Subtitle C and D Corporate Financial Test Analysis
Issue Paper
Domestic Assets Requirement

Introduction

The U.S. assets requirement was first introduced in the Subtitle C financial test in the 1982 revised interim final rule (47 FR 15036, April 7, 1982). This requirement was added to other provisions of the financial test in order to help ensure accessibility to funds in the event of bankruptcy and to enhance recoveries from firms that go bankrupt after using the financial test for financial assurance. The current Subtitle C regulations require corporations to have:

- 90 percent of total assets located within the United States; or

- Domestic assets equal to at least six times the sum of costs assured through the financial test.

These regulations were found to be too restrictive; therefore, the Agency has proposed that the domestic assets requirement be modified. The proposed regulations would require corporations to have:

- Domestic assets equaling or exceeding the sum of all environmental obligations being assured by a financial test.

In response to the proposed Subtitle C and D corporate financial test rule of October 12, 1994, several commenters expressed concerns related to changes to the current domestic assets requirement. Specific issues raised by commenters included:

- Some or all of the domestic assets required by the test should also be required to be liquid so that the assets will be more readily accessible in the event of bankruptcy.

- To allow a higher level of test availability while still ensuring accessibility to a significant amount of assets in the event of bankruptcy, the required percentage of assets located in the United States should be lowered from 90 percent.

- To be consistent with the tangible net worth requirement of $10 million plus the costs firms seek to assure, $10 million should be added to the proposed domestic assets requirement; firms should be required to have domestic assets totaling the closure and post-closure costs plus an additional "cushion" of $10 million. (This paper will refer to this option as the "additive" option.)

- Since the states have less leverage to access foreign assets than the federal government, the proposed reduction in the domestic assets requirement puts the states at a disadvantage.

This paper analyzes the issues raised by commenters on the domestic assets requirement of the financial test including:

- The potential effect of requiring liquid U.S. assets;

- The effect on the availability of the financial test of the following U.S. asset requirement options:

  a) a six times multiple requirement;
  b) lowering the required percentage of assets held in the U.S. to 50 or 75 percent; or
  c) requiring a $10 million cushion for domestic assets; and

- The differences in the ability of federal and state agencies to access foreign assets in bankruptcy proceedings.

The key findings of this paper, in summary, are:

- A more stringent domestic assets requirement potentially could decrease public costs by increasing recoveries from bankrupt firms, but could also increase private costs by reducing the availability of the test.

- Liquid assets may be more accessible than fixed assets and thereby ensure a more timely payment of closure and post closure costs in bankruptcy proceedings, but the decrease in public costs is not likely to offset the increase in private costs that would result from a liquid assets requirement.

- The difficulty of accessing foreign assets varies among different foreign countries, but should not vary substantially between the federal government and other U.S. entities.

The remainder of this paper is organized into four sections. Section 1 briefly discusses the impact of domestic assets requirement on public and private costs. Section 2 addresses the impact of foreign assets on financial test public costs and the limited ability of states to access foreign assets in bankruptcy proceedings as compared to federal agencies. Section 3 examines how a liquid domestic asset requirement would impact the availability of the financial test. Section 4 discusses the effect of other proposed options on the availability of the financial test, including restoring the current six times multiple requirement; lowering the required percentage of assets held in the U.S. to 50 or 75 percent; or, requiring a $10 million additive for domestic assets.

1. Impact of Domestic Assets on Public and Private Costs

In the 1981 analysis that led to the current Subtitle C financial test, and again in the 1989 analysis of possible financial test revisions, the EPA compared the performance of alternative financial tests based on criteria that included minimizing the sum of private and public costs. Private costs are the costs to viable firms of obtaining alternative financial assurance when they cannot pass the test. The private cost of any financial test is determined by its "Availability" (i.e., the percentage of financial assurance obligations that non-bankrupt firms can assure by using the test). Public costs are the costs to the public sector of paying for financial assurance obligations of firms that pass the test but later go bankrupt without funding their obligations. The primary determinant of the public cost of a financial test is its "Misprediction" rate (i.e., the percentage of the financial assurance obligations covered by bankrupt firms that used the financial test).

