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Inequality: You Don't Know the Half of It

(Or why inequality is worse than we thought)

By Nicholas Shaxson, John Christensen and Nick Mathiason¹

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1. Introduction

Economic inequality has reached extreme proportions in many countries. But the problem is far worse than we have understood until now. This is because all studies exploring economic inequality have systematically underestimated the wealth and income enjoyed by the world's wealthiest individuals. The enormous quantity of assets held offshore and in opaque and anonymous structures is not factored properly into anybody's calculations. Not only that, but the *trend* of rising inequality in many countries appears to be worse than previously thought, for similar reasons.

At its simplest, our argument is that if an asset is hidden in an offshore bank account, or an offshore trust or company, and the ultimate owner or beneficiary of the income or capital cannot be identified, then this asset and the income it produces will not be counted in the inequality statistics. Almost all these hidden assets are owned by the world's wealthiest individuals. So it follows that the inequality statistics, particularly at the top end of the scale, underestimate the scale of the problem.

¹ Nicholas Shaxson is author of *Treasure Islands: Tax Havens and the Men who Stole the World*, Random House, 2011. John Christensen is former Economic Adviser to the UK tax haven of Jersey and is director of the Tax Justice Network. Nick Mathiason is business correspondent at the Bureau of Investigative Journalism.

Although many studies do try to compensate for missing offshore data, **all experts interviewed for this report agreed that no study comes even close to compensating sufficiently.** (See *Box 1* for brief expert comments).

Box 1: Quotable quotes, from the experts

In response to our initial question: do you believe our thesis is valid? The following responses came from the experts we contacted:

Yes, definitely.

- **Thomas Piketty**, professor, Paris School of Economics

Absolutely.

- **Sam Pizzigati**, Associate Fellow, Institute for Policy Studies (IPS) in Washington, D.C.

I agree with your thesis and I believe - everyone does.

- **Milorad Kovacevic**, Chief Statistician for the U.N. Human Development Report Office

I think there's no doubt whatsoever. . . People say there's lots of money missed out and that's true. There is an issue here.

- **Branko Milanovic**, Lead Economist in the World Bank research group

The main bias is likely to be at the top end of the distribution. But we do not yet have the data needed to correct for this problem across all countries.

- **Martin Ravallion** Acting Chief Economist and Senior Vice President Development Economics, World Bank

There is absolutely no doubt at all that the statistics on income and wealth at the top understate the problem, for the reasons that you say.

- **Stewart Lansley**, author of *The Cost of Inequality: Why Economic Equality is Essential for Recovery*.

The wealth of the very rich is massively under-reported in households surveys and (probably slightly less so) in tax accounts. Proper reporting would drive up the Gini and drive down the wealth share of the poorest 20 per cent.

- **Kevin Watkins**, nonresident senior fellow, Center for Universal Education, Brookings Institution

Although much of the wealth and income of the poorest is also “missing,” as they are especially hard to access and to survey, their ‘missing’ assets and income are insignificant when compared to those at the top, so they make little difference to the overall inequality picture.

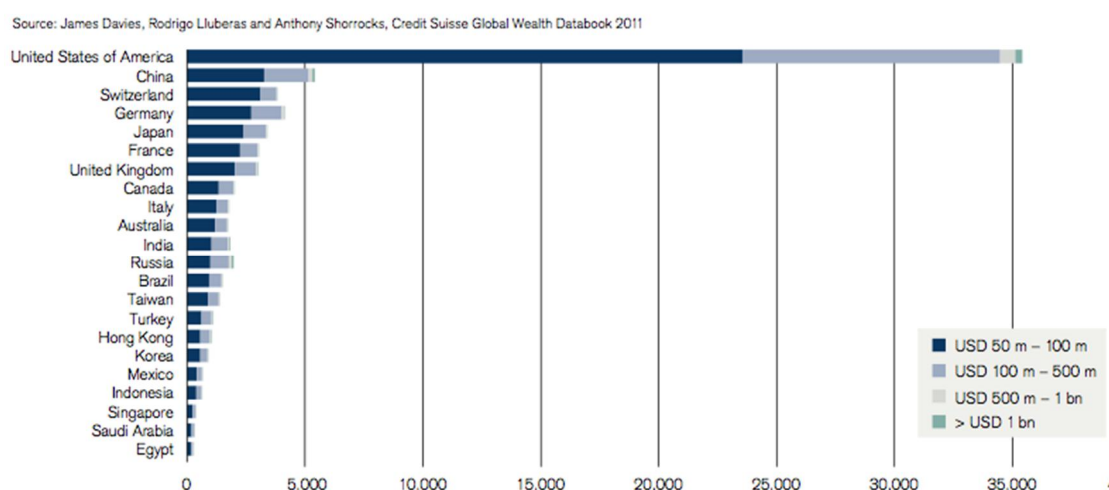
Wealthy people, or High Net Worth Individuals (HNWIs) in the bankers' parlance, usually have advisers offering all manner of offshore services, ranging from mild (legal) tax planning to the cloaking of assets for the purpose of tax evasion and many other crimes. A private global infrastructure of lawyers, accountants, bankers and company and trust formation agents are dedicated to hiding the assets of the world's wealthiest individuals – and they have been spectacularly successful, as James Henry's accompanying report for the Tax Justice Network shows.

Henry's research, which we believe is the most rigorous and comprehensive study of its kind, reveals that well in excess of US\$ 21 trillion is held unrecorded and offshore, conservatively estimated. No estimate of missing wealth on this scale has ever before been constructed. Therefore, both wealth and inequality are being dramatically underestimated to a very significant degree, in every study and in every country.

With the bottom half of the world's population together possessing barely 1% percent of global wealth while the top 10% owns 84%², economic inequality is widely and increasingly recognised as a problem in its own right. Research shows that more unequal societies tend to experience slower growth, higher political instability, and a wide range of negative health and social outcomes, as *Box 2* explains.

