% | 409\% | 90\% | 60\% | 47\% | 34\% | 178\% | 161\% | 8\% | 52\% | 133\% | 81\% |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |

Notes: wealth is at the end of the year, except non-profits and government wealth which are mid-year estimates.

Table D.1c: The composition of household wealth in Denmark

|  | [1] | [2] | [3] | [4] | [5] | [6] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of total net household wealth |  |  |  |  |  |
|  | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions |
| 1980 | 100\% | 3.7\% | 20.1\% | 34.8\% | 25.5\% | 15.8\% |
| 1981 | 100\% | 5.1\% | 23.2\% | 25.9\% | 26.7\% | 19.1\% |
| 1982 | 100\% | 4.9\% | 24.0\% | 23.2\% | 26.8\% | 21.0\% |
| 1983 | 100\% | 7.9\% | 23.0\% | 26.9\% | 21.6\% | 20.5\% |
| 1984 | 100\% | 6.0\% | 24.5\% | 27.3\% | 21.6\% | 20.6\% |
| 1985 | 100\% | 7.5\% | 23.5\% | 29.9\% | 18.9\% | 20.2\% |
| 1986 | 100\% | 7.4\% | 26.7\% | 21.6\% | 21.3\% | 23.1\% |
| 1987 | 100\% | 7.4\% | 29.9\% | 13.3\% | 22.9\% | 26.4\% |
| 1988 | 100\% | 11.1\% | 28.5\% | 12.6\% | 21.1\% | 26.7\% |
| 1989 | 100\% | 15.1\% | 27.4\% | 8.2\% | 21.3\% | 28.1\% |
| 19990 | 100\% | 13.8\% | 30.2\% | 3.1\% | 21.8\% | 31.1\% |
| 1991 | 100\% | 15.1\% | 28.3\% | 4.4\% | 20.6\% | 31.6\% |
| 1992 | 100\% | 11.9\% | 30.9\% | 1.5\% | 21.6\% | 34.2\% |
| 1993 | 100\% | 14.0\% | 30.0\% | 3.8\% | 18.3\% | 33.9\% |
| 1994 | 100\% | 13.6\% | 28.6\% | 5.4\% | 18.7\% | 33.8\% |
| 1995 | 100\% | 11.9\% | 27.9\% | 8.5\% | 17.3\% | 34.3\% |
| 1996 | 100\% | 13.6\% | 25.7\% | 10.2\% | 16.1\% | 34.4\% |
| 1997 | 100\% | 15.8\% | 23.4\% | 11.3\% | 14.6\% | 34.8\% |
| 1998 | 100\% | 17.3\% | 22.0\% | 12.9\% | 13.9\% | 34.0\% |
| 1999 | 100\% | 20.2\% | 19.3\% | 14.6\% | 12.8\% | 33.2\% |
| 2000 | 100\% | 19.1\% | 19.0\% | 16.0\% | 12.4\% | 33.5\% |


|  | [1] | [2] | [3] | [4] | [5] | [6] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% of total net household wealth |  |  |  |  |  |
|  | Household wealth | Equities | Currency, deposits and bonds | Housing (net of debt) | Business assets | Pensions |
| 2001 | 100\% | 12.9\% | 21.9\% | 17.5\% | 13.3\% | 34.4\% |
| 2002 | 100\% | 11.3\% | 22.9\% | 17.2\% | 13.4\% | 35.2\% |
| 2003 | 100\% | 11.1\% | 23.2\% | 17.3\% | 13.1\% | 35.2\% |
| 2004 | 100\% | 12.1\% | 22.1\% | 18.8\% | 12.0\% | 35.1\% |
| 2005 | 100\% | 17.8\% | 19.5\% | 19.8\% | 10.7\% | 32.1\% |
| 2006 | 100\% | 18.9\% | 17.8\% | 24.9\% | 9.5\% | 29.0\% |
| 2007 | 100\% | 17.6\% | 18.1\% | 24.9\% | 11.2\% | 28.2\% |
| 2008 | 100\% | 10.9\% | 19.3\% | 25.9\% | 11.6\% | 32.3\% |
| 2009 | 100\% | 16.2\% | 20.8\% | 16.5\% | 10.4\% | 36.1\% |
| 2010 | 100\% | 17.2\% | 20.5\% | 14.8\% | 9.9\% | 37.5\% |
| 2011 | 100\% | 14.6\% | 21.0\% | 12.4\% | 9.9\% | 42.2\% |
| 2012 | 100\% | 15.9\% | 21.1\% | 10.2\% | 9.2\% | 43.5\% |
| 2013 | 100\% | 21.3\% | 16.0\% | 11.3\% | 9.0\% | 42.4\% |
| $\begin{aligned} & 2014 \\ & 2015 \end{aligned}$ |  |  |  |  |  |  |


| Table D.2: Shares of total household wealth (household-level) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population: households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (\% of household wealth) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Bottom 90\% | $\begin{gathered} \hline \text { Bottom } \\ 50 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Middle } \\ 40 \% \\ \hline \end{gathered}$ | Top 10\% | Top 5\% | Top 1\% | Top 0.5\% | Top 0.1\% | Top 0.01\% | $\begin{gathered} \hline \text { Top } \\ 0.001 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 10\% to } \\ 1 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 10\% to } \\ 5 \% \\ \hline \end{gathered}$ | Top 5\% to 1\% | $\begin{gathered} \hline \text { Top 1\% to } \\ 0.1 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 1\% to } \\ 0.5 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 0.5\% to } \\ 0.1 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 0.1\% to } \\ 0.01 \% \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Top 0.01\% to } \\ 0.001 \% \\ \hline \end{gathered}$ |
| 1980 | 52.9\% | 2.5\% | 50.4\% | 47.1\% | 33.0\% | 14.2\% | 9.9\% | 4.5\% | 1.6\% | 0.5\% | 32.9\% | 14.1\% | 18.8\% | 9.7\% | 4.3\% | 5.4\% | 2.9\% | 1.1\% |
| 1981 | 52.0\% | 1.1\% | 51.0\% | 48.0\% | 33.9\% | 15.0\% | 10.6\% | 5.0\% | 1.9\% | 0.6\% | 33.0\% | 14.1\% | 18.9\% | 9.9\% | 4.4\% | 5.5\% | 3.1\% | 1.3\% |
| 1982 | 53.1\% | 2.7\% | 50.4\% | 46.9\% | 33.0\% | 14.6\% | 10.4\% | 5.2\% | 2.2\% | 0.8\% | 32.2\% | 13.8\% | 18.4\% | 9.4\% | 4.2\% | 5.3\% | 3.0\% | 1.4\% |
| 1983 | 53.4\% | 4.4\% | 49.0\% | 46.6\% | 33.2\% | 15.7\% | 11.7\% | 6.5\% | 2.9\% | 1.0\% | 30.9\% | 13.4\% | 17.5\% | 9.2\% | 4.0\% | 5.2\% | 3.6\% | 1.9\% |
| 1984 | 55.6\% | 4.2\% | 51.4\% | 44.4\% | 30.1\% | 12.9\% | 9.3\% | 4.8\% | 2.0\% | 0.7\% | 31.6\% | 14.3\% | 17.3\% | 8.1\% | 3.6\% | 4.5\% | 2.8\% | 1.3\% |
| 1985 | 55.7\% | 3.4\% | 52.3\% | 44.3\% | 29.9\% | 12.9\% | 9.5\% | 5.1\% | 2.3\% | 0.8\% | 31.3\% | 14.3\% | 17.0\% | 7.8\% | 3.5\% | 4.3\% | 2.9\% | 1.5\% |
| 1986 | 53.3\% | 1.1\% | 52.2\% | 46.7\% | 31.7\% | 13.5\% | 9.8\% | 5.1\% | 2.1\% | 0.7\% | 33.2\% | 15.0\% | 18.2\% | 8.4\% | 3.7\% | 4.7\% | 3.0\% | 1.4\% |
| 1987 | 49.1\% | -1.1\% | 50.2\% | 50.9\% | 35.1\% | 15.2\% | 11.0\% | 5.6\% | 2.1\% | 0.7\% | 35.7\% | 15.8\% | 19.8\% | 9.7\% | 4.2\% | 5.4\% | 3.5\% | 1.4\% |
| 1988 | 47.0\% | -1.4\% | 48.4\% | 53.0\% | 37.4\% | 17.6\% | 13.2\% | 7.2\% | 2.9\% | 1.1\% | 35.4\% | 15.6\% | 19.8\% | 10.4\% | 4.4\% | 6.0\% | 4.3\% | 1.9\% |
| 1989 | 45.3\% | -1.6\% | 46.9\% | 54.7\% | 39.4\% | 19.8\% | 15.4\% | 9.0\% | 4.0\% | 1.6\% | 34.9\% | 15.3\% | 19.6\% | 10.9\% | 4.4\% | 6.4\% | 5.0\% | 2.4\% |
| 1990 | 44.9\% | -2.4\% | -47.2\% | 55.1\% | 39.5\% | 19.5\% | 15.1\% | 8.7\% | 3.8\% | 1.5\% | 35.7\% | 15.7\% | 20.0\% | 10.8\% | 4.4\% | 6.3\% | 4.9\% | 2.3\% |
| 1991 | 43.9\% | -1.7\% | 45.7\% | 56.1\% | 40.6\% | 20.6\% | 16.1\% | 9.4\% | 4.2\% | 1.7\% | 35.5\% | 15.5\% | 20.0\% | 11.2\% | 4.5\% | 6.6\% | 5.2\% | 2.5\% |
| 1992 | 43.5\% | -2.0\% | 45.4\% | 56.5\% | 40.4\% | 19.6\% | 15.0\% | 8.4\% | 3.5\% | 1.3\% | 36.9\% | 16.1\% | 20.8\% | 11.2\% | 4.6\% | 6.6\% | 4.9\% | 2.2\% |
| 1993 | 43.7\% | -0.4\% | 44.1\% | 56.3\% | 40.9\% | 21.1\% | 16.6\% | 9.8\% | 4.4\% | 1.8\% | 35.3\% | 15.4\% | 19.8\% | 11.2\% | 4.5\% | 6.7\% | 5.4\% | 2.6\% |
| 1994 | 44.8\% | 0.5\% | 44.3\% | 55.2\% | 39.9\% | 20.3\% | 15.9\% | 9.3\% | 3.9\% | 1.4\% | 34.9\% | 15.3\% | 19.6\% | 11.0\% | 4.4\% | 6.6\% | 5.3\% | 2.5\% |
| 1995 | 46.3\% | 1.3\% | 45.0\% | 53.7\% | 38.4\% | 19.0\% | 14.7\% | 8.5\% | 3.7\% | 1.5\% | 34.7\% | 15.2\% | 19.4\% | 10.5\% | 4.3\% | 6.2\% | 4.8\% | 2.2\% |
| 1996 | 45.7\% | 1.1\% | 44.6\% | 54.3\% | 39.2\% | 19.8\% | 15.4\% | 9.1\% | 4.1\% | 1.7\% | 34.5\% | 15.1\% | 19.4\% | 10.7\% | 4.3\% | 6.4\% | 5.0\% | 2.4\% |
| 1997 | 43.1\% | 0.5\% | 42.6\% | 56.9\% | 41.8\% | 22.0\% | 17.3\% | 10.5\% | 5.2\% | 2.0\% | 34.9\% | 15.1\% | 19.8\% | 11.5\% | 4.7\% | 6.9\% | 5.3\% | 3.2\% |
| 1998 | 43.0\% | 0.4\% | 42.6\% | 57.0\% | 42.2\% | 22.7\% | 18.0\% | 11.0\% | 5.5\% | 2.1\% | 34.4\% | 14.8\% | 19.5\% | 11.6\% | 4.7\% | 7.0\% | 5.5\% | 3.3\% |
| 1999 | 42.3\% | 1.0\% | 41.3\% | 57.7\% | 43.3\% | 24.3\% | 19.6\% | 12.4\% | 6.3\% | 2.5\% | 33.4\% | 14.4\% | 19.0\% | 11.9\% | 4.6\% | 7.2\% | 6.1\% | 3.8\% - |
| $2 \overline{00} \overline{0}$ | 43.9\% | 2.0\% | 41.9\% | 56.1\% | 41.9\% | 23.2\% | 18. $\overline{6} \%$ | 11.7\% | 5.9\% | 2.3\% | 33.0\% | 14.3\% | 18.7\% | 11.5\% | 4.5\% | 7.0\% | 5.7\% | 3.6\% |
| 2001 | 45.8\% | 1.6\% | 44.2\% | 54.2\% | 39.2\% | 19.7\% | 15.2\% | 8.9\% | 4.4\% | 1.8\% | 34.5\% | 15.0\% | 19.5\% | 10.8\% | 4.5\% | 6.3\% | 4.5\% | 2.6\% |
| 2002 | 46.2\% | 0.7\% | 45.5\% | 53.8\% | 38.5\% | 18.7\% | 14.3\% | 8.3\% | 4.0\% | 2.1\% | 35.1\% | 15.4\% | 19.7\% | 10.5\% | 4.4\% | 6.1\% | 4.2\% | 1.9\% |
| 2003 | 47.0\% | 1.7\% | 45.2\% | 53.0\% | 37.6\% | 18.0\% | 13.6\% | 7.5\% | 3.4\% | 1.6\% | 35.1\% | 15.4\% | 19.7\% | 10.4\% | 4.4\% | 6.1\% | 4.1\% | 1.8\% |
| 2004 | 47.1\% | 2.7\% | 44.5\% | 52.9\% | 37.9\% | 18.7\% | 14.3\% | 8.0\% | 3.4\% | 1.4\% | 34.2\% | 15.0\% | 19.2\% | 10.7\% | 4.4\% | 6.3\% | 4.5\% | 2.0\% |
| 2005 | 46.3\% | 3.5\% | 42.8\% | 53.7\% | 39.8\% | 21.6\% | 17.2\% | 10.3\% | 4.9\% | 2.1\% | 32.1\% | 13.9\% | 18.2\% | 11.3\% | 4.4\% | 6.9\% | 5.3\% | 2.9\% |
| 2006 | 46.5\% | 3.7\% | 42.7\% | 53.5\% | 40.0\% | 22.1\% | 17.4\% | 10.0\% | 4.4\% | 1.6\% | 31.5\% | 13.5\% | 17.9\% | 12.0\% | 4.7\% | 7.4\% | 5.7\% | 2.7\% |
| 2007 | 46.0\% | 3.5\% | 42.6\% | 54.0\% | 40.4\% | 22.1\% | 17.5\% | 10.3\% | 4.8\% | 2.0\% | 31.9\% | 13.6\% | 18.2\% | 11.9\% | 4.7\% | 7.2\% | 5.5\% | 2.8\% |
| 2008 | 48.0\% | 2.8\% | 45.2\% | 52.0\% | 37.4\% | 18.3\% | 13.7\% | 7.1\% | 3.0\% | 1.2\% | 33.6\% | 14.5\% | 19.1\% | 11.2\% | 4.7\% | 6.6\% | 4.2\% | 1.8\% |
| 2009 | 45.8\% | 1.4\% | 44.4\% | 54.2\% | 39.5\% | 20.3\% | 15.6\% | 8.5\% | 3.6\% | 1.5\% | 33.9\% | 14.7\% | 19.2\% | 11.8\% | 4.7\% | 7.0\% | 4.9\% | 2.2\% |
| $2 \overline{0} 10$ | 45.7\% | 1.8\% | 43.9\% | 54.3\% | 39.9\% | 21.7\% | 17.3\% | 10.6\% | 5.7\% | 3.2\% | 32.6\% | 14.3\% | 18.3\% | 11.1\% | 4.4\% | $\overline{6} .6 \%$ | 4.9\% | 2.5\% |
| 2011 | 46.9\% | 1.4\% | 45.5\% | 53.1\% | 38.3\% | 19.7\% | 15.3\% | 8.8\% | 4.0\% | 1.7\% | 33.4\% | 14.8\% | 18.6\% | 10.9\% | 4.4\% | 6.5\% | 4.8\% | 2.3\% |
| 2012 | 47.6\% | 2.4\% | 45.1\% | 52.4\% | 38.0\% | 20.0\% | 15.7\% | 9.2\% | 4.3\% | 1.8\% | 32.4\% | 14.4\% | 18.0\% | 10.9\% | 4.3\% | 6.6\% | 4.8\% | 2.5\% |
| $\begin{array}{r} 2013 \\ 2014 \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Source: Jakobsen et al. (2017)

Table E1: The HSBC sample
$\left.\left.\begin{array}{lccc}\hline \hline \hline \text { Of which: } \\ \text { Denmark }\end{array}\right] \begin{array}{ccc}\text { Of which: } \\ \text { Norway }\end{array}\right]$

Table E.2: Probability to be in the HSBC leak (all matched accounts)

|  | Number of matched households |  |  |  |  | $\%$ of population |  | Memo: Excluding HSBC <br> wealth for ranking |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia |  | Norway | Denmark | Scandinavia |
| P0-50 | 57 | 29 | 7 | 20 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | 90 |
| P50-90 | 123 | 71 | 17 | 43 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | 159 |
| P90-95 | 55 | 32 | 2 | 13 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | 40 |
| P95-99 | 110 | 71 | 5 | 36 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | 101 |
| P99-99.5 | 38 | 24 | 3 | 12 | $0.1 \%$ | $0.1 \%$ | $0.0 \%$ | $0.0 \%$ | 36 |
| P99.5-99.9 | 79 | 44 | 5 | 26 | $0.2 \%$ | $0.2 \%$ | $0.0 \%$ | $0.0 \%$ | $0.1 \%$ |
| P999-999.95 | 20 | 13 | 3 | 12 | $0.4 \%$ | $0.5 \%$ | $0.2 \%$ | $0.8 \%$ | 14 |
| P9995-P99.99 | 28 | 8 | 2 | 12 | $0.7 \%$ | $0.4 \%$ | $0.2 \%$ | $1.0 \%$ | 21 |
| P99.99-P100 | 10 | 7 | 1 | 2 | $0.9 \%$ | $1.4 \%$ | $0.4 \%$ | $0.7 \%$ | 8 |
| Total | 520 | 299 | 45 | 176 | $0.005 \%$ | $0.006 \%$ | $0.002 \%$ | $0.006 \%$ | 520 |

[^18]Table E.3: Probability to be in the HSBC leak (accounts with know values only)

|  | Number of matched households |  |  |  | \% of population |  |  |  | Memo: Excluding HSBC wealth for ranking |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |  |  |
| P0-50 | 13 | 5 | 2 | 5 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 46 | 0.0\% |
| P50-90 | 58 | 31 | 9 | 28 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 94 | 0.0\% |
| P90-95 | 38 | 19 | 0 | 11 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 23 | 0.0\% |
| P95-99 | 64 | 39 | 1 | 23 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 55 | 0.0\% |
| P99-99.5 | 28 | 16 | 2 | 11 | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 26 | 0.0\% |
| P99.5-99.9 | 60 | 36 | 4 | 18 | 0.1\% | 0.2\% | 0.0\% | 0.1\% | 33 | 0.1\% |
| P99.9-P99.95 | 16 | 12 | 2 | 6 | 0.3\% | 0.5\% | 0.1\% | 0.4\% | 9 | 0.2\% |
| P99.95-P99.99 | 15 | 6 | 1 | 5 | 0.4\% | 0.3\% | 0.1\% | 0.4\% | 8 | 0.2\% |
| P99.99-P100 | 8 | 7 | 1 | 0 | 0.8\% | 1.4\% | 0.4\% | 0.0\% | 6 | 0.6\% |
| Total | 300 | 171 | 22 | 107 | 0.003\% | 0.004\% | 0.001\% | 0.003\% | 300 | 0.003\% |

[^19] Scandinavia as a whole, and people in the top $0.01 \%$ in Norway are not necessarily in the top $0.01 \%$ of Scandinavia)

