David Bradbury
Head, Tax Policy and Statistics Division
OECD/CTPA
2, rue Andre Pascal
75775 Paris Cedex 16
France

By email to: CTP.TPS@oecd.org

8 May 2015

Dear Mr Bradbury,

BEPS Discussion Draft: Improving the analysis of BEPS

PricewaterhouseCoopers LLP (PwC) welcomes the opportunity to comment on the OECD's *Public Discussion Draft on Action 11: Improving the Analysis of BEPS*.

We commend the Secretariat and the Working Group for their efforts in realistically assessing the conceptual challenges and data limitations that must be addressed to quantify either the scale or the trend in BEPS activities.

The discussion draft appropriately identifies a number of important caveats in connection with measuring the scale and trend of BEPS activities, including:

- The need to exclude from BEPS measures income attributable to, inter alia, real activity, government incentives, and productivity differences between locations;
- The recognition that book-tax differences do not necessarily reflect BEPS activity; and
- The recognition that recent data are affected by the global financial crisis.

In an appendix to this letter, we have compiled key caveats regarding the measurement of BEPS that are identified in the discussion draft itself.

This letter reflects the views of the PwC network of firms, and we offer our observations on several aspects of the discussion draft.

1. Observations on proposed indicators

The indicators highlighted in the discussion draft and referred to below are broadly:

1. Relative concentration of net foreign direct investment (FDI) to GDP
2. High profit rates of low-taxed affiliates of top global MNEs
3. High profit rates of MNE affiliates in lower tax countries
4. Profit rates compared to effective tax rates (ETRs) for MNE domestic and foreign operations
5. ETRs of MNEs compared to comparable domestic firms
6. Relative concentration of royalty payments relative to R&D expenditures
7. Interest expense to income ratios of top global MNE affiliates in high statutory tax rate countries

For two indicators (#1 and #6), time trends are reported over the 2005-2012 period. In both cases, the BEPS indicator are coincident with the global financial crisis. Calculating indicators over a longer period of time would be helpful in assessing whether, and to what extent, macroeconomic conditions may affect the BEPS indicators.

For indicator #2, in 2011, it is reported that 67% of top global MNE affiliate income is in countries with high profit rates (relative to the MNE worldwide average), of which 45% is in countries with low ETRs (relative to the MNE worldwide average). Thus two-thirds of income of high profit rate affiliates is reported in low-tax countries (45%/67%). This is taken to be evidence supportive of BEPS. However, among the population of affiliates with low profit rates, an even higher percentage (79%=26%/33%) of affiliate income is reported in low-tax jurisdictions. The smaller share of high profit rate than low profit rate affiliate income in low-tax jurisdictions does not seem consistent with BEPS-related activity.

Many of the indicators have arbitrary elements, for example:

- Indicators #2 and #7 are based on the top 250 global MNEs reporting required information. Why was the analysis cut off at 250? Does it make a difference if available data for all MNEs are used?
- Indicator #3 is based on the profit rate for the lower quintile of a company's affiliates ranked by ETR. Does it make a difference if the 10^{th} or 30^{th} percentiles are used?
- Indicator #4 is based on an analysis of 25 large MNEs. Would it make a difference if all MNEs for which data are available were analysed?
- Indicator #5 will be calculated only for "top global MNEs in a country" again raising the question whether use of a limited sample affects the results.
- Indicator #6 compares the ratio of royalties received to R&D expenditures for the 5 countries with the highest ratios to all other countries. Why were the top 5 countries chosen? How would the results change if the top quartile, for example, were used? Does the measure of R&D performed include cost sharing payments? Do royalties include those paid with respect to marketing intangibles and other services that are not expected to be related to R&D spending?

2. Response to questions posed regarding indicators

As the very largest MNEs may not be representative, we recommend calculating indicators for all MNEs for which data are available.

Indicators may be significantly affected by inclusion of loss companies in the sample. We recommend that results be reported with and without inclusion of loss companies.

Outliers are a common issue with indicators of the type suggested in the discussion draft. 'Winsorizing' the data may be appropriate.

3. Observations on economic approaches to measuring the scale of BEPS

The report correctly observes that measurement of the scale of BEPS activity requires a counterfactual determination of where profits would be reported absent BEPS activity. This requires that the analysis take into account non-tax factors that affect income including R&D, intangible capital, public infrastructure, industry agglomeration effects, and synergies with other affiliates [p. 61]. However, these factors generally are omitted in academic studies.

Omitted variables can lead to biased estimates of profit shifting:

- "Omitted variable in the analyses will have at least two effects: the explanatory power of the regression will be weak and tax shifting responsiveness may be affected by the omitted variables" [p. 61]
- As noted by Dharmapala [2014], many econometric measures of profit shifting are vulnerable to simultaneity bias, i.e., omitted variables that help determine profitability may be correlated with tax rates. In an analysis that attempted to address simultaneity bias, Dharmapala's estimate of profit shifting was much lower than the estimates generally reported in the literature.[1]

Based on a meta-analysis of econometric research on profit shifting, Heckemeyer and Overesch (2013) find that studies using company-level data find significantly smaller tax effects on reported profitability. The authors conclude that aggregated data (e.g., at the industry or country level) are associated with misleadingly high tax effects.[2]

PwC agrees with the discussion draft conclusion that multiple approaches to measuring the scale and trend of BEPS activities are better than reliance on a single measure,

> "Given the many uncertainties associated with estimates of the scale and economic impacts of BEPS, using multiple approaches and seeing where their ranges overlap should provide more comfort to policymakers than relying on a single approach or a single data source." [p. 60]

4. Other economic impacts of BEPS and countermeasures

The aim of public policy should be to improve economic welfare. This requires that policy actions generate increases in economic welfare in excess of costs. The report takes a "balanced budget" approach to analysing BEPS meaning that revenues raised by BEPS are assumed to be used to lower other taxes. Under this approach, the economic benefit of BEPS counter-measures is not the revenue raised, but rather the improvement (if any) in the allocation of economic resources that leads to increased output. PwC appreciates that OECD plans to analyse the full economic impact of BEPS countermeasures including the effects on "economic efficiency and growth … and the burden of … BEPS countermeasures" [p. 71].

