



PUBLIC FINANCIAL FLOWS

ASSESSMENT PAPER

*Benefits and Costs of the IFF Targets
for the Post-2015 Development Agenda*

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Post-2015 Consensus

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Highlights

For each of the three proposed targets, there is currently insufficient evidence to provide precise cost-benefit analyses. However, available data indicate that in even the most conservative scenarios, they are likely to exhibit high ratios of benefit to cost. The targets are:

- Reduce to zero the legal persons and arrangements for which beneficial ownership info is not publicly available.
- Reduce to zero the cross-border trade and investment relationships between jurisdictions for which there is no bilateral automatic exchange of tax information.
- Reduce to zero the number of multinational businesses that do not report publicly on a country-by-country basis.

The following targets are relatively ineffective or there is large uncertainty regarding the benefit cost ratio:

- Reduce illicit financial flows by \$x
- Reduce tax evasion by \$x
- Increase stolen asset recovery by \$x.

Range of benefit-cost ratios for proposed targets

Proposed target	Benefits	Costs	BCR
(i) Reduce to zero the legal persons and arrangements for which beneficial ownership info is not publicly available	\$768bn - \$7.5tn	\$0.35bn - \$66bn	13 – 20,000
(ii) Reduce to zero the cross-border trade and investment relationships between jurisdictions for which there is no bilateral automatic exchange of tax information	Possible additional taxable income of \$277bn to \$1660bn (or \$245bn to \$1471bn)	Unknown: but certainly not prohibitive for the 64 jurisdictions now committed to the OECD standard	Likely to be high (high confidence)
(iii) Reduce to zero the number of multinational businesses that do not report publicly on a country-by-country basis	Unknown; but highly likely to be in billions of dollars a year	Unknown, but close to zero and possibly negative	Likely to be high (high confidence)

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Our Recommendation

The UN Secretary-General's High Level Panel of Eminent Persons on the Post-2015 Development Agenda has proposed the following target:

'12e. Reduce illicit flows and tax evasion and increase stolen-asset recovery by \$x'

Despite its attractive simplicity, such a target faces questions in relation to technical accuracy, measurability and accountability. The Open Working Group's current proposals move the discussion forward however, and highlight the importance of identifying the specific steps necessary for progress – and where cost-benefit analysis may provide useful insights.

In this light, we propose and examine three more precise targets, which can be considered either as a direct alternative or – which is perhaps more likely in the current politics of the negotiations – as the detail which could sit underneath a reworked version of the High Level Panel's proposal.

For each of the three proposed targets, there is currently insufficient evidence to provide precise cost-benefit analyses. However, available data indicate that in even the most conservative scenarios, they are likely to exhibit high ratios of benefit to cost. The targets are:

- i. Reduce to zero the legal persons and arrangements for which beneficial ownership info is not publicly available;
- ii. Reduce to zero the cross-border trade and investment relationships between jurisdictions for which there is no bilateral automatic exchange of tax information; and
- iii. Reduce to zero the number of multinational businesses that do not report publicly on a country-by-country basis.

There are ongoing international processes in respect of each of these targets, and those involved should be encouraged to prioritise collection of data that would enable a more complete impact assessment.

Given the likely minimum ranges of benefit-cost ratios, however, there is a strong case to include these specifics in the post-2015 framework.

Introduction: Illicit financial flows¹

This paper sets out a definition of illicit financial flows (this section); considers the approach to such flows in proposals for the post-2015 sustainable development framework (section 1); explores evidence of the damage done by illicit flows (section 2); proposes alternative measures (section 3); and provides a tentative analysis of the economic costs and benefits of these measures, on the basis of currently available evidence (section 4).

The limitations of cost-benefit analysis should be kept in mind throughout. The post-2015 framework is fundamentally political. The power of its predecessor, the Millennium Development Goals lay in its contribution to setting norms rather than in the specifics of individual targets. Most importantly, perhaps, MDG 3 fixed the still-emerging norm on the need for gender equality – with a reach that has gone far beyond the handful of areas in which targets were actually specified.

The value of economic cost-benefit analysis is clearly of second order in comparison, and the Open Working Group rightly weighs political and social issues highly. Imagine that cost-benefit analysis implied that including the most marginalised 1% of populations politically, or in service basic provision, was prohibitively expensive. It is unthinkable that the principle (and norm) of universality would be sacrificed to a more ‘realistic’ 99% target – which would effectively formalise a commitment to exclude the most excluded.

Where cost-benefit analysis can play a role, however, is in relation to the other major contribution of the MDGs: the creation of a framework for some shared prioritisation among national and other actors. With the most recent (June 2014) proposal containing some 17 goals and more than 200 targets, some narrowing down seems inevitable if the final framework is again to assist shared prioritisation, rather than provide a more or less comprehensive list of possible areas for focus, from which any actor can pick and choose without the likelihood of greater coordination.

Within the areas identified as political priorities, and alongside the rights-based and other arguments for specific emphases and inclusions, the results of economic cost-benefit analysis can provide additional and complementary evidence. Two caveats apply: the extent of uncertainties in any assessment should be fully reflected when this analysis is weighed alongside other evidence; and the second-order nature of economic costs and benefits in the political decisions being taken should not be forgotten.

In the current study, a narrowly economic approach provides conservative estimates because while the costs of the proposed targets are measured relatively well, only the narrowest economic benefits are captured (ignoring the potential for political, social and environmental benefits). In the case of illicit flows therefore, there is unlikely to be a conflict between cost-benefit analysis and rights-based arguments – since the latter,

¹ This section draws on material prepared for the Tana High Level Forum on Peace and Security in Africa (Cobham, 2014), and for the UNECA High Level Panel on Illicit Financial Flows out of Africa.

including arguments for the progressive mobilisation of resources for the progressive realisation of rights, would add positive weight to the benefits and strengthen the findings.

Illicit financial flows comprise tax evasion, the theft of state assets, the laundering of the proceeds of crime, and a range of market and regulatory abuses under cover of anonymity. The leading estimates suggest that developing countries in total may currently be losing close to a trillion dollars a year, and more than half a trillion dollars a year on average over the last decade (GFI, 2013). While such estimates of deliberately hidden phenomena are fraught with uncertainty, confidence in the broad magnitudes is supported by a range of different studies by different authors and based on different data. At the very least, it seems likely that illicit outflows are substantially larger than official aid receipts; and that tax abuse, typically through trade mispricing, is the major element of illicit outflows. Damage is likely to be substantial – in the form of tax losses, foregone economic growth, greater inequality, and the undermining of institutions, political representation and trust.

There is no single, agreed definition of illicit financial flows (IFF), due to both the vagueness of the term and the hidden nature of its content. The Oxford dictionary definition of ‘illicit’ is: “forbidden by law, rules or custom.” The first three words alone would define ‘illegal’, and this highlights an important feature of any definition: illicit financial flows are not necessarily illegal. Flows forbidden by “rules or custom” may encompass those which are socially and/or morally unacceptable, and not necessarily legally so.

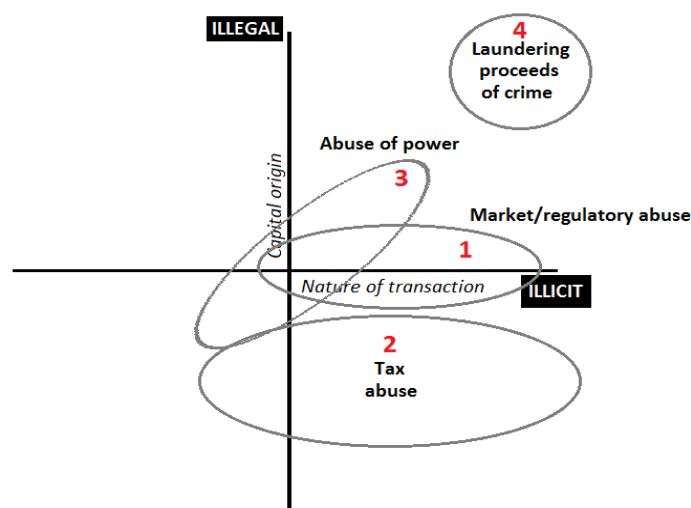
Laws, like rules and customs, vary across geography and time, and at either end of a transaction – so a legal definition would not necessarily be precise either. In addition to this, there are important differences in the likelihood of legality, according to the resources available to challenge and test behaviour. Behaviour of uncertain legality is more likely to go unchallenged by a tax system with little to no capacity to uncover corporate tax evasion, or a political system with little to no will to address the theft of state funds – the absence of legal findings of criminality is not, therefore, an unbiased indicator of the legality of financial flows. To take a specific example, commercial tax evasion affecting a low-income country where the tax authorities have limited administrative capacity is much less likely to be either uncovered or successfully challenged in a court of law, than the same behaviour in a high-income country with relatively powerful authorities. A strictly legal definition of IFF is therefore likely to result in systematically – and wrongly – understating the scale of the problem in lower-income, lower-capacity states. For this reason, such a definition should be rejected.²

