Costs And Benefits Of Loan Consolidation

Flora L. Williams[1]

The issues, benefits and costs of loan consolidation are addressed based on responses from clients who participated in a financial clinic. Procedures for analysis developed in a worksheet and techniques of time value of money are applied. Loan consolidation tended to increase costs for participants.
Key Words: *Credit, Debt repayment, Loan consolidation, Financial stress*

Introduction

Consumer credit in the U.S. has continued to grow, partly due to marketing by lenders (Zuckerman, 2000). Assessment of the benefits and costs of loan consolidation is increasingly important in light of aggressive advertising by creditors and the financial difficulty faced by many families. A procedure for assessing loan consolidation is presented in this article. An analysis of selected benefits and costs of clients over a 11 year period is reported. A tool for counselors and clients themselves to assess benefits and costs of loan consolidation is shown.

Consumers facing financial stress or need for quick action recognize benefits of loan consolidation but usually fail to recognize costs or dangers. Loan consolidation marketing promotes the benefits of consolidation but ignores the costs or and risks. This article presents the benefits and costs, advantages and disadvantages in three studies.

Loan Consolidation

Loan or debt consolidation seems simple. Assessing its appropriateness as a response to financial difficulty is more complex and thus is examined in this study. Consolidation of financial obligations, bills, debts, and loans is an arrangement to pay off selected creditors, debtors, or mortgage holders with a new loan making total monthly payment less than the total of previous individual loans. Usually the length of time for scheduled payments is extended. Collateral or security is usually required.

Common vehicles used for consolidation are bill consolidation, a second mortgage, refinancing with additional debt and cash-out equity. The focus in this study does not require distinguishing the technical differences among various vehicles for consolidation.

Loan consolidations are available from personal sources, banks, credit unions, finance companies, and debt consolidation companies. Consumers are exposed to many offers to consolidate bills from mailings, telephone calls and advertisements. Typically, the beginning rate is low but the interest rate can increase.

Home equity lines offer tax and non-tax advantages compared with other forms of credit (Eugeni, 1993). As Table 1 shows, the percentage of two types of home equity debt used for loan consolidation has fluctuated since 1987, but the percent of borrowers listing "repayment of other debt" as a purpose has remained high (Eugeni, 1993; U.S. Bureau of the Census, 1995; Canner, Durkin & Luckett, 1998).

Table 1
Percent of Borrowers Stating that "Repayment of other debt" Was a Use for Loan, by Type of Home Equity Loan

Type	1987	1991	1993-1994	1997
Open-end	53	36	45	49
Closed end	35	43	68	61

Sources: Eugeni (1993); U.S. Bureau of the Census (1995); Canner, et al. (1998).

Increased use of home equity lines of credit was concentrated in high-income groups (Kennickell & Shack-Marquez, 1992) where tax advantages are greater. The median amount outstanding in home equity closed-end loans for the lender was $52 million and in home equity lines of credit was $79 million (Eugeni, 1993). The Federal Reserve Board reported 20% of all homeowners with mortgages refinanced their mortgages and 15% held a home equity loan (Holloway, 1990).

Information necessary for assessing appropriateness of loan consolidation heretofore is limited to concepts of time value of money. Factors considered are age of

1. *Flora L. Williams, Associate Professor, Department of Consumer Sciences & Retailing, Purdue University, West Lafayette, Indiana 47907. Phone: 765-494-8297. Fax: 765-494-0869. E-mail: floraw@purdue.edu*

original loans (Jacobs & Tyson, 1986), interest rates, negotiating fees (Dunaway, 1992), and income tax deductibility of interest on original and proposed loans. Terms of each original and proposed loan must be known for applying time value of money techniques. "Benefits and costs should be compared in equivalent dollars of purchasing power using the net present value approach" (Jacob & Tyson, 1986, p. 85).

