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Border Tax Adjustments Won't Stimulate Exports

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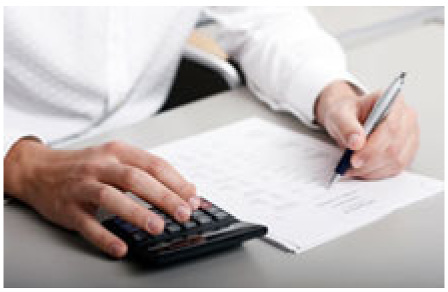

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The VATs employed by many of the United States' trading partners include border adjustments that rebate tax on exports and impose tax on imports. In contrast, the U.S. income tax system taxes domestic production, including production for export, and does not tax the overseas production of goods and services that are imported into the United States. A common view holds that the United States could permanently boost its exports and permanently reduce its imports by moving to a border-adjusted tax system. Moreover, the fact that international trade agreements allow border adjustments to be applied to some types of consumption taxes is often seen as a major advantage of consumption taxation.

At first glance, the view that a border tax adjustment would provide a competitive advantage to U.S. producers may seem plausible or even self-evident. A deeper look at the issue reveals, however, that a border adjustment would not and could not have the claimed effects. I have previously explained this long-standing conclusion, which is a consensus view of the economics profession, in three letters to this journal.[1] In response to recent discussion of border adjustments, I now return to the topic.

The claim that a border adjustment would

In a simple textbook model, a border adjustment would trigger a real increase in the value of the dollar that would raise the cost of U.S. exports and reduce the cost of U.S. imports by an amount that would exactly offset the direct effects of the border adjustment. In that model, the border adjustment would have no economic impact at all. In more realistic models, a border adjustment would have some effects on trade, but those effects would not include–indeed, they would differ dramatically from–a permanent export boost and permanent import reduction. Furthermore, if a border adjustment did somehow yield a permanent reduction in the trade deficit, such a reduction would lower rather than raise American living standards; we would forever send more goods and services to foreigners while receiving fewer goods and services from them in return.

permanently boost exports and reduce imports is often presented as an argument for consumption taxation.

Current economic conditions add another dimension to this issue. Because exports (net of imports) are a component of aggregate demand, it has been suggested that a border adjustment could provide a useful demand stimulus to combat the severe recession. Unfortunately, such a view reflects a misinterpretation of Keynesian macroeconomics. A permanent border adjustment would do nothing to stabilize the economy. Although a border adjustment that varied across the business cycle could theoretically serve a stabilization role, such a policy would be impractical.

As noted above, the claim that a border adjustment would permanently boost exports and reduce imports is often presented as an argument for consumption taxation. In reality, the economic case for consumption taxation, which is quite compelling, has absolutely nothing to do with border adjustments. The genuine advantages of consumption taxation–more efficient allocation of resources across the life cycle, increased capital accumulation, and a simpler tax system–need no boost from misconceptions about border adjustments.

Exchange Rate Adjustment

The claimed trade effects of border adjustments have played a prominent role in some recent discussions of tax policy. The alleged trade effects of border adjustments continue to be cited by some FairTax supporters as an argument for replacing income and payroll taxes with a retail sales tax (which has a built-in border adjustment).[2] During the 2008 presidential campaign, two Republican candidates, Rep. Duncan Hunter of California and Arkansas Gov. Mike Huckabee, also cited the alleged trade effects of border adjustments.[3]

Following the election, the American Manufacturing Trade Action Coalition (AMTAC) sent a memo to the Obama-Biden transition team, complaining that the "VAT disadvantage is the greatest contributing factor" to U.S. trade deficits.[4] AMTAC reiterated its support for the proposed Border Equity Tax Act, which calls for a change to international trade agreements that preclude a border adjustment of the income tax, and urged the incoming administration to renegotiate those agreements.[5] Two articles citing the alleged trade effects of border-adjusted taxes have recently appeared in *The Washington Times*; one of the articles was reprinted in this journal.[6]

Because taxing an activity tends to discourage it and subsidizing an activity tends to encourage it, it initially seems plausible that a tax on imports and a subsidy for exports would reduce imports and increase exports. The argument is invalid, however, because it ignores the budget constraint that links imports and exports.

