

## POLICY ISSUE INFORMATION

August 24, 2000

SECY-00-0181

FOR: The Commissioners

FROM: William D. Travers  
Executive Director for Operations

SUBJECT: UNITED STATES ENRICHMENT CORPORATION FINANCIAL REVIEW

PURPOSE:

The purpose of this paper is to provide the results of the Nuclear Regulatory Commission (NRC) staff's financial review of the United States Enrichment Corporation (USEC).

SUMMARY:

In response to the downgrading of USEC's corporate credit rating and other financial changes since February 2000, the NRC staff performed a financial review of USEC based on information provided by USEC and other public sources. The staff's review selected and evaluated the following scenarios:

1. Continued operation of two gaseous diffusion plants.
2. Operation of one gaseous diffusion plant.
3. Deployment of advanced enrichment technology.
4. Brokering Russian downblended uranium and closure of both gaseous diffusion plants.
5. Cessation of all operations.
6. Acquisition of USEC by another party.

CONTACT: Timothy Johnson, FCSS/NMSS  
(301) 415-7299

Information in this record was deleted in  
accordance with the Freedom of Information Act  
Exemptions 4  
FOIA/PA 2012-0097

~~SENSITIVE AND PROPRIETARY INFORMATION -- LIMITED  
TO NRC UNLESS COMMISSION DETERMINES OTHERWISE~~

The review indicates a range of economic performance for the various scenarios and the dependence of performance on key business decisions by USEC over the next 5 to 10 years.

BACKGROUND:

Under Section 193(f) of the Atomic Energy Act of 1954, as amended, and as implemented in 10 CFR 76.22(b)(2), the NRC may not issue a certificate of compliance to USEC or its successor if it finds that issuance of the certificate would be inimical to the maintenance of a reliable and economical source of domestic enrichment services. When NRC recertified USEC's operation of the gaseous diffusion plants in January 1999, USEC had investment-grade credit ratings from both Moody's Investors Service (Moody's) and Standard & Poor's (S&P). On February 3, 2000, USEC announced: lower financial projections for Fiscal Year (FY) 2001 (USEC's FY begins on July 1 and ends on June 30); a plan to lay off 850 employees (later revised to 625); a dividend rate cut to half of its previous value; and a program to repurchase stock. On the next day, February 4, 2000, S&P reacted to this announcement by downgrading USEC's credit rating from BBB to BB+, a less than investment-grade, or speculative, rating. On February 23, 2000, Moody's downgraded USEC from Baa1 to Ba1, also a speculative-grade rating. With regard to AEA §193(f)(2)(B) considerations, NRC's recertification of USEC in early 1999 was based on USEC's investment-grade credit ratings. In a memorandum to the Commission dated March 13, 2000, the staff presented information on the financial status of USEC and indicated it would initiate a re-evaluation of USEC's economics and reliability in accordance with draft NUREG-1671, "Standard Review Plan for the Recertification of the Gaseous Diffusion Plants" (SRP).

Since the USEC privatization on July 28, 1998, USEC has faced several difficult issues that have resulted in substantially lower projected earnings, beginning in the USEC FY 2001. These issues include: (1) an oversupply of uranium on the world market; (2) an agreement with the U.S. Department of Energy (DOE) to purchase Russian downblended high-enriched uranium (HEU), which is currently at above-market prices; (3) use of older and less efficient enrichment technology; and (4) failure of the Atomic Vapor Laser Isotope Separation (AVLIS) process to become a viable technology for future, more efficient uranium enrichment. The current market price of enrichment services is about \$80 per separative work unit (SWU). This price is below the current price of SWU purchased from Russia under the HEU downblending agreement and below the current USEC gaseous diffusion plant production cost (in excess of (b)(4) which varies as a function of production level). USEC's current positive earnings are from long-term sales contracts at prices above production costs and from the sale of uranium inventories that were transferred to USEC from the DOE at the time of privatization.

The long-term contracts, however, will expire in the next several years, and USEC will be forced to negotiate new contracts at prices consistent with the current market prices at that time.

At the time of privatization, USEC was expected to replace its 50-year-old gaseous diffusion plants with the AVLIS enrichment technology that would be capable of producing SWU at well below the current market prices. In June 1999, USEC announced that it was suspending research and development on AVLIS because it considered that the technology was incapable

~~SENSITIVE AND PROPRIETARY INFORMATION -- LIMITED  
TO NRC UNLESS COMMISSION DETERMINES OTHERWISE~~

of practical, full-scale production levels at competitive prices. Without a more competitive enrichment technology, USEC's ability to compete at today's market prices will be challenged.

In FY 2000 (which ended on June 30, 2000), USEC expected to sell about 12.7 million SWU. Of this, USEC obtained about 5.5 million SWU from the Russian HEU agreement with the remainder coming from its enrichment plants at Portsmouth and Paducah and sales from its inventory. At this production level, USEC will be operating the two gaseous diffusion plants at about 25 percent capacity. At these low production levels, production costs for two operating plants are about (b)(4). Production costs for a single plant producing 5 to 6 million SWU per year would be about (b)(4). Therefore, the Russian HEU agreement has a substantial effect on USEC's operations, and, as such, it is our understanding that some investment firms have been urging USEC to shut down one of its plants. As indicated in the NRC staff memorandum to the Commission dated March 13, 2000, under the "Agreement Regarding Post-Closure Conduct," between USEC and the Department of Treasury, the downgrading of USEC's corporate credit rating to below an investment-grade level may allow USEC to close one of its plants before January 1, 2005. On June 21, 2000, USEC announced its intent to close the Portsmouth plant.

#### DISCUSSION:

NRC staff, with the technical assistance of ICF Consulting, Inc. (ICF), evaluated the projected financial condition of USEC for the next 5-year period, consistent with the guidance published in the draft SRP. The SRP includes an examination of the credit strength and financial condition based on credit ratings from rating services such as Moody's and S&P. Under the SRP, a speculative credit rating could be acceptable based on additional analysis of business plans, projected financial statements, and other information applicable to the critical issues affecting USEC.

NRC staff tasked ICF to evaluate the above issues in accordance with draft NUREG-1671. To gather relevant information for the analysis, on February 25, 2000, NRC staff requested USEC to provide business plans and financial statements for the next 5 years. NRC staff and ICF also used publicly available information in Securities and Exchange Commission 10-K and 10-Q reports and other publicly available investment sources. On April 14, 2000, USEC provided financial information in response to the NRC staff request. On May 1, May 8, June 5, and June 23, 2000, USEC provided additional information to clarify and supplement the April 14, 2000, submittal. USEC provided some information only through 2003, the date the gaseous diffusion plant certificates are due to expire. NRC and ICF made appropriate assumptions based on the information provided for the follow-on years and modeled USEC finances beyond 2005 to better understand long-term trends. For purposes of analysis and comparison, ICF and the staff examined USEC's financial situation to characterize USEC's current and projected future condition under various scenarios. Neither ICF nor the staff have attempted to determine how or whether "economical" or "reliable" might be defined, and the staff has not drawn any conclusions on the matter.

~~SENSITIVE AND PROPRIETARY INFORMATION - LIMITED  
TO NRC UNLESS COMMISSION DETERMINES OTHERWISE~~

an analysis of USEC's financial conditions under six primary scenarios. These scenarios are as follows:

1. Continued operation of two gaseous diffusion plants.
2. Operation of one gaseous diffusion plant.
3. Deployment of advanced enrichment technology.
4. Brokering Russian downblended uranium and closure of both gaseous diffusion plants.
5. Cessation of all operations.
6. Acquisition of USEC by another party.

Scenarios 1 - 4 all include distribution of Russian origin uranium produced from downblending HEU.

For each of the above scenarios, ICF prepared pro forma financial statements and computed net present values. The net present value analysis method is a common approach used by businesses to compare future earnings under various scenarios. Businesses use the results to select the most profitable business options. ICF also prepared sensitivity analyses on key parameters. These analyses showed the following:

1. For Scenarios 1 and 2 (operation of one or both gaseous diffusion plants), USEC would generate a positive corporate cash flow for the next 5 years (i.e., FY 2001 to 2005) because of its long-term contracts and uranium inventory sales. However, after 2001, USEC cannot profitably enrich uranium using its gaseous diffusion plants at the current market prices.
2. For Scenarios 1 and 2, USEC cannot generate a positive corporate cash flow indefinitely beyond FY 2005, even if it ceases operations at one of the gaseous diffusion plants. USEC is currently producing positive earnings based on its long-term contracts, uranium inventory sales, and sales of Russian SWU.
3. Scenario 3, deployment of advanced enrichment technology, shows that USEC needs to develop a less costly enrichment capability to replace the gaseous diffusion plants to be able to generate a positive cash flow over the long term. USEC may be able to generate positive cash flows using advanced enrichment facilities (e.g., a gas centrifuge plant) beginning in 2009 if it closes the gaseous diffusion plants and builds an advanced enrichment technology plant under favorable schedules and financing conditions. However, such a plant may not meet USEC's stated expectations for return on investment.
4. Under Scenario 4, brokering Russian downblended uranium and closure of both gaseous diffusion plants, USEC is able to generate positive cash flows until all the agreed upon Russian downblended uranium is sold.
5. Liquidation by USEC itself (Scenario 5) or acquisition and liquidation of USEC by another entity (Scenario 6) become a risk at the end of July 2001 (when ownership restrictions expire) if USEC's stock price per share remains below the break-up value per share.

~~SENSITIVE AND PROPRIETARY INFORMATION - LIMITED  
TO NRC UNLESS COMMISSION DETERMINES OTHERWISE~~



The Commissioners

5

The staff has not provided and does not intend to provide, the data and assumptions used in the draft report to USEC for its review for accuracy. The staff does not believe such a review is necessary due to the confidence in its understanding of the data based on multiple meetings with USEC and submittals from USEC that provided sufficient opportunity for clarification in advance of inclusion of data in the analysis.

COORDINATION

This paper has been coordinated with the Office of the General Counsel, which has no legal objection.

*/RA by Frank J. Miraglia for/*

William D. Travers  
Executive Director  
for Operations

Attachment:

ICF Consulting Report,  
"Financial Evaluation of USEC, Inc."

~~SENSITIVE AND PROPRIETARY INFORMATION -- LIMITED  
TO NRC UNLESS COMMISSION DETERMINES OTHERWISE~~

**ATTACHMENT**

FINANCIAL EVALUATION OF  
USEC, INC.

Prepared for the  
U.S. NRC  
OFFICE OF NUCLEAR MATERIALS,  
SAFETY, AND SAFEGUARDS

Prepared by  
ICF CONSULTING

August 23, 2000



~~\*\* Contains proprietary information. Not for distribution outside of NRC \*\*~~

## Table of Contents

EXECUTIVE SUMMARY .....	1
1. INTRODUCTION AND OBJECTIVES .....	5
2. METHODOLOGY .....	7
2.1 Overview .....	7
2.2 Data Sources .....	8
2.3 Cash Flow Model .....	9
3. CRITICAL FINANCIAL ISSUES, VULNERABILITIES, AND UNCERTAINTIES ..	10
3.1 Declining SWU Prices .....	10
3.2 GDP Plant Viability .....	11
3.3 Russian HEU Agreement .....	15
3.4 Inventories .....	16
3.5 New Enrichment Technologies .....	17
3.6 Dividends Policy and the Share Repurchase Program .....	19
3.7 Ownership Restrictions .....	19
3.8 Energy Costs .....	21
4. DESCRIPTION OF SCENARIOS AND ASSUMPTIONS .....	25
4.1 Scenario 1: Continued operation of the two GDPs .....	25
4.2 Scenario 2: Continued operation of only one GDP .....	25
4.3 Scenario 3: Continued operation assuming the commercial deployment of advanced enrichment technology .....	26
4.4 Scenario 4: Operation of the business as a broker of SWU .....	27

4.5	Scenario 5: Cessation of all operations .....	27
4.6	Scenario 6: Acquisition of USEC to sell its assets .....	27
4.7	Other Assumptions .....	28
5.	RESULTS AND SENSITIVITY ANALYSIS .....	33
5.1	Evaluation of Individual Scenarios .....	33
5.1.1	Scenario 1: Continued operation of the two GDPs .....	33
5.1.2	Scenario 2: Continued operation of only one GDP .....	34
5.1.3	Scenario 3: Continued operation assuming the commercial deployment of advanced enrichment technology .....	36
5.1.4	Scenario 4: Operation of the business as a broker of SWU .....	36
5.1.5	Scenario 5: Cessation of all operations .....	37
5.1.6	Scenario 6: Acquisition of USEC by another party .....	37
5.2	Sensitivity Analysis of Key Parameters .....	37
5.3	Conclusions and Recommendations .....	42

Appendix 1: Results by Scenario

Appendix 2: Sensitivity Analysis by Subscenario

Note: This report reflects analysis of information that was provided to NRC on a confidential basis and that would be unavailable from other sources. As such, the analysis and results reflect proprietary information. In addition, the subject and findings of this report are of a sensitive nature and could result in negative consequences if released.

## EXECUTIVE SUMMARY

### Introduction

As a condition of the privatization of the U.S. Enrichment Corporation (USEC), the 1996 USEC Privatization Act required NRC to determine whether issuance of a certificate of compliance to the privatized entity would be consistent with the "maintenance of a reliable and economical source of domestic enrichment services." NRC's draft *Standard Review Plan for the Recertification of the Gaseous Diffusion Plants* ("the draft SRP") indicates that this condition is met if an applicant's financial condition is sufficiently strong "to allow the expectation that [the company] can remain viable for at least five years."<sup>1</sup> The draft SRP states that this determination should be made based on the lowest current actual public credit rating (e.g., from Standard & Poor's Corporation or Moody's Investors Services) or, if actual ratings are not available, on estimated ratings. If the actual or estimated credit rating is of investment grade (AAA, AA, A, or BBB as rated by Standard & Poor's, or Aaa, Aa, A, or Baa as rated by Moody's), then the applicant is presumed to meet the conditions described above. Based on an investment grade rating received from Standard & Poor's during the privatization process, USEC met the above conditions in the draft SRP.<sup>2</sup>

In February of this year, USEC's public credit ratings were lowered to less than investment grade by both Standard & Poor's and Moody's. Consequently, NRC is re-evaluating

---

<sup>1</sup> NUREG-1671, Standard Review Plan for the Recertification of the Gaseous Diffusion Plants, Draft Report for Comment, U.S. Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards, February 1999.

<sup>2</sup> A proprietary letter indicated that Standard & Poor's post-privatization credit rating for USEC would be A- based on various assumptions and capital structures outlined by the management of USEC.

the issue of whether USEC's financial condition is consistent with the maintenance of a reliable and economical source of domestic enrichment services, and NRC has commissioned this study to assist in the re-evaluation.

### Objectives and Methodology

This study examines the economic, financial, and business characteristics of USEC and evaluates the company's cash flow over the next five years. It projects USEC's ability to generate positive cash flows and to enrich uranium at its plants at a cost that is below its selling price of SWU.

The study models USEC's current and future cash flows under six basic scenarios:

- (1) Continued operation of the two gaseous diffusion plants (GDPs);
- (2) Continued operation of only one GDP;
- (3) Continued operation assuming the commercial deployment of advanced enrichment technology;
- (4) Operation of the business as a broker of SWU;<sup>3</sup>
- (5) Cessation of all operations; and
- (6) Acquisition of USEC to sell its assets.

### Results

Exhibit ES-1 summarizes the analysis of Scenarios 1-4 (and variations) relative to the criteria noted above. (Scenarios 5 and 6 each assume that USEC will be liquidated and, consequently, cannot be usefully summarized in terms of production costs or a series of cash flows.)

---

<sup>3</sup> SWU, or "separative work units," represent the units of service that USEC and other enrichment companies sell to their customers. Typically, customers bring their own uranium for enrichment, but they must pay for the enrichment services, as measured in SWU.

Exhibit ES-1  
Summary of Findings Under Scenarios 1-4 (and Variations)

Subscenarios	Scenario							
	1. Two GDPs		2. One GDP		3. New Technology		4. Broker SWU	
	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY
<i>Status of GDP Operations</i>								
A. Both GDPs operate	2001	2005			2001	2004		
B. Only Paducah operates			2003	2006	2003	2005		
C. Only Portsmouth operates			2001	2006	2001	2005		
D. No GDPs operate					2003	2005, and after 2008		beyond 2010
<i>Status of Russian Agreement Beginning in 2002</i>								
E. Continue at current price	2001	2004	2003	2005	2003	2004, and after 2008		2006
F. Continue at market price	2001	2004	2003	2006	2003	2004, and after 2008		2006
G. Continue at market price less 12%	2001	2005	2003	2006	2003	2005, and after 2008		beyond 2010
H. No Russian SWU	2001	2005	2003	2006	2003	2004, and after 2009		
<i>Federal Support for Centrifuge</i>								
I. Loan guarantee, R&D subsidized by DOE					2003	2005, and after 2008		
J. No federal support					2003	2005, and after 2010		

Note: Shading indicates cells that are not applicable to the scenario.



### Conclusions

- USEC as a firm is projected to generate positive cash flows for the next five years (i.e., FY 2001-2005). However, USEC cannot enrich uranium profitably at the GDPs given current market prices for SWU. USEC also cannot enrich uranium profitably at the GDPs once its average sales price (i.e., including sales prices under legacy contracts) falls to levels that are expected in FY 2003 and beyond.
- USEC cannot generate positive cash flows indefinitely beyond FY 2005, even if it ceases operations at one GDP. USEC is currently surviving financially based on inventory sales, legacy contracts, and (once the Russian agreement is renegotiated) Russian SWU.
- To generate positive cash flow in the long term, USEC needs to develop a less costly enrichment process to replace the GDPs. USEC should be able to generate positive cash flow beginning in FY 2009 if it closes both GDPs and builds a gas centrifuge plant or other advanced technology resulting in lower production costs. However, it is uncertain whether USEC will undertake an investment in a centrifuge plant given its stated expectations for return on investment.
- Alternatively, USEC could continue to generate positive cash flows in the medium term (i.e., through FY 2008 or FY 2012) by closing both GDPs and becoming a broker of Russian SWU.
- Acquisition and liquidation of USEC by an informed party becomes a risk at the end of July 2001 (when ownership restrictions expire) if USEC's price per share remains below the break-up value per share.
- NRC may wish to prepare itself for the possibility that, in a few years (e.g., when NRC is considering re-issuance of USEC's certificate of compliance in 2003), USEC's financial condition may not allow the expectation that the company can remain in business for an additional five years.

## 1. INTRODUCTION AND OBJECTIVES

In the 1992 Energy Policy Act, Congress gave the NRC the responsibility to regulate USEC, then a self-financing government corporation, under a certification of compliance arrangement. In 1996, the NRC issued the first Certificate of Compliance for the gaseous diffusion plants. Also in 1996, Congress enacted the USEC Privatization Act, which included additional requirements for privatization and requirements that the NRC may not issue a certificate of compliance to USEC if it finds that issuance of the certificate would be inimical to the "maintenance of a reliable and economical source of domestic enrichment services."

Chapter 16 of NRC's draft *Standard Review Plan for the Recertification of the Gaseous Diffusion Plants* ("the draft SRP"), approved by the Commission in November 1997, indicates that this condition is met if an applicant's financial condition is sufficiently strong "to allow the expectation that [the company] can remain viable for at least five years."<sup>4</sup> The draft SRP states that this determination should be made based on the lowest current actual public credit rating (e.g., from Standard & Poor's Corporation or Moody's Investors Services) or, if actual ratings are not available, on estimated ratings. If the actual or estimated credit rating is of investment grade (AAA, AA, A, or BBB as rated by Standard & Poor's, or Aaa, Aa, A, or Baa as rated by Moody's), then the applicant is presumed to meet the conditions described above.<sup>5</sup> Based on an investment grade rating received from Standard & Poor's during the 1998 privatization process, NRC determined that USEC met the above conditions in the draft SRP.<sup>6</sup>

When NRC recertified USEC's operation of the gaseous diffusion plants in January 1999, USEC had investment-grade credit ratings from both Moody's and S&P, which provided an acceptable financial basis for recertifying the plants. The NRC issued a recertification of the plants for a 5-year period.

---

<sup>4</sup> NUREG-1671, *Standard Review Plan for the Recertification of the Gaseous Diffusion Plants, Draft Report for Comment*, U.S. Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards, February 1999. This document provides NRC's process for conducting the safety review for the recertification of the gaseous diffusion plants.

<sup>5</sup> Under the SRP, a speculative rating could also be acceptable, but further NRC analysis using additional criteria would be required.

<sup>6</sup> A proprietary letter indicated that Standard & Poor's post-privatization credit rating for USEC would be A- based on various assumptions and capital structures outlined by the management of USEC. Letter from Scott Sprinzen, Managing Director of Standard & Poor's Corporate Ratings, to Sarah A. Van Lierde, Treasurer of USEC, April 24, 1998.

On February 3, 2000, USEC announced lower financial projections for fiscal year 2001, a plan to lay off 850 employees (subsequently modified to 625 employees), a dividend rate cut to half of its previous value, and a program to repurchase stock. On February 4, 2000, Standard & Poor's reacted to this announcement by downgrading USEC's credit rating from BBB to BB+, a speculative-grade rating. On February 23, 2000, Moody's downgraded USEC from Baa1 to Ba1, also a speculative-grade rating. Consequently, NRC is re-evaluating the issue of whether USEC's financial condition is consistent with the maintenance of a reliable and economical source of domestic enrichment services, and NRC has commissioned this study to assist in the re-evaluation. Reviewing the financial status is consistent with typical NRC practice if the basis for authorizing an activity, such as operating the gaseous diffusion plants, changes sometime after the authorization. NRC believes this review is consistent with the authority Congress provided to the NRC in the USEC Privatization Act of 1996.

The objectives of this analysis are to examine the economic, financial, and business characteristics of USEC, to evaluate USEC's ability to generate positive cash flows, and to assess USEC's ability to profitably enrich uranium at its own facilities.

## 2. METHODOLOGY

### 2.1 Overview

The draft SRP states that applicants with less than investment grade credit ratings must be evaluated to determine “whether any economic, financial, or business characteristics . . . exist that provide reasonable assurance of the applicant’s viability for at least five years.” The draft SRP notes three examples of factors that might provide reasonable assurance of the applicant’s viability for at least five years. These factors include contracts adequate to support the applicant’s operations over a five-year time period, financial guarantees provided by a parent company, and compelling business prospects.

This study considers these and other factors as needed to model USEC’s current and future cash flows under six basic scenarios (which are described in greater detail in Section 4):

- (1) Continued operation of the two gaseous diffusion plants (GDPs);
- (2) Continued operation of only one GDP;
- (3) Continued operation assuming the commercial deployment of advanced enrichment technology;
- (4) Operation of the business as a broker of SWU;<sup>7</sup>
- (5) Cessation of all operations; and
- (6) Acquisition of USEC to sell its assets.

For each of these scenarios, the study estimates the direction and magnitude of cash flows over the next five years, and evaluates the cash flow projections to identify foreseeable instances of insolvency or other critical times for the business. The study also considers USEC’s cost of producing SWU relative to the price the company receives for selling SWU.

The study uses a variety of information, including USEC’s audited public filings with the U.S. Security and Exchange Commission (SEC), other financial data and projections provided by USEC, research reports and analyses prepared by federal agencies and by private investment houses, and other published sources. The study cites specific data sources as appropriate and undertakes sensitivity analysis on key variables.

---

<sup>7</sup> SWU, or “separative work units,” represent the units of service that USEC and other enrichment companies sell to their customers. Typically, customers bring their own uranium for enrichment, but they must pay for the enrichment services, as measured in SWU.

## 2.2 Data Sources

The study uses a variety of information, much of which has been provided by USEC, either indirectly through USEC's public filings with the SEC, or directly at the request of NRC for this analysis. SEC filings reviewed included USEC's Form 10-K for fiscal years 1998 and 1999, as well as various Forms 10-Q and 8-K. Information provided in 10-K's includes audited financial data. The auditor's opinion on USEC's financial statements for 1998 and 1999 is clean, thereby ensuring that a certified public accountant believed that the financial statements fairly present the company's financial condition in accordance with generally accepted accounting principles. Thus, the financial statements provide an independently audited and detailed set of financial data as necessary for conducting in-depth analysis of the company's future business prospects.

USEC voluntarily supplemented the publicly-available information by responding to various information requests from NRC. This supplemental information included the following:

- Information package submitted on April 14, 2000;
- USEC meeting with NRC staff and ICF staff on April 20, 2000;
- Information package submitted on May 1, 2000;
- Information package submitted on May 8, 2000;
- USEC meeting with NRC staff and ICF staff on May 15, 2000;
- Information package submitted on June 5, 2000; and
- Information package submitted on June 23, 2000.

Several USEC staff attended each meeting, including USEC's chief financial officer (CFO) Mr. Henry Shelton, and Mr. James Miller, an executive vice president. USEC has asserted that most or all of the information originating from these submittals and meetings is highly proprietary in nature. Consequently, the analysis and conclusions contained in this study also should be considered proprietary.

This study has researched independently a variety of claims and assumptions contained in the USEC data. NRC staff have assisted with this effort by, in particular, contacting staff of other federal agencies. The results of this research are documented in the report. Nevertheless, given the highly detailed and proprietary nature of the topics examined in this study, most of USEC's data cannot be obtained from other sources. The study, however, does consider the sensitivity of the results to changes in key parameters, including certain data provided by USEC.

### 2.3 Cash Flow Model

The term "cash flow" refers to the amount of net cash generated by, or used by, a company in a given year (i.e., total cash receipts minus total disbursements). Firms that generate *positive* cash flows are successfully meeting their obligations and providing extra cash that can be used to operate the enterprise or returned to shareholders. Firms that generate *negative* cash flows are net users of cash; although they may be able to meet their expenses in the short term (e.g., through cash reserves or credit), they will not be able to finance operations in the long term if cash flow remains negative. A declining firm would generally be expected to stay in business only as long as cash flow remains positive; assuming there is no expectation that financial performance will improve in the future, the firm would be expected to cease operations just as cash flow becomes negative.

The cash flow model designed for this study leverages available information regarding USEC to project the company's financial performance under each of the six main scenarios and under a variety of subscenarios. It accounts for USEC's revenues (i.e., sales of SWU and uranium) and costs (including costs of GDP production, Russian purchases, outsourced downblending, research and development, new plant construction, taxes, etc.) and models the company's cash flows, cash balances, and net income.

The model projects cash flows for each scenario and subscenario in the near term (i.e., in the next 5 years). Trends and turning points in the cash flows are identified to inform the analysis and better understand the company's key financial issues.

### 3. CRITICAL FINANCIAL ISSUES, VULNERABILITIES, AND UNCERTAINTIES

This section identifies and analyzes the financial issues, vulnerabilities, and uncertainties that are most critical to USEC's financial condition. It includes preliminary findings that influenced both the definition of the scenarios and the assumptions used in the cash flow model.

#### 3.1 Declining SWU Prices

Most of USEC's sales result from long-term contracts. USEC negotiates these contracts with its customers based on prevailing prices and forward escalation rates. In recent years, however, prices for SWU have declined substantially, primarily due to industry overcapacity, liquidation of stockpiles, lower production costs among competitors, and currency rate variations (SWU prices are set in U.S. dollars). The spot price for SWU, which was as high as \$98 in 1998, has fallen to about \$80 per SWU at present.<sup>8</sup> USEC's average selling price per SWU, therefore, is declining as its older, higher-priced contracts are gradually replaced by newer, lower-priced contracts. As shown in Exhibit 3-1, USEC's average selling price per SWU is projected to drop by an average of three percent annually until the projected market price of \$82 is reached in FY 2008.

Given that both total demand and total supply are expected to increase modestly over time, the most likely driver of SWU prices in the short-term and intermediate term may be changes in currency rates, which tend to be driven by macroeconomic factors. To the extent that foreign currencies appreciate relative to the dollar, the production costs of USEC's competitors (which are denominated in foreign currencies) will increase, which could force these firms to raise their dollar-denominated SWU prices. Even if SWU prices were to increase, however, the benefit to USEC would be gradual because it would still have to deliver SWU at lower prices for

Exhibit 3-1  
USEC's Average Selling Price (\$2000)

Fiscal Year (July 1 - June 30)	Average Selling Price per SWU (Projected)
2000	\$108
2001	\$106
2002	\$103
2003	\$97
2004	\$90
2005	\$90
2006	\$87
2007	\$85
2008	\$82

Source: ICF analysis based on data provided by USEC.

---

<sup>8</sup> Sources: U.S. Department of Energy's Energy Information Administration (EIA); the Ux Consulting Company, LLC, and the Uranium Exchange Company, April 3, 2000.

a number of years based on its inventory of long-term contracts. Perhaps of greater note is that there is no certainty the dollar will depreciate. In fact, the euro has been depreciating relative to the dollar, even while the European Central Bank has taken steps to bolster that currency.<sup>9</sup>

### 3.2 GDP Plant Production

USEC operates two gaseous diffusion plants (GDPs). The plant in Paducah, Kentucky, has operated since 1952 and has a design capacity of 11.3 million SWU per year. It currently is certified to enrich uranium only up to 2.75 percent. The plant in Portsmouth, Ohio, has operated since 1956 and has a design capacity of 7.4 million SWU per year. The Portsmouth plant currently is certified to enrich uranium up to 10 percent. Nuclear fuel typically is enriched to about 5 percent.<sup>10</sup> The economic capacity of the two plants is less than the design capacity and totals 13-14 million SWU per year. Nevertheless, this combined economic capacity is sufficient to meet USEC's current demand of approximately 11.5 million SWU. It also would be adequate to meet the entire U.S. demand for enriched uranium (approximately 10 million SWU annually), assuming that domestic customers could be prioritized over foreign customers.<sup>11</sup> If USEC were to close either of the plants, the company would not have sufficient enrichment capacity to meet its current demand or the entire U.S. demand (unless the lost capacity were to be replaced); the company also would be at increased risk of losing its entire production capacity to fire, accident, etc.

Production costs at the two GDPs vary considerably based on the level of production and the cost of electricity (which itself varies by season). Exhibit 3-2 shows the approximate relationship between production costs and production levels at each of the two GDPs as well as for the two-GDP complex.<sup>12</sup> Assuming each plant is producing 5.5 million SWU per year, the

---

<sup>9</sup> Washington Post, "Euro Falls to New Low Despite Bank's Action," by Anne Swardson, April 28, 2000, page E3. The value of the euro is not significantly different today, despite some fluctuation since the end of April.

<sup>10</sup> Currently, USEC employs the two GDPs in sequential fashion. The process begins at the Paducah facility (which is certified to enrich uranium only to 2.75 percent) and is completed at the Portsmouth facility.

<sup>11</sup> According to the U.S. Department of Energy's Energy Information Agency, domestic demand for enrichment services was 10.0 million SWU in 1999 (*Uranium Industry Annual*, DOE/EIA-0478(99), Table 25, May 2000) and is projected at between 9.3-10.4 million SWU between 2000-2005 ([http://www.eia.doe.gov/cneaf/nuclear/n\\_pwr\\_fc/data98/table4.html](http://www.eia.doe.gov/cneaf/nuclear/n_pwr_fc/data98/table4.html)).

<sup>12</sup> The cost-to-production relationships depicted in Exhibit 3-2 reflect current operations, which employ the two GDPs in sequential fashion. This study assumes the relationships would remain valid if each GDP, independently, were to enrich uranium to 5 percent. In addition, the relationships are sensitive to changes in energy costs, which are embedded in the curves. The



average cost per SWU is approximately the same at both GDPs. At higher volumes, Paducah is the more efficient plant. At lower volumes, Portsmouth is more efficient. This difference between the two plants may become critical should USEC cease enrichment operations at one GDP.<sup>13</sup>

Another difference between the two plants is the relative size of their "sweet spot," that is, the size of the range of production volumes at which each plant is at its most economical. To help evaluate the size of each plant's sweet spot, Exhibit 3-3 shows the derivative of the curves from Exhibit 3-2. The derivative curves show the rate of change in cost per SWU. Each plant is most economical where its derivative curve crosses (or falls relatively close to) zero. For Paducah, this economical range extends from about 5 million SWU per year to about 8.5 million SWU per year -- a 3.5 million SWU range. In contrast, Portsmouth's economical range extends from about 4 million SWU per year to about 5.5 million SWU per year -- a 1.5 million SWU range (less than half that of Paducah). Thus, Paducah offers USEC a much higher degree of operating flexibility than does Portsmouth.

Currently, USEC operates each of the two GDPs at approximately 25 percent of capacity.<sup>14</sup> This results in average production costs above \$110 per SWU,<sup>15</sup> which is well above the current market price of approximately \$80. If USEC were to close one of the GDPs, it would be able to operate the remaining plant more efficiently, thereby lowering production costs to an (b)(4) -- still substantially higher than the market price. While these estimates are sensitive to variations in the cost of electricity (see Section 3.8), it is unlikely that even a single GDP would be capable of producing SWU at costs lower than the current market price. Moreover, because GDP production costs are sensitive to production volume, the average production cost per SWU could jump considerably if GDP production is cut due to fluctuations in demand or to USEC's receipt of SWU from additional sources (e.g., a new centrifuge plant).

---

new power agreement that USEC recently reached with TVA, for example, makes Paducah more economical than indicated in the exhibit. This study uses the cost-to-production relationships shown above (because updated relationships are not yet available) but adjusts for the new TVA energy agreement in subsequent calculations.

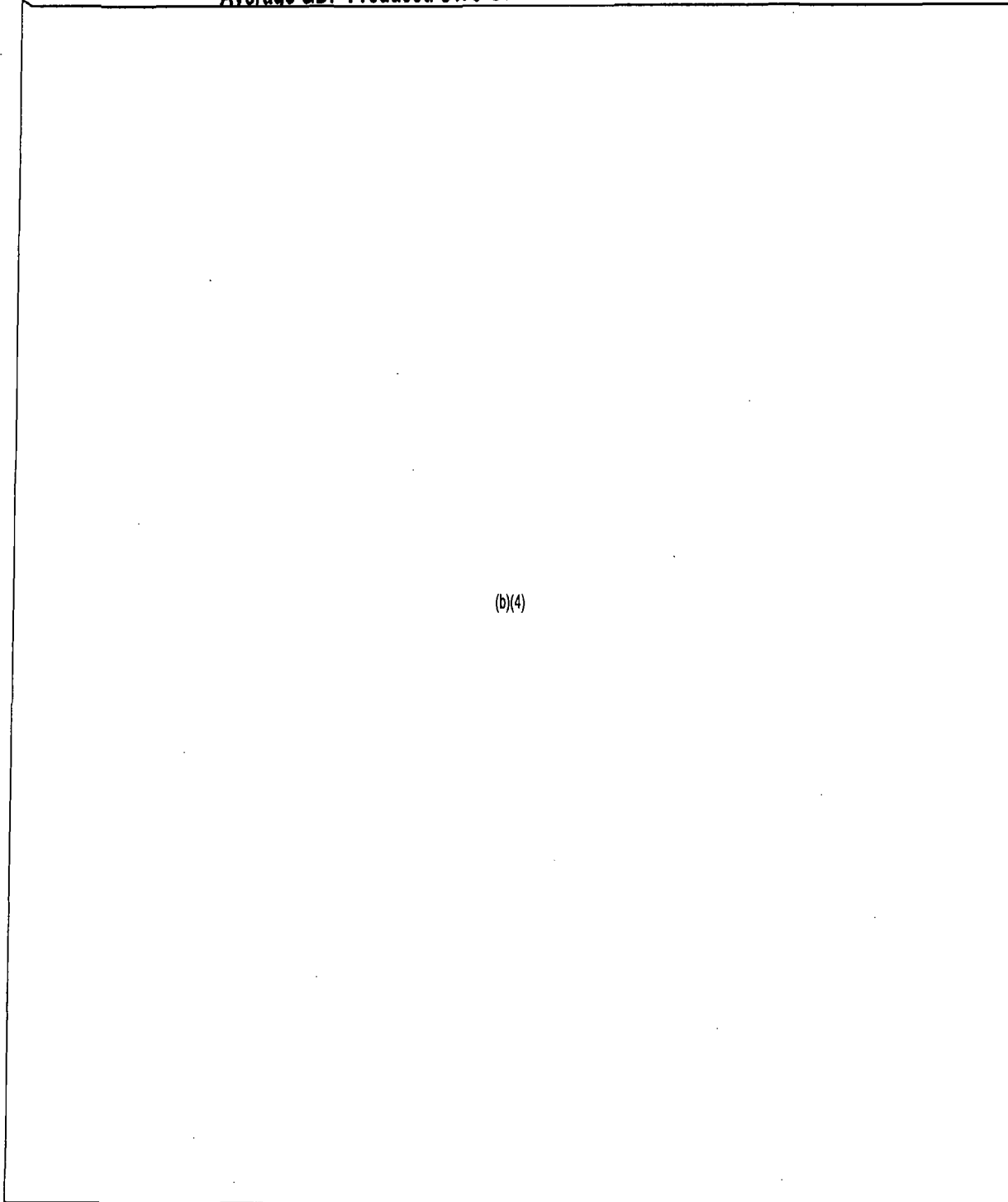
<sup>13</sup> USEC has announced its intention to close the Portsmouth GDP in June 2001.

<sup>14</sup> The remaining SWU supplied by USEC comes from USEC's inventories and from Russian SWU (as discussed in Section 3.3).

<sup>15</sup> Source: ICF analysis of data provided by USEC.

**Exhibit 3-2**

**Average GDP-Produced SWU Cost as a Function of SWU Production**

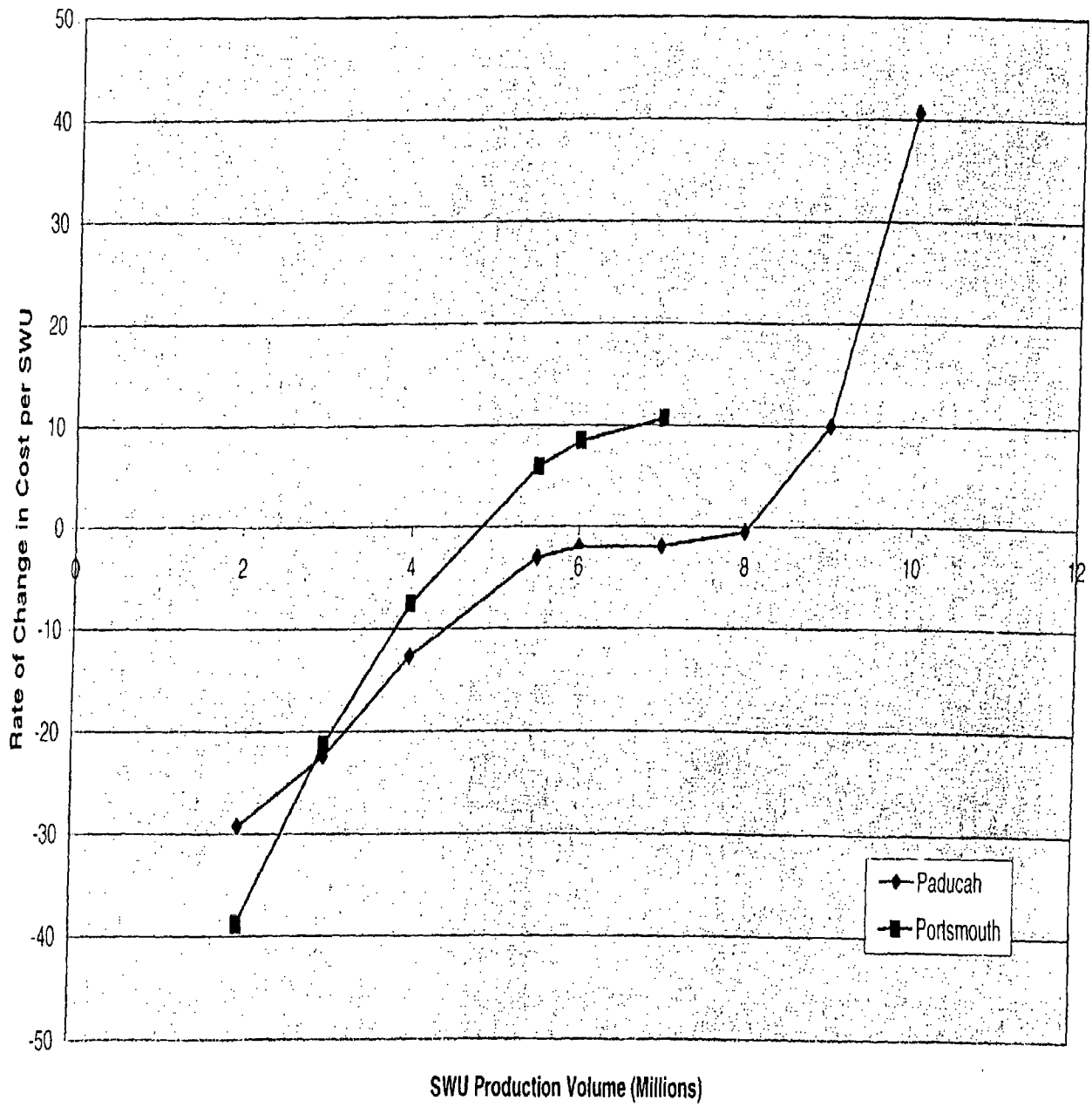


(b)(4)

**SWU Production per year (Millions)**

**Source: ICF estimates based on data provided by USEC.**

Exhibit 3-3  
Plot of the Derivative of the Paducah and Portsmouth Production Equations



Operation of the GDPs requires freon (R-114) as a process coolant and, due to leakage, USEC adds to the two plants approximately 750,000 pounds (total) of freon annually (a six percent leakage rate). The company has a stockpile of 2.0 million pounds, and claims to purchase approximately 300,000 pounds of reconditioned freon annually at prices averaging approximately \$15 per pound. However, because freon, an ozone depleting substance, is no longer produced in the U.S., USEC is investigating suitable replacements. The company has identified two replacements that it believes are compatible with freon and can replace the freon with no need to retrofit the plants and no loss in efficiency.<sup>16</sup> The company also believes that either replacement would have approximately the same cost per pound as freon.<sup>17</sup> This issue is critical because the GDPs cannot operate without a suitable process coolant. If a new coolant cannot be identified, operations at the GDPs will not be able to continue indefinitely or might require expensive plant upgrades. Similarly, GDP production costs would rise further if a replacement coolant is available but proves to be significantly more expensive than freon.

### 3.3 Russian HEU Agreement

As the Executive Agent for the Russian HEU agreement, USEC is obligated to purchase certain amounts of Russian SWU each year, subject to cancellation of the contract. USEC currently pays \$88 per SWU, increasing to \$90 per SWU in 2001, at which time the current pricing agreement expires. USEC is currently negotiating prices for the next five years of the agreement (2002-2007).

The current pricing agreement is nominally profitable to USEC, given that USEC's average selling price for SWU (under USEC's legacy contracts) is above the prices paid for Russian SWU. However, the price for Russian SWU has been, and may still be, higher than the

---

<sup>16</sup> Evaluating the adequacy of the two substitutes, believed to be perflorocyclobutane ( $C_4F_8$ ) and perflorobutane ( $C_4F_{10}$ ), is beyond the scope of this study. In general, it is difficult to predict the performance of compounds as refrigerants based on physical properties, absent real-time testing. The above compounds have boiling points relatively similar to R-114, but they have different molecular weights and it is possible that USEC's equipment may need to be modified if they are used. Other users of freon are evaluating other compounds, including isomers of hexafloropropane, but the specific applications of these other users may differ from those of USEC.

<sup>17</sup> USEC indicated that costs for a freon substitute should be less than \$20 per pound. If the substitute costs \$5 more per pound than freon, USEC's annual cash flows may decrease by less than \$4 million under two-GDP scenarios, and less than \$2 million under one-GDP scenarios. The results of this study are not sensitive to this change in cost.

*marginal cost*<sup>18</sup> (as opposed to the average cost) of producing SWU at the GDPs, which means that USEC would have been financially better off had it produced, rather than purchased, the same quantity of SWU. Looking forward, it is clear that renewal of the Russian agreement is not economical for USEC unless it receives prices that are lower than current market prices (i.e., approximately \$80 per SWU). (Even though USEC, due to its legacy contracts, might temporarily make some profit buying Russian SWU at prices higher than the market price, doing so would be uneconomical given that USEC could purchase SWU more cheaply on the spot market.)

The outcome of the current price negotiations is of critical importance to USEC's long-term financial condition because, as discussed in Section 3.2, USEC is unable to produce SWU economically at either or both of its existing GDPs. Therefore, the new Russian pricing agreement must be sufficiently profitable (1) to subsidize future losses incurred at the GDPs, and (2) to allow USEC to fund research and development of a new, lower-cost enrichment technology.

Given existing trade restrictions and Russia's need for U.S. dollars, it seems likely that USEC will achieve an agreement to continue purchasing Russian SWU.

(b)(4)

NRC also has learned that some unresolved issues remain and therefore it is uncertain when negotiations will conclude.<sup>20</sup>

### 3.4 Inventories

At the end of FY 2000, USEC is estimated to have approximately \$1.7 billion in inventory on its books, which is currently in the form of U.S. HEU, natural uranium, and low enriched uranium (LEU), but which will be sold primarily as SWU and natural uranium. Much

---

<sup>18</sup> The term "marginal cost" is used to mean the incremental cost of the last SWU produced or the first unit subtracted from production. USEC's high fixed costs result in a high average cost per SWU. The incremental (or "marginal") cost of producing additional SWU, however, is substantially lower than the average cost.

<sup>19</sup> Source: NRC meetings with USEC staff on April 20 and May 15, 2000. USEC emphasized that information regarding expected outcomes (e.g., prices, volumes) of the negotiations should be considered confidential and proprietary.

<sup>20</sup> Telephone conversation between Jeff Hughes, Assistant to Under Secretary Moniz, U.S. Department of Energy, and Tim Johnson, NRC/NMSS, on May 23, 2000.

of this inventory was transferred to USEC from the DOE during the privatization process and can be sold under certain restrictions defined in the USEC Privatization Act and in a 1998 DOE Secretarial Determination. In addition, USEC also has inventory that is not covered by sales restrictions. This large inventory provides USEC significant flexibility in how it operates the business. For example, inventory can be sold when that is more cost effective than producing additional SWU. The following paragraphs discuss each type of inventory in more detail.

USEC has rights to sell approximately \$300 million worth of SWU from downblended U.S. HEU.<sup>21</sup> The analysis assumes USEC will sell an average of \$50 million worth of this downblended SWU each year for the years from 2000 to 2005. Because USEC is not licensed to handle HEU, the downblending is contracted to another licensee. The cost of the SWU to USEC is estimated at \$70.50 per SWU. Thus, USEC is able to sell the downblended HEU profitably.

SWU inventory from sources other than U.S. HEU is about \$650 million or approximately 8 million SWU. USEC has indicated that it keeps approximately two million SWU in inventory as safety stock in case of delays with Russian SWU deliveries. Additional SWU inventory allows USEC to vary production at the GDPs based on seasonal variations in electricity prices. The SWU inventory is likely to be sold off as needed when GDP production and Russian SWU cannot meet USEC's demand, or when it is more cost effective to sell the inventory than to produce or purchase more SWU.

The natural uranium (unenriched UF<sub>6</sub>) inventory of approximately 25,000 metric tons has an estimated value of \$750 million. USEC plans to liquidate much of this inventory over a period of six years, from 2000 to 2005, generating average annual revenue of \$117 million.<sup>22</sup> USEC's planned inventory sales are significant, and they provide a strong source of support helping USEC maintain positive cash flows over this period. The company anticipates maintaining an inventory of approximately 5,000 metric tons of uranium beyond 2005 to help provide the company with flexibility in offering its customers more favorable contract terms.

### 3.5 New Enrichment Technologies

Given that GDP production costs exceed current SWU market prices (see Section 3.2), USEC must deploy new technology to ensure future profitability. USEC is currently investigating the commercial development of at least two technologies as potential replacements for the gaseous diffusion process.