Use of Loan Consolidation
Loan consolidation is chosen because monthly cash flow is insufficient to meet the original monthly payments. The consumer may be required to consolidate in order to meet additional financial obligations.

Manchester and Porteba (1989) report consumers refinance for consumption rather than for investment purposes, based on the negative correlation they found between the occurrence of refinancing and changes in net worth. Reasons for refinancing are reducing interest costs on existing loans and getting cash for educational expenses, medical expenses, and auto purchases (Holloway, 1990). Mortgage refinancing is used for home improvements and repayment of existing debts. In 1997, 49% of home equity lines of credit were used for repayment of other debts as were 61% of the traditional home equity funds (Canner, et al., 1998). Traditional closed-end loans (completed at a given time for a given amount) are used mainly for debt consolidation and home improvement.

Theory

Model of Life Cycle
Loan consolidation can be explained as rational behavior in using the life cycle model, based on the assumption that consumers seek to maximize their utility from consumption over a lifetime (Hanna, Fan & Chang, 1995). The consumer should save when income is relatively high and dissave when income is relatively low (Hanna, et al., 1995). If dissaving is optimal and the consumer has not accumulated financial assets, borrowing is rational, even if for current consumption.

Real spending increases depending on real interest rate on loans and investments, risk tolerance, personal discount factor, liquidity constraint, sudden structural changes or financial disaster (Hanna, et al., 1995). The life cycle model implies that it may be rational to refinance to lower one's total payments, even if the interest rates are higher, depending on personal discount rates and income expectations.

Model of Crisis Management
The economic models and cost/benefit analysis are deficient in explaining behavior within crisis respect to preference for the consolidation strategy. Sullivan, Warren and Westbrook (1989) indicate the economic model had "little predictive power, while social-demographic factors have far greater explanatory power" (p. 236) in the choice of Chapter 13 Bankruptcy among alternatives. Their data suggest that the relatively simplistic economic models used in bankruptcy policy-making are not appropriate. The narrow focus of the economic model "excludes other characteristics that may impinge on debtor decision making..." for those debtors that are "filled with anxiety and self-loathing" and are under enormous pressure (p. 244).

The simple economic model presumes decisions are "made by a rational maximizer coolly calculating the gain from" one alternative compared to another and their costs "based on an informed understanding" of processes and laws (Sullivan, et al., 1989, p. 244).

Experience with families in trouble indicate that "debtors' emotions and their lack of information do not leave them in a position to 'calculate' much of anything, except that the next paycheck will not stretch around even the most pressing payment demands" (Sullivan, et al., 1989, p. 244). Under stress, however, individuals are presumed to have erroneous thinking, perceptions influenced by wrong information and blindfolds to considering alternatives. They panic rather than plan.

Application of business accounting to individual or family decisions is deficient because of temptations to expand wants faster than income and to respond emotionally more than rationally as observed in clinic and counseling experience. Initially the family may be rational, i.e. use credit based on perceived optimal quantity/quality mix of goods and services considering cost/benefits, given competing demands and current budget constraints. Then temptations, needs of children, and unexpected events interfere with rational behavior. Therefore, loan consolidation has dimensions other than simple mathematics or time value of money.

Rather than a personal finance approach of calculating benefit/cost of alternatives, debtors under stress need a financial counseling approach. Financial counseling in contrast to personal finance utilizes mathematics plus additional insights into behavioral patterns, crisis reactions, temptations to again spend after temporary relief from loan consolidation has occurred, ways to control overspending and credit use, and management for the unique person and situation. Specific cases or references are not cited but are based on clinical and counseling experience.

Rather than being rational in taking loan consolidation, clients lack knowledge, willingness, and/or ability to reconcile lifestyle with income. Costs and benefits are both economic and psychological. In advising clients, therefore, the mathematical factors are insufficient. Additional information about financial and nonfinancial costs or dangers of loan consolidation must be provided to assist clients in making a rational choice. Many individuals observed in clinical experience do not understand the credit process and time value of money concepts upon which rational decisions are based.