For any household, firm, or nation, purchases must equal sales in present discounted value. Purchases are financed by the proceeds of sales and sales are made to finance desired purchases. For any nation, therefore, the present discounted value of exports equals the present discounted value of imports over its entire history. Any policy that permanently reduces imports must also reduce exports, and any policy that permanently increases exports must also increase imports. The quest to permanently increase exports while permanently reducing imports is futile, whether pursued through border adjustments or any other method.

The real exchange rate, which determines the terms at which a country buys and sells, is the key variable. For the United States, the real exchange rate is the value of the dollar in terms of foreign currency (the nominal exchange rate) multiplied by the U.S. price level and divided by the foreign price level.[7] The real exchange rate adjusts to keep the present discounted value of exports and imports equal. The adoption of a border adjustment by the United States would trigger an increase in the real exchange rate that would offset the perceived boost to exports and the perceived restraint on imports.

Countless economists have noted that exchange rate movements offset the trade effects of border adjustments.[8] Yet many discussions of border adjustments simply ignore the exchange rate and its implications.

In analyzing this issue, economists often emphasized a simple textbook model that makes a number of restrictive assumptions. The simple textbook model assumes that the border adjustment applies uniformly to all goods and services; the prime example would be the addition of a border adjustment to a comprehensive uniform-rate VAT that previously lacked such an adjustment. The model also assumes that the border adjustment is perfectly implemented and that it applies throughout the nation's entire history. In the simple model, the exchange rate adjustment is an exact offset that prevents the border adjustment from having any real economic effects at all.

As discussed in the section below, however, the main conclusion of the simple textbook model carries over intact to more general and more realistic models. Although a border adjustment would have some real effects in those models, the effects would not include a permanent boost to exports or a permanent restraint on imports.

With freely floating exchange rates, the required adjustment to the real exchange rate could occur instantly through a revaluation of the nominal exchange rate. For example, if the border adjustment were not accompanied by a change in the U.S. price level, the dollar would simply jump in value on world currency market markets.[9]

Despite what one might expect, the analysis is largely unchanged in the case in which a foreign country pegs its currency against the U.S. dollar. The key is that a pegged exchange rate remains fixed only until the pegging country decides to change it. If a foreign government that pegs its currency at 10 units to the dollar were to observe that the United States had adopted a 20 percent border adjustment, it could simply repeg its currency at 12 units to the dollar. That simple step would maintain an unaltered real equilibrium with no change in exports or imports, thereby preserving the real advantages that the government perceives from its decision to peg. Unless the foreign government had a metaphysical preference for the number 10 over the number 12, there is no apparent reason why it would not repeg.

As an analogy, consider whether a switch from the English system of measurement to the metric system would affect traffic speeds in the United States. If a state "pegs" its highway speed limit at 65, would we expect a switch to the metric system to reduce the allowable pace of travel within the state by 38 percent, from 65 miles per hour to 65 kilometers (40.39 miles) per hour? Surely not. The state's choice of 65 miles per hour as the speed limit undoubtedly reflects a desired balance between traffic safety and transportation efficiency, not a metaphysical attachment to the number 65. After the switch to kilometers, the state would presumably repeg its speed limit to some number in the vicinity of 104.61, thereby maintaining that desired balance and avoiding a change in the pace of travel.

In short, a border adjustment is an unpromising strategy to alter trade patterns between the United States and a pegging country because it can be defeated by a foreign government's choice of a number. Furthermore, even if the foreign government did not repeg, the real exchange rate would still (eventually) adjust through a decline in the pegging country's price level.[10]

The above discussion establishes that a border adjustment would not permanently increase or reduce exports. It is worth emphasizing, however, that if any such impact occurred, it would be an economic disaster rather than an economic triumph. Under that outcome, we would forever send more goods and services, produced by our toil and with our natural resources, to foreign consumers while forever receiving fewer goods and services for our own enjoyment in return. We would suffer a permanent reduction in our standard of living.

In economic terms, imports are the gain from trade while exports are the cost of trade. We give up exports so that we may obtain imports. The desire to increase exports and reduce imports reflects the misguided view known as mercantilism, the doctrine that Adam Smith condemned so forcefully in 1776.[11]

More General Models

The simple textbook model predicts that a border adjustment would have no real economic effects because of an exact offset from the exchange rate. Under more realistic assumptions, a border adjustment could have some economic effects, but those effects would still not include a permanent increase in exports or a permanent reduction in imports.