---

<sup>21</sup> The estimate is based on USEC selling 3.1 million SWU at an average price of \$96.80 per SWU.

<sup>22</sup> This analysis uses USEC's projections for the sale of the uranium inventory.

- The gas centrifuge process is a well-understood technology used by a number of other enrichment service providers. Investment in a gas centrifuge plant would allow USEC to provide enrichment services at costs at, near, or below those of its competitors.
- The SILEX process involves a new laser-based technology. Assuming the technology works and can be made financially feasible, SILEX might enable USEC to leapfrog its competitors in terms of operating costs.

Neither technology can be implemented immediately. USEC has discussed the potential phase-in of an operational centrifuge plant between FY 2004 and the end of FY 2006, although this time frame may be optimistic given licensing issues. A SILEX-based process would likely take several additional years, assuming it proves feasible, but uncertainties surrounding SILEX make further consideration of the technology too speculative to analyze in the framework of the current cash flow analysis. This study, therefore, considers only an investment in a centrifuge plant, with ongoing research and development expenses for SILEX.

From a capacity standpoint, if USEC builds a centrifuge plant with an economical capacity of 3 million SWU annually,<sup>23</sup> the company would have to keep one GDP operating at low levels (e.g., 2.5 to 3 million SWU per year) to meet current sales or total domestic demand through FY 2013.<sup>24</sup>

While investment in a centrifuge plant might allow USEC to remain an active producer of enriched uranium for a longer period of time, it is unclear whether USEC will invest in a centrifuge plant for at least two reasons. First, USEC may prefer to take the risk that SILEX can be made commercially feasible rather than merely playing technological "catch-up" with the company's competition. Second, a centrifuge plant might not generate a sufficient return on investment to merit the added investment. For example, USEC has stated that it halted investment in its AVLIS technology when it became apparent that the expected return on investment would not provide adequate compensation for the significant risk.

(b)(4)

---

<sup>23</sup> USEC management provided the 3 million SWU capacity figure for a new centrifuge plant and indicated that the company currently is not considering higher capacities.

<sup>24</sup> This assumes USEC will purchase 5.5-6.0 million SWU annually under the Russian contract. Even without the Russian SWU, USEC could meet current demand if it operates both the centrifuge plant and the Paducah GDP. Alternatively, the company could sell less SWU to reduce contracted demand.

At the present time, USEC believes that two years of research and development (in FY 2001-2002) would be required before it could begin to design and license a centrifuge plant. Because the design process has not even begun, any forecasted rate of return must be considered speculative. With that said, this study has attempted such a forecast, and projects a return on investment of (b)(4). Obviously, USEC can be expected to design a facility that maximizes its return on investment, and the company is, in fact, known to be investigating a variety of centrifuge technologies.

At least for a centrifuge plant (and possibly for SILEX), USEC seems to anticipate receiving (1) a Department of Energy subsidy of approximately one-half the research and development costs, and (2) a federal loan guarantee on borrowing related to an investment in any new technology.<sup>25</sup>

### **3.6 Dividends Policy and the Share Repurchase Program**

On February 3, 2000, USEC announced that it was simultaneously (1) lowering its financial projections for FY 2001, (2) planning to lay off 850 employees, (3) cutting its dividend payments by half, and (4) enacting a stock buy-back plan. This announcement triggered the downgrading of USEC's bond rating the next day by Standard & Poor's, based in part on USEC's signal that its business prospects do not currently support continued payment of dividends at the same level. USEC's current dividend level is consistent with, approximately, a 12 percent dividend per share, and requires aggregate disbursements of almost \$50 million annually. Under the share repurchase program, USEC expects to repurchase an additional 10 million shares by the end of FY 2001. USEC projects to spend a total of \$188 million during FY 2000 and 2001 to repurchase its stock.

This study has not attempted to evaluate the propriety of these discretionary payments. Given the pattern of cash flows projected by this study, however, it is questionable whether USEC would be willing to suspend these dividends or buy-back payments to subsidize its enrichment operations in scenarios where its cash flows go negative, often in the 2006-2008 time frame. Although the company might be willing to suspend the dividends or buy-back payments while developing a new enrichment technology or business line, the current dividend payments and share purchases are not projected to hinder the financing of a gas centrifuge plant, as is modeled under Scenario 3.

### **3.7 Ownership Restrictions**

The Privatization Act prevents any single entity from owning more than 10 percent of USEC through July 2001. After that time, acquisition of USEC may be attractive to certain entities for either strategic/operational reasons or for financial reasons. In general, the acquiring

---

<sup>25</sup> NRC contacts with DOE staff suggest that these types of federal support may be unlikely.



firm would be expected to use its new purchase in a way that maximizes the worth of its own shareholders. Thus, the acquirer may analyze scenarios such as those examined in this study. If there are no synergies between USEC and the acquirer, and if the acquisition results in no change in USEC's operations or investment, then the same scenarios should dominate for the consolidated entity as dominates when USEC is an independent entity.

The relative valuation of scenarios would change if the acquisition were to lead to changes in operations or investments, either for USEC or the acquirer. For example, if a firm with lower borrowing costs purchased USEC, building a centrifuge plant might become more attractive; this would increase the likelihood that the centrifuge plant would be built. [This study has not evaluated how the issue of borrowing costs affects the valuation of Scenario 6.] Similarly, the valuations of scenarios might differ if synergies exist between USEC and the acquirer.

Identifying potential acquirers and evaluating potential synergies is beyond the scope of this study. Therefore, this study evaluates a scenario in which a third party acquires USEC solely for the financial gain represented by USEC's liquidation or "break-up" value. In such a case, the acquirer calculates the net present value of selling USEC's assets and paying its liabilities. If this value is sufficiently greater than the price at which USEC can be acquired, then the acquisition and liquidation are attractive for any entity that can raise the capital to carry out this plan. Note that this scenario could plausibly occur even if another scenario would result in a higher net present value, as long as USEC's market capitalization (which is USEC's price per share of stock multiplied by the number of shares outstanding) does not reflect the "true" value of USEC's available options (which always includes liquidating itself). In this case, the acquiring firm should be able to achieve a higher return by keeping the business running, but it may be willing to forego the added return if it is able to quickly achieve an adequate return without incurring significant operating risks.

USEC's current market value is approximately \$351 million (or 82.5 million shares at \$4.25 per share). A rough estimate of the firm's current liquidation value is \$848 million.<sup>26</sup> The current value of this option, therefore, is the difference between these two figures, or \$497 million, although the acquirer would receive less due to transaction costs. It follows that acquisition and liquidation by an outside entity may pose a threat when ownership restrictions expire in July 2001. This threat is likely a factor in USEC's plans to buy back additional stock and to pay high dividends.<sup>27</sup>

---

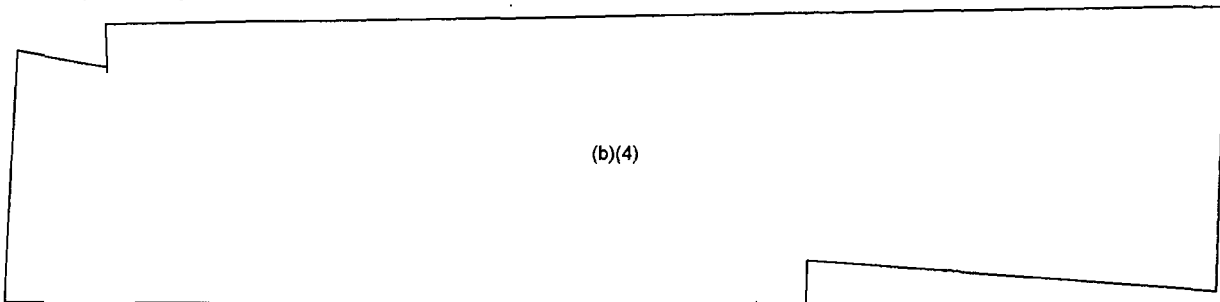
<sup>26</sup> Source: ICF estimate based on USEC's FY 2000 balance sheet on USEC's web site. This estimate assumes USEC liquidates all inventories and pays off all liabilities.

<sup>27</sup> Dividend payments and share repurchases both use cash and, therefore, directly reduce the cash available to potential acquirers.

### 3.8 Energy Costs

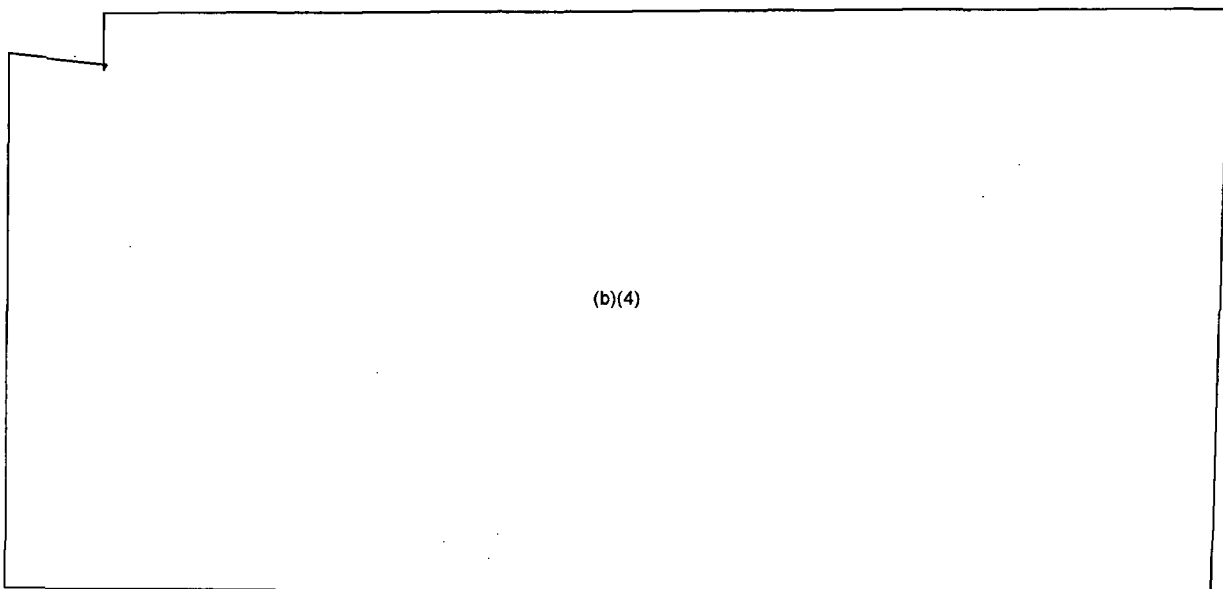
Uranium enrichment at the GDPs requires large amounts of electricity, historically more than 20 million megawatt hours (MWhr) per year at both plants. Power costs represent 55 to 60 percent of USEC's cost of production. USEC has also generated profit in recent years from the sale of electricity back to one of its suppliers ("monetized power").

This study estimated annual energy costs and revenues based on USEC's projections, other USEC documents, and information from the Energy Information Administration (EIA). Energy costs are not modeled explicitly in this study, however, but rather are embedded in broader cost functions (see Section 3.2). The results discussed in this section have been used to verify assumptions made in the cash flow model and as inputs to the sensitivity analysis.



Given the operating inefficiencies inherent to the GDPs relative to other commercial enrichment technologies, this study is less sensitive to changes in power costs than to other key factors (such as the price of Russian SWU, the number of operating GDPs, and the development of a centrifuge plant).

#### Power for the Paducah GDP



prices seem reasonable based on data provided by EIA (discussed below). If USEC decides not to purchase any power from EEI, it will incur a demand charge through 2005 when the contract expires. (See discussion of demand charges below.)

#### Power for the Portsmouth GDP

The Portsmouth plant receives all of its power through USEC's contract with Ohio Valley Electric Corp (OVEC), which expires in 2005. According to USEC, the company has a firm power contract for access to as much as 1,900 MW capacity. (USEC's financial documents state that the contract is for 100 percent of the power generated by OVEC.) In the past 2 years, USEC has used about 60 percent of the total MWhrs available under the contract. The average price per MWhr paid by USEC was \$20.24 in FY 1998.

According to information provided by USEC, USEC has notified OVEC of its intention to terminate its contract in 2003. The utility is expected to incur a large cost in 2003 for compliance with environmental regulations. Under the terms of the contract, this cost is passed on to USEC in total, payable in the year the cost is incurred. Because the OVEC contract expires in 2005, USEC would receive little benefit in return for the large capital expenditure. USEC has indicated that it will not be obligated to pay the demand charge after 2003.

#### Demand Charges

Demand charges are paid whether or not USEC takes delivery of power. These charges are included as part of the price unless USEC does not purchase any power. USEC provided estimates of these charges for each contract (see Exhibit 3-4). It should be noted that USEC provided much higher estimates of the total demand charges for both contracts in the Company's 1999 10-K. This study used the more recent estimates provided by USEC for this analysis.

#### EIA Forecasts

EIA has forecasted retail electricity prices for industrial customers through 2020 as part of the Annual Energy Outlook 2000 (AEO2000). EIA projects prices decreasing by an average of 0.6 percent per year from 1998 to 2020 for both the East North Central (ENC) region (including OH and IL) and East South Central

Exhibit 3-4  
Estimated Demand Charge  
(million)

Year	OVEC	EEI
1999	\$92.0	\$49.5
2000	\$59.4	\$38.0
2001	\$84.0	\$24.5
2002	\$90.7	\$17.6
2003	\$100.3	\$10.7
2004	\$108.0*	\$3.8*
2005	\$116.1*	\$0*

\* ICF estimate based on USEC data.

(ESC) Region (including KY).<sup>28</sup> EIA projects retail electricity prices to industrial customers decreasing an average of 0.4 percent per year from 1998 to 2020 for the East Central Area Reliability Coordination Agreement (ECAR) Region, which includes both KY and OH.<sup>29</sup>

USEC purchases power at rates closer to wholesale than retail. Because forecasts of wholesale prices are not included in the AEO2000, the study used fuel costs to electricity generators (which are included in the AEO2000) as a proxy for wholesale prices. The cost of producing electricity is a function of fuel costs, operating and maintenance costs, and the cost of capital. For existing plants, fuel costs typically represent about 80 percent of total operational costs (fuel and operating and maintenance) for a 300-megawatt coal-fired plant and about 90 percent of the total operational costs for a gas-fired combined-cycle plant of the same size in 1997. In the ENC Census Division, EIA forecasted generator fuel prices to decrease an average of 1 percent per year from 1998 to 2006, then increase an average of 1 percent per year from 2006 to 2020, for a total average annual increase of 2 percent from 1998 to 2020.

These forecasts suggest that electricity prices in the regions in which the GDPs are located should not change much over the next 20 years and are likely to decrease slightly through 2006. Prices available to USEC could either decrease or increase slightly after 2006. Given that USEC is predicting prices that are higher than the prices it currently pays, its predictions seem plausible (see Exhibit 3-5).

Exhibit 3-5  
USEC Power Prices (\$/Mh)

	1998 (A)	1999 (A)	2000 (E)	2001 (E)	2002 (E)	2003 (E)
<b>Paducah</b>						
(b)(4)						
<b>Portsmouth</b>						
OVEC firm	\$20.24	\$21.26	\$18.74	\$22.35	\$23.09	\$24.67
New Supplier(s) price					\$26.00	\$26.00

(A) = actual, (E) = estimate

Source: USEC

<sup>28</sup> Tables 13 and 16 (prices and other information by Census Division).

<sup>29</sup> Tables 60 and 63 (prices and other information by NERC Region).

Potential Revenue or Offset to Cost

In the summer of FY 1999 and FY 2000, USEC sold unused power back to OVEC as an offset to production costs. USEC refers to this as "monetizing power." According to USEC, the company and OVEC agree on a quantity and price in advance. The quantity has been 700 MW for three months, approximately 1.5 million MWHrs. USEC booked \$31.7 million from monetized power in FY 1999 and expects to book \$45.9 million in FY 2000. Under the company's monthly moving average inventory cost method, USEC assigns the revenue as an offset to costs for the SWU generated in that year and then books the income as the SWU is sold. Thus, the profit generated each summer is booked over several years.

USEC announced on May 30, 2000 that it expects to realize a pretax cash benefit of \$44 million, or \$28 million after tax, from a new agreement with OVEC covering power usage for the summer of 2000. Under USEC's monthly moving average inventory cost method, the financial benefit will be spread across 3 fiscal years.

## **4. DESCRIPTION OF SCENARIOS AND ASSUMPTIONS**

### **4.1 Scenario 1: Continued operation of the two GDPs**

This scenario assumes that both GDPs continue to operate.<sup>30</sup> It also assumes that USEC reaches a new pricing agreement for continued purchase of downblended Russian HEU, with the agreement taking effect beginning in January 2002. Other scenario-specific assumptions include the following:

- USEC purchases 5.5 million SWU annually through FY 2001, then 6 million SWU annually beginning in FY 2002.
- USEC incurs research and development expenses associated with SILEX and gas centrifuge technology during the period 2000 to 2005.

For sensitivity purposes, the analysis considers a variation under which purchases of downblended Russian HEU cease at the end of 2001 (if a new pricing agreement is not negotiated). See Section 3.3 for a discussion of issues and assumptions related to the Russian agreement.

### **4.2 Scenario 2: Continued operation of only one GDP**

This scenario assumes that only the Paducah GDP continues to operate, with the Portsmouth plant halting enrichment operations on or before June 30, 2001, as announced by USEC. USEC provided certain financial projections based on a Paducah-only scenario, but the company indicated that the cost savings resulting from closure of either plant are (with the exception of power costs) believed to be similar. See Section 3.2 for a discussion of issues related to GDP operations and viability.

Under a one-plant scenario, USEC would be unable to fulfill its projected contractual demand absent the continued purchase of downblended Russian HEU (or purchase of SWU from other sources). Consequently, this scenario assumes that USEC reaches a new pricing agreement for continued purchase of downblended Russian HEU, with the agreement taking effect beginning in January 2002. For sensitivity purposes, the analysis considers variations under which purchases of downblended Russian HEU cease at the end of 2001 or are accelerated to 8 million SWU annually beginning in FY 2002. See Section 3.3 for a discussion of issues and assumptions related to the Russian agreement.

---

<sup>30</sup> See Section 3.2 for a discussion of issues related to GDP operations and viability.

Other scenario-specific assumptions include the following:

- One GDP plant will be closed as of the beginning of FY 2002 (i.e., July 1, 2001), and the remaining GDP will operate at less than its optimum capacity due to the purchase of Russian SWU.
- USEC purchases 5.5 million SWU annually from Russia through FY 2001, then 6 million SWU annually beginning in FY 2002.

#### **4.3 Scenario 3: Continued operation assuming the commercial deployment of advanced enrichment technology**

This scenario assumes that USEC invests in and builds a new 3-million SWU centrifuge plant. Production capacity at the new facility is assumed to come on line in stages, with 25 percent of capacity available and utilized in FY 2006, 50 percent in FY 2007, 75 percent in FY 2008, and 100 percent in FY 2009. This scenario also assumes that USEC halts enrichment operations at the Portsmouth GDP on or before June 30, 2001, and halts operations at the Paducah GDP on June 30, 2008. Other scenario-specific assumptions include the following:

- USEC is assumed to incur research and development expenses of \$30 million, \$60 million, \$10 million, and \$10 million in each of fiscal years 2001 through 2004, respectively.
- The investment required to design, license, and build the new plant is assumed to be \$1.25-\$1.5 billion over the five fiscal years 2005-2009, with the investment allocated to those years in the following amounts: \$175 million, \$320 million, \$380 million, \$290 million, and \$80 million.
- Energy costs of the centrifuge plant are assumed to be \$33 per SWU, or \$100 million per year once the plant is fully operational.
- USEC reaches a new pricing agreement for continued purchase of downblended Russian HEU, with the agreement taking effect beginning in January 2002. See Section 3.3 for a discussion of issues and assumptions related to the Russian agreement.
- USEC purchases 5.5 million Russian SWU annually through FY 2001, then 6 million SWU annually beginning in FY 2002.
- The GDP will produce the difference between the sales volume less the Russian purchases, the U.S. HEU-derived SWU, and the centrifuge-plant-produced SWU.
- USEC will not receive a federal loan guarantee on plant-related debt or a partial subsidy for research and development costs associated with the centrifuge plant.

For sensitivity purposes, the analysis considers variations under which one GDP closes beginning in FY 2002 but the other GDP continues enriching uranium indefinitely, and under which no Russian SWU is received beginning in FY 2002. The analysis also considers the effect of bringing the centrifuge plant on-line beginning in FY 2004 rather than FY 2006.

#### **4.4 Scenario 4: Operation of the business as a broker of SWU**

In this scenario, USEC is assumed to close both GDPs, but to continue in business as a broker of enrichment services. USEC would retain its current SWU contracts and would continue to market SWU obtained through the Russian agreement and through downblending of U.S. HEU. Other scenario-specific assumptions include the following:

- Both GDPs are closed at the end of FY 2001.
- Revenues are generated by selling natural uranium inventory, SWU inventory, SWU from downblended U.S. HEU, and SWU from the Russian contract.
- The Russian contract amounts are increased to 6 million SWU annually beginning in FY 2002.

For sensitivity purposes, the analysis considers a variation under which purchases of downblended Russian HEU are accelerated to 9.3 million SWU annually beginning in FY 2002, thereby shortening the effective life of the Russian agreement such that it would end in approximately 2009. See Section 3.3 for a discussion of issues and assumptions related to the Russian agreement.

#### **4.5 Scenario 5: Cessation of all operations**

In this scenario, USEC would liquidate itself by selling its assets (including its inventories and its long-term SWU contracts), paying its liabilities, and returning any net worth to shareholders. Other scenario-specific assumptions include the following:

- Assets will be sold for the values on USEC's balance sheet.

#### **4.6 Scenario 6: Acquisition of USEC to sell its assets**

This scenario assumes that USEC is acquired by another corporate entity for its liquidation or "break-up" value. The acquirer purchases a controlling interest in USEC and liquidates the company consistent with Delaware law and USEC's by-laws. USEC's salable and liquid assets include cash, accounts receivable, inventories, and certain prepaid items. This scenario is identical to Scenario 5 (cessation of all operations) except that the liquidation of the company would be initiated by an acquiring entity rather than by USEC itself, and the



liquidation value is reduced by the cost of obtaining USEC's stock. Other scenario-specific assumptions include the following:

- Assets will be sold for the values on USEC's balance sheet.
- Transaction costs are not considered so the valuation of this scenario is overstated.

#### **4.7 Other Assumptions**

In addition to the scenario-specific assumptions discussed above, the analysis also assumes the following:

##### **Plant Capacities**

1. The Paducah GDP is assumed to have a practical capacity of 8 million SWU per year.
2. The Portsmouth GDP is assumed to have a practical capacity of 5.5 million SWU per year.

##### **Revenues**

3. USEC's projected revenue from SWU sales that have already been contracted are firm and will not change enough to warrant including any variability in the analysis.
4. USEC's projected revenue from uranium sales that have already been contracted are firm and will not change enough to warrant including any variability in the analysis.
5. USEC will sell all but 5,000 metric tons of its natural uranium inventory by the end of FY 2005 and thus will not receive revenues from uranium sales after FY 2005. The 5,000 metric tons is assumed to remain in USEC's inventory to allow USEC to provide more flexibility in contract terms for its customers.
6. Revenue per SWU for the years 2000 to 2005 is based on the current contract backlog reported by USEC and the assumed SWU market price.

The following table shows contracted and to be contracted SWU prices:

FY	Contracted SWU (Thousands)	Contracted Revenue (Millions of \$)	Average Contract Price (\$/SWU)	To Be Contracted SWU (Thousands)	Average To Be Contracted Price (\$/SWU)*
2000					
2001					
2002			(b)(4)		
2003					
2004					
2005					

\* These are equivalent to the assumed market prices in each year.

The weighted average SWU selling price from the contracted and to be contracted amounts are as follows:

FY 2000 -	(b)(4)
FY 2001 -	
FY 2002 -	
FY 2003 -	
FY 2004 -	
FY 2005 -	

7. (b)(4)

8. The estimated SWU spot price is assumed to be \$80 in 2000, \$80.50 in 2001, \$81 in 2002, \$81.50 in 2003, and \$82 in 2004 and beyond. Projections are based on information from DOE's Energy Information Agency.
9. Under the renegotiated Russian agreement USEC will purchase 6 million SWU per year from Russia.
10. For scenarios where the amount of Russian SWU received is higher than 6 million SWU, the amount of Russian SWU received in the last year that Russian SWU is available is equal to 92 million SWU minus the sum of all previous amounts received.

### Expenses

11. The cost of SWU purchased under the Russian HEU agreement is in accordance with the current pricing schedule through FY 2001. Beginning in calendar year 2002, the cost of the Russian SWU is assumed to be (b)(4) below the market value in each year. Thus for FY 2002 the average of the existing contract price and the projected new contract price is used as the cost of Russian SWU. The analysis assumes that one half of the Russian SWU is received in each of the last half of CY 2001 and the first half of CY 2002. Except where noted under a specific scenario, USEC is assumed to purchase all Russian SWU called for under the current Russian HEU agreement.

The cost of Russian SWU used in the analysis in each year is:

FY 2000	(b)(4)
FY 2001	(b)(4)
FY 2002	(b)(4)
FY 2003	(b)(4)
FY 2004 and after	(b)(4)

For the purposes of sensitivity analysis, the discount of Russian SWU from the market price was varied from (b)(4) percent.

12. The cost of GDP-produced SWU will vary due to changes in electricity costs. All other costs are assumed to have too small a variation to be included in the analysis.
13. Per SWU production costs at each plant are calculated from plant specific polynomial equations that are based on data supplied by USEC (see Exhibit 3-2). The production cost curves reflect FY 2002 electricity costs.<sup>31</sup> The assumed electricity costs used in the production curves are: for Portsmouth \$23.09 per MWhr and for Paducah (b)(4) per MWhr. Adjustments to total production costs are made in each year to account for changes in unit electricity costs.
14. In fiscal years 2001 and later the electricity costs for Paducah are assumed to be (b)(4) per MWhr, which is equal to the cost in the Tennessee Valley Authority (TVA) agreement signed in July 2000.
15. In fiscal years 2001 to 2003, the electricity costs for Portsmouth are assumed to be \$22.35, \$23.09, and \$24.67 per MWhr, respectively. For Portsmouth in FY 2004 and

---

<sup>31</sup> USEC stated that the production curves are based on FY 2002 costs during the May 15, 2000 meeting with NRC, USEC, and ICF.

later, the cost of electricity is assumed to be  $\boxed{(b)(4)}$  per MWhr, which is the same as the TVA agreement.

16. The conversion of SWU to MWhrs is assumed to be  $\boxed{(b)(4)}$  MWhr per SWU.<sup>32</sup> The projected MWhrs for fiscal years 2004 and later are calculated by multiplying estimated SWU production by  $\boxed{(b)(4)}$  MWhr per SWU. If both plants are assumed to be open under the scenario, the MWhrs are assumed to be divided evenly between the two plants.
17. The cost of purchasing the SWU downblended from U.S. HEU will vary with a maximum cost of  $\boxed{(b)(4)}$  per SWU. The analysis assumes a cost of  $\boxed{(b)(4)}$  per SWU.
18.  $\boxed{(b)(4)}$
19. The current debt of \$500 million will be paid off using available cash or refinanced when it comes due if USEC is projected to be in business at that time.
20. The analysis assumes that USEC earns interest on its cash holdings. The interest earned on cash holdings is assumed to be 5 percent of the average cash on hand for the year.
21. USEC will not monetize power after the summer of 2000. Income received from the sale of power accrues over several years due to USEC's accounting practices, and will cease at the end of FY 2003. USEC will not incur demand charges for OVEC after 2003.
22. USEC's effective tax rate is assumed to be  $\boxed{(b)(4)}$  percent.
23. SWU production at the GDPs is assumed to be split evenly between the two plants, as long as both plants are open.
24. The fixed and labor costs at each GDP are assumed to be  $\boxed{(b)(4)}$  per year. The fixed and labor costs are assumed to be embedded in the production cost curves (see Exhibit 3-2). Consequently, the analysis reflects planned staffing levels even though no specific assumptions have been made regarding numbers of employees.
25. Whenever possible, USEC will take advantage of net operating loss tax carrybacks during years that the company has a net operating loss.

---

<sup>32</sup> USEC stated in the April 20, 2000 meeting that a good rule of thumb for converting MWhr to SWU is  $\boxed{(b)(4)}$  MWhr/SWU.

<sup>33</sup> Source: BNY Capital Markets Inc. analysis of USEC dated April 7, 2000.

26. Selling, general, and administration (SGA) expenses are assumed to be constant at \$46 million, which is the amount USEC projects for fiscal years 2000, 2001, 2002, and 2003.
27. The analysis assumes that USEC will spend \$117 and \$71 million in FY 2000 and FY 2001, respectively, for repurchasing stock.
28. Based on press releases issued by the company, USEC will incur special charges of \$80 million in FY 2000 for the closure of Portsmouth above the estimate contained in USEC's April 14, 2000 submittal.

### **Investments and Financing**

29. For FY 2000 and 2001, the SILEX research and development (R&D) costs are assumed to be \$12 and \$10 million respectively. After FY 2001, the SILEX R&D costs are assumed to be constant at \$7 million annually through FY 2012.
30. Capital expenditures for GDP plant upgrades are assumed to be \$11 million per year for years beyond FY 2003 (the last year for which USEC provided estimates).
31. New debt is assumed to be required when there is a deficit of cash on hand (after dividends) exceeding \$100 million in two or more consecutive years. For deficits of \$0-\$100 million, the analysis assumes that USEC would use short term borrowing to cover the deficit. The analysis does not estimate the interest expense for any short term borrowing. The assumed interest rate for new borrowing is 8 percent.

### **Cash Flow Calculations**

32. The non-cash expense adjustments (except for depreciation) and changes in account adjustments made to net income to calculate free operating cash flow for years beyond USEC's projections are assumed to decline over time to zero in FY 2007.
33. Cash flows and their net present values are calculated before dividend payments and cash used to repurchase stock.
34. Dividends are assumed to remain at the current value of \$0.55 per share.
35. The number of shares outstanding is expected to fall due to share repurchases. For purposes of calculating dividend payments, shares outstanding are assumed to be 95 million in 2000, 80 million in 2001 and 70 million in 2002 and beyond.
36. The discount rate used to calculate the present value of future cash flows is 10 percent.

## 5. RESULTS AND SENSITIVITY ANALYSIS

This section describes the study's findings. Section 5.1 individually evaluates each scenario described in Section 4 to determine whether the scenario is consistent with continued positive cash flows. Section 5.2 assesses how the findings of the analysis might change based on a sensitivity analysis of key parameters. Finally, Section 5.3 summarizes the findings of the analysis.

### 5.1 Evaluation of Individual Scenarios

This study evaluates USEC's financial condition under each scenario by projecting the direction and magnitude of the company's future cash flows. (See Section 2.3 of this report for a discussion of the cash flow model and the use of cash flow as an indicator of firm financial condition.) The study also considers USEC's cost of producing SWU relative to the price the company receives for selling SWU. Each scenario is discussed in turn below. Exhibit 5-1 summarizes the analysis of Scenarios 1-4 (and variations) relative to the criteria noted above. (Scenarios 5 and 6 each assume that USEC will be liquidated and, consequently, cannot be usefully summarized in terms of production costs or a series of cash flows.)

#### 5.1.1 Scenario 1: Continued operation of the two GDPs

Under this scenario, USEC continues to operate both GDPs, and the company successfully renegotiates the Russian agreement. Under Scenario 1, USEC delivers SWU derived from four sources: the GDPs, the Russian agreement, an outsourced downblending of U.S. HEU, and inventory (see the first exhibit in Appendix 1.1). USEC's average revenue per SWU exceeds its average cost per SWU until approximately FY 2002, at which time the average cost per SWU begins to exceed the average revenue per SWU (see the second exhibit in Appendix 1.1). However, the average cost per SWU actually enriched by USEC, which includes only GDP-produced SWU under this scenario, exceeds USEC's average revenue per SWU beginning in FY 2001 (see the third exhibit in Appendix 1.1). Nevertheless, cash flow remains positive through FY 2005 due to the added revenue generated by sales of uranium (see the fourth exhibit in Appendix 1.1) and, to a lesser extent, on margins provided by legacy contracts.

This study also projects that USEC is unlikely to maintain positive cash flow beyond FY 2005, when sales of uranium inventory are expected to be minimal.<sup>34</sup> Moreover, USEC's cash flow may be negative in FY 2005 if the company does not negotiate sufficiently profitable terms

---

<sup>34</sup> Cash flows are expected to be negative beyond FY 2005 despite a decrease in the average cost of USEC produced SWU in FY 2006. The average cost of USEC produced SWU decreases because of increased GDP production volume, which lowers the average unit cost of production. GDP production increases in FY 2006 to make up for the loss of downblended U.S. HEU SWU, which ends in FY 2005.

under the new Russian agreement (e.g., if the price USEC pays for Russian SWU under the new agreement does not change from that under the current agreement, or if the new price is set equal to the market price).

### **5.1.2 Scenario 2: Continued operation of only one GDP**

Under this scenario, USEC continues to operate only the Paducah GDP and it successfully renegotiates the Russian agreement. USEC delivers SWU derived from four sources: the GDPs, the Russian agreement, an outsourced downblending of U.S. HEU, and inventory (see the first exhibit in Appendix 1.2). USEC's average revenue per SWU exceeds its average cost per SWU until approximately FY 2007, at which time the average cost per SWU begins to exceed the average revenue per SWU (see the second exhibit in Appendix 1.2). However, the average cost per SWU actually enriched by USEC, which includes only GDP-produced SWU under this scenario, exceeds USEC's average revenue per SWU beginning in approximately FY 2003 (see the third exhibit in Appendix 1.2). Nevertheless, cash flow remains positive through FY 2006 due primarily to the added revenue generated by sales of uranium (see the fourth exhibit in Appendix 1.2).

The analysis also projects that USEC is unlikely to maintain positive cash flow beyond FY 2006 when sales of uranium inventory are scheduled to end.<sup>35</sup> This projection would not change if the company is unable to renegotiate the Russian agreement (and consequently receives no Russian SWU beginning in FY 2002), or if the price USEC pays for Russian SWU under the new agreement does not change from that under the current agreement, or if the new price is set equal to the market price.

---

<sup>35</sup> Cash flows are expected to be negative beyond FY 2006 despite a decrease in the average cost of USEC produced SWU in FY 2006. The average cost of USEC produced SWU decreases because of increased GDP production volume, which lowers the average unit cost of production. GDP production increases in FY 2006 to make up for the loss of downblended U.S. HEU SWU, which ends in FY 2005.

Exhibit 5-1  
Summary of Findings Under Various Scenarios and Subscenarios

Subscenarios	Scenario							
	1. Two GDPs		2. One GDP		3. New Technology		4. Broker SWU	
	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY	FY in which GDP Production Costs Exceed USEC's SWU Selling Price	Cash Flow Positive Through FY
<i>Status of GDP Operations</i>								
A. Both GDPs operate	2001	2005			2001	2004		
B. Only Paducah operates			2003	2006	2003	2005		
C. Only Portsmouth operates			2001	2006	2001	2005		
D. No GDPs operate					2003	2005, and after 2008		beyond 2010
<i>Status of Russian Agreement Beginning in 2002</i>								
E. Continue at current price	2001	2004	2003	2005	2003	2004, and after 2008		2006
F. Continue at market price	2001	2004	2003	2006	2003	2004, and after 2008		2006
G. Continue at market price less 12%	2001	2005	2003	2006	2003	2005, and after 2008		beyond 2010
H. No Russian SWU	2001	2005	2003	2006	2003	2004, and after 2009		
<i>Federal Support for Centrifuge</i>								
I. Loan guarantee, R&D subsidized by DOE					2003	2005, and after 2008		
J. No federal support					2003	2005, and after 2010		

Note: Shading indicates cells that are not applicable to the scenario.



### 5.1.3 Scenario 3: Continued operation assuming the commercial deployment of advanced enrichment technology

Under this scenario, USEC is assumed to build a 3 million SWU-capacity centrifuge plant that would come on line in stages, with 25 percent of capacity available and utilized in FY 2006, 50 percent in FY 2007, 75 percent in FY 2008, and 100 percent in FY 2009. This scenario also assumes that USEC halts enrichment operations at one GDP on or before June 30, 2001, and halts operations at the other GDP on June 30, 2008. As discussed in Section 3.5, it is uncertain as to whether USEC will build this plant.

Under Scenario 3, USEC delivers SWU derived from five sources: the GDPs, the new gas centrifuge plant, the Russian agreement, the outsourced downblending of U.S. HEU, and inventory (see the first exhibit in Appendix 1.3). USEC's average revenue per SWU exceeds its average cost per SWU in all years (see the second exhibit in Appendix 1.3). However, except for in FY 2002, the average cost per SWU actually enriched by USEC, which includes both GDP-produced SWU and centrifuge-produced SWU, exceeds USEC's average revenue per SWU for the fiscal years 2001-2008 -- that is, until the second GDP is shut down (see the third exhibit in Appendix 1.3). Cash flow, initially positive due to uranium sales, is driven negative beginning in FY 2006 due to the company's ongoing investment in the centrifuge plant. Cash flow remains negative until FY 2009, at which time the remaining GDP closes and the new plant is fully operational and producing SWU at a profit (see the fourth exhibit in Appendix 1.3).<sup>36</sup>

The company would not return to positive cash flows in FY 2009, however, if USEC does not close the second GDP or if the company is unable to renegotiate the Russian agreement (and consequently receives no Russian SWU beginning in FY 2002).

### 5.1.4 Scenario 4: Operation of the business as a broker of SWU

Under this "broker scenario," both GDPs cease operations beginning in July 2001. USEC liquidates its inventories (of uranium, SWU, and LEU from downblended U.S. HEU) and sells Russian SWU for the duration of the Russian agreement (i.e., through FY 2013).<sup>37</sup> USEC also delivers SWU from downblended U.S. HEU through FY 2005. (See the first exhibit in Appendix 1.4.) USEC's average revenue per SWU exceeds its average cost per SWU in all years (see the second exhibit in Appendix 1.4). USEC does not enrich any SWU itself after FY

---

<sup>36</sup> This scenario is not sensitive to the price negotiated under the new Russian agreement. USEC's cash flows are projected to become positive again even if the price paid for Russian SWU under the new agreement does not change from that under the current agreement.

<sup>37</sup> This scenario does not consider the possibility that the Russian agreement might not be renewed in FY 2002 because such the possibility is inconsistent with USEC staying in business as a SWU broker.

2001 (see the third exhibit in Appendix 1.4). Cash flow remains positive in all years (see the fourth exhibit in Appendix 1.4). However, the analysis also projects that USEC is unlikely to remain in business beyond FY 2013 when Russian SWU is assumed to become unavailable.

### **5.1.5 Scenario 5: Cessation of all operations**

In this scenario, USEC would liquidate itself by selling its assets (including its inventories and its long-term SWU contracts), paying its liabilities, and returning any net worth to shareholders. Consequently, this scenario, does not provide any ongoing cash flows once the liquidation has occurred.

### **5.1.6 Scenario 6: Acquisition of USEC by another party**

The continued operation of USEC if acquired by another entity would depend on the identity of the acquirer and its specific plans regarding USEC, neither of which can be predicted at this time. Therefore this scenario assumes USEC is acquired solely for the financial gain represented by USEC's liquidation or "break-up" value. Consequently, as defined, this scenario does not provide any ongoing cash flows once the liquidation has occurred. The value of breaking up the company (see Appendix 1.6) is low relative to other scenarios. Because the break-up value is positive and growing, however, other entities may find it increasingly profitable to acquire and liquidate USEC beginning at the end of July 2001 (when ownership restrictions expire). This scenario depends significantly on the magnitude of transaction costs (which were not accounted for in the analysis), on USEC's future dividend policy, and on whether USEC's price per share remains below the break-up value per share.

## **5.2 Sensitivity Analysis of Key Parameters**

Sensitivity of the results to changes in key parameters has been considered in two ways. First, to help design the most likely scenarios, alternative versions of certain scenarios are analyzed:

- Scenarios 1, 2, and 4 are analyzed based on alternative terms of the to-be-renegotiated Russian agreement.
  - Scenario 1a (which is presented as Scenario 1 throughout the main body of this report) assumes that USEC receives under the new agreement 6 million SWU annually beginning in FY 2002. Scenario 1b assumes the agreement is not continued so USEC receives no Russian SWU beginning in FY 2002.
  - Scenario 2a (which is presented as Scenario 2 in the main body of this report) assumes that USEC receives under the new agreement 6 million SWU annually beginning in FY 2002. Scenario 2b assumes that

purchases under the agreement are accelerated to 8 million SWU annually beginning in FY 2002.<sup>38</sup> Scenario 2c assumes the Russian agreement is not continued so USEC receives no Russian SWU beginning in FY 2002.

- Scenario 4a (which is presented as Scenario 4 in the main body of this report) assumes that USEC receives under the new agreement 6 million SWU annually beginning in FY 2002. Scenario 4b assumes that purchases under the agreement are accelerated to 9.3 million SWU annually beginning in FY 2002.<sup>39</sup> The study does not consider a subscenario where the Russian agreement is not continued because such a subscenario would be inconsistent with USEC staying in business as a SWU broker.
- Scenario 3 is analyzed based on whether or not USEC continues to operate one of the GDPs while building a gas centrifuge plant, and on alternative terms of the to-be-renegotiated Russian agreement.
  - Scenario 3a assumes that a GDP will remain in operation, and that USEC receives under the new agreement 6 million SWU annually beginning in FY 2002.
  - Scenario 3b (which is presented as Scenario 3 in the main body of this report) assumes that USEC will not operate any GDPs once a gas centrifuge plant becomes fully operational at the beginning of FY 2009. It also assumes that USEC receives under the new agreement 6 million SWU annually beginning in FY 2002.
  - Scenario 3c is identical to Scenario 3b, but assumes that the gas centrifuge plant will come on line two years earlier (i.e., it will be fully operational by FY 2007).

---

<sup>38</sup> The accelerated purchase subscenario is considered under Scenario 2 (operation of one GDP) because USEC might reasonably wish to accelerate purchases of Russian SWU in order to improve short-term cash flow. This subscenario is not considered under Scenario 1 (operation of two GDPs). In accepting accelerated purchases, USEC would have to operate the GDPs at lower production levels that are more costly.

<sup>39</sup> Scenario 4b assumes purchases of Russian SWU are accelerated to 9.3 million SWU annually because that level is most beneficial to USEC under the broker scenario. In contrast, Scenario 2b accelerates purchases to only 8 million SWU annually because any higher level would more negatively impact operating costs at the remaining GDP (i.e., by reducing the volume of SWU enriched).

- Scenario 3d assumes that one GDP remains in operation (as in Scenario 3a), but that the Russian agreement is not continued, so USEC receives no Russian SWU beginning in FY 2002.

The study analyzed the results of these various subscenarios to inform the specification of the scenarios used throughout the main body of the report. Appendix 2 presents results for each of the above subscenarios. Exhibit 5-2 summarizes USEC's SWU production capacity under various scenarios and subscenarios.

Exhibit 5-2  
Summary of USEC's Production Capacity, in Millions of SWU,  
Under Various Scenarios and Subscenarios

Subscenarios	Scenario			
	1	2	3	4
	Two GDPs	One GDP	New Technology	Broker SWU
<i>Status of GDP Operations</i>				
A. Both GDPs operate	13.5		16.5	
B. Only Paducah operates		8	11	
C. Only Portsmouth operates		5.5	8.5	
D. No GDPs operate			3	0.00

Note: Shading indicates cells that are not applicable to the scenario.

The second way in which the study considers sensitivity is by individually varying key parameters to identify the threshold value at which USEC's projected cash flows would change direction (i.e., the point at which a negative scenario would become positive, or vice versa). The results of this second sensitivity analysis are summarized below:

Scenario 1: Continued Operation of Both GDPs

Under Scenario 1, USEC would maintain (i.e., beyond FY 2005) positive cash flows if any one of the following events were to occur before FY 2006:

- USEC's average contracted SWU price increases to approximately \$117 per SWU. (USEC's average contracted SWU price currently is projected to gradually decline toward the \$80 spot price, reaching \$90 in 2004 and \$82 in 2008.)
- USEC reduces GDP production costs at the GDPs by approximately 40 percent.

(b)(4)

To illustrate the sensitivity of Scenario 1 to the price of SWU under a renegotiated Russian contract two additional exhibits are included in Appendix 2.1.A that show USEC's cash flow if the renegotiated price is at the market price and USEC's cash flow if the renegotiated price is at the current agreement price. These two exhibits are the fifth and sixth exhibits in Appendix 2.1.A. In each case USEC's cash flow is projected to be positive through FY 2004.

Scenario 2: Continued Operation of One GDP

Under Scenario 2, USEC would maintain (i.e., beyond FY 2006) positive cash flows if any of the following events were to occur before FY 2007:

- USEC's average contracted SWU price does not fall below \$89. (Currently, USEC's average contracted SWU price is projected to gradually decline toward the \$80 spot price, reaching \$90 in 2004 and \$82 in 2008.)
- USEC reduces GDP production costs by approximately 11 percent (assuming Paducah is the operative plant). Based on discussions with USEC management, the company has already achieved most of the operating savings it expects to achieve at the GDPs.

(b)(4)

To illustrate the sensitivity of Scenario 2 to the price of SWU under a renegotiated Russian contract two additional exhibits are included in Appendix 2.2.A that show USEC's cash flow if the renegotiated price is at the market price and USEC's cash flow if the renegotiated price is at the current agreement price. These two exhibits are the fifth and sixth exhibits in Appendix 2.2.A. USEC's cash flow is projected to be positive through FY 2005 if the price is renegotiated at the current agreement price. USEC's cash flow is projected to be positive through FY 2006 if the price is renegotiated at the market price.

Scenario 3: Deployment of a Centrifuge Plant and No GDPs

Under Scenario 3, USEC's cash flows are projected to be negative beginning in FY 2006 and ending in FY 2008. The positive cash flows anticipated beginning in FY 2009 would not occur if any of the following events were to occur:

- USEC fails to reach agreement on an extension of the Russian Agreement beyond FY 2001.
- Centrifuge investment costs increase significantly (e.g., by 150-200 percent) from the \$1.5 billion assumed under the scenario.
- Annual centrifuge operating costs increase significantly (e.g., by 300 percent) from the \$100 million cost assumed under the scenario.

If energy costs are higher than \$33 per SWU, cash flows would be reduced once the centrifuge plant begins to operate, though they would remain positive. For example, costs of \$55 per SWU would reduce annual cash flow by \$66 million once the plant is fully operational.

To illustrate the sensitivity of Scenario 3 to the price of SWU under a renegotiated Russian contract two additional exhibits are included in Appendix 2.3.B that show USEC's cash flow if the renegotiated price is at the market price and USEC's cash flow if the renegotiated price is at the current agreement price. These two exhibits are the fifth and sixth exhibits in Appendix 2.3.B. In each case USEC's cash flow is projected to be positive through FY 2004 and after FY 2008.

#### Scenario 4: Broker Russian SWU

Under Scenario 4, USEC is projected to maintain positive cash flow through 2010. Cash flow could become negative, however, if the price it negotiates for the new Russian agreement is not at least 10 percent below market price.

To illustrate the sensitivity of Scenario 4 to the price of SWU under a renegotiated Russian contract two additional exhibits are included in Appendix 2.4.A that show USEC's cash flow if the renegotiated price is at the market price and USEC's cash flow if the renegotiated price is at the current agreement price. These two exhibits are the fifth and sixth exhibits in Appendix 2.4.A. In each case USEC's cash flow is projected to be positive through FY 2006.

#### Scenario 5: Cessation of All Operations

As Scenario 5 is specified, USEC cannot maintain positive cash flow (by definition).