Consistent with the definition of illicit as forbidden, is the idea of IFF as hidden – whether technically illegal in each context or not, they would be frowned upon at the very least as a form of abuse, and so are deliberately obscured from public view. Following from this, IFF

² Blankenburg & Khan (2012) provide an interesting, related argument: that in cases of state illegitimacy there may be legal flows which are illicit, and indeed illegal flows which are licit. Where a state is unrepresentative and predatory, its adjudications over legality may be considered illegitimate. A tax evading flow, under such circumstances, could be considered justified – and even, depending on the interpretation of ‘rules or custom’, as licit. Relatedly, some illegal flows (and possibly some illicit ones) may not be detrimental if the set of rules or laws that they breach are themselves flawed.

can be thought of in the four categories shown in Figure 1, which presents a stylised representation of their respective positions in terms of the legality of underlying capital and the licitness of the transactions involved. With some exceptions, it is possible to be rather clearer about the legality of the underlying capital than of the transaction – for example, legal profits may be subject to illicit transactions with the aim of tax abuse.

Figure 1: Stylised representation of major IFF types



The categories are:

1. market and/or regulatory abuse (including the use of anonymity to hide political conflicts of interest, or to break regulations on for example market concentration or credit creation);
2. tax abuse (including both that by individuals and companies related to hidden assets and income streams, and that of multinational groups related to profit shifting);
3. abuse of power, including the theft of state funds and assets, and the bribery of public officials; and
4. the laundering of the proceeds of crime (primarily the trafficking of drugs and of humans).

The historic emphasis in policy has been on IFF relating to illegal capital – i.e. abuse of power and corruption, and laundering of criminal proceeds. More recently, and since the financial crisis in particular, greater prominence has been given to measures against tax and market abuse. Annex Table A1 provides a typology of specific IFF channels, from e.g. the manipulation of trade prices to hidden transfers of ownership, and includes a summary for each of the likely effects on state revenues and regulatory effectiveness.

An important feature to note is that most of the identified channels can be used for multiple types of illicit flow. An attempt to clamp down on one or more IFF types while leaving others open (e.g. to address those involving criminal capital only) is therefore likely to fail.

In addition, since there are consistently damaging effects on revenues and on regulatory effectiveness, it may make sense to seek broader progress.

From a development perspective, there are likely to be significant costs to each IFF type. These we discuss in section 2 below. In line with the recognition that the central feature of IFF is their hidden nature, and that their fundamental facilitator is financial opacity, the countermeasures developed take the form primarily of requirements for greater financial transparency: transparency of and about companies, and between jurisdictions in relation to each other's residents. These are discussed in section 3 below, along with other possibilities that we do not consider to have as high a priority. In section 4, we explore the extent of evidence on specific costs and benefits to these preferred measures identified, before a brief final section concludes.

First we consider briefly the position of IFF in discussions on the Post-2015 agenda, and the weaknesses of the original proposals put forward.

Illicit financial flows in the Post 2015 Agenda

The issue of illicit financial flows is among a number which have come to much greater prominence in the period since the Millennium Development Goals (MDGs) were set. A number of concerns with the scope and nature of the MDGs come together in this process, in particular the concern that the MDGs reflect a donor agenda (defined somewhat in opposition to a nationally-owned – and nationally financed? agenda), and the concern that the MDGs were too heavily focused on the social sector (and social spending), at the expense of a wider macroeconomic agenda that would have included domestic revenue raising, economic growth and distributional concerns more prominently.

It was of little surprise then that the High Level Panel report on the Post-2015 Development Agenda proposal for the successor framework to the MDGs included not only a lengthy discussion of the issue, but importantly a specific illicit flows target:

'12e. Reduce illicit flows and tax evasion and increase stolen-asset recovery by \$x'

This is an important and early milestone in the debate, and reflects the extent of consensus which has developed in the last five years in particular. For reasons we explore below, the specific proposal is flawed – but this does not imply that it should be dropped, rather that alternatives be developed. It was perhaps inevitable that this relatively new area – in terms of international policy prominence – would see a more iterative process than some others.

The High Level Panel's proposed target can be disaggregated into the three component parts, each of which suffers important flaws.

- Reduce illicit financial flows by \$x;
- Reduce tax evasion by \$x; and
- Increase stolen asset recovery by \$x.

First, there may not be globally accepted estimates of the components mentioned which could credibly be targeted in such a precise way. While leading multilateral institutions including the World Bank and IMF have neither offered support for the most widely-used estimates (those of Global Financial Integrity, e.g. GFI, 2013), nor proposed their own alternatives, it is unclear whether there is sufficient political confidence in any one set of estimates.

Even if there were to be agreement on, for example, the leading estimates from GFI, however, the targets would remain flawed. This is in part because the overall framing in dollar terms risks focusing efforts on the financial rather than broader impacts. These wider effects are discussed below, but to illustrate the point here consider the role of asset theft. Dollar targeting risk seriously downplaying the importance of progress in this area, since estimates suggest it is much smaller financially than – for example – corporate tax evasion. The theft of public assets, however, may be of greater importance in terms of damage to governance.

A broader concern is that, in the absence of specific policy measures and national responsibilities, the targets do not provide the kind of clear accountability necessary to drive progress.

The proposed framing does not make clear who should do what, or who will be responsible if a given \$x reduction is not achieved. IFF are an international problem, where the secrecy provided in other jurisdictions is likely to be at least as important as the action taken domestically (see e.g. World Bank, 2013); so there is no parallel to a target such as one on domestic health outcomes where there is a clear lead responsibility of the national government. As such, the proposed targets risk paying lip-service to the issue without providing a concrete path to progress.³ Coster van Voorhout et al. (2014) highlight additional issues with reliance on quantitative estimates alone.

An alternative view is that it is not realistic – or, perhaps, politically motivating – to create targets of sufficient detail that lines of accountability are clear. The Open Working Group on Sustainable Development Goals has however carried the discussion forward, and made some progress on this point. Most recently, the co-chairs’ proposal of June 2014 includes specific targets under the proposed goals 16 (‘Achieve peaceful and inclusive societies, rule of law, effective and capable institutions’) and 17 (‘Strengthen and enhance the means of implementation and global partnership for sustainable development’):

- 16.3 by 2030 reduce illicit financial flows by x% and reduce money laundering and all forms of organized crime including human trafficking and illicit trade in arms, drugs and wildlife
- 17.45 cooperate globally to reduce substantially international tax evasion and avoidance

³ An additional issue arises in relation to the third element of the target: namely that a dollar increase in stolen asset recovery could be achieved by maintaining the current rate of recovery while the volume of asset theft rises – which would surely not represent progress. Effective recovery would instead see the volume of both theft *and* recovery fall, ideally to zero.

17.46 cooperate globally to combat illicit financial flows and transfers, recover stolen assets and return them to their countries of origin

These proposals appear preferable to the High Level Panel's formulation for two main reasons: first, because the emphasis on global cooperation provides the basis for accountability beyond individual states; and second, because the greater detail allows for individual identification of particular issues that must be tackled.

The reframing from dollar reductions in IFF to proportionate reduction is welcome, both because it moves away from overemphasising the financial component of damage done and because it may make it easier for participants to accept the use of contested estimates (since agreement that estimates capture the direction of change may be easier to obtain than agreement that particular dollar ranges are accurate).

As the co-chairs also make clear, the goals and targets 'will be further elaborated through indicators focused on measurable outcomes.' A possible concern is the overlap between the three targets, to the extent that similar practical measures are likely to be necessary to deliver progress under each: but this is presentational rather than substantive. If a measure around beneficial ownership transparency (for example) were to support progress on each of the targets, then which of the three it sits under is of little practical importance.