Both the legal and the illegal aspects of this pose big problems for inequality studies.

Table 1: "Ultra" High Net Worth Individuals 2011, selected countries



Source: [Credit Suisse](#), *Global Wealth Report 2011*. It sees a global total of nearly 85,000 Ultra High Net Worth Individuals (UHNWIs) with assets exceeding US\$50 million, with 2,700 of them each owning over \$500m.

² Source: *Global Wealth Report 2011*, Credit Suisse Research Institute, p10 <http://bit.ly/pAHcoa>

This paper is a first attempt to lay out the nature of how unrecorded offshore assets and income feed through to our understanding of inequality. Based primarily on our interviews with some of the world's top experts, it contains relatively little in the way of econometric analysis, and it does not seek to be comprehensive: it should be viewed as a starting point. Our aim is to focus attention on the problem and to spur others to research this field in more depth.

Box 2: why inequality is a problem and causes problems

A number of recent studies have focused on correlations between income inequality and a range of social and economic problems. Perhaps the best known is *The Spirit Level* by Kate Pickett and Richard Wilkinson. They found that people in more equal societies are likely to live longer, are less likely to experience mental illness, to use illegal drugs, to achieve higher grades at school, to be imprisoned, to suffer obesity, to enjoy social mobility, to suffer violence, to enjoy child well-being, and to suffer lower rates of teenage motherhood. This study has been widely referenced: as the U.S. economist Paul Krugman put it in May, "Wilkinson-type views about the corrosive effects of inequality are going seriously mainstream."¹

A 2011 [study](#) by Isabel Ortiz and Matthew Cummins for Unicef found that for 131 countries where inequality could be measured, those with rising inequality tended to grow more slowly over the period studied (1990-2008), and this "strong negative correlation between high inequality and high growth" remains intact for developing countries alone. They also found that inequality is strongly associated with political instability.

There is also evidence that inequality was a causal factor behind the global economic and financial crisis since 2007/8. Much of the 'subprime' borrowing patterns of low-income households, for instance, was driven by economic inequality stimulating consumption and higher borrowing among lower income levels.¹ This chimes with research by the U.S. economist James Galbraith:

"The evidence in the U.S. shows that the rise in inequality is associated with credit booms, which are often periods of sometimes great prosperity. One was in the late 1990s with information technology and one in the 2000s with housing, before everything fell apart. But this is also a sign of instability — the crash that follows is very ugly business. If we're going to go forward with growth on a more sustainable basis, then controlling inequality and controlling instability are the same issue. One is an expression of the other."

Box 2 contd.

Stewart Lansley takes a similar view, focusing on what happens when a gap opens up between wages and productivity, when benefits from greater productivity flow to the richest section of society. This throws economies out of balance: purchasing power and consumer spending fall and the demand gap is filled by rising debt, which postpones the problem.¹

Power follows money, and extreme concentrations of wealth at the top of the income scale lead inevitably to disproportionate power and influence for the wealthiest members of society. So some of the most malign political effects of inequality stem from changes at the very top of the income and wealth distribution – the very section that our study focuses on.

We would go further, suggesting that the ability of the wealthiest members of society to put their money offshore gives them great power: the oft-heard cry of ‘don’t tax or regulate us too much or we will move to Geneva or London or the Cayman Islands’ has been wielded to potent effect in recent decades in eviscerating financial regulations, forcing tax cuts on capital, and more.

In addition to the many ways in which inequality has contributed to the financial and economic crisis, we have also outlined [a number of ways](#) in which tax havens and the offshore system have themselves contributed to the crisis.

2. The missing wealth: different estimates

Missing wealth 1: the Price of Offshore, Revisited

James Henry’s 2012 report for the Tax Justice Network, entitled *The Price of Offshore Revisited*, estimates that there is between \$21 and \$32 trillion of unrecorded offshore financial wealth in the world, conservatively estimated. Almost all this unrecorded wealth and income will be enjoyed by the top 1% of the world’s population, dramatically skewing the income and wealth distribution

in that politically important segment of the world's population, and having a major impact on the [Gini coefficient](#) for each country.

Henry, a former chief economist for the consultancy McKinsey, draws on data from the World Bank, the International Monetary Fund, the United Nations, central banks, the Bank for International Settlements, and national accounts. He uses these sources – many of which have never before been deployed in this way – to construct a range of different estimates of the size of unrecorded offshore wealth, in the most detailed study of its kind ever conducted.

This groundbreaking research has established that for a focus group of 139 mostly low - middle income countries, these private offshore holdings of US\$ 7.3-9.3 trillion are roughly twice their aggregate gross external debts of \$4.08 trillion. These countries, traditionally regarded as debtor nations, are in fact creditors to the world, once these secret private offshore holdings are taken into account. The big problem is that the assets are held by a tiny wealthy fraction of these countries' populations, while the debts are shouldered by the poorer sections.

The findings call into question claims made by G20 leaders in 2009 in the early period of the financial crisis when they declared that “the era of banking secrecy is over”. Far from it: the system is alive and well, and growing fast.

Missing wealth 2: the case of the United States

Income and wealth statistics from the United States provide another curious indication of a large amount of missing wealth, which is summarised by Sam Pizzigati, Associate Fellow, Institute for Policy Studies (IPS) in Washington, D.C. and editor of the IPS newsletter on inequality, entitled *Too Much*. He said our thesis is “absolutely” valid and notes:

“We have a huge paradox in the data: a disconnect between the data on income inequality and the data on wealth inequality. The income data tell us there has been a truly enormous separation between the richest of the rich – the top 1% and 0.1% - and everyone else. But the wealth data show us no great growth in the separation. So it is an enormous paradox.”³

The best known US income data is produced by Professor [Thomas Piketty](#) of the Paris School of Economics and Professor Emmanuel Saez at the University of California, Berkeley. Table 1 below, taken from their data, shows **the incomes of the top 1% of the US population more than doubled from 1980 - 2010, while the incomes of the top 0.1% more than trebled and the incomes of the top 0.01% more than quadrupled. Over the same period the incomes of the bottom 90% fell by nearly five percent.**

³ Authors' interview with Pizzigati. Unless explicitly referenced otherwise, quotes in this articles were gleaned from interviews with the people identified.