For example, the simple model assumes that the border adjustment applies at a uniform rate to all goods and services. If the border adjustment applied to only some items, it would have real trade effects. For example, if the United States is a net importer of an item, border adjusting an excise tax on the item would reduce imports of that item while the associated strengthening of the dollar would increase imports of other goods and services and also reduce exports. The end result would be a reduction in the volume of trade, as exports and overall imports would both decline, with no permanent change in the balance of trade. Conversely, if the United States is a net exporter of an item, border adjusting an excise tax on the item would increase exports of that item, while the associated strengthening of the dollar would reduce exports of other goods and services and also increase imports. The end result would be an increase in the volume of trade, as imports and overall exports would both rise, with no permanent change in the balance of trade.

An excise tax on an internationally traded item is usually intended to reduce domestic consumption (rather than domestic production) of the item, and the burden of the tax is usually intended to fall on domestic consumers (rather than domestic producers) of the item. To achieve those goals, the excise tax should be border adjusted, a practice generally permitted by international trade agreements. Most federal excise taxes are indeed border adjusted.[12]

If the border adjustment applied throughout a nation's entire history and the other assumptions of the simple textbook model held, the border adjustment would have zero present-value revenue effect, as the present discounted value of the import taxes collected would equal the present discounted value of the export subsidies paid. A border adjustment adopted midstream of a nation's history (obviously the relevant case) could have revenue effects, although the effects might be different from what one expected.

Because the United States is running a trade deficit, one might think that a border adjustment would yield a net revenue gain because import taxes would exceed export subsidies. In present-value terms, however, a border adjustment would actually yield a net revenue loss for the United States. At any point in the middle of a nation's history, the present discounted value of its future exports equals the present discounted value of its future exports plus the country's net foreign debt (or minus its net foreign assets). Because the United States is a net debtor country, the present discounted value of its future exports exceeds the present discounted value of its future imports. A permanent border adjustment would therefore reduce the present value of revenues.

A border adjustment could have other real effects. The simple textbook model ignores the administrative and compliance problems that affect actual tax systems; a border adjustment would solve some of those problems while introducing others. Notably, a border adjustment would eliminate the transfer-pricing problems that plague non-border-adjusted tax systems, but would introduce the problems of fraudulent export refund claims and tax evasion on imports. Border adjustments could also have various real effects if cross-border investments have uncertain or above-normal returns.

Also, a temporary border adjustment would generally have real trade effects. Although exports and imports are equal in present value across a nation's entire history, they do not have to balance over any shorter time interval. As a result, a temporary border adjustment would shift net exports from one interval to another. For example, a one-day border adjustment that taxed items imported on a particular day and subsidized items exported on that day would clearly increase exports and reduce imports on that day. In accordance with the present-value equality, however, exports would fall and imports would increase after the border adjustment ended. (If the border adjustment was anticipated, exports would also fall and imports would also rise before the adjustment began.) I further discuss temporary border adjustments in the next section.

A border adjustment would have profoundly important transitional effects on asset values, effects that have drawn surprisingly little attention.[13] If the United States were to add a border adjustment to a uniform consumption tax (without transition relief), the adjustment would bring into the tax base the consumption of Americans financed by their holdings of foreign assets and would remove from the tax base the consumption of foreigners financed by their holdings of American assets. As a result, Americans' holdings of foreign assets would decline in real value while foreigners' holdings of American assets would rise in real value. The changes in real asset values would be implemented through the rise in the real exchange rate; the rise in the real value of the dollar would depreciate the dollar value of Americans' foreign asset holdings and would appreciate the foreign-currency value of foreigners' American asset holdings.

The wealth transfers could be quite large. Assume, for simplicity, that foreigners hold $10 trillion of American assets and that Americans hold the same amount of foreign assets. Adding a border adjustment to a 20 percent (tax-inclusive) VAT would increase foreigners' wealth by $2 trillion and reduce Americans' wealth by $2 trillion. Because cross-border holdings are balanced in this example, the border adjustment would not change the present discounted value of federal revenue, but it would cause $2 trillion of that revenue to be collected from Americans rather than from foreigners.[14]

Border Adjustment as Keynesian Stimulus

Current economic conditions add another dimension to discussions of border adjustments. The United States is mired in a severe recession. From March 2007 to January 2009, the unemployment rate rose from 4.4 percent to 7.6 percent. From December 2007 to January 2009, nonfarm payrolls shed 3.6 million jobs. More disturbing still, roughly half of the job losses occurred in the last three months of that interval. The loss of 598,000 jobs in January was the largest since December 1974.