#### Scenario 6: Acquisition of USEC by Another Party

Under Scenario 6, acquisition by another party becomes infeasible if USEC's market value exceeds the break-up value. Market value is calculated as price per share (currently about \$4.25) times the number of shares outstanding, both of which are subject to change. The difference between USEC's current market value and its projected break-up value in FY 2002 (when ownership restrictions in the Privatization Act expire) is nearly \$3 per share, less the

transaction costs (which are not quantified in this study) associated with such a purchase and liquidation.

### 5.3 Conclusions and Recommendations

- USEC as a firm is projected to generate positive cash flows for the next five years (i.e., FY 2001-2005). However, USEC cannot enrich uranium profitably at the GDPs given current market prices for SWU. USEC also cannot enrich uranium profitably at the GDPs once its average sales price (i.e., including legacy contracts) falls to levels that are expected in FY 2003.
- USEC cannot generate positive cash flows indefinitely beyond FY 2005, even if it ceases operations at one GDP. USEC is currently surviving financially based on inventory sales, legacy contracts, and (once the Russian agreement is renegotiated) Russian SWU.
- To generate positive cash flow in the long term, USEC needs to develop a less costly enrichment process to replace the GDPs. USEC should be able to generate positive cash flow beginning in FY 2009 if it closes the GDPs and builds a gas centrifuge plant or other advanced technology resulting in lower production costs. However, it is uncertain whether USEC will undertake an investment in a centrifuge plant given its stated expectations for return on investment.
- Alternatively, USEC could continue to generate positive cash flows in the medium term (i.e., through FY 2008 or FY 2012) by closing both GDPs and becoming a broker of Russian SWU.
- Acquisition and liquidation of USEC by an informed party becomes a risk at the end of July 2001 (when ownership restrictions expire) if USEC's price per share remains below the break-up value per share.
- NRC may wish to prepare itself for the possibility that, in a few years (e.g., when NRC is considering re-issuance of USEC's certificate of compliance in 2003), USEC's financial condition may not allow the expectation that the company can remain in business for an additional five years.

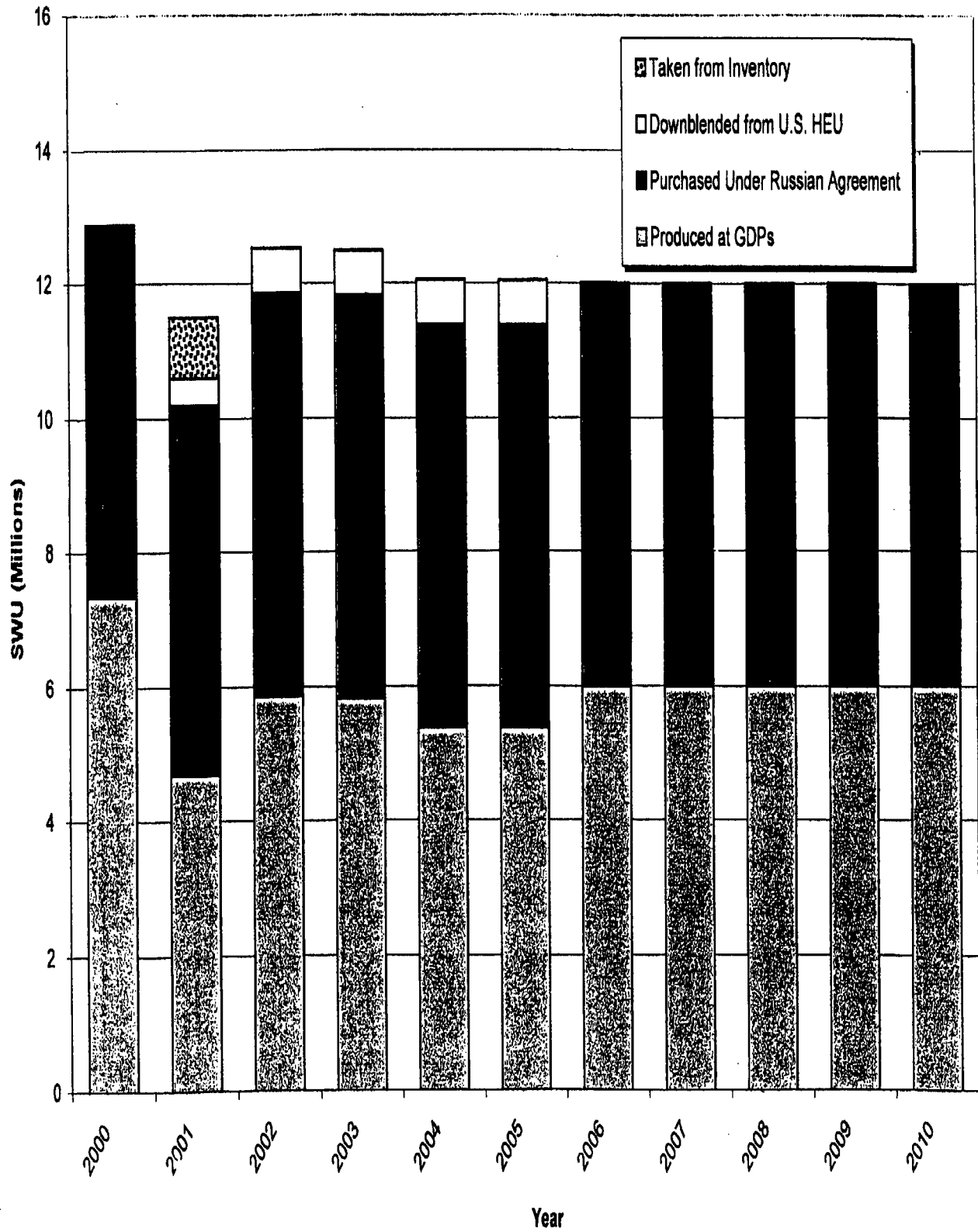
---

## **Appendix 1: Results by Scenario**

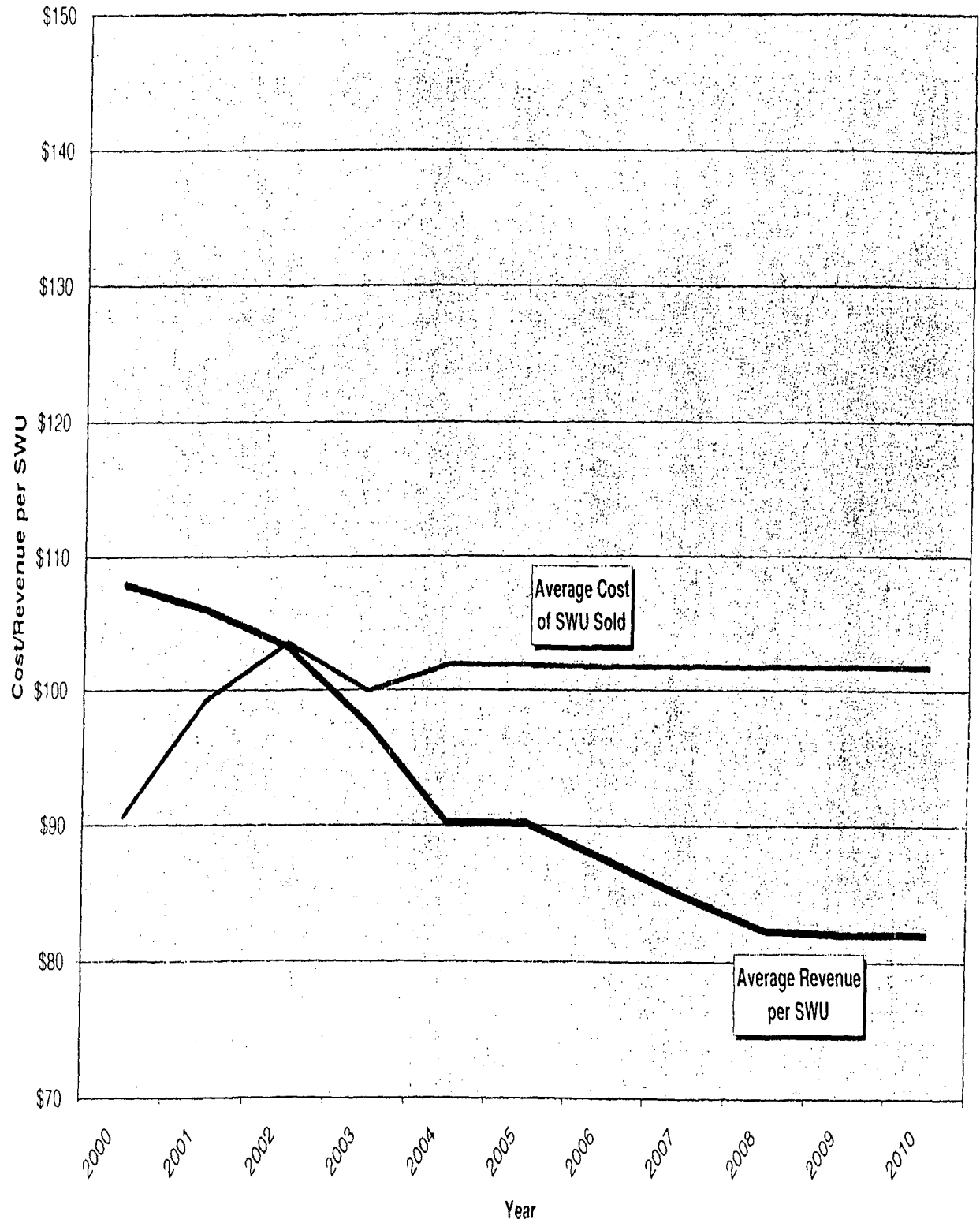
- 1.1 Scenario 1: Continued operation of the two GDPs
- 1.2 Scenario 2: Continued operation of only one GDP
- 1.3 Scenario 3: Continued operation assuming the commercial deployment of advanced enrichment technology
- 1.4 Scenario 4: Operation of the business as a broker of SWU
- 1.5 Scenario 5: Cessation of all operations
- 1.6 Scenario 6: Acquisition of USEC to sell its assets



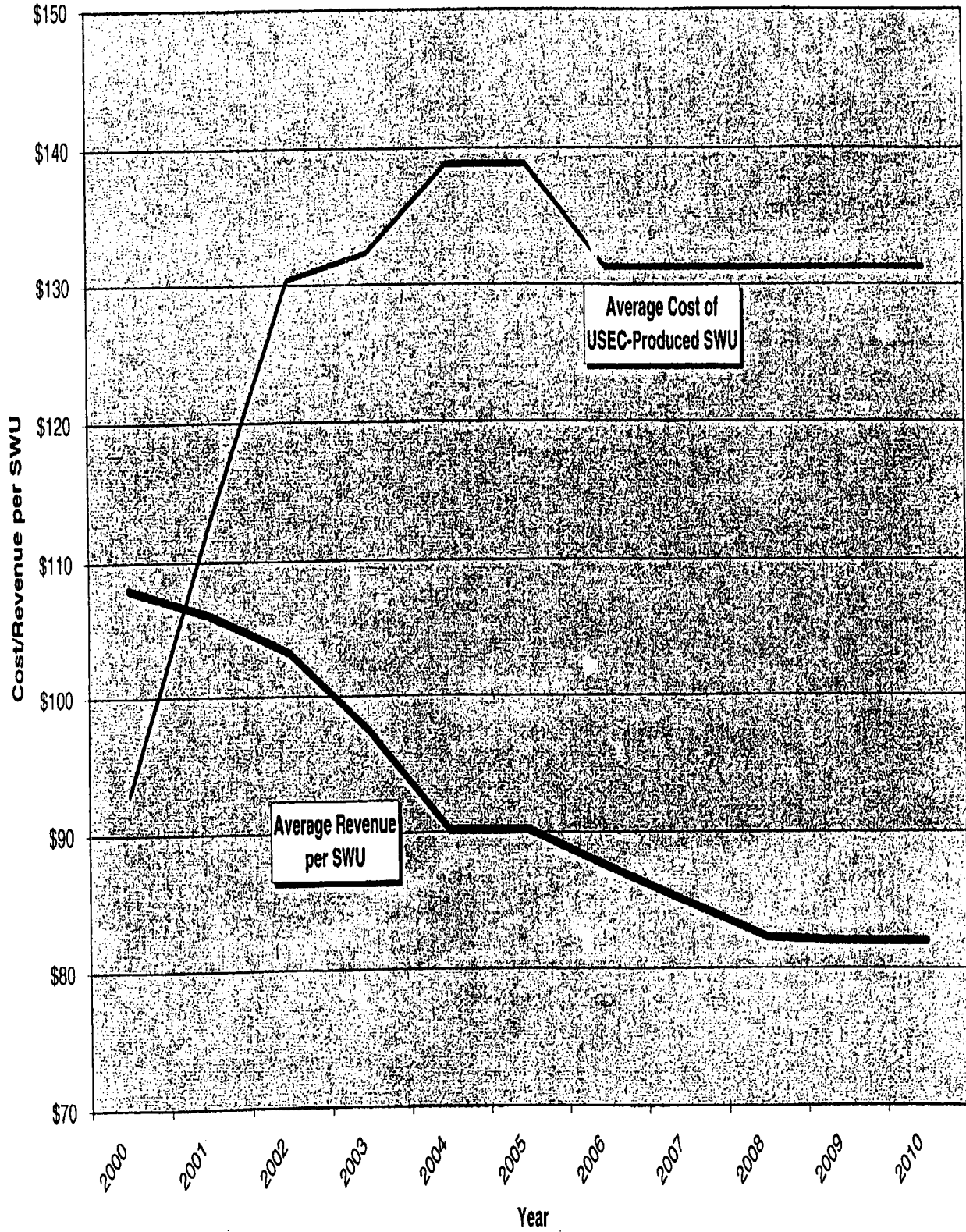
### Sources of SWU Scenario 1: Two GDPs



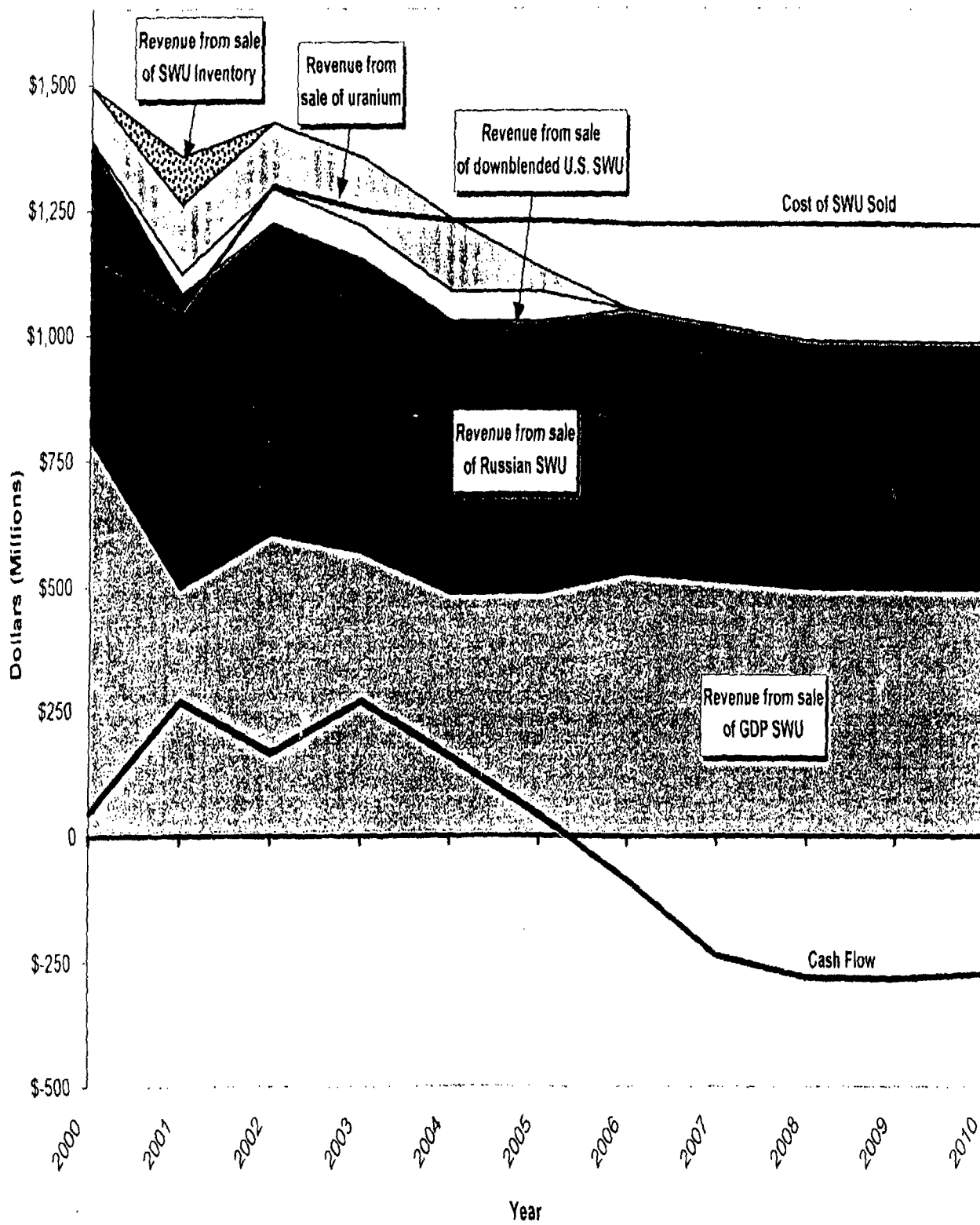
Revenue per SWU Relative to Average Cost per SWU  
Scenario 1: Two GDPs



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 1: Two GDPs



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 1: Two GDPs**



---

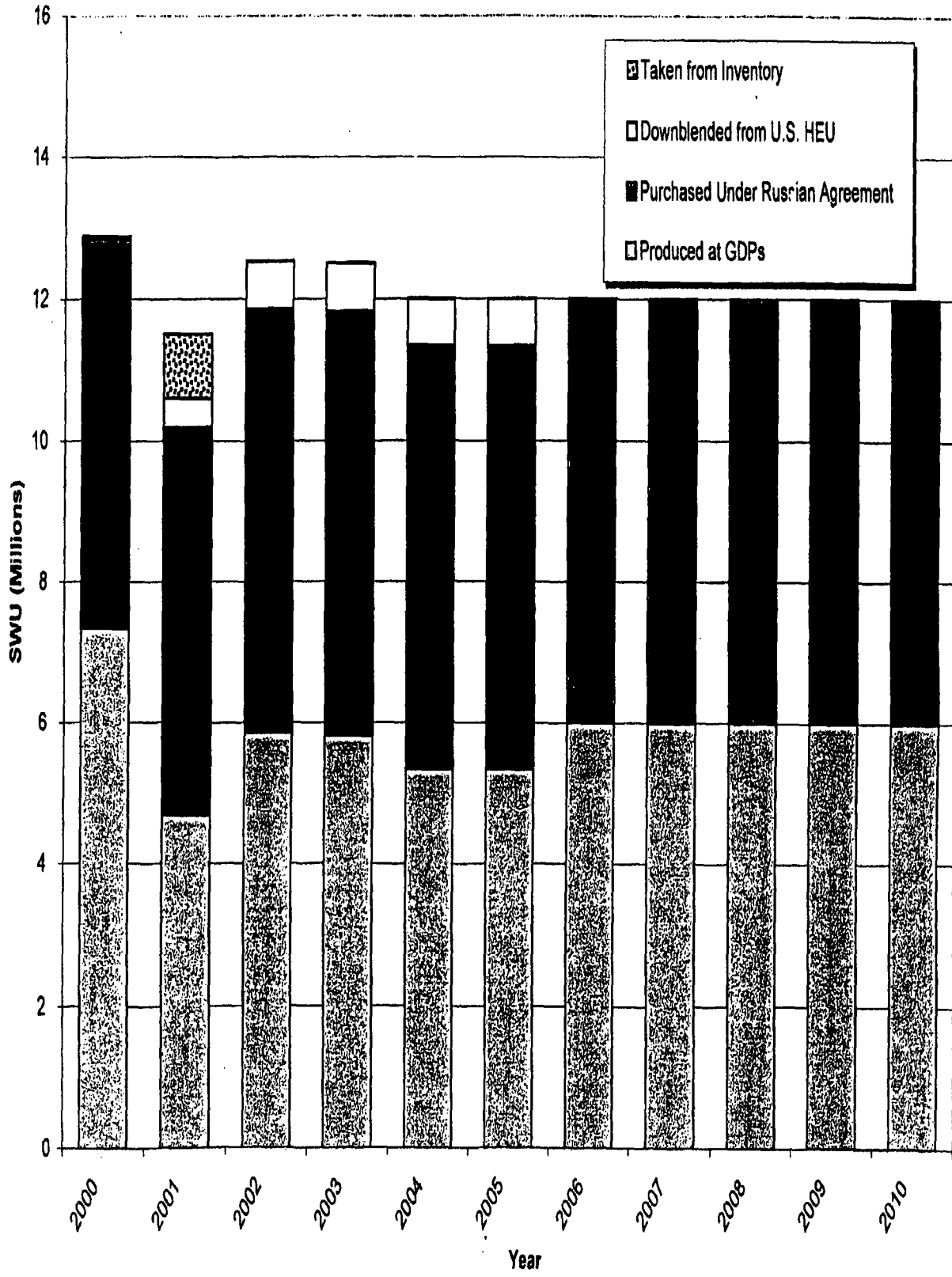
2000

2000

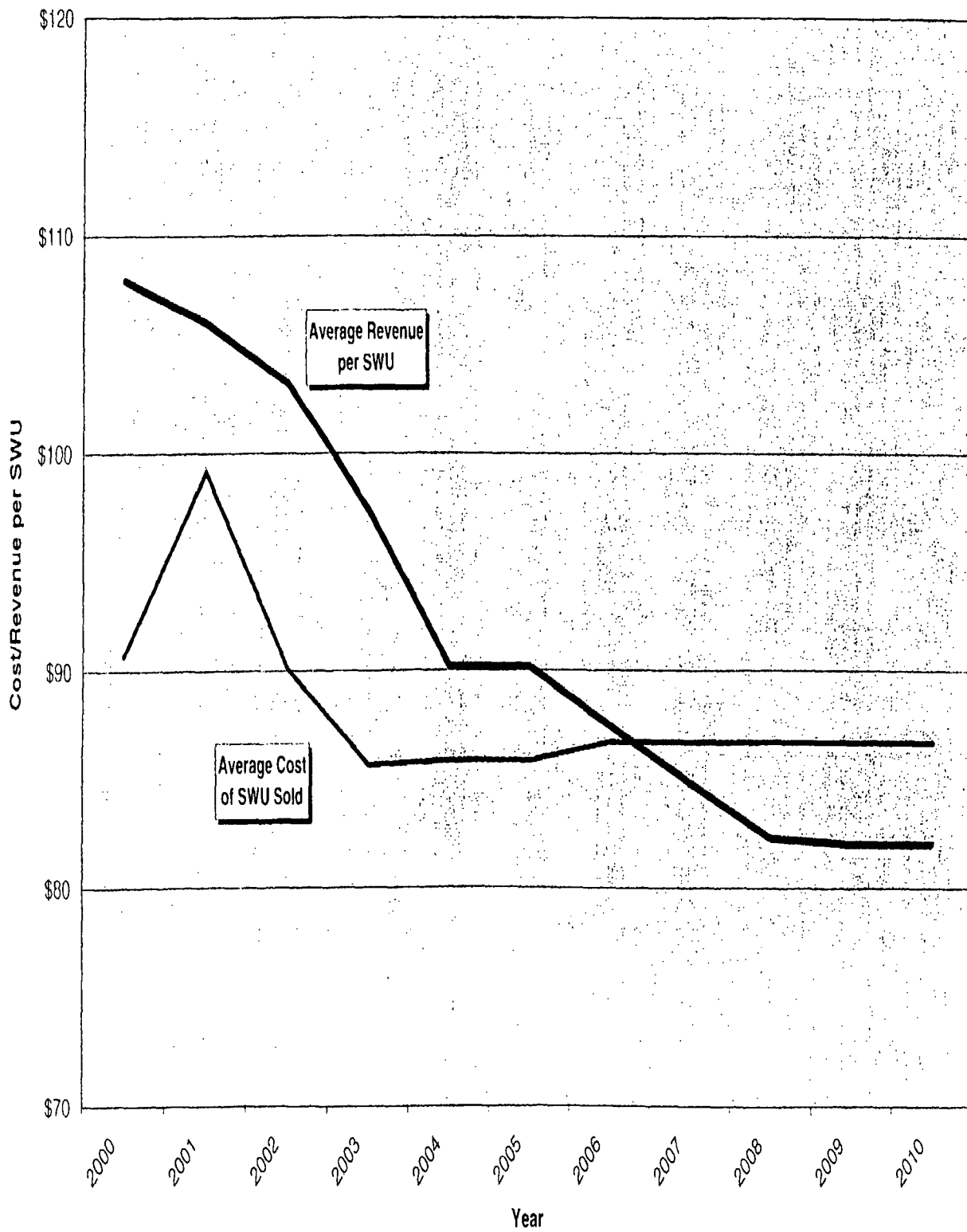
## Appendix 1.2: Results by Scenario

### Scenario 2: Continued operation of only one GDP

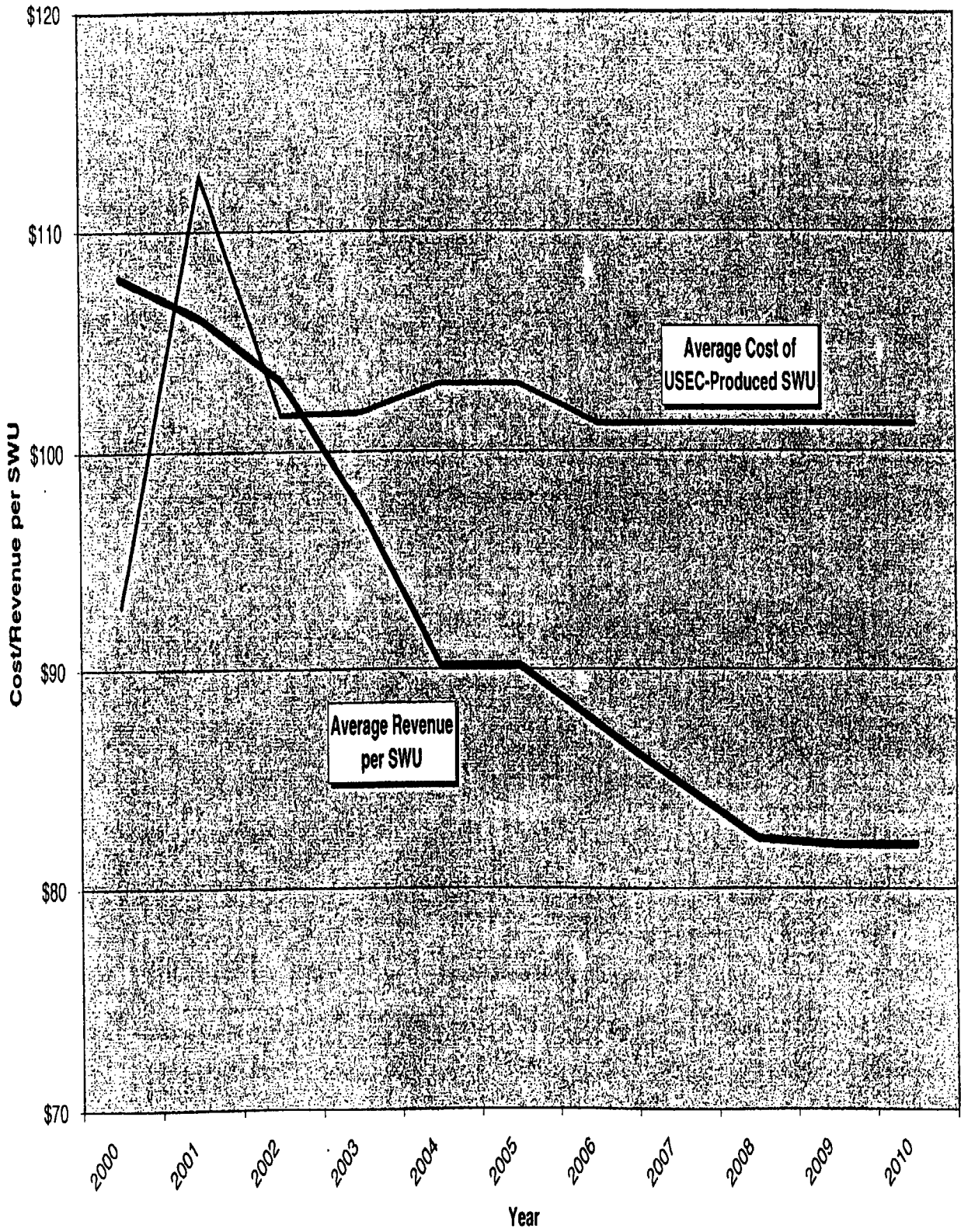
Sources of SWU  
Scenario 2: One GDP



Revenue per SWU Relative to Average Cost per SWU  
Scenario 2: One GDP

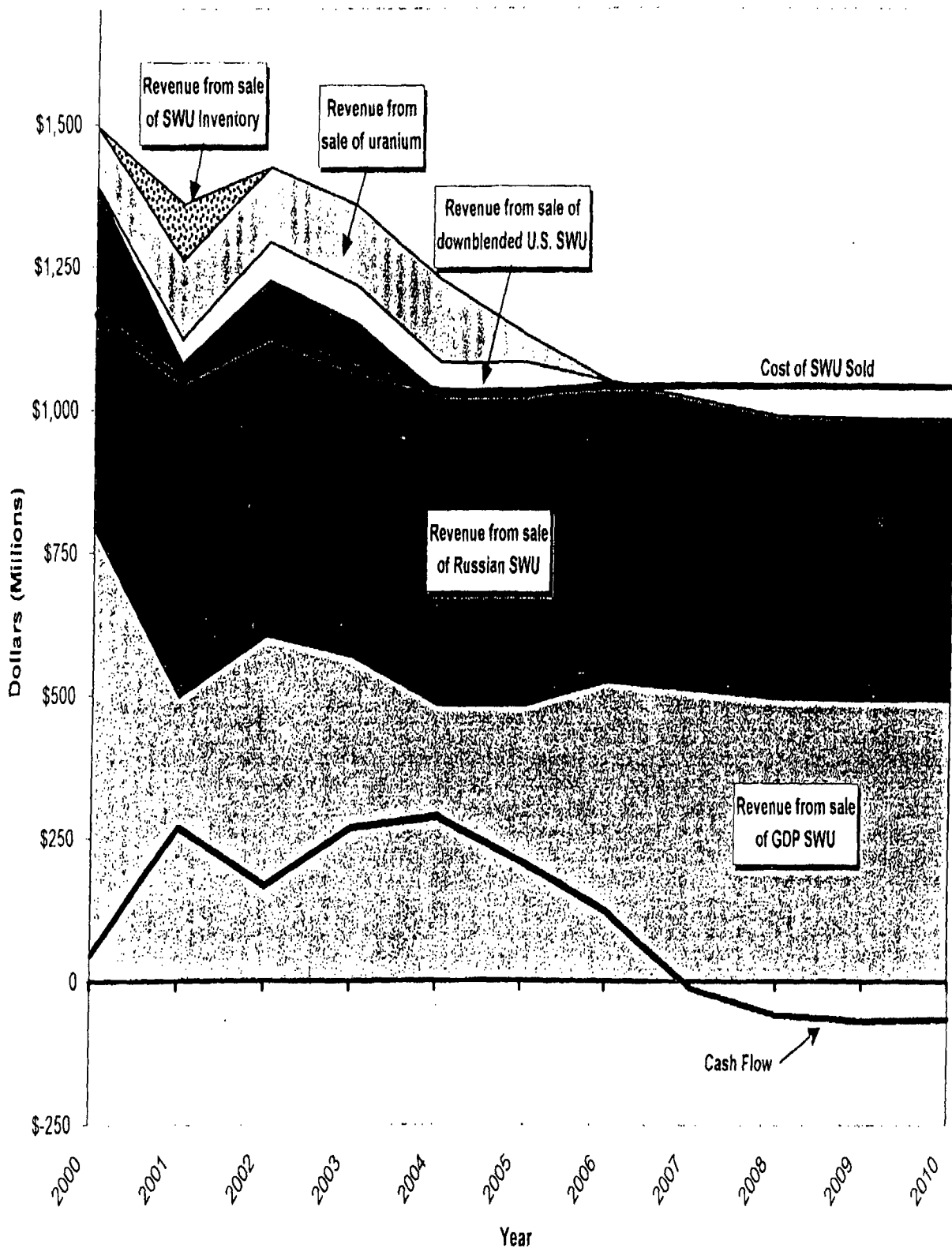


Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 2: One GDP





Cash Flow and Cost of SWU Relative to Revenues-by-Source  
 Scenario 2: One GDP



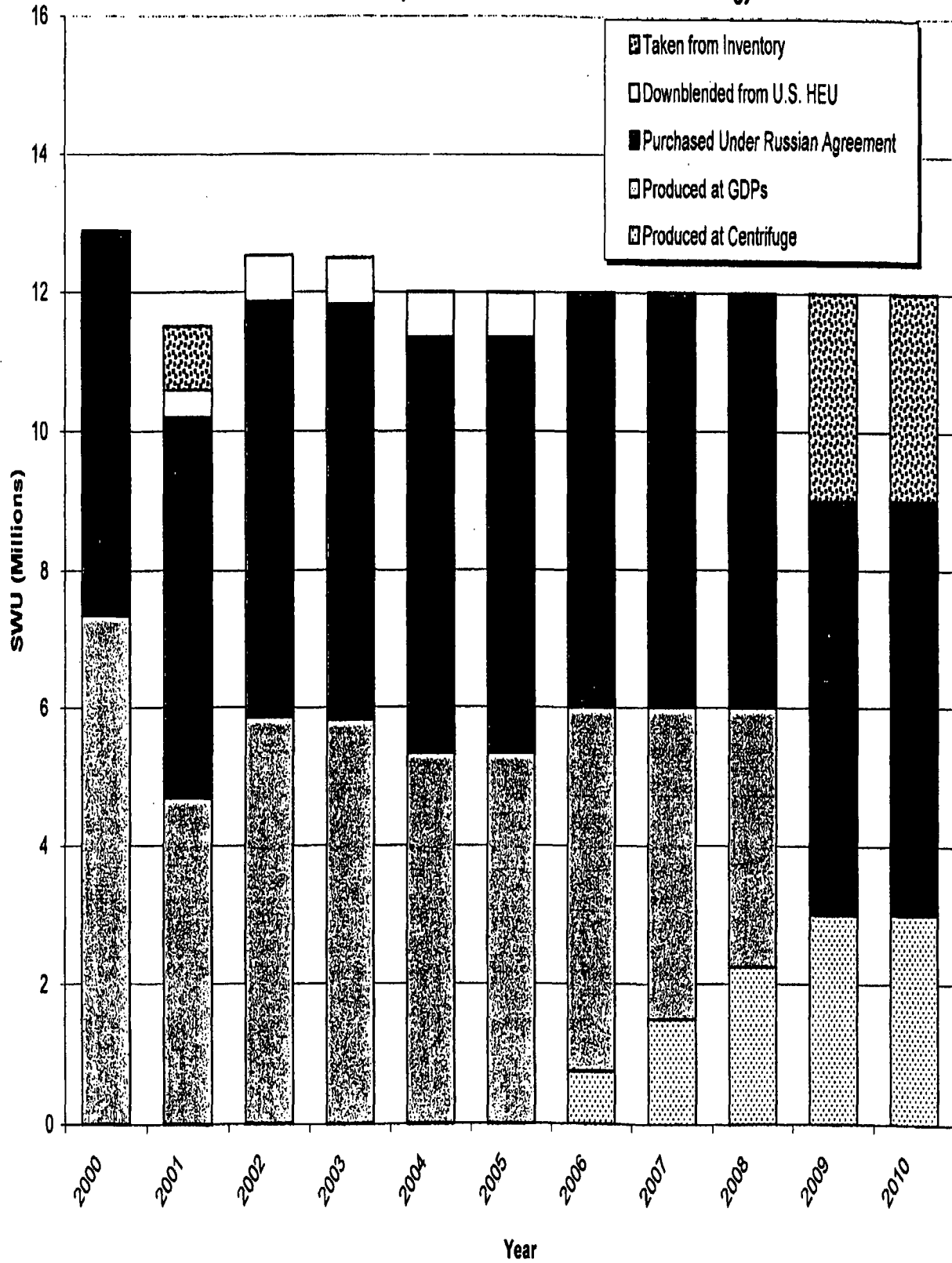
---

Appendix 1.3: Results by Scenario

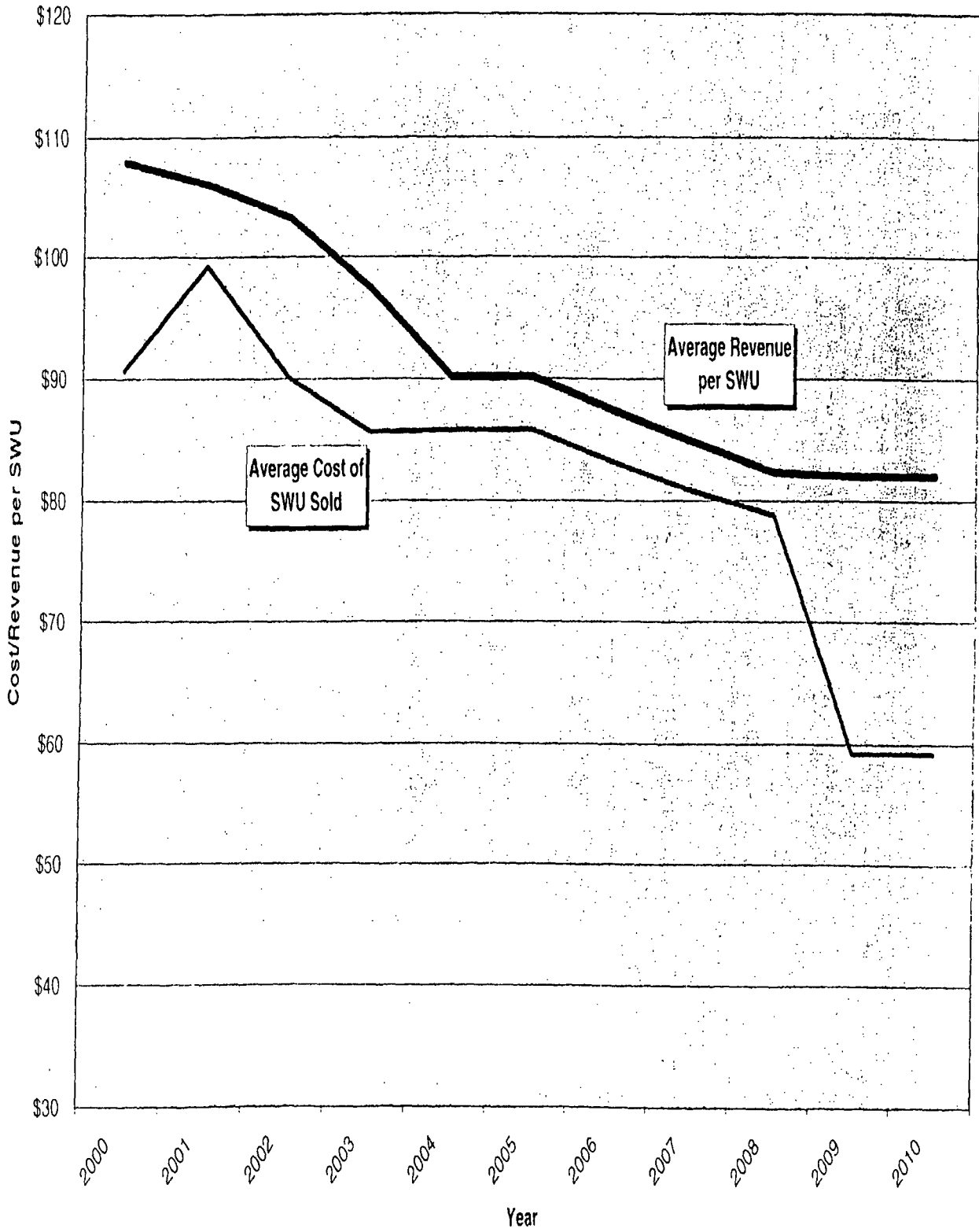
Scenario 3: Continued operation assuming the commercial  
deployment of advanced enrichment technology

# Sources of SWU

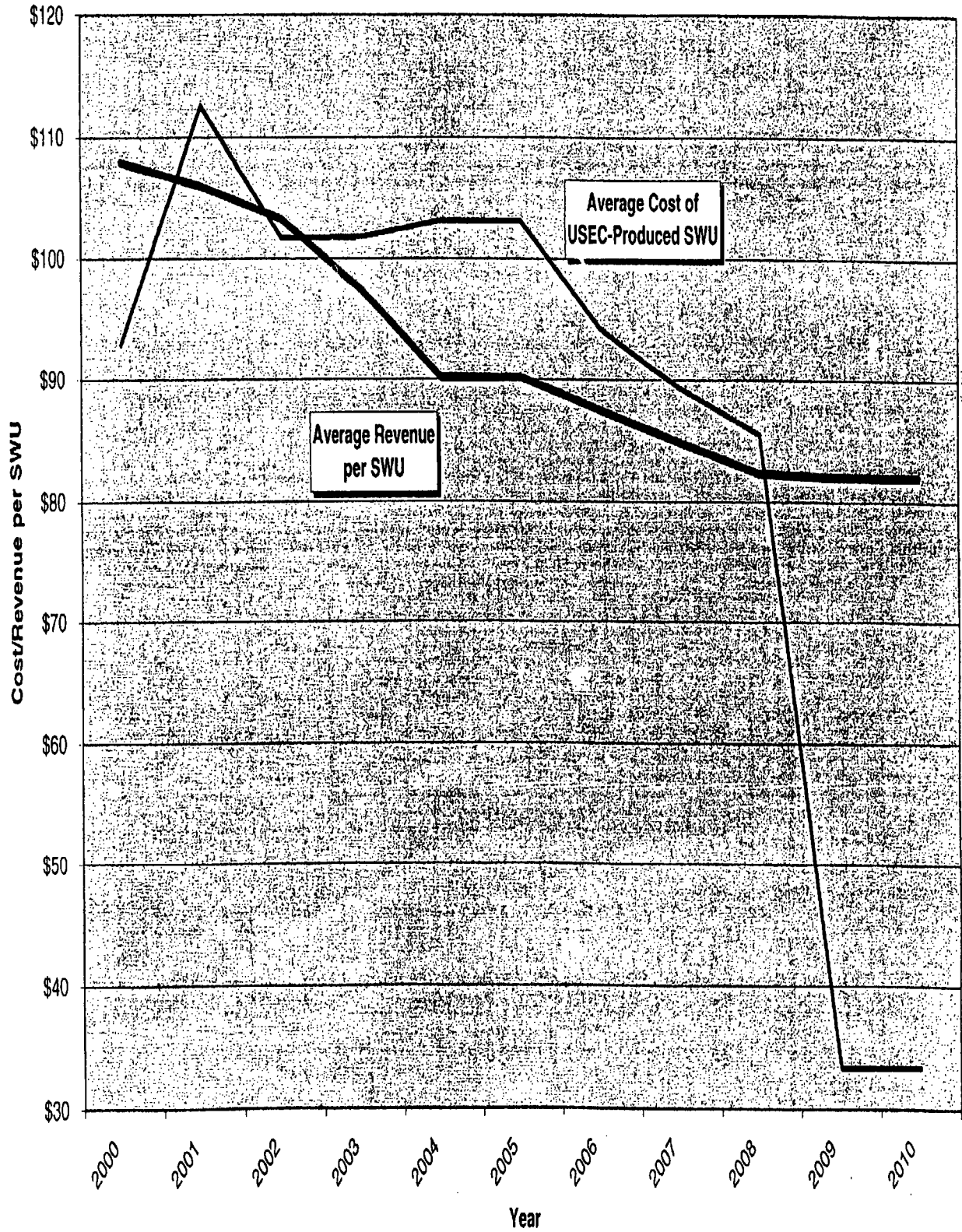
## Scenario 3: Replacement of GDPs with New Technology



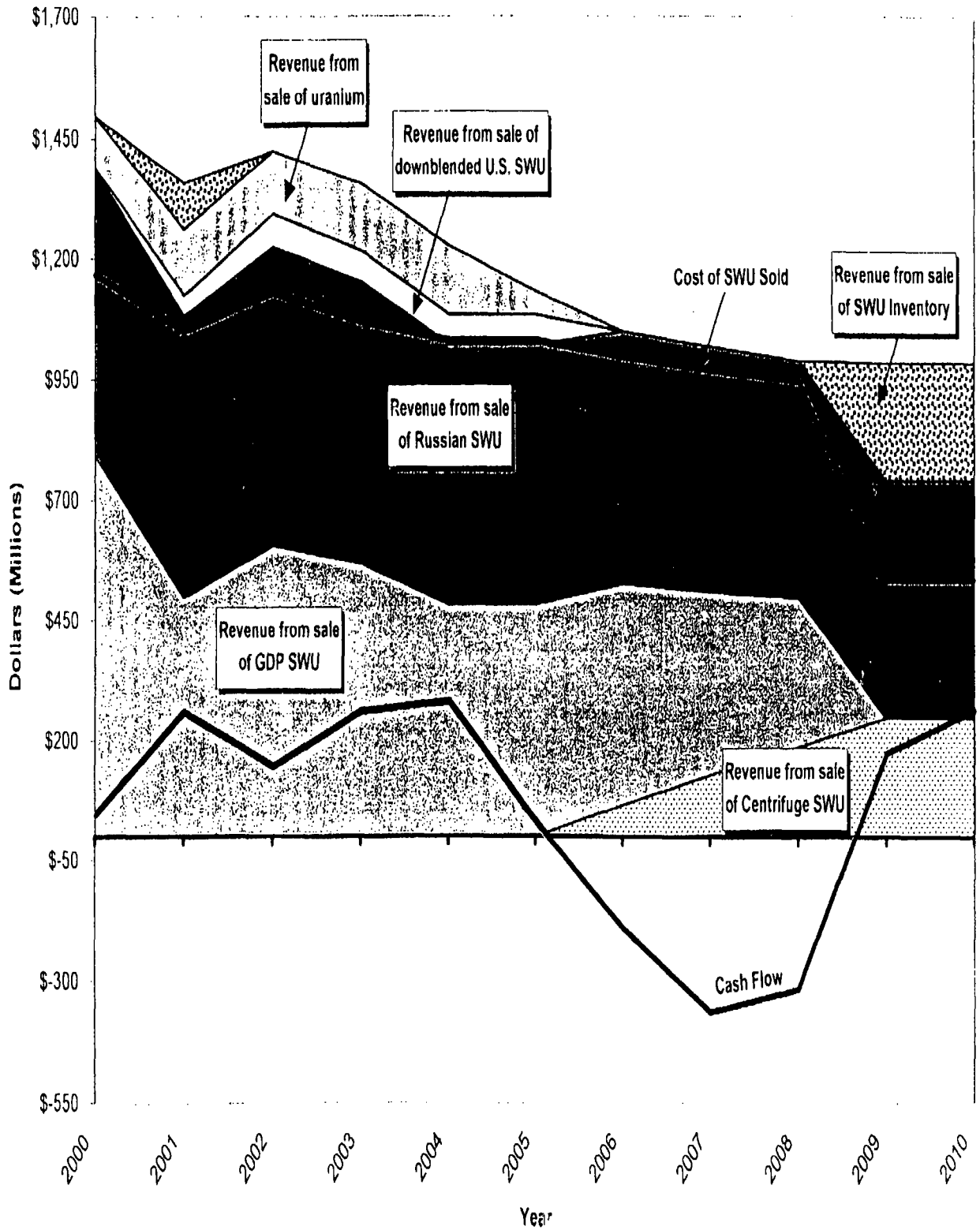
Revenue per SWU Relative to Average Cost per SWU  
Scenario 3: Replacement of GDPs with New Technology



