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THESIS

**RESOURCE CONSEQUENCES OF ALTERING THE
DELINQUENT DEBT THRESHOLD USED IN BACKGROUND
INVESTIGATIONS FOR SECURITY CLEARANCES**

by

Paul D. Matheny

December 1993

Co-Advisors:

**Howard W. Timm
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13. ABSTRACT (Maximum 200 words)

This thesis presents the results of a study conducted to determine the resource impact of raising the delinquent debt threshold used to expand background investigations on security clearances from \$500 to \$2000. Statistical analysis was used to investigate the effects of this change in policy on the frequency of financial issue case security clearance investigations. The results of the analysis indicate that a reduction did occur in the number of financial related issue cases as a percentage of the total number of issue cases after the threshold change had taken place. As a result, resources are saved as case controllers, investigators, adjudicators, administrators, and secretarial staff spend less time, effort, and related travel on financial related issue cases. Additional savings are realized as defense contractor employees spend less time on menial tasks waiting for security clearances to be approved.

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RESOURCE CONSEQUENCES OF ALTERING
THE DELINQUENT DEBT THRESHOLD
USED IN BACKGROUND INVESTIGATIONS
FOR SECURITY CLEARANCES

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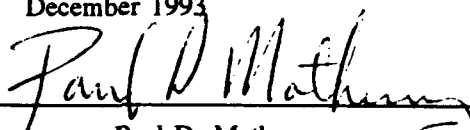
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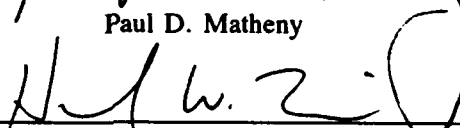
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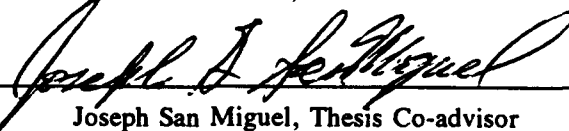


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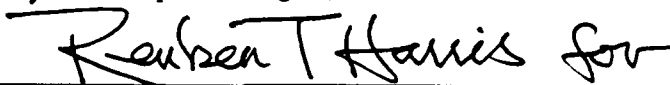
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ABSTRACT

This thesis studied the impact of raising the delinquent debt threshold used to expand background security investigations on financial and personnel resources. Statistical analysis was used to investigate the effects of this change in the Defense Investigative Service's policy on the frequency of financial issue case security clearance investigations. Results indicate that a reduction occurred in the number of financial related issue cases as a percentage of the total number of issue cases after the threshold change was implemented. Issue case investigations are more resource intensive and consume more resources. As the frequency of financial related issue cases declines, resources are saved because case controllers, investigators, adjudicators, administrators, and secretarial staff are required to spend less time, effort, and related travel on these cases. Additional savings are realized as defense contractor employees spend less time on menial tasks waiting for security clearance approval.

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I. INTRODUCTION

A. PROBLEM STATEMENT

The Defense Investigative Service (DIS) has been tasked with the responsibility to investigate, inspect, advise and assist in personnel and information security administration. Its tasking is based on the critical fact that the safety and security of our nation depends on the loyalty and integrity of all the personnel, military and civilian, who make up the Defense Department. An equally important part of national defense is the industrial base which supports our military establishments.

Authority has been given to DIS by the Department of Defense (DoD) to conduct Personnel Security Investigations (PSIs) on members of the Armed Forces as well as certain DoD civilian personnel, contractor personnel, and other personnel who are affiliated with DoD. Executive Order 10450 (1953), "Security Requirements for Government Employment," which has been amended on numerous occasions, requires agency heads to classify positions with respect to the sensitivity to national security.

Executive Order 10865, "Safeguarding Classified Information Within Industry" (1960), as amended by Executive Order 10909, (1961), created the personnel clearance program within the Defense Industrial Security Program. For both government

employees and contractor personnel, an investigation appropriate to sensitivity level and access to classified information is required to determine if the access is clearly consistent with the best interests of national security. (Defense Investigative Service, 1993). The ultimate goal of security investigations of uniformed and civilian personnel in the defense establishment is to select trustworthy and reliable personnel for positions involving matters of national security interest.

Security investigations sometime reveal negative information which may impact the applicant's request for a security clearance. One area which has received more attention in recent years is derogatory financial information. In July 1992, DIS increased the delinquent debt threshold used to expand security clearance background investigations from \$500 to \$2000. The delinquent debt threshold was raised on the basis of research done by Naval Postgraduate School graduates LT Janet G. Goldstein, USN, and LT Henry J. Hill, USN, and analysis done by DIS.

An investigation is now expanded when the credit bureau report shows an account or accounts with a cumulative unpaid balance of \$2000 and which is 120 days or more past due. Expanded investigations may be conducted when this threshold has been met in instances where there are payments past due 120 days or more, charged off unpaid balances, balances placed in collection, balances remaining after repossessions, amounts

owed under garnishment or judgement orders, bankruptcy within the last seven years, arrests for insufficient funds, and lawsuits for financial irresponsibility.

Expansion of a security investigation means that the scope of the investigation must be broadened in order to resolve the derogatory information that was previously known or uncovered during the investigation. When the derogatory financial information meets the delinquent debt threshold, an expanded investigation is required, and the case becomes an issue case. As a result, a significant increase in personnel and financial resources is needed to resolve the issue in question. (Hill, 1991).

From a financial management perspective, the expanded investigation means an increase in the resources required to complete the investigation. Additional time and effort will be required on the part of the case controller, the investigator, administrative and secretarial staff, and the adjudicator.

Derogatory credit information can be particularly time consuming if the subject of the investigation has lived in different geographic areas and the creditors providing the negative information are also located in different geographic areas. Related travel requirements can escalate rapidly as well. Investigators covering the areas in question will be tasked with the responsibility of contacting each creditor to

determine the circumstances surrounding the derogatory credit information on the subject.

To date, there has been no analysis of the effect of raising the delinquent debt threshold on available resources. Logically, the change should mean that DIS will experience a reduction in the number of expanded investigations due to delinquent debt. The reduction should allow the savings to be used for other agency operations.

A credit check is presently initiated for initial background investigations and periodic reinvestigations for TOP SECRET (TS) clearances and Sensitive Compartmented Information (SCI) access, as well as for periodic reinvestigations of SECRET clearances. In addition, strong consideration is now being given to making a credit check part of the background investigation for a SECRET clearance. This could have serious resource implications in light of the current era of declining budgets.

B. OBJECTIVES OF THIS STUDY

The primary objective of this study is to evaluate the impact on DIS resources from raising the delinquent debt threshold used by DIS to expand PSIs. In this era of scarce resources, the impact of any policy change is of prime importance to the federal agency making the change. The results of this study will help identify any changes which have resulted from the threshold changes and enable affected agencies to better manage their resources.

C. RESEARCH QUESTIONS

1. Primary Research Question

What has been the resource impact of altering the delinquent debt threshold used to expand background investigations for security clearances from \$500 to \$2000?

2. Secondary Research Questions

a. Has the number of expanded background investigations decreased with the change in the delinquent debt threshold?

b. Has the investigation time required to complete security clearance investigations been reduced as a result of the change in the threshold?

D. THE SCOPE OF THE THESIS

Determining the effects of the change in the delinquent debt threshold is the main focus of this thesis. The study includes an overview of Defense Investigative Service and its relationship to the Personnel Investigative Center (PIC) and the Defense Industrial Security Office (DISCO).

The investigative process used for security clearances was examined and the secondary research questions addressed. This analysis is limited to only those factors which pertain to the delinquent debt threshold criteria used to determine if an expansion of a background investigation for a security clearance is warranted.

E. RESEARCH METHODOLOGY

In order to become thoroughly familiar with the investigative process related to security investigations, a literature review of instructions, manuals, and other guidance was completed first. Data were collected from the offices of the DIS, PIC, and DISCO. Information has also been gathered by conducting personal interviews whenever possible with personnel from these three organizations.

Additional data obtained from the Issue Case Data Base maintained by the Personnel Security Research Center (PERSEREC), provided crucial information on expanded background investigations relating to delinquent debt. A time series study and ratio analysis were used to study the frequency of issue cases concerning delinquent debt occurring before the change in threshold to the frequency of issue cases occurring after the policy change. Simple regression analysis and random sampling were also employed to estimate the effects.

Initially, it was anticipated that cost information provided by DIS would enable the researcher to estimate the cost savings from the change in the delinquent debt credit threshold. However, cost information could not be obtained from the DIS comptroller's office. The impact on DIS resources is discussed with respect to the effects of the change on the kinds of activities which are required to complete a security background investigation or reinvestigation.