Misprediction rate, however, is not the sole determinant of public costs. In calculating the public costs incurred as a result of bankrupt firms using the test, it is also necessary to consider the amount of funds that can be recovered through bankruptcy proceedings. The 1989 analysis assumed that 20 percent of the financial assurance obligations of firms that go bankrupt after passing the financial test could be recovered in bankruptcy proceedings. Further analysis suggests that the Agency's use of a 20 percent recovery rate for the current financial test was overly conservative, because recoveries from firms that later re-emerge from Chapter 11 reorganization alone could produce a recovery rate of 39 percent.[1]

The U.S. assets requirement is not expected to affect the misprediction rate of a financial test, because there is no apparent reason to expect the risk of firm failure to be affected by the geographic location of its assets. Thus, the U.S. asset requirement can impact financial test performance (i.e., the sum of public and private costs) in two ways:

- Public costs may be reduced by increasing recoveries in bankruptcy; and
- Private costs may increase due to reduced financial test availability.

A more stringent domestic assets requirement will not be cost effective unless the increase in private costs is offset by a decrease in public costs. Public costs could decrease if a higher percentage of funds were recovered by the Agency through bankruptcy proceedings, while the private costs could increase if fewer firms could meet the requirements of the financial test.

2. Access to Foreign Assets and Effect on Financial Test Public Costs

One commenter has criticized the proposed domestic assets requirement because it lessens the amount of assets required to be within the United States. The commenter contends that the Agency will have more difficulty recovering funds if a substantial amount of a regulated firm's assets are located abroad.

[1] For more information on bankruptcy recovery rates see Issue Paper 11, "Performance of the Financial Test as a Predictor of Bankruptcy".

ICF's review of laws governing international bankruptcy[2] indicates that there are specific instances in which a U.S. assets requirement might reduce public costs by increasing recoveries. U.S. creditors may have difficulty enforcing claims against debtor assets located in foreign jurisdictions, and, even if they can bring claims, may be subordinated by local creditors. Different countries have different laws governing bankruptcy and the claims of a foreign creditor are not always protected in a bankruptcy proceeding. In instances where a bankrupt U.S. firm with a majority of its assets in foreign countries owes a disproportionate share of its liabilities to U.S. creditors, it is possible that the percentage of funds recovered by U.S. creditors may be lower than the recovery rate of foreign creditors. The U.S. assets requirement would ensure that firms using a financial test for financial assurance would have potential access to at least some specified amount of U.S. assets available for recovery by U.S. creditors in the event of bankruptcy.

The total public cost reduction that might be realized by any U.S. asset requirement may be relatively small, however, because this provision may not have significant impact on most bankruptcy recoveries. For example, if a creditor has received partial payment as a result of a foreign proceeding, he may receive nothing more until comparable U.S. creditors have received an equivalent payment. The U.S. Bankruptcy Code cannot guarantee fair treatment of all creditors in all bankruptcies, because it cannot be enforced outside of the United States. However, in instances where the U.S. court has control over U.S. assets proportionately equal to or greater than a bankrupt firm's U.S. liabilities, U.S. bankruptcy law should award proportionate payment to creditors of equal standing. Ordinary claims of equal standing by the federal government and by other entities (e.g., states) should be accorded the same treatment under the law.[3] Therefore, the federal and state governments should have essentially the same opportunity to recover financial assurance obligations through bankruptcy proceedings.

In those cases where the U.S. bankruptcy court can guarantee fair treatment of all creditors (i.e. where U.S. assets are equal to or greater than U.S. liabilities), the U.S. assets requirement is not likely to significantly increase recoveries of financial assurance obligations. Furthermore, no domestic asset requirement can ensure full recovery of financial assurance obligations, because those claims would still have to compete with claims of other creditors, and total liabilities will exceed total assets in bankruptcy. Therefore, the reduction in public costs achieved by any domestic assets requirement may be negligible, and would be offset by higher private costs if the requirement significantly reduces financial test availability.

3. Effect of Liquid Assets Requirement on Financial Test Availability and Private Costs

One commenter expressed concern that none of the required domestic assets are required to be liquid assets. The commenter argued that even though fixed assets are

[2] See Memorandum from ICF Incorporated to Ed Coe (EPA) on the "Evaluation of U.S. Assets Requirement of Financial Test," March 4, 1992.

[3] Federal tax claims and federal fines have higher standing over ordinary claims in bankruptcy proceedings.

valuable, this value may not always be realized and the liquidation of fixed assets may take a great deal of time. The commenter further expressed concern that although a corporation is able to pass the financial test, there is no assurance that its fixed assets would be available to pay for closure and post-closure costs.