Rather than being driven by the most economical way, over time, to resolve cash flow problems, many individuals considering loan consolidation can be characterized by:

1. Desiring to be free of harassment, anxiety of not meeting monthly obligations, and being overwhelmed by numerous bills with varying due dates.
2. Wanting simple solutions and procedures without counting the cost in terms of additional interest and of having an inflexible payment with the danger of losing their home.
3. Not being aware of others who after loan consolidation again accumulated new debts equal or greater than before loan consolidation but then with more anxiety.
4. Not realizing loan consolidation does not solve a mismanagement problem and postpones the reconciliation of income with expenses causing them to go deeper into debt.
5. Not knowing that loan consolidation adds more stress unless lifestyle or consumption problems are solved by drastic changes.

Benefits and costs are summarized in Table 2. They confirm the need for individualizing the decision to use loan consolidation.

Benefits and Advantages of Loan Consolidation

Managerial

For some individuals, observed in clinic experience, loan consolidation makes it easier to administer personal debt, as only one monthly payment is required rather than several. A lower monthly payment is usually achieved with combining original loans over a longer time. Paying off original or current debts reduces harassment from creditors if this has been the case.

Table 2

Loan Consolidation Benefits (Advantages) and Costs (Disadvantages)

Potential Benefits

1. Ends harassment
2. Avoids bankruptcy
3. Maintains reputation
4. Provides smaller monthly payments
5. Reduces overwhelming anxiety about cash flow temporarily
6. Prevents loss of goods, cut in service, and court action
7. Is less painful than changing life-style behavior, and expectations
8. Avoids saying "no" to children, spouse, or friends
9. Rearranges cash flow to meet unexpected large expense
10. Can help the consumer learn the credit process from experience which motivates more discipline and awareness of expanding wants
11. Reduces tax by portion of interest paid on equity loan

Potential Costs

1. Increases cost because repayment period is longer (total interest is higher)
2. Makes former non-interest-bearing accounts now interest-bearing
3. Doesn't consider additional fees, balloon clauses, etc. usually until after decision
4. Usually encourages obtaining higher amount for debt than needed (Canner, et al., 1990)
5. Creates fixed amount of payment and due date
6. Can lose security of loan if payments are not made
7. Combining short-term and long-term debt which increases length of short-term
8. Mismanagement problems are postponed with temporary psychological freedom
9. Encourages new purchases to maintain current life-style, continues purchasing with high interest rate
10. Continues large balances in revolving charges that are not paid off
11. Causes additional stress ultimately
12. Doesn't solve problem of reconciling income with expenses
13. Doesn't force creative ways to increase income, reduce expenses, control credit, adjust debts, clarify priorities, and improve household organization.
14. Makes portion of original payment formerly going for principal now going for interest in starting over again with a new loan
15. Contributes to "creeping indebtedness"
16. Has total cost greater over time even at lower interest rates
17. Bases decision on reduced monthly payments (e.g. $296 with consolidation and $965 with original plan, monthly) rather than on comparison of total cost over time.

Psychological
Threats of wage garnishment which involve risks in job security are removed by loan consolidation. Stigma and negative consequences resulting from bankruptcy are avoided. Lifestyle and self-image with friends and children are maintained through loan consolidation. Loan consolidation decreases financial pressures and anxieties at least temporarily. Financial and psychological peace of mind are possible.

Loan consolidation can change behavior if it stops the individual or family from using numerous payments on large balances in revolving charges that are never paid off, tempting them to continually make purchases with high interest rates. They can learn from experience to be more disciplined and not to accumulate additional debts based on expanding wants.

Financial
A loan consolidation benefits individuals and families when assets are saved. Property is protected from repossession and services are protected from “cut off” since they are paid through loan consolidation.