F. DEFINITIONS AND ABBREVIATIONS

To help the reader better understand Defense Investigative Service terminology, selected terms used in this report are listed in alphabetical order along with their definitions and abbreviations.

1. **Adjudication** - The process used by the adjudicator to analyze derogatory information obtained in a personnel security investigation. Its purpose is to reconcile the information with established standards for granting a security clearance. (Hill, 1991)
2. **Adjudicator** - The military, DoD, and Defense Industrial and Security Office personnel who evaluates the information gathered by a security investigation and determines whether or not the subject is granted a clearance.
3. **Background Investigation (BI)** - An investigation concerning the activities of the subject to gather sufficient information in order to make a decision on access to sensitive information. The minimum required for a TOP SECRET clearance and for certain sensitive programs. It covers the last five years of the subject's life or from the 18th birthday, whichever is shorter. The last two full years of the subject's life must be covered, but the investigation will not go back further than the 16th birthday. Included is a verification of birth, citizenship, education, and employment. It also requires a review of all federal agencies for derogatory information; a credit check; a check of pertinent criminal records; character references; and an interview with the subject. (Defense Investigative Service, 1993)
4. **Classified Information** - Official information which has been evaluated as requiring protection from disclosure in the interest of national security.
5. **Credit Check** - A credit bureau check covering all locations where subject has resided, been employed, or attended school for six months or more on a cumulative basis during the last seven years of subject's life or up to the 18th birthday.

6. **Defense Industrial Security Clearance Office (DISCO) -** Office responsible for conducting investigations, issuing clearances, and maintaining clearance records for DoD contractor personnel. (Goldstein, 1991)
7. **Directorate for Industrial Security Clearance Review (DISCR) -** The office responsible for adjudicating those industrial cases that DISCO could not approve for clearance. (U. S. Department of Defense, 1985)
8. **Expansion -** When adverse information meets DIS's threshold criteria, the security investigation is broadened. Adverse information must be reconciled before a clearance can be granted. The subject is interviewed and a statement is given concerning the adverse information. Written or oral statements are taken from the outside parties involved and findings are documented.
9. **National Agency Check (NAC) -** Indexes and files of pertinent federal agencies are checked for information relating to the loyalty, trustworthiness, and suitability of individuals under the investigative jurisdiction of the Department of Defense (DoD). (Defense Investigative Service, 1993)
10. **Periodic Reinvestigation (PR) -** Required every five years for individuals with completed background investigations. Personnel with NACs and SECRET access require one every six years. A PR entails a NAC, verification of employment, local agency checks, credit check, a personal interview, and interviews with coworkers and references.
11. **Personal Security Investigation (PSI) -** PSIs are investigations required for making a determination as to the eligibility for access to classified information, retention in sensitive duties, or other designated duties requiring a PSI.
12. **Personnel Investigation Center (PIC) -** The branch of DIS which is responsible for conducting personnel security investigations.
13. **Scoping -** The procedure of evaluating an investigative request as well as current investigative efforts to determine the areas and the extent to which an investigation is made. (Defense Investigative Service, 1993)

14. **Sensitive Compartmented Information (SCI)** - Material related to intelligence which must have special handling. The Director of Central Intelligence is responsible for protecting this information. (Hill, 1991)
15. **Special Background Investigation (SBI)** - Minimum requirement for access to SCI and to participate in other sensitive programs. Covers the last 15 years of the applicant's life or through the 18th birthday. Requirements for the BI must be met. The NAC is broadened to include neighborhood checks and interviews with knowledgeable neighbors.
16. **Single Scope Background Investigation (SSBI)** - Implemented in December 1991 to replace the BI and SBI. Covers the last 10 years of subject's life. It includes a detailed interview of the subject of the investigation. Also included are a review of birth record, interview of character references, review of education and employment records, National Agency Checks, local agency checks, and a credit check.

G. THESIS OUTLINE

The remainder of this thesis is organized in the following manner: Chapter II gives a general background of DIS and its organization. It also discusses the results of the literature review concerning the security clearance process. Chapter III describes the methodology used to collect the data and other information used as a basis for this thesis. Limitations encountered in gathering data are discussed. Chapter IV discusses the findings from the data analysis. Chapter V gives conclusions and recommendations. The final section contains the Appendix, lists references, and is concluded by the initial distribution list.

II. BACKGROUND

A. DIS MISSION AND ORGANIZATION

The Defense Investigative Service is an agency of the DoD. In Fiscal Year (FY) 91, direction, authority, and control of DIS was transferred to the Deputy Secretary of Defense (Counterintelligence and Security Countermeasures) from the Deputy Under Secretary of Defense for Security Policy. This was carried out in response to efforts to streamline and improve the efficiency of the DoD.

Created in 1972, the DIS is chartered as a national security, personnel security investigative, and industrial security agency. Currently, it is responsible for carrying out security checks on contractor personnel, military members, DOD civilians, and other governmental personnel. DIS administers four programs; the Personnel Security Investigative Program, the Defense Industrial Security Program, the Arms, Ammunition, and Explosives Security Program, and the Key Asset Protection Program.

The Personnel Security Program is designed to gather information relating to the loyalty, character, emotional stability, trustworthiness, and reliability of personnel assigned to or affiliated with the DoD. The Defense Industrial Security Program ensures that classified information is properly safeguarded by U.S. industry

performing government contracts or conducting research and development. The Arms, Ammunition, and Explosives Program protects sensitive conventional arms, ammunition, and explosives in possession of or produced by DoD contractors. The Key Asset Protection Program is designed to promote adequate security for those industrial facilities which are critical to emergency mobilization preparedness.

Jurisdictional authority for DIS covers the United States, U.S. Possessions, and Trust Territories. Offices are also maintained in the Far East to help the military and other user agencies with security in overseas contractor facilities.

It is important to note that DoD downsizing and reorganization efforts are affecting its agencies in various ways. One example is the implementation of the Single Scope Background Investigation (SSBI) in December 1991. The SSBI replaces the Background Investigation (BI) for TS clearances and the Special Background Investigation (SBI) for access to SCI.

The period of investigation for the BI covered 5 years and that for the SBI was 15 years. Investigation periods for SSBIs cover a period of 10 years adding 5 more years than the BI and cutting 5 years from the time required for the SBI. Subject interviews were required for the BI while SBIs did not require them.

The SSBI requires a detailed interview with the subject of the investigation. Additional requirements include a review

of birth records, interview of character references, review of educational and employment records, a National Agency Check, local agency checks, and a credit check.

Implementation of the SSBI has been significant for DIS because it was intended to save money and lower costs by creating a background investigation which would be accepted by all agencies of the Executive Branch and its departments. Instead, it has placed a significant strain on DIS resources. While downsizing is taking place within the rest of DoD, the DIS workload has increased.

With the reduction of Armed Forces personnel it is expected that the number of investigations will decrease. Past experience has shown that the largest decreases will be in requests for SECRET and CONFIDENTIAL security clearances. However, due to the resource-intensive aspects of the SSBI and the required Periodic Reinvestigations (PRs), the DIS workload will not be dramatically reduced. (Defense Investigative Service, 1993)

As consolidation and reduction in manning levels continue, military departments are beginning to turn over industrial security programs like Special Access Programs (SAP) to DIS. Since DIS has offices throughout the country, it should be able to conduct SAPs in a more cost effective manner than the individual military departments. Taking over new responsibilities such as this will also have an impact on the DIS workload. (Defense Investigative Service, 1992)

The DIS is made up of field activities, regional resident offices, and support activities. The support activities consist of the Personnel Investigation Center (PIC) located in Baltimore, Maryland, and the Defense Industrial Security Clearance Office (DISCO) situated in Columbus, Ohio.

B. THE INVESTIGATION PROCESS

Defense Investigative Service regional offices and field activities are staffed with Special Agents who are tasked with the job of conducting security investigations on DoD personnel. Policies, procedures, regulations, and guidelines for personnel security clearances are established in Department of Defense Directive 5200.2R.

The personnel security investigative process begins with the forwarding of the Request for Security Clearance (DD1879), the Personnel Security Questionnaire (PSQ/ DD398), and other related forms to PIC which is responsible for day to day management of all cases. Military departments and DoD submit security clearance requests directly to PIC. Contractors submit their requests to DISCO which then forwards them to PIC.

At this point, PIC assigns the investigative tasks to the appropriate DIS field office either in the United States or overseas. The field office gathers all relevant information concerning the subject and transmits it to PIC. The information submitted from the field is then collated and transmitted

to the adjudication facility which has jurisdiction over the subject of the investigation. (Haag and Schoyer, 1989)

By the end of FY94, there will be eight federal agencies which perform adjudications for military and other DoD and governmental personnel requiring security clearances. The results of investigations on industrial applicants are forwarded to DISCO for adjudication.