We develop in section 3 a proposal for precise targets within the final post-2015 framework, based on a set of financial transparency measures which are at the heart of international policy processes outside the post-2015 discussions, leaving open the question of the ideal level or location within the broader framework. First we survey briefly the literature on IFF scale and development impacts, to inform subsequent analysis of the benefits of curbing IFF.

Development impacts of IFF

Illicit financial flows may have impacts in four important areas: on economic growth; on social development outcomes; on income distribution and inequality; and on governance and institutional strength. In each area the evidence is indicative rather than comprehensive, although the literature is developing apace. Here we highlight some major findings.

Economic Growth Impact

The link is most direct in relation to economic growth, where illicit outflows can be considered as lost GDP. The GFI and African Development Bank consider the scale of losses in Kar et al. (2013), and summarise their findings for the most heavily affected African countries in Figure 2 – all but two of these twenty have lost more than 10% of their recorded GDP on average.⁴

⁴ Although see e.g. Jerven (2013) on the well-known problems with GDP statistics themselves.

Figure 2: Ratio of average IFF to GDP, 1980-2009



A number of studies have looked at the revenue impact of IFF, or more specifically of trade mispricing. Christian Aid (2008) used Baker's (2005) survey-based estimates to estimate a tax loss for all developing countries of \$160bn, and a subsequent (2009) study based on detailed trade data was broadly consistent in scale, as was GFI's analysis (Hollingshead, 2010). The latter is based on data for 2002-06 so is somewhat dated, but provides a useful breakdown which illustrates the potential scale. The overall sub-Saharan African revenue loss is estimated at 3.4% of total government revenues, although given the broad rise in African IFF since the early 2000s we might expect this to have worsened since. Individual countries show marked differences, however, with four of the top ten revenue losers from the region: Zimbabwe loses most (31.5% of revenues); Mali comes in 5th (25.1% of revenues lost); Republic of Congo 6th (24.9%); and Zambia 8th (21.7%).

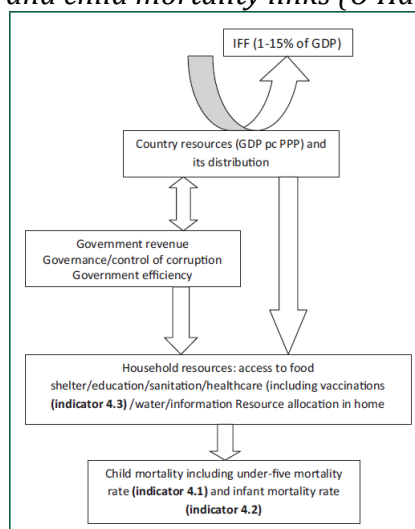
In terms narrowly of economic growth these can be considered as reflecting the scale of lost opportunity for states to develop infrastructure and to invest in human capital, in order to fuel future growth and employment. To give just one example, consider the potential for additional investment in power infrastructure: Andersen & Dalgaard (2013) find that a 1% increase in power outages across the region reduces GDP per capita, in the long run, by 2.6%; or alternatively, "if all African countries had experienced South Africa's power quality, the continent's average annual rate of real GDP per capita growth would have been increased by 2 percentage points" (p.22).

Social Development Impact

Only one academic study has looked directly at social development impacts of IFF. Following Christian Aid (2008), O'Hare et al. (2014) model the potential impacts of IFF on child (under-five) and infant mortality. Figure 3 shows the potential pathways from IFF to mortality: lost revenue and lost national resources (GDP), combined with losses in state capacity, result in worse household access to basic necessities, and this – mediated through the resource allocation within the household – gives rise to worse child health outcomes, including higher mortality rates.

O'Hare et al. (2014) draw upon a previous meta-analysis of studies of the relationship between GDP and mortality rates, to establish a baseline for the impact of GDP losses in sub-Saharan Africa. These are then applied to GFI estimates of IFF, to establish how much quicker progress towards Millennium Development Goal 4 (reductions in child mortality) would have been if IFF were eliminated.

Figure 3: IFF and child mortality links (O'Hare et al., 2014)



Some reductions are striking – e.g. in Swaziland, the projected reduction is from 155 years at current progress, to just 27, or in Mauritania from 198 to 19 years. Others are more modest, e.g. Mozambique which falls from 16 to 11 years. The regional picture lies in between, of course: with the projected date to reach MDG 4 coming forward from 2029 to 2016. In other words, on these projections, Africa as a whole would very nearly have met MDG 4 in time had IFF been eliminated; whereas on current trends it will take nearly twice as long. While more detailed research into specific pathways is required, this provides a striking illustrative calculation of the potential human impacts.

Income Distribution Impact

In relation to income distribution, the arguments are clear that IFF are likely, by and large, to be an elite phenomenon: because this is where the incidence of direct taxation will overwhelmingly lie, and because political and corporate power in many cases will facilitate IFF. If tax systems are in theory progressive, then incentives for abuse are likely to be strongest at the top of the income distribution – and opportunities will also be concentrated here, for those with access to foreign bank accounts, or for businesses operating internationally. Lost taxation on high (individual and corporate) income will not only make the system less progressive overall, raising inequality; it will also reduce the scale of revenues available. This, in turn, limits state capacity to address inequality in market outcomes through cash transfers (or in-kind benefits such as health and education) to lower-income households. This further increases the likely final level of inequality.

An additional channel occurs through the effect on the tax system itself. Because revenues cannot be raised through direct taxation when the system is porous to IFF, this results in

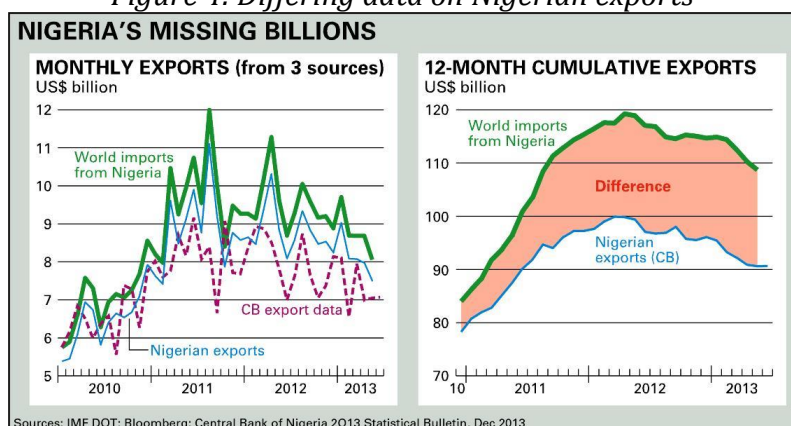
pressure for less progressive – or, all too often, downright regressive – modes of taxation. The most obvious example, and one which has become of increasing importance across Africa during exactly the period that IFF have risen, is the VAT. Again, if states are forced by IFF to resort to less progressive taxation, higher inequality is inevitable.

A third, and the most indirect potential channel, is the political one. If, as discussed below, IFF are associated with a greater tendency towards rent-seeking rather than productive economic activity, then more of the economy – and politics – is tied up in a battle for control of limited resources. This type of power struggle, as opposed to the beneficial pursuit of greater economic capacity, is likely – almost inevitably – to reduce opportunities for those outside the elite, reducing social mobility and crystallising inequality.

Inequality is associated with a range of negative outcomes, in areas ranging from the intellectual and psychosocial development of children to the probability of conflict (UNICEF/UNWomen, 2013), and the costs are likely to be substantial also in terms of foregone economic growth. Berg & Ostry (2011) found, for example, that a 10-percentile reduction in income inequality is associated with a nearly 50% increase in the duration of a growth spell – a result which dominates the equivalent impact from trade openness, improved political institutions, increased FDI, a more competitive exchange rate or reduced external debt.

Nigeria provides a striking illustration of elite gains in a country widely recognised as suffering large illicit flow. The recently suspended central bank governor Lamido Sanusi had highlighted the deviation between Nigeria’s recorded (oil) exports, including those declared to the central bank in relation to payments from the state oil company, and the apparent worldwide level of imports from Nigeria (figure 4).