These trends produce some stark facts, such as estimates that just six members of the Walton family (of Walmart fame) [are worth](#) as much as the poorest 30% of all Americans.)

Table 1: top incomes and income shares in the United States

<i>Income in 2010 US \$ (income share in brackets)</i>	<i>Bottom 90 percent \$</i>	<i>Top 1 percent</i>	<i>Top 0.1 percent</i>	<i>Top 0.01 percent</i>
1980	\$31,337 (65.37%)	\$432,364 (10.0%)	\$1,471,060 (3.41%)	\$5,507,457 (1.28%)
2010	\$29,840 (52.1%)	\$1,019, 089 (19.8%)	\$4,906,513 (9.52%)	\$23,846,950 (4.63%)
Increase in income 1980 - 2010	- 4.8 %	2.36 x	3.34 X	4.32 x
<i>Income includes capital gains. Source: Piketty and Saez, see elsa.berkeley.edu/~saez/TabFig2010.xls, Table A6</i>				

However – and this is where Pizzigati’s paradox becomes apparent – the wealth data shows a completely different picture from the income data. According to [work by](#) Sylvia Allegretto, co-chair of the Center on Wage and Employment Dynamics of the University of California, Berkeley, the top 1% of households owned 33.8% of all the wealth in 1983, while 26 years later, in 2009, the top 1 percent owned 35.6%: a tiny increase⁴.

Pizzigati comments:

“That is the paradox: we have this income data where incomes are quadrupling, and tripling, and doubling, over a period of three decades – and the wealth figures show just a tiny, tiny little blip in that wealth concentration. That is a total disconnect.

“That fantastic increase (in incomes) has to go somewhere.”

He said that missing offshore wealth is likely to be a key explanation because one of the only other explanations is that *“they take that income and blow it on \$5,000 dinners every night. That doesn’t make sense. You simply cannot consume away that fantastic amount of money that income inequality has put into their pockets.”*

Pizzigati considered it unlikely that the wealth data anomaly reflected major changes in the way people responded to survey data: the U.S. Federal Reserve

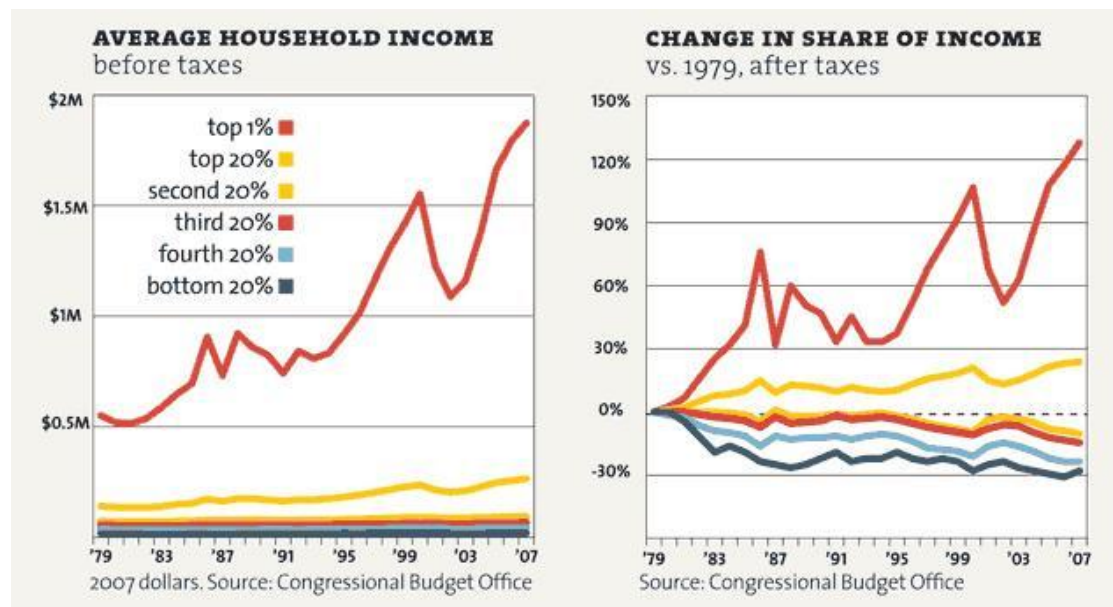
⁴ See Table 2 in EPI Briefing Paper: The state of working America’s wealth, 2011: Through volatility and turmoil, the gap widens, By Sylvia A. Allegretto | March 24, 2011 http://www.epi.org/publication/the_state_of_working_americas_wealth_2011/

surveys are highly detailed, with sessions lasting from 90 minutes to several hours for each respondent. He says that one minor part of the explanation is that the Federal Reserve data, on which Allegretto's work relies, purposefully excludes the wealthiest 400 Americans – but even then, he estimated that including them might make a difference equivalent to just one percentage point or so.

"No-one has really gone into that paradox in any depth at all."

The income data here is based on tax returns, which are backed up legal sanctions for those who fail to comply, whereas for surveys there are no such incentives to report accurately: this suggests that the income data, which shows exploding inequality, may perhaps be the more accurate measure. (However some surveys have advantages over tax data too: Section 3 below explores problems with tax and survey data.)