Lengthening loans through consolidation is beneficial if the future is profitable and income is increasing as in a business (Dunaway, 1992). This benefit assumes the problem is cash flow or improper debt structure. A more advantageous option is refinancing only long-term debt and paying others as planned rather than combining short and long-term debts (Dunaway, 1992).

Loan consolidation is a way to raise additional funds (Canner, Luckett & Durkin, 1990). Canner, et al. (1990) found that consumers accessed about 25% of their accumulated equity during refinancing by liquidating equity. More flexibility for new borrowing in the case of home equity credit line is possible (Canner, et al., 1990).

Using mortgage refinancing funds to pay off numerous small debts or to meet increased cost of living has been particularly attractive to consumers in recent years because of the Tax Reform Act of 1986 which eliminated the deductibility of interest paid on non-mortgage consumer credit (Canner, et al., 1990). Tax deductibility of interest makes loan consolidation an advantage in the use of home equity loans or second mortgages.

Loan consolidation is an advantage when the interest rate is sufficiently lower, has the same or a shorter term than the original, and interest becomes tax deductible. Further advantage is realized when payments are larger than the minimum required.

Benefits of loan consolidation occur to the lender although these are not the foci of the paper. Default risk is low when loans are secured by the borrower’s home (Courtless, 1993).

Costs and Disadvantages of Loan Consolidation
Managerial
Individuals and families are observed to choose loan consolidation to relieve immediate financial pressure without calculating increased interest cost or long-term financial and managerial consequences of their decision. Debts that were formerly non-interest-bearing such as medical, attorney, collection agency, and relatives become interest-bearing in loan consolidation.

Psychological
Observation of financial behavior indicates the psychological freedom gained from a smaller monthly payment and less creditor harassment through loan consolidation encourages accumulation of more debts. Within a certain time, there are additional debts, small and/or large obligations. There is now danger of loss of goods used as security if payments are not met. There are at least two fixed mortgage payments with the house at risk. The payment on the second mortgage(s) or home equities must be made regardless of circumstances. More anxiety results and credit is used to the maximum with nothing for emergencies. Clients have reported that loan consolidation(s) paved the road to financial disaster.

Risk of losing one’s house is a disadvantage of loan consolidation, although this risk was probably occurring before consolidation for some families. One study reported 50% of second mortgages were for debt consolidation which implies that debtors already in financial stress were pledging their houses to maintain their level of consumption (Peterson, 1986). In 1983, 14% of second mortgages resulted in recoveries of property or charge-offs of the gross value (more than the value of debts to be repaid) and in 1984, 25% resulted in such action (Peterson, 1986). These high failure rates suggest an “adverse selection” process in loan consolidation.

Loan consolidation, at the time of decision, seems a simple solution and less painful than changing behaviors and expectations. However, in loan consolidation wasteful and mismanaged behaviors are continued. Creative changes in income and consumption are ignored. Saying no to a spouse or children is avoided. Eventually, loan consolidation causes more complications and pain as reported by clients in clinical and counseling experience.

Financial

Individuals and families give up a lower interest rate on some debts in exchange for a higher rate in consolidation. Total interest paid over time is often greater with loan consolidation even if the interest rate on the consolidated loan is lower as the term has to be lengthened to get the monthly payment lower than the payments in the original situation. Combining short-term and long-term debt increases the length of short-term debts (Dunaway 1992). The portion of payment in the original debt which was applied to the principal, especially in older loans, is reduced and, in part, applied to interest rather than principal.

Individuals and families are encouraged in the consolidation process to borrow more money than needed solely for loan repayment. More money for most families is needed for current expenses, anticipated expenses, miscellaneous items, new wants, and major items. Research has documented that nearly 60% of those who refinanced or consolidated loans also borrowed additional funds more than requested (Canner, et al., 1990).

The fee for the consolidator, lender, or credit counselor to pay creditors increases the cost of loan consolidation. In some cases, the one monthly bill for consolidation becomes larger than pervious small bills (Dahlstrom, 1988).