Figure 4: Differing data on Nigerian exports⁵

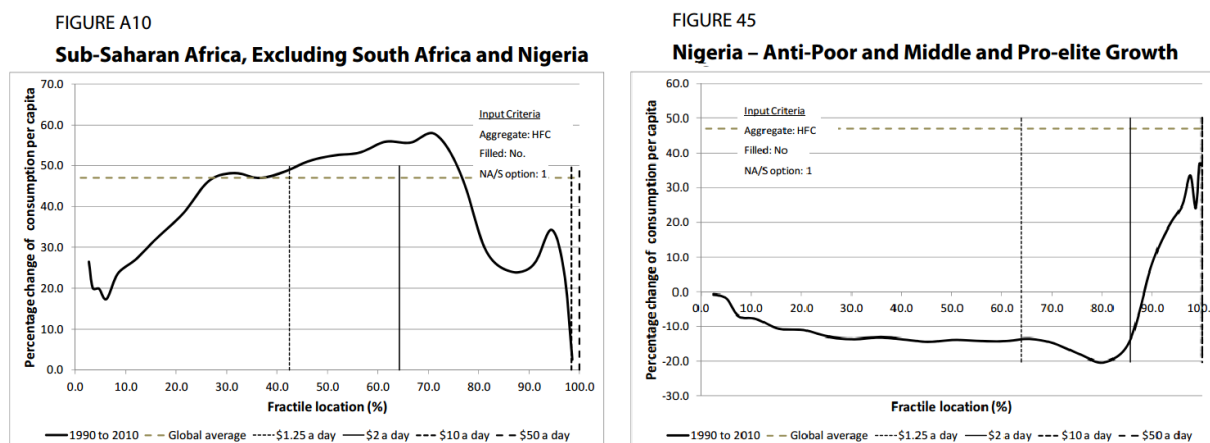


Without making an explicit causal link, we can use Edward and Sumner (2014) data to consider the pattern of consumption growth by centile of Nigeria’s population between 1990 and 2010, and compare that to the pattern across the continent (figure 5). Despite Nigeria’s massive growth during the period, only above the 95th percentile did Nigerian

⁵ Figure compiled by Africa Confidential: http://www.africa-confidential.com/article/id/5227/Oil_theft_row_escalates.

citizens see consumption growth greater than that elsewhere on average; and the vast majority saw their consumption fall while elsewhere it rose. When Nigeria rebased its GDP series in 2014, it not only revealed the country to have the largest economy in Africa, but also showed a level of revenue typically associated with state ‘fragility’, just 10.6% of GDP (of which tax revenues were less than 3.9%).⁶

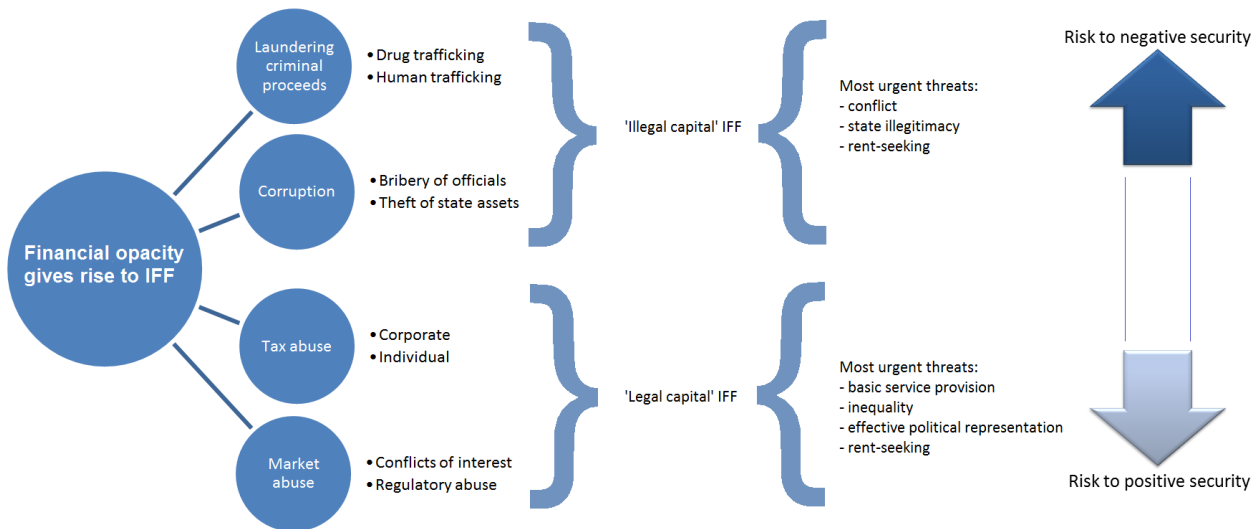
Figure 5: Relative consumption growth 1990-2010, Sub-Saharan Africa and Nigeria



The final major impact of IFF is likely to be on governance and, per the typology presented earlier, IFFs of all types are associated with either ineffective state functioning or illegitimate use of state power. As a result, there are multiple channels through which IFFs present a threat to governance, undermining both political institutions and the confidence in them. Figure 6 shows the linkages of different IFF types to security, where negative security is defined as the ability of states to prevent insecurity at the personal, community and political levels, and positive security is defined as the ability of states to provide secure conditions in which rapid human development can take place.

⁶ See: <http://www.cgdev.org/blog/nigerias-upward-revision-gdp-should-sound-alarm-tax-gdp-ratio>.

Figure 6: Overview of IFF and security linkages



Source: Cobham (2014).

Those IFF relating to the abuse of power – one or other form of public corruption – will have the most obvious effects on negative security. However, the effects of tax abusive IFF on positive security may be just as powerful.

The relationship between taxation and governance is complex and strong (Brautigam et al., 2008). Most simply, states with a ratio of tax to GDP below 15% or 20% of GDP are often thought of as 'fragile' (Stewart et al., 2009), simply due to the resulting weakness in state capacity to deliver services including its own administration. The econometric evidence suggests that the share of tax revenues as a proportion of government expenditure is a particularly important determinant of governance standards over time (Ross, 2004), with the intuition that the more governments can fund themselves without directly taking money from citizens (say from natural resource wealth or high, long-term levels of aid), the less likely is effective accountability. The role of direct taxation (taxation of income, profits, capital gains and property) appears to be especially important (Mahon, 2005), supporting the view that it is precisely the salience of tax which strengthens the accountability mechanism, and so, over time, the governance outcome.

The potential economic growth effects will again be substantial through this channel. Fayissa & Nsiah (2013) use a panel of 39 African countries, from 1995-2004, and find that governance is consistently important for growth, and especially for those countries at the lowest and highest per capita income levels. On average, a 10% improvement in a broad governance measure would imply an increase in per capita GDP of 1.5%, or (allowing for dynamic effects) as much as a 6.1% increase.

The likely impacts of IFF are both large and wide-ranging; and at the same time there are substantial uncertainties over the exact scale. In addition, the counterfactuals are unclear and vary according to the type of IFF. For example, restricting corporate profit-shifting and generating additional revenue should produce a fairly direct benefit in the country in

question. However, this may effectively result in a redistribution away from shareholders giving rise to economic losses elsewhere, and possibly dynamic effects on investment if one government is seen as particularly aggressive in targeting tax abuse. Limiting the returns to crime by prevent money-laundering may potentially reduce economic activity, at least in the short term. Even preventing the theft of state assets will reduce the business of foreign banks involved in the transaction, and may also lead to lower investment or consumption in that jurisdiction.

As a result, it would be impossible to provide a full and precise estimate of either the gross benefits of a 1% reduction in IFF, or of the benefits net of any offsetting losses. In section 4 we discuss the costs and benefits of three proposed targets. For two of these we rely on specific estimates of tax loss, ignoring all other types of IFF and wider impacts thereof. For the first and most general, however, such an approach does not make sense and so we consider various ranges of reduction of the GFI estimates of total IFF in dollar terms. Notwithstanding the inevitable uncertainty of these estimates, and the existence of some offsetting costs of IFF curtailment, this decision to exclude all the other potential impacts discussed here makes it likely nonetheless that our analysis of potential benefits will err on the conservative side.