Liquid assets include cash holdings and receivables which are readily available in bankruptcy proceedings. Other assets including property and equipment are considered fixed assets. In Chapter 7 liquidations, fixed assets are not as readily accessible as liquid assets, their liquidation may take time, and the value of fixed assets may not be fully realized at the time of liquidation.[4] The bankruptcy court, however, would have to determine the liquidation value of all assets before it could settle the competing claims of creditors. Claims for financial assurance obligations would have to compete with other creditors and would not have any immediate or priority claim to the assets that happen to be liquid. Therefore, a liquid assets requirement might not enhance recoveries at all.

Exhibit 1 illustrates that many Subtitle D firms have liquid assets that are less than 100 percent of their closure and post-closure costs.

Exhibit 1
Subtitle D Firms with Liquid Assets Less Than Closure and Post Closure Costs
(1994 $ millions)

Corporation	Closure/ Post Closure Costs	Total Liquid Assets	Liquid Assets as a % of Closure/Post Closure Costs
American	43	31	72%
BFI	1,246	1,186	95%
Chambers	193	109[5]	56%
Mid-American	242	42	17%
Republic	109	14	13%
Sanifill	113	41	36%
USA	51	37	11%
Western	73	54	74%

[4] Under Chapter 7 of the U.S. Bankruptcy Code, all assets of the bankrupt firm are liquidated. Under Chapter 11, a firm seeks temporary protection from its creditors so that it can reorganize its finances.

[5] Figure from Chamber's 1993 Annual Report.

As a consequence, a liquid assets requirement could significantly decrease the availability of the financial test, and thereby increase private costs. Because this requirement is not expected to significantly reduce public costs, a liquid assets requirement probably would not be cost effective.

4. Effect of Proposed Options on Financial Test Availability and Private Costs

The U.S. assets requirement may affect the availability of the financial test and consequently may have an impact on both the public and private costs. Unfortunately, data limitations preclude a systematic analysis of the impact of the U.S. asset requirement on financial test availability. Some conclusions, however, can be derived about its comparative impact on the availability of the current financial test versus its potential impact on the availability of the proposed test. Exhibit 2 examines the percentage of assets that Subtitle D firms would need to have located in the U.S. in order to satisfy the current domestic asset requirements, the proposed requirements, and the additive requirement. By analyzing these figures, the potential impact of the domestic assets requirement options may be identified. For example, a requirement which necessitates that a large percentage of a firm's assets be held in the U.S. could decrease the availability of the test and, thereby, increase private costs.

Both the proposed requirement and the related additive requirement suggested by commenters would not, it appears, significantly reduce the availability of the financial test. Figures in Column D suggest that most firms can satisfy the proposed requirement even if less than 40 percent of their assets are located in the U.S. Thus, the proposed requirement is not likely to be a binding constraint that reduces availability. The proposed change may significantly increase availability by reducing the total amount of assets required to be held in the United States relative to the current requirements. Similarly, data in Column E suggest that the additive requirement would not decrease the availability of the financial test as compared to the proposed requirement because the percentage of assets required to be located in the U.S. is not significantly increased. The suggested $10 million additive requirement would also increase the availability of the test relative to current requirements by essentially decreasing the percentage of total assets required to be held in the United States.

Exhibit 2
Availability Using Alternative Domestic Assets Requirements
(1994 $ millions)

(A) Corporation	(B) Total Assets	(C) Estimated Closure and Post Closure Costs	(D) Closure/ Post Closure Cost as % of Total Assets	(E) $10 million Cushion as % of Total Assets (Additive Requirement)	(F) 6x Cost as % of Total Assets (Multiple Requirement)
American	142	43	30%	37%	180%
BFI	5,797	1,246	21%	22%	126%
Chambers	534	193	36%	38%	216%
Eastern Environmental	17,468	36	0.2%	0.3%	1%

Laidlaw	3,633	303	8%	9%	48%
Mid-American	674	242	36%	38%	216%
Republic	132	109	83%	90%	498%
Sanifill	500	113	23%	25%	138%
USA	323	51	16%	19%	96%
Waste Management	17,539	1,621	9%	9%	54%
Western	285	73	26%	29%	156%

Use of the current Subtitle C requirements may have a significant impact on the availability of the test to Subtitle D firms. Data in Column F suggest that few firms would meet the U.S. requirement if forced to comply with the six times multiple requirement. Therefore, many would be forced to pass the test by having 90 percent of their total assets located in the United States. This 90 percent requirement might decrease the availability of the test. As an alternative, one commenter suggested decreasing the percentage of total assets required as domestic assets from 90 percent to 75 or 50 percent to increase the financial test's availability. While this change could increase availability, requiring even 75 or 50 percent of assets to be located in the U.S. would also decrease availability of the financial test relative to the proposed requirements. As Exhibit 2 illustrates, using the other proposed U.S. asset requirements, many of the firms could pass the financial test with less than 50 percent of their total assets being located in the U.S.