Cost of loan consolidation includes closing costs such as payoffs or prepayment penalties on the original loans. There are other fees or costs of refinancing the transaction (G-Yohannes, 1988). Financial advisors can calculate the time required for maintaining a new loan or refinancing to recover the transaction costs (Jacobs & Tyson, 1986). The difference per month between the original and new loan divided into the transaction cost gives the number of months to recover costs. Some financial advisors recommend an amount equivalent to the transaction costs be invested for maximum return rather than obtaining a new loan. The techniques of time value of money can be applied in the decision.

The consolidator is buying into a program that has a 3 to 20 year term or longer for lowering initial monthly payments. In contrast, financial problems can be achieved in fewer years if drastic changes in lifestyle are made, as observed in counseling experience. Changes made in employment, income sources, expenses, children's or spouse's responsibilities, household management, and priorities for a designated period of time, at least, are assumed to bring better financial results over a longer period of time than consolidation.

Loan consolidation may diminish a relationship with a previous lender by using a new lender with a lower interest rate. When the previous lender is needed, the consumer's credibility has been hurt or a lower rate may not be available. The more credit worthy of those taking consolidations must be paying interest charges high enough to cover the cost of defaulters. The temporarily distressed client can investigate other strategies before taking consolidation.

The typical advertisements illustrate the current monthly payments ($965 for example), the debt consolidation loan payment ($296) and the annual percentage rate. Not shown are results obtained by the financial counselor: total cost over time, number of months left to pay currently and with loan consolidation, total interest, closing costs, additional fees, and what happens with late payments.

Hypotheses

It is hypothesized for this empirical study that fewer families benefit economically from loan consolidation than experience negative consequences. This hypothesis was based on informal clinical experience and the longer list of costs (disadvantages) than of benefits (advantages). Loan consolidation increases emotional and financial stress rather than reducing it as consumers initially perceive. It increases the debt burden for more families than it reduces. The hypothesis is based on the premises that:

1. Debts which were formerly non-interest-bearing are included in consolidation.
2. The repayment term of the consolidated loan is usually longer than the terms of the original debts, and therefore costs more even if the interest rate is lower than some of the originals.
3. Additional loans are accumulated in the consolidation process or afterwards because of the temporarily reduced stress.
4. Mismanagement problems are not solved with loan consolidation, only postponed.

Methodology

Three studies were used to develop the methods for assessing cost and benefit of loan consolidation: experiment with a proposed worksheet as a tool for assessment, survey of clients, and a mailed survey of those having taken bankruptcy. The method for analyzing and comparing loan consolidation with original debt arrangements was developed in response to questions by clients in a financial clinic over 11 years, 1978 to 1989. One of the most frequently asked questions was about loan consolidation. An efficient and effective method was required to collect data due to limited time with clients and urgency to prevent additional problems. A comprehensive questionnaire entitled “Intake Information” was conducted by trained interviewers in a university clinic which included details about income, expenses, and debts among other relevant financial and family information. Participants voluntarily came to the clinic seeking assistance in a variety of decisions and help with financial problems.

The experience in the clinic confirmed that clients learned more from specific calculations on a worksheet than general advice from financial counselors. Also, alternatives other than borrowing more money to solve a debt problem were then addressed.

The First Study
First, a detailed list of debts and their characteristics were collected in the data collection process. A worksheet (Figure 1) was developed to identify the issues, variables, and procedures involved in possible consolidation to compare with the original debt load. Comparisons were made with various assumptions. This method helped to create alternatives for different clients to solve their financial problems. Variables identified were type of debt, interest rates, payment terms, balances, number of months remaining, payoff fees, interest the first month, and total interest over time.

A pilot study was conducted to test the worksheet developed for identifying variables, procedures, and efficiency in recording data. A typical case from a client was developed. Ten clients were in the pilot study. Analysis of a typical case was used to further direct the research.