Proposed targets⁷

As set out in the introduction, the defining feature of illicit flows is their hidden nature. As a result, policy responses have focused on financial transparency – in the interests of both prevention and cure. Major policy change is underway in three key areas:

- the collation and publication of beneficial ownership information, to eliminate the potential for anonymous ownership of companies, trusts and foundations;
- the shift from the dysfunctional ‘on request’ system of tax information exchange to one of automatic exchange, to prevent the hiding of offshore assets and income streams; and
- the requirement for country-by-country reporting from multinational enterprises, to expose major misalignments between the distribution of profit and the location of real economic activity.

Each of the three gives rise to a potential post-2015 target which would provide clear lines of accountability (or, if the formulation is preferred, to a measureable indicator to sit under a broader, more aspirational target such as the Open Working Group’s (2014) language).

For the issue of beneficial ownership, the legal title to companies is not always the same as the name of the people who actually control it (the ‘beneficial owners’). For example companies can be listed under the name of ‘Nominee’ shareholders, or be held in the name of another company (or trust or foundation), or anonymous ‘bearer shares’ may be used, making it impossible to trace relationships.

⁷ This section draws on material prepared for the Open Government Guide (Cobham, 2013) and the Tana High Level Forum on Peace and Security in Africa (Cobham, 2014).

As the World Bank study Puppet Masters showed (van der Does de Willebois et al, 2011), anonymous ownership of companies, trusts and foundations is often the central element of financial secrecy in illicit financial flows. Sometimes this occurs within a country – for example, law enforcement in the USA has long struggled with the problem of individual states allowing anonymous company formation (GAO, 2006).

Often, anonymous vehicles are formed in foreign jurisdictions, adding to the problems since this compels authorities to engage in the complicated and often difficult process of a cross-border investigation. Jurisdictions such as Luxembourg or Mauritius, which are commonly used as ‘conduits’ to invest elsewhere, have therefore a particular responsibility to others in respect of providing transparency.

The Financial Action Task Force (FATF) recommends that countries ensure that information on the real, beneficial owners of companies, trusts and foundations are available to the authorities in an adequate, accurate and timely manner (Recommendations 24 and 25). The G-8 group of countries highlighted the issue at their summit last year, and the UK and a number of its territories with financial centres have since committed to a public registry of beneficial ownership of companies.

Making such registries public, rather than only being accessible to the police or other law enforcement authorities, not only enables law enforcement authorities in other countries to access information without having to resort to the cumbersome, expensive and time-consuming process of mutual legal assistance, but also allows citizens, journalists and civil society to hold companies (and their owners) to account for their actions and provides useful information for banks, customers and suppliers in assessing potential business partners (Open Societies Foundation, 2013).

The specific target would take the form of a zero target for companies and other legal arrangements without publicly available beneficial ownership information. In the presence of full information on the nature of the cost and benefit schedules, it might be argued that achieving the last few percent of coverage could be high cost and of relatively low benefit. Absent such detailed information, however, we rely on the argument that partial responses to financial secrecy are somewhat like squeezing a sausage: the total volume (of IFF) does not change, only the distribution as agents seek alternative secrecy jurisdictions if one becomes transparent. In that light, a zero target is necessary:

- i. Reduce to zero the legal persons and arrangements for which beneficial ownership information is not publicly available.*

Data collated on such a target would highlight the extent to which each jurisdiction had met their responsibilities, so accountability for financial secrecy affecting others would be clear.

The second target relates to multilateral, automatic exchange of tax information. The rationale, following long-standing success in the EU’s Saving Tax Directive and in bilateral US-Canada and Canada-Mexico deals, is to provide a powerful deterrent to undeclared

foreign income and hidden assets; and a powerful tool to tackle continuing abuse. Automatic exchange was the subject of declarations at the G20 and G8, and with the latter's explicit mandate the OECD (2014) has published the new international standard: the Common Reporting Standard, or CRS (emphasis in original):

To prevent circumventing the CRS it is designed with a broad scope across three dimensions:

- The financial information to be reported with respect to reportable accounts includes all types of investment income (including interest, dividends, income from certain insurance contracts and other similar types of income) but also account balances and sales proceeds from financial assets.
- The financial institutions that are required to report under the CRS do not only include banks and custodians but also other financial institutions such as brokers, certain collective investment vehicles and certain insurance companies.
- Reportable accounts include accounts held by individuals and entities (which includes trusts and foundations), and the standard includes a requirement to look through passive entities to report on the individuals that ultimately control these entities.

An 'early adopters' group has now begun the process to pilot the standard. Encouragingly, this involves a number of traditional 'tax haven' jurisdictions, such as Jersey, Cayman and the British Virgin Islands, which have typically resisted such information exchange – but few developing countries, not even all the G20 members. A substantial number of additional jurisdictions subsequently signed a May 2014 declaration, committing to the same OECD information exchange standard – so that in total jurisdictions responsible for more than 90% of financial services exports, and around two thirds of world population, are now included. It remains unclear, however, whether most developing countries will be included in multilateral, automatic exchange, or required to seek bilateral agreements where a requirement for immediate, full reciprocity may be an obstacle.⁸

The proposed target is to ensure that all jurisdictions which engage economically – that is, they share bilateral trade or investment flows – are also exchanging the relevant information to prevent abuse within those transactions. Again, this takes the form of a zero target:

- ii. *Reduce to zero the cross-border trade and investment relationships between jurisdictions for which there is no bilateral automatic exchange of tax information*

Reporting on progress would show the progress of individual countries and jurisdictions, allowing identification of blockages. In addition, at the national level, reporting would identify major partners with whom information exchange should be prioritised.

⁸ See: <http://www.taxjustice.net/2014/02/13/press-release-tjn-responds-new-oecd-report-automatic-information-exchange/> and Cobham (2014b).

The potential scale of corporate tax abuse in IFF is large, and the third target relates to corporate reporting. This area has seen the longest period of progress through growing unilateral imposition (in the US and EU) of public country-by-country reporting requirements, largely focused on the extractive and financial sectors. More importantly, however, the OECD was mandated in 2013 to produce a global standard for country-by-country reporting to tax authorities.⁹ This type of reporting is designed (Murphy, 2012) to allow a simple system of red-flagging potentially tax-abusive misalignments of profit and economic activity. A red flag might be raised if, for example, local subsidiaries account for half of the economic activity but only 5% of the declared profit; while a subsidiary in Luxembourg, for example, is in the opposite position.

Making this information public allows analysis and comparison between countries, and also contributes to public confidence in fair tax being applied. In effect, such reporting privately to tax authorities – as the OECD template envisages – provides a tool to support greater accountability of companies to tax authorities. Making the same information public provides a tool to support accountability of companies, tax authorities and governments to their citizens. In addition, tax authorities would become able to draw on a global rather than a purely national dataset to make comparisons of the behaviour of multinational companies in their jurisdiction.

The proposed target is therefore to:

- iii. Reduce to zero the number of multinational businesses that do not report publicly on a country-by-country basis.*

Either companies or tax authorities could choose to publish the information, with resulting indications of the transparency commitment or otherwise.

These three measures, between them, point the way towards a set of post-2015 targets that have the potential to generate the type of illicit flow reductions that the High Level Panel proposal envisages.

Before looking at the respective costs and benefits in section 4, there is a further potential target area to be considered. The estimates of Global Financial Integrity tend to suggest that for most countries, in most periods, trade misinvoicing is responsible for half or more of all illicit financial flows. This leads to proposals to address the trade channel directly.

As discussed in section 1, misinvoicing can be used for a broad range of IFF types – from laundering the proceeds of crime and individual tax evasion, to abusive corporate profit-shifting. Tackling it directly may be effective in reducing any or all of these. Proposals for government to use customs data more closely and in international collaboration (see e.g. Cobham, 2013) are certainly worth pursuing. GFI (2014) also propose measures to increase individual accountability in customs declarations and related company accounts.

⁹ A draft has already been published for comments: <http://www.oecd.org/ctp/transfer-pricing/discussion-draft-transfer-pricing-documentation.pdf>. We do not enter here into arguments about what exactly is included in this reporting, but assume that these will include the major elements needed for effectiveness.

It is, however, also possible that making one IFF channel more difficult or expensive to use – without addressing the underlying opportunity to benefit – may simply push IFF into other channels. While it seems reasonable to think that misinvoicing is a sufficiently large channel that there would not be 1:1 substitution into other channels; but it also seems unlikely that no substitution would take place.