Given the nature of proposed revisions to other sections of the test, use of the six times or 90 percent domestic assets requirement would have additional availability implications for the test. Proposed revisions to the financial test would reduce the net worth requirement to the sum of cost estimates covered by the test plus $10 million. In the context of this revision, a six-times U.S. asset multiple requirement could make the financial test unavailable to firms with financial resources well in excess of other financial test requirements. For example, under the proposed financial test, a firm with cost estimates of $8 million would need to have total net worth of $18 million. In order to pass the net worth to total liabilities ratio requirement of the proposed test, the firm would also need to have net worth equal to at least 40 percent of its total assets. A firm with net worth of $40 million and total assets of $50 million would have financial resources well in excess of these financial test requirements (i.e., net worth equal to 80 percent of total assets, or total liabilities to net worth of less than 0.25, and $22 million in excess of net worth additive requirements). However, this firm could not pass the financial test if it had just over 10 percent of its assets located outside of the United States (i.e., just under $45 million in U.S. assets) because it could not satisfy the six-times multiple requirement for U.S. assets (6 times $8 million in cost estimates equals $48 million).

The example described above suggests that retaining the U.S. assets requirement in its present form could significantly reduce the availability of the proposed financial test, and thereby increase private costs. At the same time, the U.S. assets requirement may not significantly decrease public costs by increasing recoveries from firms with substantial U.S. assets (e.g., 70 or 80 percent of total assets). Furthermore, bankruptcy is unlikely for firms that pass financial test requirements. The assurance risk (i.e., the risk that the Agency will become responsible for an owner's or operator's obligations)[6] is less than 0.4 percent even for the smallest Subtitle D firms which pass the financial test. Since the benefits of the domestic assets requirement only accrue in the event of bankruptcy, and bankruptcy is very unlikely for firms that pass the financial test, the effect of a stringent domestic assets requirement on public costs is likely to be minimal compared to its effect on private costs. Retaining the U.S. assets requirement in its present form could significantly increase the total public and private costs of the proposed test.

Requiring that firms have U.S. assets of at least $10 million plus the total amount of obligations being assured by the financial test, as suggested by comment, is consistent with the Agency's proposal to require tangible net worth of $10 million plus one times the amount of obligations assured by the test. In the event that a firm goes bankrupt after using the financial test, the net worth requirement enhances the likelihood that some percentage of financial assurance obligations could be recovered through bankruptcy proceedings since the firm should have at least some assets available to creditors, and the U.S. asset requirement, while reduced relative to the current Subtitle C requirements, would help to ensure access to such funds.

The Agency may wish, therefore, to consider promulgating a U.S. assets requirement of $10 million plus the amount of environmental obligations covered by the test. Establishing the same additive requirement for tangible net worth and for U.S. assets would restore the relationship between these requirements. Thus, a firm cannot pass the net worth additive requirement and fail the recommended U.S. assets additive requirement unless the percentage of its total assets located inside the United States is less than the percentage of total assets accounted for by net worth. The recommended U.S. assets additive requirement is likely to limit the availability of the proposed financial test only in those instances where firms have a substantial percentage of their assets located outside the United States. Firms with net worth substantially greater than the additive requirement will also pass the U.S. assets additive requirement with an even smaller percentage of their total assets in the United States. Furthermore, large multinational firms (i.e., with substantial total assets) are also likely to pass the recommended U.S. assets additive requirement even when their U.S. assets are a relatively small percentage of total assets. In general, an additive requirement for U.S. assets is most likely to limit the availability of the proposed financial test only in those instances where it is most important to ensure access to funds in the event of bankruptcy. Since the public cost reduction resulting from any U.S. asset requirement is expected to be relatively small regardless of how stringent the requirement, a U.S. assets requirement that significantly reduces availability, and thereby increases private costs, may be inconsistent with the financial test performance criterion of minimizing the sum of public and private costs.

[6] For more information on assurance risk, see ICF Incorporated, Issue Paper 10: "Assessment of Financial Assurance Risk of Subtitles C and D Corporate Financial Test and Third-Party Financial Assurance Mechanisms," March 18, 1996.

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