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 3: Replacement of GDPs with New Technology



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 3: Replacement of GDPs with New Technology**

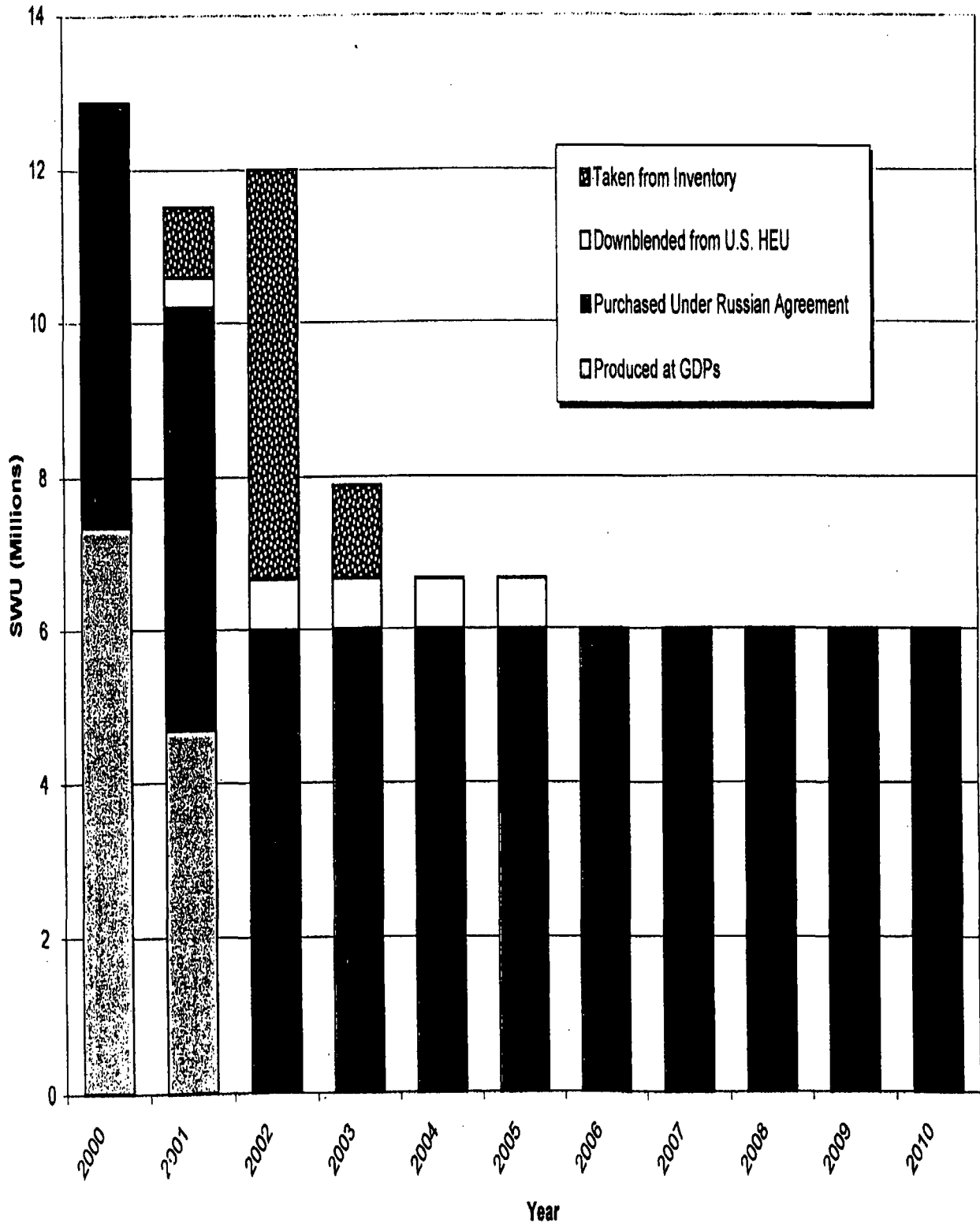


---

Appendix 1.4: Results by Scenario

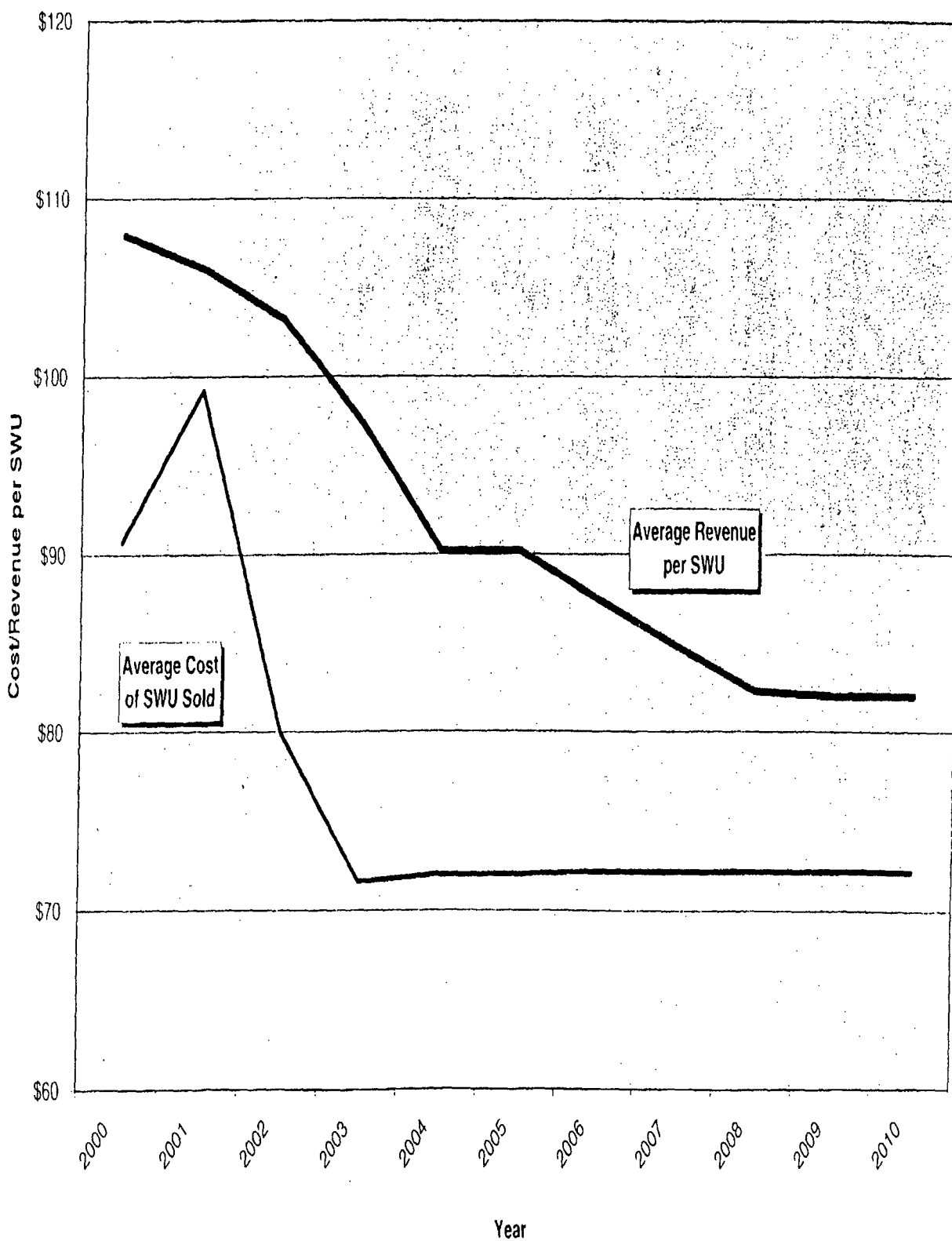
Scenario 4: Operation of the business as a broker of SWU

### Sources of SWU Scenario 4: Broker Russian SWU

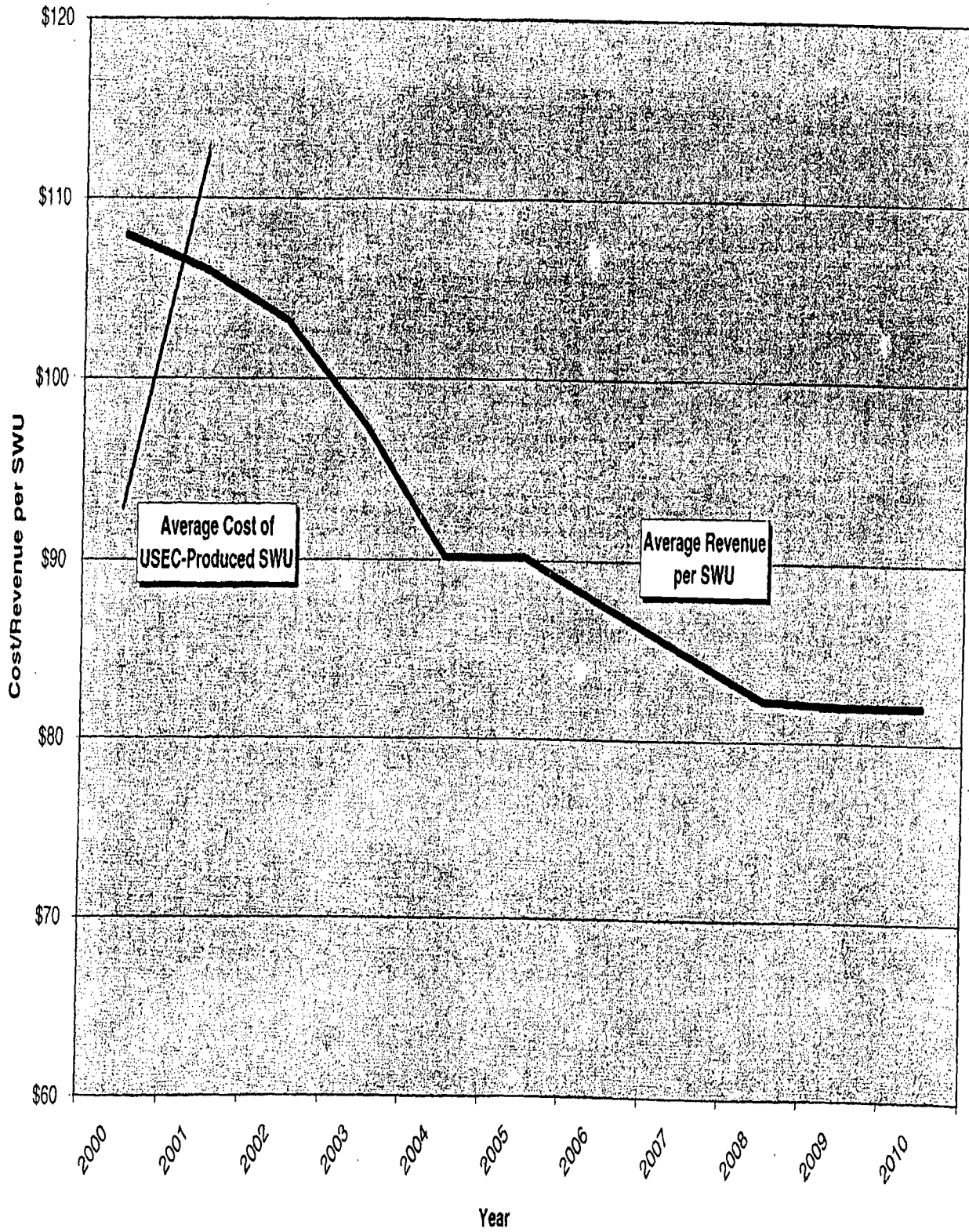




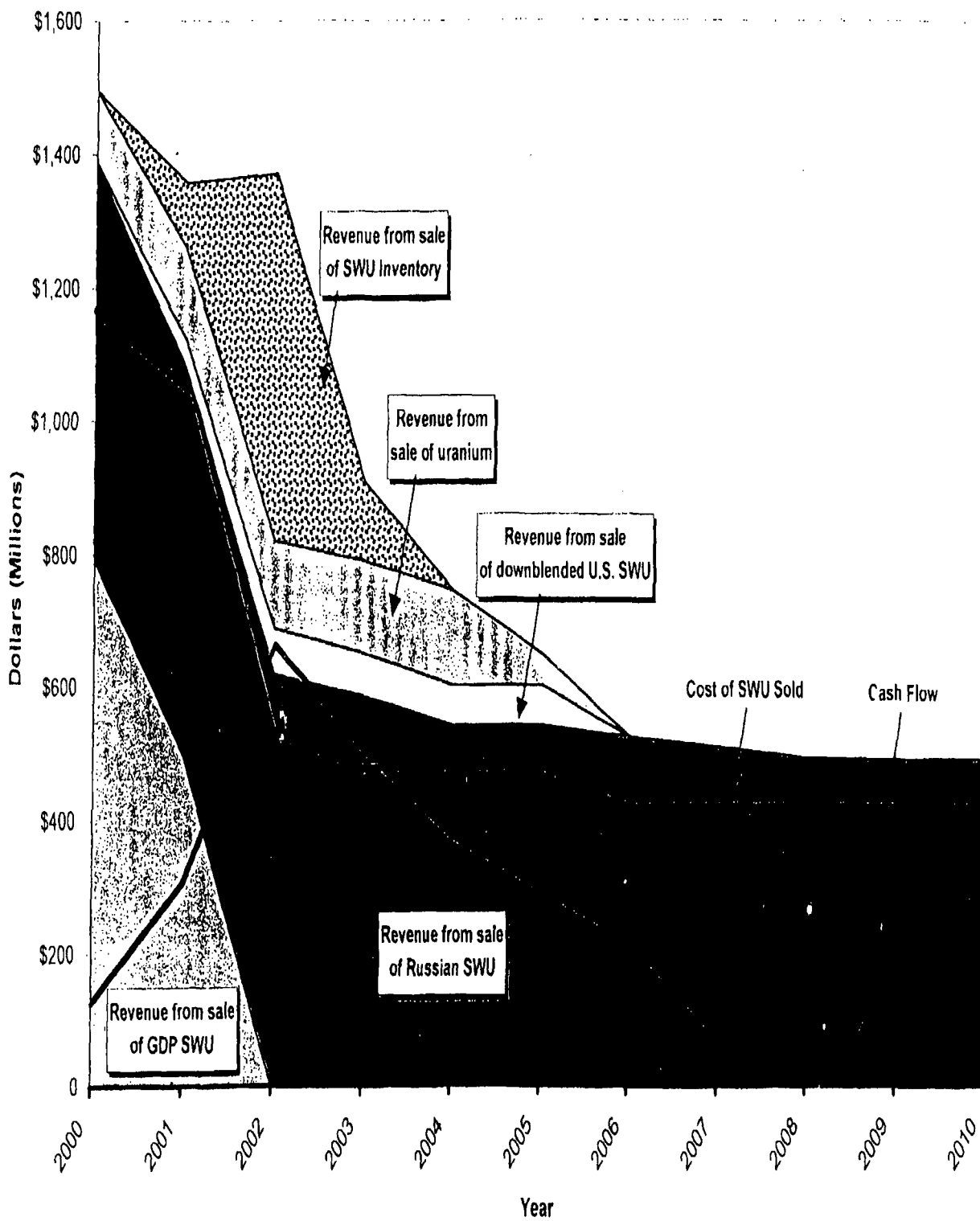
Revenue per SWU Relative to Average Cost per SWU  
Scenario 4: Broker Russian SWU



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 4: Broker Russian SWU



### Cash Flow and Cost of SWU Relative to Revenues-by-Source Scenario 4: Broker Russian SWU



---

Appendix 1.5: Results by Scenario

Scenario 5: Cessation of all operations

**Scenario 5: Cessation of All Operations**

<b>ASSETS (in millions)</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Total Current Assets	1384	1290	1392	1528
Uranium held for Future Use	436	251	191	133
Prepaid Assets	94	84	76	67
<b>Total Assets</b>	<b>1914</b>	<b>1625</b>	<b>1659</b>	<b>1728</b>
<b>LIABILITIES (in millions)</b>				
Total Current Liabilities	356	452	365	347
Long Term Debt	500	500	500	500
Total Other Liabilities	210	188	201	226
<b>Total Liabilities</b>	<b>1066</b>	<b>1140</b>	<b>1066</b>	<b>1073</b>
<b>Net Worth</b>	<b>848</b>	<b>485</b>	<b>593</b>	<b>655</b>
<b>Net Worth per Average Number of Shares Outstanding</b>	<b>\$ 8.93</b>	<b>\$ 6.06</b>	<b>\$ 8.47</b>	<b>\$ 9.36</b>

**Notes for Scenario 5**

1. Data for FY 2000 to 2003 were obtained from USEC.

---

Appendix 1.6: Results by Scenario

Scenario 6: Acquisition of USEC to sell its assets

**Scenario 6: Acquisition of USEC to Sell Its Assets**

<b>ASSETS (in millions)</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
Total Current Assets	1,384	1,290	1,392	1,528
Uranium held for Future Use	436	251	191	133
Prepaid Assets	94	84	76	67
<b>Total Assets</b>	<b>1,914</b>	<b>1,625</b>	<b>1,659</b>	<b>1,728</b>
<b>LIABILITIES (in millions)</b>				
Total Current Liabilities	356	452	365	347
Long Term Debt	500	500	500	500
Total Other Liabilities	210	188	201	226
<b>Total Liabilities</b>	<b>1,066</b>	<b>1,140</b>	<b>1,066</b>	<b>1,073</b>
<b>Net Worth</b>	<b>848</b>	<b>485</b>	<b>593</b>	<b>655</b>
Stock Price as of August 2000	\$ 4.25			
Stock Outstanding as of June 2000 (in millions)	82.5			
Market Capitalization	\$ 351	\$ 351	\$ 351	\$ 351
<b>Break-up Value</b>	<b>\$ 497</b>	<b>\$ 134</b>	<b>\$ 242</b>	<b>\$ 304</b>
<b>Break-up Value per Average Number of Shares Outstanding</b>	<b>\$ 5.24</b>	<b>\$ 1.68</b>	<b>\$ 3.46</b>	<b>\$ 4.35</b>

**Notes for Scenario 6:**

1. Data for FY 2000 to 2003 were obtained from USEC.

---

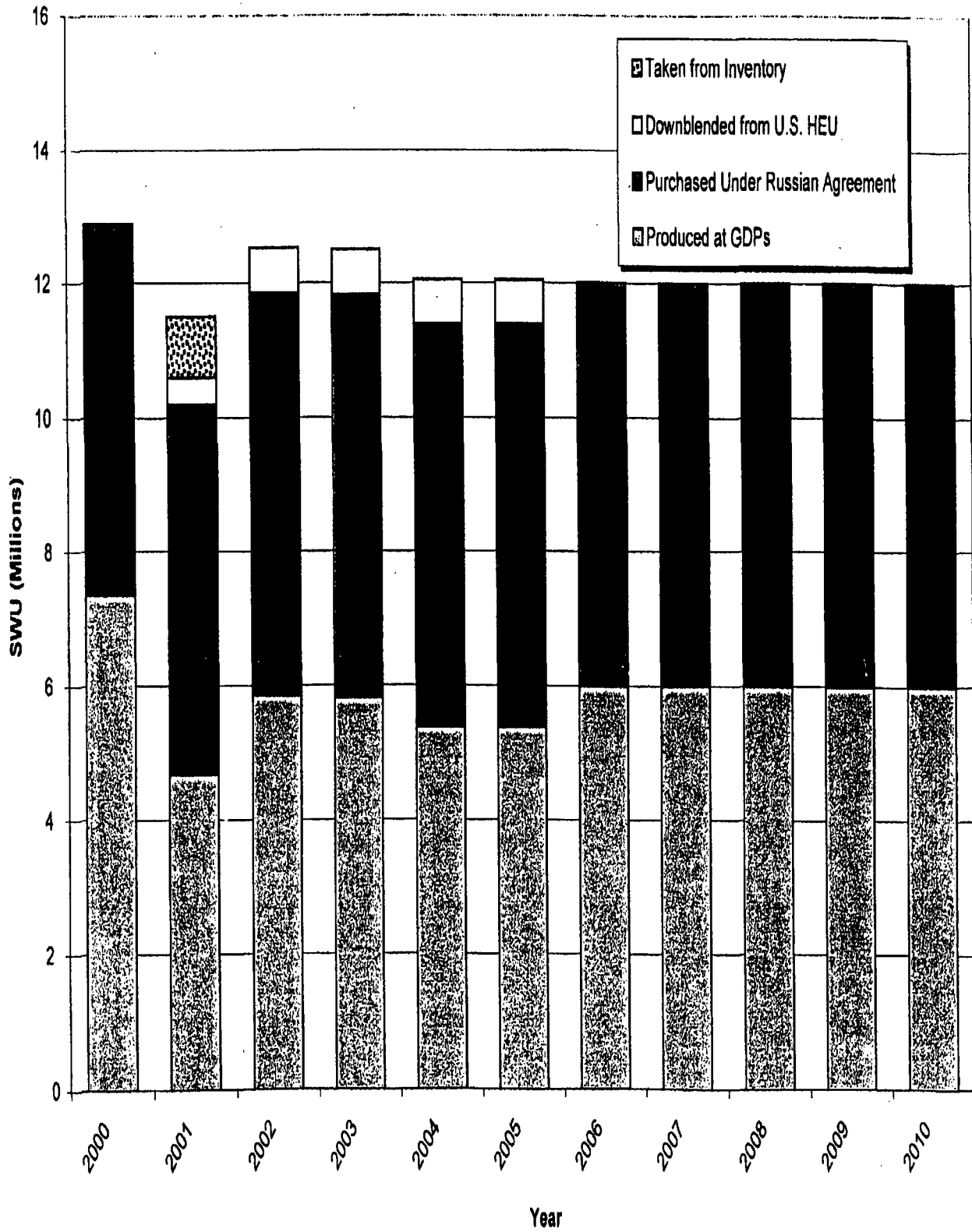
Appendix 2.1.A: Sensitivity Analysis by Subscenario

Scenario 1a: Two GDPs with 6 million Russian SWU annually in FY 2002-2010

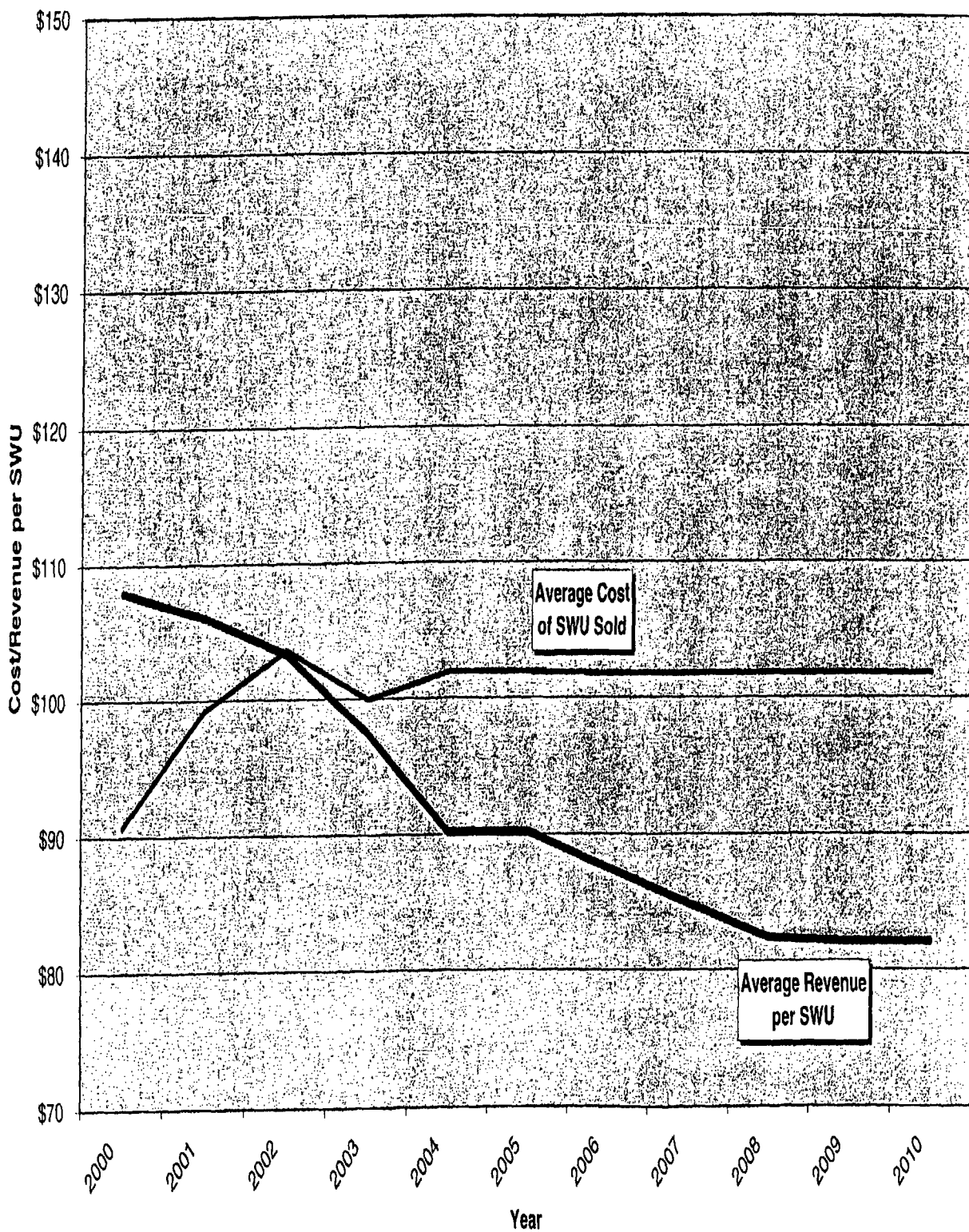


### Sources of SWU

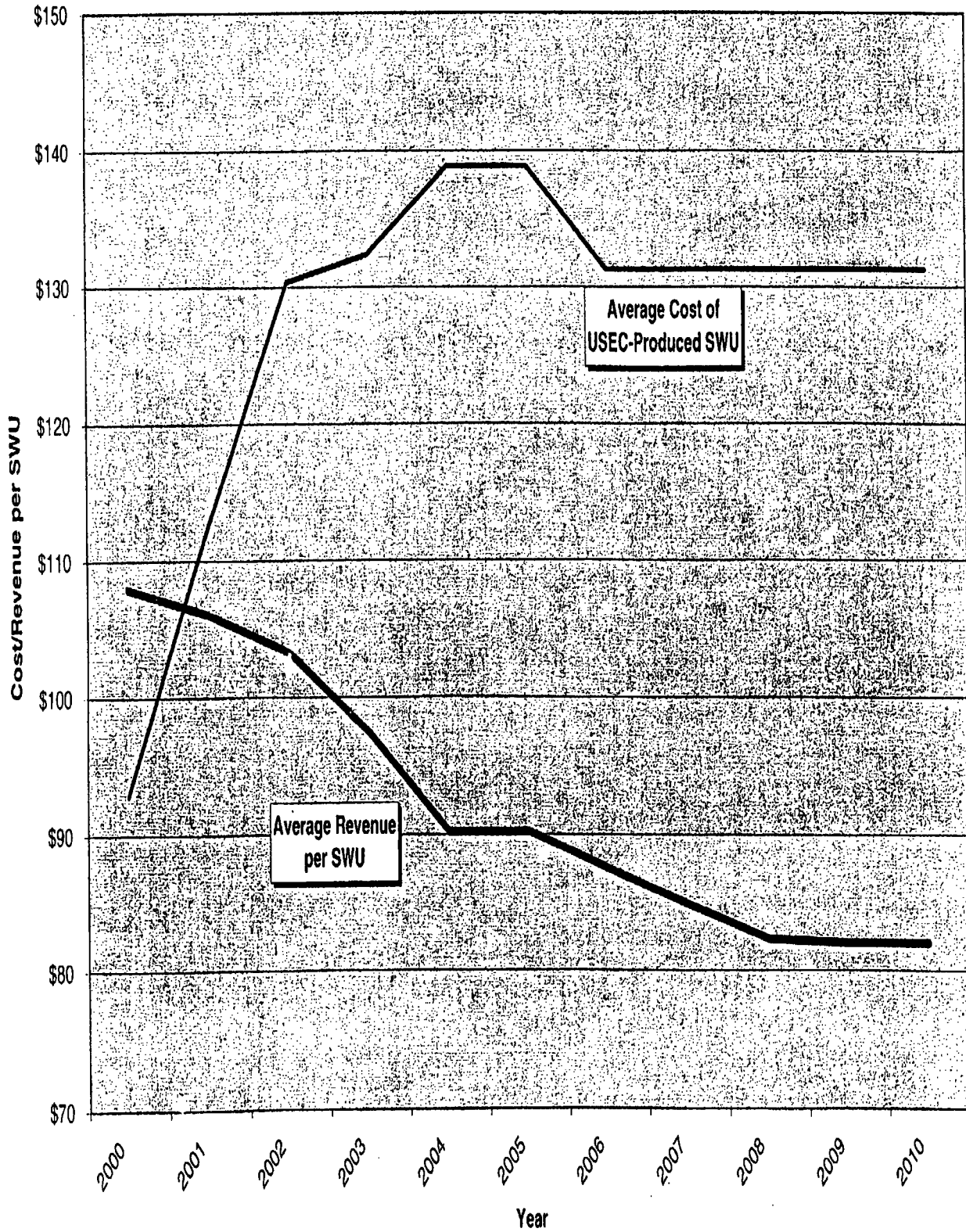
Scenario 1a: Two GDPs with 6 Million Russian SWU Annually in FY 2002-2010



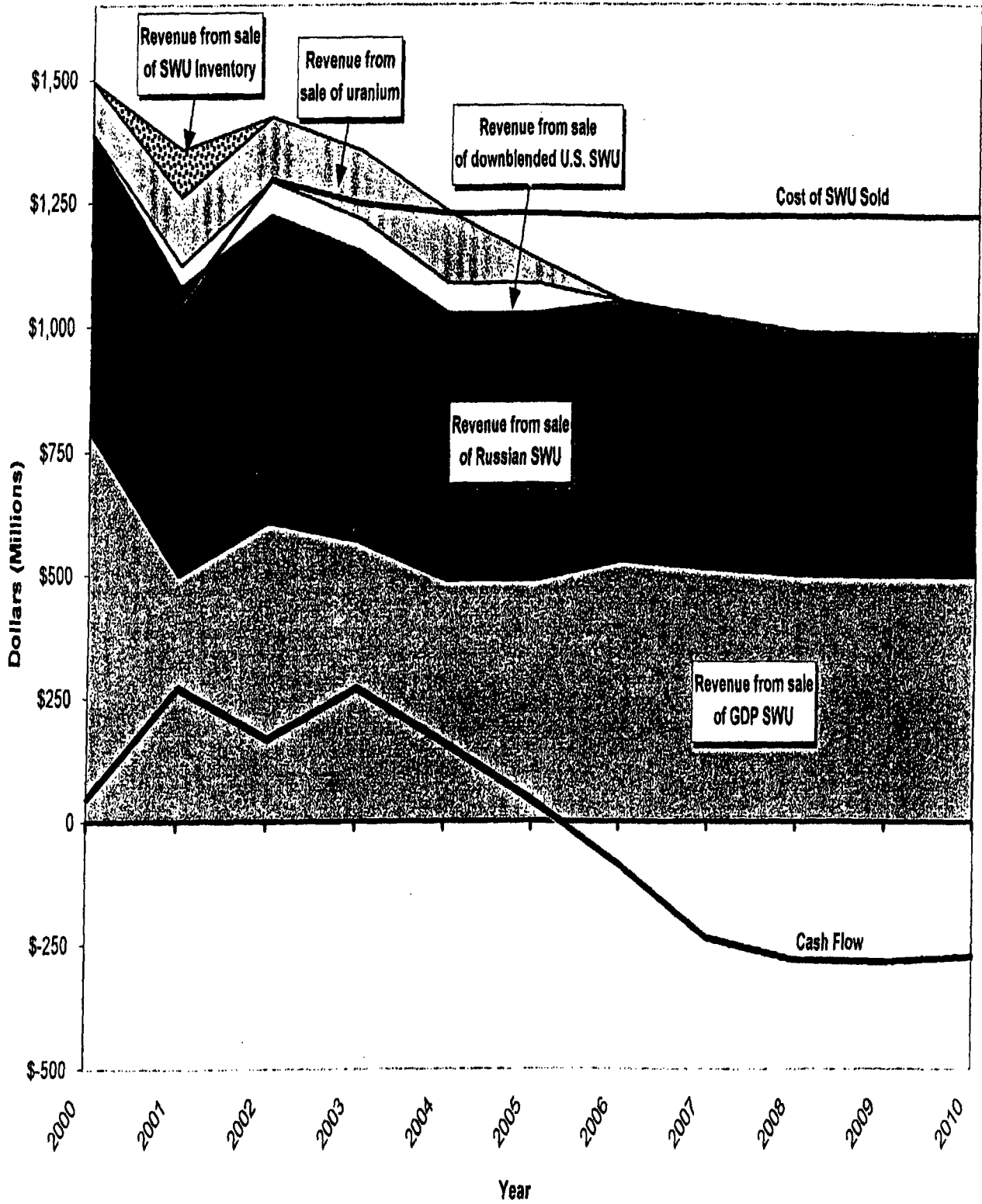
Revenue per SWU Relative to Average Cost per SWU  
Scenario 1a: Two GDPs with 6 Million Russian SWU Annually in FY 2002-2010



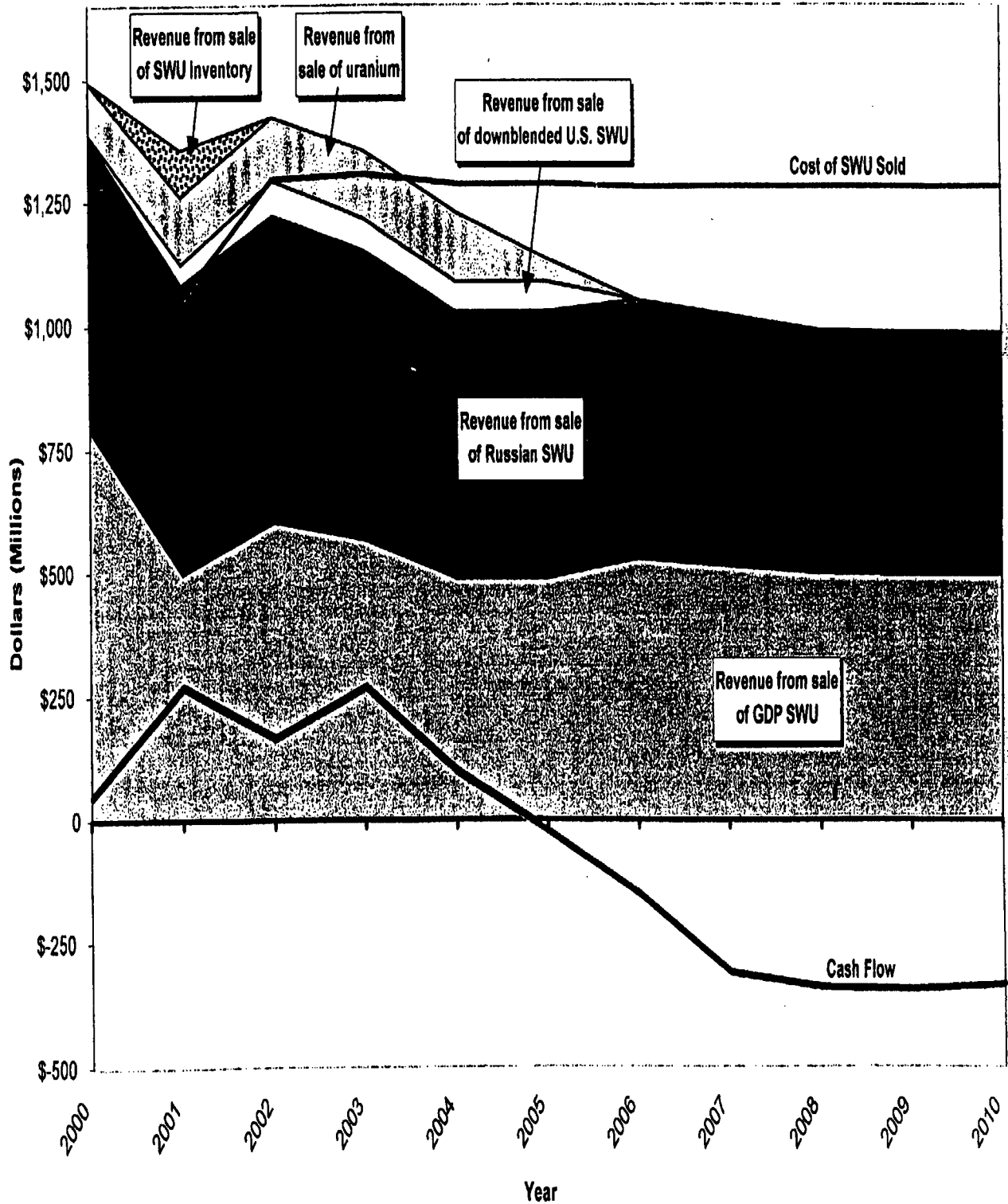
Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 1a: Two GDPs with 6 Million Russian SWU Annually in FY 2002-2010



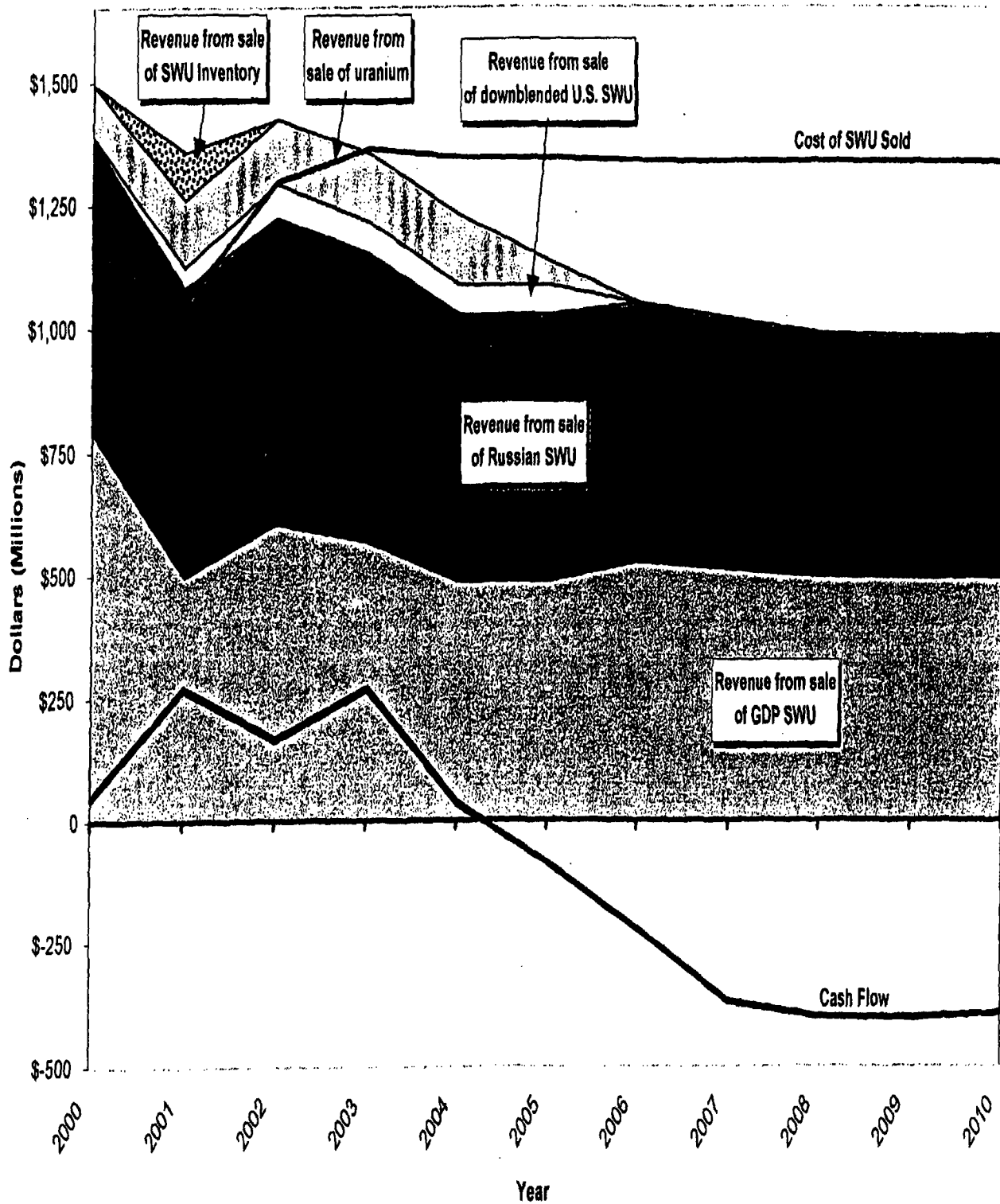
**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 1a: Two GDPs with 6 Million Russian SWU Annually in FY 2002-2010**



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 1a: Two GDPs with 6 Million Russian SWU Annually in FY 2002-2010; Price of Russian SWU is the Spot Market Price**



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 1a: Two GDPs with 6 Million Russian SWU Annually in FY 2002-2010; Price of Russian SWU is the Same Price as Under the Current Contract**



**Scenario 1a: Two GDPs with 6 Million Russian SWU Annually in FY 2002-2012**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,226	1,130	1,049	1,018	887	984	984
Total COGS	1,214	1,211	1,252	1,220	1,227	1,227	1,220	1,220	1,220	1,220	1,220
Gross Margin	258	146	118	87	(1)	(97)	(171)	(203)	(233)	(236)	(236)
Interest Expense	39	33	33	33	33	33	33	10	10	10	0
Interest Earned	0	(1)	(15)	(26)	(36)	(41)	(31)	(14)	0	0	0
SG&A	48	46	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	25	37	7	7	7	7	7	7	7	7
Pretax Income	167	41	54	52	(51)	(142)	(226)	(252)	(296)	(300)	(289)
Taxes	58	14	19	18	(18)	(18)	0	0	0	0	0
Net Income	109	27	35	34	(34)	(124)	(226)	(252)	(296)	(300)	(289)
Adjustments to Net Income to Obtain Cash Flow	7	264	147	244	200	175	150	25	25	25	25
Investments in GDPs and New Plant	(71)	(23)	(18)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)
Cash Flow Before Financing	45	268	164	267	155	40	(87)	(238)	(282)	(286)	(275)
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	197	164	267	155	40	(437)	(238)	(282)	(436)	(275)
Estimated Cash on Hand at the end of the Year (Before dividends)	55	252	416	683	838	878	441	203	(79)	(515)	(790)
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	208	378	645	800	839	402	165	(118)	(553)	(829)
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
GDP Produced SWU	7,345	4,696	5,856	5,819	5,380	5,380	6,000	6,000	5,000	6,000	6,000
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	0	0	0	0	0
SWU from Inventory	0	909	0	0	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,521	12,484	12,045	12,044	12,000	12,000	12,000	12,000	12,000
Cost per SWU for Purchase/Production Sources (\$ in millions)	(b)(4)										
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										
Revenue per SWU	(b)(4)										

**Notes for Scenario 1a**

1. FY 2000-2005. Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2005.
2. FY 2000-2005. COGS fluctuate because of changes in GDP production amounts due partly to changes in the production amount of downblended US HEU.
3. CY 2002. Russian HEU renegotiated price begins.
4. FY 2003: first full year of reduced Russian SWU costs.
5. FY 2005-2010. COGS constant because constant quantities are purchased from Russia and produced in the GDP.
6. CY 2006. Interest Payments on IPO Debt of \$350 million complete.
7. FY 2006-2010. Revenues decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
8. CY 2008. Interest Payments on IPO Debt of \$150 million complete.