Adjudicators must evaluate the evidence gathered by the investigation, use specific decision criteria, and decide whether or not to grant the subject a security clearance. If significant adverse information is uncovered on an industrial applicant, DISCO refers to case to the Directorate for Industrial Security Clearance Review (DISCR). A final decision on eligibility for a security clearance on industrial applicants with significant adverse information will be made by DISCR. (Hill, 1991)

C. CLEARANCE DETERMINATION

There are three levels of security clearances, TOP SECRET, SECRET, and CONFIDENTIAL. Classification of information is based on its sensitivity to national security. The unauthorized disclosure of TS material could result in exceptionally grave damage to national security. Disclosure of SECRET information may result in serious damage to national security. CONFIDENTIAL information, if revealed without proper authority, could cause damage to national security.

Investigations relating to TS clearances are more extensive than those for SECRET clearances. SECRET clearances require more investigative resources than CONFIDENTIAL clearances.

In instances where derogatory information is discovered during an investigation, case controllers at PIC must use case expansion guidelines to decide if expansion of the investigation is required. Significant negative information would require that the scope of the investigation be expanded to resolve the problem. Self-reported adverse information may also cause the scope to be expanded. When the investigation is expanded the case is then referred to as an "issue case".

Categories of issue cases include the following: (1) alcohol abuse, (2) drug abuse, (3) financial problems, (4) emotional and mental problems, (5) criminal behavior, (6) sexual misconduct, (7) loyalty, (8) foreign connections, (9) foreign preference, (10) falsification, (11) security incident, and (12) refusal to answer questions. Issue cases become very important because, among other things, they require additional resources. (Wiskoff and Fitz, 1991)

Adverse financial information has become an important area of interest to DIS. Individuals with a history of significant delinquent debt are perceived as a possible security threat. This study is focused on the issue of financial problems and in particular the delinquent credit threshold which was

increased in July 1992 from \$500 to \$2000 for outstanding balances which are delinquent for over 120 days.

D. LITERATURE REVIEW

Between 1945 and 1990 there were 115 Americans arrested for espionage. A recent study revealed that at least 67.8% of these people were motivated in part by money. Additionally it was shown that money was the primary motive for espionage in at least 52.2% of these cases. (Heuer, 1991) Therefore, financial issues have become an important area of interest in any Background Investigation (BI).

1. Resource Requirements

The SSBI, which replaced both the BI and SBI, was implemented on December 1, 1991. This event increased the investigative actions required of DIS and impacted resources. Since DIS is downsizing, as is the rest of DoD, the increased demand for resources created concern. As a result, a comprehensive manpower versus work requirements study was conducted by DIS.

Smaller offices were closed and personnel assignments were matched to work requirements. During FY92, 84% of the DIS budget was allocated to personnel related costs as opposed to 85.4% in FY91. Also, the SSBI is more labor intensive than the BI or SBI because it requires more leads and an in-depth subject interview. (Defense Investigative Service, 1992)

In FY92 DIS completed over 733,600 National Agency Checks (NACs) and over 264,400 more extensive Personnel

Security Investigations (PSIs). This includes Single Scope Background Investigations, Special Background Investigations, Background Investigations, Periodic Reinvestigations (PRs) for TS, Post Adjudicative Investigations, Expanded National Agency Checks, and SECRET periodic reinvestigations. Figures for FY91 show that approximately 691,000 NACs and 232,100 other PSIs were completed.

The implementation of the SSBI, the additional requirement of a neighborhood investigation at the current residence of all investigative subjects of a Periodic Reinvestigation for TS and SCI, and the increase in the number of personnel requiring SECRET PRs have increased case completion times in FY92.

In fact, in FY92 the SSBI generated an average of 30 leads per case while the BI generated about 18 leads per case and the SBI averaged 31 leads per case. At the end of FY92 average PSI completion time was 116 days. In FY 91 average completion time was 112 days. (Defense Investigative Service, 1993)

The Defense Investigative Service reported that in FY 91, for operational temporary duty and credit checks, it spent \$1,554,000, and \$602,000 respectively. Those same categories for FY 92 were \$1,878,000 and \$1,053,000. These figures appear to reflect the results of the increased investigative requirements. (Defense Investigative Service, 1993)

2. Active Duty Navy Bankruptcies

A disturbing trend which will impact the number of financial-related issue cases is the tendency of some military personnel to file for bankruptcy more often than the civilian population. One study looked at the incidence of sailors filing bankruptcy in the Jacksonville and San Diego areas.

The results of the study indicated that the sailors in the two locations were filing bankruptcy more often than the civilian population. This seems to be contrary to the notion that people with steady incomes, such as military personnel, would file bankruptcy less often than the general civilian population. (Sachse, 1993)

Another interesting finding of the study showed that sailors were filing bankruptcy with a lower debt burden than the civilian population. The analysis indicated that the financial condition of sailors filing bankruptcy is two times better than the financial condition of civilians who file bankruptcy. In addition, more than 70% of the sailors who filed bankruptcy were either E-5 or E-6. (Sachse, 1993).

The incidence of bankruptcy of Navy personnel revealed in this study points out the possibility that issue cases related to bankruptcy may be increasing for this group if not for all military personnel in general. However, economic conditions in San Diego are very bad and may contribute to high bankruptcy rates in general. A majority of those filing bankruptcy were E-5 and E-6, the seniority level at which

SECRET and TS clearances would more likely be required. This is another indicator that issue cases related to bankruptcy may be on the increase.

3. Adjudication

The quality of the adjudicative process has been an area of concern in the overall clearance granting procedure. There are two primary methods used to determine financial responsibility, judgmental and empirical screening.

It is recognized by the judgmental method that the typical behavior of a category of people may not necessarily predict the behavior of an individual within the group. (Bodzin, 1988) In other words, all individuals who file for bankruptcy are not always financially irresponsible. There can be factors over which the subject had no control or other mitigating circumstances.

Individuality is not always a concern of the empirical method. Quantitative measures are used to evaluate financial responsibility. Credit performance data based on reports from sources which have granted credit to the subject are analyzed. Newer methods combine this information with a scoring of the personal traits of an individual to come up with an overall score to be compared to a minimum standard for acceptability. (Bodzin, 1988)

The DoD clearance process is still mostly judgmental in nature with some additional empirical aspects. Thresholds such as the \$2000 delinquent debt threshold are supposed to

provide an objective standard which can be used to determine if a case should be classified as an issue case. However, investigators are encouraged to expand investigations if they decide that the situation calls for it, despite the fact that the data from the case fall below the threshold. (Goldstein, 1991)

In recent years, the adjudicative process has moved toward a more empirical approach. Experts in the security field have recommended that a more objective framework be established on which adjudicators can base their decisions.

As a result, DoD Directive 5220.6 dated 12 August 1985 set forth more specific and objective adjudicative guidance. This directive gives a criteria list containing factors both for and against the approval of a clearance which must be taken into consideration by the adjudicator. (U.S. Department of Defense, 1985)

4. Espionage and the Financial Motive

Most of the American citizens arrested for espionage in the last 15 years have had no particular ideological reasons to engage in espionage. As mentioned earlier in this report, about 70% of the cases involved the selling of our country's secrets for money. As a result, assessing the financial vulnerability of DoD personnel has become increasingly important.

The effective use of automated credit information has also become an item of interest because of the speed with

which the data can be obtained and the relatively low cost of obtaining the information. Automated credit reports can identify subjects who could be a security risk because of financial problems. These reports can also help identify individuals who possess unexplained financial resources or who maintain higher levels of credit than can be expected for someone of their income level.

K. J. Euske and D. P. Ward concluded in a study of existing financial reporting sources that credit checks, even automated ones, do not always identify questionable sources of income. They pointed out that there can be major problems with using credit checks because relevant data may be missing, credit reports can be complex and require a lot of time to analyze, and credit services do not use a standard reporting format. Still, computer assisted credit checks hold the most promise for analyzing the financial background of individuals. (Euske and Ward, 1988) Also, credit bureaus have improved the quality of data since 1988.

In response to these concerns, DIS has purchased a system which will automate most of the credit report processing. Off-the-shelf software, currently in use by the financial community, is being altered to meet the needs of DIS. This will allow PIC in Baltimore, Maryland to eliminate most of the manual process now used to gather and review these reports.

The new credit reporting system is called Automated Credit Reporting System (ACRS). It is expected to be on line in December 1993 and fully operational before the end of FY94. Derogatory information will be printed out on a separate sheet of paper in an easy to read format. Reports containing no derogatory information will only show a summary of the credit references.