## Table E.4: Share of HSBC wealth hidden

|  | Scandinavia | Sweden | Denmark | Norway |  | Scandinavia | Sweden | Denmark | Norway |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P0-50 | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | P0-50 | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| P50-90 | $1 \%$ | $1 \%$ | $2 \%$ | $0 \%$ | P50-90 | $1 \%$ | $1 \%$ | $2 \%$ | $0 \%$ |
| P90-95 | $1 \%$ | $1 \%$ | $2 \%$ | $0 \%$ | P90-95 | $1 \%$ | $1 \%$ | $2 \%$ | $0 \%$ |
| P95-99 | $3 \%$ | $4 \%$ | $10 \%$ | $0 \%$ | P95-99 | $3 \%$ | $4 \%$ | $10 \%$ | $0 \%$ |
| P99-99.5 | $3 \%$ | $3 \%$ | $5 \%$ | $0 \%$ | P99-99.5 | $3 \%$ | $3 \%$ | $5 \%$ | $0 \%$ |
| P99.5-99.9 | $14 \%$ | $14 \%$ | $35 \%$ | $1 \%$ | P99.5-99.9 | $14 \%$ | $14 \%$ | $35 \%$ | $1 \%$ |
| P99.9-P99.95 | $7 \%$ | $11 \%$ | $6 \%$ | $3 \%$ | P99.9-P99.95 | $7 \%$ | $11 \%$ | $6 \%$ | $3 \%$ |
| P99.95-P99.99 | $15 \%$ | $10 \%$ | $38 \%$ | $6 \%$ | P99.95-P100 | $70 \%$ | $66 \%$ | $38 \%$ | $95 \%$ |
| P99.99-P100 | $55 \%$ | $56 \%$ | $0 \%$ | $89 \%$ |  |  |  |  |  |

Table E.5: Number of customers and account values at HSBC Switzerland

|  | Number of <br> accounts | Client assets <br> (million \$) | Average <br> account value <br> (million \$) |
| :--- | :---: | :---: | :---: |
| 2002 |  | 45,000 |  |
| 2003 |  | 57,500 |  |
| 2004 | 30,000 | 61,000 | 2.0 |
| 2005 | 25,500 | 76,000 | 3.0 |
| 2006 | 28,500 | 105,000 | 3.7 |
| 2007 | 30,412 | 118,400 | 3.9 |
| 2008 | 31,500 | 105,000 | 3.3 |
| 2009 | 32,000 | 107,500 | 3.4 |
| 2010 | 29,000 | 110,000 | 3.8 |
| 2011 | 27,000 | 98,000 | 3.6 |
| 2012 | 22,000 | 95,000 | 4.3 |
| 2013 | 17,500 | 86,000 | 4.9 |
| 2014 | 10,343 | 68,000 | 6.6 |

Source: HSBC (2015), http://www.hsbc.com/~/media/hsbc-com/investorrelationsassets/financial-and-regulatory-reports/gbp-update\ -290115

Table E.7: HSBC evaders, Panama papers individuals, \& amnesty participants, by wealth group (lumping top $0.01 \%$ and next $0.04 \%$ together)

|  | HSBC |  |  |  | Panama papers |  | Amnesty |  |  |  | HSBC + Amn. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] [12] |
|  | Extensive margin |  | Intensive margin |  | Extensive margin |  | Extensive margin |  | Intensive margin |  | Extensive margin |
| Wealth group | \% of all households | Test | \% of evaders' wealth | Test | \% of all households | Test | \% of all households | Test | \% of evaders' wealth | Test | $\begin{gathered} \begin{array}{c} \% \text { of all } \\ \text { households } \end{array} \text { Test } \end{gathered}$ |
| P0-90 | $\begin{gathered} 0.00 \\ (0.00) \end{gathered}$ |  | $\begin{aligned} & 35.08 \\ & (9.19) \end{aligned}$ | A | $\begin{gathered} 0.00 \\ (0.00) \end{gathered}$ |  | $\begin{gathered} 0.03 \\ (0.00) \end{gathered}$ |  | $\begin{aligned} & 36.52 \\ & (1.86) \end{aligned}$ | C | $\begin{gathered} 0.03 \\ (0.00) \end{gathered}$ |
| P90-95 | $\begin{gathered} 0.01 \\ (0.00) \end{gathered}$ |  | $\begin{aligned} & 38.27 \\ & (4.44) \end{aligned}$ | A | $\begin{gathered} 0.01 \\ (0.00) \end{gathered}$ | A | $\begin{gathered} 0.25 \\ (0.01) \end{gathered}$ |  | $\begin{aligned} & 25.32 \\ & (2.06) \end{aligned}$ | A | $\begin{gathered} 0.26 \\ (0.01) \end{gathered}$ |
| P95-99 | $\begin{gathered} 0.03 \\ (0.00) \end{gathered}$ |  | $\begin{aligned} & 39.34 \\ & (3.51) \end{aligned}$ | A | $\begin{gathered} 0.01 \\ (0.00) \end{gathered}$ | A | $\begin{gathered} 0.78 \\ (0.02) \end{gathered}$ |  | $\begin{aligned} & 27.42 \\ & (1.26) \end{aligned}$ | AB | $\begin{gathered} 0.80 \\ (0.02) \end{gathered}$ |
| P99-99.5 | $\begin{gathered} 0.07 \\ (0.01) \end{gathered}$ |  | $\begin{aligned} & 42.32 \\ & (5.90) \end{aligned}$ | A | $\begin{gathered} 0.04 \\ (0.01) \end{gathered}$ | B | $\begin{gathered} 2.83 \\ (0.09) \end{gathered}$ |  | $\begin{aligned} & 31.02 \\ & (1.95) \end{aligned}$ | B | $\begin{gathered} 2.89 \\ (0.09) \end{gathered}$ |
| P99.5-99.9 | $\begin{gathered} 0.19 \\ (0.02) \end{gathered}$ |  | $\begin{aligned} & 46.51 \\ & (3.76) \end{aligned}$ | A | $\begin{gathered} 0.04 \\ (0.01) \end{gathered}$ | B | $\begin{gathered} 4.31 \\ (0.12) \end{gathered}$ |  | $\begin{aligned} & 30.89 \\ & (1.52) \end{aligned}$ | B | $\begin{gathered} 4.49 \\ (0.12) \end{gathered}$ |
| P99.9-99.95 | $\begin{gathered} 0.38 \\ (0.08) \end{gathered}$ |  | $\begin{aligned} & 36.19 \\ & (5.84) \end{aligned}$ | A | $\begin{gathered} 0.16 \\ (0.06) \end{gathered}$ | B | $\begin{gathered} 8.16 \\ (0.45) \end{gathered}$ |  | $\begin{aligned} & 31.26 \\ & (2.79) \end{aligned}$ | ABC | $\begin{gathered} 8.51 \\ (0.45) \end{gathered}$ |
| P99.95-100 | $\begin{gathered} 0.72 \\ (0.12) \\ \hline \end{gathered}$ |  | $\begin{array}{r} 37.31 \\ (6.84) \\ \hline \end{array}$ | A | $\begin{gathered} 0.37 \\ (0.10) \\ \hline \end{gathered}$ | B | $\begin{array}{r} 11.95 \\ (0.53) \\ \hline \end{array}$ |  | $\begin{array}{r} 32.84 \\ (2.92) \\ \hline \end{array}$ | BC | $\begin{array}{r} 12.37 \\ (0.54) \\ \hline \end{array}$ |
| Number of households | 10,617, |  | 10,617,1 |  | 7,547,170 |  | 7,547,1 |  | 7,547,17 |  | 7,547,170 |
| Number of tax evaders | 520 |  | 300 |  | 165 |  | 8,233 |  | 1,375 |  | 8,571 |

Note: Bootsrapped standard errors in parenthesis. Wealth group sharing a letter are not significantly different at the $5 \%$ level.

| Table E.8: country distribution of the wealth managed by HSBC Switzerland vs. All Swiss banks |  |  |
| :---: | :---: | :---: |
|  | \% of total |  |
|  | Offshore wealth in Switzerland | HSBC wealth |
| Africa and Middle East (excl. Gulf countries) | 10.8\% | 15.4\% |
| Algeria | 0.2\% | 0.4\% |
| Angola | 0.2\% | 0.0\% |
| Benin | 0.0\% | 0.0\% |
| Botswana | 0.0\% | 0.0\% |
| Burkina Faso | 0.0\% | 0.0\% |
| Burundi | 0.0\% | 0.0\% |
| Cabo Verde | 0.0\% | 0.0\% |
| Cameroon | 0.1\% | 0.0\% |
| Central African Republic | 0.0\% | 0.0\% |
| Chad | 0.0\% | 0.1\% |
| Comoros | 0.0\% | 0.0\% |
| Congo | 0.1\% | 0.1\% |
| Congo (Democratic Republic of the) | 0.1\% | 0.1\% |
| Côte d'Ivoire | 0.2\% | 0.1\% |
| Egypt | 1.5\% | 2.0\% |
| Equatorial Guinea | 0.0\% | 0.0\% |
| Eritrea | 0.0\% | 0.4\% |
| Ethiopia | 0.0\% | 0.0\% |
| Gabon | 0.1\% | 0.0\% |
| Ghana | 0.0\% | 0.1\% |
| Guinea | 0.0\% | 0.0\% |
| Guinea-Bissau | 0.0\% | 0.0\% |
| Iran (Islamic Republic of) | 0.5\% | 0.9\% |
| Iraq | 0.0\% | 0.3\% |
| Israel | 2.6\% | 5.8\% |
| Jordan | 1.2\% | 0.5\% |
| Kenya | 0.6\% | 0.3\% |
| Lesotho | 0.0\% | 0.0\% |
| Libya | 0.3\% | 0.3\% |
| Madagascar | 0.0\% | 0.1\% |
| Malawi | 0.0\% | 0.0\% |
| Mali | 0.0\% | 0.1\% |
| Mauritania | 0.0\% | 0.0\% |
| Morocco | 0.7\% | 0.9\% |


| Mozambique | 0.0\% | 0.0\% |
| :---: | :---: | :---: |
| Namibia | 0.0\% | 0.0\% |
| Niger | 0.0\% | 0.0\% |
| Nigeria | 0.5\% | 0.2\% |
| Rwanda | 0.0\% | 0.0\% |
| Sao Tome and Principe | 0.0\% | 0.0\% |
| Senegal | 0.2\% | 0.1\% |
| Sierra Leone | 0.0\% | 0.0\% |
| South Africa | 0.5\% | 1.2\% |
| Sudan | 0.0\% | 0.1\% |
| Swaziland | 0.0\% | 0.0\% |
| Syrian Arab Republic | 0.5\% | 0.7\% |
| Tanzania, United Republic of | 0.1\% | 0.1\% |
| Togo | 0.0\% | 0.0\% |
| Tunisia | 0.2\% | 0.3\% |
| Uganda | 0.0\% | 0.1\% |
| Yemen | 0.3\% | 0.1\% |
| Zambia | 0.0\% | 0.0\% |
| Zimbabwe | 0.1\% | 0.2\% |
| Europe | 43.9\% | 44.7\% |
| Albania | 0.0\% | 0.0\% |
| Austria | 0.8\% | 1.0\% |
| Belgium | 1.8\% | 2.7\% |
| Bosnia and Herzegovina | 0.0\% | 0.0\% |
| Bulgaria | 0.1\% | 0.2\% |
| Croatia | 0.1\% | 0.0\% |
| Czech Republic | 0.2\% | 0.1\% |
| Denmark | 0.2\% | 0.6\% |
| Estonia | 0.0\% | 0.0\% |
| Finland | 0.1\% | 0.0\% |
| France | 8.1\% | 10.7\% |
| Germany | 6.3\% | 3.8\% |
| Greece | 3.5\% | 2.2\% |
| Hungary | 0.1\% | 0.1\% |
| Iceland | 0.0\% | 0.0\% |
| Ireland | 0.1\% | 0.5\% |
| Italy | 8.8\% | 6.4\% |
| Latvia | 0.0\% | 0.1\% |
| Lithuania | 0.0\% | 0.1\% |
| Macedonia (the former Yugoslav Rep | 0.0\% | 0.1\% |
| Moldova (Republic of) | 0.0\% | 0.0\% |
| Netherlands | 0.5\% | 1.0\% |
| Norway | 0.16\% | 0.3\% |


| Poland | 0.2\% | 0.7\% |
| :---: | :---: | :---: |
| Portugal | 1.0\% | 0.8\% |
| Romania | 0.1\% | 0.7\% |
| Serbia | 0.1\% | 0.0\% |
| Slovakia | 0.1\% | 0.0\% |
| Slovenia | 0.0\% | 0.0\% |
| Spain | 5.2\% | 2.0\% |
| Sweden | 0.5\% | 0.9\% |
| Ukraine | 0.1\% | 0.2\% |
| United Kingdom of Great Britain and | 5.8\% | 9.3\% |
| Gulf countries | 14.3\% | 6.3\% |
| Kuwait | 0.8\% | 0.6\% |
| Oman | 0.2\% | 0.2\% |
| Qatar | 0.1\% | 0.2\% |
| Saudi Arabia | 7.3\% | 3.3\% |
| United Arab Emirates | 5.9\% | 2.0\% |
| Asia | 9.5\% | 6.7\% |
| Afghanistan | 0.0\% | 0.0\% |
| Armenia | 0.0\% | 0.0\% |
| Australia | 0.6\% | 0.6\% |
| Azerbaijan | 0.1\% | 0.0\% |
| Bangladesh | 0.0\% | 0.0\% |
| Bhutan | 0.0\% | 0.0\% |
| Cambodia | 0.0\% | 0.0\% |
| China | 0.2\% | 0.3\% |
| Fiji | 0.0\% | 0.0\% |
| Georgia | 0.0\% | 0.0\% |
| India | 0.7\% | 2.4\% |
| Indonesia | 0.4\% | 0.1\% |
| Japan | 0.6\% | 0.2\% |
| Kazakhstan | 0.1\% | 0.3\% |
| Korea (Republic of) | 0.1\% | 0.0\% |
| Kyrgyzstan | 0.0\% | 0.0\% |
| Lao People's Democratic Republic | 0.0\% | 0.0\% |
| Micronesia (Federated States of) | 0.0\% | 0.0\% |
| Mongolia | 0.0\% | 0.0\% |
| Nepal | 0.0\% | 0.0\% |
| New Zealand | 0.5\% | 0.1\% |
| Pakistan | 0.7\% | 0.5\% |
| Philippines | 0.3\% | 0.1\% |
| Sri Lanka | 0.0\% | 0.0\% |
| Taiwan, Province of China[a] | 0.8\% | 0.1\% |


| Tajikistan | 0.0\% | 0.0\% |
| :---: | :---: | :---: |
| Thailand | 0.5\% | 0.0\% |
| Tonga | 0.0\% | 0.0\% |
| Turkey | 3.7\% | 2.0\% |
| Turkmenistan | 0.0\% | 0.0\% |
| Uzbekistan | 0.0\% | 0.0\% |
| Viet Nam | 0.0\% | 0.0\% |
| Russian Federation | 2.3\% | 1.0\% |
| Latin America | 14.6\% | 17.1\% |
| Argentina | 3.5\% | 2.0\% |
| Bolivia (Plurinational State of) | 0.1\% | 0.1\% |
| Brazil | 2.7\% | 4.0\% |
| Chile | 0.2\% | 0.3\% |
| Colombia | 0.3\% | 0.2\% |
| Cuba | 0.0\% | 0.0\% |
| Dominican Republic | 0.1\% | 0.0\% |
| Ecuador | 0.2\% | 0.1\% |
| El Salvador | 0.0\% | 0.1\% |
| Guatemala | 0.0\% | 0.0\% |
| Haiti | 0.0\% | 0.0\% |
| Honduras | 0.0\% | 0.0\% |
| Jamaica | 0.0\% | 0.0\% |
| Mexico | 2.0\% | 1.3\% |
| Nicaragua | 0.0\% | 0.0\% |
| Paraguay | 0.2\% | 0.0\% |
| Peru | 0.1\% | 0.1\% |
| Suriname | 0.0\% | 0.4\% |
| Trinidad and Tobago | 0.0\% | 0.0\% |
| Venezuela (Bolivarian Republic of) | 5.0\% | 8.5\% |
| United States of America | 3.2\% | 6.2\% |
| Canada | 1.3\% | 2.2\% |
| Other | 0.2\% | 0.3\% |
| Total | 100.0\% | 100.0\% |

Table E.9: Persons included in the HSBC-file and registered in Sweden 31 december 2006

| Age | Number | Mean | Std | Median |
| :--- | :---: | :---: | :---: | :---: |
| Total | 340 | 52 | 15 | 52 |
| Woman | 103 | 54 | 14 | 58 |
| Men | 237 | 51 | 15 | 50 |

Total income from employment and business

|  | Number | Mean | Std | Median |
| :--- | :---: | :---: | :---: | :---: |
| Total | 340 | 455053 | 607806 | 287529 |
| Woman | 103 | 254132 | 281638 | 196128 |
| Men | 237 | 542373 | 686370 | 331266 |

Total income from employment and business and capital income

|  | Number | Mean | Std | Median |
| :--- | :---: | :---: | :---: | :---: |
| Total | 340 | 1698511 | 6627890 | 430699 |
| Woman | 103 | 950802 | 3786261 | 287146 |
| Men | 237 | 2023465 | 7520324 | 516796 |


|  | Number |
| :--- | :---: |
| Total | 340 |
| Born in Sweden | 294 |
| Foreign born | 46 |

Lives in Stockholm City ..... 136
Rest of country ..... 204
County of Stockholm ..... 235
Rest of country ..... 105
Education
Okänd ..... 27
Förgymnasial ..... 26
Gymnasial ..... 90
Eftergymnasial ..... 197

Table F.1: Probability to be in the Panama Papers

|  | Number of households |  |  | $\%$ of population |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Norway + | Norway | Sweden | Norway + <br> Sweden | Norway | Sweden |
| P0-50 | 34 | 21 | 36 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| P50-90 | 46 | 8 | 35 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| P90-95 | 20 | 3 | 7 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| P95-99 | 18 | 3 | 12 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| P99-99.5 | 14 | 3 | 6 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| P99.5-99.9 | 13 | 6 | 7 | $0.0 \%$ | $0.1 \%$ | $0.0 \%$ |
| P99.9-P99.95 | 6 | 3 | 4 | $0.2 \%$ | $0.2 \%$ | $0.2 \%$ |
| P99.95-P99.99 | 5 | 2 | 2 | $0.2 \%$ | $0.2 \%$ | $0.1 \%$ |
| P99.99-P100 | 9 | 4 | 3 | $1.2 \%$ | $1.5 \%$ | $0.6 \%$ |
| Total | 165 | 53 | 112 | $0.002 \%$ | $0.002 \%$ | $0.002 \%$ |

Table G.1: Number of amnesty participants

|  | Norway |  | Sweden |  | Norway + Sweden |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Disclosed <br> wealth <br> excluded <br> from wealth | Disclosed <br> wealth <br> included in <br> wealth | Disclosed <br> wealth <br> excluded <br> from wealth | Disclosed <br> wealth <br> included in <br> wealth <br> (imputed) | Disclosed <br> wealth <br> excluded <br> from wealth | Disclosed <br> wealth <br> included in <br> wealth |
| P0-50 | 346 | 139 | 571 | 160 | 710 | 301 |
| P50-90 | 403 | 270 | 1,766 | 1,285 | 1,961 | 1,510 |
| P90-95 | 115 | 114 | 941 | 855 | 1,088 | 947 |
| P95-99 | 237 | 301 | 1,912 | 2,127 | 2,214 | 2,347 |
| P99-99.5 | 81 | 155 | 554 | 847 | 724 | 1,068 |
| P99.5-99.9 | 150 | 266 | 733 | 992 | 1,027 | 1,301 |
| P99.9-P99.95 | 28 | 66 | 146 | 234 | 201 | 308 |
| P99.95-P99.99 | 41 | 80 | 144 | 236 | 235 | 347 |
| P99.99-P100 | 21 | 31 | 44 | 75 | 73 | 104 |
| Total | 1,422 | 1,422 | 6,811 | 6,811 | 8,233 | 8,233 |