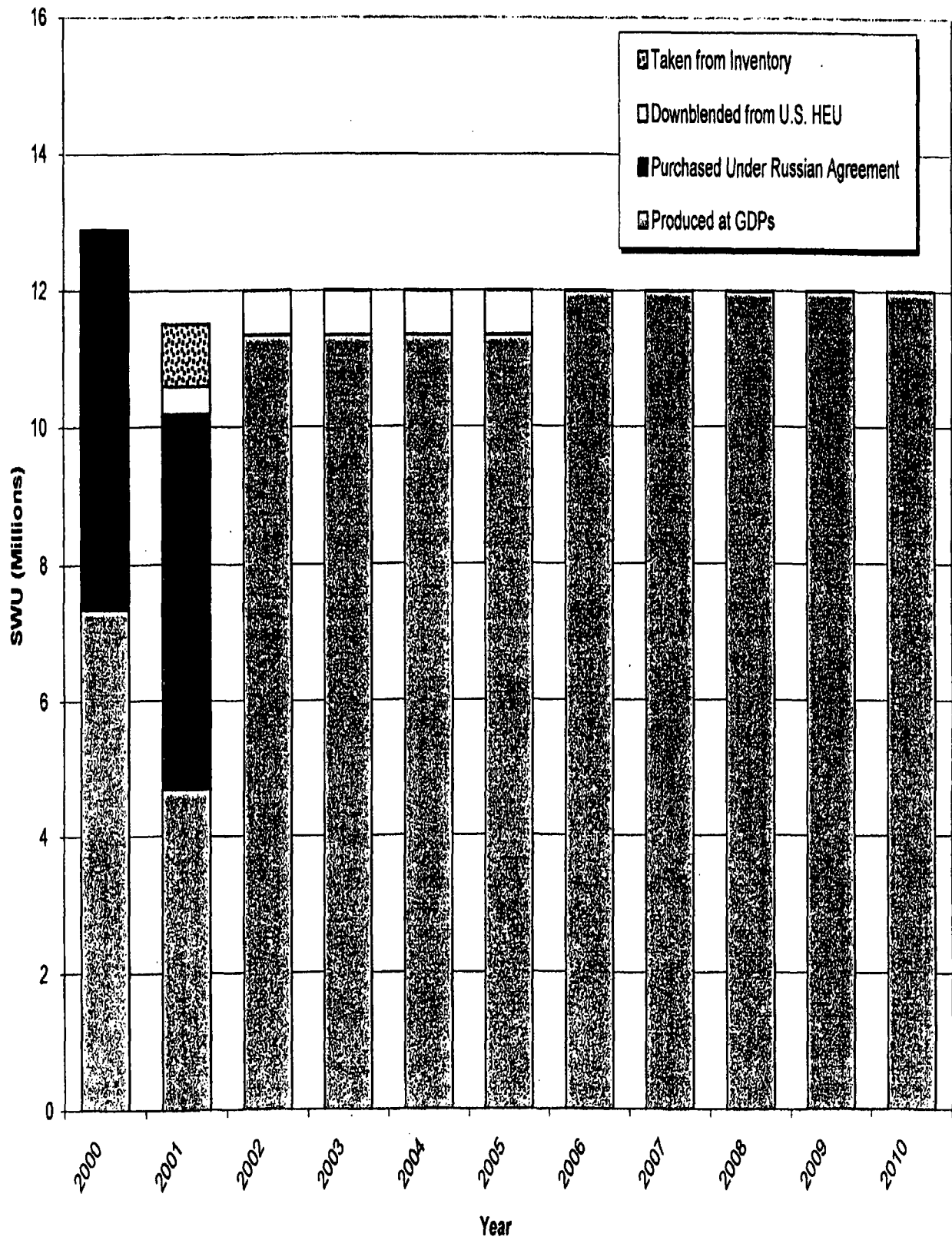
---

Appendix 2.1.B: Sensitivity Analysis by Subscenario

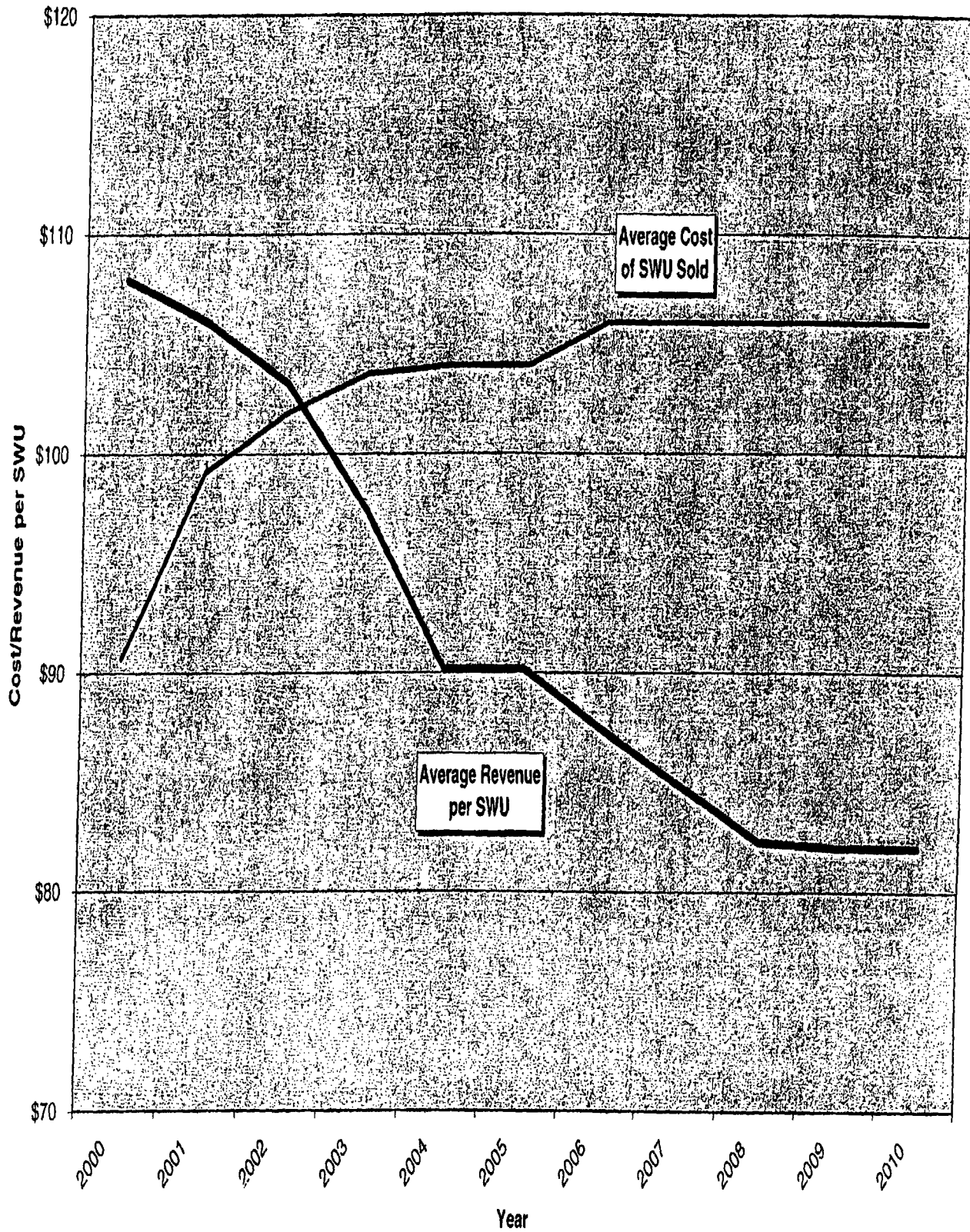
Scenario 1b: Two GDPs with no Russian SWU after FY 2001



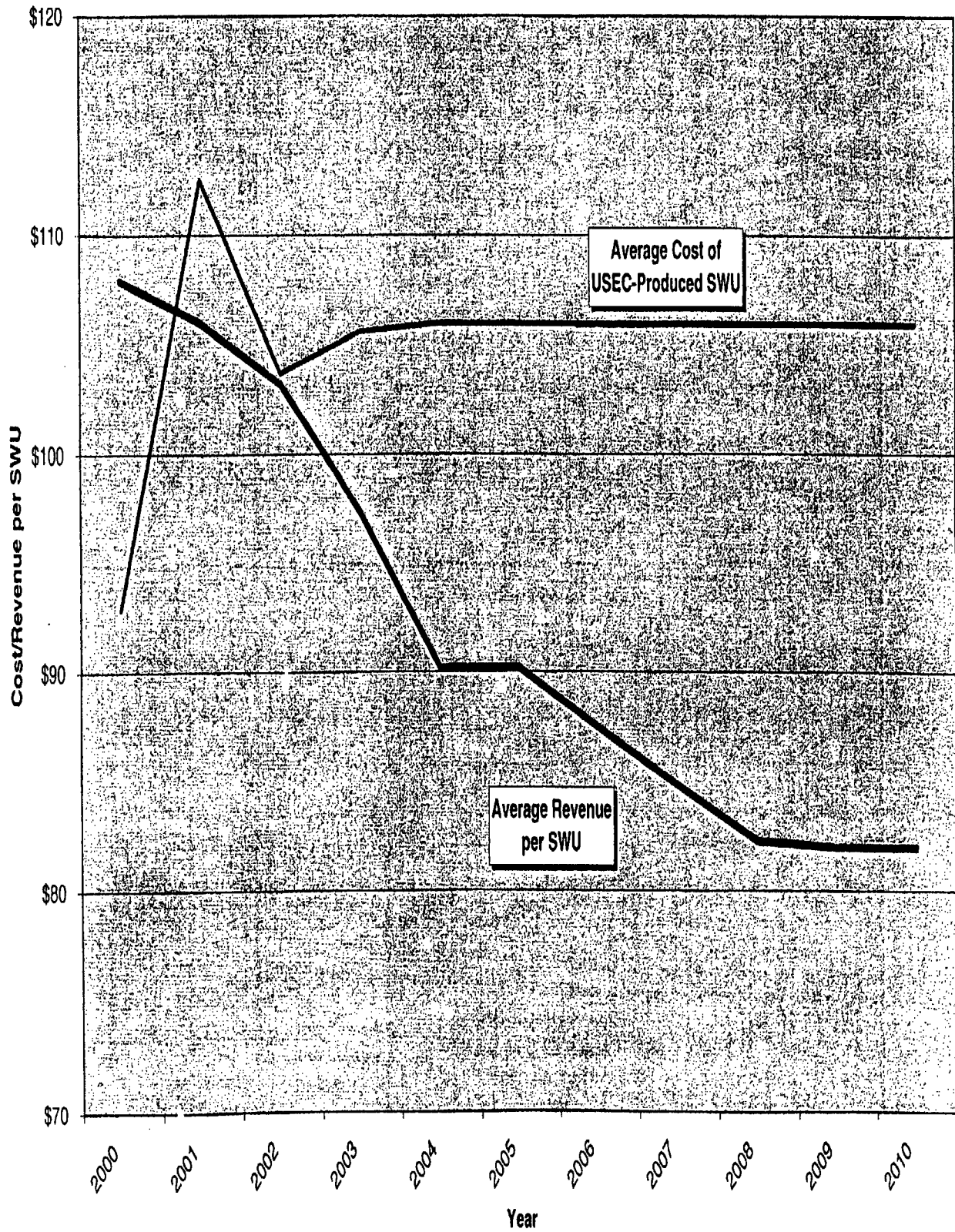
**Sources of SWU**  
**Scenario 1b: Two GDPs with No Russian SWU After FY 2001**



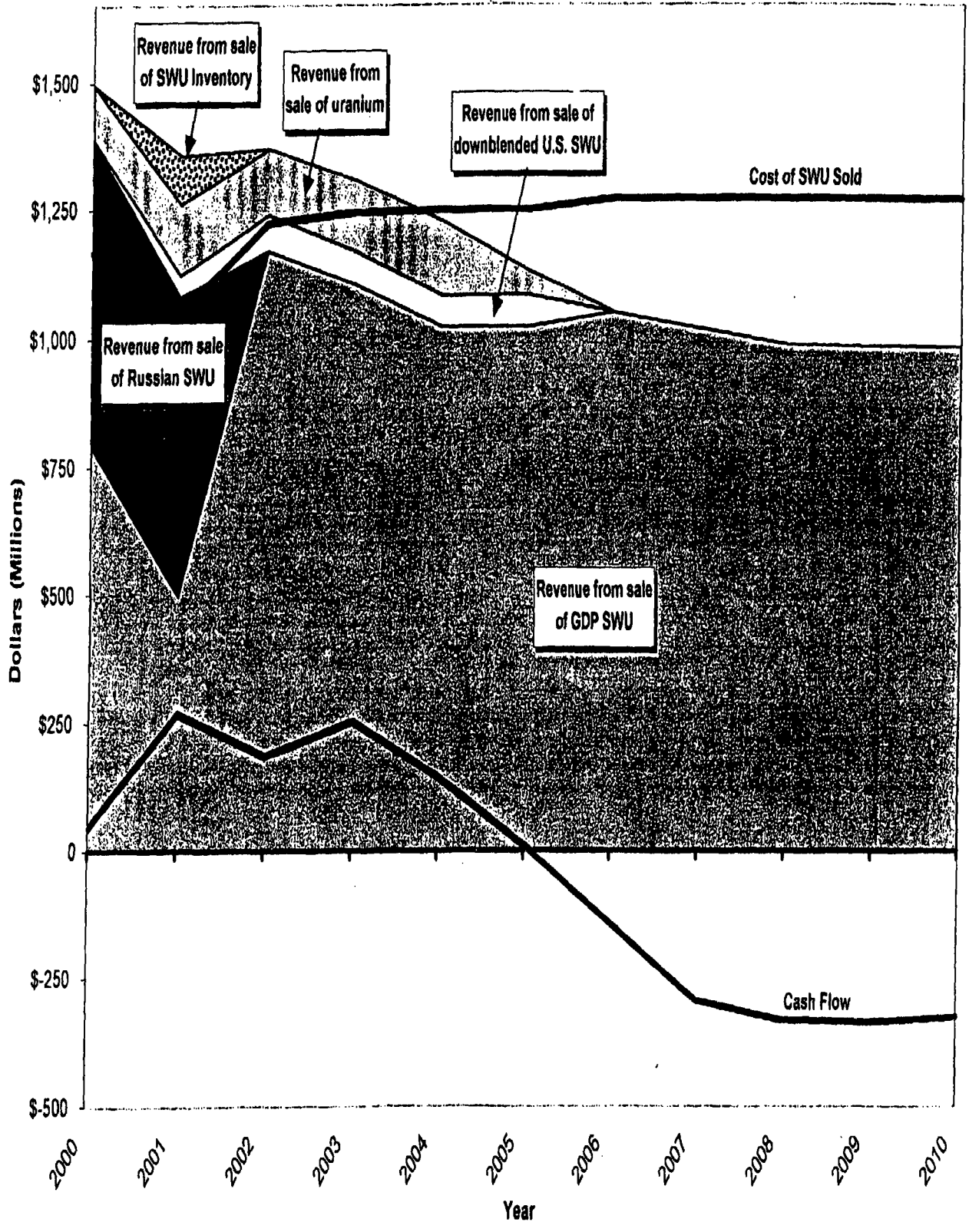
Revenue per SWU Relative to Average Cost per SWU  
Scenario 1b: Two GDPs with No Russian SWU After FY 2001



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 1b: Two GDPs with No Russian SWU After FY 2001



**Cash Flow and Cost of SWU Relative to Revenues-by-Source  
Scenario 1b: Two GDPs with No Russian SWU After FY 2001**



**Scenario 1b: Two GDPs with No Russian SWU After FY 2001**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,226	1,130	1,049	1,018	987	984	984
Total COGS	1,214	1,211	1,222	1,244	1,248	1,248	1,272	1,272	1,272	1,272	1,272
Gross Margin	258	146	148	64	(23)	(119)	(222)	(254)	(284)	(288)	(288)
Interest Expense	39	33	33	33	33	33	33	10	10	10	0
Interest Earned	0	(1)	(15)	(26)	(36)	(40)	(28)	(8)	0	0	0
SG&A	46	46	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	25	37	7	7	7	7	7	7	7	7
Pre-tax Income	167	41	84	26	(73)	(165)	(281)	(309)	(347)	(351)	(341)
Taxes	58	14	29	10	(25)	(10)	0	0	0	0	0
Net Income	109	27	55	19	(48)	(155)	(281)	(309)	(347)	(351)	(341)
Adjustments to Net Income to Obtain Cash Flow	7	264	147	244	200	175	150	25	25	25	25
Investments in GDPs and New Plant	(71)	(23)	(18)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)
Cash Flow Before Financing	45	268	184	252	141	9	(142)	(295)	(333)	(337)	(327)
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	197	184	252	141	9	(492)	(295)	(333)	(487)	(327)
Estimated Cash on Hand at the end of the Year (Before dividends)	55	252	436	688	829	837	345	51	(283)	(769)	(1,096)
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	208	397	649	790	799	307	12	(321)	(808)	(1,134)
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	0	0	0	0	0	0	0	0	0
GDP Produced SWU	7,345	4,686	11,335	11,335	11,335	11,336	12,000	12,000	12,000	12,000	12,000
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	0	0	0	0	0
SWU Iron Inventory	0	909	0	0	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Cost per SWU for Purchase/Production Sources (\$ in millions)											
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										
Revenue per SWU	(b)(4)										

**Notes for Scenario 1b**

1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006
2. FY 2000-2005, COGS fluctuate because of changes in GDP production amounts due partly to changes in the production amount of downblended US HEU.
3. FY 2005, COGS increase because of rising production amounts at the GDPs because the U.S. HEU runs out.
4. FY 2006, Interest Payments on IPO Debt of \$350 million complete.
5. FY 2006-2010, Revenues decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
6. FY 2006, Interest Payments on IPO Debt of \$150 million complete.

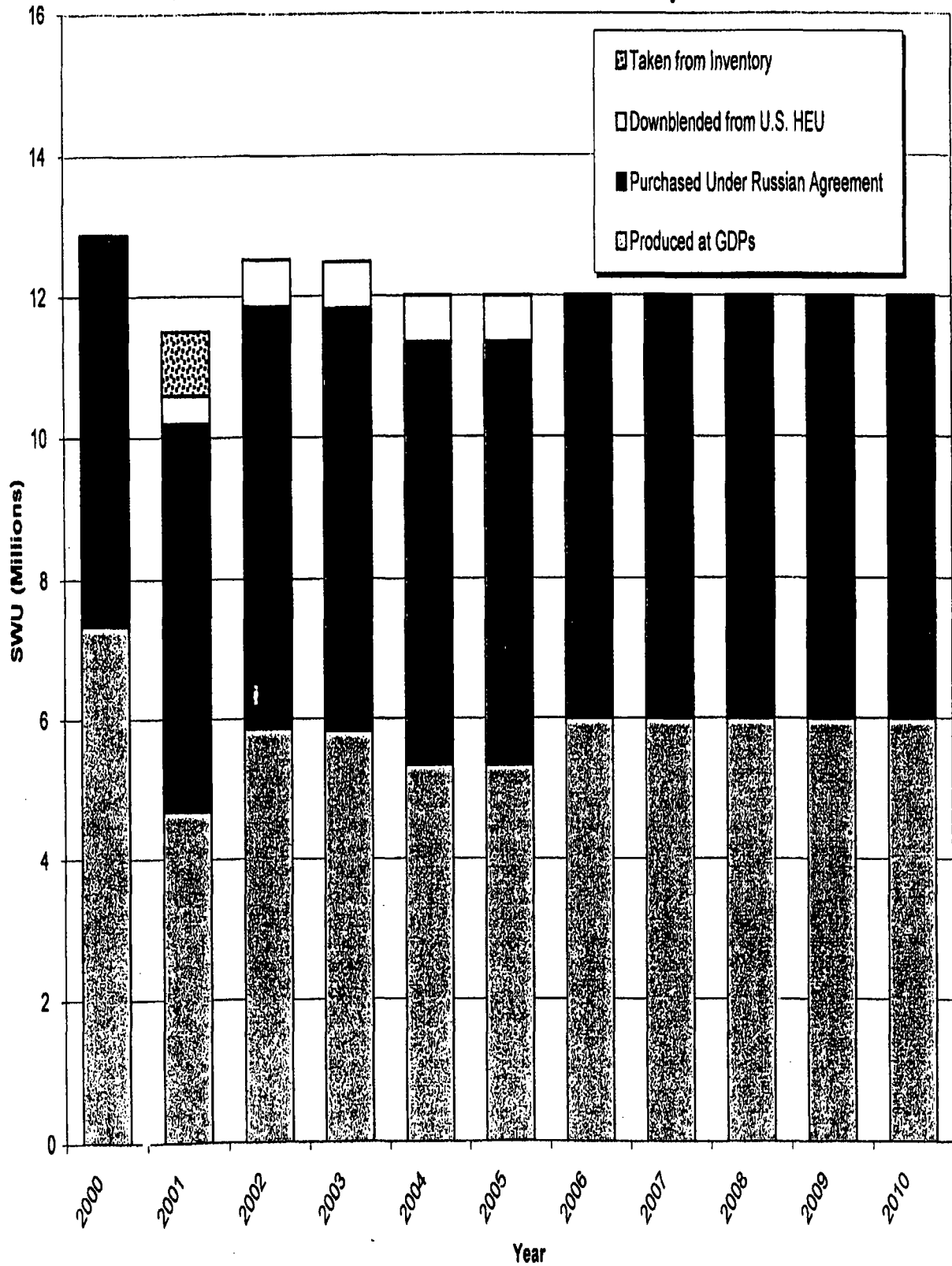
---

Appendix 2.2.A: Sensitivity Analysis by Subscenario

Scenario 2a: One GDP with 6 million Russian SWU annually in FY 2002-2010

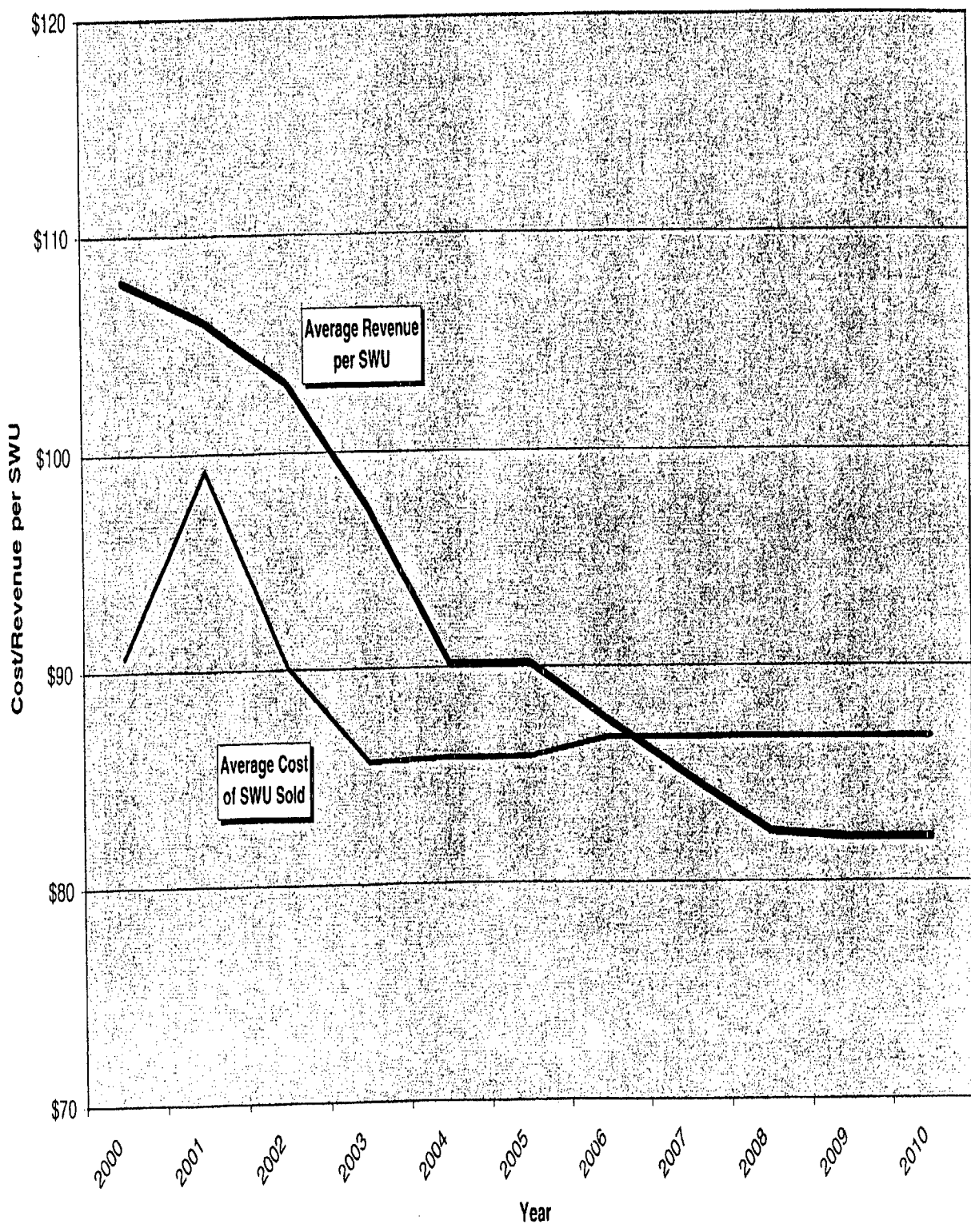
### Sources of SWU

Scenario 2a: One GDP with 6 Million Russian SWU Annually in FY 2002-2010



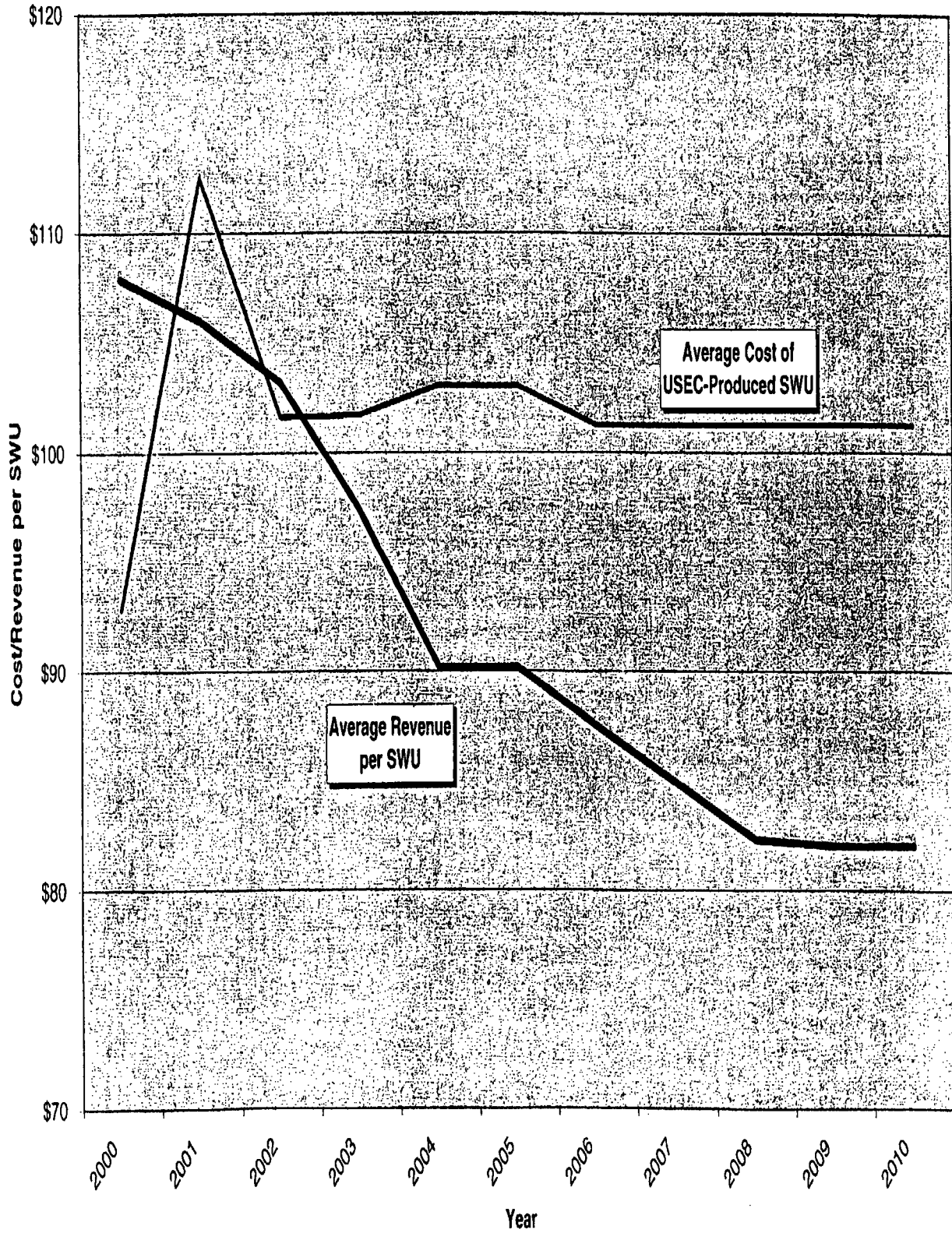


Revenue per SWU Relative to Average Cost per SWU  
Scenario 2a: One GDP with 6 Million Russian SWU Annually in FY 2002-2010

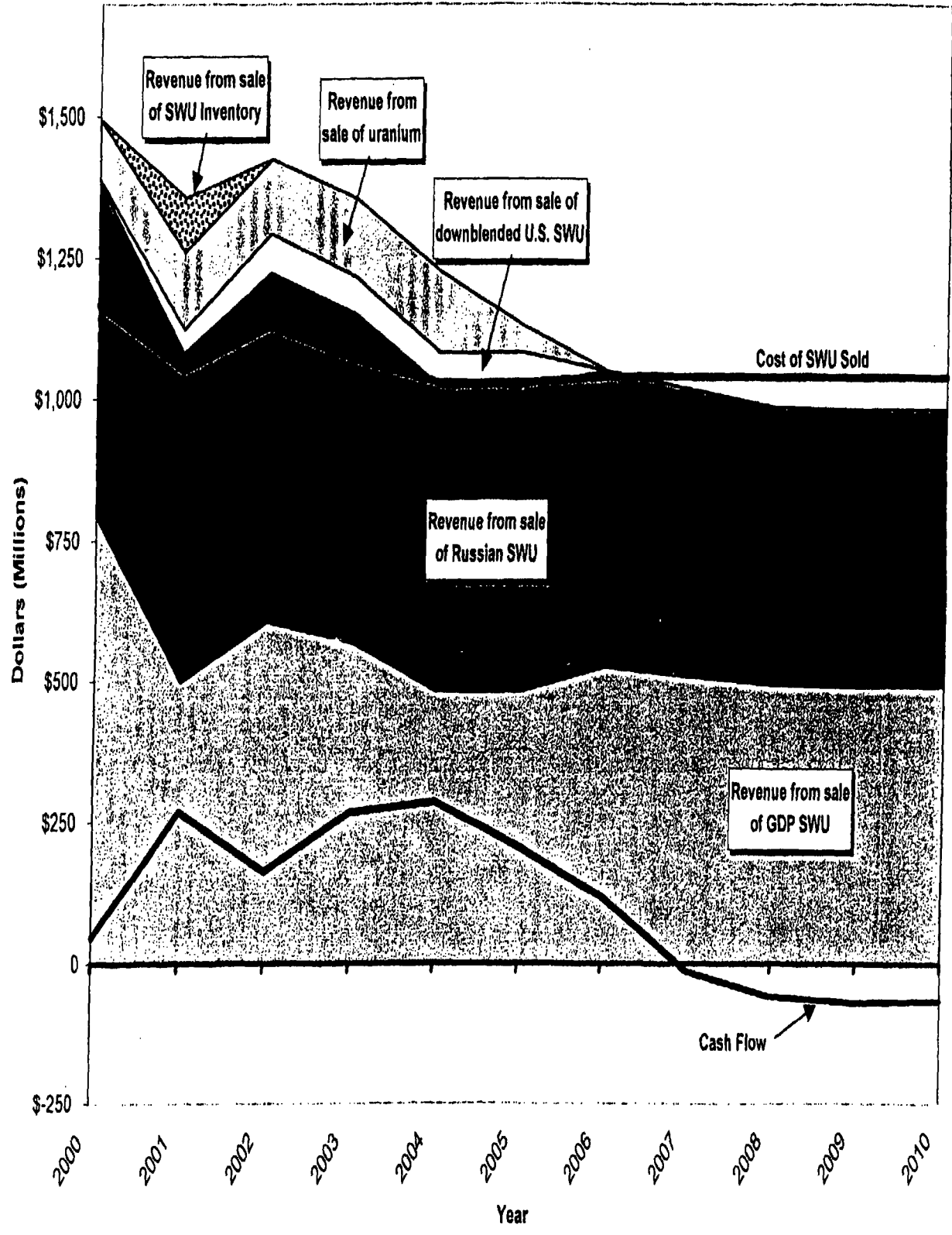




Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 2a: One GDP with 6 Million Russian SWU Annually in FY 2002-2010

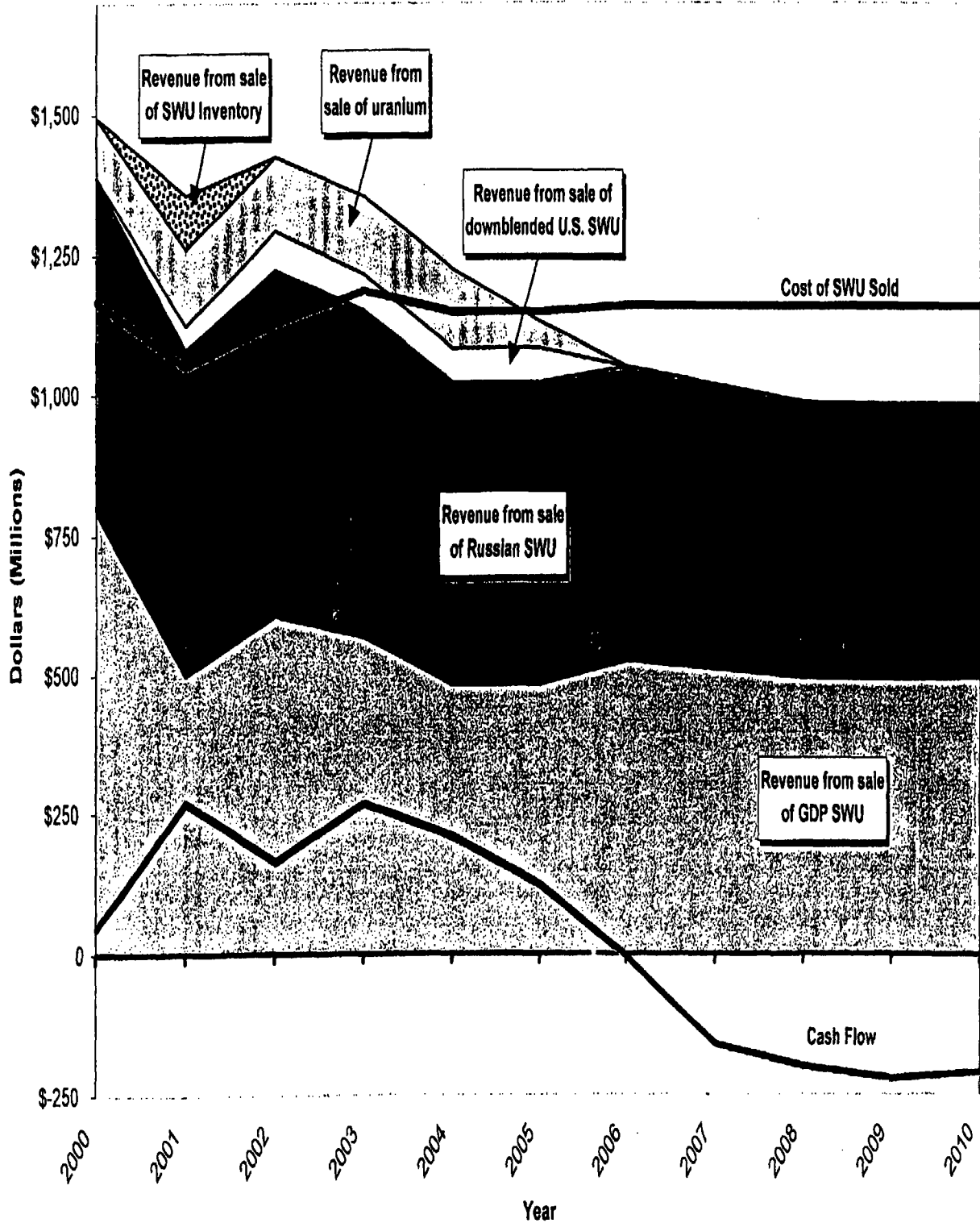


**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 2a: One GDP with 6 Million Russian SWU Annually in FY 2002-2010**





**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 2a: One GDP with 6 Million Russian SWU Annually in FY 2002-2010; Price of Russian SWU is the Same Price as Under the Current Contract**



**Scenario 2a: One GDP with 6 Million Russian SWU Annually in FY 2002-2012**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,226	1,130	1,049	1,018	987	984	984
Total COGS	1,214	1,211	1,252	1,220	1,030	1,030	1,040	1,040	1,040	1,040	1,040
Gross Margin	258	146	118	87	196	100	9	(22)	(53)	(56)	(56)
Interest Expense	39	33	33	33	33	33	33	10	10	10	0
Interest Earned	0	(1)	(15)	(26)	(39)	(52)	(51)	(45)	(43)	(36)	(29)
SG&A	46	46	46	46	46	46	46	46	45	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	25	37	7	7	7	7	7	7	7	7
Pretax Income	167	41	54	52	149	66	(26)	(40)	(73)	(83)	(80)
Taxes	58	14	19	18	51	23	(9)	(14)	0	0	0
Net Income	109	27	35	34	98	43	(17)	(26)	(73)	(83)	(80)
Adjustments to Net Income to Obtain Cash Flow	7	264	147	244	200	175	150	25	25	25	25
Investments in GDPs and New Plant	(71)	(23)	(18)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)
Cash Flow Before Financing	45	268	164	267	287	207	122	(12)	(59)	(69)	(66)
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	197	164	267	287	207	(228)	(12)	(59)	(219)	(66)
Estimated Cash on Hand at the end of the Year (Before dividends)	55	252	416	683	970	1,177	949	936	877	658	593
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	208	378	645	931	1,138	910	898	839	620	554
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
GDP Produced SWU	7,345	4,686	5,856	5,819	5,335	5,335	6,000	6,000	6,000	6,000	6,000
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	0	0	0	0	0
SWU from Inventory	0	999	0	0	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,521	12,484	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Cost per SWU for Purchase/Production Sources (\$ in millions)	(b)(4)										
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										

**Revenue per SWU**

**Notes for Scenario 2a**

1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
2. FY 2000-2005, COGS fluctuate because of changes in GDP production amounts due partly to changes in the production amount of downblended US HEU.
3. CY 2002, Russian HEU renegotiated price begins.
4. FY 2003, First full year of reduced Russian SWU costs.
5. CY 2006, Interest Payments on IPO Debt of \$350 million complete.
6. FY 2006-2010, Revenues decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
7. FY 2007-2010, COGS constant because constant quantities are purchased from Russia and produced in the GDP.
8. CY 2009, Interest Payments on IPO Debt of \$150 million complete.

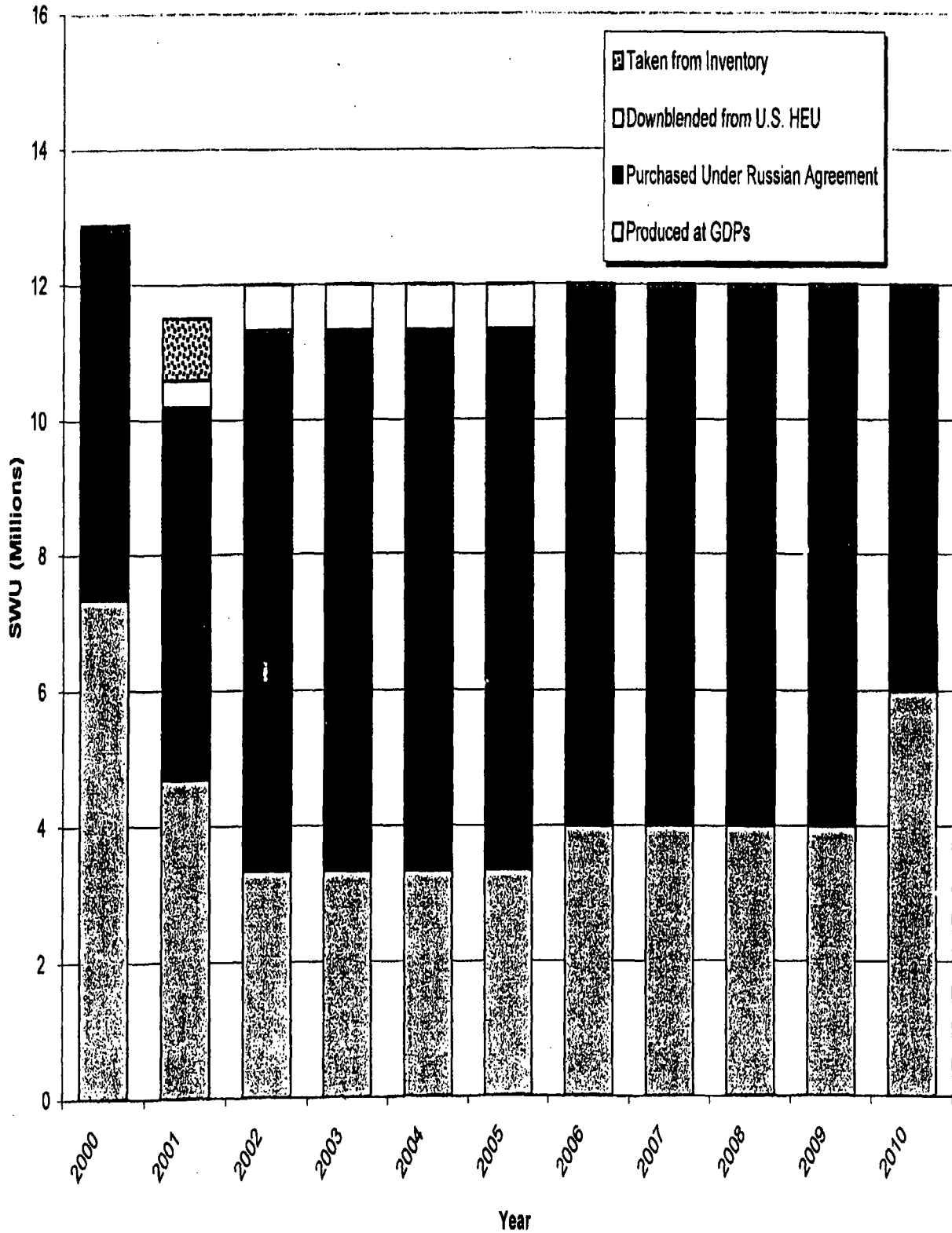
---

Appendix 2.2.B: Sensitivity Analysis by Subscenario

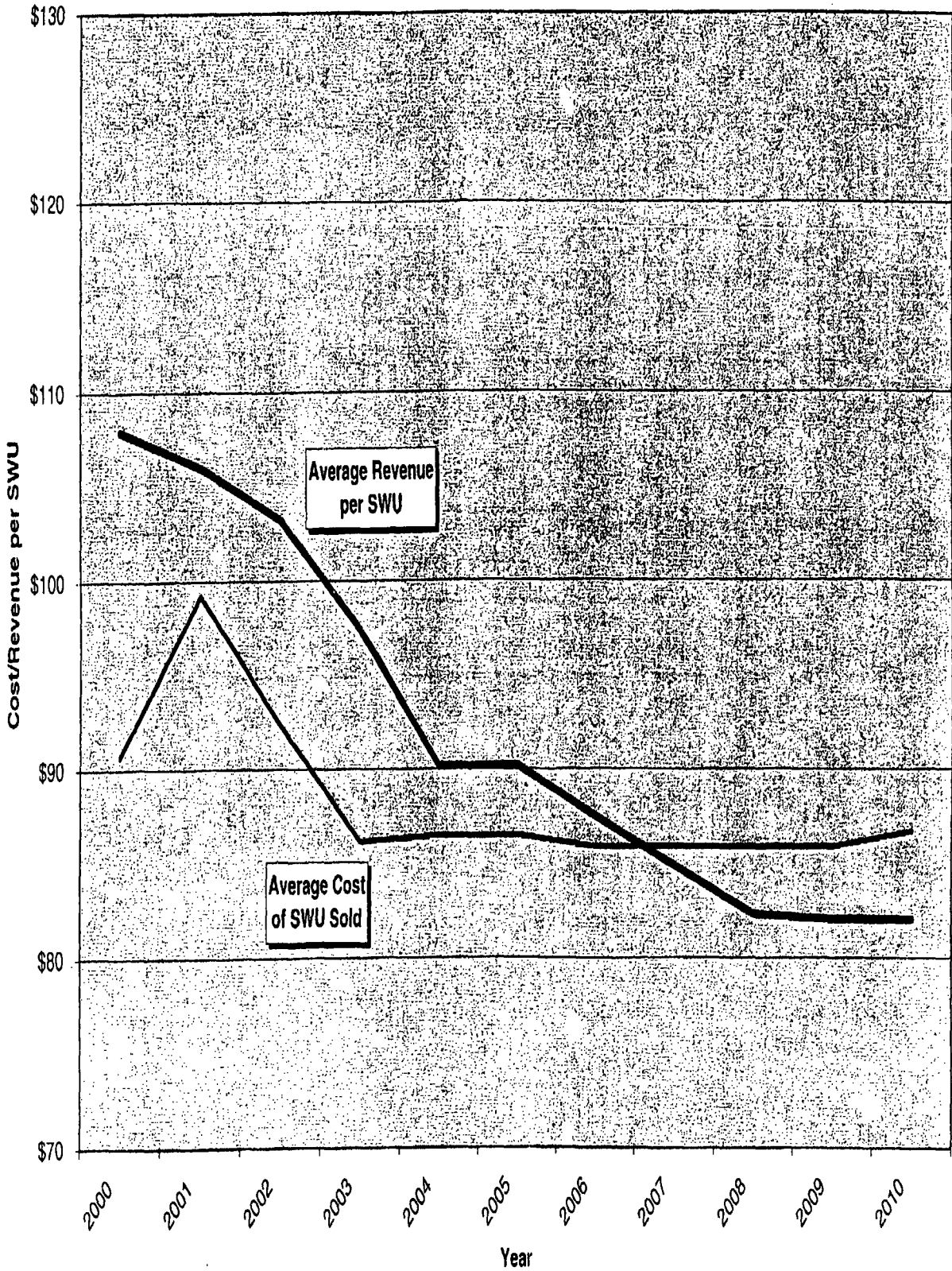
Scenario 2b: One GDP with 8 million Russian SWU annually in FY 2002-2009

### Sources of SWU

Scenario 2b: One GDP with 8 Million Russian SWU Annually in FY 2002-2009

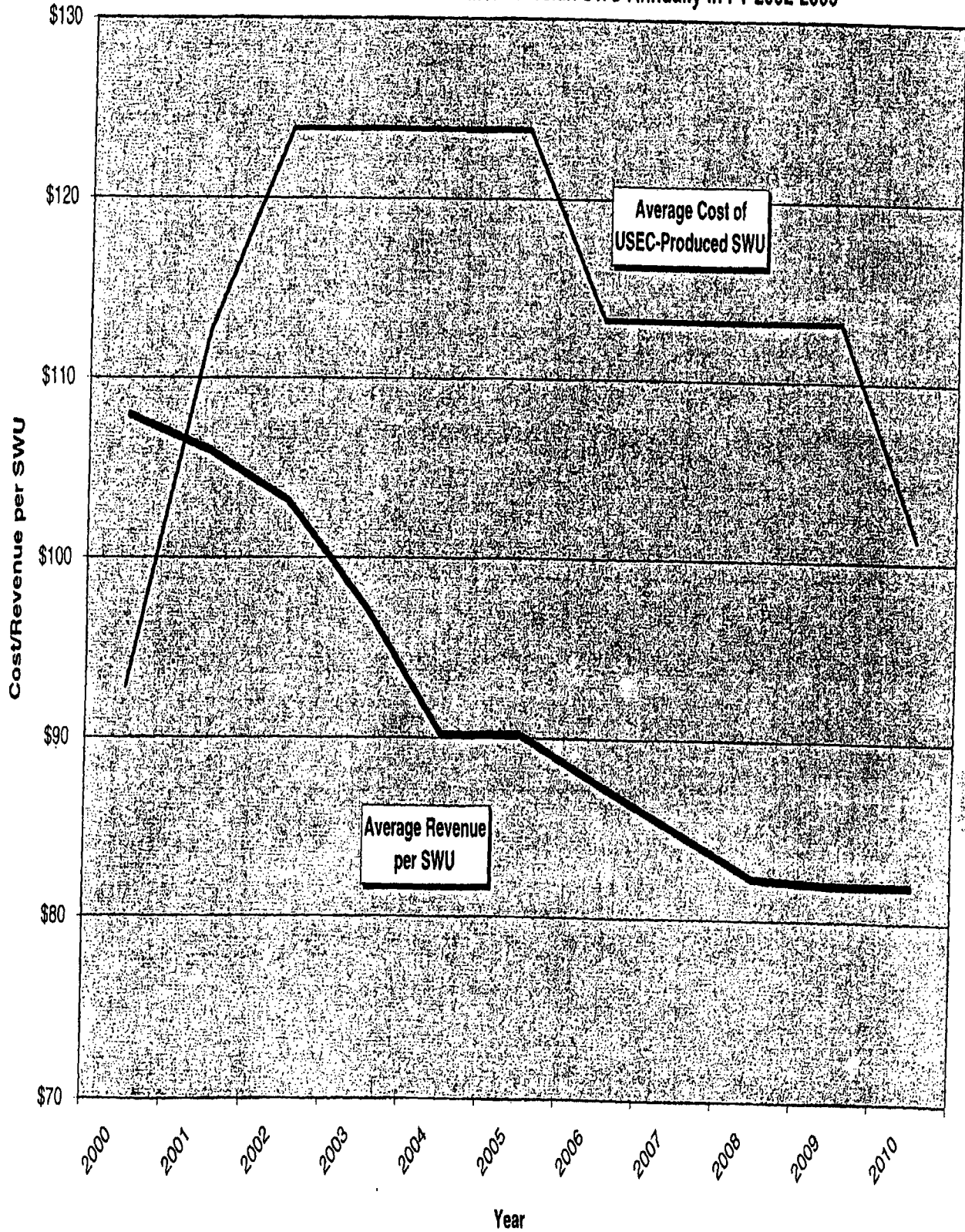


Revenue per SWU Relative to Average Cost per SWU  
Scenario 2b: One GDP with 8 Million Russian SWU Annually in FY 2002-2009