The crisis has focused attention on Keynesian stimulus to aggregate demand as a means of job creation and economic recovery. Although border adjustments have been mentioned as a way to boost aggregate demand, stimulus concerns offer no justification for a border adjustment.

As I discussed in an earlier article, aggregate demand consists of consumer spending, residential and business investment, government purchases of goods and services, and net exports (exports minus imports).[15] Because the economy is subject to price rigidities or other nominal imperfections, fluctuations in aggregate demand can generate output fluctuations. It might seem, then, that a border adjustment could provide a useful demand stimulus by boosting net exports. Indeed, one recent analysis cites a need to "produce and sell our way" out of the recession, concludes that "exporting American-made products is a good place to start," and advocates a border adjustment as a way to attain that goal.[16]

As discussed above, a border adjustment would not actually produce a permanent export boost and import restraint, and such an outcome would reduce American standards of living if it did occur. It therefore seems unlikely that such an effect would serve any valid Keynesian objectives.

Indeed, the desire to stimulate demand through a permanent boost in net exports rests on a misunderstanding of Keynesianism. As I stressed in my earlier article, Keynesian macroeconomics does not recommend permanently boosting aggregate demand to permanently increase output. Such a formulation not only embodies a mistaken policy recommendation, but also seeks a goal beyond what Keynesian policy can achieve. The correct formulation is quite different: Keynesian macroeconomics recommends making aggregate demand more countercyclical (boosting it when the economy is weak and restraining it when the economy is strong) in order to make output more stable. Because the appropriate goal of Keynesian stimulus policy is stabilization, there is no Keynesian case for permanently boosting net exports even if such an outcome were feasible.

It might seem, however, that a different type of export stimulus could promote economic stabilization. Keynesian fiscal policy has generally used tax and spending measures to shift consumer spending, investment, and government purchases from periods of economic strength into periods of economic weakness. Should not

Keynesian fiscal policy also seek to shift net exports from periods of strength to periods of weakness?

In principle, that policy could be useful. A border adjustment could be applied when the economy is weak and turned off when the economy is strong. Alternatively, a "negative" border adjustment (an export tax and import subsidy) could be applied when the economy is strong and turned off when the economy is weak. In each case, the key feature is that exports would receive more favorable treatment when the economy is weak than when it is strong, while imports would receive more favorable treatment when the economy is strong than when it is weak.

Of course, such a countercyclical policy would be far removed from what proponents of border adjustments advocate. In any case, it is evident that such a policy would be completely unworkable because it would disrupt trading relationships and play havoc with international trade agreements. Such a policy would also be unnecessary because of the availability of other stabilization policy tools.

The Real Case for Consumption Taxation

As a pedagogical matter, it is imperative that the misconceptions about border adjustments be rejected because those misconceptions are inimical to a proper understanding of free trade and the gains from trade. It is puzzling that those misconceptions have been embraced by some political conservatives who profess an attachment to free markets.

Unfortunately, misconceptions about border adjustment have clouded the debate about the relative merits of income and consumption taxation. The fact that international trade agreements allow border adjustments for some types of consumption taxes but not for income taxes is sometimes cited as an (or the) advantage of consumption taxation. Linking the case for consumption taxation to a fallacy refuted by the economics profession decades ago is not a sensible strategy. It is particularly damaging when the real case for consumption taxation, which has absolutely nothing to do with border adjustments, is so strong.

Unlike the current income tax, a consumption tax would be neutral between current consumption and future consumption and would therefore tend to promote capital accumulation. A consumption tax would also be significantly simpler than the income tax because it would eliminate the complications of capitalization, depreciation, amortization, inventory accounting, and tax-preferred savings accounts. Furthermore, a consumption tax could be designed to maintain progressivity, particularly if the tax were implemented as a Bradford X-tax or perhaps a personal expenditures tax. A consumption tax would provide those advantages whether or not it were border adjusted. A move to consumption taxation should therefore be the primary focus of tax reform efforts.