[^20]Table G.2: Probability to disclose hidden wealth in tax amnesties

|  | Norway |  | Sweden |  | Norway + Sweden |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Disclosed <br> wealth <br> excluded <br> from wealth | Disclosed <br> wealth <br> included in <br> wealth | Disclosed <br> wealth <br> excluded <br> from wealth | Disclosed <br> wealth <br> included in <br> wealth <br> (imputed) | Disclosed <br> wealth <br> included in <br> wealth | Disclosed <br> wealth <br> excluded <br> from wealth |
| P0-50 | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| P50-90 | $0.0 \%$ | $0.0 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ |
| P90-95 | $0.1 \%$ | $0.1 \%$ | $0.4 \%$ | $0.4 \%$ | $0.3 \%$ | $0.3 \%$ |
| P95-99 | $0.2 \%$ | $0.3 \%$ | $1.0 \%$ | $1.1 \%$ | $0.8 \%$ | $0.7 \%$ |
| P99-99.5 | $0.6 \%$ | $1.1 \%$ | $2.3 \%$ | $3.5 \%$ | $2.8 \%$ | $1.9 \%$ |
| P99.5-99.9 | $1.4 \%$ | $2.4 \%$ | $3.8 \%$ | $5.1 \%$ | $4.3 \%$ | $3.4 \%$ |
| P99.9-P99.95 | $2.1 \%$ | $4.8 \%$ | $6.1 \%$ | $9.7 \%$ | $8.2 \%$ | $5.3 \%$ |
| P99.95-P99.99 | $3.8 \%$ | $7.3 \%$ | $7.5 \%$ | $12.2 \%$ | $11.5 \%$ | $7.8 \%$ |
| P99.99-P100 | $7.7 \%$ | $11.4 \%$ | $9.1 \%$ | $15.6 \%$ | $13.8 \%$ | $9.7 \%$ |

## Table G.3: Pooling amnesty participants and HSBC account-holders

|  | Population: Norway + Sweden |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Population | Wealth <br> threshold <br> (million \$) | Average <br> wealth <br> (million \$) | Number of <br> HSBC + <br> amnesty <br> households | Fraction of <br> HSBC + <br> amnesty <br> households |
| P0-50 | $3,773,567$ |  | 0.0 | 337 | $0.0 \%$ |
| P50-90 | $3,018,886$ | 0.1 | 0.3 | 1,599 | $0.1 \%$ |
| P90-95 | 377,358 | 0.6 | 0.7 | 979 | $0.3 \%$ |
| P95-99 | 301,887 | 0.8 | 1.1 | 2,422 | $0.8 \%$ |
| P99-99.5 | 37,735 | 1.8 | 2.2 | 1,092 | $2.9 \%$ |
| P99.5-99.9 | 30,189 | 2.7 | 4.2 | 1,354 | $4.5 \%$ |
| P99.9-P99.95 | 3,774 | 8.1 | 10.2 | 321 | $8.5 \%$ |
| P99.95-P99.99 | 3,019 | 13.3 | 21.2 | 355 | $11.8 \%$ |
| P99.99-P100 | 755 | 41.4 | 141.8 | 112 | $14.8 \%$ |
| Total | $7,547,170$ |  | 0.26 | 8,571 | $0.114 \%$ |

Table G.4: Results from the Norwegian amnesty

|  | Population | Wealth threshold (milllion \$) | Average wealth (million \$) | Number of disclosing households | Disclosed wealth (million \$) | Fraction of disclosers | Wealth disclosed, of total wealth disclosed | Wealth \% disclosed, \% of each group's wealth | Average disclosed wealth (million \$) | Average wealth disclosed / average wealth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| P0-50 | 1,364,116 |  | 0.0 | 139 | 12 | 0.0\% | 0\% | 0.0\% | 0.1 |  |
| P50-P90 | 1,091,293 | 0.1 | 0.3 | 270 | 38 | 0.0\% | 2\% | 0.0\% | 0.1 | 45\% |
| P90-P95 | 136,412 | 0.6 | 0.7 | 114 | 20 | 0.1\% | 1\% | 0.0\% | 0.2 | 25\% |
| P95-P99 | 109,129 | 0.8 | 1.0 | 301 | 99 | 0.3\% | 4\% | 0.1\% | 0.3 | 32\% |
| P99-P99.5 | 13,641 | 1.5 | 1.8 | 155 | 94 | 1.1\% | 4\% | 0.4\% | 0.6 | 34\% |
| P99.5-P99.9 | 10,913 | 2.1 | 3.2 | 266 | 286 | 2.4\% | 12\% | 0.8\% | 1.1 | 34\% |
| P99.9-P99.95 | 1,364 | 6.0 | 7.6 | 66 | 157 | 4.8\% | 7\% | 1.5\% | 2.4 | 31\% |
| P99.95-P99.99 | 1,092 | 10.0 | 16.4 | 80 | 527 | 7.3\% | 22\% | 2.9\% | 6.6 | 40\% |
| P99.99-P100 | 273 | 33.9 | 109.7 | 31 | 1,127 | 11.4\% | 48\% | 3.8\% | 36.4 | 33\% |
| Total | 2,728,233 |  | 0.24 | 1,422 | 2,359 | 0.052\% | 100\% |  |  |  |

Table G.5: Results from the Swedish amnesty

|  | Population | Wealth <br> threshold <br> (milllion \$) | Average <br> wealth <br> (million \$) | Number of <br> disclosing <br> households | Fraction of <br> disclosers |
| :--- | :---: | :---: | :---: | :---: | :---: |
| P0-50 | $2,409,483$ |  | 0.0 | 571 | $0.0 \%$ |
| P50-P90 | $1,927,587$ | 0.1 | 0.3 | 1766 | $0.1 \%$ |
| P90-P95 | 240,948 | 0.6 | 0.7 | 941 | $0.4 \%$ |
| P95-P99 | 192,759 | 0.9 | 1.2 | 1912 | $1.0 \%$ |
| P99-P99.5 | 24,095 | 2.1 | 2.5 | 554 | $2.3 \%$ |
| P99.5-P99.9 | 19,275 | 3.1 | 4.8 | 733 | $3.8 \%$ |
| P99.9-P99.95 | 2,410 | 9.5 | 11.9 | 146 | $6.1 \%$ |
| P99.95-P99.99 | 1,927 | 15.3 | 24.1 | 144 | $7.5 \%$ |
| P99.99-P100 | 483 | 46.2 | 172.6 | 44 | $9.1 \%$ |
| Total | $4,818,967$ |  |  | 6,811 | $0.141 \%$ |

Table G.7: Correlation between avoidance and evasion in the 2007 cross-section

|  | (1) | $(2)$ <br> Maximized <br> dividend <br> True taxable <br> wealth <br> payments in <br> 2005 | Owns a <br> holding <br> company | 80\% wealth <br> tax reduction |
| :--- | :---: | :---: | :---: | :---: |
| Subsequent amnesty | 0.0063 | $-0.0253^{* * *}$ | $-0.0387^{* * *}$ | $-0.0161^{* * *}$ |
| participant | $(0.0083)$ | $(0.0035)$ | $(0.0033)$ | $(0.0021)$ |
| Observations | 524,667 | 724,232 | 724,232 | 724,232 |
| R-squared | 0.9703 | 0.0595 | 0.1639 | 0.1346 |
| Age | 6 groups | 6 groups | 6 groups | 6 groups |
| Wealth | 100 groups | 100 groups | 100 groups | 100 groups |
| Income | 10 groups | 10 groups | 10 groups | 10 groups |

## Table H1: Danish random audits, summary statistics

|  | All years | 2008 | 2010 | 2012 |
| :--- | :---: | :---: | :---: | :---: |
| Entire Danish population |  |  |  |  |
| Number of adults (20+) | $12,549,036$ | $4,131,611$ | $4,182,492$ | $4,234,933$ |
| Fraction with errors | $11.99 \%$ | $10.95 \%$ | $12.53 \%$ | $12.46 \%$ |
| Mean error | 35,680 | 41,221 | 30,487 | 36,087 |
| Fraction deliberate evaders | $1.33 \%$ | $1.33 \%$ | $1.18 \%$ | $1.46 \%$ |
| $\quad$ Mean deliberately evaded income | 139,632 | 137,371 | 147,065 | 135,702 |
| Self-employed |  |  |  |  |
| $\quad$ Number of adults (20+) | $1,178,415$ | 395,439 | 385,897 | 397,078 |
| $\quad$ Fraction with errors | $58.37 \%$ | $54.05 \%$ | $59.66 \%$ | $61.41 \%$ |
| Mean error | 58,698 | 66,314 | 51,327 | 58,982 |
| Fraction deliberate evaders | $10.16 \%$ | $10.10 \%$ | $10.28 \%$ | $10.09 \%$ |
| $\quad$ Mean deliberately evaded income | 166,200 | 170,631 | 142,103 | 185,647 |
| Non self-employed |  |  |  |  |
| $\quad$ Number of adults (20+) | $11,370,621$ | $3,736,172$ | $3,796,595$ | $3,837,855$ |
| Fraction with errors | $7.18 \%$ | $6.39 \%$ | $7.74 \%$ | $7.39 \%$ |
| Mean error | 16,284 | 18,758 | 14,160 | 16,403 |
| Fraction deliberate evaders | $0.41 \%$ | $0.41 \%$ | $0.26 \%$ | $0.57 \%$ |
| Mean deliberately evaded income | 71,731 | 50,091 | 167,134 | 43,891 |
|  |  |  |  |  |
| Total evaded income (billion DKK) | 53.7 | 18.7 | 16.0 | 19.0 |
| Total evaded taxes (billion DKK) | 24.7 |  |  |  |
| Total deliberately evaded income (billion DKK) | 23.3 | 7.6 | 7.3 | 8.4 |
| Total deliberately evaded taxes (billion DKK) | 10.5 |  |  |  |
| Total reported taxable income (billion DKK) | 2,973 | 960 | 1,004 | 1,009 |
| Total evasion (\% total reported taxable income) | $1.8 \%$ | $1.9 \%$ | $1.6 \%$ | $1.9 \%$ |
| Total deliberate evasion (\% total reported taxable incom | $0.8 \%$ | $0.8 \%$ | $0.7 \%$ | $0.8 \%$ |
| National income (billion DKK) | 4,760 | 1,606 | 1,577 | 1,576 |
| Total deliberate evasion (\% national income) | $0.5 \%$ | $0.5 \%$ | $0.5 \%$ | $0.5 \%$ |
| Price index (2012 = 1) |  | 0.93 | 0.96 | 1 |
| Total taxes paid | 1,057 | 363 | 344 | 350 |
| Average tax rate | $36 \%$ | $38 \%$ | $34 \%$ | $35 \%$ |

[^21]Table H2: Number of audited taxpayers, by wealth bin

|  | All years | 2008 | 2010 | 2012 | Memo: US, 2001 $\underset{\substack{\text { (Johns \& Slemrod 2010, Tab. A1) } \\ \text { (bins of taxable income) }}}{ }$ (bins of taxable income) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of audited taxpayers | 18,985 | 6,204 | 6,233 | 6,548 | 36,699 |
| Self-employed | 6,223 | 2,125 | 2,071 | 2,027 | n.a. |
| Non-self-employed | 12,762 | 4,079 | 4,162 | 4,521 | n.a. |
| In the top 10\% of the wealth distribution | 4,358 | 1,437 | 1,389 | 1,532 | 11,882 |
| In the top 1\% of the wealth distribution | 663 | 209 | 236 | 218 | 3,649 |
| In the top $0.5 \%$ of the wealth distribution | 317 | 92 | 116 | 109 | 2,060 |
| In the top 0.1\% of the wealth distribution | 59 | 19 | 25 | 15 | n.a. |
| In the top $0.01 \%$ of the wealth distribution | 7 | 1 | 4 | 2 | n.a. |
| Audit rate | 0.15\% | 0.15\% | 0.15\% | 0.15\% | 0.03\% |
| In the top 10\% of the wealth distribution | 0.35\% | 0.35\% | 0.33\% | 0.36\% | 0.09\% |
| In the top 1\% of the wealth distribution | 0.53\% | 0.51\% | 0.56\% | 0.51\% | 0.29\% |
| In the top $0.5 \%$ of the wealth distribution | 0.51\% | 0.45\% | 0.55\% | 0.51\% | 0.33\% |
| In the top $0.1 \%$ of the wealth distribution | 0.47\% | 0.46\% | 0.60\% | 0.35\% | n.a. |
| In the top $0.01 \%$ of the wealth distribution | 0.56\% | 0.24\% | 0.96\% | 0.47\% | n.a. |
| Memo: Number of adults (thousands) | 12,549 | 4,132 | 4,182 | 4,235 | 125,808 |

Table H3: Income unreported in random audits, by wealth bin

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fraction (\% ho | x evaders eholds) | Average u (\% of bin's | orted income avg. tax. inc.) | Total unr <br> (\% bin's | ted income ot. tax. inc.) | Distribution (\% of total | ue taxable inc. able income) | Distribution (\% of total | nreported inc. ported income) |
|  | All | Deliberate only | All | Deliberate only | All | Deliberate only | All | Deliberate only | All | Deliberate only |
| P0-10 | 12.4\% | 1.5\% | 22.6\% | 57.5\% | 2.8\% | 0.9\% | 6.7\% | 6.6\% | 11.0\% | 8.2\% |
| P10-20 | 5.4\% | 0.3\% | 26.2\% | 55.1\% | 1.4\% | 0.2\% | 4.8\% | 4.8\% | 4.0\% | 1.3\% |
| P20-30 | 6.0\% | 0.7\% | 17.3\% | 52.7\% | 1.0\% | 0.4\% | 6.5\% | 6.5\% | 4.0\% | 3.6\% |
| P30-40 | 9.5\% | 1.4\% | 11.4\% | 30.4\% | 1.1\% | 0.4\% | 8.0\% | 8.0\% | 5.1\% | 4.8\% |
| P40-50 | 9.2\% | 0.9\% | 9.4\% | 36.9\% | 0.9\% | 0.3\% | 8.8\% | 8.8\% | 4.5\% | 4.3\% |
| P50-60 | 10.3\% | 0.9\% | 8.4\% | 43.0\% | 0.9\% | 0.4\% | 9.7\% | 9.7\% | 5.0\% | 5.2\% |
| P60-70 | 10.5\% | 1.5\% | 14.9\% | 50.8\% | 1.6\% | 0.8\% | 10.8\% | 10.9\% | 10.0\% | 11.4\% |
| P70-80 | 13.8\% | 1.5\% | 11.3\% | 49.8\% | 1.6\% | 0.7\% | 11.9\% | 11.9\% | 11.0\% | 12.2\% |
| P80-90 | 17.3\% | 1.8\% | 12.4\% | 57.1\% | 2.1\% | 1.0\% | 12.9\% | 12.9\% | 16.3\% | 18.0\% |
| P90-95 | 13.6\% | 1.1\% | 10.4\% | 55.3\% | 1.4\% | 0.6\% | 7.0\% | 7.0\% | 5.9\% | 6.0\% |
| P95-99 | 26.5\% | 2.8\% | 10.0\% | 34.8\% | 2.7\% | 1.0\% | 7.4\% | 7.3\% | 11.7\% | 9.9\% |
| P99-99.5 | 28.2\% | 5.5\% | 13.3\% | 36.2\% | 3.7\% | 2.0\% | 1.5\% | 1.5\% | 3.3\% | 4.1\% |
| P99.5-100 | 37.3\% | 5.2\% | 9.1\% | 37.0\% | 3.4\% | 1.9\% | 4.1\% | 4.0\% | 8.2\% | 11.0\% |
| All | 11.5\% | 1.28\% |  |  | 1.77\% | 0.78\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |
| Bottom 50\% | 8.5\% | 1.0\% |  |  | 1.4\% | 0.5\% | 34.8\% | 34.8\% | 28.6\% | 22.1\% |
| Middle 40\% | 13.0\% | 1.4\% |  |  | 1.6\% | 0.7\% | 45.3\% | 45.3\% | 42.3\% | 46.9\% |
| Top 10\% | 20.7\% | 2.2\% |  |  | 2.5\% | 1.1\% | 19.9\% | 19.9\% | 29.0\% | 31.0\% |
| Top 1\% | 32.8\% | 5.4\% |  |  | 3.5\% | 1.9\% | 5.6\% | 5.5\% | 11.5\% | 15.1\% |

[^22][^23]Table H4: Taxes evaded in random audits, by wealth bin

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Taxes evaded (\% taxes owed) |  | Taxes evaded (\% true taxable income) |  | Taxes paid (\% of true tax. income) |  | Taxes owed (\% of true tax. income) |  |
|  | All | Deliberate only | All | Deliberate only | All | Deliberate only | All | Deliberate only |
| P0-10 | 3.6\% | 1.1\% | 1.2\% | 0.4\% | 32.0\% | 32.7\% | 33.2\% | 33.0\% |
| P10-20 | 1.7\% | 0.2\% | 0.5\% | 0.1\% | 30.0\% | 30.4\% | 30.5\% | 30.5\% |
| P20-30 | 1.4\% | 0.5\% | 0.4\% | 0.2\% | 31.6\% | 31.8\% | 32.1\% | 32.0\% |
| P30-40 | 1.4\% | 0.5\% | 0.5\% | 0.2\% | 34.0\% | 34.2\% | 34.5\% | 34.4\% |
| P40-50 | 1.1\% | 0.4\% | 0.4\% | 0.2\% | 35.4\% | 35.6\% | 35.8\% | 35.7\% |
| P50-60 | 1.1\% | 0.5\% | 0.4\% | 0.2\% | 36.0\% | 36.2\% | 36.4\% | 36.4\% |
| P60-70 | 2.0\% | 0.9\% | 0.7\% | 0.4\% | 36.5\% | 36.8\% | 37.2\% | 37.1\% |
| P70-80 | 2.0\% | 0.9\% | 0.7\% | 0.3\% | 37.1\% | 37.4\% | 37.8\% | 37.8\% |
| P80-90 | 2.7\% | 1.3\% | 1.0\% | 0.5\% | 37.3\% | 37.8\% | 38.4\% | 38.2\% |
| P90-95 | 1.8\% | 0.8\% | 0.7\% | 0.3\% | 38.2\% | 38.5\% | 38.9\% | 38.8\% |
| P95-99 | 3.2\% | 1.2\% | 1.4\% | 0.5\% | 41.2\% | 41.9\% | 42.6\% | 42.4\% |
| P99-99.5 | 4.2\% | 2.2\% | 2.1\% | 1.1\% | 47.1\% | 48.0\% | 49.2\% | 49.1\% |
| P99.5-100 | 3.7\% | 2.1\% | 1.9\% | 1.1\% | 50.4\% | 51.1\% | 52.3\% | 52.2\% |
| All | 2.15\% | 0.92\% | 0.80\% | 0.34\% | 36.6\% | 37.0\% | 37.4\% | 37.3\% |
| Bottom 50\% | 1.8\% | 0.6\% | 0.6\% | 0.2\% | 33.0\% | 33.3\% | 33.6\% | 33.5\% |
| Middle 40\% | 2.0\% | 0.9\% | 0.7\% | 0.4\% | 36.8\% | 37.1\% | 37.5\% | 37.5\% |
| Top 10\% | 3.0\% | 1.4\% | 1.3\% | 0.6\% | 42.5\% | 43.0\% | 43.8\% | 43.6\% |
| Top 1\% | 3.8\% | 2.1\% | 2.0\% | 1.1\% | 49.5\% | 50.3\% | 51.5\% | 51.4\% |