Criteria used to evaluate credit reports will be automated so that only the required reports will be printed. Delays caused by problems in obtaining the addresses of creditors reporting derogatory credit information will be eliminated. The system will be controlled by DIS and the format for credit reports has been tailored to DIS requirements. Time and money will be saved by eliminating most of the manual processing of credit reports.

E. SUMMARY

Defense Investigative Service responsibility to carry out security checks on contractor personnel, military members, DoD civilians, and other governmental personnel is a very important one. How well this task is carried out has a significant impact on national security.

The current downsizing of the Armed Forces has not dramatically reduced the DIS workload. Resource intensive aspects of the PR and SSBI has put increased demands on DIS resources. Budget reductions have led to reductions in personnel and closing of smaller offices.

One study indicates that senior enlisted Navy personnel may be filing bankruptcy more frequently and at a lower level of debt than the civilian population. Military services are turning over more of the responsibility for industrial security programs to DIS. Both of these developments mean an increase in workload for DIS.

The financial motive is still the primary motive for espionage. Therefore the financial aspects of a BI are still very important, especially the credit check. The new Automated Credit Reporting System will help reduce the cost of credit checks.

The additional demands on DIS resources make it increasingly important that its resources be used as effectively as possible. Raising the delinquent debt credit threshold from \$500 to \$2000 was an effort to direct resources where they will be the most effective. The remainder of this research focuses on the effects of this change.

III. METHODOLOGY

A. DATA COLLECTION

The primary purpose of the data analysis was to determine the effects of altering the delinquent debt credit threshold from \$500 to \$2000. Data were gathered from the Issue Case Data Base maintained by PERSEREC, hard copy information which had not yet been entered into that data base, the Defense Central Index of Investigations (DCII) available at the Defense Manpower Data Center (DMDC) in Monterey, California, DIS personnel, and the end of the Fiscal Year reports on DIS achievements.

Personnel from the Quality Assurance Branch (QAB) at PIC provide quality assurance monitoring for cases after the corresponding investigations have been completed. QAB personnel randomly select issue cases from among those on which the investigation has been closed for at least one day, for the purpose of performing quality checks on them. Information contained on the cover sheets which are forwarded with each set of issue case summary sheets sent to PERSEREC revealed, that between July 1991 and July 1993, 3677 issue cases were reviewed. This represented 6.9% of the 53,275 issue cases received by the QAB during that period.

After performing the quality check on the completed issue case, a short summary of that case is made on a single sheet

of paper which includes the name, social security number, case opening date, type of investigation (BI, SBI, SSBI, etc.), sheet identification number, and the classification of the issue (financial, criminal activity, falsification, etc.). The summary sheets on the completed issue cases which have been checked during the week are gathered together under the direction of Linda Howes, Chief of the Quality Assurance Branch at PIC, and forwarded via mail to Dr. Ralph Carney at PERSEREC for inclusion in the Issue Case Data Base. The cover letter gives the dates of the week in which the random checks were made, total cases received, and total reviewed.

In order to establish trends relating to financial issue cases, data were retrieved from the automated Issue Case Data Base covering the time period January 1989 through June 1991. At the time of this analysis, data from the summary sheets had not been entered into the Issue Case Data Base since June 1991. Individual summary sheets from July 1991 through July 1993 had to be examined separately and the data summarized manually. Figure 1 shows how the data was organized.

Dr. John Goral at DMDC provided information from the DCII related to overall totals for BI, SBI, SSBI, PR, and SPR security investigations. This information covered the period July 1990 through June 1992 and was used to study broad trends in security investigations.

MONTH__YEAR__

TOTAL ISSUES SOLE FIN ISSUES MULT FIN ISSUES

	MI	CI	IN	T	MI	CI	IN	T	MI	CI	IN	T
BI												
SBI												
SSB												
I												
PR												
SPR												
TO												
AO												
TR												

Figure 1

LEGEND

- TOTAL ISSUES-Total number of issues including single financial issue cases and multiple financial issue cases.
- SOLE FIN ISSUE-An issue case in which a financial issue is the only issue.
- MULT FIN ISSUE-An issue case which has multiple issues of which financial is only one.
- MI-Subject of the issue case is a member of the military.
- CI-Subject of the issue case is a DoD civilian.
- IN-Subject of the issue case is a defense contractor employee.

- BI-Background Investigation.
- SBI-Special Background Investigation.
- SSBI-Single Scope Background Investigation.
- PR-Periodic Reinvestigation.
- SPR-Periodic reinvestigation of a SECRET clearance.
- T-Row total.
- TO-Column total.
- AO-All other issue cases below secret periodic reinvestigation.
- TR-Total number of all issue cases reviewed by QAB including all other issue cases.
- MONTH_YEAR_-Month and year in which the investigation was completed and the case reviewed by QAB.

At the end of each Fiscal Year, DIS publishes its achievements for that year. This publication provided information relating to year end figures for expenses and statistical totals on general categories of investigations. Figures for FY91 and FY92 were used for comparison. Information for FY93 was not available for dissemination at the time this study was being conducted.

General information regarding security investigation procedures was gathered during personal interviews with Lynn Reuchel, Special Agent in Charge, and Bill Henderson, Assistant Special Agent in Charge, at the DIS Field Office in Monterey, California. Linda Howes, Chief, Quality Assurance Branch, at PIC provided information regarding the quality assurance process via telephone conversation. Background information concerning security investigations and DIS was

provided via telephone by Jim Carnaggio, Personnel Security Specialist, Dale Hartig, Chief of Information and Public Affairs, and Chuck Forsyth, DIS Assistant Deputy Director, Comptroller.

B. DATA ANALYSIS PROCEDURES

Credit checks are required for BI, SBI, SSBI, PR, and SPR. Financial information is a key item of interest for each type of investigation. TS security clearances and SCI access are covered by the BI, SBI, SSBI, and PR investigations. Secret Periodic Review (SPR) is used solely for SECRET clearances.

Ratio analysis of data relating to the pertinent security investigations was carried out using Statistical Package for Social Science (SPSS) mainframe software Version 4.0. To study the effects of the change in the delinquent debt credit threshold, the total number of investigation issue cases which were sole financial issue cases was divided by the total issue cases. The total number of multiple issue cases that involved a financial issue , was also divided by the total number of issue cases. Prior to conducting these procedures all of the background investigation categories were grouped together (BI, SBI, and SSBI). Sole and multiple issue ratios were calculated separately for the PR and SPR categories.

There was considerable variance in the number of issue cases reviewed by the QAB. Some months the QAB would review no issue cases; other months they would review more than 100.

Periods when few cases were reviewed were caused by the QAB being tasked with other assignments.

In order to reduce the likelihood of erroneous ratios emerging for the months in which the QAB reviewed zero or only a small number of issue cases, monthly totals were grouped into 6 month periods of time. A six month period of data was used to compute a mean single percentage or ratio for each category described above. This conveniently provided nine values representing nine six month periods beginning in January 1989 and ending in July 1993. July was added to the last period because no reviews were conducted in January 1993 and it was also the most recent available data.

Regression analysis using the values from the nine periods for each category of investigation was accomplished using the software contained in QUATRO PRO spreadsheet package Version 4.0. As previously stated, the increase in the delinquent debt credit threshold occurred in July 1992. The dates and corresponding period are listed in Table 1.

Regression analysis was performed using the first 7 periods in order to forecast what the ratio for each category would have been for Periods 8 and 9 had no change in the delinquent debt credit threshold taken place. This allowed the forecasted ratios to be compared to the actual ratios for Periods 8 and 9 which represent the time frame after the change in the delinquent debt credit threshold took place.

Graphs shown in Figure 2 through 7, Appendix A, illustrate the results of the regression analysis.

TABLE 1

PERIOD	DATES
1	1/89-6/89
2	7/89-12/89
3	1/90-6/90
4	7/90-12/90
5	1/91-6/91
6	7/91-12/91
7	1/92-6/92
8	7/92-12/92
9	1/93-7/93

The effect of the change in the delinquent debt credit threshold on the time required to open and close an investigation is also of interest to this research project. To get a sense of the mean times for opening and closing an investigation of an issue case before and after the change in July 1992, a random sampling technique was used.

Individual case summary sheets for the time period July 1991 through July 1993 offered a convenient pool of data from which to gather information about issue case investigation opening and closing dates. This time period was divided into two periods. One went from July 1991 to June 1992 and the other covered the period July 1992 to July 1993. Fifty issue cases were randomly selected for each of the categories of sole financial, multiple financial, and other issue cases which did not include financial for both of the time periods.