I end on the same note on which I have ended thrice before: The border-adjustment fallacy should not obscure the real case for consumption taxation.

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Footnotes

1 "Border Adjustments Won't Promote Competitiveness," Tax Notes, Oct. 4, 2004, p. 122, Doc 2004-19117 [PDF], 2004 TNT 193-52 ; "Why Attacks on Analysis of Border Adjustment Were Unsuccessful," Tax Notes, Nov. 22, 2004, p. 1153, Doc 2004-21938 [PDF], 2004 TNT 226-34 ; and "The FairTax: A Response to Adler's Critique," Tax Notes, Jan. 28, 2008, p. 567, Doc 2008-1303 [PDF], 2008 TNT 19-45 .

2 "The FairTax levels the playing field. Under the FairTax, imported goods and domestically produced goods incur the same U.S. tax. This stands in stark contrast to the present system, where U.S. companies and workers must pay income tax and payroll taxes, but foreign goods enter the U.S. entirely free of any tax, other than whatever modest customs duties are levied. . . . Today, 29 of 30 OECD nations have border-adjustable tax regimes; only the U.S. does not. By failing to respond, the net effect is the export of both jobs and entire industries." (Emphases in original.) Available at http://www.fairtax.org/site/PageServer?pagename=mfg_home (http://www.fairtax.org/site/PageServer?pagename=mfg_home).

3 At a May 3, 2007, debate in Simi Valley, Calif., Hunter complained that "a dumb trade deal that we signed with the rest of the world allows all of our exports to be taxed twice while their exports to us are not taxed at all." Available at http://www.presidency.ucsb.edu/ws/index.php?pid=74350 (http://www.presidency.ucsb.edu/ws/index.php?pid=74350). At an October 9, 2007, debate in Dearborn, Mich., Huckabee said that the "FairTax untaxes those things which we export . . . instead of exporting our jobs, we'll [actually be] exporting products that we make in America." Available at http://www.presidency.ucsb.edu/ws/index.php?pid=75861 (http://www.presidency.ucsb.edu/ws/index.php?pid=75861).

4 The AMTAC memo is available at http://otrans.3cdn.net/96f405cb244cb4276c_t7m6bfh21.pdf (http://otrans.3cdn.net/96f405cb244cb4276c_t7m6bfh21.pdf).

5 Rep. Bill Pascrell Jr., D-N.J., introduced H.R. 2600, the Border Tax Equity Act, in the 110th Congress on June 6, 2007. The bill, which was not acted on, attracted eight Republican and six Democratic cosponsors.

6 William Hawkins, "Other Economic Numbers Need Attention," The Washington Times, Oct. 16, 2008; and Ernest S. Christian, "Producing and Selling Our Way Out of a Recession?" Tax Notes, Jan. 19, 2009, p. 411, Doc 2009- 188 [PDF], 2009 TNT 12-66 (reprinted from the Dec. 22, 2008, edition of The Washington Times).

7 For example, if the dollar is worth 10 units of foreign currency, and if a bundle of goods and services sells for $1 in the United States and for 5 units of foreign currency abroad, the real value of the dollar is 2. The bundle of goods and services costs twice as much in the United States as abroad; a U.S. dollar has twice the value abroad that it has at home.

8 Some of the analyses include Alan J. Auerbach, "The Choice Between Income and Consumption Taxes: A Primer," in Institutional Foundations of Public Finance: Economic and Legal Perspectives, Alan J. Auerbach and Daniel Shaviro, eds. (Cambridge, MA: Harvard University Press, 2008), pp. 13-46, at pp. 17-20; David A. Weisbach, "Implementing Income and Consumption Taxes," in Institutional Foundations, pp. 59-93, at pp. 81-84; Daniel Shaviro, "Simplifying Assumptions: How Might the Politics of Consumption Tax Reform Affect (Impair) the End Product?" in Fundamental Tax Reform: Issues, Choices, and Implications, John W. Diamond and George R. Zodrow, eds. (Cambridge, MA: MIT Press, 2007), pp. 75-124, at pp. 104-106; David F. Bradford, The X Tax in the World Economy: Going Global With a Simple, Progressive Tax (Washington, D.C.: AEI Press, 2004), pp. 5-17; Harry Grubert and T. Scott Newlon, Taxing Consumption in a Global Economy (Washington, D.C.: AEI Press, 1997), pp. 8-10; James R. Hines Jr., "Fundamental Tax Reform in an International Setting," in Economic Effects of Fundamental Tax Reform, Henry J. Aaron and William G. Gale, eds. (Washington, D.C.: Brookings Press, 1996), pp. 465-493, at pp. 478-479; and John Whalley, "Lessons From General Equilibrium Models," in Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax, Henry J. Aaron, Harvey Galper, and Joseph A. Pechman, eds. (Washington, D.C.: Brookings, 1988), pp. 15-53, at p. 39.