[^24]Table H.5: Comparison of tax evasion in US vs. Danish random audits (unreported income, \% of true income)

|  | US | Denmark <br> (all) | Denmark <br> (deliberate only) |
| :--- | :---: | :---: | :---: |
| P0-10 | $-1 \%$ | $2.8 \%$ | $0.9 \%$ |
| P10-20 | $4 \%$ | $1.4 \%$ | $0.2 \%$ |
| P20-30 | $5 \%$ | $1.0 \%$ | $0.4 \%$ |
| P30-40 | $5 \%$ | $1.1 \%$ | $0.4 \%$ |
| P40-50 | $6 \%$ | $0.9 \%$ | $0.3 \%$ |
| P50-60 | $7 \%$ | $0.9 \%$ | $0.4 \%$ |
| P60-70 | $7 \%$ | $1.6 \%$ | $0.8 \%$ |
| P70-80 | $8 \%$ | $1.6 \%$ | $0.7 \%$ |
| P80-90 | $8 \%$ | $2.1 \%$ | $1.0 \%$ |
| P90-95 | $11 \%$ | $1.4 \%$ | $0.6 \%$ |
| P95-99 | $18 \%$ | $2.7 \%$ | $1.0 \%$ |
| P99-99.5 | $19 \%$ | $3.7 \%$ | $2.0 \%$ |
| P99.5-100 | $15 \%$ | $3.4 \%$ | $1.9 \%$ |
| All | $11 \%$ | $1.8 \%$ | $0.8 \%$ |

Notes: US data from Johns and Slemrod (2010), Table 2, using 2001, NRP, ranking taxpayers by estimated true AGI
Overall evasion level about six higher in US, due to the facts that:

1) In the US, IRS applies a DCE multiplies of about 3,
2) Self-employment income / GDP ratio twice higher in the US

Table J.1: Wealth hidden, by wealth bin (2006)

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth hidden (\% of true wealth) |  |  |  | Distribution of true (hidden + non-hidden) wealth (\% of total household wealth) |  |  |  | Distribution of hidden wealth (\% of total hidden wealth) |  |  | Memo: <br> Assumed fraction of offshore wealth hidden | Memo: <br> Disclosed | Memo: HSBC wealth |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty |  | (million US\$) | (million US\$) |
| P0-10 | -0.1\% | -0.3\% | -0.1\% | -0.1\% | -2.7\% | -1.3\% | -5.9\% | -1.9\% | 0.2\% | 0.1\% | 0.3\% | 90\% | 7 | 1 |
| P10-20 | 0.0\% | 0.2\% | 0.0\% | -0.6\% | 0.0\% | 0.1\% | -0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90\% | 0 | 0 |
| P20-30 | 0.0\% | 0.0\% | 0.3\% | 0.0\% | 0.6\% | 0.8\% | 0.1\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 90\% | 1 | 0 |
| P30-40 | 0.0\% | 0.0\% | 0.1\% | 0.0\% | 1.7\% | 1.8\% | 0.8\% | 1.3\% | 0.0\% | 0.0\% | 0.1\% | 90\% | 1 | 0 |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 3.3\% | 3.1\% | 2.7\% | 0.1\% | 0.0\% | 0.1\% | 90\% | 2 | 0 |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 5.1\% | 6.5\% | 4.7\% | 0.1\% | 0.1\% | 0.1\% | 90\% | 3 | 1 |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 7.6\% | 10.2\% | 7.4\% | 0.2\% | 0.1\% | 0.2\% | 90\% | 6 | 1 |
| P70-80 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 11.9\% | 11.2\% | 14.6\% | 11.3\% | 0.4\% | 0.3\% | 0.5\% | 90\% | 11 | 3 |
| P80-90 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 17.9\% | 17.4\% | 20.6\% | 18.0\% | 0.6\% | 0.4\% | 0.7\% | 90\% | 18 | 4 |
| P90-95 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 13.4\% | 13.5\% | 14.3\% | 13.9\% | 1.0\% | 1.1\% | 0.8\% | 90\% | 20 | 11 |
| P95-99 | 0.3\% | 0.4\% | 0.4\% | 0.1\% | 17.8\% | 18.3\% | 17.2\% | 18.7\% | 3.8\% | 3.5\% | 4.2\% | 90\% | 99 | 35 |
| P99-99.5 | 1.1\% | 1.4\% | 1.7\% | 0.5\% | 4.3\% | 4.4\% | 3.7\% | 4.8\% | 3.5\% | 3.0\% | 4.0\% | 90\% | 94 | 30 |
| P99.5-99.9 | 2.7\% | 3.5\% | 4.2\% | 1.2\% | 6.9\% | 6.5\% | 5.5\% | 7.6\% | 13.2\% | 14.3\% | 12.1\% | 90\% | 286 | 144 |
| P99.9-P99.95 | 4.5\% | 5.9\% | 6.9\% | 2.1\% | 2.1\% | 2.0\% | 1.7\% | 2.3\% | 6.7\% | 6.7\% | 6.6\% | 90\% | 157 | 68 |
| P99.95-P99.99 | 7.4\% | 9.9\% | 10.8\% | 3.5\% | 3.5\% | 3.2\% | 3.0\% | 3.7\% | 18.6\% | 14.9\% | 22.3\% | 90\% | 527 | 151 |
| P99.99-P100 | 12.1\% | 14.7\% | 16.7\% | 7.5\% | 5.9\% | 6.1\% | 5.4\% | 4.8\% | 51.6\% | 55.3\% | 47.8\% | 90\% | 1,127 | 558 |
| All | 1.4\% | 1.7\% | 1.7\% | 0.7\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 90\% | 2,359 | 1,008 |
| Bottom 50\% | 0.2\% | 0.1\% | -0.2\% | 0.1\% | 2.9\% | 4.7\% | -2.6\% | 2.7\% | 0.3\% | 0.2\% | 0.5\% | 90\% |  |  |
| Middle 40\% | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 43.2\% | 41.4\% | 51.9\% | 41.4\% | 1.2\% | 0.9\% | 1.6\% | 90\% |  |  |
| Top 10\% | 2.6\% | 3.2\% | 3.4\% | 1.2\% | 53.9\% | 53.9\% | 50.7\% | 55.9\% | 98.4\% | 98.9\% | 97.9\% | 90\% |  |  |
| Top 1\% | 5.8\% | 7.3\% | 8.5\% | 2.8\% | 22.8\% | 22.2\% | 19.3\% | 23.3\% | 93.6\% | 94.3\% | 92.9\% | 90\% |  |  |
| Top 0.1\% | 9.3\% | 11.8\% | 13.3\% | 5.0\% | 11.6\% | 11.3\% | 10.1\% | 10.9\% | 76.9\% | 77.0\% | 76.8\% | 90\% |  |  |
| Top 0.01\% | 12.1\% | 14.7\% | 16.7\% | 7.5\% | 5.9\% | 6.1\% | 5.4\% | 4.8\% | 51.6\% | 55.3\% | 47.8\% | 90\% |  |  |

[^25] group in each Scandinavian country.

Table J.1b: Wealth hidden, by wealth bin (2006) - assuming no heterogeneity in macro hidden wealth across Scandinavian countries

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth hidden (\% of true wealth) |  |  |  | Distribution of true (hidden + non-hidden) wealth (\% of total household wealth) |  |  |  | Distribution of hidden wealth (\% of total hidden wealth) |  |  | Assumed fraction of offshore |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty | wealth hidden |
| P0-10 | -0.1\% | -0.2\% | 0.0\% | -0.2\% | -2.7\% | -1.3\% | -5.9\% | -1.8\% | 0.2\% | 0.1\% | 0.3\% | 90\% |
| P10-20 | 0.0\% | 0.1\% | 0.0\% | -1.2\% | 0.0\% | 0.1\% | -0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| P20-30 | 0.0\% | 0.0\% | 0.3\% | 0.1\% | 0.6\% | 0.8\% | 0.1\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 1.8\% | 0.8\% | 1.3\% | 0.0\% | 0.0\% | 0.1\% | 90\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 3.3\% | 3.1\% | 2.7\% | 0.1\% | 0.0\% | 0.1\% | 90\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 5.2\% | 6.5\% | 4.7\% | 0.1\% | 0.1\% | 0.1\% | 90\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 7.6\% | 10.3\% | 7.3\% | 0.2\% | 0.1\% | 0.2\% | 90\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.9\% | 11.3\% | 14.6\% | 11.2\% | 0.4\% | 0.3\% | 0.5\% | 90\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.9\% | 17.5\% | 20.7\% | 17.9\% | 0.6\% | 0.4\% | 0.7\% | 90\% |
| P90-95 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 13.4\% | 13.5\% | 14.3\% | 13.8\% | 1.0\% | 1.1\% | 0.8\% | 90\% |
| P95-99 | 0.3\% | 0.3\% | 0.3\% | 0.3\% | 17.8\% | 18.3\% | 17.2\% | 18.6\% | 3.8\% | 3.5\% | 4.2\% | 90\% |
| P99-99.5 | 1.1\% | 1.1\% | 1.3\% | 1.0\% | 4.3\% | 4.4\% | 3.7\% | 4.8\% | 3.5\% | 3.0\% | 4.0\% | 90\% |
| P99.5-99.9 | 2.7\% | 2.8\% | 3.4\% | 2.4\% | 6.9\% | 6.5\% | 5.4\% | 7.7\% | 13.2\% | 14.3\% | 12.1\% | 90\% |
| P99.9-P99.95 | 4.5\% | 4.8\% | 5.6\% | 4.1\% | 2.1\% | 1.9\% | 1.7\% | 2.3\% | 6.7\% | 6.7\% | 6.6\% | 90\% |
| P99.95-P99.99 | 7.4\% | 8.2\% | 8.8\% | 6.8\% | 3.5\% | 3.2\% | 3.0\% | 3.8\% | 18.6\% | 14.9\% | 22.3\% | 90\% |
| P99.99-P100 | 12.1\% | 12.2\% | 13.7\% | 13.9\% | 5.9\% | 5.9\% | 5.2\% | 5.2\% | 51.6\% | 55.3\% | 47.8\% | 90\% |
| All | 1.4\% | 1.4\% | 1.4\% | 1.4\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 90\% |
| Bottom 50\% | 0.2\% | 0.1\% | -0.2\% | 0.2\% | 2.9\% | 4.7\% | -2.6\% | 2.7\% | 0.3\% | 0.2\% | 0.5\% | 90\% |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.2\% | 41.5\% | 52.1\% | 41.1\% | 1.2\% | 0.9\% | 1.6\% | 90\% |
| Top 10\% | 2.6\% | 2.6\% | 2.7\% | 2.4\% | 53.9\% | 53.8\% | 50.5\% | 56.2\% | 98.4\% | 98.9\% | 97.9\% | 90\% |
| Top 1\% | 5.8\% | 6.0\% | 6.9\% | 5.5\% | 22.8\% | 21.9\% | 19.0\% | 23.8\% | 93.6\% | 94.3\% | 92.9\% | 90\% |
| Top 0.1\% | 9.3\% | 9.7\% | 10.9\% | 9.5\% | 11.6\% | 11.1\% | 9.9\% | 11.3\% | 76.9\% | 77.0\% | 76.8\% | 90\% |
| Top 0.01\% | 12.1\% | 12.2\% | 13.7\% | 13.9\% | 5.9\% | 5.9\% | 5.2\% | 5.2\% | 51.6\% | 55.3\% | 47.8\% | 90\% |

Note: this table assumes that each Scandinavian country hides in total the same fraction of its wealth as Scandinavia as a whole. We then apply this estimate to the country-specific distributions of non-hidden wealth in 2006 to compute the implied fraction of wealth hidden by each group of the wealth distribution in each country.

Table J.1c: Wealth hidden, by wealth bin (2006) - assuming no hidden wealth in the tax havens other than Switzerland

| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wealth hidden (\% of true wealth) |  |  |  | Distribution of true (hidden + non-hidden) wealth (\% of total household wealth) |  |  |  | Distribution of hidden wealth (\% of total hidden wealth) |  |  | Assumed fraction of offshore |
| Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty | wealth hidden |
| 0.0\% | -0.1\% | 0.0\% | 0.0\% | -2.8\% | -1.3\% | -6.0\% | -1.9\% | 0.2\% | 0.1\% | 0.3\% | 90\% |
| 0.0\% | 0.1\% | 0.0\% | -0.3\% | 0.0\% | 0.1\% | -0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| 0.0\% | 0.0\% | 0.1\% | 0.0\% | 0.6\% | 0.8\% | 0.1\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 1.8\% | 0.8\% | 1.4\% | 0.0\% | 0.0\% | 0.1\% | 90\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 3.4\% | 3.1\% | 2.7\% | 0.1\% | 0.0\% | 0.1\% | 90\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 5.2\% | 6.6\% | 4.7\% | 0.1\% | 0.1\% | 0.1\% | 90\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 7.7\% | 10.3\% | 7.4\% | 0.2\% | 0.1\% | 0.2\% | 90\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 12.0\% | 11.3\% | 14.7\% | 11.4\% | 0.4\% | 0.3\% | 0.5\% | 90\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 18.1\% | 17.6\% | 20.8\% | 18.1\% | 0.6\% | 0.4\% | 0.7\% | 90\% |
| 0.0\% | 0.1\% | 0.0\% | 0.0\% | 13.5\% | 13.6\% | 14.5\% | 14.0\% | 1.0\% | 1.1\% | 0.8\% | 90\% |
| 0.1\% | 0.2\% | 0.1\% | 0.1\% | 17.9\% | 18.4\% | 17.3\% | 18.7\% | 3.8\% | 3.5\% | 4.2\% | 90\% |
| 0.5\% | 0.6\% | 0.5\% | 0.3\% | 4.3\% | 4.4\% | 3.7\% | 4.8\% | 3.5\% | 3.0\% | 4.0\% | 90\% |
| 1.2\% | 1.6\% | 1.3\% | 0.7\% | 6.8\% | 6.5\% | 5.4\% | 7.6\% | 13.2\% | 14.3\% | 12.1\% | 90\% |
| 2.0\% | 2.8\% | 2.2\% | 1.1\% | 2.0\% | 1.9\% | 1.6\% | 2.3\% | 6.7\% | 6.7\% | 6.6\% | 90\% |
| 3.3\% | 4.8\% | 3.5\% | 1.9\% | 3.4\% | 3.1\% | 2.8\% | 3.7\% | 18.6\% | 14.9\% | 22.3\% | 90\% |
| 5.6\% | 7.3\% | 5.7\% | 4.1\% | 5.6\% | 5.6\% | 4.8\% | 4.7\% | 51.6\% | 55.3\% | 47.8\% | 90\% |
| 0.6\% | 0.8\% | 0.5\% | 0.4\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 90\% |
| 0.1\% | 0.1\% | -0.1\% | 0.0\% | 2.9\% | 4.8\% | -2.6\% | 2.7\% | 0.3\% | 0.2\% | 0.5\% | 90\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.6\% | 41.7\% | 52.5\% | 41.6\% | 1.2\% | 0.9\% | 1.6\% | 90\% |
| 1.1\% | 1.5\% | 1.0\% | 0.7\% | 53.6\% | 53.5\% | 50.1\% | 55.8\% | 98.4\% | 98.9\% | 97.9\% | 90\% |
| 2.5\% | 3.5\% | 2.7\% | 1.5\% | 22.2\% | 21.5\% | 18.3\% | 23.1\% | 93.6\% | 94.3\% | 92.9\% | 90\% |
| 4.2\% | 5.7\% | 4.4\% | 2.7\% | 11.0\% | 10.7\% | 9.3\% | 10.6\% | 76.9\% | 77.0\% | 76.8\% | 90\% |
| 5.6\% | 7.3\% | 5.7\% | 4.1\% | 5.6\% | 5.6\% | 4.8\% | 4.7\% | 51.6\% | 55.3\% | 47.8\% | 90\% |

Note: this table assumes that Scandinavian countries have 0 wealth hidden in the tax havens other than Switzerland. We then combine the amount of wealth hidden in Switzerland with the country-specific distributions of non-hidden wealth in 2006 to compute the implied lower bound fraction of wealth hidden by each group of the wealth distribution in each Scandinavian country.

Table J.1d: Wealth hidden, by wealth bin (2006) - assuming same macro hidden wealth as world average

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth hidden (\% of true wealth) |  |  |  | Distribution of true (hidden + non-hidden) wealth (\% of total household wealth) |  |  |  | Distribution of hidden wealth (\% of total hidden wealth) |  |  | Assumed fraction of offshore |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty | wealth hidden |
| P0-10 | -0.2\% | -0.5\% | -0.1\% | -0.3\% | -2.7\% | -1.3\% | -5.8\% | -1.8\% | 0.2\% | 0.1\% | 0.3\% | 90\% |
| P10-20 | -0.1\% | 0.3\% | -0.1\% | -2.6\% | 0.0\% | 0.1\% | -0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| P20-30 | 0.1\% | 0.1\% | 0.5\% | 0.1\% | 0.6\% | 0.7\% | 0.1\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| P30-40 | 0.1\% | 0.0\% | 0.1\% | 0.1\% | 1.6\% | 1.8\% | 0.8\% | 1.3\% | 0.0\% | 0.0\% | 0.1\% | 90\% |
| P40-50 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 3.2\% | 3.3\% | 3.0\% | 2.7\% | 0.1\% | 0.0\% | 0.1\% | 90\% |
| P50-60 | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 5.3\% | 5.1\% | 6.4\% | 4.6\% | 0.1\% | 0.1\% | 0.1\% | 90\% |
| P60-70 | 0.1\% | 0.1\% | 0.0\% | 0.1\% | 7.9\% | 7.5\% | 10.1\% | 7.2\% | 0.2\% | 0.1\% | 0.2\% | 90\% |
| P70-80 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 11.7\% | 11.1\% | 14.4\% | 11.1\% | 0.4\% | 0.3\% | 0.5\% | 90\% |
| P80-90 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 17.7\% | 17.2\% | 20.4\% | 17.6\% | 0.6\% | 0.4\% | 0.7\% | 90\% |
| P90-95 | 0.2\% | 0.2\% | 0.2\% | 0.2\% | 13.2\% | 13.3\% | 14.1\% | 13.6\% | 1.0\% | 1.1\% | 0.8\% | 90\% |
| P95-99 | 0.6\% | 0.6\% | 0.7\% | 0.6\% | 17.5\% | 18.1\% | 17.0\% | 18.4\% | 3.8\% | 3.5\% | 4.2\% | 90\% |
| P99-99.5 | 2.4\% | 2.3\% | 2.8\% | 2.1\% | 4.3\% | 4.4\% | 3.7\% | 4.8\% | 3.5\% | 3.0\% | 4.0\% | 90\% |
| P99.5-99.9 | 5.6\% | 5.9\% | 7.0\% | 5.0\% | 7.0\% | 6.6\% | 5.6\% | 7.8\% | 13.2\% | 14.3\% | 12.1\% | 90\% |
| P99.9-P99.95 | 9.1\% | 9.7\% | 11.3\% | 8.3\% | 2.2\% | 2.0\% | 1.7\% | 2.4\% | 6.7\% | 6.7\% | 6.6\% | 90\% |
| P99.95-P99.99 | 14.5\% | 15.9\% | 17.0\% | 13.4\% | 3.8\% | 3.4\% | 3.2\% | 4.1\% | 18.6\% | 14.9\% | 22.3\% | 90\% |
| P99.99-P100 | 22.8\% | 22.8\% | 25.3\% | 25.7\% | 6.6\% | 6.6\% | 6.0\% | 5.9\% | 51.6\% | 55.3\% | 47.8\% | 90\% |
| All | 2.9\% | 2.9\% | 2.9\% | 2.9\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 90\% |
| Bottom 50\% | 0.3\% | 0.2\% | -0.4\% | 0.4\% | 2.8\% | 4.7\% | -2.5\% | 2.6\% | 0.3\% | 0.2\% | 0.5\% | 90\% |
| Middle 40\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 42.6\% | 40.9\% | 51.3\% | 40.5\% | 1.2\% | 0.9\% | 1.6\% | 90\% |
| Top 10\% | 5.3\% | 5.3\% | 5.6\% | 5.1\% | 54.6\% | 54.5\% | 51.3\% | 56.9\% | 98.4\% | 98.9\% | 97.9\% | 90\% |
| Top 1\% | 11.5\% | 11.9\% | 13.6\% | 11.0\% | 23.9\% | 23.1\% | 20.2\% | 24.9\% | 93.6\% | 94.3\% | 92.9\% | 90\% |
| Top 0.1\% | 17.9\% | 18.7\% | 20.6\% | 18.3\% | 12.6\% | 12.1\% | 10.9\% | 12.3\% | 76.9\% | 77.0\% | 76.8\% | 90\% |
| Top 0.01\% | 22.8\% | 22.8\% | 25.3\% | 25.7\% | 6.6\% | 6.6\% | 6.0\% | 5.9\% | 51.6\% | 55.3\% | 47.8\% | 90\% |

[^26] 2006 to compute the implied fraction of wealth hidden by each group of the wealth distribution in each Scandinavian country.