Using the information from the individual case summary sheets, the mean time required to open and close an issue case for each category was calculated. One time period was before the change in the delinquent debt credit threshold and the other covers a period of time after the change. Mean investigation times were computed for both sole and multiple financial issue cases in each of the two time periods. Comparing the means from the prechange period to the post change period provided another way to measure the effects of the change.

The DCII was employed to ascertain the mean time required for a non issue security clearance investigation to be completed. Information relating to BI, SBI, SSBI, PR, and SPR categories was combined for this procedure in the same manner done for the issue cases. This data provided a opportunity to

compare the difference in time required for a non issue investigation with that required for an issue case investigation.

MINITAB Data Analysis Software Release 1.1 was used to determine standard deviations for the data gathered before and after the change. The case completion times for both sole and multiple financial issue cases were combined for each time period to calculate the standard deviation. These statistics were used to estimate the point in time when the effects of the investigations under the previous delinquent debt threshold ended and the time when the investigations under the new policy began to take full effect.

The DCII was again accessed to get a general idea of the trends in the number of security investigations and issues which occurred during a three year period. Information was divided into three periods, July 1990 through June 1991, July 1991 through June 1992, and July 1992 through June 1993. Financial issues are included in the Suitability issue category. Totals for Suitability were provided for the BI, SBI, SSBI, PR, and SPR security investigation categories for each of the three periods described above. Totals are shown in Table 5.

C. LIMITATIONS

At the outset of this study, it was intended that an estimated amount of monetary savings attributable to the change in the financial issue case threshold could be provided at the conclusion of the research. However, average cost

figures were unobtainable from DIS during the data collection phase of this study. Official DIS statistical information on the average number of days required for expanded investigations, those which did not require expansion, and the different categories of investigations also were not available.

Therefore, a time series study using ratio analysis, simple regression analysis, and random sampling were used to measure the effects of the change in the delinquent debt credit threshold. The impact on DIS resources will be described in terms of the effects on the kinds of activities which are required to complete a security investigation.

IV. FINDINGS

A. DATA ANALYSIS

Ratio analysis was performed using software from the Statistical Package for Social Science. A useful way to examine the effects of the change in the delinquent threshold is the total number of sole and multiple financial issue cases as a ratio or percentage of the total issue cases. The three categories of background investigations, BI, SBI, and SSBI, were grouped together into a general BI category for the purposes of analysis. One ratio was calculated for sole financial issue cases and another for multiple financial issue cases for the BIs. The same two ratios were used for both PR and SPR.

The ratios are presented in Table 2. A separate ratio is provided for each of the time periods depicted in Table 1 (found in the preceding chapter). Periods 8 and 9 are the focus of major concern because the change in the delinquent debt threshold occurred at the beginning of Period 8 (July 92-December 92).

In addition to the impact of the change in the delinquent debt threshold, the ratios also reflect the impact that

TABLE 2

SOLE ISSUE BI									
Period:	1	2	3	4	5	6	7	8	9
Ratio:	.216	.249	.220	.205	.273	.243	.240	.225	.180
MULTIPLE ISSUE BI									
Period:	1	2	3	4	5	6	7	8	9
Ratio:	.160	.216	.178	.188	.191	.227	.280	.229	.217
SOLE ISSUE PR									
Period:	1	2	3	4	5	6	7	8	9
Ratio:	.250	.278	.363	.339	.339	.329	.330	.297	.210
MULTIPLE ISSUE PR									
Period:	1	2	3	4	5	6	7	8	9
Ratio:	.191	.170	.134	.181	.164	.224	.202	.189	.213
SOLE ISSUE SPR									
Period:	1	2	3	4	5	6	7	8	9
Ratio:	.000	.222	.455	.300	.385	.353	.328	.386	.220
MULTIPLE ISSUE SPR									
Period:	1	2	3	4	5	6	7	8	9
Ratio:	.000	.000	.004	.150	.181	.230	.147	.210	.180

initiating the SSBI and reinstating SECRET PRs had on the system. The reason multiple issue case SPRs took longer for their impact to appear was that those cases took longer for DIS to complete and for them to reach both the QAB and the issue case data base.

Although the drop in the ratios for BI and PR from Period 7 to Period 8 shows some of the effects of the change in the delinquent debt credit threshold, the comparison of greatest interest for the ratio analysis is on the changes which occurred between Periods 7 and 9. The reason for this is that it took several months for financial issue cases processed before the policy change to work their way through the system.

The full impact of the threshold change cannot be determined until all of the cases being compared were processed under the new policy. A comparison of the opening and closing dates of a random sample of issue case investigations before and after the change showed that the mean time for these issue cases to work their way through the DIS system falls somewhere between five and six months.

Mean ratios and percent changes for Periods 7 and 9 are shown in Table 3. Results relating to the length of time it took DIS to process the issue cases are discussed more fully in the next section.

It is evident that a decrease occurs in the sole financial issue case ratio from Periods 7 to 9 for each of the three categories. The same trend can be seen in the multiple financial issue BI category. Because of the nature of the multiple issue cases and limited access to data, it is impossible to make any strong judgement as to why the remaining two multiple financial issue category ratios increased

TABLE 3

PERIODS			
	7	±	9
Sole BI	.240	-25	.180
Mult BI	.280	-22.5	.217
Sole PR	.330	-36.4	.210
Mult PR	.202	+5.4	.213
Sole SPR	.328	-32.9	.220
Mult SPR	.147	+22.4	.180

between Periods 7 and 9. However, the overall trend in ratios for 4 out of 6 categories shown above is downward. This evidence seems to support the conclusion that the increase in the delinquent debt credit ratio did decrease the overall number of sole and multiple financial issue cases.

B. RANDOM SAMPLING OF CASES TO COMPARE OPENING AND CLOSING DATES

The summary sheets for individual issue cases were randomly sampled to get a mean time required to complete sole and multiple financial issue case investigations. Mean completion times before and after the change in the delinquent debt credit threshold were of interest. Fifty issues cases were randomly selected from both the sole and multiple issue cases without regard to the BI, PR, and SPR categories.

Since July 1992 marked the change in the threshold, 50 cases were drawn from the July 1991 through June 1992 time frame. Likewise, 50 cases were selected from the July 1992 through July 1993 time frame for each group. By comparing the

opening date and closing time of each case on the cover sheets, mean investigation completion time was calculated.

Table 4 gives the mean investigation times for non-issue cases, sole financial issue cases, and multiple financial issue cases for the periods July 1991 through June 1992 and July 1992 through July 1993.

TABLE 4

	July 91-June 92	July 92-July 93
Non - Issue	107.0	117.0
Financial Issue	157.1	165.8
Mult Financial Issue	167.6	201.9

At first glance this finding would tend to be contrary to the notion that less financial issue cases should lead to shorter investigation times. However, the implementation of the SSBI as a replacement of the BI and SBI has increased completion times. It is also reasonable to assume that after the debt threshold was raised, financial issue cases increased in complexity which would also tend to increase completion time. In addition, the increased emphasis on periodic reinvestigations of both TOP SECRET and SECRET clearances have undoubtedly contributed to the increase in the mean time for completion of sole and multiple financial issue cases. Whatever positive effect the change in the delinquent debt credit threshold may have had on reducing issue case investigation

times has been overwhelmed by the more resource intensive SSBI and the emphasis now placed on PRs and SPRs.

Table 4 also shows that the mean time for a non issue investigation was 107 days for the period before the change in the threshold and 117 days for the period after it. Dr. John Goral at DMDC was able to provide this additional information using the DCII.

During the period before the change, the mean time required to complete a non issue case investigation was 31.9% less than that for a sole financial issue case investigation and 36.2% less than a multiple financial issue case investigation. The same comparisons of post change mean values reflect that the non issue case took 29.4% and 42.1% less time.

These comparisons point out the significant time requirement differences between a non issue case investigation and an issue case investigation. It can be seen that any action taken which reduces the number of issue cases will have a corresponding effect on time requirements. Reduced time requirements translate into reduced demands on DIS resources.

Since the increase in the resource intensive SSBI was expected to have a significant impact after the change, the same procedure was used to determine the mean completion time for an SSBI after the change for both the sole financial issue cases and the multiple financial cases. Cases may also be

more complex because easier cases (those with the lowest debt level) were no longer being investigated due to the threshold change.

For sole financial issue cases, the mean completion time period after the change for an SSBI was 204.1 days. The mean completion time for multiple financial issue case after the change, which are SSBIs, was 203.7 days. Base on random sampling it appears that for both types of cases, the mean completion time for an SSBI is somewhere around 204 days. This figure is well above the mean completion time for all sole and multiple financial issue cases. The results make it rather clear that the SSBI is having an impact by increasing mean case completion times.