The alternative, which includes the three targets suggested here, is to act at a different point in the process: to seek to reduce the benefits to having successfully undertaken any given illicit flow. The combination of beneficial ownership transparency and automatic information exchange effectively nullifies any benefit of IFF to support tax evasion, and also sharply curtails the scope to benefit from bribery and the theft of state assets, while making the laundering of the proceeds of crime much less likely to succeed. On the corporate side, transparency of the misalignment between economic activity and profits ensures, at least, that the results of any abusive profit-shifting are visible – to regulators, tax authorities, policymakers and public alike. This is unlikely to provide perfect discipline, but will certainly reduce the incentives.

On balance, while there is certainly value in exploring the potential for closing the trade channel of IFF, the potential for substitution to other channels if the underlying incentives are not changed leads us to exclude these from further consideration here.

Finally, there is an important point of comparison of the proposed targets with existing language. We have stated that the latter do not lend themselves to accountability. To see the difference, consider that each of the three proposals would, if measured, make it possible to state that a given country or jurisdiction (i) has x% of companies, trusts and foundations for which no beneficial ownership information is publicly available; (ii) has no bilateral automatic exchange of tax information for y% of its cross-border investment and trade flows; and (iii) has z% of the multinationals operating and/or headquartered there reporting publicly on a country-by-country basis.

The core idea is that these targets, measured in this way, give developing countries leverage. For example,¹⁰ Zambia can fail to meet its IFF target of zero trade without automatic information exchange; or it on IFFs, or Zambia can ask a major trade partner like Switzerland to sign up to AIE; or Zambia can trade less with Switzerland.¹¹ Conversely, any given set of possible trading or investment partners can be compared according to their performance on these targets to see which is likely to embody the highest IFF risk. The potential power of such targets, in comparison to a global commitment to reduce IFF which is not explicitly judged on these or equivalent specifics, should be clear.

¹⁰ I'm grateful to Claire Kumar for capturing this point so clearly in interview.

¹¹ Bjorn Lomborg raises an interesting counterargument: might such a mechanism create the potential to reduce progress towards, or even to roll back, free trade – perhaps being exploited by special interest groups to erect barriers? While this is plausible, it is not currently the situation that the technical means to limit free trade are lacking; the extent to which they are used is primarily a question of local and international politics. To the extent that this proposal might empower some countries which have historically found it harder, for example, to use WTO mechanisms to pursue a more managed trade agenda, it could potentially open up new obstacles; but it seems unlikely to be a major outcome.

Discussion of costs and benefits¹²

We consider first proposed target (i), involving the publication of registers of beneficial ownership of companies, trusts and foundations.

No substantive assessments of compliance costs for trusts and foundations exist, unfortunately. While the complexity of some such arrangements may result in greater difficulty of identifying beneficial owners, it is clear that the US Foreign Account Tax Compliance Act will now require such a process in cooperating jurisdictions in most cases (see e.g. Harrison, 2013). The additional costs of identifying beneficial owners on a register may not be great. The numbers of trusts and foundations may also not be great compared to the numbers of companies worldwide. Nonetheless, this absence of good data on the numbers of such arrangements or the costs of beneficial ownership registration is a concern not only for this exercise but for the broader questions of financial transparency and illicit flows. In what follows the analysis is necessarily limited to companies.

There are three relevant studies for company ownership, two relating to the UK and one to the European Union. The latter, the study of Savona et al (2007), while wider in scope, is also the least recent and the least transparent in its calculations. It considers two models of beneficial ownership disclosure based on the Third EU Anti Money Laundering Directive (Directive 2005/60/EC): Model 0 assumes an intermediary-based disclosure system whereby accountants and banks generally would be responsible for obtaining and disclosing information with an ownership threshold of 25%; while Model 1 assumes the duty to disclose beneficial ownership of public and private unlisted companies is placed on the same beneficial owner, who should notify the company of his ownership details. It is then expected that the company should collect this information and file it in a Central National Registry available on-line to law enforcement agencies and to the wider public. The ownership threshold is raised to 10%.

Savona et al (2007), hereafter the EU study, relies on a combination of quantitative and qualitative data, primarily obtained through questionnaires submitted to experts and authorities in each of the EU-27 Member States. Although the study notes that these questionnaires were met with varying degrees of response, estimates were used to fill gaps in available data, and several sensitivities were taken into account, the report does not share the fundamental assumptions for its calculations. Direct costs of implementation are considered, along with indirect costs through the effects on economic activity.

Overall, the EU study found costs at the aggregate EU-27 level as follows: the net direct cost for implementing Model 0 is estimated at approximately €6,774 million, the net indirect cost at €10,143 million; while for Model 1, the net direct cost is estimated at €125 million, the net indirect cost at €11,171 million. The bulk of the costs for Model 0 are associated

¹² This section benefits from the careful research assistance of Emily Alpert.

with the activities of ‘intermediaries,’ whereas they are greatest for ‘government’ under Model 1.

For the UK, the total cost estimates are €11,425 million for Model 0 and €11,005 million for Model 1. Under both models, the greatest costs to the UK are attributed to (1) a loss in tax revenue and (2) the loss of bank clientele whereas the offsets (benefits) to either governments or intermediaries were negligible in comparison. The results show the UK as incurring the highest direct and indirect costs of any of the Member States under both models, and ultimately accounting for the majority of costs to the EU as a whole: 61.1% under Model 0, but 97.6% under Model 1. The costs are offset by aggregate benefits that are projected to accrue to more than half of the EU Member States.

The first UK study we consider was commissioned by the NGO Global Witness from lawyers John Howell & Co. (2013), to update the analysis contained in the UK government’s own 2002 assessment. The study considers transition costs and on-going costs to companies and Companies House under 4 different scenarios: (1) companies collect and maintain an internal registry of their own beneficial ownership; (2) companies declare to Companies House; (3) information is made public; and (4) companies provide ID verification of each beneficial owner. In line with the Third Anti-Money Laundering Directive (AMLD), the proposed Fourth AMLD and the recommendations of the Financial Action Task Force (FATF), the GW Study determines the threshold for beneficial ownership at 25%. The study does not assess any potential benefits.

Based on estimates of 5.5 million individual shareholdings in private companies and the likelihood of 410,000 unregistered beneficial owners in the UK, implementing a disclosure system for beneficial ownership would cost at minimum £14.08 million for companies to collect and maintain an internal registry (scenario 1) plus an additional £10.02 million to declare this information to companies house on an annual basis (scenario 2). To require declaration more frequently (on event), this would cost £14.59 million (Scenario 3) or approximately £4.57 million more than annual disclosure. No extra cost is foreseen for the information to be made public, however it would cost an estimated £49.65 million extra for companies to provide ID verification of each beneficial owner. On-going costs are calculated at £0.27 (Scenario 1), £2.03 million (Scenario 2), £3.84 million (Scenario 3) and £6.45m (Scenario 4). Excluding the requirement for ID verification, the estimated transition cost for annual disclosure is £24.10 million plus £2.3 million in on-going costs (Scenario 2) and the estimated transition cost for disclosure on event is £29.67 million plus £4.11 million in on-going costs.

Table 1: Cost estimates for public register of UK company beneficial ownership, US\$

	EU study (2007)		GW study (2013)	
Initial costs		38.04		38.23
Of which:	Data filing for unregistered beneficial owners	1.89	Companies collect and maintain an internal registry of their own beneficial ownership	22.02
	Record keeping and filing with a central registry	36.14	Companies declare to Companies House (central registry)	15.67
			Transition costs for Companies House (central registry)	0.55
Ongoing costs		4.57		3.60
Of which:	Updating for unregistered owners	0.77	Maintaining registry annually	0.42
	Data updating with registry	3.80	Declaring annually to Companies House (central registry)	3.17
Total costs		42.61		41.83

Note: Table shows, in 2013 US\$, a comparison of 'Model 1' in Savona et al (2007), the EU study; and 'Scenario 2' in Howell & Co. (2013), the GW study. For the EU study we use average USD/EUR exchange rate for 2007: 1EUR = \$1.37, and a conversion rate of 0.89 to account for inflation of 2007 dollars in 2013. For GW study we use average GBP/USD exchange rate for 2013: 1GBP = \$0.635.