Table J.1e: Wealth hidden, by wealth bin -- based on matched HSBC wealth and HSBC global market share only

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wealth hidden (\% of true wealth) |  |  |  | Distribution of true (hidden + non-hidden) wealth (\% of total household wealth) |  |  |  | Distribution of hidden wealth (\% of total hidden wealth) |  |  | Assumed fraction of offshore |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty | wealth hidden |
| P0-10 | -0.1\% | -0.1\% | 0.0\% | -0.1\% | -2.7\% | -1.3\% | -5.9\% | -1.9\% | 0.2\% | 0.1\% | 0.3\% | 90\% |
| P10-20 | 0.0\% | 0.1\% | 0.0\% | -0.3\% | 0.0\% | 0.1\% | -0.7\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| P20-30 | 0.0\% | 0.0\% | 0.2\% | 0.0\% | 0.6\% | 0.8\% | 0.1\% | 0.5\% | 0.0\% | 0.0\% | 0.0\% | 90\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.7\% | 1.8\% | 0.8\% | 1.3\% | 0.0\% | 0.0\% | 0.1\% | 90\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.3\% | 3.3\% | 3.1\% | 2.7\% | 0.1\% | 0.0\% | 0.1\% | 90\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.4\% | 5.1\% | 6.5\% | 4.7\% | 0.1\% | 0.1\% | 0.1\% | 90\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.1\% | 7.6\% | 10.2\% | 7.4\% | 0.2\% | 0.1\% | 0.2\% | 90\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 11.2\% | 14.5\% | 11.3\% | 0.4\% | 0.3\% | 0.5\% | 90\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 17.9\% | 17.4\% | 20.5\% | 18.0\% | 0.6\% | 0.4\% | 0.7\% | 90\% |
| P90-95 | 0.1\% | 0.1\% | 0.2\% | 0.1\% | 13.4\% | 13.5\% | 14.2\% | 13.9\% | 1.0\% | 1.1\% | 0.8\% | 90\% |
| P95-99 | 0.3\% | 0.3\% | 0.4\% | 0.2\% | 17.7\% | 18.3\% | 17.1\% | 18.7\% | 3.8\% | 3.5\% | 4.2\% | 90\% |
| P99-99.5 | 1.0\% | 1.1\% | 1.8\% | 0.6\% | 4.3\% | 4.4\% | 3.7\% | 4.8\% | 3.5\% | 3.0\% | 4.0\% | 90\% |
| P99.5-99.9 | 3.1\% | 3.5\% | 5.6\% | 1.7\% | 6.9\% | 6.6\% | 5.5\% | 7.7\% | 13.2\% | 14.3\% | 12.1\% | 90\% |
| P99.9-P99.95 | 4.8\% | 5.5\% | 8.5\% | 2.6\% | 2.1\% | 2.0\% | 1.7\% | 2.3\% | 6.7\% | 6.7\% | 6.6\% | 90\% |
| P99.95-P99.99 | 6.3\% | 7.5\% | 10.7\% | 3.6\% | 3.5\% | 3.2\% | 3.0\% | 3.7\% | 18.6\% | 14.9\% | 22.3\% | 90\% |
| P99.99-P100 | 13.6\% | 14.5\% | 21.0\% | 10.0\% | 6.0\% | 6.1\% | 5.7\% | 5.0\% | 51.6\% | 55.3\% | 47.8\% | 90\% |
| All | 1.5\% | 1.6\% | 2.2\% | 0.9\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 90\% |
| Bottom 50\% | 0.1\% | 0.1\% | -0.1\% | 0.1\% | 2.8\% | 4.7\% | -2.6\% | 2.7\% | 0.3\% | 0.2\% | 0.5\% | 90\% |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 43.2\% | 41.4\% | 51.7\% | 41.3\% | 1.2\% | 0.9\% | 1.6\% | 90\% |
| Top 10\% | 2.7\% | 2.9\% | 4.2\% | 1.6\% | 54.0\% | 53.9\% | 50.9\% | 56.0\% | 98.4\% | 98.9\% | 97.9\% | 90\% |
| Top 1\% | 6.2\% | 6.8\% | 10.4\% | 3.6\% | 22.8\% | 22.1\% | 19.6\% | 23.4\% | 93.6\% | 94.3\% | 92.9\% | 90\% |
| Top 0.1\% | 9.9\% | 11.0\% | 15.9\% | 6.3\% | 11.6\% | 11.2\% | 10.4\% | 11.0\% | 76.9\% | 77.0\% | 76.8\% | 90\% |
| Top 0.01\% | 13.6\% | 14.5\% | 21.0\% | 10.0\% | 6.0\% | 6.1\% | 5.7\% | 5.0\% | 51.6\% | 55.3\% | 47.8\% | 90\% |

Note: this table blows up the wealth hidden at HSBC by 47.5 to estimate the total offshore wealth of Scandinavian countries.

# Table J.2: Income hidden, by wealth bin (2006) 

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Income hidden (\% of true taxable income) |  |  |  | Share of true (hidden + non-hidden) taxable inc. (\% of total taxable income) |  |  |  | Share of hidden income of total hidden income) |  |  | Assumed rate of return |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty |  |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 4.8\% | 9.8\% | 6.6\% | 0.2\% | 0.1\% | 0.3\% | 4.5\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 3.4\% | 5.4\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 6.6\% | 3.5\% | 6.5\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 8.2\% | 6.7\% | 8.0\% | 0.0\% | 0.0\% | 0.1\% | 4.5\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 8.0\% | 8.7\% | 8.9\% | 0.1\% | 0.0\% | 0.1\% | 4.5\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 8.8\% | 9.6\% | 9.7\% | 0.1\% | 0.1\% | 0.1\% | 4.5\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 10.1\% | 10.4\% | 10.8\% | 0.2\% | 0.1\% | 0.2\% | 4.5\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.7\% | 11.5\% | 11.8\% | 11.8\% | 0.4\% | 0.3\% | 0.5\% | 4.5\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% | 13.6\% | 13.7\% | 12.8\% | 0.6\% | 0.4\% | 0.7\% | 4.5\% |
| P90-95 | 0.0\% | 0.1\% | 0.0\% | 0.0\% | 8.3\% | 8.6\% | 8.0\% | 7.0\% | 1.0\% | 1.1\% | 0.8\% | 4.5\% |
| P95-99 | 0.2\% | 0.2\% | 0.1\% | 0.1\% | 8.0\% | 9.7\% | 8.1\% | 7.3\% | 3.8\% | 3.5\% | 4.2\% | 4.5\% |
| P99-99.5 | 0.7\% | 0.8\% | 0.7\% | 0.5\% | 1.8\% | 1.9\% | 1.5\% | 1.5\% | 3.5\% | 3.0\% | 4.0\% | 4.5\% |
| P99.5-99.9 | 2.3\% | 2.4\% | 2.4\% | 1.5\% | 2.0\% | 2.5\% | 1.7\% | 2.0\% | 13.2\% | 14.3\% | 12.1\% | 4.5\% |
| P99.9-P99.95 | 4.7\% | 5.4\% | 5.8\% | 3.0\% | 0.5\% | 0.6\% | 0.3\% | 0.5\% | 6.7\% | 6.7\% | 6.6\% | 4.5\% |
| P99.95-P99.99 | 9.1\% | 9.9\% | 13.8\% | 5.5\% | 0.7\% | 0.9\% | 0.4\% | 0.7\% | 18.6\% | 14.9\% | 22.3\% | 4.5\% |
| P99.99-P100 | 22.0\% | 23.7\% | 39.7\% | 11.7\% | 0.8\% | 1.0\% | 0.4\% | 1.0\% | 51.6\% | 55.3\% | 47.8\% | 4.5\% |
| All | 0.35\% | 0.46\% | 0.30\% | 0.22\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 4.5\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.0\% | 30.9\% | 34.1\% | 34.8\% | 0.3\% | 0.2\% | 0.5\% |  |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 44.9\% | 43.9\% | 45.6\% | 45.2\% | 1.2\% | 0.9\% | 1.6\% |  |
| Top 10\% | 1.5\% | 1.8\% | 1.4\% | 1.1\% | 22.1\% | 25.1\% | 20.3\% | 20.0\% | 98.4\% | 98.9\% | 97.9\% |  |
| Top 1\% | 5.5\% | 6.3\% | 6.6\% | 3.7\% | 5.8\% | 6.8\% | 4.3\% | 5.7\% | 93.6\% | 94.3\% | 92.9\% |  |
| Top 0.1\% | 13.3\% | 14.5\% | 20.2\% | 7.7\% | 2.0\% | 2.4\% | 1.1\% | 2.2\% | 76.9\% | 77.0\% | 76.8\% |  |
| Top 0.01\% | 22.0\% | 23.7\% | 39.7\% | 11.7\% | 0.8\% | 1.0\% | 0.4\% | 1.0\% | 51.6\% | 55.3\% | 47.8\% |  |

[^27]Table J.2b: Income hidden, by wealth bin (2006) - assuming no heterogeneity in macro hidden wealth across Scandinavian countries

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Income hidden (\% of true taxable income) |  |  |  | Distribution of true (hidden + non-hidden) taxable inc. (\% of total taxable income) |  |  |  | Distribution of hidden income (\% of total hidden income) |  |  | Assumed rate of |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty | return |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 4.8\% | 9.8\% | 6.6\% | 0.2\% | 0.1\% | 0.3\% | 4.5\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 3.4\% | 5.4\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 6.6\% | 3.5\% | 6.5\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 8.2\% | 6.7\% | 8.0\% | 0.0\% | 0.0\% | 0.1\% | 4.5\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 8.0\% | 8.7\% | 8.8\% | 0.1\% | 0.0\% | 0.1\% | 4.5\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 8.8\% | 9.6\% | 9.7\% | 0.1\% | 0.1\% | 0.1\% | 4.5\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 10.1\% | 10.4\% | 10.8\% | 0.2\% | 0.1\% | 0.2\% | 4.5\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.7\% | 11.5\% | 11.8\% | 11.8\% | 0.4\% | 0.3\% | 0.5\% | 4.5\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% | 13.6\% | 13.7\% | 12.8\% | 0.6\% | 0.4\% | 0.7\% | 4.5\% |
| P90-95 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 8.6\% | 8.0\% | 7.0\% | 1.0\% | 1.1\% | 0.8\% | 4.5\% |
| P95-99 | 0.2\% | 0.1\% | 0.2\% | 0.2\% | 8.0\% | 9.7\% | 8.1\% | 7.3\% | 3.8\% | 3.5\% | 4.2\% | 4.5\% |
| P99-99.5 | 0.7\% | 0.6\% | 0.8\% | 0.8\% | 1.8\% | 1.9\% | 1.5\% | 1.5\% | 3.5\% | 3.0\% | 4.0\% | 4.5\% |
| P99.5-99.9 | 2.3\% | 1.8\% | 2.7\% | 2.3\% | 2.0\% | 2.5\% | 1.7\% | 2.0\% | 13.2\% | 14.3\% | 12.1\% | 4.5\% |
| P99.9-P99.95 | 4.7\% | 4.1\% | 6.7\% | 4.6\% | 0.5\% | 0.6\% | 0.3\% | 0.5\% | 6.7\% | 6.7\% | 6.6\% | 4.5\% |
| P99.95-P99.99 | 9.1\% | 7.7\% | 15.6\% | 8.4\% | 0.7\% | 0.8\% | 0.4\% | 0.8\% | 18.6\% | 14.9\% | 22.3\% | 4.5\% |
| P99.99-P100 | 22.0\% | 19.0\% | 43.2\% | 17.1\% | 0.8\% | 0.9\% | 0.4\% | 1.0\% | 51.6\% | 55.3\% | 47.8\% | 4.5\% |
| All | 0.35\% | 0.35\% | 0.35\% | 0.35\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 4.5\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.0\% | 31.0\% | 34.1\% | 34.8\% | 0.3\% | 0.2\% | 0.5\% |  |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 44.9\% | 44.0\% | 45.5\% | 45.2\% | 1.2\% | 0.9\% | 1.6\% |  |
| Top 10\% | 1.5\% | 1.4\% | 1.7\% | 1.7\% | 22.1\% | 25.1\% | 20.4\% | 20.1\% | 98.4\% | 98.9\% | 97.9\% |  |
| Top 1\% | 5.5\% | 4.8\% | 7.5\% | 5.6\% | 5.8\% | 6.7\% | 4.3\% | 5.8\% | 93.6\% | 94.3\% | 92.9\% |  |
| Top 0.1\% | 13.3\% | 11.4\% | 22.7\% | 11.5\% | 2.0\% | 2.3\% | 1.2\% | 2.3\% | 76.9\% | 77.0\% | 76.8\% |  |
| Top 0.01\% | 22.0\% | 19.0\% | 43.2\% | 17.1\% | 0.8\% | 0.9\% | 0.4\% | 1.0\% | 51.6\% | 55.3\% | 47.8\% |  |

[^28]Table J.2c: Income hidden, by wealth bin (2006) - assuming no hidden wealth in the tax havens other than Switzerland

| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Income hidden (\% of true taxable income) |  |  |  | Distribution of true (hidden + non-hidden) taxable inc. (\% of total taxable income) |  |  |  | Distribution of hidden income (\% of total hidden income) |  |  | Assumed rate of |
| Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty |  |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.4\% | 4.8\% | 9.8\% | 6.6\% | 0.2\% | 0.1\% | 0.3\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 3.4\% | 5.4\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 6.6\% | 3.5\% | 6.5\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.8\% | 8.2\% | 6.7\% | 8.0\% | 0.0\% | 0.0\% | 0.1\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.4\% | 8.0\% | 8.7\% | 8.9\% | 0.1\% | 0.0\% | 0.1\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 8.8\% | 9.6\% | 9.8\% | 0.1\% | 0.1\% | 0.1\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 10.1\% | 10.5\% | 10.8\% | 0.2\% | 0.1\% | 0.2\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.8\% | 11.5\% | 11.8\% | 11.9\% | 0.4\% | 0.3\% | 0.5\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.9\% | 13.6\% | 13.7\% | 12.8\% | 0.6\% | 0.4\% | 0.7\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 8.6\% | 8.0\% | 7.0\% | 1.0\% | 1.1\% | 0.8\% | 4.5\% |
| 0.1\% | 0.1\% | 0.0\% | 0.1\% | 8.0\% | 9.7\% | 8.1\% | 7.3\% | 3.8\% | 3.5\% | 4.2\% | 4.5\% |
| 0.3\% | 0.4\% | 0.2\% | 0.3\% | 1.8\% | 1.9\% | 1.4\% | 1.5\% | 3.5\% | 3.0\% | 4.0\% | 4.5\% |
| 1.0\% | 1.1\% | 0.7\% | 0.8\% | 2.0\% | 2.5\% | 1.7\% | 1.9\% | 13.2\% | 14.3\% | 12.1\% | 4.5\% |
| 2.1\% | 2.5\% | 1.8\% | 1.6\% | 0.5\% | 0.6\% | 0.3\% | 0.5\% | 6.7\% | 6.7\% | 6.6\% | 4.5\% |
| 4.1\% | 4.8\% | 4.6\% | 3.0\% | 0.7\% | 0.8\% | 0.4\% | 0.7\% | 18.6\% | 14.9\% | 22.3\% | 4.5\% |
| 10.7\% | 12.4\% | 16.6\% | 6.5\% | 0.7\% | 0.9\% | 0.3\% | 0.9\% | 51.6\% | 55.3\% | 47.8\% | 4.5\% |
| 0.15\% | 0.21\% | 0.09\% | 0.12\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 4.5\% |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.0\% | 31.0\% | 34.2\% | 34.9\% | 0.3\% | 0.2\% | 0.5\% |  |
| 0.0\% | 0.0\% | 0.0\% | 0.0\% | 45.0\% | 44.0\% | 45.6\% | 45.3\% | 1.2\% | 0.9\% | 1.6\% |  |
| 0.7\% | 0.8\% | 0.4\% | 0.6\% | 22.0\% | 25.0\% | 20.2\% | 19.9\% | 98.4\% | 98.9\% | 97.9\% |  |
| 2.4\% | 3.0\% | 2.1\% | 2.0\% | 5.7\% | 6.6\% | 4.1\% | 5.6\% | 93.6\% | 94.3\% | 92.9\% |  |
| 6.1\% | 7.2\% | 7.1\% | 4.2\% | 1.9\% | 2.2\% | 1.0\% | 2.1\% | 76.9\% | 77.0\% | 76.8\% |  |
| 10.7\% | 12.4\% | 16.6\% | 6.5\% | 0.7\% | 0.9\% | 0.3\% | 0.9\% | 51.6\% | 55.3\% | 47.8\% |  |

[^29]Table J.2d: Income hidden, by wealth bin (2006) - assuming same macro hidden wealth as world average

