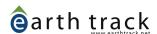
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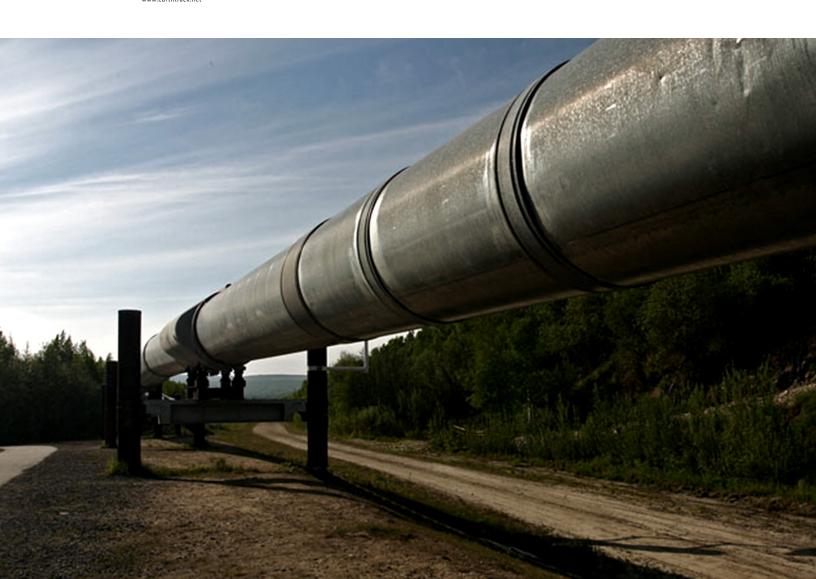
Subsidies to Fossil Fuel Master Limited Partnerships

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Executive Summary

Fossil fuel firms – predominantly oil and gas – dominate a special category of business tax structures called "master limited partnerships," or MLPs. The sector is the primary beneficiary of a narrow exemption created by Congress in 1987 when tax-exempt treatment of publicly-traded partnerships (PTPs) was largely ended.

MLPs are able to avoid corporate level income taxes entirely, as well as distribute cash to owners on a tax-deferred basis. While beneficial to MLPs, the tax-favored treatment disadvantages market competitors in the electric power, heating, and transport fuel sectors, including renewable energy and energy efficiency providers. Most federal assessments of energy subsidies have excluded MLPs entirely; where official estimates of revenue losses have been done, these numbers appear to be significantly understating the subsidy magnitude. Key findings from this review include:

- MLP tax expenditures are part of a broader set of government subsidies that continue to underwrite activities contributing to climate change. These policies not only have large fiscal costs, but also work counter to the country's environmental goals and our national interest.
- Fossil fuel MLPs are growing quickly. The market capitalization of fossil fuel MLPs reached an estimated \$385 billion by the end of March 2013, up from less than \$14 billion in 2000. Related tax subsidies have been as high as \$4 billion annually in recent years.
- Fossil fuel activities continue to dominate MLPs, both in number of firms and share of total market capitalization. As of the end of last year, 77 percent of MLPs were in the oil, gas, and coal sectors based on data collected by the National Association of Publicly Traded Partnerships (NAPTP), the main industry trade association. Firms in the fossil fuel sectors comprised 79 percent of total MLP market capitalization, though this figure is likely a bit low. Firms classified in other sectors also include some oil and gas-related businesses, including fracking sand and fossil fuel investments held by publicly-traded private equity firms such as Blackstone.
- Government estimates of tax expenditures from energyrelated MLPs are too low. Tax expenditures related to MLPs have been understated in recent years, and appear to be growing rapidly. Using a variety of estimation approaches, we estimate that tax preferences for fossil fuel MLPs cost

- the Treasury as much as \$13 billion over the 2009-12 period, more than six times the official estimates (see Table 5).
- MLP tax breaks are among the largest subsidies to fossil fuels. Although most government reviews of energy subsidies have not even included MLP-related tax expenditures, our estimates suggest this subsidy is among the top five largest fiscal subsidies to the fossil fuel sector and the largest single tax break to the sector.
- Growing share of production cycle for oil, gas, and coal can be organized as a tax-favored MLP. Financial innovation and IRS private letter rulings have expanded the fossil fuel market segments able to legally and successfully operate as tax-favored MLPs. Recent innovations have even established a precedent by which MLPs have successfully acquired taxable corporations, taking them off the corporate tax role in the process.
- Even in well-established market segments, there is a large overhang of fossil fuel assets poised to exit the corporate income tax system through conversion to MLPs. Less than 20 percent of total assets in the refiners, exploration and production, oil services, and coal sectors are presently held in a tax-favored MLP format (see Table 6). Even in the MLP-intensive midstream segment of the oil and gas market, conventional (taxable) corporate forms continue to own more than half of the assets. In all of these sectors, there is a huge pool of assets that multiple investment firms anticipate will convert to MLPs in coming years.
- Despite a booming oil and gas sector, corporate income tax collections by the U.S. Treasury may remain flat or decline. Broader MLP-eligibility and growing capabilities and interest in converting assets from C-corporations to MLPs dampen corporate income tax collections from the oil and gas sector. Despite a boom so large that the United States is rapidly climbing towards becoming the world's largest producer of both oil and natural gas, the Treasury may see only limited income tax benefits.
- Proposed expansion of MLP eligibility to renewables
 risks disproportionate benefits flowing instead to the
 fossil fuel sector. Current efforts to expand MLP treatment
 to renewables (The Master Limited Partnerships Parity
 Act) are not necessarily a panacea for alternative energy.
 The expansion will reduce the likelihood that MLP's taxexempt treatment will be ended for fossil fuel producers,
 allowing the rapid growth of tax-exempt fossil fuel MLPs
 to continue unchecked. This legislation also would open
 MLP-eligibility to power generation for the first time,

creating risks that this treatment will be extended from the current proposed set of recipients (biomass, solar, wind, geothermal) to all forms of power generation in coming years. This would disadvantage energy conservation, offset hoped for gains from the expansion in renewable sectors, and trigger very large tax losses to Treasury.

 The MLP loophole should be closed; MLPs should be taxed as conventional corporations, not extended to new uses.
 This strategy, continuing what the United States started in 1986, would eliminate large and growing subsidies to fossil fuels.

1. MLP History: A Special Exemption for Natural Resource Industries

The federal tax treatment of different types of business structures varies widely. Some, including partnerships, pay no income taxes at the entity level. Where access to tax-advantaged organizational forms is not equal across industries, they can introduce economic distortions.

Historically, firms that were publicly traded were not able to avoid entity-level income taxes by forming partnerships. Publicly-traded partnerships (PTPs), an organizational form that was first used in the early 1980s, were created to change this - combining the benefits of access to public equity markets of a conventional Subchapter C corporation with full avoidance of corporate income taxes (previously associated only with private, non-traded partnerships). PTPs also offered the limited liability to owners that taxable corporate forms provided. Master Limited Partnerships (MLPs) are a form of PTPs, and today comprise nearly all remaining operating businesses allowed to be organized as PTPs. Forbes magazine describes MLPs as an "income and a tax shelter rolled into one investment" (Baldwin 2010). MLPs are heavily concentrated in the oil and gas sector, and therefore of great interest to policy makers focused on a level playing field in energy markets.

1.1 Rapid growth in PTPs led Congress to start taxing them

The tax, liability, and market access benefits of PTPs resulted in rapidly growing PTP formation during the 1980s. Firms across many different types of businesses were organizing as PTPs to bypass corporate income taxes. Congress saw this trend, and worried it would trigger significant erosion of the corporate tax base (Sherlock and Keightley, 2011: 6).

To stem potential losses to the U.S. Treasury, the Tax Revenue Act of 1987 subjected the vast majority of these partnerships to standard corporate taxes even if they were formed as PTPs.¹ Industry lobbying ensured that the new rules did not apply to everybody, however (Mider 2013a). Exempt from the reform were entities for which at least 90 percent of its gross income came from passive sources, most prominently rents, royalties, and natural resource income (Sherlock and Keightley 2011: 6).² John Buckley, currently a tax professor at Georgetown University Law Center and formerly Chief Tax Counsel for the House Ways and Means Committee helped write the 1987 exemption rules and noted that the authors of the exception "didn't envision how popular the tax break would become" (Mider 2013a).