To be more precise about the point in time when the effects of the old policy end and the new policy began, MINITAB Data Analysis Software Release 1.1 was used to calculate standard deviations for the mean investigation times. In this instance the same time periods were used but the sole and multiple financial issue cases were combined to form a pool of completion times from which to determine a standard deviation for the cases sampled before the change and another standard deviation for the cases after the change.

Results generated by MINITAB showed a standard deviation of 69.1 days for the period before the change and 68.9 for the period after the change. Based on the characteristics of a normal distribution, moving three standard deviations from the

mean case completion date for cases processed the day before the change in the delinquent debt threshold went into effect will provide an estimate of when the total effects of the change in threshold will be in force. This represents 364.3 days from July 1, 1992.

It is important to recognize that cases processed before July 1, 1992 should have almost completely worked their way through the system before July 1, 1993. Therefore, by the end of June 1993 virtually all of the effects of threshold change should be reflected in the cases represented in the issue case data base.

C. REGRESSION ANALYSIS

Studies described in the Review of Literature section of this thesis indicate that the frequency of filing bankruptcy is increasing in this country, especially among military personnel. Filing bankruptcy results in background investigation and periodic review cases automatically being treated as a financial issue case. One would then expect the ratio of financial issue cases to increase if the threshold remained the same. Inflation and adverse economic conditions would also tend to increase the rate. Regression analysis can be used to forecast the impact of those factors. Thus, these effects can also be taken into consideration.

The QUATRO PRO statistical program was used to perform regression analysis. The data from Periods 1 through 7 were used to perform regression analysis in order to forecast what

the ratios for Periods 8 and 9 may have been if no change in the delinquent debt credit ratio had occurred. The actual values determined by using ratio analysis are shown above in Table 2.

Figures 2 through 7 in the Appendix give graphic illustrations of the forecasts for Periods 8 and 9 using regression analysis for each of the categories discussed in this section. Actual versus forecasted values, percentage differences, and coefficients of determination, R^2 , are given in Table 5 for Periods 8 and 9.

R^2 is a descriptive measure of the utility of the regression equation for making predictions. Values of R^2 near zero indicate that the regression equation is not very useful in making predictions. As values get closer to one, it becomes more useful in making predictions.

The forecasted values based on simple regression analysis show that for Period 8, increases in the ratios were predicted to increase for all six groups. The smallest predicted increase was an increase of 7.8% for multiple issue PRs as compared to a high of 18.4% increase for sole issue PRs. Actual results show a decrease from predicted values in each category. The coefficients of determination, R^2 , show moderate to strong predictive regression utility except for

TABLE 5

	Period 8			Period 9			R ²
	Actual vs Forecast %+, -			Actual vs Forecast %+, -			
Sole BI	.225	.251	-10.4	.180	.255	-29.4	.53
Mult BI	.229	.262	-12.6	.217	.276	-21.4	.40
Sole PR	.297	.364	-18.4	.210	.375	-44.0	.79
Mult PR	.189	.205	- 7.8	.213	.211	+1	.59
Sole SPR	.386	.459	-15.9	.220	.501	-56.1	.23
Mult SPR	.210	.256	-18.0	.180	.294	-38.8	.58

Sole SPR which had an R² of .23. This is not surprising because even with a simple inspection of the data given in Section A, it can be seen that the data points for Sole PR appear to have to have a weak linear relationship.

Actual values compared to those forecasted for period 9 show even larger decreases for most issue groups. Multiple PR shows a predicted 1% increase for Period 9. The largest decrease between an actual and forecasted value was 56.1% for Sole PR.

Again one must take into consideration the weak predictive regression utility, .23, for Sole PR. However, when multiple issue case PRs and sole issue case SPRs are excluded, the remaining 4 groups show large predicted increases in period 9 based on the regression analysis forecasting. The decreases achieved for Sole BI, Multiple BI, Sole PR, and Multiple SPR

when compared to the predicted values were 29.4%, 21.4%, 44%, and 38.8% respectively.

When taken as whole, even with the noted exceptions, the forecasted values for Periods 8 and 9 point to a downward trend for most of the issue case categories. This part of the analysis also supports the premise that the change in the delinquent debt credit threshold did substantially affect the overall number of sole and multiple issue case in the BI, PR, and SPR categories. The results suggest that instead of the forecasted increases in the number of financially related issue cases, substantial decreases occurred.

D. GENERAL TRENDS

The DCII, which is operated by DIS, provides an automated data base of investigative and clearance information. Financial issue cases are included in the category of Suitability Issues in the DCII. A suitability issue can be any of the following issues: (1) alcohol abuse, (2) drug abuse, (3) financial problems, (4) emotional and mental problems, (5) criminal behavior, (6) sexual misconduct, (7) loyalty, (8) falsification, and (9) refusal to answer questions.

Information was retrieved by investigation type from the DCII. Totals were calculated for BI, SBI, SSBI, PR, and SPR for the time periods July 1990 through June 1991, July 1991 through June 1992, and July 1992 through June 1993. This data were gathered in order to look at the overall trends for the

suitability issue for each of the five investigation types listed above. The totals are given in Table 6.

The information contained in Table 6 shows the dramatic effects of the implementation of the SSBI across the three time periods. Total BIs go from 7,129 in the first period down to one in the third period. SSBI totals started at 15 in the first period and steadily increased to a total of 10,367 in the third period. The consolidated total in the second period for BI, SBI, and SSBI is 13,625. When compared to the same total for the third period, 10,415, the trend in decreasing numbers of issue cases can be seen. Totals for PRs began at 7,701 in the first period, peaked at 9,061 in the second period and fell to 7,487 in the third period.

Information on SPRs shows a similar trend. First period totals began at 3,064 while second period totals peaked at 15,551. As with the PRs, third period totals fell to 8,082.

Overall totals show familiar trends. Period 1 final totals are 26,321. Those for Period 2 crested at 38,237. Final totals for period 3 fell to 25,937. Again, it must be pointed out that the financial issue is only one of the issues which make up the DCII Suitability category. However, the pattern is the same as that revealed by ratio analysis, and supported by regression analysis.

Mean investigations times for financial issue cases and multiple financial issue cases, determined by random sampling, were helpful in demonstrating the effects of the increased

TABLE 6

	First Period	Second Period	Third Period
	7/90-6/91	7/91-6/92	7/92-6/93
BI	7129	2762	1
SBI	8426	3201	47
SSBI	15	7662	10367
PR	7701	9061	7487
SPR	3064	15551	8082
Total	26321	38237	25937

emphasis on the SSBI on the length of time required for security investigations. In general, totals for financial related issue cases appear to increase up until June 1992 then drop after that date.

V. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

The objective of this thesis was to evaluate the impact of raising the delinquent debt credit threshold from \$500 to \$2000. Ratio analysis, regression analysis, random sampling, and evaluation in the trends of numbers of different types of security investigations were employed to study the effects of the change in the credit threshold.

When derogatory financial information which meets the \$2000 delinquent debt credit threshold is reported by the member or uncovered during a security investigation, the case is classified as an issue case. Additional resources are required to complete the investigation of an issue case.

The case controller, investigator, and adjudicator will be required to spend more time and effort on an issue case to resolve the derogatory information. More administrative and secretarial support is also needed. Additional travel will be required of the investigator. If creditors providing derogatory information are located in different geographic areas, several investigators may get involved, increasing the travel and per diem costs.

Time required for adjudication decisions, reviews and appeals will be reduced with fewer issue cases. Contractor employees will be required to spend less time on menial jobs

waiting for security clearance approval. From a financial management perspective, any reduction in these activities will save resources that are getting more scarce with each Fiscal Year.

B. ANSWERS TO RESEARCH QUESTIONS

The primary research question which directed this thesis was: What has been the resource impact of altering the delinquent debt credit threshold used to expand background investigations for security investigations from \$500 to \$2000?

Based on the analysis of the data obtained, the researcher concluded that the results clearly point to a reduction in the numbers of sole financial and multiple financial issue cases as a percentage of the total number of issue cases. Even with the noted exceptions, the evidence shows a decrease in overall percentages of financial related issue cases. This phenomenon does coincide with the raising of the delinquent debt credit threshold which occurred in July 1992.

Dramatic decreases from Period 7 to Period 9 in sole financial issue cases for BIs, PRs and SPRs were discovered. Multiple financial issue cases for BIs show a somewhat smaller decrease. Meanwhile, multiple financial issue cases for PRs and SPRs showed modest increases. However, when looking at the total results, there is support to conclude that the decreases in the ratio of financial issue cases to total issue cases begin to be evident between Periods 7 and 9.