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Income hidden (\% of true taxable income) |  |  |  | Distribution of true (hidden + non-hidden) taxable inc. (\% of total taxable income) |  |  |  | Distribution of hidden income (\% of total hidden income) |  |  | Assumed rate of |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty | return |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 4.8\% | 9.8\% | 6.5\% | 0.2\% | 0.1\% | 0.3\% | 4.5\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.6\% | 3.4\% | 5.4\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 6.5\% | 3.5\% | 6.5\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 8.2\% | 6.6\% | 8.0\% | 0.0\% | 0.0\% | 0.1\% | 4.5\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 8.0\% | 8.7\% | 8.8\% | 0.1\% | 0.0\% | 0.1\% | 4.5\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 8.7\% | 9.6\% | 9.7\% | 0.1\% | 0.1\% | 0.1\% | 4.5\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 10.0\% | 10.4\% | 10.8\% | 0.2\% | 0.1\% | 0.2\% | 4.5\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.7\% | 11.4\% | 11.8\% | 11.8\% | 0.4\% | 0.3\% | 0.5\% | 4.5\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 13.6\% | 13.7\% | 12.7\% | 0.6\% | 0.4\% | 0.7\% | 4.5\% |
| P90-95 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 8.3\% | 8.6\% | 8.0\% | 7.0\% | 1.0\% | 1.1\% | 0.8\% | 4.5\% |
| P95-99 | 0.4\% | 0.3\% | 0.2\% | 0.5\% | 8.0\% | 9.7\% | 8.1\% | 7.3\% | 3.8\% | 3.5\% | 4.2\% | 4.5\% |
| P99-99.5 | 1.4\% | 1.4\% | 1.2\% | 2.2\% | 1.8\% | 1.9\% | 1.5\% | 1.5\% | 3.5\% | 3.0\% | 4.0\% | 4.5\% |
| P99.5-99.9 | 4.8\% | 4.1\% | 3.9\% | 6.1\% | 2.0\% | 2.5\% | 1.7\% | 2.0\% | 13.2\% | 14.3\% | 12.1\% | 4.5\% |
| P99.9-P99.95 | 9.6\% | 8.9\% | 9.5\% | 11.5\% | 0.5\% | 0.6\% | 0.4\% | 0.5\% | 6.7\% | 6.7\% | 6.6\% | 4.5\% |
| P99.95-P99.99 | 17.6\% | 15.9\% | 21.3\% | 19.9\% | 0.8\% | 0.9\% | 0.4\% | 0.9\% | 18.6\% | 14.9\% | 22.3\% | 4.5\% |
| P99.99-P100 | 37.6\% | 34.8\% | 52.8\% | 35.9\% | 1.0\% | 1.2\% | 0.5\% | 1.3\% | 51.6\% | 55.3\% | 47.8\% | 4.5\% |
| All | 0.73\% | 0.78\% | 0.51\% | 0.94\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 4.5\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.8\% | 30.8\% | 34.0\% | 34.6\% | 0.3\% | 0.2\% | 0.5\% |  |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 44.7\% | 43.8\% | 45.5\% | 44.9\% | 1.2\% | 0.9\% | 1.6\% |  |
| Top 10\% | 3.2\% | 3.0\% | 2.4\% | 4.5\% | 22.4\% | 25.4\% | 20.5\% | 20.5\% | 98.4\% | 98.9\% | 97.9\% |  |
| Top 1\% | 11.1\% | 10.3\% | 10.7\% | 13.9\% | 6.2\% | 7.1\% | 4.5\% | 6.3\% | 93.6\% | 94.3\% | 92.9\% |  |
| Top 0.1\% | 24.6\% | 22.5\% | 30.1\% | 26.1\% | 2.3\% | 2.7\% | 1.3\% | 2.8\% | 76.9\% | 77.0\% | 76.8\% |  |
| Top 0.01\% | 37.6\% | 34.8\% | 52.8\% | 35.9\% | 1.0\% | 1.2\% | 0.5\% | 1.3\% | 51.6\% | 55.3\% | 47.8\% |  |

[^30]Table J.2e: Income hidden, by wealth bin (2006) -- based on matched HSBC wealth and HSBC global market share only

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Income hidden (\% of true taxable income) |  |  |  | Share of true (hidden + non-hidden) taxable inc. (\% of total taxable income) |  |  |  | Share of hidden income of total hidden income) |  |  | Assumed rate of return |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Average | HSBC | Amnesty |  |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.3\% | 4.8\% | 9.8\% | 6.6\% | 0.2\% | 0.1\% | 0.3\% | 4.5\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.7\% | 3.4\% | 5.4\% | 4.8\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 5.9\% | 6.6\% | 3.5\% | 6.5\% | 0.0\% | 0.0\% | 0.0\% | 4.5\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 7.7\% | 8.2\% | 6.6\% | 8.0\% | 0.0\% | 0.0\% | 0.1\% | 4.5\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.3\% | 8.0\% | 8.7\% | 8.8\% | 0.1\% | 0.0\% | 0.1\% | 4.5\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 8.8\% | 8.8\% | 9.6\% | 9.7\% | 0.1\% | 0.1\% | 0.1\% | 4.5\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 10.5\% | 10.1\% | 10.4\% | 10.8\% | 0.2\% | 0.1\% | 0.2\% | 4.5\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 11.7\% | 11.5\% | 11.8\% | 11.8\% | 0.4\% | 0.3\% | 0.5\% | 4.5\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 13.8\% | 13.6\% | 13.7\% | 12.8\% | 0.6\% | 0.4\% | 0.7\% | 4.5\% |
| P90-95 | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 8.3\% | 8.6\% | 8.0\% | 7.0\% | 1.0\% | 1.1\% | 0.8\% | 4.5\% |
| P95-99 | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 8.0\% | 9.7\% | 8.1\% | 7.3\% | 3.8\% | 3.5\% | 4.2\% | 4.5\% |
| P99-99.5 | 0.6\% | 0.7\% | 0.8\% | 0.6\% | 1.8\% | 1.9\% | 1.4\% | 1.5\% | 3.5\% | 3.0\% | 4.0\% | 4.5\% |
| P99.5-99.9 | 2.6\% | 2.4\% | 3.1\% | 2.0\% | 2.0\% | 2.5\% | 1.7\% | 2.0\% | 13.2\% | 14.3\% | 12.1\% | 4.5\% |
| P99.9-P99.95 | 5.1\% | 5.0\% | 7.1\% | 3.8\% | 0.5\% | 0.6\% | 0.3\% | 0.5\% | 6.7\% | 6.7\% | 6.6\% | 4.5\% |
| P99.95-P99.99 | 7.9\% | 7.5\% | 13.7\% | 5.6\% | 0.7\% | 0.8\% | 0.4\% | 0.7\% | 18.6\% | 14.9\% | 22.3\% | 4.5\% |
| P99.99-P100 | 24.4\% | 23.5\% | 46.6\% | 15.2\% | 0.8\% | 1.0\% | 0.4\% | 1.0\% | 51.6\% | 55.3\% | 47.8\% | 4.5\% |
| All | 0.37\% | 0.42\% | 0.37\% | 0.28\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 4.5\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 33.0\% | 31.0\% | 34.1\% | 34.8\% | 0.3\% | 0.2\% | 0.5\% |  |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 44.9\% | 43.9\% | 45.5\% | 45.2\% | 1.2\% | 0.9\% | 1.6\% |  |
| Top 10\% | 1.6\% | 1.7\% | 1.8\% | 1.4\% | 22.2\% | 25.1\% | 20.4\% | 20.0\% | 98.4\% | 98.9\% | 97.9\% |  |
| Top 1\% | 5.9\% | 5.8\% | 8.0\% | 4.6\% | 5.9\% | 6.8\% | 4.3\% | 5.7\% | 93.6\% | 94.3\% | 92.9\% |  |
| Top 0.1\% | 14.0\% | 13.5\% | 23.9\% | 9.5\% | 2.0\% | 2.4\% | 1.2\% | 2.3\% | 76.9\% | 77.0\% | 76.8\% |  |
| Top 0.01\% | 24.4\% | 23.5\% | 46.6\% | 15.2\% | 0.8\% | 1.0\% | 0.4\% | 1.0\% | 51.6\% | 55.3\% | 47.8\% |  |


|  | Table J.3: Taxes evaded on hidden wealth, by wealth bin (2006) |  |  |  |  |  |  |  |  |  |  |  | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |  |  |  |  |
|  | Taxes evaded (\% of taxes owed) |  |  |  | Taxes evaded (\% of true taxable income) |  |  |  | Taxes paid (\% of true taxable income) |  |  |  | Taxes owed (\% of true taxable income) |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.5\% | 34.0\% | 24.9\% | 38.1\% | 31.6\% | 34.0\% | 24.9\% | 38.1\% |
| P90-95 | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% |
| P95-99 | 0.2\% | 0.2\% | 0.3\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 35.6\% | 36.7\% | 26.9\% | 42.3\% | 35.7\% | 36.8\% | 27.0\% | 42.3\% |
| P99-99.5 | 0.8\% | 1.0\% | 1.2\% | 0.5\% | 0.3\% | 0.4\% | 0.4\% | 0.2\% | 41.3\% | 38.7\% | 30.7\% | 48.7\% | 41.6\% | 39.1\% | 31.0\% | 48.9\% |
| P99.5-99.9 | 2.7\% | 2.9\% | 3.4\% | 1.2\% | 1.2\% | 1.2\% | 1.3\% | 0.6\% | 41.4\% | 38.7\% | 35.5\% | 51.7\% | 42.6\% | 39.9\% | 36.8\% | 52.3\% |
| P99.9-P99.95 | 5.3\% | 6.6\% | 7.5\% | 2.2\% | 2.4\% | 2.6\% | 3.2\% | 1.2\% | 43.4\% | 37.6\% | 39.0\% | 53.3\% | 45.8\% | 40.3\% | 42.2\% | 54.5\% |
| P99.95-P99.99 | 10.2\% | 12.3\% | 15.9\% | 4.4\% | 4.7\% | 4.9\% | 7.7\% | 2.3\% | 41.4\% | 34.9\% | 40.6\% | 49.3\% | 46.1\% | 39.7\% | 48.3\% | 51.5\% |
| P99.99-P100 | 24.4\% | 29.2\% | 36.3\% | 9.8\% | 11.5\% | 11.5\% | 22.4\% | 4.8\% | 35.5\% | 27.8\% | 39.3\% | 44.0\% | 47.0\% | 39.2\% | 61.7\% | 48.8\% |
| All | 0.56\% | 0.65\% | 0.67\% | 0.24\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 31.6\% | 33.6\% | 24.4\% | 37.1\% | 31.8\% | 33.8\% | 24.6\% | 37.2\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% |
| Top 10\% | 2.2\% | 2.3\% | 2.8\% | 1.0\% | 0.8\% | 0.9\% | 0.8\% | 0.5\% | 35.8\% | 36.1\% | 28.1\% | 43.1\% | 36.5\% | 36.9\% | 28.9\% | 43.5\% |
| Top 1\% | 6.6\% | 7.7\% | 9.5\% | 3.0\% | 2.9\% | 3.0\% | 3.7\% | 1.5\% | 40.7\% | 36.5\% | 35.0\% | 49.4\% | 43.6\% | 39.6\% | 38.6\% | 50.9\% |
| Top 0.1\% | 14.8\% | 17.8\% | 22.2\% | 6.2\% | 6.9\% | 7.0\% | 11.3\% | 3.1\% | 39.5\% | 32.6\% | 39.7\% | 47.8\% | 46.4\% | 39.7\% | 51.0\% | 51.0\% |
| $\underline{\text { Top 0.01\% }}$ | 24.4\% | 29.2\% | 36.3\% | 9.8\% | 11.5\% | 11.5\% | 22.4\% | 4.8\% | 35.5\% | 27.8\% | 39.3\% | 44.0\% | 47.0\% | 39.2\% | 61.7\% | 48.8\% |

Table J.3b: Taxes evaded on hidden wealth, by wealth bin (2006) - assuming no heterogeneity in macro hidden wealth across Scandinavian countries

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Taxes evaded (\% of taxes owed) |  |  |  | Taxes evaded (\% of true taxable income) |  |  |  | Taxes paid (\% of true taxable income) |  |  |  | Taxes owed (\% of true taxable income) |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.5\% | 34.0\% | 24.9\% | 38.1\% | 31.6\% | 34.0\% | 24.9\% | 38.1\% |
| P90-95 | 0.1\% | 0.0\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% |
| P95-99 | 0.2\% | 0.2\% | 0.3\% | 0.2\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 35.6\% | 36.7\% | 26.9\% | 42.3\% | 35.7\% | 36.8\% | 27.0\% | 42.3\% |
| P99-99.5 | 0.8\% | 0.8\% | 1.4\% | 0.7\% | 0.3\% | 0.3\% | 0.4\% | 0.4\% | 41.3\% | 38.7\% | 30.6\% | 48.6\% | 41.6\% | 39.0\% | 31.1\% | 48.9\% |
| P99.5-99.9 | 2.7\% | 2.3\% | 4.0\% | 1.9\% | 1.2\% | 0.9\% | 1.5\% | 1.0\% | 41.4\% | 39.0\% | 35.4\% | 51.2\% | 42.6\% | 39.8\% | 36.8\% | 52.2\% |
| P99.9-P99.95 | 5.3\% | 5.0\% | 8.6\% | 3.5\% | 2.4\% | 2.0\% | 3.6\% | 1.9\% | 43.4\% | 38.1\% | 38.6\% | 52.4\% | 45.8\% | 40.2\% | 42.3\% | 54.3\% |
| P99.95-P99.99 | 10.2\% | 9.6\% | 18.0\% | 6.7\% | 4.7\% | 3.8\% | 8.7\% | 3.4\% | 41.4\% | 35.7\% | 39.7\% | 47.8\% | 46.1\% | 39.5\% | 48.4\% | 51.2\% |
| P99.99-P100 | 24.4\% | 23.8\% | 39.8\% | 14.5\% | 11.5\% | 9.2\% | 24.4\% | 7.0\% | 35.5\% | 29.5\% | 37.0\% | 41.3\% | 47.0\% | 38.7\% | 61.4\% | 48.3\% |
| All | 0.56\% | 0.49\% | 0.78\% | 0.38\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 31.6\% | 33.7\% | 24.4\% | 37.1\% | 31.8\% | 33.8\% | 24.6\% | 37.2\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% |
| Top 10\% | 2.2\% | 1.8\% | 3.2\% | 1.6\% | 0.8\% | 0.7\% | 0.9\% | 0.7\% | 35.8\% | 36.2\% | 28.1\% | 42.8\% | 36.5\% | 36.9\% | 29.0\% | 43.5\% |
| Top 1\% | 6.6\% | 5.9\% | 10.8\% | 4.6\% | 2.9\% | 2.3\% | 4.2\% | 2.3\% | 40.7\% | 37.1\% | 34.6\% | 48.4\% | 43.6\% | 39.4\% | 38.8\% | 50.7\% |
| Top 0.1\% | 14.8\% | 14.1\% | 24.9\% | 9.3\% | 6.9\% | 5.5\% | 12.7\% | 4.7\% | 39.5\% | 33.8\% | 38.4\% | 45.9\% | 46.4\% | 39.3\% | 51.2\% | 50.6\% |
| Top 0.01\% | 24.4\% | 23.8\% | 39.8\% | 14.5\% | 11.5\% | 9.2\% | 24.4\% | 7.0\% | 35.5\% | 29.5\% | 37.0\% | 41.3\% | 47.0\% | 38.7\% | 61.4\% | 48.3\% |

Table J.3c: Taxes evaded on hidden wealth, by wealth bin (2006) - assuming no hidden wealth in the tax havens other than Switzerland

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Taxes evaded (\% of taxes owed) |  |  |  | Taxes evaded (\% of true taxable income) |  |  |  | Taxes paid (\% of true taxable income) |  |  |  | Taxes owed (\% of true taxable income) |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.5\% | 34.0\% | 24.9\% | 38.1\% | 31.5\% | 34.0\% | 24.9\% | 38.1\% |
| P90-95 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% |
| P95-99 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 35.7\% | 36.7\% | 26.9\% | 42.3\% | 35.7\% | 36.8\% | 26.9\% | 42.3\% |
| P99-99.5 | 0.3\% | 0.5\% | 0.4\% | 0.2\% | 0.1\% | 0.2\% | 0.1\% | 0.1\% | 41.4\% | 38.8\% | 30.8\% | 48.8\% | 41.6\% | 39.0\% | 30.9\% | 49.0\% |
| P99.5-99.9 | 1.2\% | 1.4\% | 1.1\% | 0.6\% | 0.5\% | 0.5\% | 0.4\% | 0.3\% | 42.0\% | 39.2\% | 36.1\% | 52.0\% | 42.5\% | 39.8\% | 36.5\% | 52.4\% |
| P99.9-P99.95 | 2.3\% | 3.1\% | 2.4\% | 1.2\% | 1.1\% | 1.2\% | 1.0\% | 0.7\% | 44.6\% | 38.8\% | 40.6\% | 54.1\% | 45.7\% | 40.0\% | 41.6\% | 54.7\% |
| P99.95-P99.99 | 4.6\% | 6.0\% | 5.4\% | 2.4\% | 2.1\% | 2.3\% | 2.6\% | 1.2\% | 43.7\% | 36.8\% | 44.9\% | 50.6\% | 45.8\% | 39.2\% | 47.5\% | 51.8\% |
| P99.99-P100 | 12.1\% | 15.8\% | 14.7\% | 5.5\% | 5.6\% | 6.0\% | 9.4\% | 2.7\% | 40.7\% | 31.9\% | 54.3\% | 46.5\% | 46.3\% | 37.9\% | 63.7\% | 49.2\% |
| All | 0.24\% | 0.30\% | 0.20\% | 0.13\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 31.7\% | 33.7\% | 24.5\% | 37.2\% | 31.8\% | 33.8\% | 24.5\% | 37.2\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% |
| Top 10\% | 0.9\% | 1.1\% | 0.9\% | 0.6\% | 0.3\% | 0.4\% | 0.2\% | 0.2\% | 36.1\% | 36.4\% | 28.4\% | 43.3\% | 36.4\% | 36.8\% | 28.7\% | 43.5\% |
| Top 1\% | 2.9\% | 3.7\% | 3.1\% | 1.6\% | 1.3\% | 1.4\% | 1.2\% | 0.8\% | 42.1\% | 37.8\% | 36.6\% | 50.3\% | 43.3\% | 39.3\% | 37.8\% | 51.1\% |
| Top 0.1\% | 6.9\% | 9.0\% | 7.9\% | 3.4\% | 3.2\% | 3.5\% | 4.0\% | 1.7\% | 42.8\% | 35.4\% | 46.2\% | 49.6\% | 46.0\% | 38.9\% | 50.2\% | 51.4\% |
| Top 0.01\% | 12.1\% | 15.8\% | 14.7\% | 5.5\% | 5.6\% | 6.0\% | 9.4\% | 2.7\% | 40.7\% | 31.9\% | 54.3\% | 46.5\% | 46.3\% | 37.9\% | 63.7\% | 49.2\% |

Table J.3d: Taxes evaded on hidden wealth, by wealth bin (2006) - assuming same macro hidden wealth as world average

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Taxes evaded (\% of taxes owed) |  |  |  | Taxes evaded (\% of true taxable income) |  |  |  | Taxes paid (\% of true taxable income) |  |  |  | Taxes owed (\% of true taxable income) |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.9\% | 33.4\% | 25.1\% | 32.9\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.5\% | 34.0\% | 24.9\% | 38.1\% | 31.6\% | 34.0\% | 24.9\% | 38.1\% |
| P90-95 | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.1\% | 32.4\% | 34.9\% | 25.7\% | 38.7\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% |
| P95-99 | 0.5\% | 0.4\% | 0.5\% | 0.5\% | 0.2\% | 0.1\% | 0.1\% | 0.2\% | 35.6\% | 36.6\% | 26.9\% | 42.1\% | 35.7\% | 36.8\% | 27.0\% | 42.3\% |
| P99-99.5 | 1.7\% | 1.7\% | 2.1\% | 1.9\% | 0.7\% | 0.7\% | 0.6\% | 0.9\% | 41.0\% | 38.4\% | 30.5\% | 47.9\% | 41.7\% | 39.1\% | 31.2\% | 48.8\% |
| P99.5-99.9 | 5.6\% | 5.0\% | 5.7\% | 4.9\% | 2.4\% | 2.0\% | 2.1\% | 2.5\% | 40.4\% | 38.1\% | 34.9\% | 49.3\% | 42.8\% | 40.1\% | 37.0\% | 51.8\% |
| P99.9-P99.95 | 10.7\% | 10.8\% | 12.2\% | 8.9\% | 4.9\% | 4.4\% | 5.2\% | 4.7\% | 41.2\% | 36.3\% | 37.5\% | 48.6\% | 46.1\% | 40.6\% | 42.7\% | 53.3\% |
| P99.95-P99.99 | 19.4\% | 19.4\% | 24.3\% | 16.3\% | 9.1\% | 7.8\% | 11.9\% | 8.1\% | 37.6\% | 32.5\% | 37.0\% | 41.8\% | 46.6\% | 40.4\% | 48.9\% | 49.9\% |
| P99.99-P100 | 40.7\% | 41.5\% | 49.2\% | 31.6\% | 19.6\% | 16.8\% | 29.8\% | 14.7\% | 28.5\% | 23.7\% | 30.7\% | 31.9\% | 48.0\% | 40.6\% | 60.6\% | 46.6\% |
| All | 1.18\% | 1.11\% | 1.13\% | 1.03\% | 0.4\% | 0.4\% | 0.3\% | 0.4\% | 31.5\% | 33.5\% | 24.4\% | 36.9\% | 31.9\% | 33.9\% | 24.7\% | 37.3\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% |
| Top 10\% | 4.5\% | 4.0\% | 4.6\% | 4.3\% | 1.7\% | 1.5\% | 1.4\% | 1.8\% | 35.1\% | 35.6\% | 27.8\% | 41.6\% | 36.8\% | 37.1\% | 29.2\% | 43.4\% |
| Top 1\% | 13.0\% | 12.5\% | 15.1\% | 11.5\% | 5.7\% | 5.0\% | 5.9\% | 5.7\% | 38.3\% | 35.0\% | 33.4\% | 44.1\% | 44.1\% | 40.0\% | 39.4\% | 49.9\% |
| Top 0.1\% | 27.0\% | 27.1\% | 32.7\% | 21.8\% | 12.7\% | 11.0\% | 16.9\% | 10.7\% | 34.4\% | 29.5\% | 34.8\% | 38.3\% | 47.1\% | 40.5\% | 51.6\% | 49.0\% |
| Top 0.01\% | 40.7\% | 41.5\% | 49.2\% | 31.6\% | 19.6\% | 16.8\% | 29.8\% | 14.7\% | 28.5\% | 23.7\% | 30.7\% | 31.9\% | 48.0\% | 40.6\% | 60.6\% | 46.6\% |