1.2 Most PTPs are MLPs; Dominated by oil and gas

Even in the years before PTP tax subsidies were narrowed, the oil and gas sector was a main beneficiary of the structure. Nelson and Martens (1989: 4) note in their review of 1986 tax filings that "MLPs in oil and gas dwarfed MLPs in other industries in financial respects as well as in number of partners, in gross income, net income and assets."

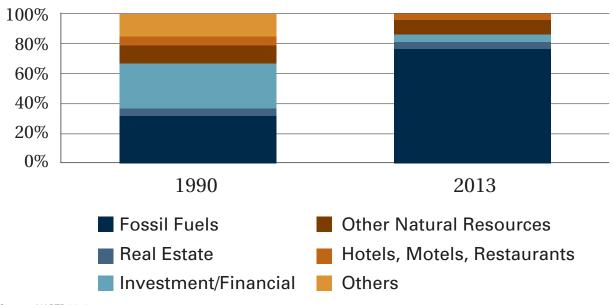
Although some PTPs are passive investments funds rather than MLPs, virtually all of the operating companies eligible for PTP status are MLPs.³ Over the past 25 years, MLPs have become increasingly concentrated in the oil and gas sector, both in terms of number (see Figure 1) and market capitalization (see Figure 2). By the end of 2012, oil and gas firms constituted more than three-quarters of MLP market capitalization, and captured a similar share of MLP-related tax subsidies. Natural resource MLPs comprised more than 80 percent of the total.

^{1.} These rules were codified in section 7704 of the Internal Revenue Code.

^{2.} The 90% test applied to sources of revenue, but did not require this level of payout to owners. Although high payout rates are attractive to MLP investors, the lack of a required distribution level provides MLP management with a much greater degree of operating flexibility than some other types of pass-through entities such as Real Estate Investment Trusts (REITs).

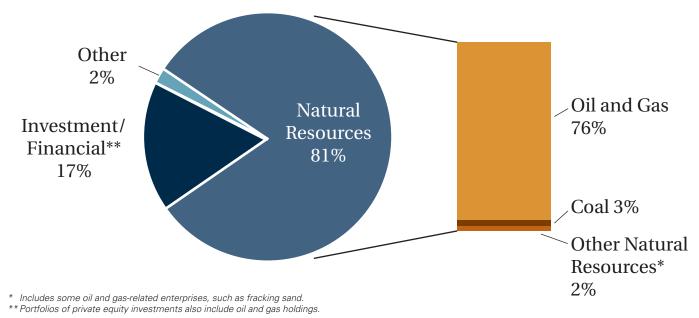
^{3.} NAPTP notes that while the terms "PTP" and "MLP" are often used interchangeably, they are not always the same. MLPs comprise operating companies. The association notes that "[t]here are a number of PTPs which are not active businesses but investment funds, in particular commodity pools" (NAPTP 2013b). Tax subsidy estimates in this paper are based on financial statements of the operating fossil fuel MLPs only

Figure 1: Most MLPs in Fossil Fuel Sector



Source: NAPTP 2013a

Figure 2: Oil and Gas MLPs Dominate Sector by Market-Cap as Well



Source: NAPTP 2013a. Market capitalization as of December 31, 2012.

2. How MLPs Provide Tax Breaks

MLPs can generate tax subsidies in a few possible ways: avoidance of corporate income tax; deferred taxation on distributions to partners; lower tax rates on carried interest by MLP general partners; and FERC rules that allow recovery of corporate income taxes by pipeline MLPs, even though no such taxes are due. Our review focuses on the first two.

Avoidance of corporate income taxes. The partnership structure allows nearly all taxable income earned by the MLP to pass through tax-free to partners (referred to as "unit holders") with no corporate level taxation.⁴ Although this process does result in somewhat higher taxes at the individual level (the income paid out to shareholders is larger than for a standard corporation since there were no deductions for corporate taxes), substantial net tax savings remain.

Return of capital deferral on roughly 80 percent of distributions to unit holders. The form of cash distributions to owners gives rise to a second important subsidy. A large portion of the payments to MLP owners – historically averaging about 80 percent – is classified as a "return of capital" and pays no taxes upon distribution. Rather, the distributions reduce the purchase cost of the MLP units (the "cost basis") on which future gains are calculated. Taxes will be due some years in the future, usually when the MLP investment is sold. However, the delay in when taxes must be paid is valuable to unit holders because it results in lower taxes on a net present value basis.⁵

Reduced tax rate to general partners due to carried interest rules. A third potential tax subsidy, though not one quantified in this paper, comes in the form of what is called "carried interest." Managers in investment companies regularly receive the bulk of their compensation in the form of an interest in the investments they are making rather than as cash wages. This technique allows them to convert much of their pay into capital gains rather than wage income, thereby paying a much lower rate of tax. Conventional workers do not have this option, so

may pay a higher percentage share of their compensation in taxes than people earning much larger amounts of money, but able to use the carried interest approach.

Carried interest rules come into play with some MLPs through their general partners. In addition to public unit holders, many MLPs also have general partners - frequently the original company that spun off some of the assets used to create the MLP to begin with. The general partner receives a large share of cash flows as a result of sometimes complicated incentive payments, known as incentive distribution rights (IDRs).6 At present, IDRs receive capital gains tax treatment and therefore pay a lower rate of tax. There are Congressional efforts to fix this, though "the language of the current bill specifies these changes for financial services firms, so energy MLPs would be excluded" (Hsu, 2013). Regardless of whether statutory exclusions continue or not, carried interest treatment of incentive distribution payments would mean that MLP distributions both to unit holders and to general partners would be tax advantaged.

Allowable recovery of "phantom" taxes under FERC rules for pipeline rates. Finally, many MLPs are pipelines, with rates regulated by the Federal Energy Regulatory Commission (FERC). FERC ruled that MLPs could set pipeline rates as though they were paying corporate-level income taxes at the top marginal rates, even though the actual rate paid is zero. In effect, the ruling allows the pipelines to collect extra revenues from a regulated monopoly to cover a fictitious tax bill. Tax reporter David Cay Johnston estimated that this ruling resulted in nearly \$3 billion in extra charges on pipeline customers (Johnston 2010: 1395). Continued burgeoning growth of MLP assets since 2010 suggests figures would be even higher today. The extra charges result in higher net income within the MLPs, and would flow through in part to our tax subsidy estimates. Absent the special allowance, we would expect the economic case to convert from a conventional corporation to an MLP to be weaker.

^{4.} MLPs are allowed to have some (<10%) "bad" income – earnings that don't meet the requirements of MLP eligibility under section 7704 of the tax code. That portion of income is taxable at the MLP-level, though has been guite small and is not a material factor in the overall tax avoidance benefits of the MLP structure.

^{5.} Were returns of capital for any individual investor to bring their cost basis down to zero, subsequent MLP distributions would be fully taxable as paid out, though at the reduced capital gains rate.

^{6.} Wells Fargo notes that carried interest reforms would affect only the subset of energy MLPs with general partners (Wells Fargo 2010: 37).

3. Tax Avoidance through MLPs is a Growing Problem

Because the tax avoidance benefits of the MLP structure are substantial, pressure to expand MLP eligibility and make more extensive use of existing rules has been persistent and strong. These efforts have increased the revenue loss to Treasury (funds that must be made up by other taxpayers or through higher deficit spending) and worsened barriers to non-fossil energy providers trying to compete with oil and gas.