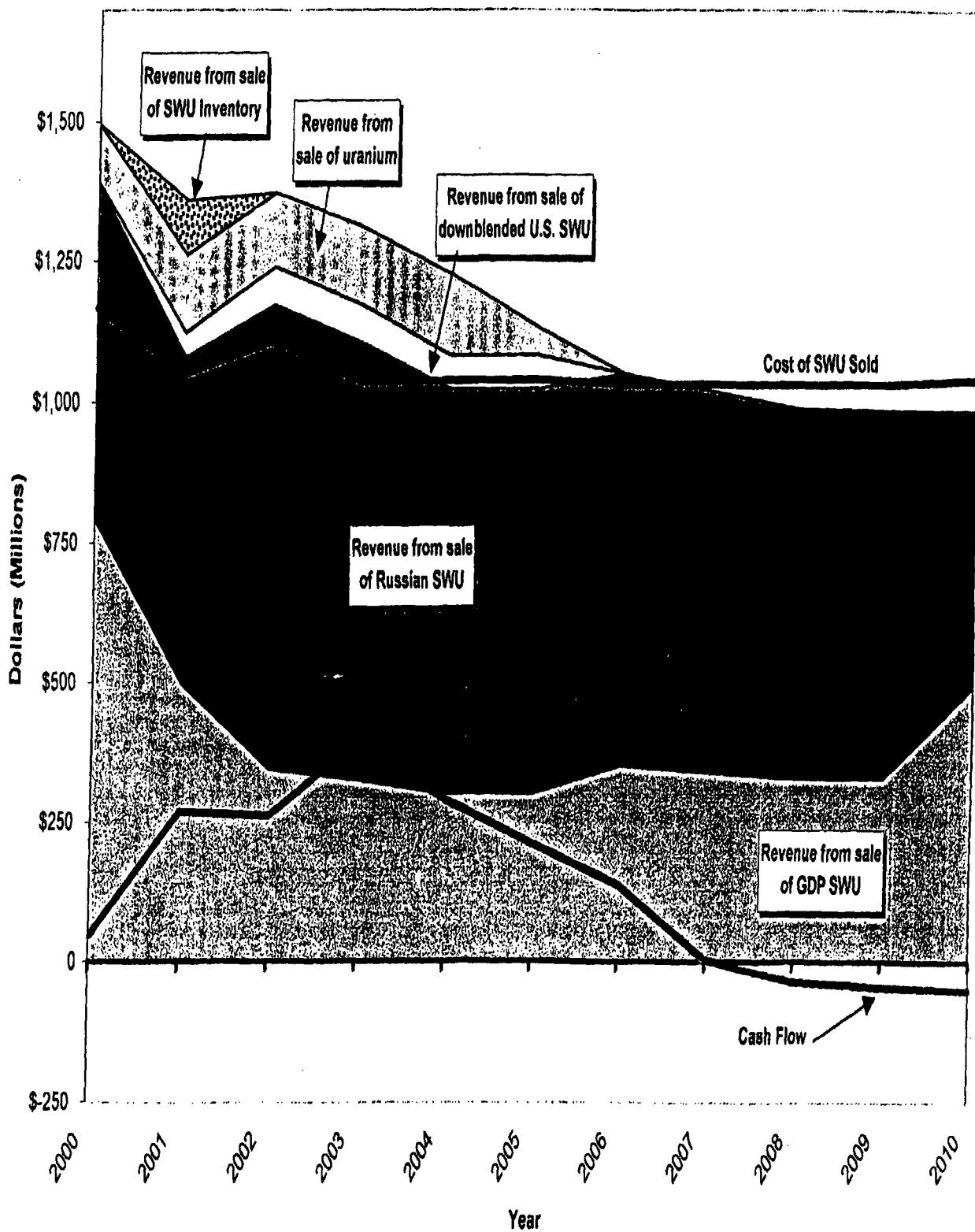




Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 2b: One GDP with 8 Million Russian SWU Annually in FY 2002-2009



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 2b: One GDP with 8 Million Russian SWU Annually in FY 2002-2009**



**Scenario 2b: One GDP with 8 Million Russian SWU Annually in FY 2002-2009**

Scenario Financial Summary	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,226	1,130	1,049	1,018	987	984	984
Total COGS	1,214	1,211	1,108	1,034	1,037	1,037	1,030	1,030	1,030	1,030	1,040
Gross Margin	258	146	262	274	188	93	19	(12)	(43)	(46)	(56)
Interest Expense	39	33	33	33	33	33	33	10	10	10	0
Interest Earned	0	(1)	(17)	(34)	(51)	(63)	(63)	(58)	(57)	(51)	(45)
SG&A	46	48	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(6)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	25	37	7	7	7	7	7	7	7	7
Pretax Income	167	41	200	246	153	69	(4)	(18)	(49)	(58)	(64)
Taxes	59	14	69	85	53	24	(1)	(6)	0	0	0
Net Income	109	27	131	161	100	45	(3)	(12)	(49)	(58)	(64)
Adjustments to Net Income to Obtain Cash Flow Investments in GDPs and New Plant	7	264	147	244	200	175	150	25	25	25	25
	(71)	(23)	(18)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)
Cash Flow Before Financing	45	268	260	394	289	209	136	2	(35)	(44)	(50)
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	197	260	394	289	209	(214)	2	(35)	(194)	(50)
Estimated Cash on Hand at the end of the Year (Before dividends)	55	252	512	906	1,195	1,404	1,191	1,193	1,158	963	913
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	208	474	868	1,157	1,366	1,152	1,154	1,119	925	875
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,008
GDP Produced SWU	7,345	4,686	3,335	3,335	3,335	3,336	4,000	4,000	4,000	4,000	5,992
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	0	0	0	0	0
SWU from Inventory	0	909	0	0	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,900	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Cost per SWU for Purchase/Production Sources (\$ in millions)	(b)(4)										
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										
Revenue per SWU	(b)(4)										

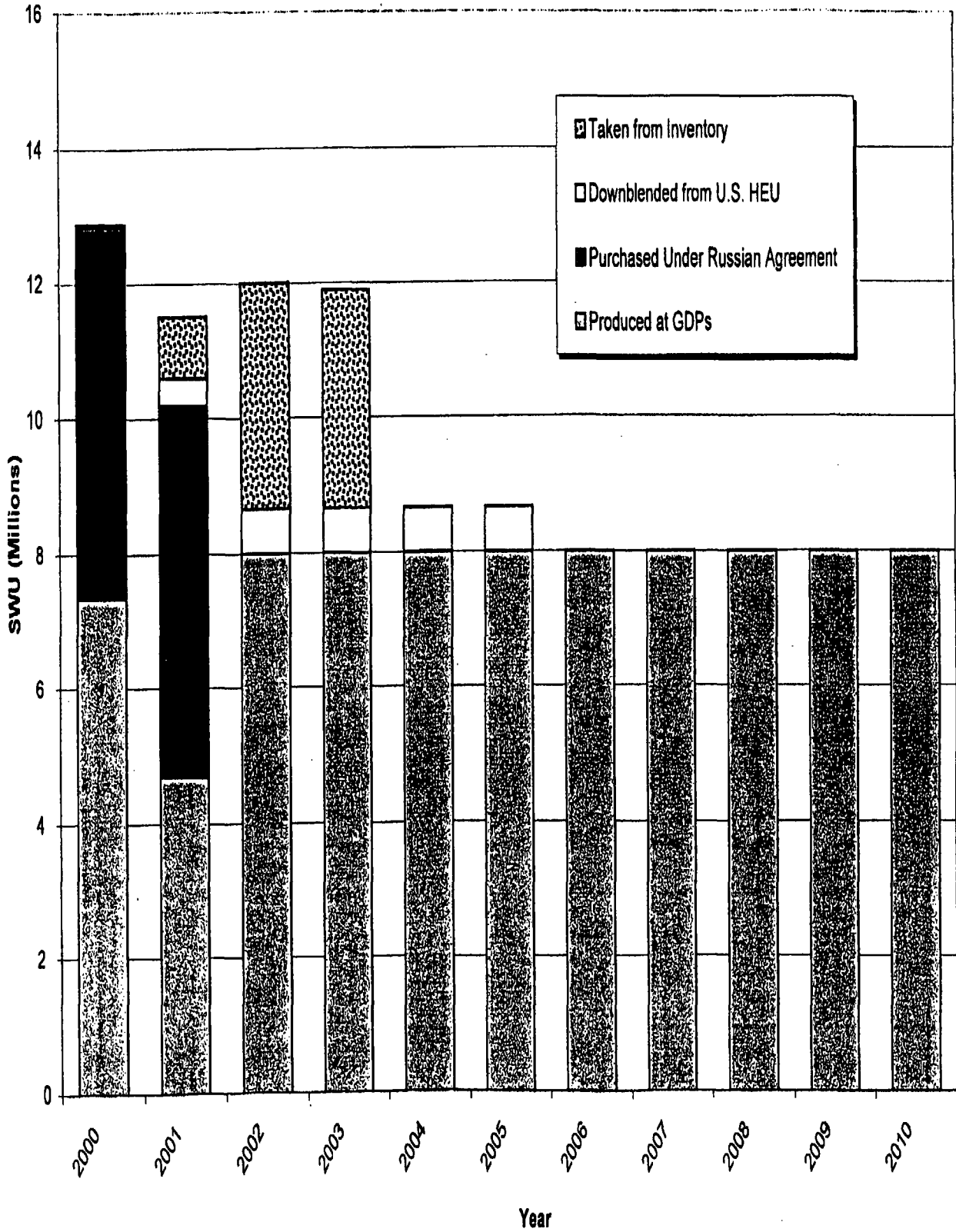
- Notes for Scenario 2b**
1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
  2. CY 2002, Russian HEU renegotiated price begins.
  3. FY 2003, First full year of reduced Russian SWU costs.
  4. FY 2002, COGS decrease because USEC is now receiving 6 million SWU, thus its average cost of SWU decreases.
  5. FY 2004-2009, COGS constant because constant quantities are purchased from Russia and produced in the GDP.
  6. CY 2006, Interest Payments on IPO Debt of \$350 million complete.
  7. FY 2006-2010, Revenues decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
  8. CY 2009, Interest Payments on IPO Debt of \$150 million complete.
  9. CY 2010, Last year that Russian SWU is received, and the amount received is 8 million instead of 6 million SWU. Thus COGS increase slightly.

---

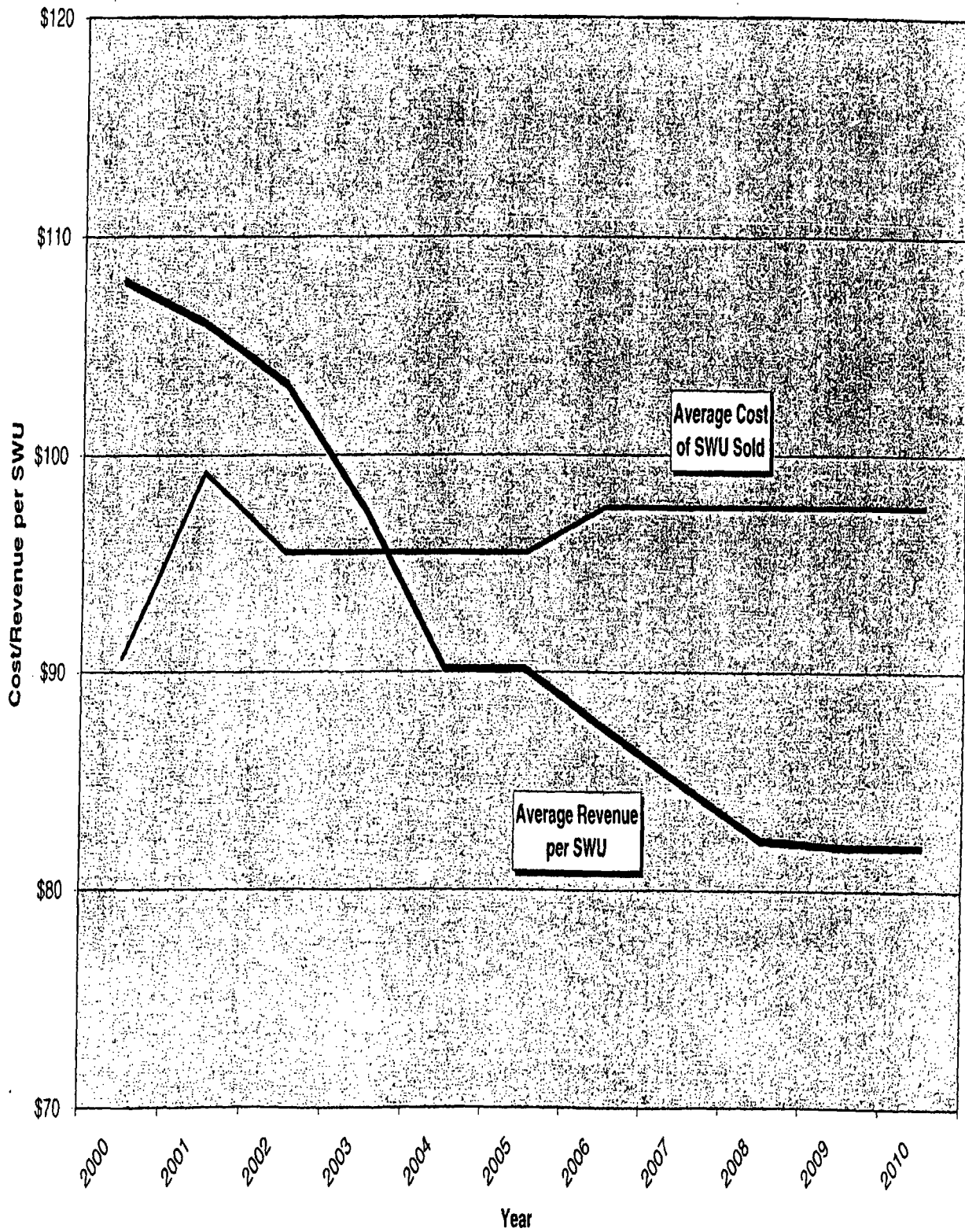
Appendix 2.2.C: Sensitivity Analysis by Subscenario

Scenario 2c: One GDP with no Russian SWU after FY 2001

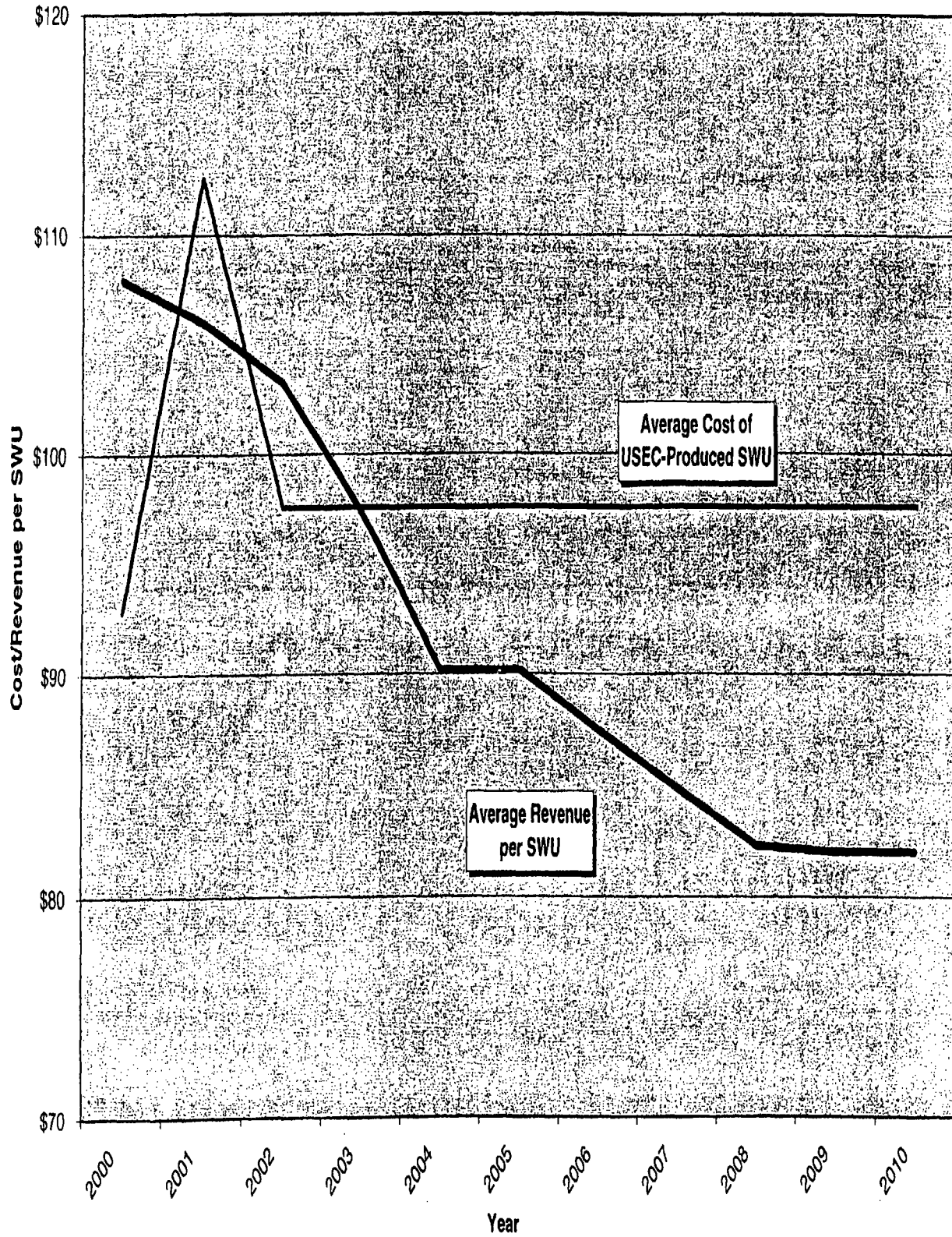
**Sources of SWU**  
**Scenario 2c: One GDP with No Russian SWU After FY 2001**



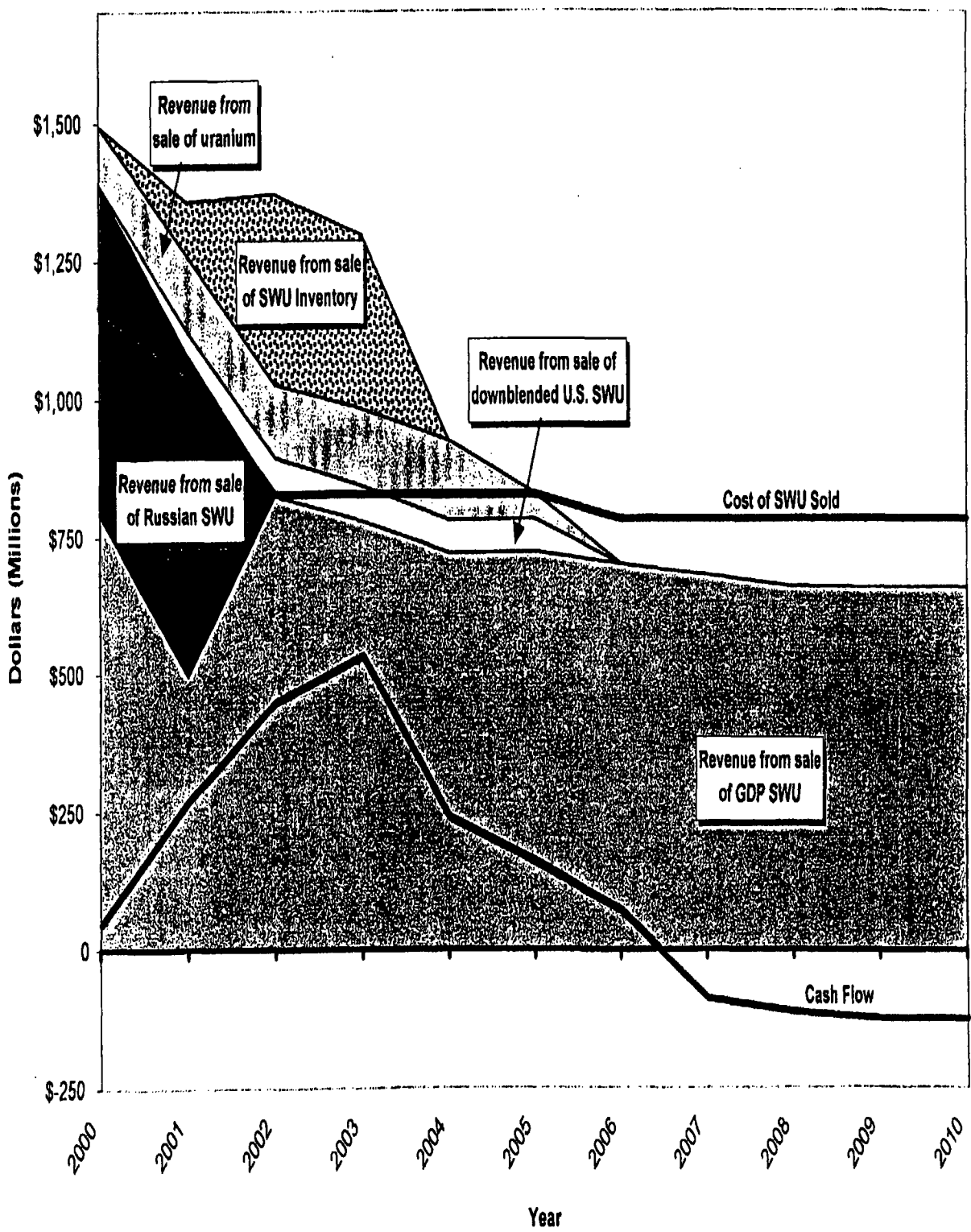
Revenue per SWU Relative to Average Cost per SWU  
Scenario 2c: One GDP with No Russian SWU After FY 2001



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 2c: One GDP with No Russian SWU After FY 2001



**Cash Flow and Cost of SWU Relative to Revenues-by-Source  
Scenario 2c: One GDP with No Russian SWU After FY 2001**





**Scenario 2c: One GDP with No Russian SWU After FY 2001**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,296	925	829	700	679	658	656	656
Total COGS	1,214	1,211	828	828	828	828	781	791	781	781	781
Gross Margin	258	146	543	469	97	1	(81)	(102)	(123)	(125)	(125)
Interest Expense	39	33	33	33	33	33	33	10	10	10	0
Interest Earned	0	(1)	(22)	(46)	(65)	(75)	(72)	(63)	(58)	(48)	(38)
SG&A	46	46	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	25	37	7	7	7	7	7	7	7	7
Pretax Income	187	41	485	454	76	(9)	(95)	(102)	(128)	(140)	(139)
Taxes	58	14	167	156	26	(3)	(26)	0	0	0	0
Net Income	109	27	318	297	50	(6)	(69)	(102)	(128)	(140)	(139)
Adjustments to Net Income to Obtain Cash Flow	7	264	147	244	200	175	150	25	25	25	25
Investments in GDPs and New Plant	(71)	(23)	(18)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)
Cash Flow Before Financing	45	268	447	530	239	158	70	(88)	(114)	(126)	(125)
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	197	447	530	239	158	(280)	(88)	(114)	(276)	(125)
Estimated Cash on Hand at the end of the Year (Before dividends)	55	252	699	1,229	1,468	1,626	1,346	1,258	1,144	869	743
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	208	660	1,190	1,429	1,587	1,307	1,219	1,106	830	705
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	0	0	0	0	0	0	0	0	0
GDP Produced SWU	7,345	4,686	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	0	0	0	0	0
SWU from Inventory	0	909	3,335	3,221	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,000	11,886	8,665	8,664	8,000	8,000	8,000	8,000	8,000

**Cost per SWU for Purchase/Production Sources (\$ in millions)**

Russian Purchased SWU	(b)(4)
GDP Produced SWU	(b)(4)
U.S. Downblended HEU	(b)(4)
Centrifuge Produced SWU	(b)(4)
Weighted Average Cost/SWU	(b)(4)

**Revenue per SWU**

**Notes for Scenario 2c**

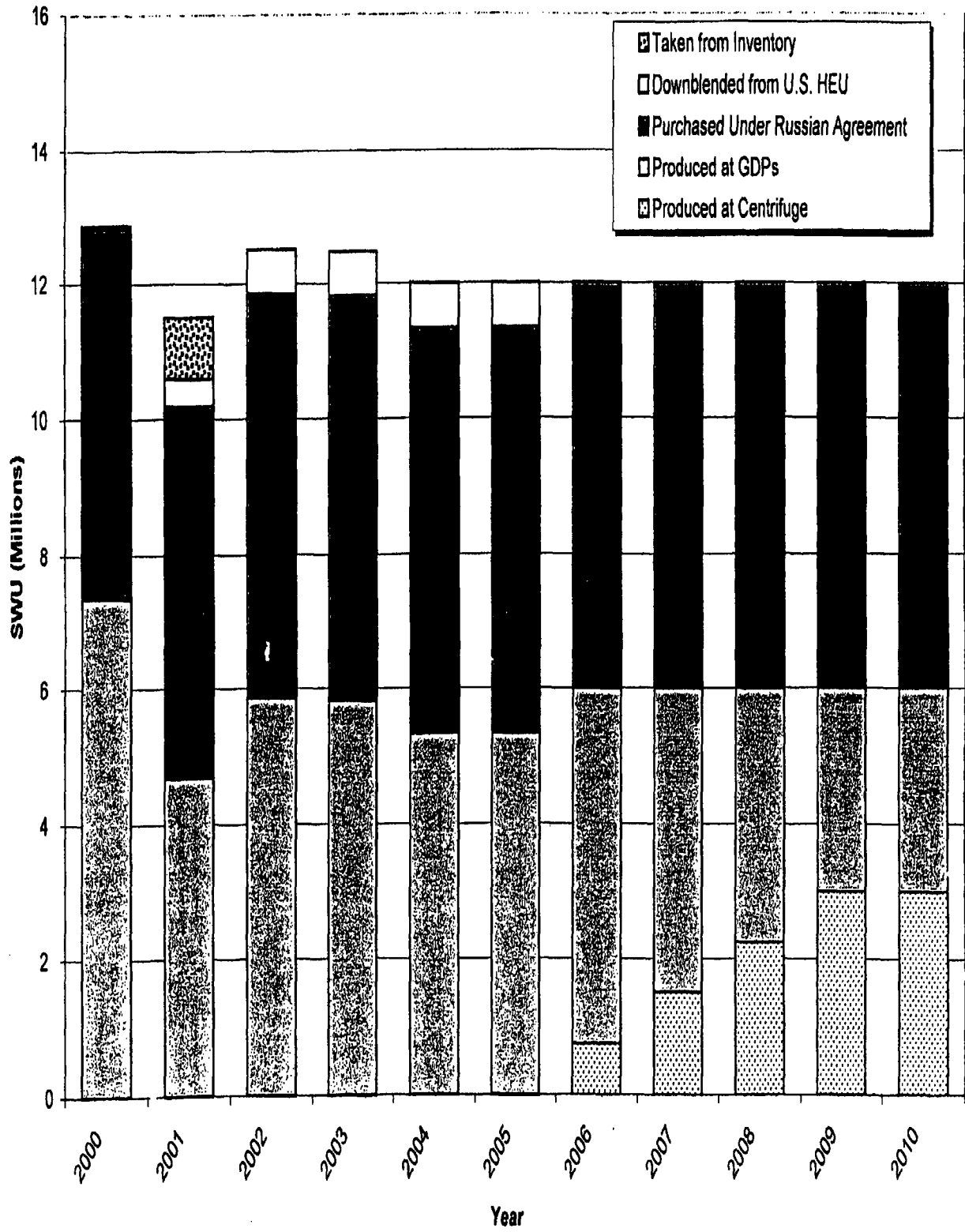
1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
2. FY 2002, COGS decrease because the GDP is operating more efficiently at the higher production rate and because a smaller amount of SWU is produced or purchased.
3. FY 2002-2005, COGS fluctuate because of changes in GDP production amounts due to changes in the production amount of downblended US HEU.
4. FY 2003-2008, Revenues decrease at about 12% per year due to the averaging in of lower priced sales contracts and a reduced amount of SWU being sold.
5. FY 2005, Revenues drop sharply after USEC has sold off all of its inventory and is now only selling the SWU it produces at the one GDP.
6. CY 2006, Interest Payments on IPO Debt of \$350 million complete.
7. CY 2009, Interest Payments on IPO Debt of \$150 million complete.
8. FY 2008-2010, Revenues are flat because only SWU from the GDP is being sold and the GDP is operating at its maximum economic capacity.

---

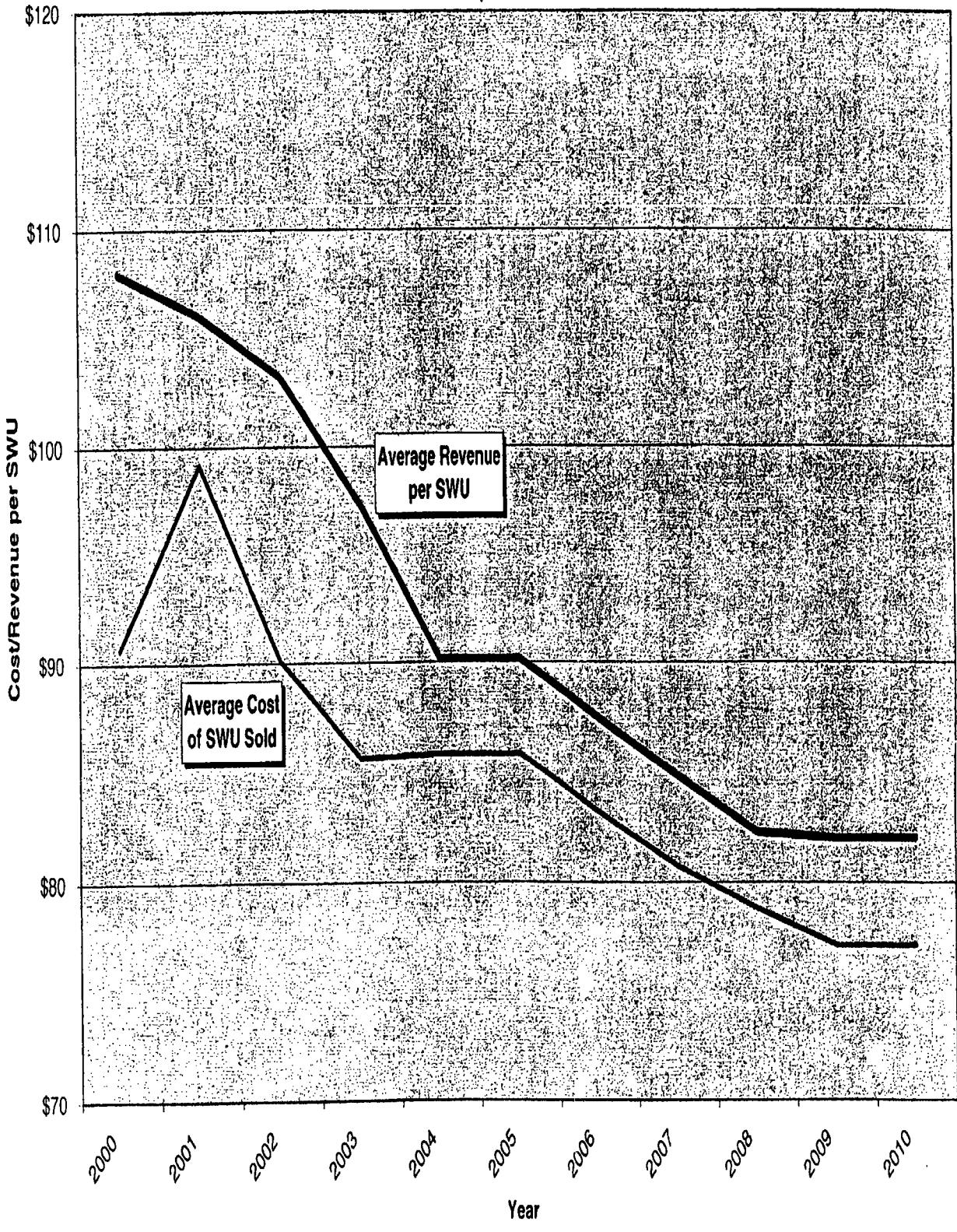
Appendix 2.3.A: Sensitivity Analysis by Subscenario

Scenario 3a: New technology beginning in FY 2006 with continued operation  
of Paducah GDP

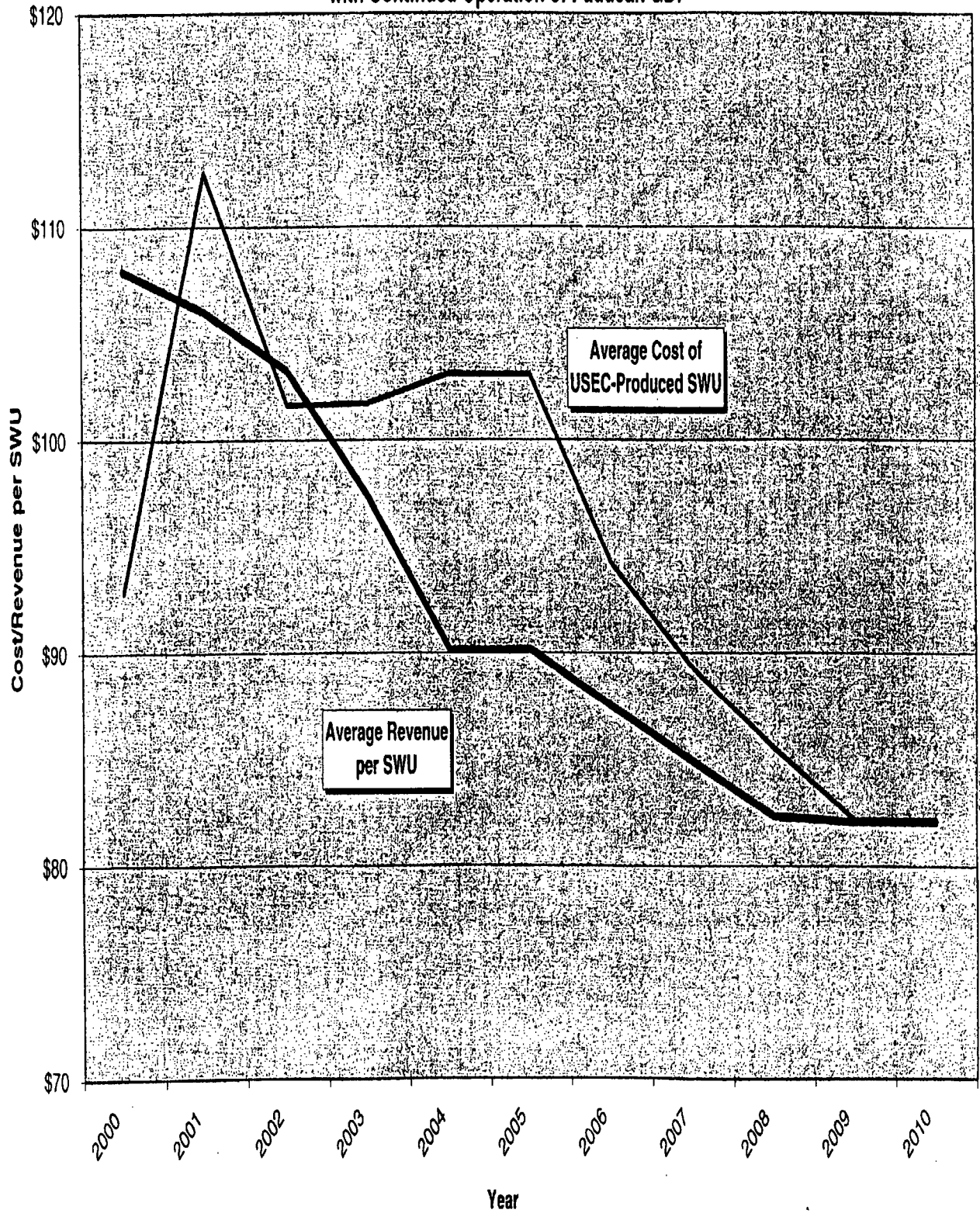
**Sources of SWU**  
**Scenario 3a: New Technology Beginning in FY 2006 with**  
**Continued Operation of Paducah GDP**



Revenue per SWU Relative to Average Cost per SWU  
Scenario 3a: New Technology Beginning in FY 2006  
with Continued Operation of Paducah GDP



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 3a: New Technology Beginning in FY 2006  
with Continued Operation of Paducah GDP





**Scenario 3a: New Technology Beginning in FY 2006 with Continued Operation of Paducah GDP**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,226	1,130	1,049	1,018	987	984	984
Total COGS	1,214	1,211	1,252	1,220	1,030	1,000	1,001	969	946	926	926
Gross Margin	258	146	118	87	196	100	49	49	42	58	58
Interest Expense	39	33	33	33	33	33	33	33	10	34	56
Interest Earned	0	(1)	(14)	(24)	(37)	(45)	(32)	(9)	0	0	0
SG&A	46	46	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	40	67	17	17	7	7	7	7	7	7
Pretax Income	167	26	23	40	137	59	(15)	(24)	(75)	(90)	(80)
Taxes	58	9	8	14	47	20	(5)	(8)	0	0	0
Net Income	109	17	15	26	90	39	(10)	(16)	(75)	(90)	(80)
Adjustments to Net Income to Obtain Cash Flow Investments in GDPs and New Plant	7 (71)	264 (23)	147 (18)	244 (11)	200 (11)	175 (185)	150 (331)	45 (395)	55 (302)	65 (92)	65 (11)
Cash Flow Before Financing	45	258	144	259	279	28	(191)	(366)	(322)	(118)	(27)
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	300	275	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	187	144	259	279	28	(541)	(366)	(22)	7	(27)
Estimated Cash on Hand at the end of the Year (Before dividends)	55	242	386	645	924	952	411	45	23	30	3
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	198	348	607	885	914	373	7	(15)	(9)	(35)
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
GDP Produced SWU	7,345	4,686	5,896	5,819	5,335	5,336	5,250	4,500	3,750	3,000	3,000
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	750	1,500	2,250	3,000	3,000
SWU from Inventory	0	609	0	0	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,521	12,484	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Cost per SWU for Purchase/Production Sources (\$ in millions)	(b)(4)										
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										

**Revenue per SWU**

**Notes for Scenario 3a**

1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006
2. CY 2002, Russian HEU renegotiated price begins.
3. FY 2003, First full year of reduced Russian SWU costs.
4. FY 2005, Construction of centrifuge plant begins.
5. FY 2006-2009, COGS decrease each year as an increasing percent of the centrifuge plant capacity comes on line. The centrifuge plant is expected to have significantly lower cost per SWU.
6. CY 2006, Interest Payments on IPO Debt of \$350 million end.
7. FY 2006-2010, Revenues decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
8. FY 2009, Construction of centrifuge plant completed.
9. FY 2008-2010, COGS constant because constant quantities are purchased from Russia and produced in the GDP and centrifuge plant.
10. FY 2008-2010, Revenues are flat because constant amounts of SWU are being sold and the price per SWU is constant.
11. CY 2009, Interest Payments on IPO Debt of \$150 million end.

---

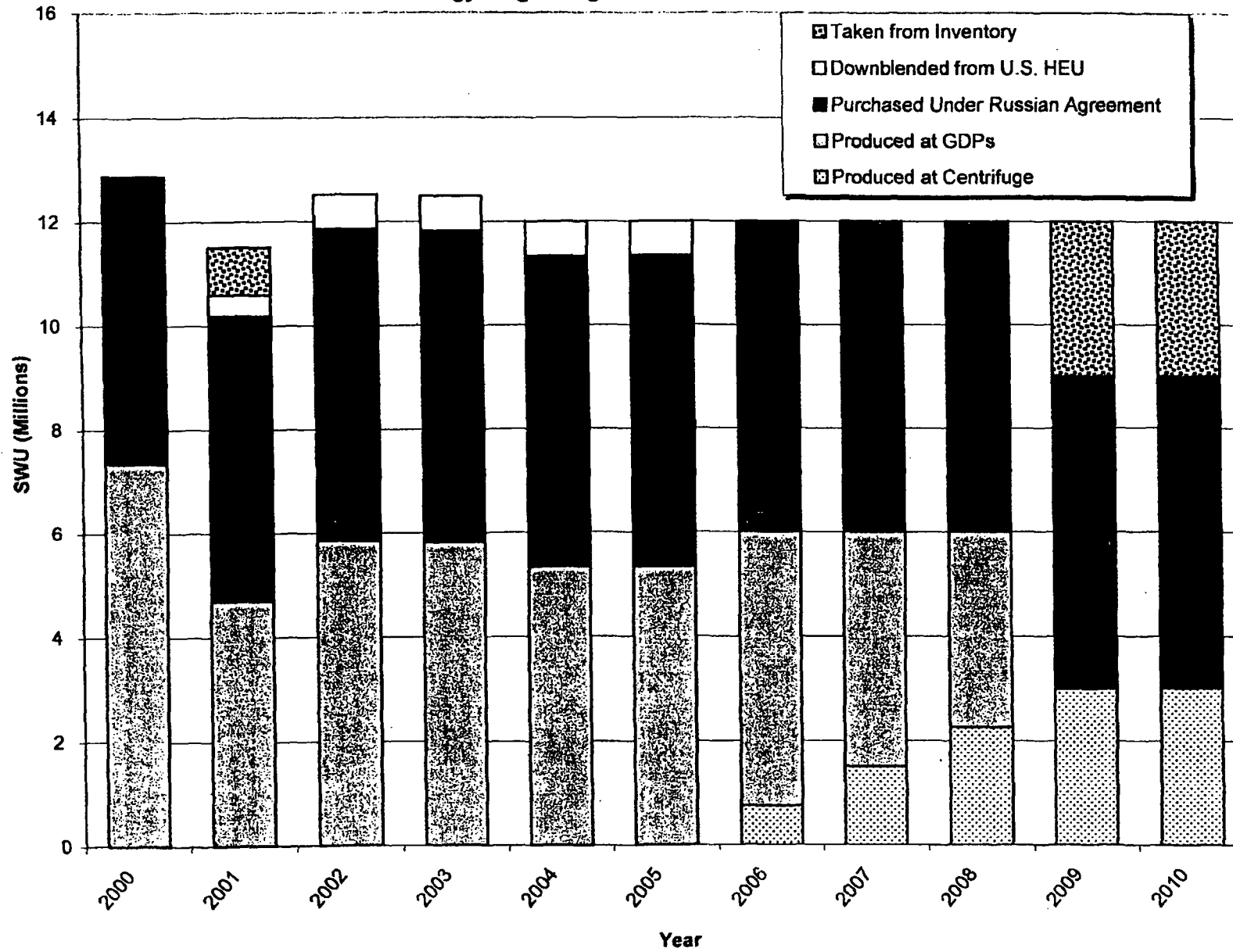
**Appendix 2.3.B: Sensitivity Analysis by Subscenario**

**Scenario 3b: New technology beginning in FY 2006 with closure of  
Paducah GDP in FY 2009**

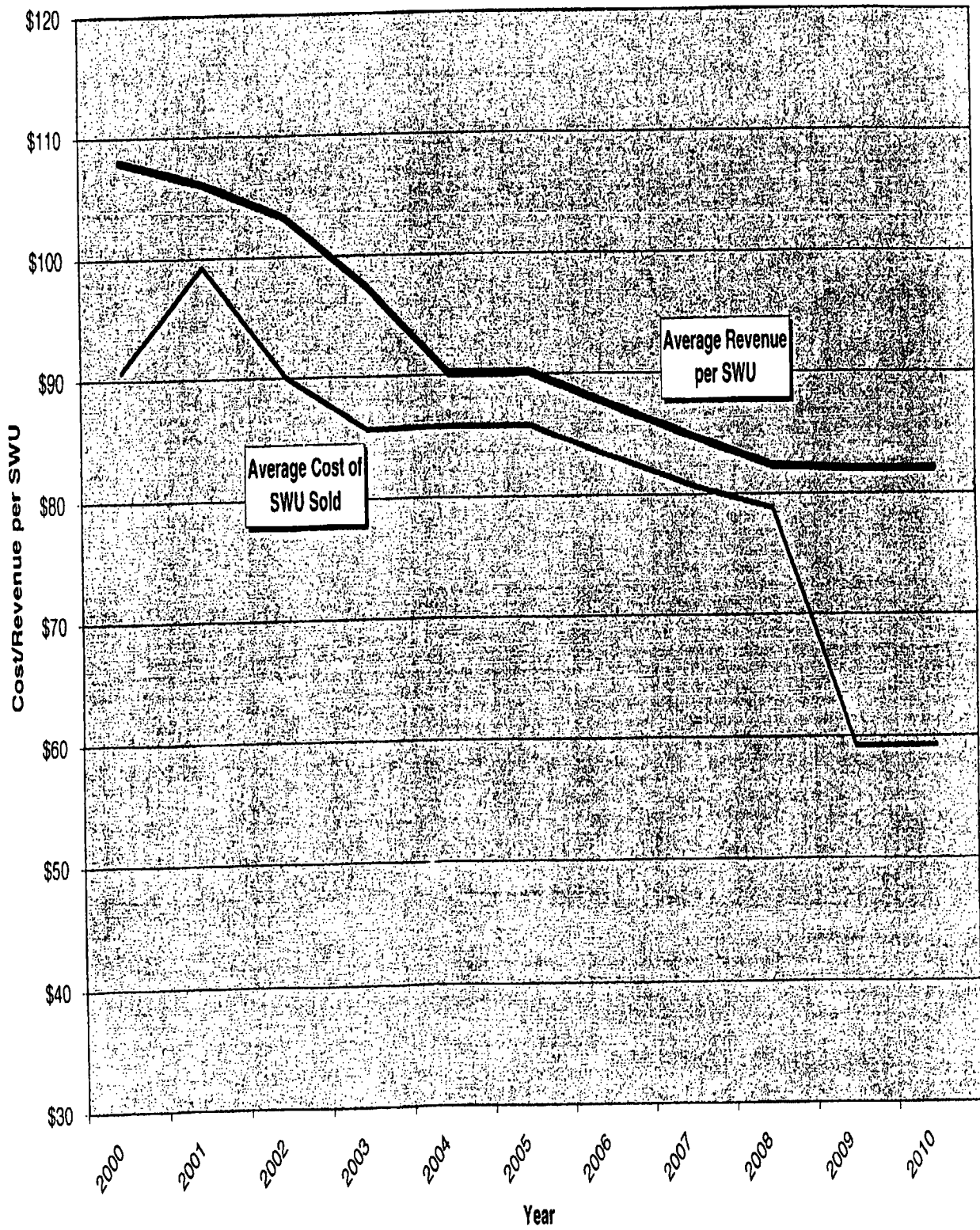


### Sources of SWU

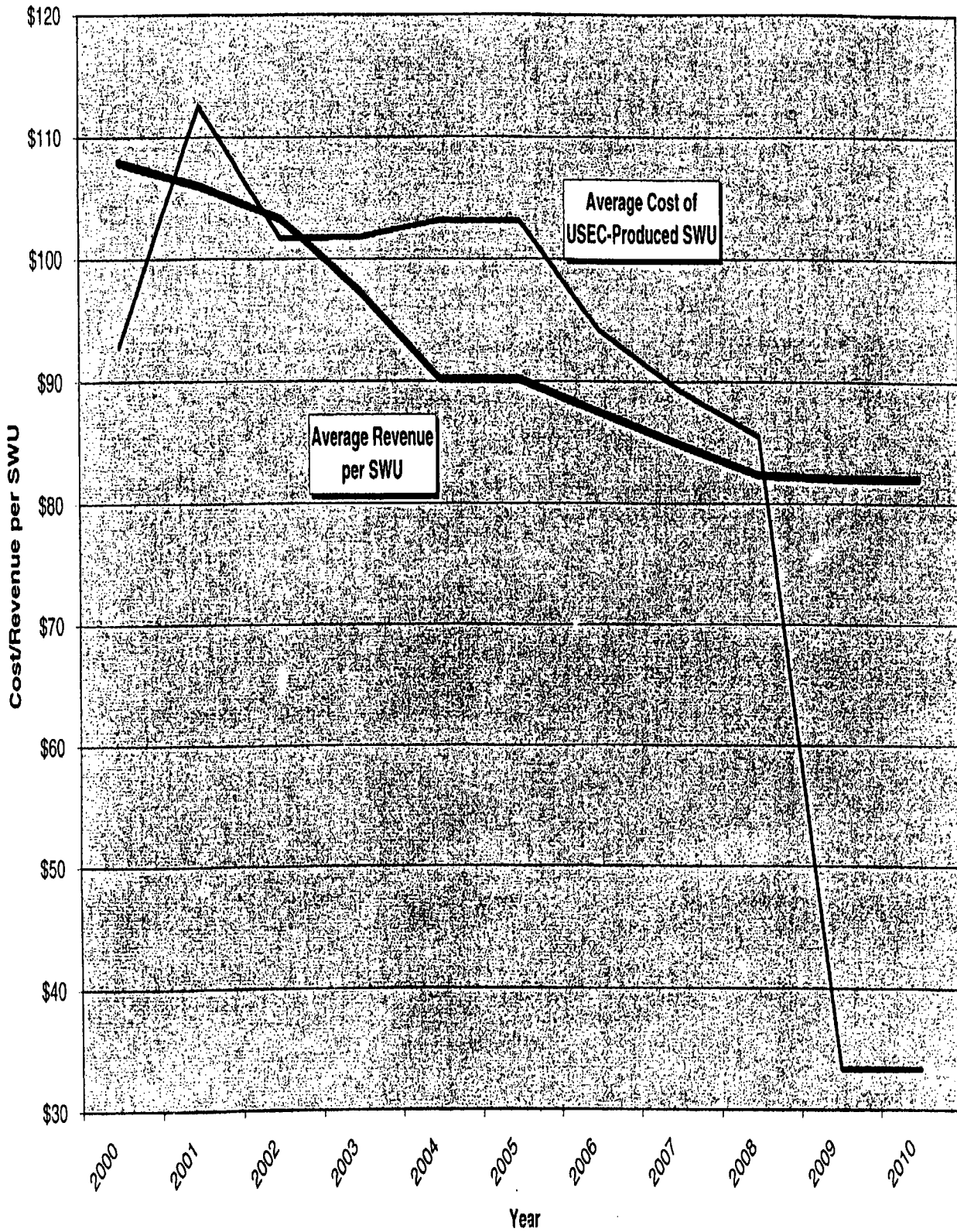
Scenario 3b: New Technology Beginning in FY 2006 with Closure of Paducah GDP in FY 2009