Income changes: United States, 1979-2007



Although the survey data appears to underestimate the scale of the problem, the income data also heavily under-estimates the income at the top of the scale. As Anthony Atkinson, Thomas Piketty and Emmanuel Saez argue in their widely publicised 2011 article *Top Incomes in the Long Run of History*⁵:

"The use of tax data is often regarded by economists with considerable disbelief. . . . These doubts are well justified for at least two reasons. The first is that tax data are collected as part of an administrative process, which is not tailored to our needs . . . Secondly,

⁵ Anthony B. Atkinson, Thomas Piketty, and Emmanuel Saez, *Top Incomes in the Long Run of History*, *Journal of Economic Literature* 2011, 49:1, 3–71, p19
<http://piketty.pse.ens.fr/fichiers/AtkinsonPikettySaez2011.pdf>

it is obvious that those paying tax have a financial incentive to present their affairs in a way that reduces tax liabilities.

There is tax avoidance and tax evasion. The rich, in particular, have a strong incentive to understate their taxable incomes.”

Given this enormous underestimation in a country with one of the world’s most sophisticated and extensive data collection facilities, it seems likely that this statistical understatement of wealth inequality may be even larger in other countries, particularly developing countries where there is greater reliance on possibly inferior survey data for both income and expenses, and where tax administrations are far weaker than in the United States.

Missing wealth 3: Africa’s Odious Debts

According to Leonce Ndikumana, research director of the African Development Bank, and James Boyce, professor of economics at the University of Massachusetts, Amherst, the sheer volume of secretly held private assets dwarf’s Africa’s public debts, making it a net creditor to the rest of the world. In their book *Africa’s Odious Debts: How Foreign Loans and Capital Flight Bled a Continent*, Ndikumana and Boyce estimate a cumulative \$944 bn in accumulated flight capital from 33 African countries in 1970-2008, compared to “just” \$177 bn in external debts, making Africa a net creditor to the world. This chimes clearly with James Henry’s research accompanying this paper. The big problem here is that:

“the assets accumulated by means of capital flight are private, while the external debts are public liabilities owed to the creditors by the people of Africa through ‘their’ governments.”⁶

Henry’s estimates accompanying this report produce a similar picture. These African private assets, and the income earned by these assets (which is often accumulated, and spent, via offshore circuits too) will generally not be accounted for in the inequality statistics. The problem for many developing countries, as Section 3 explains, is likely not just to be a significant factor in the underestimation of top incomes, but potentially a catastrophic one.

Missing Wealth 4: One, Hyde Park, London

⁶ *Africa’s Odious Debts: How Foreign Loans and Capital Flight Bled a Continent*, Léonce Ndikumana and James K. Boyce, Zed Books, 2011. Particularly Chapter 2. The authors concede that while much of this money will have been ‘dissipated in Parisian shopping sprees’, the ‘cumulative stock with imputed interest earnings is a reasonable indicator of the opportunity cost of the failure to invest these funds productively in Africa. IT also provides the most appropriate measure for comparison to Africa’s external debts, since these accrue interest regardless of how the borrowed money was used.” They also note (p47) that their accumulated capital flight figure is close to a Merrill Lynch estimate for the total wealth held by African High Net Worth Individuals (HNWIs) of approximately \$1 trillion in 2007.

Getting a handle on the ownership patterns of the wealthy is extremely hard. Anecdotal evidence, however, suggests that offshore ownership is extremely pervasive, especially in certain areas such as the financial centre of London.

Reporting by Britain's *Sunday Times* newspaper in November 2011⁷, however, provides a fascinating window into the topic. The newspaper combed land registry records to obtain ownership details for the 56 apartments that had been purchased in the London residential building One, Hyde Park, which the newspaper described as "*the most expensive apartment block ever built anywhere on Earth.*"

The 56 apartments were listed as having a value of a total £1,278 million (US\$ 2.0 bn) but of these, only four apartments, with a combined value of £65.7 million, were listed in the name of warm-blooded people. The rest, representing nearly 95 percent of the listed value of the properties, were owned anonymously through corporations or trusts, mostly in traditional small-island offshore jurisdictions. 25 were owned via the British Virgin Islands, six were owned via the Isle of Man, six more from the UK, four from each of Guernsey and the Cayman Islands, two from Liechtenstein, and one each from Switzerland, Monaco, Mauritius, St Vincent & Grenadines, Bahamas, Thailand, the United States, Liberia and Belize.

A subsequent story for the *Guardian* newspaper⁸ (by which time 62 apartments had been sold) reported that only nine had been registered to pay UK Council Tax; only four were paying the full council tax, while five are paying the 50% discounted council tax owed on a second home. Tax officials were searching records to find the apartments' owners, the *Guardian* reported, but "*the myriad offshore companies protecting the identities of residents are, according to sources at the council, likely to defeat them.*" If they were escaping council tax, then it is a fair assumption that they were effectively outside the UK tax net (which means, as Section 3 explains, that they are probably not captured in any tax net anywhere in the world.)

Owning the apartments offshore can help the owners avoid various different taxes: not just council tax, but stamp duty on the sale of the apartment⁹; rental income taxes if those are earned offshore; inheritance taxes, and more.

This anecdote suggests clearly that for at least some classes of asset in some jurisdictions, the high-worth assets via secret offshore structures is exceptionally high.

Missing wealth 5: the global scale

⁷ John Arlidge, *Anybody Home?*, *Sunday Times*, November 20, 2011

⁸ Daniel Boffey, *Only nine pay council tax in enclave for super-rich*, *The Guardian*, Nov 26, 2011

⁹ Stamp duty is payable to the UK on the sale of the apartment. However, if the apartment is owned by an offshore company, then stamp duty could be avoided if the offshore company was itself transferred from one owner to the other, rather than having the outright ownership of the apartment itself transferred.

Professor Thomas Piketty, a leading expert on economic inequality and one of the authors of the [World Top Incomes Database](#), says:

“So far, we have not taken this (offshore money) into account in the World Top Incomes database”. We tried always to be very clear that [our results are] certainly a lower bound, not only for the level of inequality, but probably for the trend as well.”