Table J.3e: Taxes evaded on hidden wealth, by wealth bin (2006) -- based on matched HSBC wealth and HSBC global market share only

|  | [1] | [2] [3] |  | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] | [13] | [14] | [15] | [16] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Taxes evaded (\% of taxes owed) |  |  |  | Taxes evaded (\% of true taxable income) |  |  |  | Taxes paid (\% of true taxable income) |  |  |  | Taxes owed (\% of true taxable income) |  |  |  |
|  | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark | Scandinavia | Sweden | Norway | Denmark |
| P0-10 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% | 27.9\% | 33.4\% | 25.1\% | 33.0\% |
| P10-20 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% | 28.5\% | 33.8\% | 21.8\% | 30.4\% |
| P20-30 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% | 28.5\% | 31.6\% | 19.3\% | 32.0\% |
| P30-40 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% | 30.9\% | 32.1\% | 22.4\% | 34.4\% |
| P40-50 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% | 31.0\% | 32.1\% | 23.0\% | 35.7\% |
| P50-60 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% | 30.8\% | 32.2\% | 23.2\% | 36.4\% |
| P60-70 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% | 30.9\% | 32.7\% | 23.4\% | 37.0\% |
| P70-80 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% | 31.0\% | 33.1\% | 23.9\% | 37.7\% |
| P80-90 | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.5\% | 34.0\% | 24.9\% | 38.1\% | 31.5\% | 34.0\% | 24.9\% | 38.1\% |
| P90-95 | 0.1\% | 0.1\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% | 32.4\% | 35.0\% | 25.7\% | 38.7\% |
| P95-99 | 0.2\% | 0.2\% | 0.3\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 35.6\% | 36.7\% | 26.9\% | 42.3\% | 35.7\% | 36.8\% | 27.0\% | 42.3\% |
| P99-99.5 | 0.7\% | 0.8\% | 1.3\% | 0.5\% | 0.3\% | 0.3\% | 0.4\% | 0.2\% | 41.3\% | 38.7\% | 30.6\% | 48.7\% | 41.6\% | 39.0\% | 31.1\% | 48.9\% |
| P99.5-99.9 | 3.1\% | 2.9\% | 4.6\% | 1.6\% | 1.3\% | 1.2\% | 1.7\% | 0.9\% | 41.3\% | 38.7\% | 35.2\% | 51.4\% | 42.6\% | 39.9\% | 36.9\% | 52.2\% |
| P99.9-P99.95 | 5.7\% | 6.1\% | 9.2\% | 2.8\% | 2.6\% | 2.5\% | 3.9\% | 1.5\% | 43.3\% | 37.8\% | 38.4\% | 52.9\% | 45.9\% | 40.3\% | 42.3\% | 54.4\% |
| P99.95-P99.99 | 8.8\% | 9.3\% | 15.8\% | 4.4\% | 4.1\% | 3.7\% | 7.6\% | 2.3\% | 42.0\% | 35.8\% | 40.6\% | 49.2\% | 46.0\% | 39.5\% | 48.3\% | 51.5\% |
| P99.99-P100 | 26.9\% | 29.0\% | 43.1\% | 12.9\% | 12.7\% | 11.4\% | 26.3\% | 6.2\% | 34.5\% | 27.8\% | 34.8\% | 42.2\% | 47.2\% | 39.2\% | 61.1\% | 48.5\% |
| All | 0.59\% | 0.60\% | 0.83\% | 0.31\% | 0.2\% | 0.2\% | 0.2\% | 0.1\% | 31.6\% | 33.6\% | 24.4\% | 37.1\% | 31.8\% | 33.8\% | 24.6\% | 37.2\% |
| Bottom 50\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% | 29.6\% | 32.4\% | 22.9\% | 33.4\% |
| Middle 40\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% | 31.1\% | 33.1\% | 23.9\% | 37.4\% |
| Top 10\% | 2.3\% | 2.2\% | 3.4\% | 1.3\% | 0.8\% | 0.8\% | 1.0\% | 0.6\% | 35.7\% | 36.1\% | 28.0\% | 42.9\% | 36.6\% | 36.9\% | 29.0\% | 43.5\% |
| Top 1\% | 7.0\% | 7.2\% | 11.5\% | 3.8\% | 3.1\% | 2.8\% | 4.5\% | 1.9\% | 40.6\% | 36.7\% | 34.4\% | 48.9\% | 43.6\% | 39.5\% | 38.9\% | 50.8\% |
| Top 0.1\% | 15.7\% | 16.6\% | 26.2\% | 7.7\% | 7.3\% | 6.6\% | 13.4\% | 3.9\% | 39.2\% | 33.0\% | 37.8\% | 46.9\% | 46.5\% | 39.5\% | 51.2\% | 50.8\% |
| Top 0.01\% | 26.9\% | 29.0\% | 43.1\% | 12.9\% | 12.7\% | 11.4\% | 26.3\% | 6.2\% | 34.5\% | 27.8\% | 34.8\% | 42.2\% | 47.2\% | 39.2\% | 61.1\% | 48.5\% |

Table J.4: Taxes evaded on hidden wealth (\% total taxes owned, 2006), by taxable rate of return

|  | rate of return $=$ | $2.0 \%$ | $2.5 \%$ | $3.0 \%$ | $3.5 \%$ | $4.0 \%$ | $4.5 \%$ | $5.0 \%$ | $5.5 \%$ | $6.0 \%$ | $6.5 \%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ |
| P90-95 | $0.1 \%$ | $0.1 \%$ | $0.1 \%$ | $0.2 \%$ | $0.2 \%$ | $0.2 \%$ | $0.2 \%$ | $0.3 \%$ | $0.3 \%$ | $0.3 \%$ | $0.3 \%$ |
| P95-99 | $0.4 \%$ | $0.4 \%$ | $0.5 \%$ | $0.6 \%$ | $0.7 \%$ | $0.8 \%$ | $0.9 \%$ | $1.0 \%$ | $1.1 \%$ | $1.1 \%$ | $1.2 \%$ |
| P99-99.5 | $1.2 \%$ | $1.5 \%$ | $1.8 \%$ | $2.1 \%$ | $2.4 \%$ | $2.7 \%$ | $3.0 \%$ | $3.3 \%$ | $3.6 \%$ | $3.9 \%$ | $4.2 \%$ |
| P99.5-99.9 | $2.4 \%$ | $3.0 \%$ | $3.6 \%$ | $4.2 \%$ | $4.8 \%$ | $5.3 \%$ | $5.9 \%$ | $6.4 \%$ | $7.0 \%$ | $7.5 \%$ | $8.0 \%$ |
| P99.9-P99.95 | $4.8 \%$ | $5.9 \%$ | $7.0 \%$ | $8.1 \%$ | $9.1 \%$ | $10.2 \%$ | $11.2 \%$ | $12.2 \%$ | $13.1 \%$ | $14.1 \%$ | $15.0 \%$ |
| P99.95-P99.99 | $12.5 \%$ | $15.2 \%$ | $17.7 \%$ | $20.1 \%$ | $22.3 \%$ | $24.4 \%$ | $26.4 \%$ | $28.3 \%$ | $30.1 \%$ | $31.8 \%$ | $33.4 \%$ |
| P99.99-P100 |  |  |  |  |  |  |  |  |  |  |  |

> Notes: in 2006, the US federal fund rate was in a range of $4.3 \%$ (January 2006 ) to $5.25 \%$ (December 2006), see Fred series FEDFUNDS. The 3-months Libor rate was in a range of $2.5 \%$ to $3.7 \%$ for euros (see Fred series EUR3MTD156N) and $4.6 \%$ to $5.3 \%$ for British pound (GBP3MTD156N). At the end of $2006,51 \%$ of the fiduciary deposits managed by Swiss banks were invested in US\$, $29 \%$ in euros, and the rest in British pounds, yens, and Swiss francs (see SNB Banks in Switzerland, 2006 edition, Table 36). The weighted average yield on fiduciary deposits was $4.3 \%$ (taking the yield on 3-months British pounds as representative of the yield on deposits in currencies other than the euro and the US\$). The total nominal return on the MSCI world was $20.65 \%$ in 2006 . The total nominal return on the S\&P 500 was $13.4 \%$ and the dividend yield of the S\&P 500 was $1.76 \%$.

Table J.5: Total taxes evaded (detected in random audits + offshore), by wealth bin

|  | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Main estimate |  |  | Lower bound |  |  | Upper bound |  |  | Based on HSBC leak only |  |  |
|  | Taxes evaded (\% taxes owed) | Random audits | Offshore | Taxes evaded (\% taxes owed) | Random audits | Offshore | Taxes evaded (\% taxes owed) | Random audits | Offshore | Taxes evaded (\% taxes owed) | Random audits | Offshore |
| P0-10 | 3.6\% | 3.6\% | 0.0\% | 3.6\% | 3.6\% | 0.0\% | 3.6\% | 3.6\% | 0.0\% | 3.6\% | 3.6\% | 0.0\% |
| P10-20 | 1.7\% | 1.7\% | 0.0\% | 1.7\% | 1.7\% | 0.0\% | 1.7\% | 1.7\% | 0.0\% | 1.7\% | 1.7\% | 0.0\% |
| P20-30 | 1.4\% | 1.4\% | 0.0\% | 1.4\% | 1.4\% | 0.0\% | 1.4\% | 1.4\% | 0.0\% | 1.4\% | 1.4\% | 0.0\% |
| P30-40 | 1.4\% | 1.4\% | 0.0\% | 1.4\% | 1.4\% | 0.0\% | 1.4\% | 1.4\% | 0.0\% | 1.4\% | 1.4\% | 0.0\% |
| P40-50 | 1.1\% | 1.1\% | 0.0\% | 1.1\% | 1.1\% | 0.0\% | 1.1\% | 1.1\% | 0.0\% | 1.1\% | 1.1\% | 0.0\% |
| P50-60 | 1.1\% | 1.1\% | 0.0\% | 1.1\% | 1.1\% | 0.0\% | 1.1\% | 1.1\% | 0.0\% | 1.1\% | 1.1\% | 0.0\% |
| P60-70 | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% |
| P70-80 | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% |
| P80-90 | 2.7\% | 2.7\% | 0.0\% | 2.7\% | 2.7\% | 0.0\% | 2.7\% | 2.7\% | 0.0\% | 2.7\% | 2.7\% | 0.0\% |
| P90-95 | 1.8\% | 1.8\% | 0.1\% | 1.8\% | 1.8\% | 0.0\% | 1.9\% | 1.8\% | 0.1\% | 1.8\% | 1.8\% | 0.1\% |
| P95-99 | 3.4\% | 3.2\% | 0.2\% | 3.3\% | 3.2\% | 0.1\% | 3.7\% | 3.2\% | 0.5\% | 3.4\% | 3.2\% | 0.2\% |
| P99-99.5 | 5.0\% | 4.2\% | 0.8\% | 4.6\% | 4.2\% | 0.3\% | 5.8\% | 4.2\% | 1.7\% | 4.9\% | 4.2\% | 0.7\% |
| P99.5-99.9 | 6.2\% | 3.7\% | 2.7\% | 4.8\% | 3.7\% | 1.2\% | 8.9\% | 3.7\% | 5.6\% | 6.6\% | 3.7\% | 3.1\% |
| P99.9-P99.95 | 8.6\% | 3.7\% | 5.3\% | 5.8\% | 3.7\% | 2.3\% | 13.6\% | 3.7\% | 10.7\% | 8.9\% | 3.7\% | 5.7\% |
| P99.95-P99.99 | 13.1\% | 3.7\% | 10.2\% | 7.9\% | 3.7\% | 4.6\% | 21.7\% | 3.7\% | 19.4\% | 11.8\% | 3.7\% | 8.8\% |
| P99.99-P100 | 26.3\% | 3.7\% | 24.4\% | 14.8\% | 3.7\% | 12.1\% | 41.4\% | 3.7\% | 40.7\% | 28.6\% | 3.7\% | 26.9\% |
| All | 2.71\% | 2.1\% | 0.6\% | 2.4\% | 2.1\% | 0.2\% | 3.1\% | 2.1\% | 1.2\% |  | 2.1\% | 0.6\% |
| Bottom 50\% | 1.8\% | 1.8\% | 0.0\% | 1.8\% | 1.8\% | 0.0\% | 1.8\% | 1.8\% | 0.0\% |  | 1.8\% | 0.0\% |
| Middle 40\% | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% | 2.0\% | 2.0\% | 0.0\% |  | 2.0\% | 0.0\% |
| Top 10\% | 5.0\% | 3.0\% | 2.2\% | 3.8\% | 3.0\% | 0.9\% | 7.2\% | 3.0\% | 4.5\% |  | 3.0\% | 2.3\% |
| Top 1\% | 9.9\% | 3.8\% | 6.6\% | 6.5\% | 3.8\% | 2.9\% | 15.9\% | 3.8\% | 13.0\% |  | 3.8\% | 7.0\% |
| Top 0.1\% | 17.4\% | 3.7\% | 14.8\% | 10.1\% | 3.7\% | 6.9\% | 28.7\% | 3.7\% | 27.0\% |  | 3.7\% | 15.7\% |
| Top 0.01\% | 26.3\% | 3.7\% | 24.4\% | 14.8\% | 3.7\% | 12.1\% | 41.4\% | 3.7\% | 40.7\% |  | 3.7\% | 26.9\% |

[^31]Table J.6: Unreported income (random audits + offshore), taxes paid vs. taxes owed, by wealth bin

| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | est |  |  | bo |  | Upper bound |  |  |


|  | Unreported <br> taxable <br> income | Taxes paid | Taxes owed | Unreported <br> taxable <br> income | Taxes paid | Taxes <br> owed | Unreported <br> taxable <br> income | Taxes paid | Taxes |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| owed |  |  |  |  |  |  |  |  |  |

## Table J.7: Average tax rates, by wealth bin (2006)

|  | Scandinavia | Sweden | Norway | Denmark |
| :--- | :---: | :---: | :---: | :---: |
| P0-10 | $27.9 \%$ | $33.4 \%$ | $25.1 \%$ | $33.0 \%$ |
| P10-20 | $28.5 \%$ | $33.8 \%$ | $21.8 \%$ | $30.4 \%$ |
| P20-30 | $28.5 \%$ | $31.6 \%$ | $19.3 \%$ | $32.0 \%$ |
| P30-40 | $30.9 \%$ | $32.1 \%$ | $22.4 \%$ | $34.4 \%$ |
| P40-50 | $31.0 \%$ | $32.1 \%$ | $23.0 \%$ | $35.7 \%$ |
| P50-60 | $30.8 \%$ | $32.2 \%$ | $23.2 \%$ | $36.4 \%$ |
| P60-70 | $30.9 \%$ | $32.7 \%$ | $23.4 \%$ | $37.0 \%$ |
| P70-80 | $31.0 \%$ | $33.1 \%$ | $23.9 \%$ | $37.7 \%$ |
| P80-90 | $31.5 \%$ | $34.0 \%$ | $24.9 \%$ | $38.1 \%$ |
| P90-95 | $32.4 \%$ | $35.0 \%$ | $25.7 \%$ | $38.7 \%$ |
| P95-99 | $35.7 \%$ | $36.8 \%$ | $26.9 \%$ | $42.3 \%$ |
| P99-99.5 | $41.6 \%$ | $39.0 \%$ | $30.9 \%$ | $49.0 \%$ |
| P99.5-99.9 | $42.4 \%$ | $39.7 \%$ | $36.4 \%$ | $52.5 \%$ |
| P99.9-P99.95 | $45.6 \%$ | $39.8 \%$ | $41.4 \%$ | $54.9 \%$ |
| P99.95-P99.99 | $45.6 \%$ | $38.7 \%$ | $47.1 \%$ | $52.1 \%$ |
| P99.99-P100 | $45.6 \%$ | $36.4 \%$ | $65.1 \%$ | $49.8 \%$ |
|  |  |  |  |  |
| All | $31.7 \%$ | $33.8 \%$ | $24.5 \%$ | $37.2 \%$ |
| Bottom 50\% | $29.6 \%$ | $32.4 \%$ | $22.9 \%$ | $33.4 \%$ |
| Middle 40\% | $31.1 \%$ | $33.1 \%$ | $23.9 \%$ | $37.4 \%$ |
| Top 10\% | $36.3 \%$ | $36.7 \%$ | $28.5 \%$ | $43.5 \%$ |
| Top 1\% | $43.1 \%$ | $39.0 \%$ | $37.4 \%$ | $51.3 \%$ |
| Top 0.1\% | $45.6 \%$ | $38.1 \%$ | $49.7 \%$ | $51.8 \%$ |
| Top 0.01\% | $45.6 \%$ | $36.4 \%$ | $65.1 \%$ | $49.8 \%$ |

Note: the average tax rate for Scandinavia in the top $0.1 \%$ is computed as the arithmetic average of the tax rate for P99.9-P99.95, P99.95-P99.99 and the top $0.01 \%$ (three groups who account for roughly the same share of taxable income). There are small variation in the raw data (with P99.95-P99.99 paying 2-3 points less than the other two groups) but they are unlikely to be robust.