For more technical discussions, see Martin S. Feldstein and Paul Krugman, "International Trade Effects of Value-Added Taxation," in Taxation in the Global Economy, Assaf Razin and Joel Slemrod, eds. (Chicago: University of Chicago Press, 1990), pp. 263-282; Gene M. Grossman, "Border Adjustments: Do They Distort Trade?" Journal of International Economics, 10(1), Feb. 1980, pp. 117-128; Avinash Dixit, "Tax Policy in Open Economies," in Handbook of Public Economics, vol. 1, Alan J. Auerbach and Martin S. Feldstein, eds. (Amsterdam: North-Holland, 1985), pp. 313-374, at p. 319; and Ben Lockwood, David De Meza, and Gareth D. Myles, "When are Origin and Destination Regimes Equivalent?" International Tax and Public Finance, 1(1), May 1994, pp. 5-24.

9 If the border adjustment occurred as part of the adoption of a sales tax or VAT, the U.S. price level might increase because of monetary accommodation of the tax by the Federal Reserve. That would actually simplify things. If the U.S. price level rose by the same percentage as the border adjustment, the adjustment of the real exchange rate would occur automatically with no change in the nominal exchange rate.

10 Because of price rigidity, it would probably take some time for the pegging country's price level to decline. During the period of price decline, U.S. exports would rise and U.S. imports would fall. In accordance with the present-discounted-value equality, however, U.S. exports would fall and U.S. imports would rise thereafter.

One case in which repegging would not occur (and a price level decline would therefore need to occur) is when the foreign country is "dollarized," that is, uses the U.S. dollar as its currency. For such a country, the exchange rate is unalterably fixed at $1 per $1. At present, only a few, generally small, countries are dollarized: East Timor, Ecuador, El Salvador, Panama, Turks and Caicos Islands, and the British Virgin Islands. Because Puerto Rico and the other U.S. overseas possessions also use the U.S. dollar, they would experience similar effects from a U.S. border adjustment that covered only the 50 states and the District of Columbia.

11 For further discussion, see my January 28, 2008, letter, supra note 1.

12 See, e.g., section 4081(a)(1)(A)(iii) (taxing imports of motor fuels) and section 6421(c) (permitting, by cross-reference to section 4221(a)(2), tax refunds on exports of motor fuels); section 5001(a) (taxing imports of distilled spirits and related alcohol products); section 5214(a) (permitting tax-free exports of those products); section 5701(h) (taxing imports of cigarettes and related tobacco products); and section

5704(b) and (c) (permitting tax-free exports of those products).

13 I discussed the asset value changes in my November 22, 2004, letter, supra note 1. Alan J. Auerbach also discussed these changes in two recent book chapters: "Tax Reform in the 21st Century," in Fundamental Tax Reform: Issues, Choices, and Implications, John W. Diamond and George R. Zodrow, eds. (Cambridge, MA: MIT Press, 2007), pp. 27-59, at pp. 45-46 and "The Choice Between Income and Consumption Taxes: A Primer," supra note 8, at pp. 19-20.

14 Because the United States is a net debtor country, the border adjustment would actually cause a net loss to the U.S. Treasury (as discussed above) and foreigner investors' gains would exceed American investors' losses.

15 "Tax Policy During the Recession: The Role of Fiscal Stimulus," Tax Notes, Jan. 12, 2009, p. 269, Doc 2008-27345 [PDF], 2009 TNT 7-49 .

16 Christian, supra note 6.