Piketty has been working with Gabriel Zucman, also of the Paris School of Economics, to try to compensate for this. In a [March 2012 paper](#) *The Missing Wealth of Nations: Are Europe and the U.S. Net Debtors or Net Creditors*,” Zucman states that:

“official statistics substantially underestimate the net foreign asset positions of rich countries because they fail to capture most of the assets held by households in offshore tax havens.”

Zucman finds that 8% of global wealth is held in tax havens, and 6% is unrecorded and describes a “puzzle”:

“At the global level, liabilities tend to exceed assets: the world as a whole is a net debtor,” [presumably to other planets in the solar system]. Similarly, the global balance of payments shows that more investment income is paid than received each year.”

This has resulted in major misunderstandings of the net assets positions of, for example, western countries vis à vis China, and Zucman concludes that current economic analyses are labouring under “*an illusion caused by tax havens.*” He explains how this comes about:

“Households do not open bank accounts in Switzerland and Singapore to place their funds in low-yield bank deposits. Through their bank accounts in tax havens, they invest in portfolio securities. But when a French household owns a US equity through a Swiss bank, France underestimates its foreign assets, because Swiss banks do not exchange data with French statisticians. US statisticians duly record a foreign liability: they are aware that a foreign resident owns a US equity. Switzerland, which is simply a conduit, records nothing. Thus, more equity liabilities than assets are recorded worldwide.”

Zucman singles out the tax havens of Luxembourg, Ireland and the Cayman Islands as being particularly important elements in the puzzle¹⁰ and estimates the ‘discrepancy’ at approximately US\$4,500 billion (\$4.5 trillion) worldwide.

¹⁰ See also, for example, [IMF Working Paper](#), *Cross-Border Investment in Small International Financial Centers*, Philip R. Lane and Gian Maria Milesi-Ferretti which says in footnote 4 that “The Net Asset Value reported by hedge funds registered in the Cayman Islands totaled over \$2.2 trillion at end-2007. However, portfolio equity claims on the Cayman Islands reported by the main investor countries participating in the CPIS were only \$768bn.”

This is significantly lower than Henry's figures, largely for two main reasons, both acknowledged by Zucman. First, Zucman's data relies on numbers that are available *to statisticians* (balance of payments statisticians and so on), whereas Henry's data is more focused on what is declared *to tax authorities*. A foreign bank account owned by a German resident and taxpayer is likely to be reflected in global balance of payments statistics, but even so there is no guarantee that the German tax authorities will have any knowledge that the account exists. Second, Zucman's estimate includes financial assets only, and excludes many other asset classes (such as real estate, yachts, artworks and so on.)

Piketty says he will work on incorporating the data on the 'missing wealth' into the data sets and thinks it will make a significant difference:

"We have not done the full computation, but most likely when we do it today's level will look bigger than in (the immediate pre-Depression year of) 1928: instead of (the Gini coefficient for the United States) being 50, it will probably be somewhere between 50 and 60: I don't know."¹¹

Henry's estimates for hidden offshore wealth are a multiple the size of Zucman's and the implications for the inequality underestimate would clearly be highly dramatic.

3. Measurement issues

Measurement problems: survey data

Two main data sources are used for measuring inequality: official inequality and tax data, on the one hand, and survey data, on the other. (*Box 3* below briefly discusses the main ways used to measure economic inequality.) Survey data is especially important for measuring inequality in developing countries, where income data can be extremely patchy. However, survey data is especially problematic with respect to capturing income and assets of high-income households.

Pizzigati in Section 2 above describes the huge disconnect between tax data and survey data in the US; Atkinson, Piketty and Saez back him up. For instance, they note that the US Current Population Survey (CPS) estimates the top 1% share of household income at about 13% while the tax data (including capital gains)¹² shows an income share of over 23%: another remarkable disconnect.

When it comes to surveys, various problems stand out. One is non-response (that is, when certain people decline to participate) and another is differential

¹¹ Piketty adds: "The problem is that the people doing micro work and the people doing macro are different people so the study of inequality very often doesn't try to be consistent with the international macro picture that we have, on capital flows, tax havens etc. These are different planets, historically: we are trying to merge these two in the literature, to make the micro inequality data consistent with the macro discrepancies that we have."

¹² Atkinson, Piketty, Saez, 2011, pp29-32

response: when people provide false information: i.e. they tell lies. Both aspects tend to downplay the effect of inequality: as Atkinson, Piketty and Saez [note](#), these two problems “*particularly affect the top income ranges.*” Offshore under-declaration is a central part of this problem.

Milorad Kovacevic, Chief Statistician for the U.N. Human Development Report Office, adds:

*“People that are in charge of measuring inequality based on survey data know that the both ends of the distribution are underrepresented or misrepresented. **There is rarely a household from the top 1% earners that participates in the survey.** On the other side the poor people either don't have addresses to be selected into the sample, or when selected they misquote their earnings - usually biasing them upwards.” (Our emphasis added.)*

Branko Milanovic, Lead Economist in the World Bank research group and a world expert on the subject of inequality, backs this up:

“Most of these (offshore) assets held by people are probably in top income and these people are not often in surveys. They refuse to participate.

..

We know people in survey who are under-represented. They're in the bottom or the top. The 10-95 percent(iles) are reasonably included. The 5% at the top and the bottom are underrepresented so clearly the gap between the top and the bottom is far higher.”

And a World Bank paper cites obvious reasons why the rich don't participate:

“High-income households might be less likely to participate because of a high opportunity cost of their time or concerns about intrusion in their affairs.”¹³

A further issue is that many income surveys are ‘top coded’ – that is, incomes above a certain threshold are lumped together, so the top category may be ‘all over \$1 million,’ for example. Here, the numbers themselves are likely to be accurate enough, but still fail to capture the potentially huge distribution of wealth within that top code. Some studies do try to compensate for this, but even so none have had access to the unprecedented data revealed by James Henry.