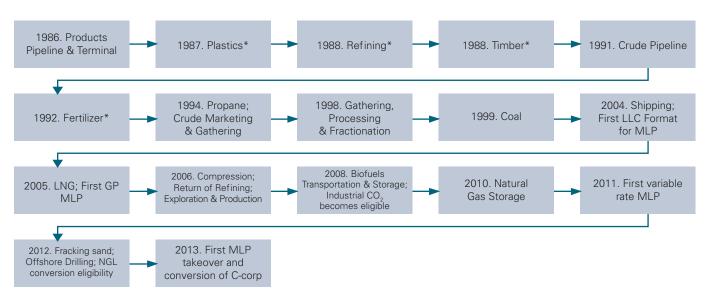
The revenue loss from MLPs has been growing over time as the structure has become more attractive and easier to use. There are three main threads of MLP expansion: financial innovations, private letter rulings, and legislative efforts to broaden MLP eligibility. These factors have coalesced to drive rapid growth in the scale of assets held using the MLP structure. The vast majority of tax-favored MLP assets remain in the oil and gas sector; if unchecked, both MLP-related tax expenditures and market distortions from the selective tax subsidies will grow sharply in coming years.

More investors, bigger market. Modifications in rules regarding unrelated business income and in how distributions within a mutual fund setting are treated have greatly improved

the liquidity of MLP investments by facilitating more workable access to the asset class for institutional and non-profit investors; and by simplifying accounting for smaller investors (particularly through mutual fund and exchange-traded fund vehicles). This increased liquidity has been an important factor in supporting the rapid growth of assets managed under the MLP structure. High payout rates for MLPs in a market where bond yields have fallen consistently has also fueled MLP growth, pulling in investors.

More eligible industries. While statutory reforms, most recently in 2008, have expanded the eligible industries (in that case to biofuel transportation and storage), two other factors have been important in broadening the types of assets that can be managed under the tax-advantaged MLP framework. First, the firms themselves have improved commodity hedging programs and some have adopted variable distributions rather than more fixed rules. Cyclical income used to pose a risk to firms considering an MLP structure. The adoption of a variable distribution schedule has largely addressed this issue. Both strategies have enabled the extension into mid-stream businesses with higher volatility in returns or commodity prices. Figure 3 illustrates the expansion of the types of firms using the MLP structure over time, as well as a number of key organizational innovations.

Figure 3: Expansion into New Sectors, Organizational Innovation has Facilitated Rapid MLP Growth



^{*}The specific MLPs in categories noted were either dissolved or converted into another entity. Often new entities in this category were created later.

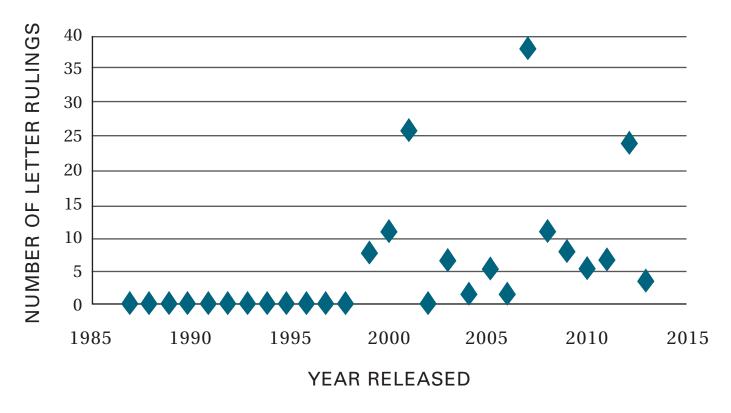
Sources: Wells Fargo 2010: 84, based on partnership reports and Vinson & Elkins, LLP; Ernst & Young 2013: 7; Earth Track analysis

^{7.} To bolster objectivity for investors, variable distribution schedules may be based on measurable metrics of performance, such as the spread a firm is earning on key parts of its production process. Crack spreads for refiners or propane-propylene spreads for chemical MLPs are two examples (Goldman Sachs 2013; 24, 28).

A second important factor in MLP expansion has been the continued and extensive use of the IRS private letter ruling process. Specific companies petition the IRS for a written determination that a particular industrial process is (or is not) eligible for MLP treatment under Section 7704 of the code. The IRS has fairly consistently found in favor of the petitioners, over time increasing the range of MLP-eligible enterprises. An October 2012 ruling, for example, extended MLP eligibility to a sub-set of the basic chemicals industry. The IRS determined that "companies that convert natural-gas liquids into ethylene,

an ingredient in plastics and antifreeze, could form MLPs. Dow Chemical Co. (DOW) was among stocks that rallied on the news as investors speculated that companies might spin off plants into tax-free vehicles" (Mider 2013b). Figure 4 shows the number of private letter rulings related to MLP statutes issued per year, illustrating both consistent use of the strategy over time and a marked increase in the issuances since the late 1990s. The trend of expansion via letter rulings is expected to continue.

Figure 4: MLP-related Private Letter Rulings Issued by the IRS



Source: IRS private letter rulings related to section 7704 issued through March 2013.

4. Oil and Gas Industries are the Largest Beneficiaries of MLP Structures

Assets organized under the tax-exempt MLP form have not only grown tremendously in magnitude over the past 25 years but also become increasingly concentrated in the oil and gas sector. Between 2000 and the end of 2012, the market capitalization of all MLPs jumped from less than \$14 billion to more than \$400 billion. Roughly \$325 billion, or more than 80 percent (see Figure 2) of the total, was in the natural resource sector – primarily oil and gas, but also coal, timber, fertilizer minerals, and fracking sand (Legg Mason 2012: 2; NAPTP 2013a: 31).8

Growth in oil and gas MLPs continues to accelerate, driven by rising equity markets, new MLP creation, a fracking-related oil and gas boom, and follow-on funding to existing MLPs. By the end of the first quarter of 2013, for example, fossil-fuel related MLPs had surged to more than \$385 billion (Google Finance, 2013), a big jump in only three months. MLPs have comprised a growing share of merger and acquisition activity as well, increasing from about 15 percent of deal activity in the oil and gas sector overall in 2010 to more than 20 percent in 2012 (PWC, 2013).

Absent regulatory changes, the shift from taxable corporate assets to tax-exempt MLPs is expected to continue. In a recent research note, Goldman Sachs noted that

'MLP-ification' of energy is increasing. We believe the energy sector is on the cusp of what could be a meaningful migration of assets into the Master Limited Partnership structure.

The first benefit listed from doing so? "[H]igher available cash flows since MLPs do not pay federal taxes..." (Goldman Sachs 2013: 1). NAPTP noted this as well in recent Congressional testimony, writing that "[W]hile MLPs are formed for a number of reasons, it is the pass-through tax treatment that makes the MLP structure such an effective vehicle for

midstream assets" (NAPTP 2012: 5). In a 2007 presentation, the industry association was even blunter, noting that "PTPs are a tax structure," emphasizing the tax advantages above any other organizational attributes (NAPTP 2007: 58).

4.1 Missing subsidy: The multi-billion dollar hole in fossil fuel subsidy reporting

With such high MLP concentration in the oil and gas sector, it is surprising to note that for decades Master Limited Partnerships (MLPs) have been invisible subsidies to fossil fuels. With a rapidly-growing pool of corporate assets held in tax-exempt MLPs now measured in the hundreds of billions of dollars, as well as yields averaging 6.5 percent (nearly 4 times the yield of 10-year Treasuries), it is clear that the revenue losses from MLPs are large. ¹⁰

Yet few of the standard oversight mechanisms used to track federal tax expenditures seem to be picking up this subsidy. The U.S. Department of Energy's (DOE) 2008 review of federal energy subsidies contains no mention of MLPs at all, despite running to more than 250 pages. Its earlier studies were no better. In fact, not until DOE's most recent subsidy review (issued in 2011) did MLPs receive any mention at all - and even there only in response to significant Congressional pressure that the Department's research mandate in 2011 should not replicate the overly narrow research scope from 2008 that biased the resulting subsidy data. In that regard, there was little success: DOE did not actually include revenue loss estimates for PTPs, but rather noted merely that they were not included because, "[a]s with many other tax provisions, the tax treatment of PTPs is not exclusive to the energy sector" (DOE 2011: x). DOE has been inconsistent in how it draws its lines between "energy-specific" and "general" subsidies. 11 Nonetheless, the fossil fuels sector comprises such a large share of operating PTPs that excluding it from evaluation on the grounds that it is of "general" benefit is untenable.

The informational deficit is not limited to DOE. The Congressional Budget Office has conducted two reviews of energy-related tax expenditures (Dinan 2013; Dinan and Webre 2012). Neither includes subsidies from the MLP form.