PwC notes that it is not clear ex ante that BEPS counter measures will be efficiency enhancing. In particular, proposed changes in transfer pricing rules that more closely align profit with economic activity such as employment and assets may have the effect of increasing investment by MNEs in tax havens.

---

[1] Dhammika Dharmapala, "Base Erosion and Profit Shifting: A Simple Conceptual Framework," University of Chicago, Coase-Sandor Institute for Law and Economics Working Paper no. 703, September 2014.

[2] Jost Heckemeyer and Michael Overesch, "Multinationals' Profit Response to Tax Differentials: Effect Size and Shifting Channels," Centre for European Economic Research, Discussion paper No. 13-045, 2013.

5. Other issues

The discussion draft (Para. 14, page 7 and Table 1.1, page 10; and Table 2.1, page 34) attempts to make a distinction between "real investment" and investment that includes "mergers and acquisitions and the accumulation of reinvested earnings." It is not clear what distinction is intended to be made here – FDI through mergers or investment of retained earnings does confer real economic activity to the company which undertakes this FDI.

We hope that these comments are helpful to the Working Party, and we remain available to provide any assistance that the OECD may require.

Yours sincerely,

Drew Lyon
Principal, National Economics & Statistics
PricewaterhouseCoopers, Washington

Peter Merrill
Principal, National Economics & Statistics
PricewaterhouseCoopers, Washington

cc Stef van Weeghel, Global Tax Policy Leader

PwC Contact	Email
Drew Lyon	drew.lyon@us.pwc.com
Peter Merrill	peter.merrill@us.pwc.com
Richard Collier	richard.collier@uk.pwc.com
Phil Greenfield	philip.greenfield@uk.pwc.com

Key Caveats Raised in the Discussion Draft

Quantifying either the scale or trend in BEPS activities

1. Due to “significant limitations of existing data … attempts to construct indicators or undertake an economic analysis of the scale and impact of BEPS are severely constrained and, as such, should be heavily qualified.” [p. 4]
2. “The use of any indicators to identify the scale and economic impact of BEPS can only provide ‘general indications’ and the interpretation of any such indicators must be heavily qualified by numerous caveats.” [p. 25]
3. “it is difficult for researchers to disentangle real economic effects from the effects of BEPS-related behaviour.”
    a) “Many BEPS behaviours cannot be identified as specific entries on tax returns or financial accounts. … thus, policymakers need economic analyses of BEPS and BEPS countermeasures, rather than just compile descriptive statistics.” [p. 6]
    b) “there are three different categories of effects that ideally would be separately estimated: (i) real economic activity across countries independent of tax; (ii) real economic activity across countries influenced by differences in non-BEPS-affected tax rates (e.g., responsiveness of capital investment to a change in a country’s effective tax rate); and (iii) BEPS-related activities across countries … Only category (iii) effects should be attributed to BEPS.” [p. 7]
    c) “If economic functions, assets, and risks are effectively relocated to another country to take advantage of a low rate or tax credit, this does not constitute BEPS.” [p. 58]
    d) “identifying deviations from arm’s-length pricing is a highly fact-intensive analysis. … Simple descriptive statistics can only provide indications, rather than correlation or causation, of potential BPES behaviours …” [p. 18]
    e) “With the growing reliance of modern business on intangible property and risk as part of global value chains, it becomes more difficult to identify where the activities creating profits take place without better data, careful transfer pricing analysis of individual transactions, and other income measurement rules.” [p. 58]
    f) “Indicators should focus on tax shifting due to BEPS, not real economic responses to tax rate differences that reflect the impact of current-law provisions adopted by legislators, including incentives to expand business operations in their country. Legislated or discretionary tax incentives can have an important impact on reported corporate income tax payments that reflect the location of real economic activity. The challenge in developing indicators is distinguishing between the economic effects and BEPS.” [p. 68]

Book-tax differences do not necessarily reflect BEPS activity [p. 8]

1. “book/tax income differences can include permanent exemption of intra group dividends and timing differences such as accelerated tax depreciation … Differences between the tax consolidation rules and the statutory accounting consolidation rules can affect consolidated accounts”
2. “Due to differences in international tax rules, some companies have tax residence in a country other the country of incorporation”
3. Financial accounting tax expense is “an accrual measure of tax associated with current year income, and which includes both current and deferred income tax expense.” “Cash income taxes are sometimes reported, but cash tax payments may reflect tax from current and prior years and potentially interest and penalties.”

Recognizing other analytical challenges, e.g. [p. 9]

1. “balance sheets typically reflect purchased intangibles only [not self-created intangibles]”
2. “Recent data is impacted by the financial crisis and changing macroeconomic conditions.”