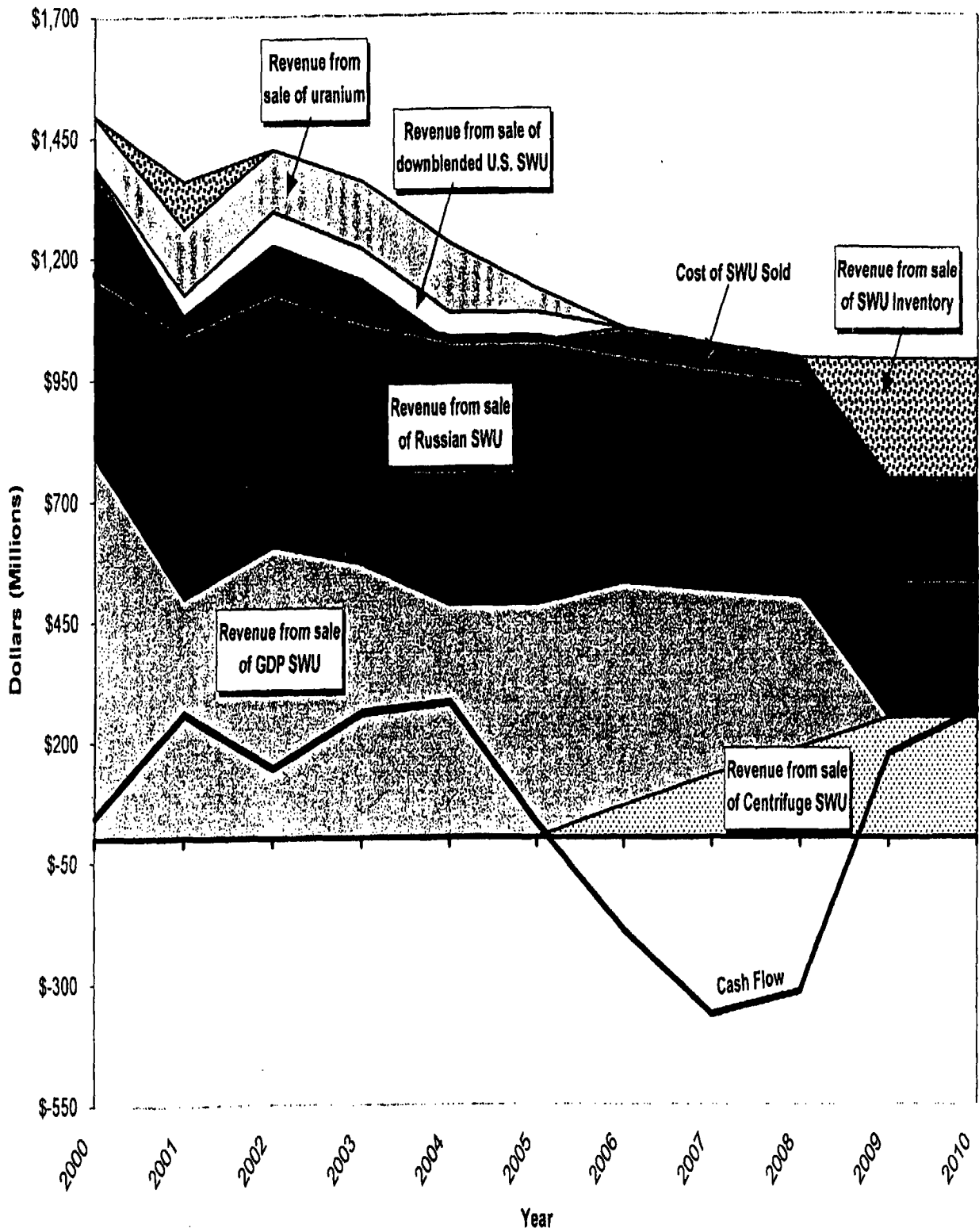
**Revenue per SWU Relative to Average Cost per SWU**  
**Scenario 3b: New Technology Beginning in FY 2006 with Closure of Paducah GDP in FY 2009**



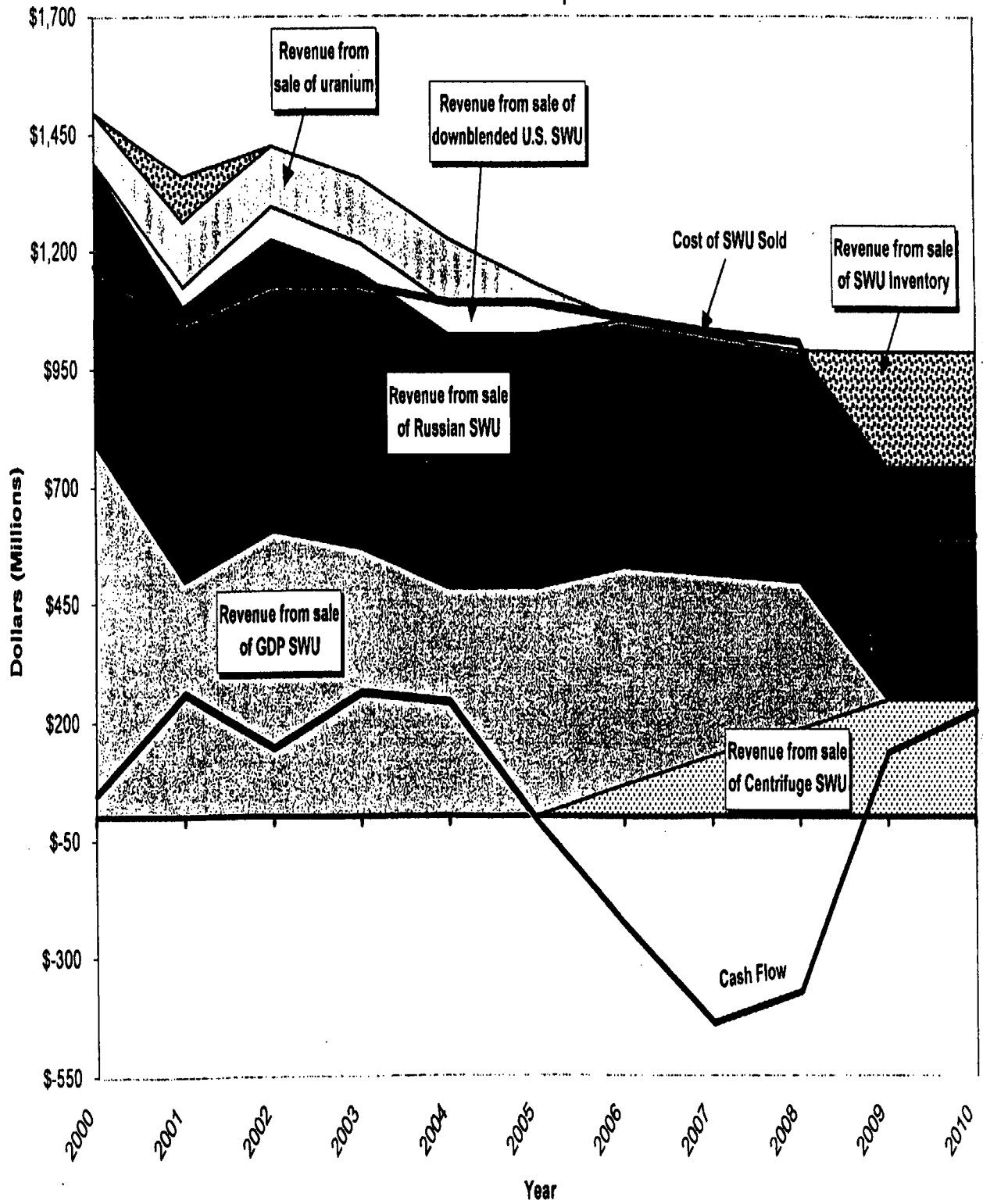
Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 3b: New Technology Beginning in FY 2006 with Closure of Paducah GDP in FY 2009



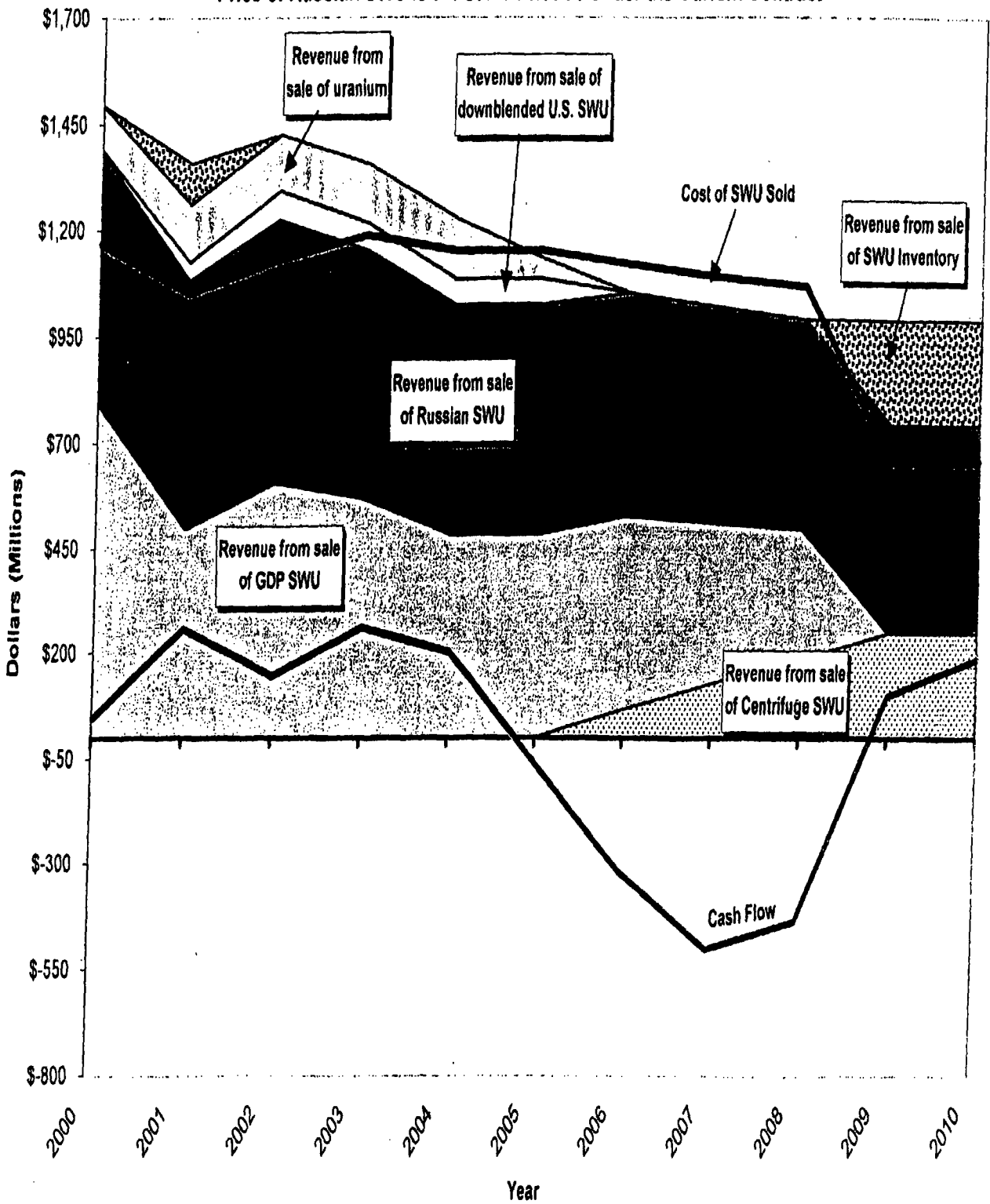
**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 3b: New Technology Beginning in FY 2006 with Closure of Paducah GDP in FY 2009**



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 3b: New Technology Beginning in FY 2006 with Closure of Paducah GDP in FY 2009**  
**Price of Russian SWU is the Spot Market Price**



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 3b: New Technology Beginning in FY 2006 with Closure of Paducah GDP in FY 2009**  
**Price of Russian SWU is the Same Price as Under the Current Contract**



**Scenario 3b: New Technology Beginning in FY 2006 with Closure of Paducah GDP in FY 2009**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,226	1,130	1,049	1,018	987	984	984
Total COGS	1,214	1,211	1,252	1,220	1,030	1,030	1,001	969	946	533	533
Gross Margin	258	146	118	87	196	100	49	49	42	451	451
Interest Expense	39	33	33	33	33	33	33	10	30	30	20
Interest Earned	0	(1)	(14)	(24)	(37)	(45)	(32)	(9)	0	0	0
SG&A	46	46	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	40	67	17	17	7	7	7	7	7	7
Protax Income	187	26	23	40	137	58	(15)	(24)	(71)	328	338
Taxes	58	9	8	14	47	20	(5)	(8)	0	113	117
Net Income	109	17	15	26	90	39	(10)	(16)	(71)	215	222
Adjustments to Net Income to Obtain Cash Flow	7	264	147	244	200	175	150	45	55	40	40
Investments in GDPs and New Plant	(71)	(23)	(18)	(11)	(11)	(185)	(331)	(395)	(302)	(81)	0
Cash Flow Before Financing	45	258	144	259	279	28	(191)	(356)	(318)	173	261
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	250	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	187	144	259	279	28	(541)	(356)	(68)	23	261
Estimated Cash on Hand at the end of the Year (Before dividends)	55	242	386	645	924	952	411	45	(23)	0	262
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	198	348	607	885	914	373	7	(61)	(38)	223
<b>SWU Purchases, Production, and Inventory Sales (Quantities)</b>											
Russian Purchased SWU	5,486	5,506	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
GDP Produced SWU	7,345	4,886	5,856	5,819	5,335	5,336	5,250	4,500	3,750	0	0
U.S. Downblended HEU	42	390	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	750	1,500	2,250	3,000	3,000
SWU from Inventory	0	909	0	0	0	0	0	0	0	3,000	3,000
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,521	12,484	12,000	12,000	12,000	12,000	12,000	12,000	12,000

Cost per SWU for Purchase/Production Sources (\$ in millions)

Russian Purchased SWU

GDP Produced SWU

U.S. Downblended HEU

Centrifuge Produced SWU

Weighted Average Cost/SWU

(b)(4)

**Revenue per SWU**

- Notes for Scenario 3b**
1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
  2. CY 2002, Russian HEU renegotiated price begins.
  3. FY 2003, First full year of reduced Russian SWU costs.
  4. FY 2005, Construction of centrifuge plant begins.
  5. FY 2006-2009, COGS decrease each year as an increasing percent of the centrifuge plant capacity comes on line. The centrifuge plant is expected to have significantly lower cost per SWU.
  6. CY 2006, Interest Payments on IPO Debt of \$350 million complete.
  7. FY 2006-2010, Revenues decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
  8. FY 2006, Construction of centrifuge plant completed.
  9. FY 2009, Second GDP is shut down. SWU is now only obtained from centrifuge plant and Russia.
  10. FY 2009, COGS decrease sharply because the second GDP is shut down and the amount of SWU produced or purchased is reduced by 25 percent.
  11. FY 2009-2010, COGS constant because constant quantities are purchased from Russia and produced in the GDP and centrifuge plant.
  12. FY 2008-2010, Revenues are flat because constant amounts of SWU are being sold and the price per SWU is constant.
  13. CY 2009, Interest Payments on IPO Debt of \$150 million complete.

---

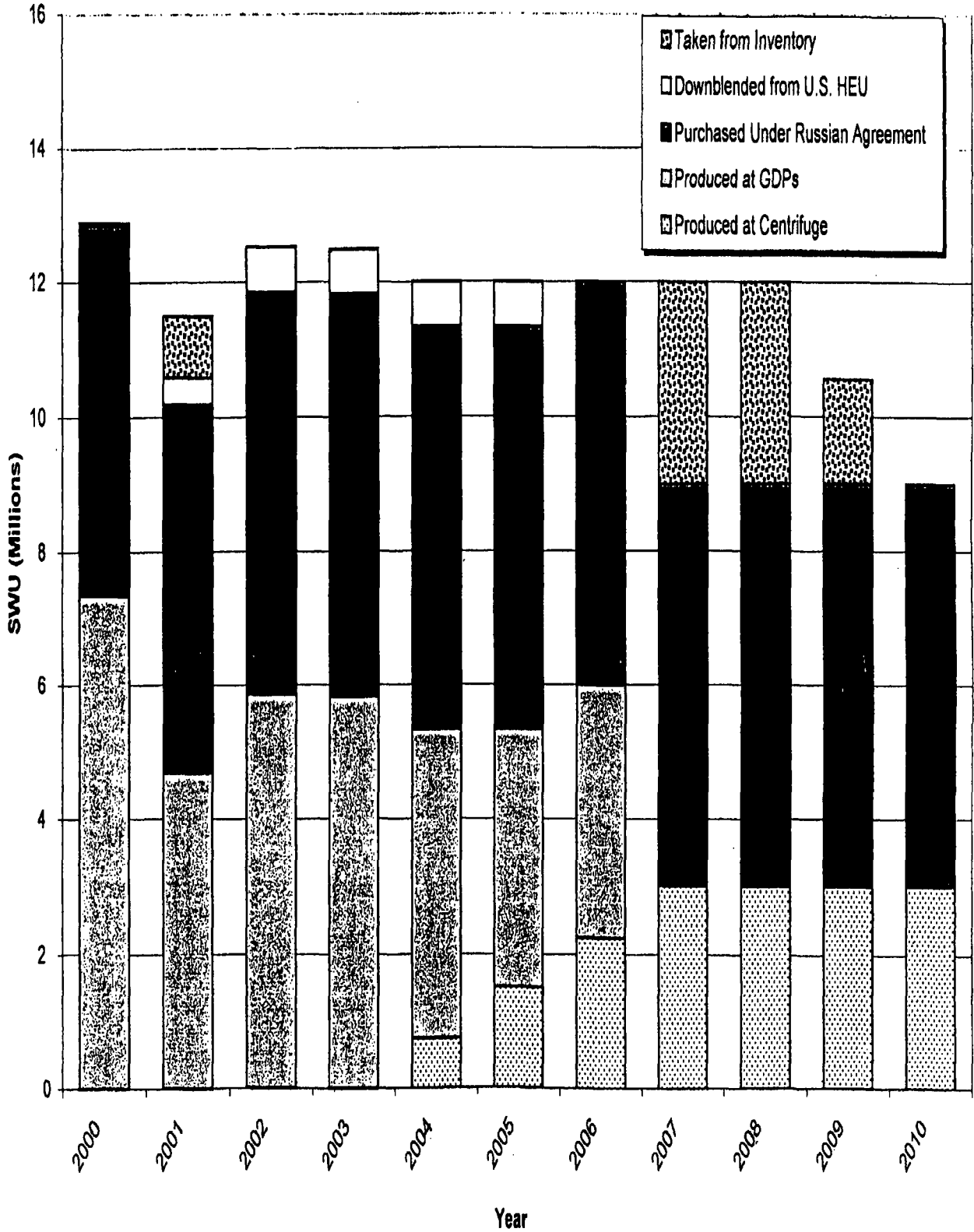
Appendix 2.3.C: Sensitivity Analysis by Subscenario

Scenario 3c: New technology beginning in FY 2004 with closure of  
Paducah GDP in FY 2007

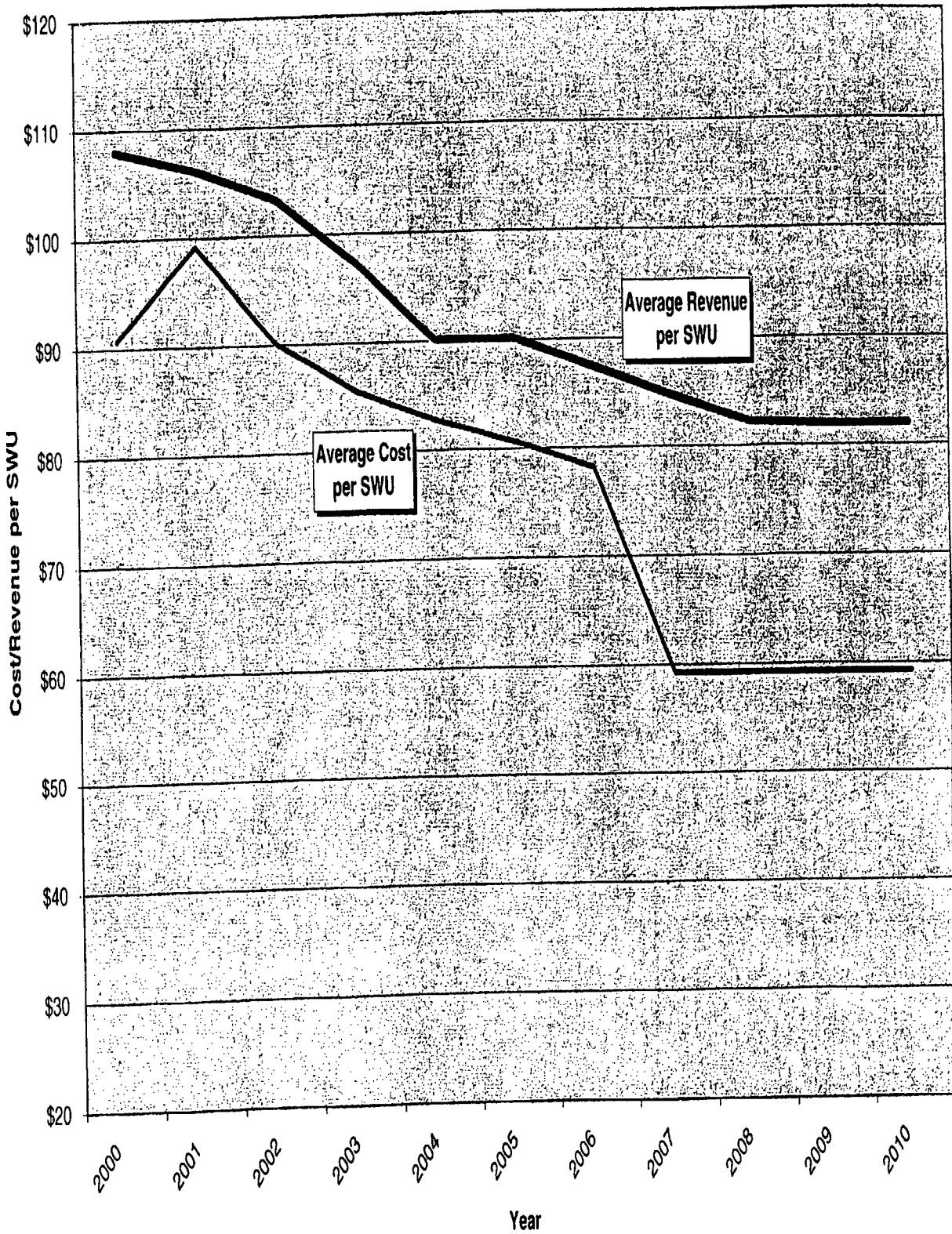


# Sources of SWU

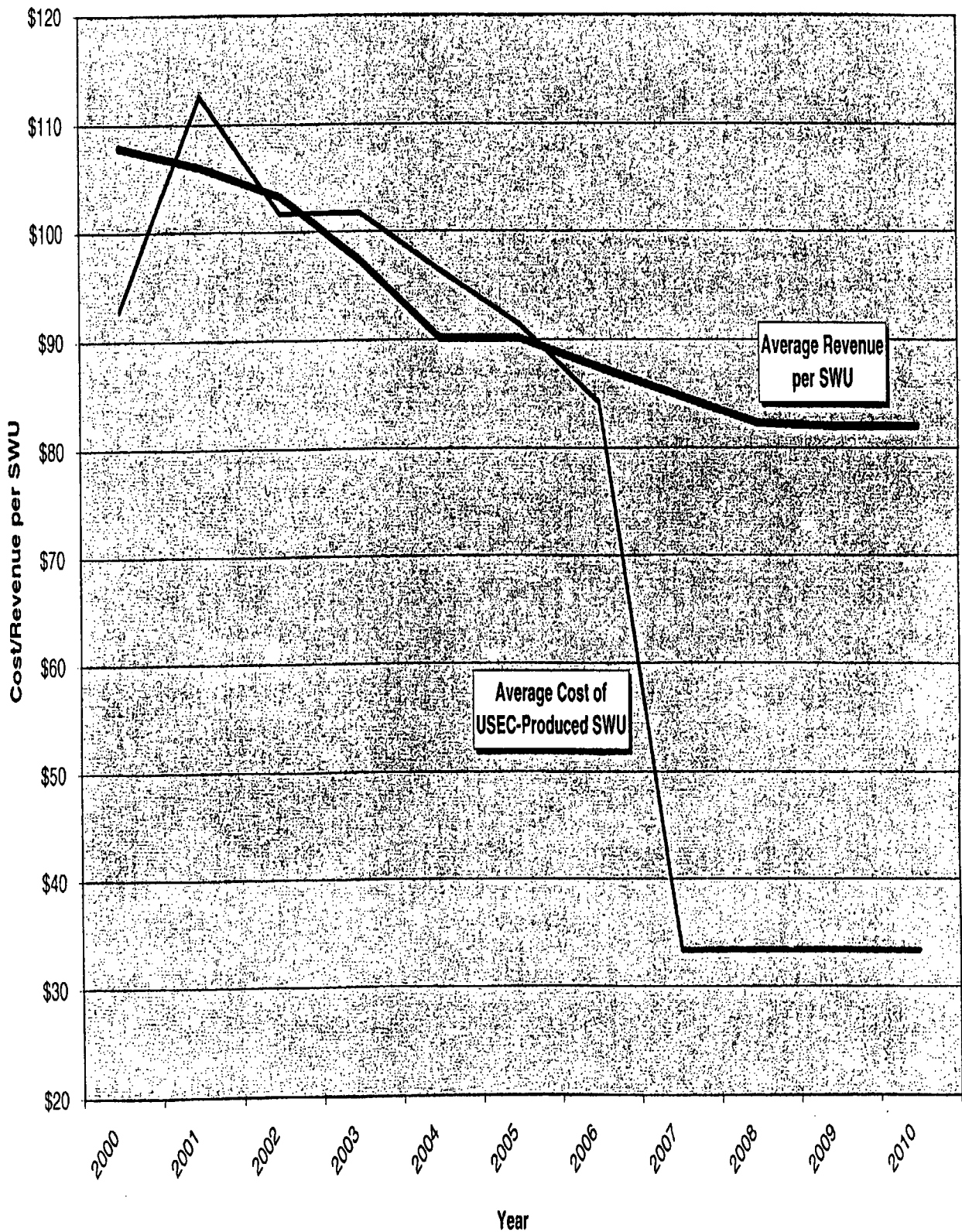
Scenario 3c: New Technology Beginning in FY 2004 with Closure of Paducah GDP in FY 2007



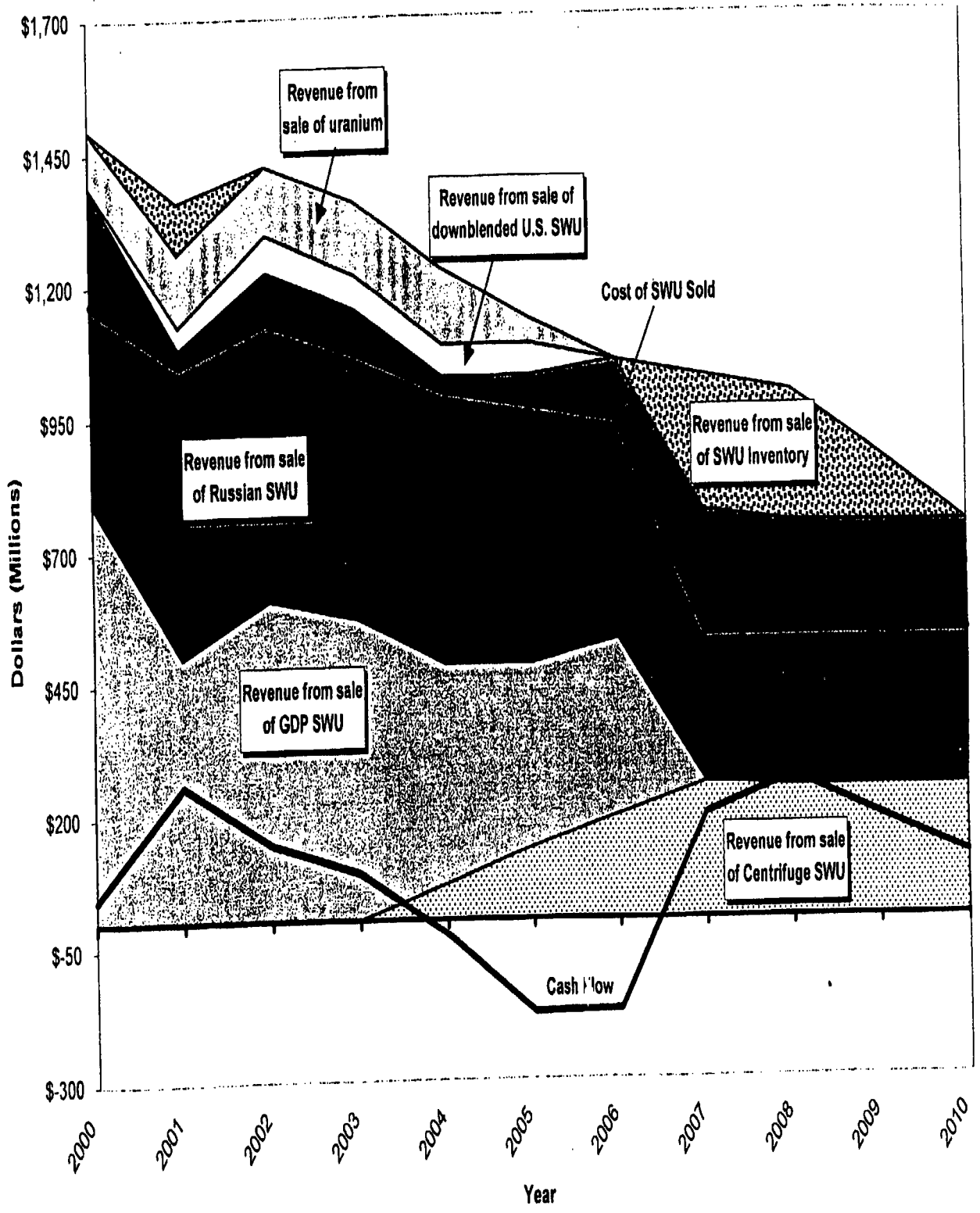
**Revenue per SWU Relative to Average Cost per SWU**  
**Scenario 3c: New Technology Beginning in FY 2004 with Closure of Paducah GDP in FY 2007**



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 3c: New Technology Beginning in FY 2004 with Closure of Paducah GDP in FY 2007



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 3c: New Technology Beginning in FY 2004 with Closure of Paducah GDP in FY 2007**



**Scenario 3c: New Technology Beginning in FY 2004 with Closure of Paducah GDP in FY 2007**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,226	1,130	1,049	1,018	987	866	738
Total COGS	1,214	1,211	1,252	1,220	997	973	946	533	533	533	533
Gross Margin	258	146	118	87	229	157	104	485	454	333	205
Interest Expense	39	33	33	33	33	33	57	34	34	34	24
Interest Earned	0	(1)	(14)	(20)	(21)	(16)	(6)	(5)	(17)	(25)	(22)
SG&A	46	48	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	40	67	7	7	7	7	7	7	7	7
Pretax Income	167	26	23	46	154	67	(30)	363	344	231	117
Taxes	58	9	8	16	53	23	(11)	125	119	80	40
Net Income	109	17	15	30	101	44	(20)	238	226	151	77
Adjustments to Net Income to Obtain Cash Flow	7	264	147	244	200	175	150	40	40	40	40
Investments in GDPs and New Plant	(71)	(23)	(18)	(185)	(331)	(385)	(302)	(81)	0	0	0
Cash Flow Before Financing	45	258	144	89	(30)	(176)	(172)	196	265	191	116
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	300	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	187	144	89	(30)	(176)	(222)	196	265	41	116
Estimated Cash on Hand at the end of the Year (Before dividends)	55	242	386	475	445	269	47	243	509	549	666
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	198	348	436	406	230	8	205	470	511	627
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
GDP Produced SWU	7,345	4,686	5,856	5,819	4,585	3,836	3,750	0	0	0	0
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	750	1,500	2,250	3,000	3,000	3,000	3,000
SWU from Inventory	0	909	0	0	0	0	0	3,000	3,000	1,561	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,521	12,484	12,000	12,000	12,000	12,000	12,000	10,561	9,000
Cost per SWU for Purchase/Production Sources (\$ in millions)											
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										
Revenue per SWU	(b)(4)										

**Notes for Scenario 3c**

1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
2. FY 2003, Construction of centrifuge plant begins.
3. FY 2004-2005, Revenue decreases because the total amount of SWU sold decreases.
4. FY 2004-2007, COGS decrease each year as an increasing percentage of the centrifuge plant capacity comes on line. The centrifuge plant is expected to have significantly lower cost per SWU.
5. CY 2006, Interest Payments on IPO Debt of \$350 million complete.
6. FY 2006-2010, Revenue decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
7. FY 2007-2010, COGS is constant because of constant SWU production at GDP and centrifuge plant.
8. FY 2007, Construction of centrifuge plant completed.
9. FY 2007-2010, COGS constant because constant quantities are produced in the GDP and centrifuge plant.
10. CY 2009, Interest Payments on IPO Debt of \$150 million complete.

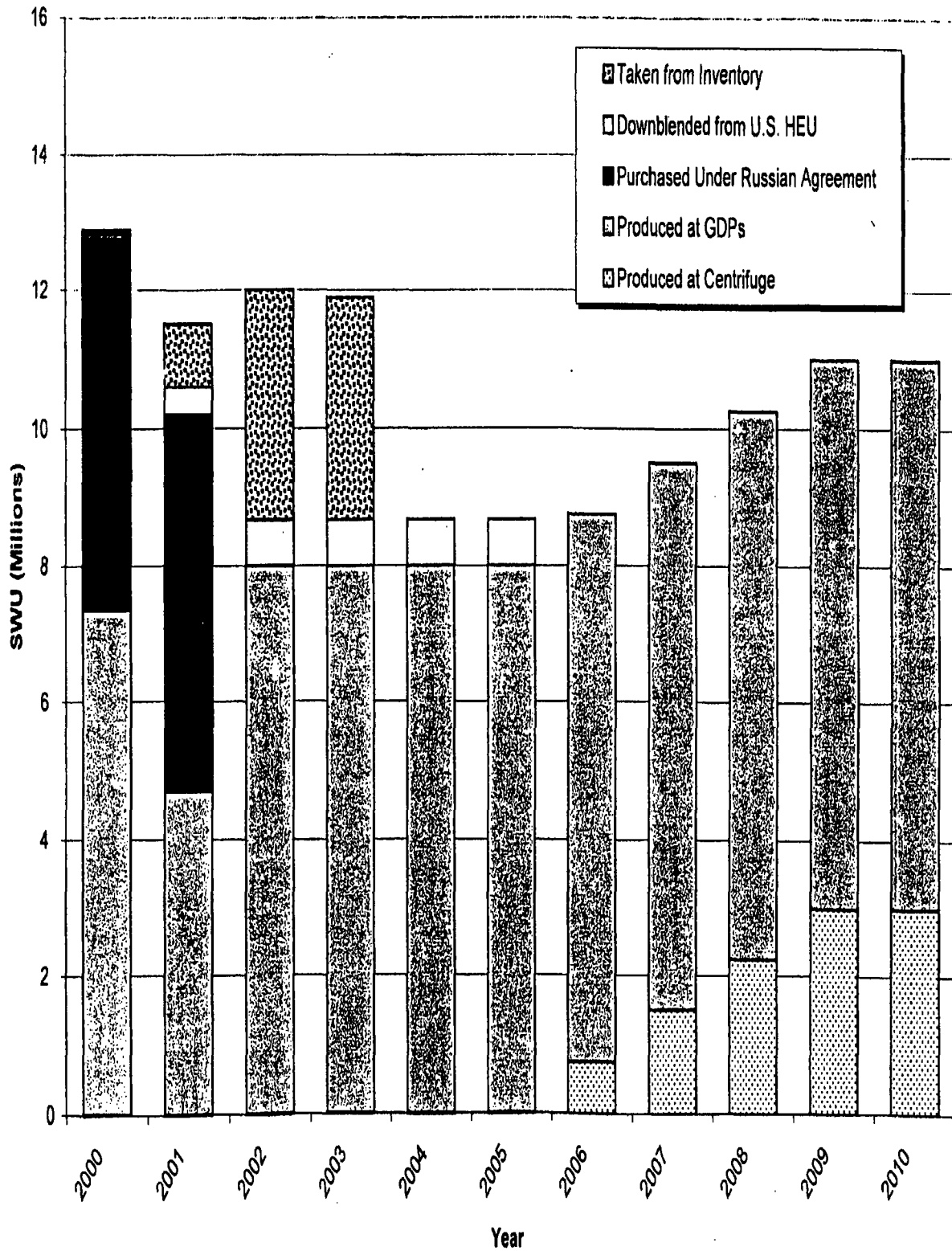
---

Appendix 2.3.D: Sensitivity Analysis by Subscenario

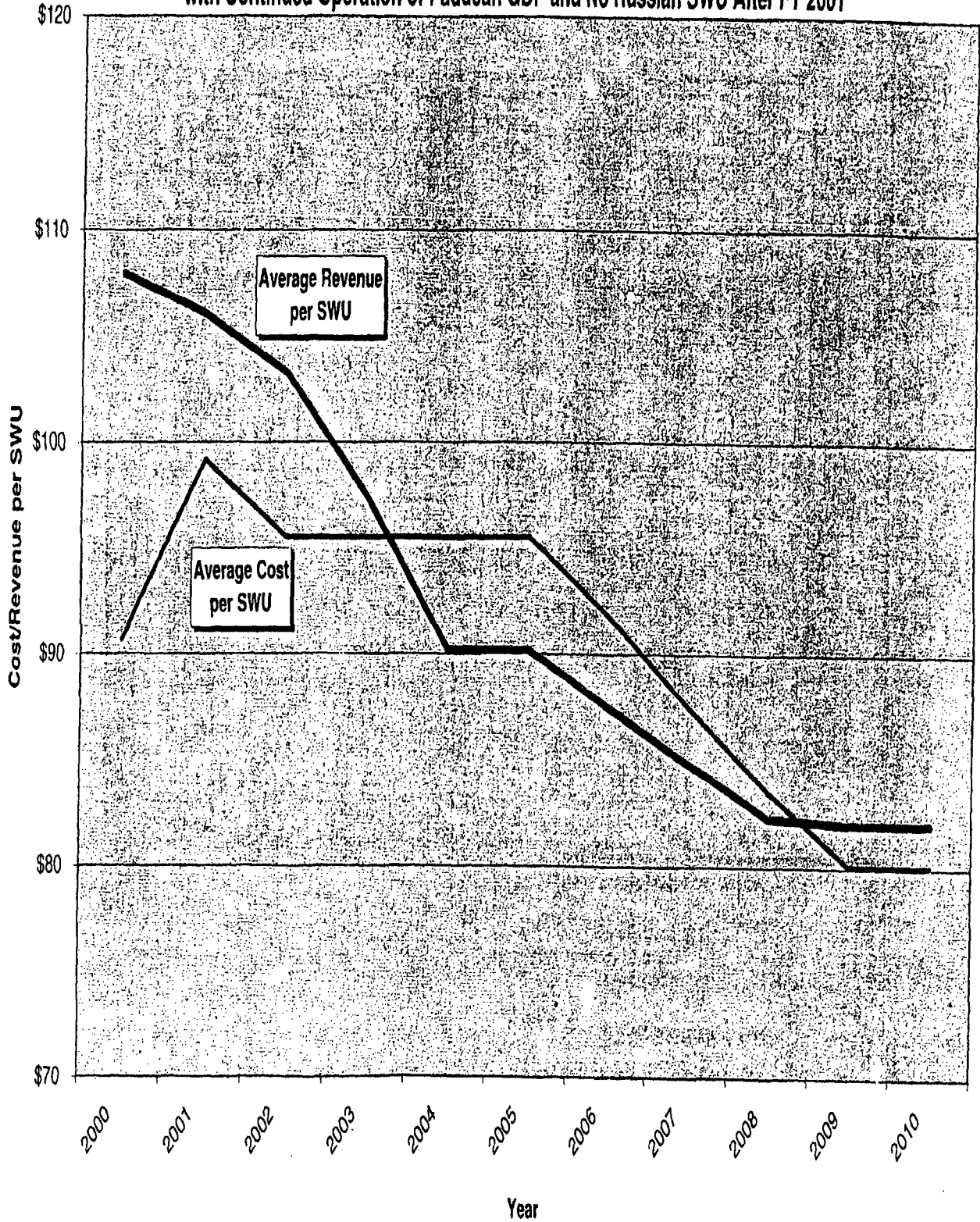
Scenario 3d: New technology beginning in FY 2006 with continued operation of Paducah GDP and no Russian SWU after FY 2001

### Sources of SWU

Scenario 3d: New Technology Beginning in FY 2006 with Continued Operation of Paducah GDP and No Russian SWU After FY 2001

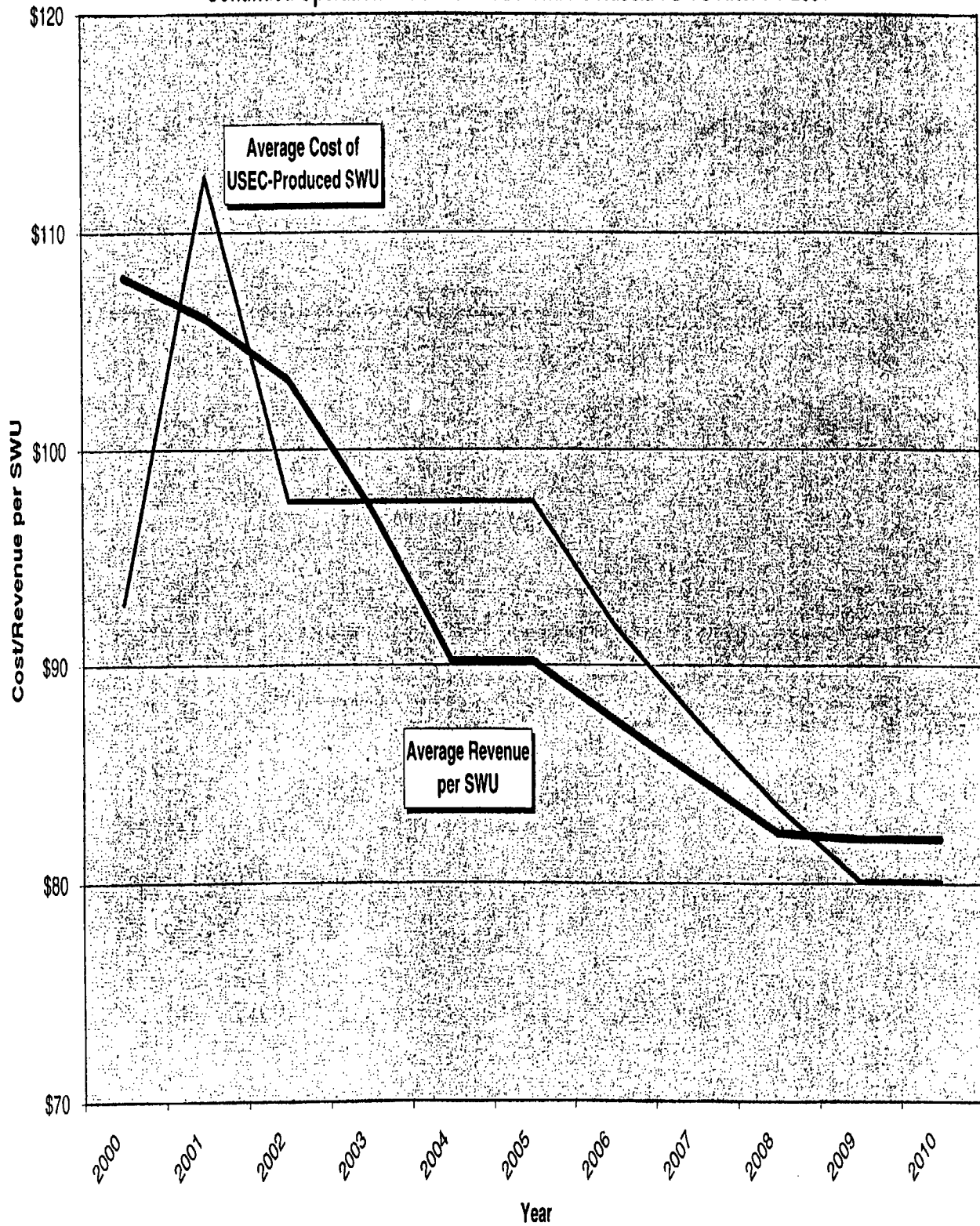


Revenue per SWU Relative to Average Cost per SWU  
Scenario 3d: New Technology Beginning in FY 2006  
with Continued Operation of Paducah GDP and No Russian SWU After FY 2001





Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 3d: New Technology Beginning in FY 2006 with  
Continued Operation of Paducah GDP and No Russian SWU After FY 2001





**Scenario 3d: New Technology Beginning in FY 2006 with Continued Operation of Paducah GDP and No Russian SWU After FY 2001**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,296	925	829	765	806	643	902	602
Total COGS	1,214	1,211	828	828	828	828	806	831	856	881	881
Gross Margin	258	146	543	469	97	1	(41)	(25)	(12)	21	21
Interest Expense	39	33	33	33	33	33	33	10	10	30	20
Interest Earned	0	(1)	(21)	(45)	(63)	(69)	(53)	(28)	0	0	0
SG&A	46	46	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	15	40	87	17	17	7	7	7	7	7	7
Pre-tax Income	167	26	454	442	64	(16)	(84)	(80)	(105)	(102)	(91)
Taxes	58	9	157	152	22	(6)	(22)	0	0	0	0
Net Income	109	17	297	289	42	(11)	(61)	(80)	(105)	(102)	(91)
Adjustments to Net Income to Obtain Cash Flow	7	264	147	244	200	175	150	45	55	65	65
Investments in GDPs and New Plant	(71)	(23)	(18)	(11)	(11)	(185)	(331)	(395)	(302)	(92)	(11)
Cash Flow Before Financing	45	258	426	522	231	(21)	(242)	(430)	(352)	(129)	(38)
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	250	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	(72)	187	426	522	231	(21)	(592)	(430)	(352)	(29)	(38)
Estimated Cash on Hand at the end of the Year (Before dividends)	55	242	669	1,191	1,422	1,401	809	379	27	(3)	(40)
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	198	630	1,153	1,384	1,363	771	341	(12)	(41)	(79)
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	0	0	0	0	0	0	0	0	0
GDP Produced SWU	7,345	4,886	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	750	1,500	2,250	3,000	3,000
SWU from Inventory	0	909	3,335	3,221	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,000	11,886	8,665	8,664	8,750	9,500	10,250	11,000	11,000
Cost per SWU for Purchase/Production Sources (\$ in millions)											
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										
Revenue per SWU	(b)(4)										

**Notes for Scenario 3d**

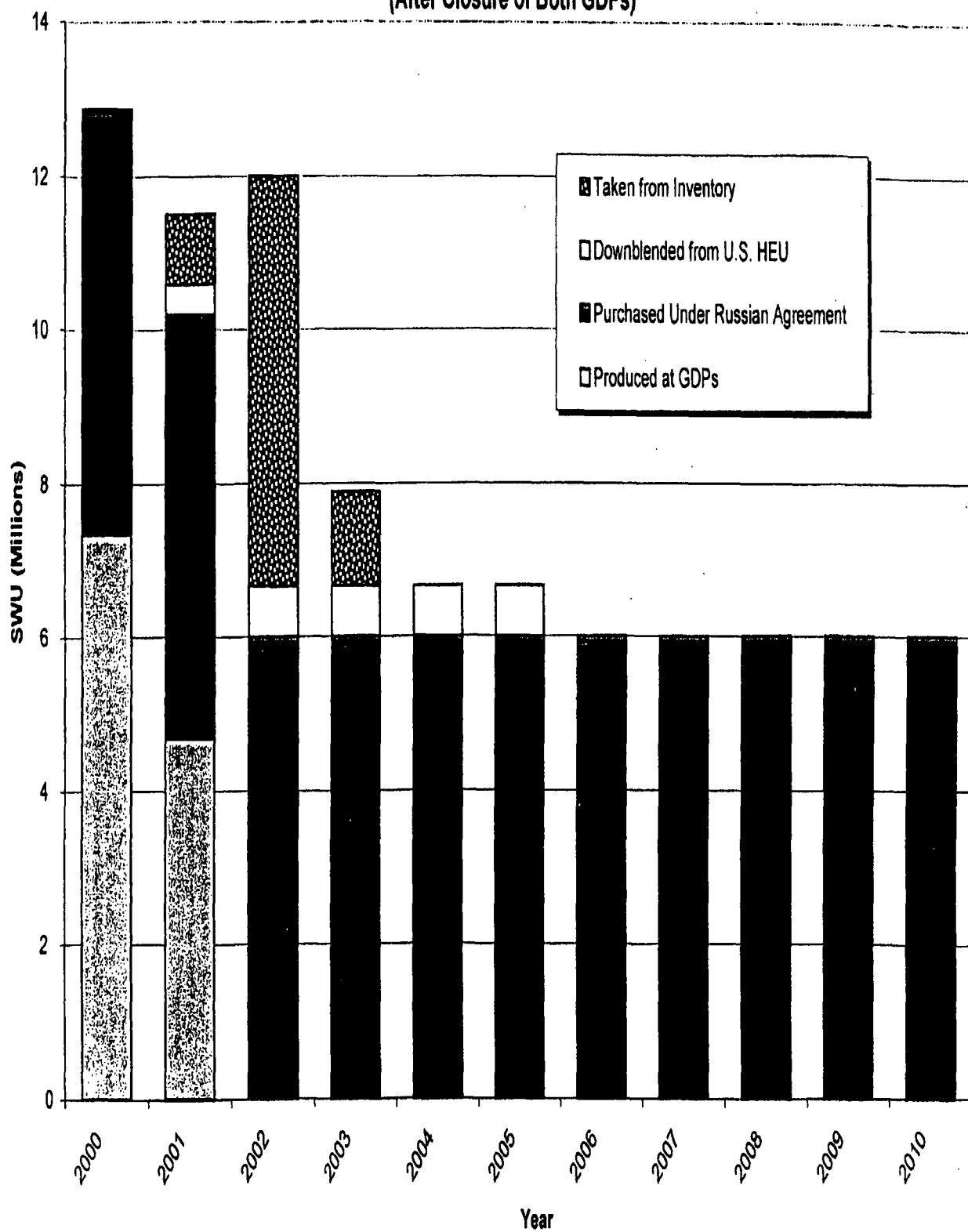
1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
2. CY 2002, Russian contract ends.
3. FY 2005, Construction of centrifuge plant begins.
4. FY 2006-2009, COGS decrease each year as an increasing percent of the centrifuge plant capacity comes on line. The centrifuge plant is expected to have significantly lower cost per SWU.
5. CY 2005, Interest Payments on IPO Debt of \$350 million end.
6. FY 2006-2010, Revenues decrease at an average rate of 3% per year due to the averaging in of lower priced sales contracts.
7. FY 2009, Construction of centrifuge plant completed.
8. FY 2009-2010, COGS constant because constant quantities are purchased from Russia and produced in the GDP and centrifuge plant.
9. FY 2008-2010, Revenues are flat because constant amounts of SWU are being sold and the price per SWU is constant.
10. CY 2009, Interest Payments on IPO Debt of \$150 million end.