Regression analysis and the information retrieved from the DCII also support the idea that decreases in financial related issue cases were taking place beginning with Period 8. For the most part, actual ratios calculated for Period 9 show dramatic differences from the forecasted ratios. Actual ratios for sole and multiple financial issue BIs were less than the forecasted ratios. Sole financial issue PR actual values showed a decrease from the forecasted amount while the corresponding multiple financial PR ratio had a slight increase. The sole and multiple financial issue SPR categories reflected actual ratios that were less than the forecasted ones.

Although the financial issue is only one of the issues included in the Suitability category, numbers taken from the DCII show a similar pattern. Overall totals for suitability issues decreased from Period 8 to 9. The demonstrated reductions translate into a savings in terms of the impact on the kind of activities which are required to complete a security background investigation or reinvestigation.

Fewer resources are required due to the savings in time spent by case controllers, investigators, and adjudicators on dealing with financial related issue cases. As a result, less administrative and secretarial support are required. The additional travel time required for a financial issue case is also saved.

The first secondary research question asks: Has the number of expanded background investigations decreased with the change in the delinquent debt threshold?

Information shown for suitability issues as well as the results of ratio analysis and regression analysis support the conclusion that the number of financial related issue cases did decrease with the change in the delinquent debt threshold. Totals for the 5 types of investigations increased from the July 1990-June 1991 period to the July 1991-June 1992 period then decreased more rapidly from the July 1991-June 1992 period to the July 1992-June 1993 time frame.

The observation can again be made that with the increase of the delinquent debt threshold in July 1992, a measurable decrease in financial related issue cases occurred during the following time period.

The second secondary research question asked: Has the investigation time required to complete security clearance investigations been reduced as a result of the change in the threshold?

Random sampling used to determine a mean time for the completion of sole and multiple financial issue case investigations produced results which indicate that the time required to complete a security investigation has increased with the change. The implementation of the SSBI, increased emphasis on periodic reinvestigation of TOP SECRET and SECRET clearances,

and possible increase in bankruptcy among Navy personnel have acted together to increase the mean investigation times.

The mean investigation time for a non-issue case is significantly lower than that for the sole or multiple financial issue case. Efforts to reduce the number of financial related issue cases do help to lower the time required for security clearance investigations resulting in less demand on DIS resources.

C. RECOMMENDATIONS FOR FURTHER RESEARCH

As was observed during this study, periodic reviews for both TOP SECRET And SECRET clearances seem to behave differently from the background investigations during the time frame from which data were gathered. One possible future study would be to focus only on the PRs and SPRs in order to isolate the time required to complete these cases. It could then be determined how labor intensive the periodic reviews really are.

Adjudication time requirements for financial-related issue cases were not addressed in this study. Research directed toward determining the adjudication time required for a financial issue case as opposed to some other issue case would also help to more fully determine the resource impact of changing the delinquent debt credit threshold.

If cost information could be obtained, it would be very useful to study the true cost of a financial issue case or any

issue case for that matter. In this era of unit costing, this would seem to be an important bit of information.

Finally, it was mentioned in Chapter I that consideration was being given to making a credit check part of the background investigation for a SECRET clearance. The new Automated Credit Reporting System (ACRS) is expected to eliminate most of the manual processing of credit reports. It will also make it much easier to identify derogatory financial information. The new system will make it very tempting to go ahead and make a credit check part of the background of a SECRET clearance.

Whether or not this is a good use of resources is dependent on the utility and validity of using financial and credit measures in security clearance investigations. If these procedures can reduce espionage and theft and increase the level of responsibility and reliability in DoD personnel, the credit check for the SECRET clearance may be worthwhile. Then, the financial resource impact may not be the only criteria to consider.

It is recommended that when ACRS comes on line and is functioning properly, a cost/benefits study on the new system be conducted to determine effects of the increase in financial issue cases if the credit check becomes part of the background investigation for a SECRET clearance. The labor intensive nature of the SSBI and the new emphasis on periodic reinvestigations of TOP SECRET and SECRET clearances have already put

additional demands on DIS resources. It will be very important to determine what additional resources will be required from DIS, and any resulting benefits, if the credit check becomes a part of the SECRET security clearance investigation.

APPENDIX

SOLE ISSUE BI

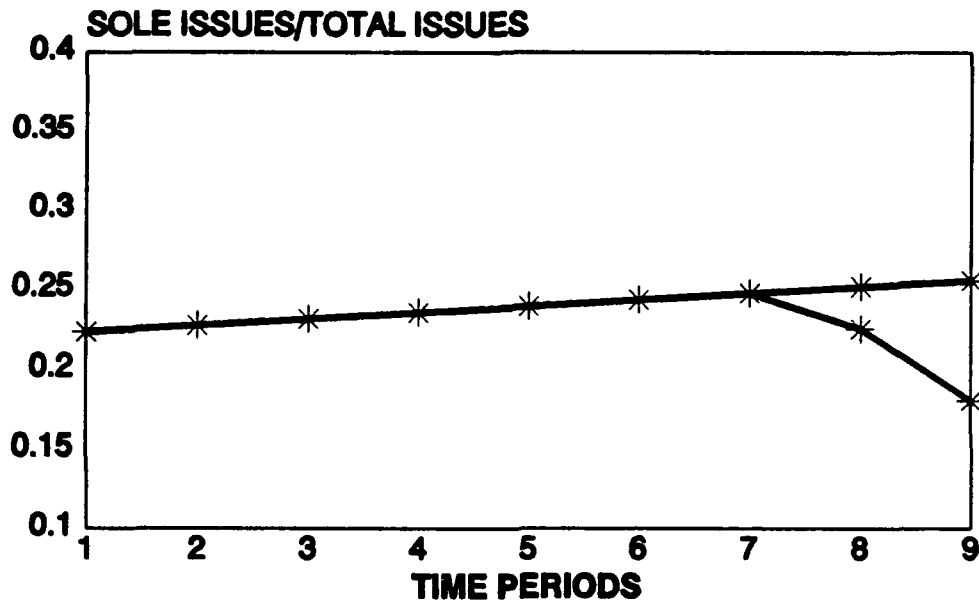
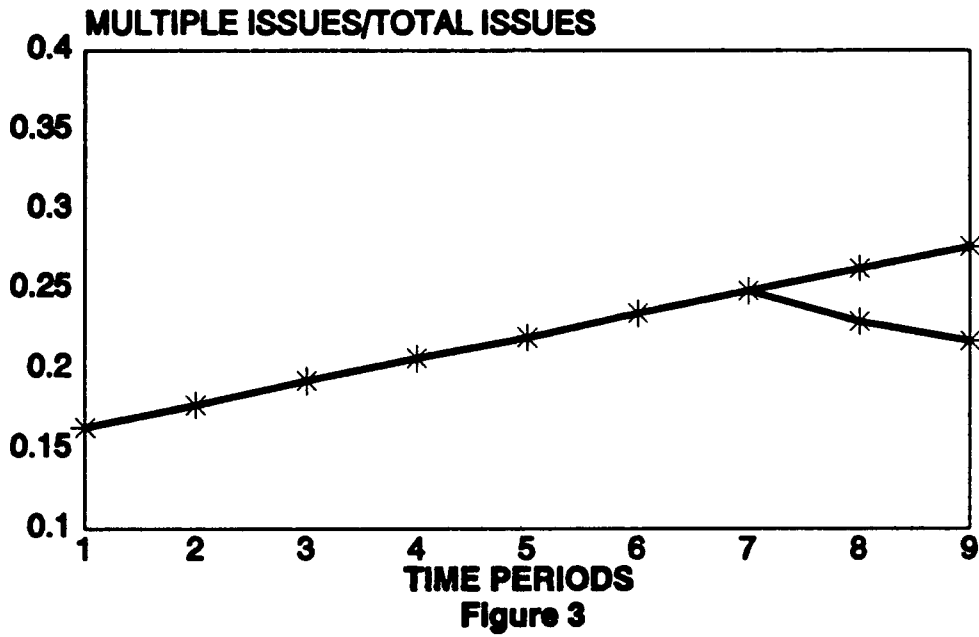