One might argue that the “missing wealth and income” at the bottom end of the income scale might even out the gap at the top, but Lansley, in the context of a discussion about the United Kingdom, explains why such an argument holds little water:

“At the bottom, it's tiny stuff, compared to people at the top: this is plumbers understating their income by 20 or 30 percent. It is really small beer: they

¹³ Anton Korinek, Johan A. Mistiaen, Martin Ravallion, *Survey nonresponse and the distribution of income*, Development Research Group, World Bank, *Journal of Economic Inequality* (2006) 4: 33–55. The article was sent to us by Ravallion as part of his response to our questions.

don't even out at all. The share of the total income pool of the bottom 10 percent will be 1 percent or less, whereas the top 1 percent has 15 percent. There is no comparison of the scale: you can forget about it."

Box 3: different measures of economic inequality

Economic inequality is measured in different ways. The commonest measure is probably the Gini coefficient, which ranges from 0 (everyone is equal) to 1 (one person has all the income or wealth, everyone else has nothing.) Gini coefficients in the real world range between about 0.25 in highly egalitarian Scandinavian countries to over 0.6 in some parts of Africa: and sometimes the number is expressed in a range between 0 and 100 instead of a range from 0 to 1.

The Gini coefficient is simple and clear but inadequate in some respects. For instance, it does not capture subtleties such as when inequality is disproportionately skewed in one particular part of the distribution, such as at the very top of the income scale. Many studies therefore prefer to talk in terms of the income captured by the top (or bottom) x percent of the population, or to describe income shares according to quintiles (fifths) or deciles (tenths) of the population, or in the ratios between these shares (such as the ratio between the top decile's share and the bottom decile's share.). Other, more technical measures of inequality are also used for different purposes.

Economic inequality also has several dimensions. Some studies focus on individuals, whereas others focus on families or households. Three main economic dimensions are measured.

Income. There are various ways to define income, but one common measure used in inequality studies relies on tax data, which captures the annual income that is subject to tax. It is also important to distinguish between *wage* inequality, which is what workers are paid, and *income* inequality, which includes financial and other capital gains, which accrue most substantially to the richest strata of societies.

Consumption and spending. These measures are fairly similar: Consumption equals spending plus the value of food and other consumption items produced and consumed by a household or individual. Most studies of developing countries use consumption rather than income data.

Wealth and assets. This focuses on ownership of assets. It is harder to measure than income inequality, because all states have income taxes and therefore there is a large amount of income data available, whereas relatively few states levy wealth taxes, so other methods generally have to be used, such as survey data, which is often an inferior measure. The problems of measuring wealth at the top of the income scale are probably even greater than for income.

Each measure has its limitations, particularly for the reasons that are the subject of this report. Data on inequality is collected primarily from surveys and from official income tax data. Occasionally other sources, such as probate data are used.

The traditional data is contested, and each study and every country measures the data in a slightly different way.

Our focus is not so much on these disputes as on the way that various studies underestimate the scale of inequality, as a result of secret offshore holdings and other related phenomena. We discuss some of the problems with measuring inequality below.

Argentina, see below, provides a rare case study of how top incomes might have been miscalculated as a result of the 'missing' data.

Measurement problems: tax data, evasion versus avoidance

From a tax perspective, offshore structures aim to protect HNWIs from a range of taxes: income taxes, stamp duties, capital gains, wealth and inheritance taxes. They cover up many other crimes and abuses too. Assets owned offshore range from financial assets to real estate, artworks, racehorses, jets, yachts – the authors even know of individual wristwatches – which are held through offshore companies or trusts, often in perpetuity.

Tax evasion is by definition illegal, while tax avoidance is by definition not illegal. A large grey area exists between the two, ranging from the softest tax 'planning' to aggressive tax avoidance using spectral and fictitious structures and schemes.

For those measures of inequality that are based on income and tax data, both evasion and avoidance are germane to our core thesis about inequality.

Tax evasion will obviously skew the picture: if income is not declared it will not show up in the tax statistics, and will therefore be missed in the inequality statistics. All experts who were asked said they were not aware of any study that had successfully taken account of this.

Tax avoidance, by contrast, is more subtle, but could perhaps be as important as evasion. As Piketty said in an interview:

“Particularly for capital income, you have a substantial fraction of capital income, even if it is not in tax havens, that manages not to be taxable for purely legal reasons: it manages to get into the right niche, the right article of the tax code, to avoid tax.”

Milanovic adds:

“The majority of these people are very rich and access the facilities provided by globalisation avoiding taxation in their own countries. They are placing wealth beyond tax authorities. The majority of these things are not necessarily illegal but its doubtful they get included.”

All this raises the question not just of what constitutes tax avoidance, but also what constitutes income: both are elastic concepts and assessing them becomes a matter of interpretation. Efforts have been made to find alternative measures

of ‘income’ which avoid using tax data, but these contain their own potentially catastrophic pitfalls too.¹⁴

Many sources of capital income such as interest income or returns on pension funds or dividends have been either taxed separately at flat rates or fully exempted and have not been counted in the tax statistics. Atkinson, Piketty and Saez (2011) added:

“Our view is that legally tax-exempt capital income poses more serious problems than tax evasion and tax avoidance per se.”

Although tax data is most usually used to collect incomes, it is occasionally used to collect wealth data. The United Kingdom, for instance, has attempted to collect wealth data based on probate forms (that is, the forms filled in when people die, for inheritance tax purposes.¹⁵) This data is highly inadequate not just because of widespread avoidance and evasion, but because of the ‘car crash’ problem: it will if, for example, people accumulated a lot of wealth in the 1990s and 2000s, they will not be recorded unless they die unexpectedly, such as in a car accident.

Some real-world cases, immediately below, demonstrate why (legal) tax avoidance is so important in skewing the inequality studies.