^{8.} It is notable that MLP market capitalization in 1986 was \$16 billion (Nelson and Martens 1989: 12). This was more than the market capitalization in 2000, indicative of the impact that restrictions on the use of PTPs implemented in 1987 had on levels of corporate tax avoidance, at least initially.

^{9.} Goldman Sachs also remarked that, "The two refiner MLP's appreciated by an average 46% in the 30 days after their IPOs [initial public offering] (vs. S&P500 +4%), ... which we believe have largely been the result of refining-focused investors acknowledging the tax advantage of the MLP structure" (Goldman Sachs 2013: 15).

^{10.} Junior MLP companies (i.e., those with a smaller market capitalization, and sometimes with somewhat higher risk operations) have yields on the order of 8%, versus about 6% for large cap MLPs. (del Alma in Mack, 2013).

^{11.} For example, Koplow (2010: 19) notes that EIA includes percentage depletion allowances as a subsidy even though many non-energy materials receive it; but excludes tax-exempt interest on energy-related municipal bonds even though a higher percentage of this type of bond went for energy uses than in the category of private activity bonds that EIA did include.

The U.S. Treasury is one of two federal bodies (the second is the Joint Committee on Taxation, or JCT, a committee of the U.S. Congress) to prepare annual estimates of federal tax expenditures. However, a Treasury official noted that they do not estimate any revenue losses associated with business form. As a result, tax subsidies from the MLP structure do not, and will not, show up in Treasury's revenue loss estimates no matter how large they grow.

At present, JCT is the only federal body estimating the scale of the MLP tax break. Yet even here, coverage was initiated slowly: there is no estimate for MLPs prior to 2008, although natural resource MLPs had a market capitalization of \$131 billion by 2007 (Legg Mason 2012). A review of tax expenditures to energy prepared by the U.S. Congressional Research Service did include JCT's subsidy estimates for MLPs, though inexplicably listed the provision in its "other" category rather than under fossil fuels (Sherlock 2012:7).

The following section provides an overview of JCT's revenue loss estimates for MLPs; Chapter 5 benchmarks these figures using comparative ratios and reported information on MLP taxable income.

4.2 JCT revenue loss estimates from MLPs

The JCT revenue loss estimates (shown in Table 1 below) form the official estimate of tax subsidies to energy industries through the MLP structure. JCT models forward projections of revenue losses based on their assessment of market size, prices, usage of available tax expenditures by market participants and other factors that affect the timing and scale of business activity related to specific tax provisions. For this reason, the

subsidy value for the same year may change over time as it is reestimated using different assumptions or inputs. For example, MLP-related revenue losses for 2011 were estimated at \$600 million in JCT's 2008 estimate, but dropped to \$200 million when re-assessed in JCT's 2012 report. Because knowledge about market conditions and business behavior tends to improve over time and with a shorter estimation window, we assume that JCT's most recent estimate of revenue losses for any year is the most reliable. For this reason, our calculations and comparisons adopt that value rather than an average of all estimates for a particular year.

All else being equal, tax subsidies through MLPs would be expected to rise as prices of fossil fuels rise (industry profits and taxable income jump); drilling activity and production increases (more firms becoming MLPs or already MLPs and generating more tax-exempt income); or corporate tax rates rise relative to individual rates (since the value of avoiding corporate taxes becomes more valuable). Falling prices, industry contraction, or rising rates on individuals relative to corporations would be expected to act in the opposite direction.

Thomas Barthold, JCT's Chief of Staff, indicates that the sharp increase in estimated revenue losses in JCT's 2013 estimate relative to 2012 (the estimated revenue loss more than quintupled for the same years) was the result of newer data showing that MLPs were generating more income than before (Mider and Rubin 2013). Other background information provided by JCT staff noted as well that their models utilize as inputs actual filing data that can be 2-3 years old. Thus, this source noted that the downward revision in 2011 was based on the recession, whereas the increased revenue losses in

Table 1: Exceptions for Publicly Traded Partnership with Qualified Income Derived from Certain Energy-related Activities, JCT Estimated Revenue Losses (\$millions)

Year Estimated	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Most Recent 5-Year Total
2008	400	400	500	600	600						2,500
2010		400	500	600	600	700					2,800
2010			500	500	600	600	700				2,900
2012				200	200	200	300	300			1,200
2013					1,100	1,200	1,200	1,400	1,400	1,500	7,800
C ICT 0010	Courses, ICT 2012, other users compiled by Paul Cybrid, Course 2012 based on ICT 2002, 2010, 2010b, and 2012										

Sources: JCT 2013; other years compiled by Pew SubsidyScope 2012 based on JCT 2008, 2010a, 2010b, and 2012.

2013 reflect the rapid expansion of natural gas pipelines and production, particularly increased production from shale formations.

In the following Chapter, we calculate that JCT's most recent revenue losses may still be significantly understating the subsidies flowing to fossil fuels from the MLP structure. However, even assuming JCT's figures are correct, the MLP subsidy is too large to overlook in all federal reviews of energy subsidies. Consider that JCT's MLP subsidy estimate (\$1.2 billion) would have been the single largest tax subsidy to fossil fuels in CBO's tally for 2013 (Dinan 2013: 4), had it been included. Similarly, their 2010 MLP estimate (\$500 million) would have been the second largest subsidy to fossil fuels in DOE's most recent subsidy tally (DOE 2011: 6,7), had DOE included the provision.

5. Subsidies to Fossil Fuel MLPs Likely to Significantly Exceed Current JCT Estimates

If the magnitude of MLP subsidies is underestimated or ignored in official government reports, a number of political problems ensue. Low numbers mute the pressure to correct existing loopholes, stem revenue losses, and remove competitive impediments to other forms of energy. Further, proposals to expand MLP eligibility to new sectors of the energy market often rely on claims that the fiscal hit of such expansion will be minor. Estimation problems with existing recipients may affect the estimated cost of MLP expansion as well; and decisions on whether or not to support expansion will be skewed by artificially low estimates of those costs.

We benchmark JCT estimates in two ways. The first is by comparing revenue loss estimates to other metrics of MLP performance over a series of years to identify variation in the resultant metrics. Wide variation in these metrics is an indication that JCT's figures may not have fully captured marketplace activity. The second approach is to pull financial data, particularly pre-tax income, on all of the fossil-fuel related MLPs and to compare the taxes that would be paid at the corporate and unit holder levels were the entity a conventional corporation rather than an MLP. Neither of these approaches is perfect, and their limitations are also noted. However, they do provide a general indication that official estimates of tax losses from fossil fuel MLPs appear to be understated – at a minimum by hundreds of millions of dollars per year; though quite possibly by billions.

5.1 Revenue loss metrics show large variability year-to-year; suggest larger-than-estimated tax cost of MLPs

Table 2 provides some additional metrics against which to assess JCT's estimated revenue losses from energy MLPs and to compare trends. While JCT greatly reduced its revenue loss estimate in 2011, capital market total returns in the MLP sector were strongly negative much earlier – in 2008; but had more than reversed by the following year. The MLP sector exhibited

much stronger performance during this period than the stock market overall, as measured by the S&P 500.

Industry data also indicate that the scale of fossil fuel MLPs, as measured by market capitalization, grew steadily throughout the recession – from about \$83 billion in 2008 when MLP returns were sharply negative to more than three times that level in 2011 when JCT revenue loss estimates were cut in half. Sharp changes in revenue loss estimates as a share of market cap between 2008 and 2009, and again in 2011 indicate that some of the core relationships driving JCT's revenue models may have been changing.