Table J.7b: Marginal tax rate, by income source and wealth bin (2006)

|  | Scandinavia |  | Sweden |  | Norway |  |  | Denmark |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Labor income | Capital (no ceiling) | Labor income | Capital (no ceiling) | Labor income | Capital (no ceiling) | Capital (ceiling) | Labor income | Capital income other than share | Share income |
| P0-10 | 32\% | 31\% | 24\% | 30\% | 36\% | 28\% | 28\% | 42\% | 34\% | 28\% |
| P10-20 | 29\% | 30\% | 23\% | 30\% | 31\% | 28\% | 28\% | 38\% | 30\% | 28\% |
| P20-30 | 34\% | 31\% | 31\% | 30\% | 29\% | 28\% | 28\% | 43\% | 35\% | 28\% |
| P30-40 | 37\% | 31\% | 35\% | 30\% | 35\% | 29\% | 29\% | 44\% | 36\% | 28\% |
| P40-50 | 38\% | 33\% | 35\% | 30\% | 37\% | 33\% | 33\% | 45\% | 37\% | 28\% |
| P50-60 | 39\% | 33\% | 36\% | 30\% | 38\% | 33\% | 33\% | 46\% | 38\% | 28\% |
| P60-70 | 40\% | 34\% | 37\% | 30\% | 38\% | 36\% | 36\% | 47\% | 39\% | 28\% |
| P70-80 | 41\% | 36\% | 38\% | 34\% | 39\% | 38\% | 38\% | 48\% | 40\% | 28\% |
| P80-90 | 42\% | 41\% | 40\% | 40\% | 39\% | 42\% | 42\% | 48\% | 40\% | 28\% |
| P90-95 | 44\% | 45\% | 43\% | 48\% | 40\% | 44\% | 44\% | 49\% | 41\% | 29\% |
| P95-99 | 47\% | 48\% | 46\% | 52\% | 42\% | 46\% | 46\% | 52\% | 44\% | 31\% |
| P99-99.5 | 49\% | 50\% | 48\% | 54\% | 43\% | 47\% | 47\% | 56\% | 48\% | 36\% |
| P99.5-99.9 | 49\% | 51\% | 49\% | 54\% | 42\% | 47\% | 47\% | 57\% | 49\% | 39\% |
| P99.9-P99.95 | 49\% | 51\% | 49\% | 55\% | 41\% | 47\% | 45\% | 57\% | 49\% | 41\% |
| P99.95-P99.99 | 49\% | 51\% | 49\% | 56\% | 41\% | 47\% | 44\% | 56\% | 48\% | 41\% |
| P99.99-P100 | 49\% | 52\% | 48\% | 56\% | 41\% | 48\% | 41\% | 56\% | 48\% | 42\% |
| All | 38\% | 35\% | 34\% | 33\% | 36\% | 34\% | 34\% | 45\% | 37\% | 28\% |
| Bottom 50\% | 34\% | 31\% | 30\% | 30\% | 33\% | 29\% | 29\% | 42\% | 34\% | 28\% |
| Middle 40\% | 40\% | 36\% | 38\% | 33\% | 38\% | 37\% | 37\% | 47\% | 39\% | 28\% |
| Top 10\% | 46\% | 47\% | 45\% | 50\% | 41\% | 45\% | 45\% | 51\% | 43\% | 31\% |
| Top 1\% | 49\% | 51\% | 48\% | 54\% | 42\% | 47\% | 47\% | 56\% | 48\% | 38\% |
| Top 0.1\% | 49\% | 51\% | 49\% | 55\% | 41\% | 47\% | 44\% | 56\% | 48\% | 41\% |
| Top 0.01\% | 49\% | 52\% | 48\% | 56\% | 41\% | 48\% | 41\% | 56\% | 48\% | 42\% |

## Table J.8: Income, wealth and inequality in Scandinavia in 2006

|  | Scandinavia | Sweden | Norway | Denmark |
| :--- | :---: | :---: | :---: | :---: |
| Macroeonomic aggregates (excl. offshore) |  |  |  |  |
| Adult population (thousands) | $\mathbf{1 4 , 7 1 1}$ | 7,179 | 3,434 | 4,097 |
| Number of households (thousands) | $\mathbf{1 0 , 6 1 6}$ | 4,818 | 2,728 | 3,070 |
| National income (billion US\$) | $\mathbf{8 9 7}$ | 359 | 299 | 239 |
| Taxable income (billion US\$) | $\mathbf{5 4 5}$ | 228 | 174 | 143 |
| Household wealth (billion US\$) | $\mathbf{2 , 9 6 7}$ | 1,323 | 651 | 993 |
| National income per adult (US\$) | $\mathbf{6 0 , 9 7 7}$ | 49,949 | 87,119 | 58,387 |
| Household wealth per adult (US\$) | $\mathbf{2 0 1 , 6 5 8}$ | 184,225 | 189,456 | 242,431 |
| Household wealth / national income | $\mathbf{3 3 1 \%}$ | $369 \%$ | $217 \%$ | $415 \%$ |
| Wealth shares (excluding offshore) |  |  |  |  |
| Bottom 50\% | $\mathbf{2 . 9 \%}$ | $4.8 \%$ | $-2.6 \%$ | $2.7 \%$ |
| Middle 40\% | $\mathbf{4 3 . 8 \%}$ | $42.1 \%$ | $52.8 \%$ | $41.7 \%$ |
| Top 10\% | $\mathbf{5 3 . 3 \%}$ | $53.1 \%$ | $49.9 \%$ | $55.6 \%$ |
| Top 1\% | $\mathbf{2 1 . 8 \%}$ | $20.9 \%$ | $17.9 \%$ | $22.8 \%$ |
| Top 0.1\% | $\mathbf{1 0 . 6 \%}$ | $10.1 \%$ | $8.9 \%$ | $10.4 \%$ |
| Top 0.01\% | $\mathbf{5 . 3 \%}$ | $5.3 \%$ | $4.6 \%$ | $4.5 \%$ |

## Table J.9: Wealth shares in 2006 (household-level)

|  | Scandinavia | Sweden | Norway | Denmark |
| :--- | :---: | :---: | :---: | :---: |
| P0-10 | $-2.8 \%$ | $-1.3 \%$ | $-6.0 \%$ | $-1.9 \%$ |
| P10-20 | $0.0 \%$ | $0.1 \%$ | $-0.7 \%$ | $0.0 \%$ |
| P20-30 | $0.6 \%$ | $0.8 \%$ | $0.1 \%$ | $0.5 \%$ |
| P30-40 | $1.7 \%$ | $1.8 \%$ | $0.9 \%$ | $1.4 \%$ |
| P40-50 | $3.3 \%$ | $3.4 \%$ | $3.1 \%$ | $2.7 \%$ |
| P50-60 | $5.4 \%$ | $5.2 \%$ | $6.6 \%$ | $4.7 \%$ |
| P60-70 | $8.2 \%$ | $7.7 \%$ | $10.4 \%$ | $7.4 \%$ |
| P70-80 | $12.0 \%$ | $11.4 \%$ | $14.8 \%$ | $11.4 \%$ |
| P80-90 | $18.2 \%$ | $17.7 \%$ | $20.9 \%$ | $18.1 \%$ |
| P90-95 | $13.6 \%$ | $13.7 \%$ | $14.5 \%$ | $14.0 \%$ |
| P95-99 | $17.9 \%$ | $18.5 \%$ | $17.4 \%$ | $18.8 \%$ |
| P99-99.5 | $4.3 \%$ | $4.4 \%$ | $3.7 \%$ | $4.8 \%$ |
| P99.5-99.9 | $6.8 \%$ | $6.4 \%$ | $5.3 \%$ | $7.6 \%$ |
| P99.9-P99.95 | $2.0 \%$ | $1.9 \%$ | $1.6 \%$ | $2.2 \%$ |
| P99.95-P99.99 | $3.3 \%$ | $3.0 \%$ | $2.7 \%$ | $3.6 \%$ |
| P99.99-P100 | $5.3 \%$ | $5.3 \%$ | $4.6 \%$ | $4.5 \%$ |
|  |  |  |  |  |
| All | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |
| Bottom 50\% | $2.9 \%$ | $4.8 \%$ | $-2.6 \%$ | $2.7 \%$ |
| Middle 40\% | $43.8 \%$ | $42.1 \%$ | $52.8 \%$ | $41.7 \%$ |
| Top 10\% | $53.3 \%$ | $53.1 \%$ | $49.9 \%$ | $55.6 \%$ |
| Top 1\% | $21.8 \%$ | $20.9 \%$ | $17.9 \%$ | $22.8 \%$ |
| Top 0.1\% | $10.6 \%$ | $10.1 \%$ | $8.9 \%$ | $10.4 \%$ |
| Top 0.01\% | $5.3 \%$ | $5.3 \%$ | $4.6 \%$ | $4.5 \%$ |

## Table J.10: Taxable income shares, by wealth bin (2006)

|  | Scandinavia | Sweden | Norway | Denmark |
| :--- | :---: | :---: | :---: | :---: |
| P0-10 | $7.4 \%$ | $4.9 \%$ | $9.8 \%$ | $6.6 \%$ |
| P10-20 | $3.7 \%$ | $3.4 \%$ | $5.4 \%$ | $4.8 \%$ |
| P20-30 | $5.9 \%$ | $6.6 \%$ | $3.5 \%$ | $6.6 \%$ |
| P30-40 | $7.8 \%$ | $8.2 \%$ | $6.7 \%$ | $8.1 \%$ |
| P40-50 | $8.4 \%$ | $8.0 \%$ | $8.7 \%$ | $8.9 \%$ |
| P50-60 | $8.8 \%$ | $8.8 \%$ | $9.6 \%$ | $9.8 \%$ |
| P60-70 | $10.5 \%$ | $10.1 \%$ | $10.5 \%$ | $10.9 \%$ |
| P70-80 | $11.8 \%$ | $11.5 \%$ | $11.8 \%$ | $11.9 \%$ |
| P80-90 | $13.9 \%$ | $13.7 \%$ | $13.8 \%$ | $12.8 \%$ |
| P90-95 | $8.3 \%$ | $8.6 \%$ | $8.0 \%$ | $7.0 \%$ |
| P95-99 | $8.0 \%$ | $9.7 \%$ | $8.1 \%$ | $7.3 \%$ |
| P99-99.5 | $1.8 \%$ | $1.9 \%$ | $1.4 \%$ | $1.5 \%$ |
| P99.5-99.9 | $2.0 \%$ | $2.5 \%$ | $1.6 \%$ | $1.9 \%$ |
| P99.9-P99.95 | $0.5 \%$ | $0.5 \%$ | $0.3 \%$ | $0.5 \%$ |
| P99.95-P99.99 | $0.6 \%$ | $0.8 \%$ | $0.4 \%$ | $0.7 \%$ |
| P99.99-P100 | $0.6 \%$ | $0.8 \%$ | $0.2 \%$ | $0.9 \%$ |
|  |  |  |  |  |
| All | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |
| Bottom 50\% | $33.1 \%$ | $31.1 \%$ | $34.2 \%$ | $34.9 \%$ |
| Middle 40\% | $45.0 \%$ | $44.1 \%$ | $45.7 \%$ | $45.3 \%$ |
| Top 10\% | $21.9 \%$ | $24.8 \%$ | $20.1 \%$ | $19.8 \%$ |
| Top 1\% | $5.5 \%$ | $6.4 \%$ | $4.0 \%$ | $5.5 \%$ |
| Top 0.1\% | $1.7 \%$ | $2.1 \%$ | $0.9 \%$ | $2.1 \%$ |
| Top 0.01\% | $0.6 \%$ | $0.8 \%$ | $0.2 \%$ | $0.9 \%$ |


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[^1]:    ${ }^{1}$ It would be interesting to compute distributions of national wealth in Norway, where the government owns a large amount of public assets in a sovereign wealth fund, but the allocation of public wealth to households

[^2]:    ${ }^{2}$ See Rygvold (2009), "Data sources for the compilation of the Norwegian securities statistics", IFC Bulletin No 29, available at http://www.bis.org/ifc/publ/ifcb29e.pdf, in particular p. 49.

[^3]:    ${ }^{3}$ http://www.ssb.no/a/metadata/conceptvariable/vardok/1332/en
    ${ }^{4}$ https://www.ssb.no/en/bank-og-finansmarked/statistikker/vpstat/kvartal/2014-11-13.
    ${ }^{5}$ Rygvold (2009, p. 48) writes that "there are plans to establish reporting from other sources to make use of information we currently lack, including that covering domestic investments in foreign registered mutual funds."
    ${ }^{6}$ https://www.skatteetaten.no/en/Bedrift-og-organisasjon/Rapportering-til-Skatteetaten/ Naeringseiendom/naeringskalkulator/.

[^4]:    ${ }^{7}$ These data have been used to study the distribution of income and wealth in Norway by a number of researchers before us; see, e.g., Aaberge and Atkinson (2010).

[^5]:    ${ }^{8}$ See https://projects.icij.org/swiss-leaks/people/arlette-ricci.
    ${ }^{9}$ See https://offshoreleaks.icij.org/nodes/10097472.

[^6]:    ${ }^{10}$ Commenting on the changes that occurred after the Falciani leak, HSBC (2015) writes that "The result of our reforms is evident as the number of accounts and total client assets of the Swiss Private Bank have been actively managed down by this intensive de-risking exercise, where we have put compliance and tax transparency ahead of profitability."

[^7]:    ${ }^{11}$ See https://projects.icij.org/swiss-leaks/people/a-k-gulamali.
    ${ }^{12}$ https://projects.icij.org/swiss-leaks/people/edouard-stern.
    ${ }^{13}$ http://sverigesradio.se/sida/artikel.aspx?programid=83\&artikel=6088515.

[^8]:    ${ }^{14}$ https://offshoreleaks.icij.org/search?c=NOR\&cat=1\&e=\&j=\&q=\&utf8=\%E2\%9C\%93, and http://www. bbc.com/news/magazine-40669239
    ${ }^{15}$ http://www.vg.no/nyheter/innenriks/skatten-2010/slik-faar-du-sjekket-skattelistene/a/ 10039982/.

[^9]:    ${ }^{16}$ http://www.di.se/artiklar/2016/4/4/skatteverket-ska-granska-svenskarna-i-panama-harvan/ https://www.far.se/nyheter/2017/april/var-uppmarksam-pa-kunder-med-koppling-till-panama-lackan/.
    ${ }^{17}$ http://www.skatteetaten.no/en/person/Tax-Return/Topic-and-deductions/ Loan-wealth-and-shares/Surtax-following-foreign-incomecapital-evasion/https:// www.skatteverket.se/privat/skatter/betalaochfatillbaka/sjalvrattelseavdeklaration/ sjalvrattelseavoredovisadetillgangariutlandet.4.1a098b721295c544e1f800040912.html.

[^10]:    ${ }^{18}$ https://www.svt.se/nyheter/granskning/ug/referens/springnotanhttps://www.svt.se/nyheter/ ekonomi/sa-gjorde-vi-granskningen-3.

[^11]:    ${ }^{19}$ In Appendix K.2, we consider an extension of the model to the competitive case; all our results carry over. Support for the monopolistic assumption comes from the fact that Swiss banks (which supplied the vast majority of cross-border wealth management services until the 1980s, before financial liberalization in the U.K. and the emergence of new offshore centers) historically had a cartel agreement, the Convention IV of the Swiss Bankers Association, which strictly regulated fees; see Zucman (2015, chapter 1).

[^12]:    ${ }^{20}$ In practice, private wealth management banks typically select customers by requiring them to have a minimum amount of assets (e.g., $\$ 1$ million, $\$ 10$ million, or $\$ 20$ million), in effect setting an infinite price for less wealthy individuals, while advertising their services to potential high-net-worth clients through by-invitation only events (golf tournaments, galas, etc.). See, e.g., Harrington (2016).
    ${ }^{21}$ By construction, adding ever less wealthy customers adds wealth under management at a declining rate so that $k^{\prime}(s)>0$ and $k^{\prime \prime}(s)<0$.
    ${ }^{22}$ The first-order condition indeed characterizes an optimum since

    $$
    \frac{d^{2} \pi}{d s^{2}}=(\theta-\lambda s \phi) k^{\prime \prime}(s)-2 \lambda \phi k^{\prime}(s)<0
    $$

[^13]:    ${ }^{23}$ In the United States, the IRS signed a check for $\$ 104$ million to the ex-banker UBS banker, Bradley Birkenfeld, who revealed the practices of his former employer. UBS entered into a deferred prosecution agreement with the Department of Justice and had to pay a fine of $\$ 780$ million in 2009.

[^14]:    ${ }^{24}$ Instead, HSBC was fined $\$ 1.92$ billion, in a year when its pretax profits reached $\$ 22.6$ billion.
    ${ }^{25}$ In the world's two largest economies, the United States and China, top wealth shares have increased significantly since the beginning of the century (Saez and Zucman, 2014; Piketty, Yang, Zucman, 2017). Forbes magazine data suggest that the wealth of global billionaires is rising faster than world wealth (Piketty, 2014).

[^15]:    Notes: Wealth estimates are from offiicial national accounts and tax-based balance sheets and do not include offshore wealth. Wealth is at the end of the year. All monetary values in this table are converted to US\$ using year-average market exchange rates.

[^16]:    Notes: See notes to the country-specific series in the relevant Appendix. Scandinavia is the arithmetic average of Norway and Sweden before the 1980s, and Norway, Sweden and Denmark since the 1980s (see formula)

[^17]:    Notes: wealth is at the end of the year and excludes offshore wealth

[^18]:    Notes: The counts for scandinavia do not add up to Sweden + Norway + Denmark because wealth bins are defined relatively to each economy (P99.99-100 is the top 0.01\% for Scandinavia as a whole, and people in the top $0.01 \%$ in Norway are not necessarily in the top $0.01 \%$ of Scandinavia)

[^19]:    Notes: The counts for scandinavia do not add up to Sweden + Norway + Denmark because wealth bins are defined relatively to each economy (P99.99-100 is the top 0.01\% for

[^20]:    Notes: Counts for Norway + Sweden do not add up to the sum of Norway and Sweden because wealth bins are defined relatively to each economy.

[^21]:    Note: All DKK figures are in constant 2012 DKK, using the national income deflator.

[^22]:    Note: this table reports estimates of the fraction of taxpayers evading taxes and the average income evaded conditional on evading (as a \% of average true taxable income), estimated from SKAT's random audit studies, pooling the 2008, 2010, and 2012 waves. These estimates are then combined with the 2006 distribution of Danish taxable income to estimate the distribution of true taxable income in 2006 (including unreported income), assuming that the evasion probabilties and intensities uncovered in the 2008, 2010, and 2012 audits also apply to 2006.

[^23]:    Note 2: Consistency with T-E.1. The macro totals for cols. [1]-[4] differ very slightly from those in Table E. 1 because here these totals are obtained by weighting the wealth-bin averages by the true population in each bin, instead of the total population in each bin implied by the audit weights. The differences are negligible in practice.

[^24]:    Note: this table reports estimates of the taxes evaded by Danish households, as estimated from SKAT's random audit studies, pooling the 2008, 2010, and 2012 waves. The detection rates in these three waves and the fraction of of income unreported conditional on evading are combined with 2006 average tax rates and marginal tax rates by wealth bin to to estimate the tax gap (amount of tax owed which is not paid) by wealth bin in 2006. That is, we assume that the probabilities to evade and the amount unreported conditional on evading (as a \% of taxable income) are the same over time and we apply these parameters to the 2006 Danish economy (in order to combine the results with the HSBC leak, which is for the year 2006).

[^25]:    Note: this table uses our estimate of the wealth hidden on aggregate by each Scandinavian country individually (cols. 2, 3, 4, line "All") to estimate the distribution of true wealth in each Scandinavian country and the share of wealth hidden by each

[^26]:    Note: this table assumes that each Scandinavian country hides in total the same fraction of its total wealth as the world as a whole. We then apply this estimate to the country-specific distributions of non-hidden wealth in

[^27]:    Note: this table uses our estimate of the taxable income hidden on aggregate by each Scandinavian country individually (cols. 2, 3, 4, line all) to estimate the distribution of true taxable income in each Scandinavian country and the share of taxable income hidden by each group in each Scandinavian country.

[^28]:    Note: this table assumes that each Scandinavian country hides in total the same fraction of its total taxable income as Scandinavia as a whole. We then apply this estimate to the country-specific distributions of nonhidden taxable income in 2006 to compute the implied fraction of taxable income hidden by each group of the wealth distribution in each country.

[^29]:    Note: this table assumes that Scandinavian countries have 0 wealth hidden in the tax havens other than Switzerland. We then combine the amount of wealth hidden in Switzerland with the country-specific distributions of non-hidden income in 2006 to compute the implied lower bound fraction of taxable income hidden by each group of the wealth distribution in each Scandinavian country.

[^30]:    Note: this table assumes that each Scandinavian country hides in total the same fraction of its total wealth as the world as a whole. We then compute the implied amount of hidden taxable income, and apply this estimate to the country-specific distributions of non-hidden income in 2006 to compute the implied fraction of taxable income hidden by each group of the wealth distribution in each Scandinavian country.

[^31]:    Note: Rates of evasion detected in random audits (taxes evaded in \% of taxes owed) are supposed to be constant within the top $0.5 \%$ of the wealth distribution, and equal to the average value for P99.5-P100 (random audits do not have a big enough sample size to study heterogeneity within the top $0.5 \%$ ).