---

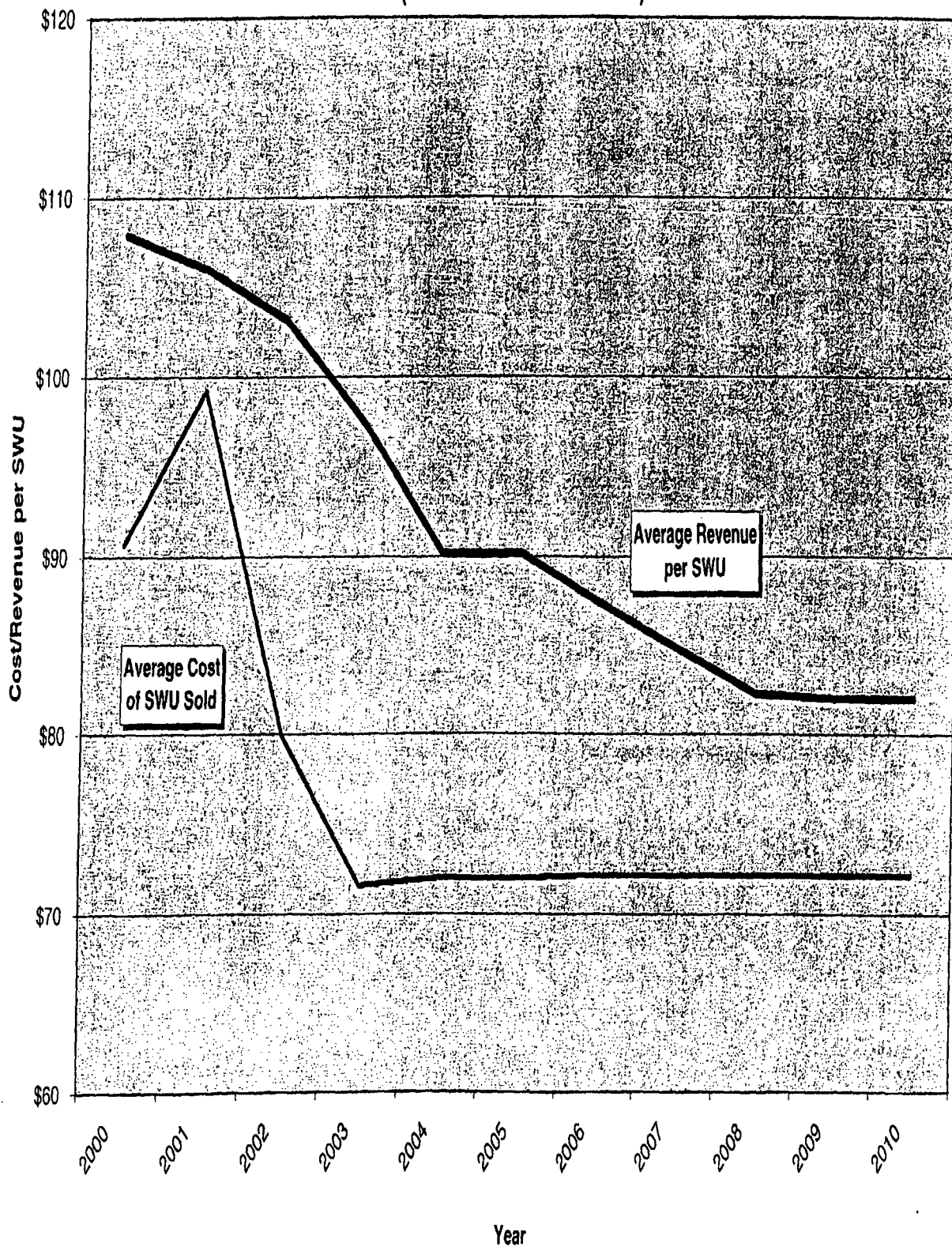
Appendix 2.4.A: Sensitivity Analysis by Subscenario

Scenario 4a: Broker 6 million Russian SWU annually in FY 2002-2010  
(after closure of both GDPs)

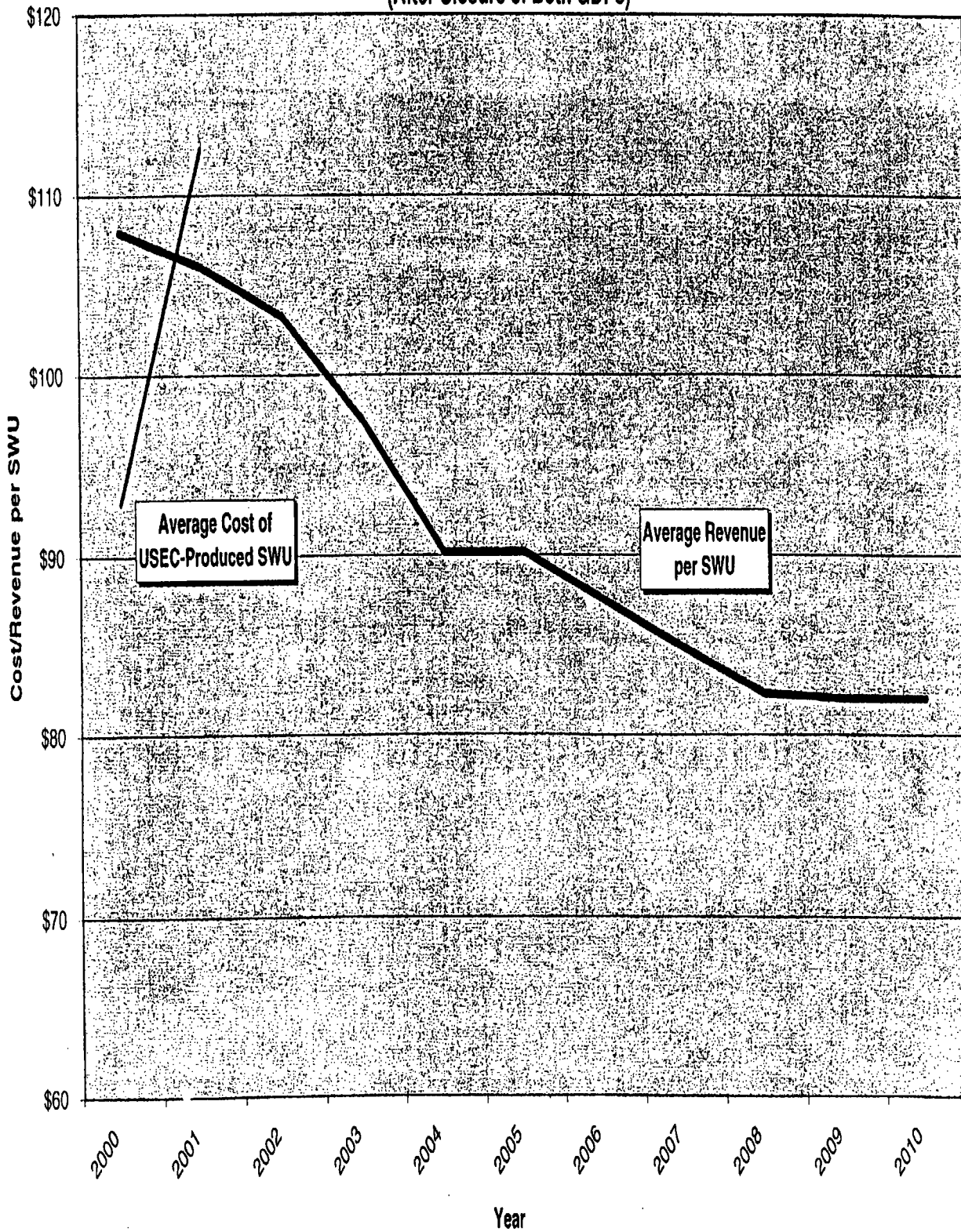
**Sources of SWU**  
**Scenario 4a: Broker 6 Million Russian SWU Annually in FY 2002-2010**  
**(After Closure of Both GDPs)**



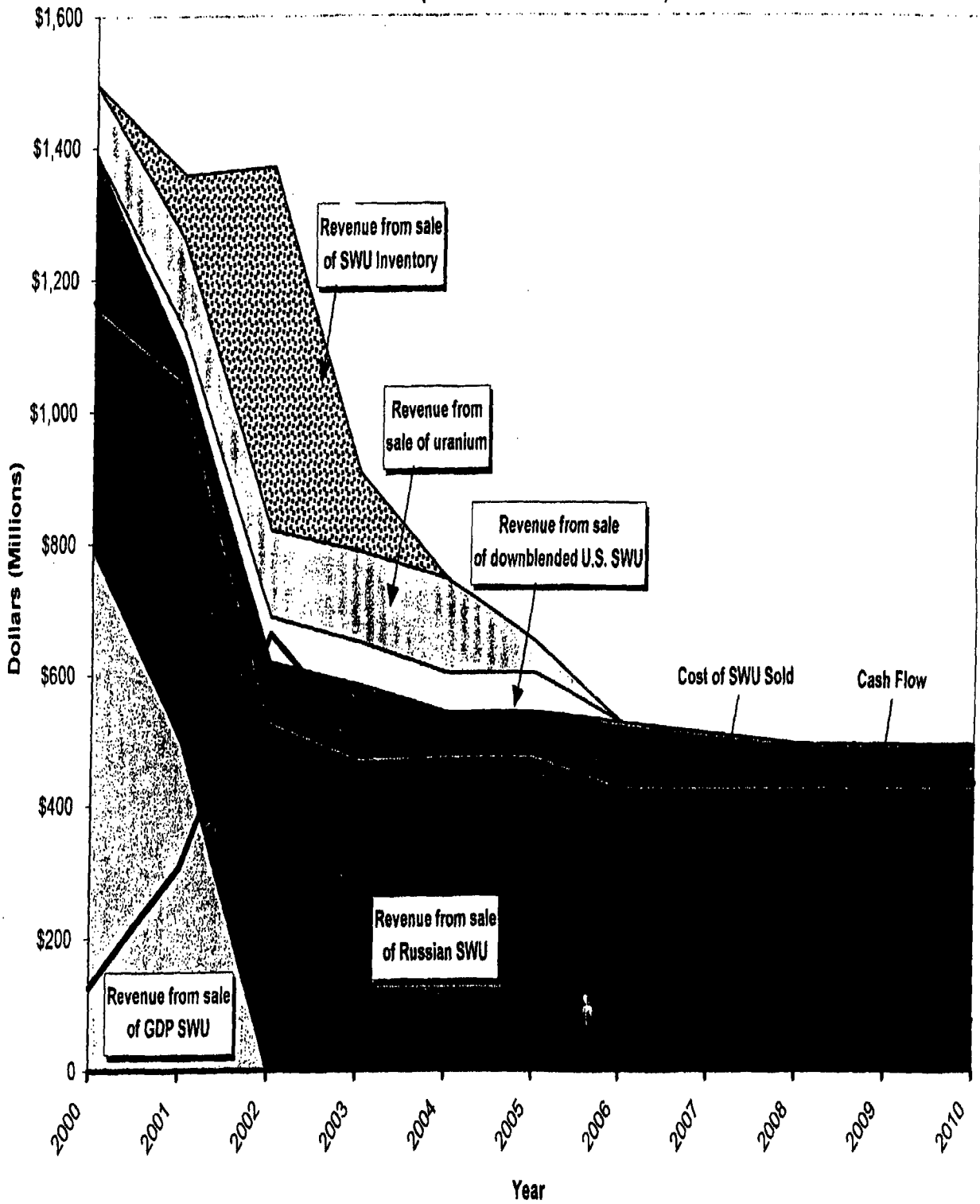
Revenue per SWU Relative to Average Cost per SWU  
Scenario 4a: Broker 6 Million Russian SWU Annually in FY 2002-2010  
(After Closure of Both GDPs)



Revenue per SWU Relative to Average Cost per USEC-Produced SWU  
Scenario 4a: Broker 6 Million Russian SWU Annually in FY 2002-2010  
(After Closure of Both GDPs)

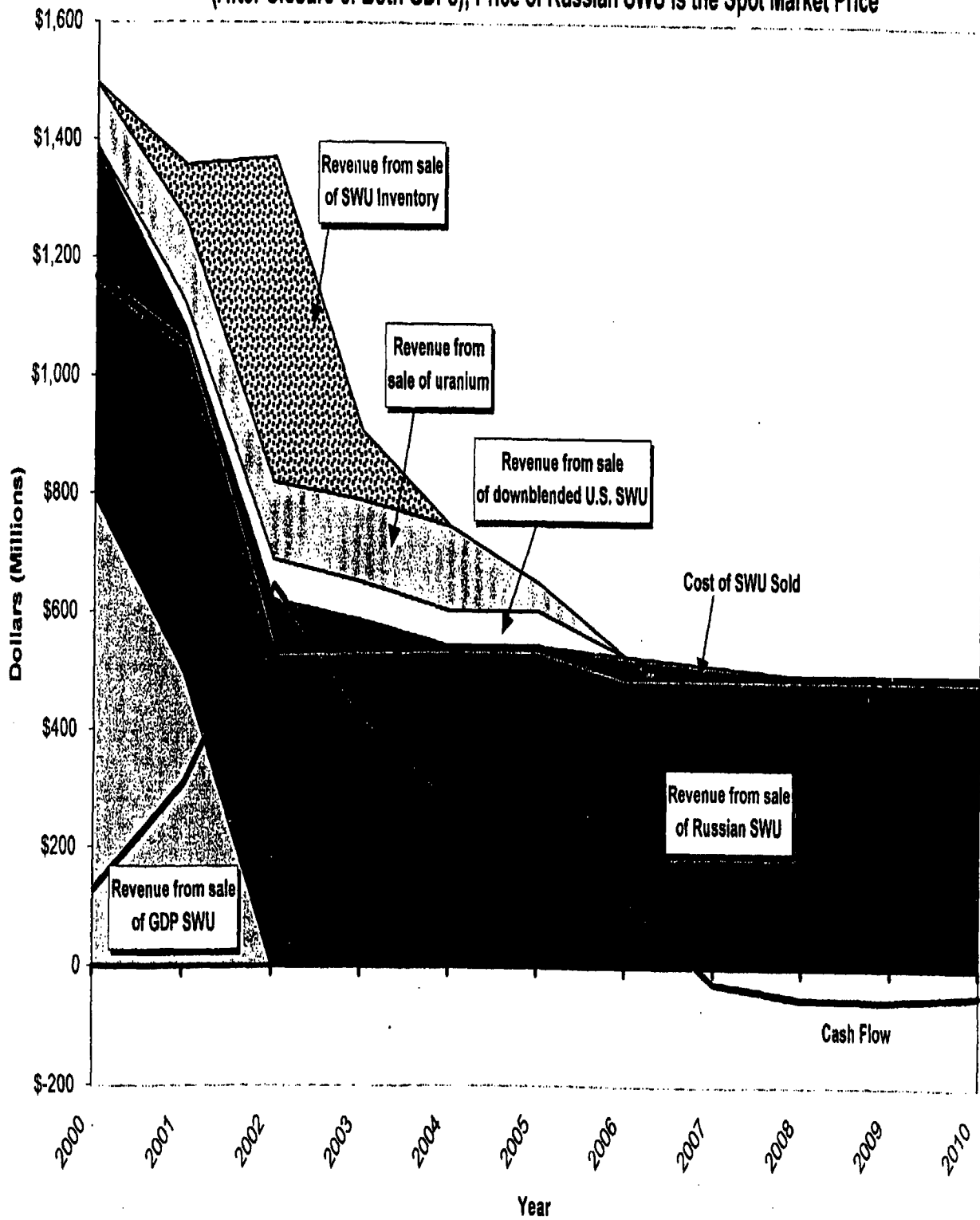


**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 4a: Broker 6 Million Russian SWU Annually in FY 2002-2010**  
**(After Closure of Both GDPs)**



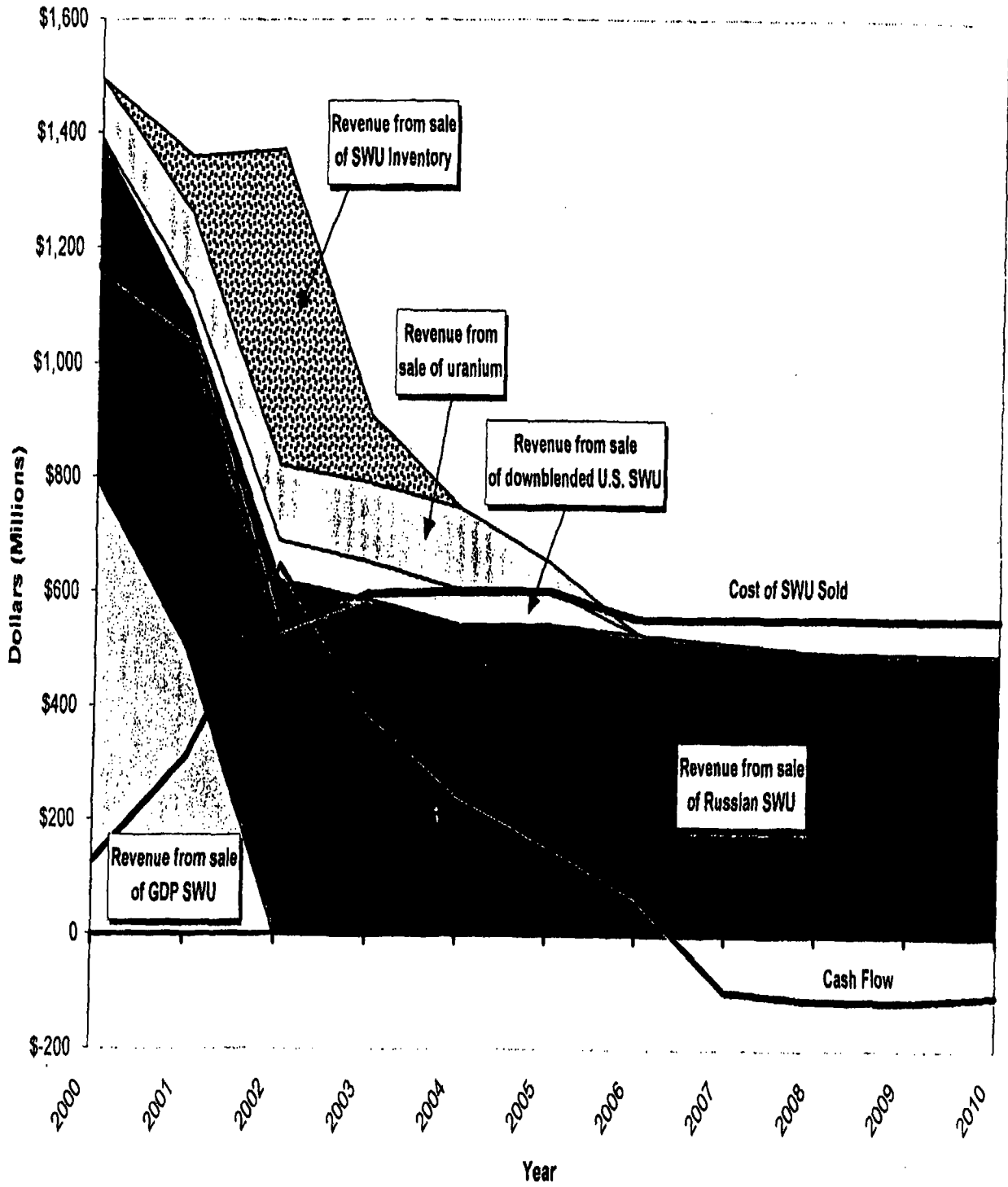


**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 4a: Broker 6 Million Russian SWU Annually in FY 2002-2010**  
**(After Closure of Both GDPs); Price of Russian SWU is the Spot Market Price**



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 4a: Broker 6 Million Russian SWU Annually in FY 2002-2010**  
**(After Closure of Both GDPs)**

Price of Russian SWU is the Same Price as Under the Current Contract



**Scenario 4a: Broker 6 Million Russian SWU Annually in FY 2002-2012 (After Closure of Both GDPs)**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	907	745	648	625	509	494	492	492
Total COGS	1,214	1,211	833	477	480	480	433	433	433	433	433
Gross Margin	258	146	538	430	265	169	92	76	61	59	59
Interest Expense	39	33	33	33	33	33	33	10	10	10	0
Interest Earned	0	(1)	(29)	(58)	(80)	(97)	(101)	(100)	(104)	(104)	(104)
SG&A	46	46	46	46	46	46	46	46	46	46	46
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	0	0	0	0	0	0	0	0	0	0	0
Pretax Income	182	66	824	434	266	187	114	120	108	107	117
Taxes	63	23	284	150	82	64	39	41	37	37	40
Net Income	119	43	540	284	174	122	74	79	71	70	76
Adjustments to Net Income to Obtain Cash Flow	7	264	112	219	200	175	150	0	0	0	0
Investments in GDPs and New Plant	0	0	0	0	0	0	0	0	0	0	0
Cash Flow Before Financing	126	307	662	503	374	297	224	79	71	70	76
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	9	236	662	503	374	297	(126)	79	71	(80)	76
Estimated Cash on Hand at the end of the Year (Before dividends)	55	291	953	1,456	1,830	2,128	2,002	2,081	2,152	2,072	2,148
Dividend Payment	52	44	39	39	39	39	39	39	39	39	39
Estimated Cash on Hand at the end of the Year After Dividends	3	247	915	1,418	1,792	2,089	1,964	2,042	2,113	2,033	2,110
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000
GDP Produced SWU	7,345	4,686	0	0	0	0	0	0	0	0	0
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	0	0	0	0	0
SWU from Inventory	0	909	5,335	1,221	0	0	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,000	7,886	6,665	6,664	6,000	6,000	6,000	6,000	6,000
Cost per SWU for Purchase/Production Sources (\$ in millions)											
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										
Revenue per SWU	(b)(4)										

**Notes for Scenario 4a**

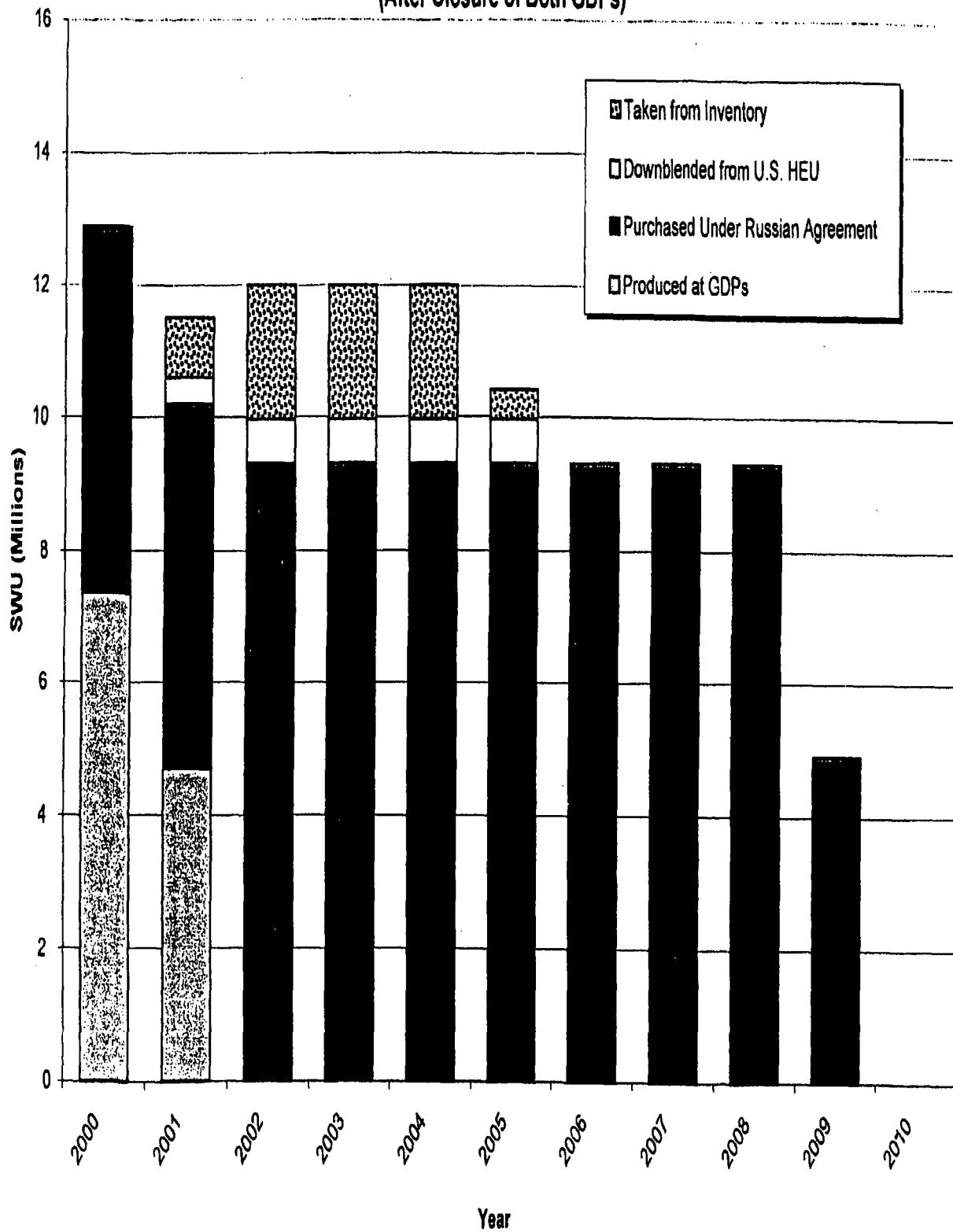
1. FY 2000-2005, Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
2. CY 2002, Russian HEU renegotiated price begins.
3. FY 2003, First full year of reduced Russian SWU costs.
4. FY 2003-2004, Large drop in revenue is due to decrease in sales volume of SWU because inventory has been sold off and USEC is only obtaining 6 million SWU from Russia.
5. FY 2003-2005, Revenues decrease significantly as the total amount of SWU USEC sells decreases to only what USEC receives from Russia and the downblended U.S. HEU.
6. CY 2006, Interest Payments on IPO Debt of \$350 million complete.
7. FY 2004-2006, Revenues decrease at about 3% per year due to the averaging in of lower priced sales contracts.
8. CY 2009, Interest Payments on IPO Debt of \$150 million complete.

---

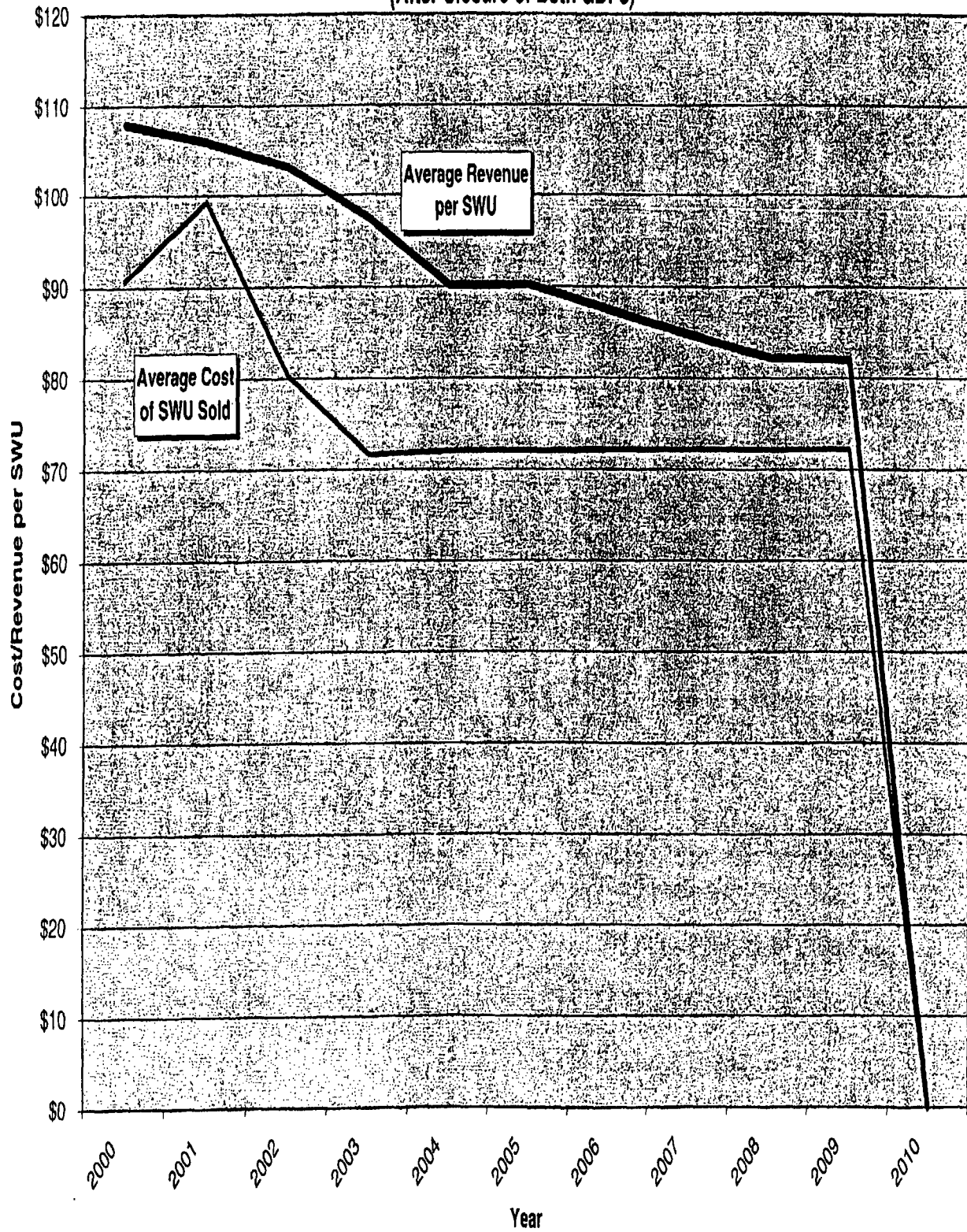
Appendix 2.4.B: Sensitivity Analysis by Subscenario

Scenario 4b: Broker 9.3 million Russian SWU annually in FY 2002-2009  
(after closure of both GDPs)

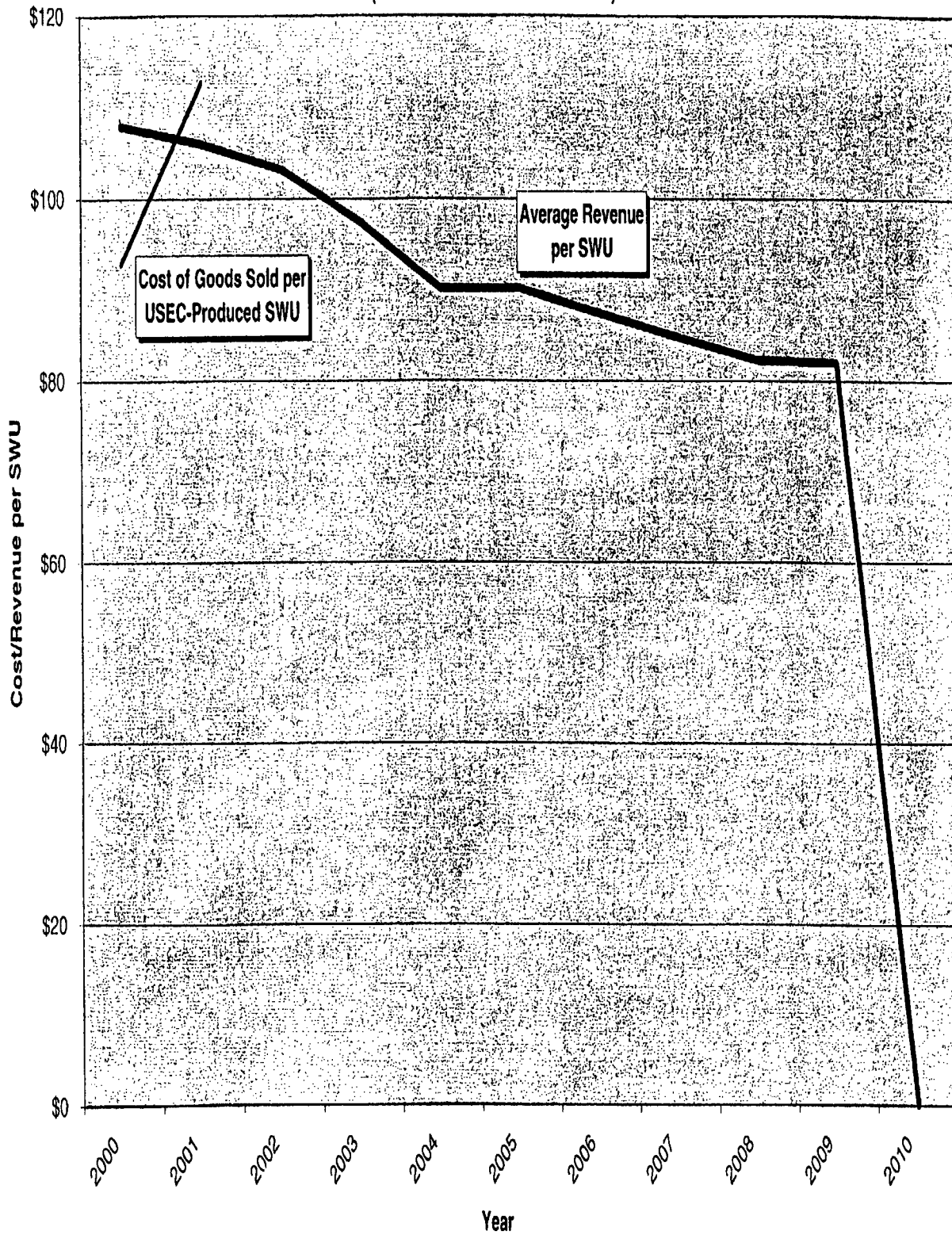
**Sources of SWU**  
**Scenario 4b: Broker 9.3 Million Russian SWU Annually in FY 2002-2008**  
**(After Closure of Both GDPs)**



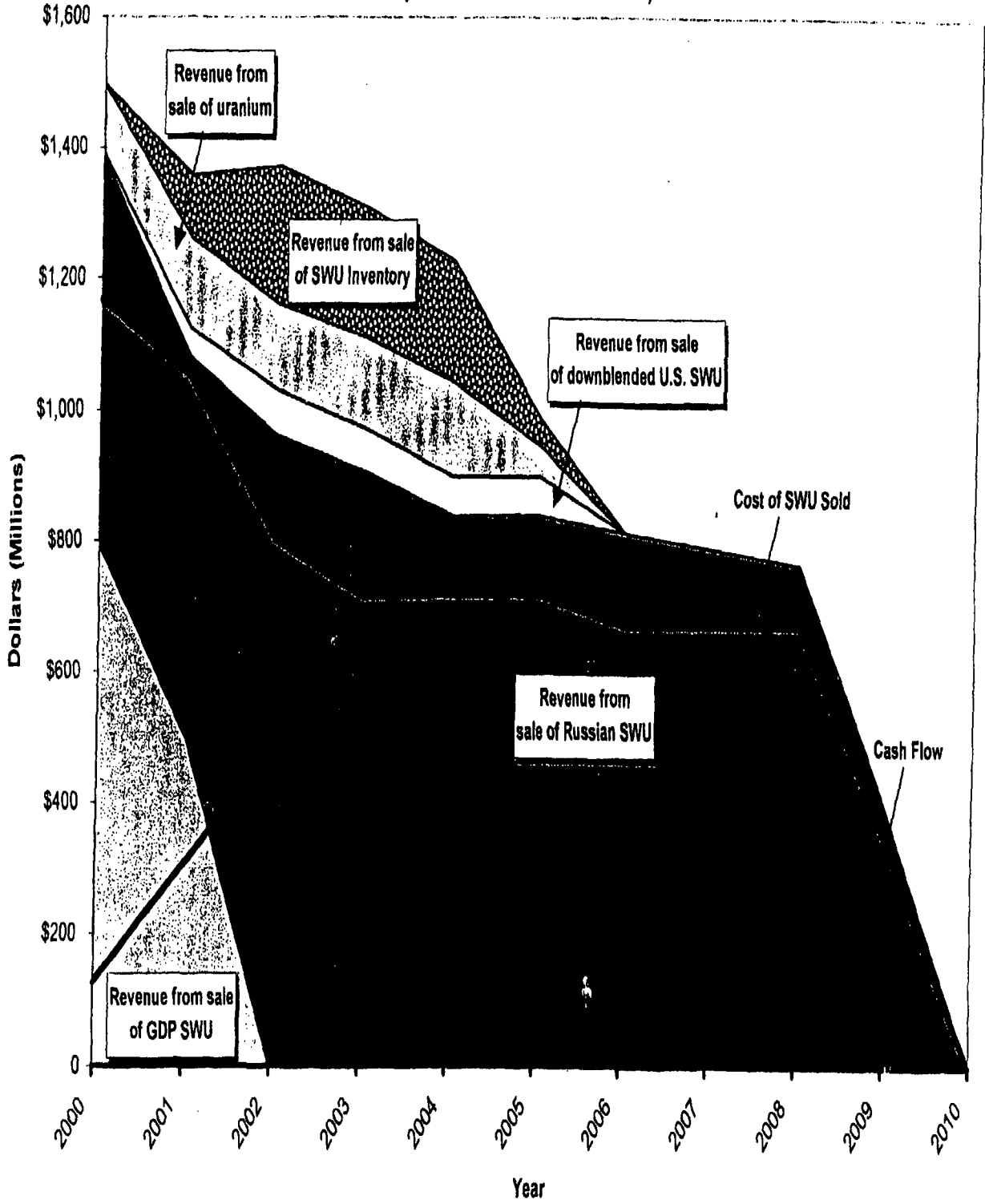
Revenue per SWU Relative to Average Cost per SWU  
Scenario 4b: Broker 9.3 Million Russian SWU Annually in FY 2002-2008  
(After Closure of Both GDPs)



Revenue per SWU Relative to Average USEC-Produced Cost per SWU  
Scenario 4b: Broker 9.3 Million Russian SWU Annually in FY 2002-2008  
(After Closure of Both GDPs)



**Cash Flow and Cost of SWU Relative to Revenues-by-Source**  
**Scenario 4b: Broker 9.3 Million Russian SWU Annually in FY 2002-2008**  
**(After Closure of Both GDPs)**





**Scenario 4b: Broker 9.3 Million Russian SWU Annually in FY 2002-2008 (After Closure of Both GDPs)**

**Scenario Financial Summary**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total Revenue	1,472	1,357	1,370	1,307	1,225	987	813	789	765	402	0
Total COGS	1,214	1,211	900	714	718	718	671	671	671	354	0
Gross Margin	258	146	470	594	508	269	142	118	94	46	0
Interest Expense	39	33	33	33	33	33	33	10	10	10	0
Interest Earned	0	(1)	(25)	(52)	(80)	(103)	(110)	(111)	(116)	(117)	0
SG&A	46	46	46	46	46	46	46	46	46	46	0
Other Expenses (Income)	(9)	2	(37)	(25)	0	0	0	0	0	0	0
R&D Expenses	0	0	0	0	0	0	0	0	0	0	0
Pre-tax Income	182	66	553	591	509	293	173	172	154	109	0
Taxes	63	23	191	204	176	101	60	59	53	37	0
Net Income	119	43	362	387	333	192	113	113	101	71	0
Adjustments to Net Income to Obtain Cash Flow	7	264	122	219	200	175	150	0	0	0	0
Investments in GDPs and New Plant	0	0	0	0	0	0	0	0	0	0	0
Cash Flow Before Financing	126	307	484	606	533	367	263	113	101	71	0
Debt Repayment	0	0	0	0	0	0	(350)	0	0	(150)	0
Cash from Financing	0	0	0	0	0	0	0	0	0	0	0
Cash Used for Stock Buy-Back	117	71	0	0	0	0	0	0	0	0	0
Cash Flow After Financing	9	236	484	606	533	367	(87)	113	101	(79)	0
Estimated Cash on Hand at the end of the Year (Before dividends)	55	291	775	1,382	1,915	2,281	2,195	2,308	2,408	2,330	0
Dividend Payment	52	44	39	39	39	39	39	39	39	39	0
Estimated Cash on Hand at the end of the Year After Dividends	3	247	737	1,343	1,876	2,243	2,156	2,269	2,370	2,291	0
SWU Purchases, Production, and Inventory Sales (Quantities)											
Russian Purchased SWU	5,486	5,506	9,300	9,300	9,300	9,300	9,300	9,300	9,300	4,908	0
GDP Produced SWU	7,345	4,686	0	0	0	0	0	0	0	0	0
U.S. Downblended HEU	42	399	665	665	665	664	0	0	0	0	0
Centrifuge Produced SWU	0	0	0	0	0	0	0	0	0	0	0
SWU from Inventory	0	909	2,035	2,035	2,035	451	0	0	0	0	0
Total SWU Purchased, Produced, and Sold from Inventory	12,873	11,500	12,000	12,000	12,000	10,415	9,300	9,300	9,300	4,908	0
Cost per SWU for Purchase/Production Sources (\$ in millions)											
Russian Purchased SWU	(b)(4)										
GDP Produced SWU	(b)(4)										
U.S. Downblended HEU	(b)(4)										
Centrifuge Produced SWU	(b)(4)										
Weighted Average Cost/SWU	(b)(4)										
Revenue per SWU	(b)(4)										

**Notes for Scenario 4b**

1. FY 2000-2005. Revenue decreases at about 5% per year due to the averaging in of lower priced sales contracts. In 2004 and 2005 uranium inventory sales trail off. Thus the sharp drop in revenue between 2004 and 2006.
2. CY 2002. Russian HEU renegotiated price begins.
3. FY 2003-2004. Large drop in revenue is due to decrease in sales volume of SWU because inventory has been sold off and USEC is only obtaining 6 million SWU from Russia.
4. FY 2003. First full year of reduced Russian SWU costs.
5. FY 2004-2007. Revenues decrease significantly as the total amount of SWU USEC sells decreases to only what USEC receives from Russia and the downblended U.S. HEU.
6. FY 2004-2008. Revenues decrease at about 3% per year due to the averaging in of lower priced sales contracts.
7. CY 2006. Interest Payments on IPO Debt of \$150 million complete.
8. CY 2009. Interest Payments on IPO Debt of \$150 million complete.