Although the link to tax liabilities is somewhat indirect, market cap metrics provide a good measure of the scale of the MLP sector as well as investor expectations about returns. Since all MLPs are publicly traded, it is possible to look at their pre-tax income, as reported in financial statements and compiled by Google Finance. In fact, pre-tax income of fossil fuel MLPs was rising even between 2009 and 2010, though the broader economy was still struggling. This pattern is not entirely anomalous. While demand for basic fuels did drop somewhat, many of the largest MLPs rely on fee-for-transport services along pipelines, and are therefore less affected by changes in commodity prices than exploration and production companies. Is

JCT revenue loss estimates present a decidedly more negative picture: estimated tax subsidies as a share of taxable income dropped from more than 4 percent in 2010 to only 1.1 percent in 2011. Their most recent tax expenditure estimates showed sharply rising levels for 2012, reaching nearly 6 percent of pretax income. JCT never publishes detailed assumptions or data behind its revenue loss estimates; it is therefore not possible to determine the causes for these changing values with any precision. Tax loss carry-forwards from the 2008 period may be one explanatory factor. Though MLPs are pass-through entities and thus cannot carry losses at the corporate level, the losses are distributed to unit holders and could affect future year tax calculations at the individual taxpayer level. However, the growth in MLP assets and in natural gas activity overall would drive revenue loss estimates in the opposite direction, and the "toll-road" nature of many MLP business activities suggest that the earnings volatility would be less than for other sectors of the

^{12.} See Box 1 for a discussion of related data issues.

^{13.} Bruno del Alma, CEO of Global X Management, a mutual fund company that includes MLP products, notes that, "MLPs tend to have lower correlation with the general market benchmarks because some of the specific structures and economics of those businesses, particularly the midstream or pipeline side of the business, operate very much like a toll road. So regardless of the economy is doing, as long as there is natural gas or oil flowing through those pipelines, the operator and the owner of that pipeline will charge a toll. That offers a significant degree of stability." (Mack 2013).

economy. Surging depreciation deductions on a tax basis, but not a financial reporting basis, could be another (see Box 1).

The bottom of Table 2 illustrates the increase in JCT estimates of MLP tax subsidies were they to have applied current ratios of revenue loss/pre-tax income to recent years. For 2009 and

2010, subsidy values would have increased by more than \$150 million annually. For 2011, estimates would have increased by more than \$800 million, to a total of \$1,022 million – roughly five times JCT's reported figure. 14

Table 2: Official MLP Tax Expenditure Estimates Versus Other Industry Benchmarks

		2008	2009	2010	2011	2012	2013	Notes
	timated ue Loss	400	400	500	200	1,100	1,200	(1)
MLP M	larket Metrics							
Market C	Capitalization	82,900	149,700	238,600	288,900	325,000	387,110	(2)
Revenue market c		0.48%	0.27%	0.21%	0.07%	0.34%	0.31%	
Annualiz index	zed return, MLP	-38.5%	85.0%	35.0%	17.0%			(3)
Annualiz 500	zed return, S&P	-36.9%	26.5%	15.1%	2.1%			(3)
Taxable i fuel MLP	ncome, fossil	na	10,222	11,539	17,651	18,992	na	(4)
MLP R	evenue Loss N	/letrics						I
Revenue income	loss/taxable		3.9%	4.3%	1.1%	5.8%		
Revenue at 2012 I	e loss if all level		592	668	1,022	1,100		
Implied i	increase in loss		192	168	822	-		(5)
Notes								I
(1) inp	T value for the most in outs and assumption a tax break.	recent point a s, and are the	t which year in qu refore used instea	uestion was est ad of averaging	imated. Revision across all estima	ns are assumed to ates JCT may have	incorporate the n made over time f	nost timely or a specific year
	tural resource MLPs 12 from NAPTP (2013				3 (based on 3.28	.13 valuation). 20	08-11 from Legg N	Mason (2012);
	sed on Alerian MLP I				12: 23).			
(4) Bas	sed on MLP financia	l statements, a	as tabulated base	d on data extra	cted from Googl	e Finance (3.28.13	3)	
	cause the implied revere would be no incre					income from JCT's	2012 estimate, by	definition

^{14.} Since the ratio includes taxable earnings, which are not available yet for 2013, we could not estimate a similar value for 2013.

5.2 Comparing tax burden on pretax earnings between C-Corp and MLP

Another way to estimate revenue losses to fossil fuel MLPs is to develop simplified tax scenarios based on financial data reported by the MLPs. This approach will not capture all accounting vagaries of each individual firm (see Box 1), but can indicate some broad trends across the fossil fuel MLP sector. Two approaches have been used here, both of which suggest actual revenue losses to Treasury have greatly exceeded past government estimates.

 NAPTP approach. In its "MLP Primer," the National Association of Publicly Traded Partnerships (2013a) illustrates the tax benefits of the MLP structure through an example of comparative tax levels between conventional

Box 1: Data Disparities between Financial Reports and Tax Filings

Pre-tax income reported in financial reports commonly differs from what is actually included on tax returns. Reasons for the variance can include other tax preference items or more speculative "filing positions" taken by firms but that may not end up being entirely accepted by the IRS. Often these end up being differences in timing, as higher deductions in earlier years reverse later on; however, there can still be significant tax savings to the firm on a present value basis.

The estimates in this chapter are based on publicly available data on taxable income; we do not have access to actual returns. Although these figures have already deducted some depreciation costs (a main component in MLP return-of-capital distributions), those deductions may not fully account for highly accelerated depreciation allowable to certain classes of oil and gas investment, or special immediate "bonus" depreciation rules that were in place during the recession. To the extent that these types of issues result in overstating taxable income, the revenue loss estimates may be too high. The scenarios approach, including the use of lower effective tax rate assumptions, helps to bound this uncertainty. In all cases, figures are materially higher than current JCT values.

Further, because reductions in taxable income to MLPs are often caused by other tax preference items, simply reducing the revenue loss estimate from the MLP structure will tell an inaccurate story of subsidies to the fossil fuel sector overall. It is equally important that the increase in the other provisions used (such as accelerated depreciation, expensing, and percentage depletion) is also measured.

corporations and MLPs. This example assumes residual distributions from conventional corporations are taxed at the ordinary income tax rate, and that taxable income within the MLP incurs an income tax burden at that same marginal rate. NAPTP assesses combined state and federal rates; we look only at federal rates because we are comparing results with JCT data, which is federal only as well. However, the combined state and federal subsidy to MLPs will be larger than federal alone because of higher combined marginal tax rates.

• Modified NAPTP approach. The modified approach refines some of the NAPTP assumptions to reflect the type of tax the particular income streams are likely to be exposed to. Specifically, this scenario assumes that corporate payments to individuals, after paying corporate income taxes, are dividends and taxed at the lower dividend rate. MLP taxes are calculated based not on reported pre-tax income, but using cash payments to unit holders (distributions), as estimated based on average yields, instead. This enables us to separate ordinary income from return of capital, as the two have different tax treatment. Based on industry averages, 20 percent of the distributions are assumed to be taxable ordinary income, with the remaining 80 percent of the distribution a return of capital entailing a tax deferral that is of benefit to the unit holder.

5.3 NAPTP tax comparisons: Projected MLP revenue losses \$2.4 to \$4.4 billion per year

Table 3 summarizes the NAPTP approach. Line II.E shows total federal taxes from the fossil fuel MLP universe under the assumption they were conventional subchapter C-corporations. The taxes paid, between \$5.4 and \$10.1 billion per year, are significantly higher than the estimated federal taxes they pay as MLPs, \$3.0 to \$5.6 billion per year. Estimated revenue losses from the MLPs using this approach would be between \$2.4 and \$4.4 billion per year, or roughly \$13.6 billion for the 2009-12 period. JCT's estimate for that same time frame was only \$2.2 billion, less than one-sixth as large.

Table 3 assumes the top marginal tax bracket for corporations (35 percent) in calculating the taxes due, though a somewhat lower rate on individuals (28 percent) that seems more reflective of the average rate that individual investors owning the MLP positions for income generation would pay.¹⁵

^{15.} NAPTP (2012: 3) noted in recent Congressional testimony that, "According to surveys done by some of our members, the majority of the investors providing this capital – up to 80 percent – are individual investors. Many of the investors are seniors – roughly 75 percent are over the age of 50. For the most part, they are individuals seeking a relatively secure income-oriented investment providing a reasonable return, something that is hard to come by in today's market."