The transition costs estimates from Scenario 2 from Howell & Co. (2013) with the direct costs in Model 1 for 'Businesses' and 'Individuals' in the UK from the EU study are the most reasonable to compare of all the scenarios and models because both assume the costs are borne by the companies; the EU study breaks-out individuals from businesses, but identifies the costs for 'individuals' as personnel time, much as Howell & Co. do; and both studies consider up-front and on-going costs. Although the number of companies, unregistered beneficial owners, and value of personnel time used in the EU study are not known, the costs of both analyses are nearly equivalent when converted into 2013 dollars: see table 1.

The most recent study however is the UK government's own impact assessment (HMG, 2013). This takes a more granular approach, assessing the 3.19 million companies according to the relative complexity of their ownership structures and estimating costs accordingly; and using existing costs of government initiatives to estimate the IT, staff and bureaucratic elements. Costs to Government are estimated to be £51,000-110,000 for the IT development of the registry and communication to industry; and £220,000 annually for maintenance. Costs to businesses are estimated to be £226 million initially, and £78 million

annually thereafter. In total, costs over ten years are estimated at £899 million (using a discount factor of 3.5%); which is equivalent, using the 2013 exchange rate, to \$1.405 billion.¹³

It is striking how far above the existing studies these new estimates are. The reliance on self-reported costs from businesses, even after excluding the least plausible values at the top end and zeros at the bottom, is noted as a concern in HMG (2013) and seems likely to be responsible for the discrepancy. We therefore use the 'High' estimates from HMG (2013) for our high costs scenario; the 'Low' estimates for the medium cost scenario, and the GW study for the low cost scenario.

Finally, we show the results for two different extrapolations. In the first, we simply scale up from the UK results to the global level on the basis of the UK's share of world GDP (3.4% on the World Bank's most recent (2012) data). This assumes, in effect, that the cost/GDP ratio faced by the UK is applicable globally. In the second extrapolation, we scale up from UK costs to EU cost on the basis of the EU study which finds a great range of costs (both positive and negative). We then scale from EU to global level by assuming the cost/GDP ratio faced by the EU is applicable globally. Extrapolation I therefore provides a substantially higher level of global costs than does extrapolation II.

The HMG (2013) study does not put a value to the benefits, but discusses a broad range of areas in which these are likely to arise – from the statements of multiple law enforcement agencies of the value of such a register, to estimates of the cost of fraud (£523 million annually), to academic studies of the value in GDP terms of recovering trust.

Since beneficial ownership transparency has a role to play in combating each IFF type, we use GFI estimates of total IFF as the basis to examine potential benefits of meeting this target. As discussed in section 2, using reductions in the dollar values as a measure of benefit ignores a great many wider benefits, although also some offsetting costs depending on assumptions made about the counterfactual. On balance, we expect the approach to understate the benefits; but there remains inevitable a high degree of uncertainty around the estimates themselves. In addition, the GFI estimates relate only to illicit outflows from developing countries. While some high-income countries undoubtedly attract and benefit from illicit inflows, many will also suffer outflows on balance; so these numbers understate the global scale of gross outflows.

We consider three possible benefit scenarios. For the high benefit scenario, we take the GFI (2013) estimate for illicit flows in 2011 as the baseline, and assume a 50% reduction due to global commitment to public registries of company ownership. For the medium benefit scenario, we take the GFI (2013) estimate for average illicit flows during 2002-2011 as the baseline, and assume a 25% reduction. For the low benefit scenario, we take the same baseline and assume only a 10% reduction. In all cases we use IMF World Economic Outlook projections as at April 2014 for average world economic growth in 2016-2019 as the basis to assume a consistent growth rate to 2030; and assume that IFF, unaddressed,

¹³ Average of bid and ask prices from oanda.com for 2013 of 0.63963 pence to a dollar.

will simply grow in line with global GDP. Table 2a shows the range of benefit-cost ratios from the combination of different scenarios, for extrapolation I; while table 2b shows the same for extrapolation II.

Table 2a: Range of benefit-cost ratios for proposed target (i), UK-global extrapolation

	Low 10% reduction of 2002-2011 average IFF estimate	Medium 25% reduction of 2002-2011 average IFF estimate	High 50% reduction of 2011 IFF estimate
Benefit estimates:			
Cost estimates:			
High UK 2013, 'High'	13.3 (12.9)	33.4 (32.1)	114.8 (110.6)
Medium UK 2013, 'Low'	20.0 (19.3)	50.1 (48.2)	172.3 (165.9)
Low GW 2013	363.3 (338.2)	908.3 (845.6)	3125.1 (2909.5)

Note: Values given are benefit-cost ratios for 3% discount rate (for 5% discount rate in brackets). Extrapolation assumes that UK costs/GDP ratio is globally applicable.

Table 2b: Range of benefit-cost ratios for proposed target (i), UK-EU-global extrapolation

	Low 10% reduction of 2002-2011 average IFF estimate	Medium 25% reduction of 2002-2011 average IFF estimate	High 50% reduction of 2011 IFF estimate
Benefit estimates:			
Cost estimates:			
High UK 2013, 'High'	87.7 (84.5)	219.3 (211.1)	754.5 (726.4)
Medium UK 2013, 'Low'	131.6 (126.7)	329.0 (316.8)	1132.1 (1090)
Low GW 2013	2387.3 (2222.5)	5968.1 (5556.4)	20534.4 (19117.6)

Note: Values given are benefit-cost ratios for 3% discount rate (for 5% discount rate in brackets). Extrapolation assumes that UK/EU costs ratio is as per Model 1 in Savona et al (2007); and that EU costs/GDP ratio is globally applicable.

We next consider target (ii), of automatic tax information exchange. Here there are (to my knowledge) precisely zero published cost-benefit analyses of any of the existing automatic exchange agreements, and existing work on the EU Saving Directive does not provide the kind of detail needed. However, as noted above, 44 countries and jurisdictions are now piloting the OECD standard – which is, in effect, largely a multilateral version of the US Foreign Account Tax Compliance Act, and a natural extension of the Saving Directive. A range of additional jurisdictions committed to the same reporting standard, without joining the multilateral pilot, in a May 2014 declaration at the OECD. In total, jurisdictions responsible for more than 90% of cross-border financial service provision are now signed

up – including Switzerland, Singapore, Luxembourg and the United States (see Cobham, 2014b).

This will be a multilateral, automatic exchange of information between countries and jurisdictions across a broad range of (per capita and total) income levels than has ever existed, and the results will therefore provide a firm basis for a detailed extrapolation to the global level – at least on the costs side. From the range of countries and jurisdictions committing, it seems unlikely that none have considered the costs; so while any such estimates remain private, it would appear that they fall short at least of the expected benefits.

The benefit aspect will be harder to assess, in part because deterrence is expected to be significantly larger than any convictions that emerge. The more substantive issues are that the initiative has sufficiently long lead times before any information exchange; and more than 2 billion people living primarily in lower-income countries are currently not included in any form. A target of zero bilateral trade and investment flows without automatic information exchange is therefore needed to ensure that the poorest people are not excluded as rich countries act to protect their own tax bases.

In addition, the process of introducing FATCA has forced financial institutions around the world to adopt appropriate systems. A multiplicity of consulting firms now offers technology platforms that cover the entire set of related requirements, from beneficial owner identification through to final reporting. A detailed study of the leading offers, combined with data on the distribution of financial institutions globally, would offer an alternative means of reaching a well-founded estimate on the cost side.

On the benefit side, we can carry out a back of the envelope calculation to envisage the potential scale. To consider the potential effect of automatic information exchange, the best available data appears to be that published periodically by the Inland Revenue Service in the US on the recorded compliance rates of different taxes, where these are disaggregated according to the extent of ‘matching’ information – that is, of information publicly known to be provided to the tax authority by someone other than the taxpayer, e.g. an employer.

Over time, these data show a consistent pattern: as the most recent IRS study, Black et al. (2012) states, “the net misreporting percentage, or NMP (defined as the net misreported amount expressed as a ratio of the true amount), for amounts subject to substantial information reporting and withholding is 1%; for amounts subject to substantial information reporting but no withholding, it is 8%; and for amounts subject to little or no information reporting, such as business income, it is 56%” (p.3). Comparing the second and third categories implies that the availability of matching information alone cuts the extent of misreporting to just a seventh of the level otherwise.