The Second Study
Analysis of a survey included all participants in the clinic. Benefits and costs were calculated using their data. The worksheet combined with a computer program used in this study had features such as individual debts dropping off the schedule at varying times. A simulation technique for assessing costs and benefits was used.

Some debts could be paid off in a few months, but other debts were large in relation to income. One of the important questions was how many months of payments on the original debt program would be required until debts reached a level approximately close to the proposed loan consolidation. Data from each client were recorded on the worksheet from the intake information and transferred for data entry into a computer program that utilized time value of money techniques.

Calculation of number of months remaining to pay debts assumed the consumer would make the same payment until the debt was paid in the worksheet. The calculation of months remaining will be exact when the researcher or advisor knows the monthly payment, the interest rate, and the balance. The proportion of payment for principal will increase as the balance declines, but that does not affect the calculation of months remaining in the debt. The term of the debt is calculated exactly, given the assumption of level payments and the known quantities of the current balance and the interest rate.

Sample Characteristics of Second Study

Characteristics of the clinic sample relevant to debt analysis provide insight into those considering loan consolidation. The number of clinic participants who provided data for analysis was 189. They lived in rural and urban areas of Indiana, were engaged in a variety of occupations, and represented different socioeconomic levels (Table 3).

The average income after taxes was $1,812 monthly or $21,744 annually with the median monthly income after taxes being $1,526 monthly or $18,312 annually. Average debt balance was $11,657 (Table 4) and the median was $5,350 excluding first mortgage. The average future value or amount owed plus interest over time excluding first mortgage was $17,727, about one and a half times the amount originally owed. Initially the average of all debts totaled monthly payments of $526. If that amount were paid and no additional debts incurred, on the average, it would take 27 months to repay $11,657. Some debts were non-interest-bearing accounts that under loan consolidation would become interest-bearing. Some were already second mortgages. Of all participants, 54% had a mortgage, compared to 53% of households in the U.S. having a mortgage in 1990 (U.S. Bureau of Census, 1995).

Table 3
Sample Characteristics of Second Study

Characteristics	Number	Percent
Residence		
Rural	58	30
Urban	131	70
Occupation		
Professional/Managerial	l47	25
Clerical/Service	58	30
Laborer/Operator	47	25
Retired	18	10
Unemployed	19	10
Age of Head of Household	41	
Married	123	65
Divorced-Single Parent	66	35
Tenure		
Homeowners	102	54
Renters	387	46

The average number of debts excluding first mortgage was 4.3 and the average number of debts with interest was 3.4. Secured debts represented 39% of all debts. Average number of credit cards was 1.9. The average ratio of monthly debt payments to monthly income was 29% and the median was 18%.

The average yearly medical debt was $1,286. Medical debt payments ranged from $22 to $5,740 monthly. The type of debt is of interest because of the debate on why families take bankruptcy a loan consolidation as a solution to financial problems. The largest part of bankrupt portfolios is medical care. Medical care represents events outside the control of families.

Table 4
Description of Debt Position for Sample at Time of Interview (n = 189)

Description	Mean
Number of secured debts excluding mortgage for those who had debt	4.39
Number of debts with interest excluding mortgage	3.36
Medical debts	$1,286
Present value of current debts	$11,657
Future value of current debts excluding first mortgage with interest rates (Ranging from 0 to 23% at time of interview)	$17,727
Monthly payment before possible consolidation	$389
Monthly payment/monthly income excluding mortgage	29%
Months remaining on current program (payback time)	45
Months until original monthly payment would be similar ($\pm$ $50) to loan consolidation payment for 5 years (23% interest for 10 years)	12
Months to repay $11,657 with payments initially at $526 (time of interview) and not incurring additional debts, debts as repaid at irregular intervals	27
Months to complete debts if follow current program payments	78
Months to complete debts if follow current program payments excluding debts longer than 5 years	45

The Third Study

A questionnaire was mailed to 50 clients who had taken loan consolidation to assess its consequences and their perceptions. This questionnaire was used to supplement the clinic survey. The low response rate of 32% was partly due to not designing a follow up but it did provide a variety of responses. Analysis of nonrespondents indicated that they consisted of larger families, more job responsibilities, lower income and lower educational levels than respondents. The average family income of the respondents was $39,000 compared to the clinic sample's average of $21,700 and the 1990 national family income of $35,353 (U.S. Bureau of Census,1996). The average number of members dependent on family income was 4.0.