Morningstar argues that the average effective tax rate (i.e., what firms actually pay) on mid-stream (non- MLP) companies is only about 25 percent, and that this lower tax rate should be used in assessing the incremental taxes from losing the MLP exemption (Hsu 2013). One challenge in adopting the Morningstar approach is that the difference between effective and marginal rates is driven significantly by the use of other tax breaks, many of them specific to fossil fuels. Thus, if the MLP tax subsidy is being reduced to reflect these other tax breaks, it is important the offsetting uptick in other subsidies triggered by the growth of fossil fuel MLP activity is showing up in JCT figures as well.

Using the lower 25 percent rate would reduce the estimated tax subsidies by about \$950 million per year on average, clearly a

significant drop. However, even with this adjustment, revenue losses from fossil fuel MLPs would still be 4.5 times higher than the JCT estimates, equal to roughly \$9.8 billion over the 2009-12 period.

Economists Philip Swagel and Robert Carroll (2012: 13), in a review of the impact of eliminating the MLP tax exemption on investment patterns for NAPTP, provide another point of comparison. They estimated there was a 9.5 percentage point reduction in the effective rate of taxation of MLPs versus C-corps in a paper they wrote for NAPTP. Applying this rate differential to pre-tax income generates an estimated \$5.5 billion in revenue losses from MLPs over the 2009-12 time frame, roughly 2.5 times the JCT estimates for the same period.

Table 3: Estimated Revenue Losses Based on MLP-reported Pre-tax Income

		2009	2010	2011	2012	Notes
. 1	Pre-tax income reported by MLPs	10,222	11,539	17,651	18,992	
l. (Corporation - federal tax scenario		İ			(1)
	A. Federal income taxes [I x IV.A]	3,578	4,039	6,178	6,647	
	B. Taxable income net of corporate taxes [I-II.A]	6,644	7,500	11,473	12,344	
	C. Shareholder federal tax [II.B x IV.B]	1,860	2,100	3,213	3,456	(2)
	D. Net income to shareholder [II.B - II.C]	4,784	5,400	8,261	8,888	
	E. Total federal taxes paid [II.A + II.C]	5,438	6,139	9,390	10,103	
III.	MLP - federal tax scenario					
	A. Federal income taxes	184	332	572	451	(3)
	B. Taxable income net of corporate taxes [I - III.A]	10,038	11,207	17,079	18,541	
	C. Shareholder federal tax [III.B x IV.B]	2,811	3,138	4,782	5,191	
	D. Net income to shareholder [III.B - III.C]	7,227	8,069	12,297	13,349	
	E. Total federal taxes paid [III.A + III.C]	2,995	3,470	5,354	5,642	
V.	Estimated revenue loss from MLPs [II.E - III.E]	2,443	2,669	4,036	4,461	
	JCT estimate [Table 1]	400	500	200	1,100	
V . I	Marginal tax rates					
	A. Corporate	35%	35%	35%	35%	
	B. Individual	28%	28%	28%	28%	

- JCT revenue loss estimates track the federal government only; Table 4 does the same. However, there are also incremental tax savings at the state level which would boost the total value of subsidies to fossil fuel MLPs.
- Applies 28% individual rate to match assumptions in NAPTP examples, and as a better proxy for the average rate paid by the individual (2)investors who own the bulk of MLP units per NAPTP (2012).
- (3)Small amounts of corporate-level taxable income within MLPs are related to non-eligible activities under the IRS statutes. Section 7704 of the Internal Revenue Code requires a minimum of 80 percent of gross income to be qualifying.

Source: Farth Track calculations based on Tables 1 and 2, and federal marginal tax rates

5.4 Modified NAPTP tax comparisons: Revenue losses \$2.3 to \$3.9 billion per year

Table 4 illustrates the modified scenario. The conventional corporation scenario taxes pre-tax earnings at the highest corporate income tax rate, but uses the lower dividend rate for the second level of shareholder taxation upon distribution. Flows from the MLP are split into ordinary income and return of capital income streams, more reflective of actual distributions from the entities.

As with Table 3, ordinary income in this scenario is taxed at the 28 percent rate for individuals and a 35 percent rate for corporations. The return of capital flows are not taxed at all in the current year. Rather, a present value of the future tax liability is assessed assuming units are held for ten years, and that the deferral is worth about 3.25 percent per year to the individual unit holders (the proxy discount rate). This figure reflects the prime rate on borrowing as of April 2013. The proxy rate of return on the deferral is higher than what one earns on 10-year Treasury bonds (the so-called risk-free rate of return), but fairly conservative in terms of what a diversified portfolio will return. It is also well below consumer costs of credit, as measured by credit cards (most holders of MLPs are individuals and not institutions).

Return of capital payments comprise a mixture of capital gains (taxed at a lower cap gains rate) and cash associated with depreciation and amortization deductions (which are "recaptured" when MLP interests are sold and taxed at ordinary income tax rates). This mix of return of capital flows is not known; we therefore conservatively assume all return of capital is taxed at the higher ordinary income rates. Were capital gains rates to apply, the 2013 capital gains rate should be assumed even for earlier years since taxes on units would not be due until sold, and the sales would occur after 2013. 16

A higher portion of distributions tagged as return of capital, higher than average yields, longer holding periods, and higher assumed benefits from the tax deferral to unit holders (conditions that all exist for some particular MLPs and investors) would reduce the present value of taxes paid under this MLP scenario. This would increase the size of the estimated tax expenditure.

As shown in line V of Table 4, estimated revenue losses from MLPs range from \$2.4 to \$4.4 billion per year under the modified scenario that more accurately picks up the type of income streams MLPs produce. Over the 2009-12 time frame, estimated revenue losses are \$12.1 billion, more than five times the government revenue loss figures.

Table 4: Estimated Revenue Losses from MLPs, Modified Assumptions

		2009	2010	2011	2012	Notes
I. F	Pre-tax income reported by MLPs	10,222	11,539	17,651	18,992	
II.	Cash distributions					
	A. Average yield	7.38%	6.20%	6.09%	6.57%	(1)
	B. Market capitalization	149,700	238,600	288,900	325,000	(2)
	C. Estimated distributions to unit holders [II.A x II.B]	11,045	14,783	17,593	21,367	(3)
	1. Current income [II.C x 20%]	2,209	2,957	3,519	4,273	
	2. Return of capital [II.C x 80%]	8,836	11,826	14,074	17,094	

^{16.} Dividend rates have also risen, but won't affect revenue loss estimates until the 2013 tax year.