The Jimmy Carr case

In June 2012 a tax avoidance scandal made headlines in the UK when the well known comedian Jimmy Carr was found to have escaped millions of pounds in tax by using a complex tax avoidance scheme via the Crown Dependency of Jersey, a notorious British tax haven. The “K2” scheme that Carr used was not ruled illegal at the time, but it was clearly abusive: the comedian subsequently apologised to the nation for using it, after widespread public outrage, and Prime Minister David Cameron called such schemes ‘morally wrong.’

Under the K2 scheme, Mr. Carr was able to channel proceeds from DVD sales and television appearances through a Jersey-based trust, which then “lent” him the money back¹⁶. Since loans are (theoretically) supposed to be repaid, they are not taxable. In addition to running an estimated £3.3 m through the Jersey structure, Carr paid himself a salary of £100,000. The company promoting the K2 scheme said that it could achieve tax rates between 0 and 25 percent, and the Times newspaper estimated that this single scheme alone sheltered £168m per year.

¹⁴ The best known method for avoiding a tax-derived definition of income is the “Haig-Simons” approach, which defines it as the sum of all consumption during a year, plus the change in net worth (which makes sense, as there are only two things one can do with income: save it, or consume it). Anything that deviated from that income is regarded as the product of an unjustified tax loophole. The problem from our perspective is that, as Sections 3 explain, both consumption and wealth measures are highly inadequate and inaccurate.

¹⁵ See, for instance, Personal Wealth Statistics 2001 to 03 and 2005 to 07, Her Majesty’s Revenue & Customs, June 2011. http://www.hmrc.gov.uk/stats/personal_wealth/intro-personal-wealth.pdf

¹⁶ See, for example, *The comedian and his sheltered millions*, Alexi Mostrous and Fay Schlesinger, The Times, June 19 2012

The UK tax authorities reportedly accepted Mr. Carr's scheme. So for income tax purposes that £3.3m was removed from the UK income tax bill. That would directly impact on the inequality statistics calculated on the basis of UK tax data, making inequality look less bad than it really is. However, there is still room for debate on whether this £3.3m should count as 'income:' Her Majesty's Revenue & Customs (HMRC) accepted the K2 tax scheme so from their perspective it was not 'income', while most reasonable people, and the British Prime Minister, would consider that it was. Tax avoidance schemes range in their degree of 'aggression' and this obviously creates a measurement problem: where does one draw the line?

Another example helps explain how both assets and income can be cloaked, apparently legally, from the tax authorities.

Trusts, and the discretionary trust

At its most basic level, a trust is a three-way legal arrangement whereby a '**settlor**' (such as a wealthy grandfather) puts assets into a trust, to be managed by independent **trustees** (perhaps provided by a law firm) for the benefit of one or more **beneficiaries** (such as the grandchildren). When the settlor hands over the assets (which might be a bank account, or a racehorse, or a portfolio of equities) into a trust, the *legal title* passes to the trustee, but the trustee remains bound by law to deploy the assets on behalf of the beneficiaries under the terms of a *trust deed*. That is the simple story: in fact, trusts have many frequently slippery and devious variants, and can provide secrecy at least as strong as the Swiss banking kind: trusts and particularly offshore trusts are widely used for tax evasion and a variety of other crimes. (See this explored in more detail, [here](#).)

Essentially, a trust is a legal arrangement for manipulating and unbundling the concept of *ownership* into different strands: legal ownership, beneficial ownership, conditional ownership, usage rights, and more.

To illustrate the point more clearly, consider the discretionary trust, widely used in Europe (although U.S. tax law has had some success in tackling them.)

The innovation in a discretionary trust is that the beneficiaries are not fixed. Instead, the question of who is to benefit from the assets is left to the 'discretion' of the trustees. So you might have several potential beneficiaries – some could even be children who have not even been born yet – and at least for now, nobody can say that they are entitled to the assets or their benefits until the trustee uses his or her 'discretion' (another very slippery concept, particularly when wielded by an offshore trustee) and shells out to a particular person or people at some point in the future.

Thus discretionary trusts create a situation whereby until the payout happens – which may be decades in the future – it is impossible to identify any given individual who is definitely entitled to any of those assets: you cannot say who

the beneficiary is. There actually isn't one: it is all up in the air, as the trustee's 'discretion' has not been exercised yet. So until then, the assets literally have no owner: they are in an 'ownerless' legal limbo. Even the potential beneficiaries could truthfully say in a survey that they are not entitled to those assets.

Ultimately, however, people will get benefits from those assets – often via loopholes which mean they don't pay taxes on them even when a distribution is made. The point is that these assets are not reflected in national statistics.

No attempt has ever been made to assess accurately how much wealth is involved, or what the nature of this wealth is, but these structures and similar 'ownerless' ones (such as assets held in Liechtenstein foundations) are widespread in Europe and elsewhere. However, given the popularity of such apparently 'ownerless' structures, it is likely that hundreds of billions and possibly trillions of dollars are held in this way.

The “elsewhere” problem.

Tax havens spend a lot of time and legislation 'deeming' income or assets to be located elsewhere: in other words, they are deemed not to fall into the local tax net. The result of this widespread 'elsewhere' problem is that these assets and income do not fall into any tax net anywhere. “Elsewhere” becomes “nowhere.”

John Christensen, a co-author of this paper, used to be Economic Adviser to the UK tax haven of Jersey where for seven years he was responsible for negotiating the terms of entry of High Net Worth Individuals (HNWIs) wanting to become residents. Jersey's strategy was (and still is) not to negotiate a tax rate but to negotiate an annual income that would be deemed taxable in Jersey.

During his period in office Christensen aimed to negotiate a minimum tax payment of £150,000 each year. So if you had, say, £10m earning 7.5% (or £750,000) then your tax rate would be level with Jersey's normal income tax rate of 20%. But if you had £100m yielding an 5% annually (or £5 million per year), then that negotiated annual tax payment of £150,000 would represent an effective tax rate of just 3%. In the absence of a capital gains tax in Jersey, it is all too easy for the HNWI's wealth management team to dress up earnings as capital gains, to keep taxable income to precisely the negotiated amount. Obviously this regime becomes more attractive, the wealthier you are.