Empirical Results
An important result of this loan consolidation study is identification of issues, variables, costs, and benefits. The hypothesis could be supported that selected economic costs were found to be greater after loan consolidation in a simulation study than were reduced. Consequences from the mailed survey were identified by clients. Those who actually had taken loan consolidation listed more negative consequences than positive.

Typical Case: First Study
The typical family (Figure 1) had seven debts initially totaling $9,089, monthly payments totaling $529 (or $911 if mother-in-law and doctor debts were included), and remaining payback of $10,767. The number of initial debts would be reduced to six in 9 months, five in 10 months, four in 11 months, three in 14 months, two in 20 months, one in 31 months, and zero in 48 months. This analysis assumes no additional debt would be undertaken during this time frame. Although this assumption is probably unrealistic, it is appropriate based on the policy of consumer credit counseling agencies. Most agencies require client to give up their credit cards and not use credit while on their debt management program.

Figure 1
Typical Family Case Using Loan Consolidation Worksheet

Creditor's Name	Annual % Rate	Balance ($)	Monthly Payment ($)	X	Term Months* =	Sub-total +	Balloon, other costs	Total Payback ($)	Prepayment Penalty or Payoff Cost	1st Monthly Interest	Total Interest ($)
VISA	18	1,282	52	X	31			1,612.66		19.23	331
Dept. Store	18	1,715	102	X	20			1,991.66		25.73	276
Credit Union	12	2,540	281	X	10			2,750.30		38.10	210
Dept. Store	18	375	47	X	9			402.49		5.63	27
Dept. Store	18	296	25	X	14			308.34		4.44	33
Dept. Store	18	221	22	X	11			241.34		3.32	21
Mother-in-Law	8	2,500	200/yr	X	4 yrs	800+	2,500 =	3,300.00		17.00	800
Dr. Smith	0	160						160.00			0
TOTAL		9,089	529†	X	9 to 48			10,767		113	1,697
Consolidated Arrangements											
Credit Union/ 2nd Mortgage	16.0	9,089	167	X	120	=		20,040			10,951
Credit Union/ 2nd Mortgage	16.0	9,089	283	X	48	=		13,584			4,495
Finance Company/ 2nd mortgage	21.0	9,089	206	X	84	=		17,304			8,215
Bank Home	11.5	9,089	200	X	60	=		11,991			2,902

Equity/Fixed Rate											
Credit Union											
Home Equity/Fixed	8.24	9,089	88	X	180	=		15,869			6,780
Home Equity/Fixed	8.24	9,089	110	X	120	=		13,232			4,143
Home Equity/Fixed	7.79	9,089	183	X	60	=		11,006			1,917
Home Equity/Fixed	4.99	9,089	96	X	120	=		11,566			2,477
Home Equity/Fixed	4.99	9,089	72	X	180	=		12,932			3,843

* Financial calculator with amortization calculations can provide number of months.
† Debts excluding mother-in-law and doctor total $529, so including them total $911.
11 months the payments totaling $529 would be $179 for three months, then $154 for six months, and then $52 for nine months.