Table 4, Continued

III.	Corporation - federal tax scenario	2009	2010	2011	2012	Notes
	A. Federal income taxes [I x V.A]	3,578	4,039	6,178	6,647	
	B.Taxable income net of corporate taxes [I-III.A]	6,644	7,500	11,473	12,344	
	C. Shareholder federal tax on dividends [III.B x V.C]	997	1,125	1,721	1,852	(4)
	D.Net income to shareholder [III.B - III.C]	5,648	6,375	9,752	10,493	
	E. Total federal taxes paid [III.A + III.C]	4,574	5,164	7,899	8,499	
V.	MLP - federal tax scenario					
	A. Federal income taxes	184	332	572	451	(5)
	B. Taxable ordinary income [II.C.1]	2,209	2,957	3,519	4,273	
	C. Unit holder federal tax [IV.B x V.B]	331	443	528	641	(6)
	D. Return of capital taxable when units sold [II.C.2]	8,836	11,826	14,074	17,094	
	1. Deferred tax liability [IV.D x VI.B]	2,474	3,311	3,941	4,786	(6)
	2. Years held before sale	10	10	10	10	(7)
	3. Estimated cost of credit (value of deferral)	3.25%	3.25%	3.25%	3.25%	(8)
	4. Present Value of tax liability	1,797	2,405	2,862	3,476	
	E. Total federal taxes paid [IV.A +IV.C + IV.D.4]	2,312	3,180	3,962	4,568	(9)
/ .	Estimated revenue loss from MLPs [III.E - IV.E]	2,262	1,983	3,937	3,931	
	JCT estimate	400	500	200	1,100	(2)
/I.	Marginal tax rates					
	A. Corporate income tax	35%	35%	35%	35%	
	B. Individual income tax	28%	28%	28%	28%	(6)
	C. Dividend tax rate	15%	15%	15%	15%	
	D. Capital gains tax rate	20%	20%	20%	20%	(6)
Vot	es					
1)	Average annual yield of the Alerian index of the 50 largest MLPs. S	maller MLPs tend	to have even h	igher yields.		
2)	From Table 1.					
3)	Investment bank estimates note return of capital comprising between capital components would reduce total tax burden.	veen 25 and 100% o	of cash payout	s to unitholders	s. Larger retu	rn of
4)	Assumes 100 percent of net corporate income tax is paid out to she somewhat. Dividend rates higher beginning in 2013.	areholders as divid	lends. Retaine	ed earnings wou	ıld reduce the	tax hit
5)	Small amounts of corporate-level taxable income within MLPs are of the Internal Revenue Code requires a minimum of 90 percent of statements of fossil fuel MLPs.	related to non-eli f gross income to b	gible activities be qualifying.	under the IRS s Payments are ta	statutes. Sect Illied from fin	ion 770 ⁴ ancial
6)	Individual tax rate of 28% is not the top marginal rate but matches paid by the individual MLP unit holders that NAPTP (2012) identif to be the individual rate as depreciation is large part of distribution taxed at ordinary income rates. A portion is also long term capital degree. Capital gains would use the rate in effect from 2013, since surcharge of 3.8% applies only to upper income taxpayers and was	ties as its main invents in excess of earn gains, so this assu sales are assumed	estors. Taxes o nings and is re imption will ov	n return of cap captured at tim verstate MLP ta	ital also assur e of sale by bo xes paid to so	ned eing me
7)	Rapidly growing MLPs could well shelter gains for longer than 10 y investment decisions by unit holders. Longer hold times would in			ı reasonable mi	x given chanş	ging
8)	Value is a proxy for the individual unit holders benefit from deferricards), the rate could be much higher. A higher rate would increase				es of debt (e.	g., credi
9)	Sum of current payments of corporate income taxes on non-quality from MLP distributions to unit holders, and the present value of ca					

5.5 Summary tabulation of MLP revenue loss estimates

Table 5 provides a summary of tax expenditure estimates for fossil-fuel related MLPs under a variety of estimation approaches. While data gaps preclude exact calculation of revenue losses, the understatement in revenues foregone is potentially very large – billions of dollars per year, and losses up to six times larger than what has historically been estimated.

With asset creation and conversion into MLPs continuing to accelerate, more refined official estimates of revenue losses are greatly needed.

Table 5: Summary of MLP Revenue Loss Scenarios (\$millions)

Sc	enario	2009	2010	2011	2012	2009-12	Multiple of JCT Estimates (2009-12)
1.	JCT revenue loss estimates, as published	400	500	200	1,100	2,200	lx
2.	JCT scaled estimate using 2011 revenue loss/taxable income ratio	592	668	1,022	1,100	3,383	1.5x
3.	All distributions taxed at ordinary income tax rates in year of distribution (NAPTP simplified example)	2,443	2,669	4,036	4,461	13,610	6.2x
3A.	Scenario 3 using effective tax rate of 25% (Morningstar scenario)	1,779	1,915	2,881	3,223	9,796	4.5x
3В.	Reduced effective tax rate per Swagel and Carroll estimates (2012) applied to taxable income	971	1,096	1,677	1,804	5,548	2.5x
4.	Differentiated tax treatment of distribution streams, incorporating dividend rates, tax deferrals on return of capital	2,262	1,983	3,937	3,931	12,113	5.5x

6. Expanding MLP Eligibility: Panacea or Problem for Renewables?

Recognizing the growing scale of MLP subsidies to their competitors, renewable energy interests have been pushing to extend MLP eligibility to a wide array of renewable energy resources. Detailed legislation to expand MLP eligibility has been reintroduced in Congress; a similar (though more narrow) bill last year failed to pass (Coons 2013; Coons 2012). Many renewable interest groups have supported the expansion. However, it is too early to conclude that MLP expansion is the best course for the sector.

6.1 Higher than estimated revenue losses suggest ongoing market distortions worse than projected

The larger the current MLP revenue losses, the more that existing oil and gas firms gain a market advantage over their non-fossil competitors. As noted above, it appears as though tax expenditures benefitting oil and gas MLPs are billions of dollars higher than estimated. From this large base, growth in fossil fuel MLPs continues apace. It is prudent to acknowledge that if tax-exempt MLPs continue to be allowed, fossil fuels will continue to disproportionately capture tax benefits on existing MLP assets for many years to come – even once renewable resources become eligible.

Further, MLPs are easier to structure for highly centralized, capital-intensive energy resources such as fossil fuels, and perhaps wind and centralized solar, particularly where the technologies are proven and the cash flows stable. Smaller firms are less able to shoulder the fixed costs to establish and manage an MLP; and investor appetite for MLPs in sectors with higher technology risk would likely be lower. Thus, smaller scale distributed resources such as residential solar providers or demand side management providers may benefit less than expected from proposed changes, though would face continued subsidization of competitors through the MLP vehicles.

6.2 Overhang in fossil fuel assets held by C-corps suggests new MLP formations will also be dominated by fossil fuels

It is clear that fossil fuels dominate assets currently held in the tax-favored MLP format. Surprisingly, however, it is quite possible that even with eligibility for renewables *new MLP formations* will also be dominated by fossil fuels. The driver here is asset scale: as shown in Table 6, there is an immense "overhang" of coal, oil and gas assets that are eligible for MLP treatment, but just haven't converted yet.

Table 6: MLP-Eligible Asset Base: Most Energy Market Cap Still Held in C-Corps

(US and Canadian Energy Sectors, excluding integrated oils)

Sector	% of Sector Assets held in MLPs	% of Sector Assets held in C-Corps
Refiners	6%	94%
Exploration and Production	14%	86%
Oil Services	0.3%	99.7%
Coal	17%	83%
Midstream	41%	59%
Source: Goldman Sachs 20	13: 23.	

Were even a portion of these assets to migrate to MLP structures, they would overwhelm MLP creation in the renewables sector. This could well happen. The pace of MLP conversion within the fossil fuel sector has been growing rapidly in recent years, and the techniques for establishing and managing fossil fuel MLPs have been optimized. In addition to financial innovations such as variable distributions that were noted earlier in this paper, Linn Energy's planned acquisition of Berry Petroleum for \$2.5 billion (\$4.3 billion including debt) marks the first time an MLP has acquired a full, tax-paying C-corporation and converted it into a tax-exempt MLP. The model could greatly accelerate the pace of MLP conversions (Gopinath 2013). 18

^{17.} CRS notes that, "MLPs have typically been used to finance proven technologies with stable cash flows. Since the financing structure is particularly well suited to entities with predictable cash flows, many existing MLP operations are involved in transportation of fuels or other midstream operations. Renewable energy technologies that pose technology risk may not be well suited to take advantage of the MLP structure. Capital is most scarce for energy technologies that have been developed beyond the research & development (R&D) laboratory phase, but have not yet reached commercialization. MLPs are not likely to attract additional capital to this capital-scarce sector comprised of technologies that have moved beyond field testing but have not yet been deployed at scale" (Sherlock and Keightley 2011: 11).

^{18.} In July 2013, the Securities and Exchange Commission began an informal review of potential problems with Linn Energy's revenue recognition rules. As of publication of this paper, there was no indication that the SEC review will derail the acquisition of of Berry Petroleum, however.

Investment firms active in the MLP area have been expecting this growth for some time. Alerian Capital, which runs the largest MLP exchange traded fund, noted in 2009 that:

Congress created this structure to encourage investment in U.S. natural resources and energy infrastructure. Since then, as the MLP structure has gained more widespread adoption, there has been a gradual yet quickly accelerating transition of MLP-qualifying assets from corporations to MLPs given the effective tax arbitrage of holding these assets in the partnership structure and the value that highly specialized management teams can provide [Emphasis added] (Alerian 2009: 10).

Michael Peterson, an energy analyst at MLV & Co., a New York investment bank, noted that their "supply-side analysis suggests the asset base of upstream MLPs has the potential to grow by a factor of five." (Peterson 2012). And, as noted earlier, analysts at Goldman Sachs believe that the "energy sector is on the cusp of what could be a meaningful migration of assets into the Master Limited Partnership structure" (Goldman Sachs 2013: 1).