The most recently published study of undeclared overseas assets is that of Zucman (2013), who finds that “individuals held unrecorded portfolios worth \$4.5tr in tax havens...My estimate [of all offshore wealth], \$5.9tr in 2008, is at the low-end of the scale [compared to estimates from the Tax Justice Network, Boston Consulting Group, Cap Gemini and Merrill

Lynch]” (p.19). We take the \$4.5 trillion which is the minimum unreported, from this most conservative of the available estimates.

The benefit of transparency is potentially of the order of six sevenths of the income stream derived from this \$4.5 trillion. If we conservatively assume the entirety was invested in US Treasury bills at around 3.5%, then the total annual income would be \$157.5 billion, and if six sevenths of that were to be reported due to information exchange it would bring \$135 billion of taxable income a year – even before any benefits of reduced criminality of other types were taken into effect.

A low-end estimate might assume that tax authorities in general are much less effective than the IRS, and therefore that the availability of information would have much a weaker deterrent effect. A one-seventh, rather than six-sevenths reduction, implies additional taxable income of \$22.5bn a year. (Alternatively, of course, a less effective tax authority might well discover a higher initial share of unreported income; so this may be unduly conservative.)

Over the post-2015 period, these simple low- and high-end scenarios generate a range of additional taxable income globally of \$277bn to \$1660bn (with a 3% discount rate), or \$245bn to \$1471bn (5% discount rate). While cost estimates remain lacking, it seems reasonable to expect that in most scenarios the likely net benefit would remain high and positive.

Finally, we consider target (iii), relating to the publication of multinationals’ country-by-country reporting. Here, even without substantial evidence of either costs or benefits, the case seems clearly positive. This is because the ongoing OECD process is intended to result in a template used by all tax authorities to require consistent reporting from all multinationals of their country-by-country economic activity, including tax paid.

As noted above, the publication of this information provides a tool to support the accountability of companies, tax authorities and governments to their citizens; and provides tax authorities with a global rather than purely national dataset with which to make comparisons of the behaviour of multinational companies in their jurisdiction.

Following the example of such initiatives as IATI, the mechanism would be straightforward. Rather than send data in the template (in the XML format) privately to an individual contact at the tax authorities of each country in which the multinational operates (or sending to a ‘home’ tax authority and requiring them to pass it on to the relevant others), companies would simply publish the XML file and record the location of the information in the online, machine-readable register. (By way of example, IATI uses the CKAN platform for aid donors to publish their data, which is also used by the UK government for its data.gov.uk website, among others.)

This would almost certainly reduce costs for each multinational in terms of employee time. In addition, it would do the same for tax authorities who would have no role in passing on data, and would simply query the data they wanted more or less instantly via the register,

rather than having to record and compile the range of files sent by various multinationals and other tax authorities. The remaining question on the cost side is whether publication imposes non-trivial costs on the multinationals. The recent PwC (2014) poll of business leaders found 59% in favour of publication, suggesting that there is only limited concern here.

Now if we envisage that the greater accountability discussed would deliver tangible benefits in the form, for example, of greater alignment between profits and economic activity (the goal of the OECD's Base Erosion and Profit Shifting initiative, and an important issue for developing countries in particular), then the resulting benefit-cost ratio is likely to be substantial.

Zucman (2014) estimates that US-headquartered multinationals' tax avoidance via 'tax havens' results in revenue losses of 20% to a third; around \$200bn in 2013. Forthcoming work (including Cobham & Loretz, 2014) suggests that the relevant part of the corporate tax base may also increase significantly in many lower-income countries if profit declaration were to be completely aligned with economic activity (measured by sales, assets and employment).

Since country-by-country reporting would reveal the specific multinational groups responsible, to both tax authorities and civil society, a disciplining effect on the most egregious misalignment seems likely. A 2% reduction could add \$4bn a year to US revenues, or \$56bn-\$64bn by 2030; a 10% reduction \$279bn - \$320bn. The global scale, as well as the dynamic behavioural effects of more effective corporate taxation, remains in need of further research.

A final caveat: given the relatively untested nature of the three targets, it may just be possible that their introduction would have precisely zero impact on illicit financial flows – so that even low-end estimates are overstated. As discussed above, however, this seems unlikely as each target is central to the way in which different types of illicit flow are hidden; and it is in their hidden nature that the damage is done.

Conclusion

Two main findings emerge from the analysis here. First, there are potentially powerful post-2015 targets which could ensure the framework delivers major progress in reducing illicit financial flows, including tax evasion and theft of state assets. On the basis of the limited evidence base currently available, each of targets (i)-(iii) seem likely to have high benefit-cost ratios in any reasonable scenario: table 3 provides a summary of the findings.

Second, there is scope to improve significantly the evidence base over the next two years as initiatives in each area go forward – and those involved, not least the OECD, should ensure that the collation of performance data is prioritised so that these gains do indeed crystallise.

Table 3: Range of benefit-cost ratios for proposed targets

Proposed target	Benefits	Costs	BCR
(i) Reduce to zero the legal persons and arrangements for which beneficial ownership info is not publicly available	\$768bn - \$7.5tn	\$0.35bn - \$66bn	13 – 20,000
(ii) Reduce to zero the cross-border trade and investment relationships between jurisdictions for which there is no bilateral automatic exchange of tax information	Possible additional taxable income of \$277bn to \$1660bn (or \$245bn to \$1471bn)	Unknown: but certainly not prohibitive for the 64 jurisdictions now committed to the OECD standard	Likely to be high (high confidence)
(iii) Reduce to zero the number of multinational businesses that do not report publicly on a country-by-country basis	Unknown; but highly likely to be in billions of dollars a year	Unknown, but close to zero and possibly negative	Likely to be high (high confidence)

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Annex 1 - Table A1: A typology of illicit financial flows and immediate impacts

Flow	Manipulation	Illicit motivation	IFF type	Impact on state funds	Impact on regulatory effectiveness
Exports	Over-pricing	Exploit subsidy regime	2	↓	↓
		(Re)patriate undeclared capital	1	↓	↓
	Under-pricing	Shift undeclared (licit) income/profit	2	↓	↓
		Shift criminal proceeds out	4	↓	↓
		Evade capital controls (including on profit repatriation)	1		↓
Imports	Under-pricing	Evade tariffs	2	↓	↓
		(Re)patriate undeclared capital	1	?	↓
	Over-pricing	Shift undeclared (licit) income/profit	2	↓	↓
		Shift criminal proceeds out	4	?	↓
		Evade capital controls (including on profit repatriation)	1	↓	↓
		Shift undeclared (licit) income/profit	2	↓	↓
Inward investment	Under-pricing	Shift undeclared (licit) income/profit	2	↓	↓
		Shift criminal proceeds out	4	?	↓
		Evade capital controls (including on profit repatriation)	1	↓	↓
	Over-pricing	(Re)patriate undeclared capital	1	?	↓
		Anonymity	1		↓
		Anonymity	3		↓
Outward investment	Under-pricing	Evade capital controls (including on profit repatriation)	1		↓
	Over-pricing	Shift undeclared (licit) income/profit	2	?	↓
		Shift criminal proceeds out	4	↓	↓
	Anonymity	Hide political involvement	3		↓
Public lending	(If no expectation of repayment, or if	Public asset theft (illegitimate allocation of state funds)	3	↓	

	under-priced)				
Public borrowing	(If state illegitimate, or if over-priced)	Public asset theft (illegitimate creation of state liabilities)	3	↓	
Related party lending	Under-priced	Shift undeclared (licit) income/profit	2	↓	
Related party borrowing	Over-priced	Shift undeclared (licit) income/profit	2	↓	
Public asset sales	Under-pricing	Public asset theft	3	↓	
	Anonymity	Hide market dominance	1		↓
	Anonymity	Hide political involvement	3		↓
Public contracts	Over-pricing	Public asset theft	3	↓	
	Anonymity	Hide market dominance	1		↓
	Anonymity	Hide political involvement	3		↓
Offshore ownership transfer	Anonymity	Corrupt payments	3	↓	↓

Note: 'IFF type' is defined as follows: 1 – market/regulatory abuse, 2 - tax abuse, 3 – abuse of power, including theft of state funds, 4 – proceeds of crime.

This paper was written by Alex Cobham, research fellow at the Center for Global Development in Europe . The project brings together more than 50 top economists, NGOs, international agencies and businesses to identify the goals with the greatest benefit-to-cost ratio for the next set of UN development goals.

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