The United Kingdom does something similar with its 'domicile' rule: for those classed as 'non-domiciled' taxpayers, in return for an annual fee of £30,000, the UK only taxes income earned in the UK: income earned from assets held outside the UK, often in places like Jersey, is considered to fall outside the UK tax net. This has attracted some of the world's wealthiest individuals – from Russian Oligarchs to Indian steel magnates to Saudi royalty to U.S. financiers - to locate in London, where their income and assets are deemed by the UK to be 'elsewhere' (which means they are taxed nowhere.) So the income inequality statistics ignore the vast assets held by some of the world's wealthiest individuals.

Measurement problems: the case of Argentina

According to a 2011 study by Facundo Alvaredo of the University of Oxford¹⁷:

“Household surveys are of little help when focusing on the very rich . . . The rich are missing from surveys either for sampling reasons or because they refuse to cooperate with the time-consuming task of completing or answering to a long form. When found, they are sometimes intentionally excluded so as to minimize bias problems generated by outliers.

...

While survey interviewers in poor countries can usually collect data in very poor areas, penetrating the gated communities in which many rich people live is often impossible.”

Alvaredo found that while 698 Argentine tax files showed income above \$1m, and 26 showed income above \$5m, the surveys showed that the top 160 individuals only had income between \$500,000 and \$1m. In developing countries, he said, surveys will typically detect earned income (e.g. wages and salaries) but fail to capture information on unearned incomes (e.g. rents, dividend payments and capital gains).

One of the rare attempts to estimate the effect of “hidden” offshore wealth was done by Jorge Gaggero and Dário Rossignolo of the Centro de Economía y Finanzas para el Desarrollo de la Argentina (CEFID-AR). Previous estimates of the Gini for Argentina, without correcting for undeclared, income was 0.46 in 2009 while the Gini they calculate after correcting for inequality was 0.48: this big differential, they said, was based on “very conservative” estimates of rents provided by wealthy Argentines’ external investments, which in turn was based on conservative official estimates of their external holdings.¹⁸

¹⁷ Facundo Alvaredo, *The Rich in Argentina over the Twentieth Century: from the conservative republic to the Peronist experience and beyond 1932-2004*, Paris School of Economics, April 2011, <http://hal.archives-ouvertes.fr/docs/00/58/83/18/PDF/wp200702.pdf>

¹⁸ The 0.46 figure is from Nora Lustig, Leonardo Gasparini, *The Rise and Fall of Income Inequality in Latin America*, Tulane University, February 2011. The 0.48 figure is from *Impacto del Presupuesto Sobre la Equidad*, Jorge Gaggero y Darío Rossignolo, Documento de Trabajo No. 40, Cefid-AR, Sept 2011. The comparison and the stress of this study’s ‘conservative’ nature was made by Gaggero, in discussion and in email correspondence: he said that Henry’s data involved much greater sums of offshore wealth (approximately 350% greater than official Argentine data) which implied a far greater distortion of the Gini coefficient, though he was not able to produce a recalculation based in Henry’s data in the short timescale presented to him.

4. Conclusion

This paper reveals for the first time that economic inequality is worse – significantly worse – than any known study of inequality has ever indicated. This is true probably for every country in the world, and for the world as a whole.

In the 30 years to 2010, the income of the top 1% in the US doubled while the top 0.01% quadrupled. In this period, incomes of the bottom 90% in the US fell by nearly 5%. Yet wealth data does not reflect the huge increases of income enjoyed by America's richest earners. There is a "total disconnect".

It is increasingly recognised that income inequality compounds and even of itself generates serious social problems, hampers growth and can spark political instability.

Reputable estimates suggest 33 African countries have seen accumulated capital flight of \$944bn between 1970 and 2008 - a vast sum consistent with James Henry's research accompanying this paper, which finds that there was \$21-32trn in assets sitting secretly offshore, uncounted.

We asked eight world experts specialising in economic inequality whether unrecorded offshore wealth is properly factored into their calculations, and if not, whether current analyses underestimated the problem. They all agreed with our theses: it is not, and they do.

Professor Thomas Piketty, a leading expert on economic inequality, has told us unrecorded offshore money is generally not included in the World Top Incomes Database study he co-authors. So its results, he says, are *"certainly a lower bound, not only for the level of inequality, but probably for the trend as well."*

The problems with gaining accurate results to base conclusions on wealth and inequality are manifold. National tax authorities have well documented issues accessing and assessing the income of their citizens, particularly HNWIs. Data surveys suffer from people either declining to participate or issuing false information, and these problems are particularly acute for the top 1%. Similar things happen at the very lowest income groups too -- but the sums involved are "small beer" compared with the upper income brackets.

The result is that economic inequality, in the various ways it is measured, does not reflect the reality of vast sums of wealth – as much as \$32 trillion according to the accompanying report by James Henry – which are not included in the calculations.

This means inequality is far more pronounced than we have until now appreciated.

Inequality is a political choice: a choice about how much inequality in outcomes a society is willing to tolerate, according to its beliefs about how important that

may be to provide incentives, and how much damage it may do to social cohesion, economic growth and so on. People take different views on each of these aspects, and on the overall balance, and that is why there cannot be a 'right' answer imposed on a country from outside, but rather the society's tolerance of inequality must be reflected in the decisions of elected representatives.

But – and this is a big but – Alex Cobham, head of research at the UK charity Save the Children, poses a question.

“What if the extent of inequality has been hidden, and may even have been systematically increasing, unseen by most people? What would that mean about the political choices that have been taken or accepted, and about the possibility of reversal as the true state of affairs becomes increasingly clear? “

We hope that our article, and James Henry's accompanying research for the Tax Justice Network, serves to help make the true state of affairs clearer, and to change the frame of reference in which societies create their policies and their systems for ensuring the prosperity of their citizens.

END