If fossil fuel assets are able to convert to MLP formats more quickly, and with more assets than renewables, the continued allowance of MLP tax exemptions could erode rather than bolster the competitive position of renewable energy.

6.3 Pending legislation provides MLP eligibility to power generation assets for the first time, potentially another huge base of conventional energy assets

Expanding eligibility for tax-favored MLPs to power generation is a clearly-stated objective of the 2013 Coons bill; its purpose reads: "To amend the Internal Revenue Code of 1986 to extend the publicly traded partnership ownership structure to energy power generation projects and transportation fuels, and for other purposes" (Coons 2013: 1). Section 2(a)(4) extends eligibility to the "generation of electric power exclusively utilizing any resource described in section 45(c)(1)..." (Coons 2013:2). Though the bill attempts to focus on renewable forms

of electricity, the extension of MLP eligibility into power generation equipment for the first time is clear.

The potential fiscal and environmental impact of this extension should not be underestimated, even if for the next few years only generally "green" forms of power are included. ¹⁹ In reviewing the early history of the MLP structure, tax reporter David Cay Johnston noted that:

[Gordon] Gooch [a regulatory lawyer and former chief counsel for FERC] says that corporate-owned electric utilities are salivating at the prospect of getting out of paying corporate income tax while pocketing the money. Their trade association has already defended collecting income taxes from customers, monies that are never turned over to government. The industry trade association Edison Electric Institute basically said its members just do what the law allows. 'The electric utilities would be master limited partnerships now,' Gooch said, 'except that when the law was changed in 1986 the Edison Electric Institute was uncharacteristically asleep at the switch.' (Johnson 2012: 98)

Conventional fossil fuels have dominated the MLP structure since inception, and supporting Congressional members and trade associations would be important backers of any successful effort to extend MLP eligibility to renewable resources. These industries would now point to MLP eligibility for renewable power generation assets as evidence that the MLP structure can be used for this portion to the fuel cycle. They would then question the basis by which coal and gas exploration, production, storage, and transportation are long-accepted constituents in the MLP structure, and yet generating power from these very same resources is for some reason not allowed.

Nuclear power MLPs are another interesting twist. Assuming nuclear power is not eligible under the waste energy provisions of MLPs,²⁰ the exclusion of nuclear generation outright would become increasingly difficult were coal and gas-fired electricity to become eligible. Politically, some groups strongly supporting the Coons bill (DC-based policy advocacy group Third Way is one example) are quite clear about their desire to see nuclear

^{19.} The Coons bill (section 2(a)(4)) does include eligibility for many types of biomass, for waste-to-energy facilities, ethanol production plants, combined heat and power and waste heat applications that includes fossil-fired processes at large industrial plants, and fuels such as coal if they also deploy appropriate carbon capture and storage. All of these resources have some potential environmental downsides.

^{20.} A number of environmental groups have stated on background that nuclear power is not eligible under any provision of the Coons bill, even section 2(a)(4)(vi). However, the statutory language referenced by that section does not seem to tightly exclude nuclear, and an argument could be made that nuclear reactor power uprates are a modification to an existing facility to obtain incremental electricity, and therefore count as eligible waste heat to power. This is the type of issue that could well be submitted to the IRS for a written determination, part of the gradual broadening of MLP eligibility that we have seen in many other areas.

included amongst the eligible power sources right now.21

Were the extension of MLPs to conventional power generation sector to occur, fiscal losses to Treasury would spiral. It would also negate whatever comparative tax advantage renewable power generators were hoping to receive from the expansion, since their conventional energy counterparts would be receiving the same tax breaks.

6.4 Future reform of MLP taxation becomes near impossible post-Coons

There is a strong fiscal case for eliminating the tax exemption of MLPs now, and this case will grow even stronger as revenue loss numbers are adjusted upwards to reflect growth in fossil fuel conversions to MLPs, and particularly should conventional power utilities become eligible under new legislation.

Politically, however, the inclusion of renewables as eligible resources will generate a bipartisan coalition protecting the subsidy, and make it nearly impossible to eliminate the tax favored status for fossil fuel MLPs. An expanded coalition that would oppose MLP elimination – even in the context of broadbased tax reform – is likely one reason that oil state legislators such as Lisa Murkowski, and trade associations such as the American Petroleum Institute, support the bill.

The Hill newspaper reported this of Senator Coons, the bill's main sponsor:

Currently, [MLP treatment] only applies to fossilfuel projects, and supporters say it has helped boost financing for pipeline construction and oil-and-gas developments. Coons said that is why oil-patch senators, such as Sens. Lisa Murkowski (R-Alaska) and Mary Landrieu (D-La.), have signed on as co-sponsors.

The Delaware senator expressed confidence that Republicans and fossil fuel interests could be convinced to support the bill to shield the structure from becoming a tax-reform casualty. (Coleman 2012)

This sentiment is largely echoed by the investment community:

Several members of Congress have introduced potential legislation to include renewables such as wind or solar as qualifying income. We do not have any insight into the likelihood of such a change, but note that renewables typically receive more Democratic support, while oil and gas interests (including midstream infrastructure) receive more Republican support, so the addition of renewable could make support for MLPs more bipartisan. (Goldman Sachs 2013: 25)

While some renewable producers will undoubtedly benefit from MLP expansion, the larger base of fossil fuel assets, both already in MLPs or poised to convert, suggest fossil energy will continue to capture the vast majority of growing MLP-related tax expenditures in coming years. Yet the new bill will effectively lock in the country to continued subsidization of fossil fuels, slowing our transition away from them.

^{21. &}quot;There is a simple fix. By amending the Internal Revenue Code Section 7704 (d) to include revenues from the generation and sale of electricity produced from clean energy sources as qualifying income, clean energy projects could qualify as MLPs. This could bring substantial private capital off the sidelines to finance these renewable projects and would level the playing field between competing energy technologies. Large-scale electricity generation projects with power purchasing agreements (PPAs), including utility-scale solar, geothermal, on and off-shore wind, nuclear and, eventually, carbon capture and storage, could all benefit from this reform." (Freed and Stevens 2011: 4).

7. Conclusion

Special legislative provisions have allowed a select group of industries to operate as tax-favored publicly-traded partnerships more than 25 years after Congress stripped eligibility for most sectors of the economy. These firms, organized as Master Limited Partnerships, are heavily concentrated in the oil and gas industry. Selective access to valuable tax preferences distorts energy markets and creates impediments for substitute, non-fossil, forms of power, heating, and transport fuels.

Financial innovations, combined with statutory changes and regulatory rulings from the IRS have gradually expanded and routinized the conversion of tax-paying corporate assets into tax-favored MLPs. The pace of growth has been accelerating in recent years, reaching about \$385 billion in fossil-fuel assets that are exempt from corporate income taxes as of the end of March 2013. Strong investor demand for MLP units, coupled with surging new investment into fracking-related oil and gas projects and a large amount of existing oil and gas assets still held as tax-paying C-corporations all indicate large scale growth in tax-favored oil and gas assets is likely in the near term.

Historically, subsidies to MLPs have been largely ignored by all federal bodies responsible for tracking government spending and subsidies. The only federal body tracking MLP-related tax expenditures is JCT, and they have been doing so only since 2008. This review also suggests that the official estimates of revenue losses may be understating the actual tax cost of fossil fuel MLPs by billions of dollars per year; losses over the 2009 to 2012 period for which we have data may have been as high as \$13.6 billion, more than six times federal estimates for the same period.

Understating MLP subsidies does nobody outside of the oil and gas industry any favors. Economic losses, market impediments to renewable energy, and headwinds against activities that can help mitigate climate change are all higher than currently assessed. Political efforts to curb or eliminate the tax preference are muted, and the costs of further expanding eligibility to new energy resources and new stages of the fossil fuel production cycle are understated. Congress eliminated tax-exempt PTPs for most sectors of the economy in 1987; Canada did the same in 2006. In both cases, the sectors adjusted and survived. The time has come to finish the job Congress began 25 years ago by eliminating tax preferences for MLPs.

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