Figure 2

MULTIPLE ISSUE BI



SOLE ISSUE PR

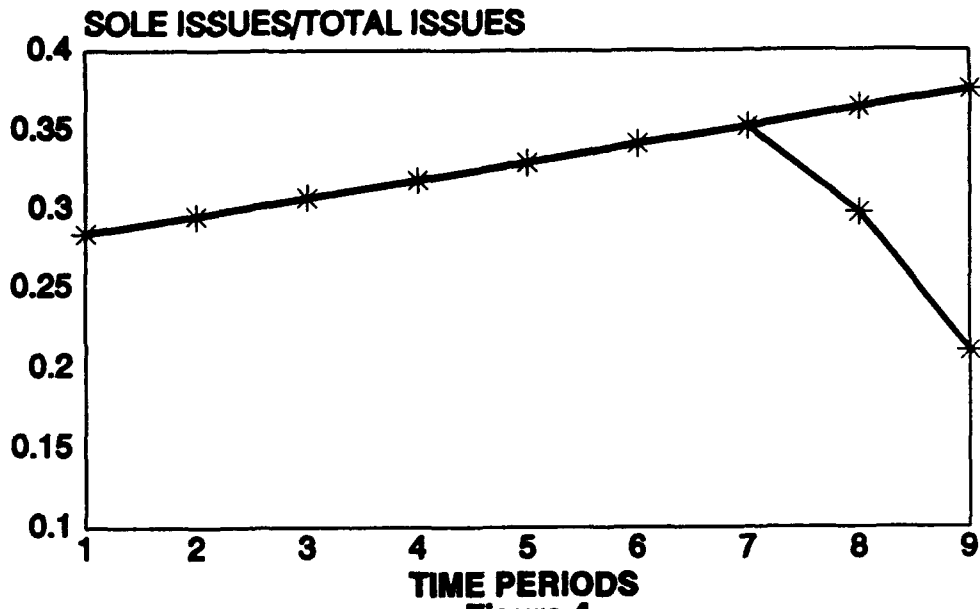
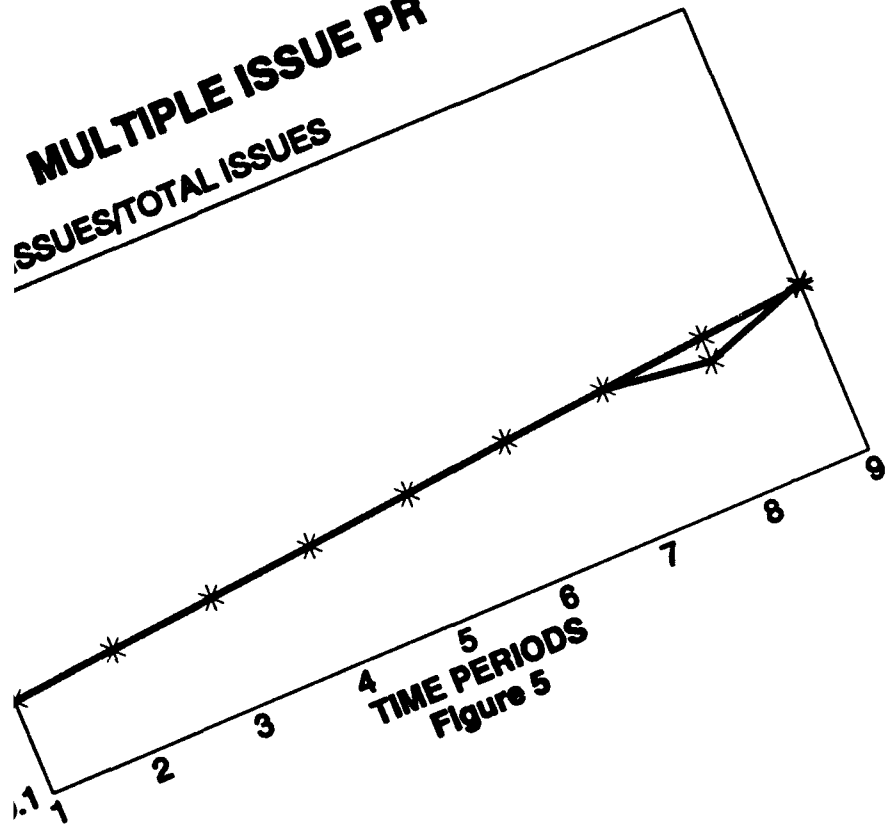
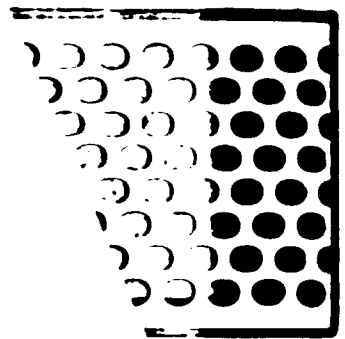


Figure 4

MULTIPLE ISSUE PR
ISSUES/TOTAL ISSUES



TIME PERIODS
Figure 5



SOLE ISSUE SPR

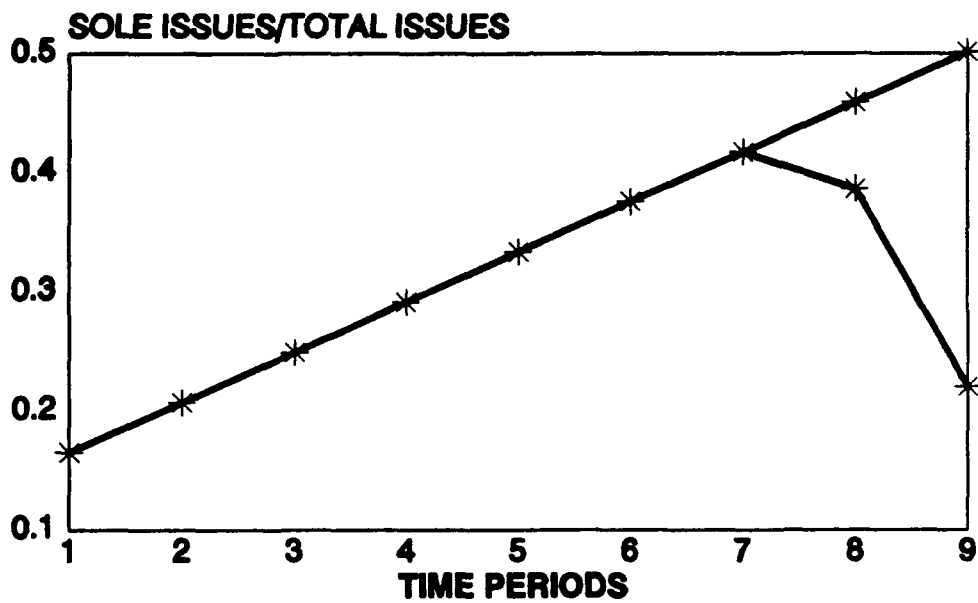
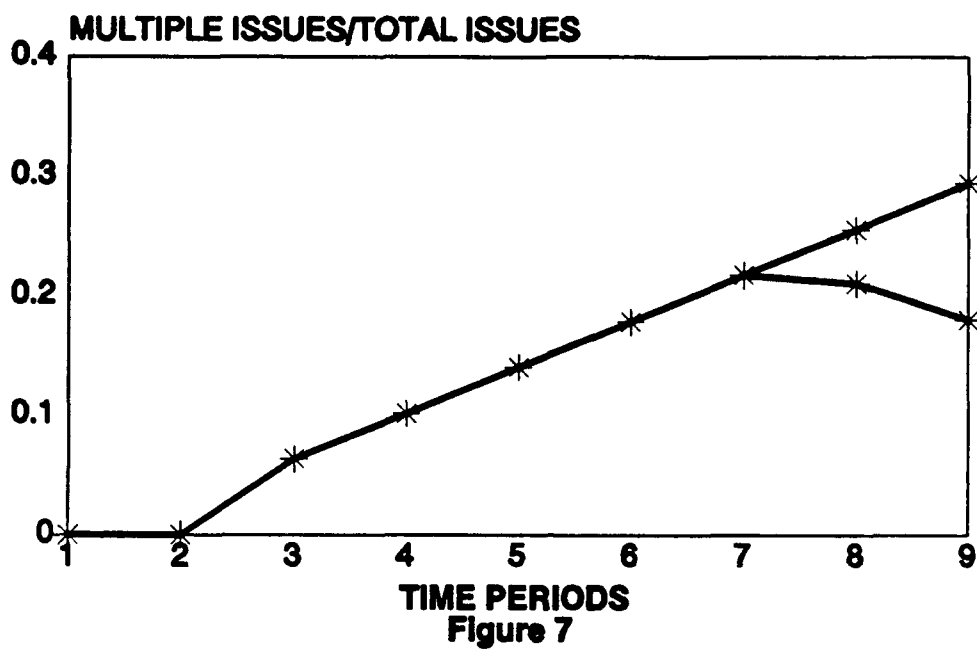


Figure 6

MULTIPLE ISSUE SPR



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