With loan consolidation, the typical family (Figure 1) would have a greater payback than the original loan program because of increased length of payment time, i.e. $11,991; $13,584; $17,304; and $20,040 versus $10,767. Monthly interest in loan consolidations with selected rates and terms ranged from $87.10 to $121 and over whereas in the original loan program with initial debts it was $113.45. Initially, the family was paying $529 monthly whereas in loan consolidation it would pay $167 or more which is typical of other families. Initially, in 11 months if the debts were paid off as scheduled, the family would have its monthly payments reduced to about $179 for 3 months, $154 for 6 months, and $52 for 9 months. In loan consolidations the payments would be $167 for 10 years, $200 for 5 years, $283 for 4 years, and $206 for 7 years. Initially, total interest was $1,697 over time as scheduled whereas in loan consolidations, total interest would be $10,951; $4,495; $8,215; and $2,902. As can be seen in Figure 1, interest rates for various consolidation plans ranged from 4.9 to 21% and the term varied. The worksheet was a valuable tool for identifying the financial costs involved.

Survey Participants: Second Study

Calculation of additional dollar costs can identify economic consequences from consolidating loans (Table 5). The additional cost of loan consolidation to survey participants ranged from minus $1,048 at 15% interest for a 5 year term to $12,144 at 23% interest for a 5 year term. Analysis of debt load of participants revealed that 97% would have more costs than benefits from loan consolidation. As shown in Table 6, 183 families would have an average additional cost of $12,371 given the assumption of a 15% interest rate for 15 years. Six families would benefit or gain and average of $14,670 with this assumption. At the lowest interest rate assumed in this study (9.25%), 161 families would have an additional cost of $3,330 and 28 would benefit by $18,439. The families who would benefit had second mortgages which were shortened in loan consolidation with this assumption.

Table 5
Average Value of Debt and Additional Cost with Loan Consolidation by Assumption in Simulation

Debt Assumption		Mean Value	Cost More Than Original Debt Load
Interest (%)	Term (years)		
15	5	16,679	-1,048
23	5	19,717	1,990
20	5	18,530	803

19	10	27,909	10,182
16	10	23,432	5,705
13	10	20,696	2,969
15	15	29,366	11,639
23	5	29,871	12,144

The number of months left to pay initial debts on the original program until payments were close to those in a proposed loan consolidation was identified. "Close" was defined as an amount within $50 more or less of the initial monthly payments. For example, using a debt with a five-year term and 23% interest rate, the highest loan consolidation, the number of months until debt payment would be close to that of loan 12 months was a median of 11 months and a mode of 16 months. Several were eight months and several were four months. In other words, in 11 to 12 months the original payments would have been reduced for a remaining few months compared to a monthly payment lasting five years or longer under loan consolidations.

Mailed Survey – Third Study

Both positive and negative experiences and perceived consequences of taking loan consolidation were reported by respondents in a mailed survey (Table 7). More disadvantages were cited than advantages. About two-thirds of the respondents (65%) perceived initially that loan consolidation would be the answer to their financial problems. Responses confirmed that, initially, loan consolidation seemed like an easy solution but did not solve all their problems when and if spending habits and managerial control were not improved.

Loan consolidation was obtained by second mortgages by 50%, home equity by 37.5%, and personal loans by 12.5%. Events precipitating the need for loan consolidation were medical bills reported by 12.5% of respondents, job loss by 25%, clothing purchases by 12.5%, children's education by 12.5%, and home repair/additions by 100%. Debts included in loan consolidation were doctor (12.5%), dentist (12.5%), eye care (12.5%), car repair (25%), house loans (37.5%), credit cards (25%), and car loan (18.7%).

About two-thirds of the respondents (62.5%) perceived that they had received sufficient information about credit before the decision to consolidate. After loan consolidation, they felt more educated from their experience. Their advice to others (Table 7) was similar to the benefits (advantages) and costs (disadvantages) proposed in the first part of this paper.

In three months or less after loan consolidation, over one-third of respondents accumulated other debts. The largest percentage (37.5%) accumulated another debt in either 1-3 or 10-12 months (Table 7). The same number of debts as before loan consolidation was accumulated in 1 to 3 months for one-fourth of the respondents, 6-9 months for one-fourth, and in 24-28 months for another one-fourth. One-fourth of the respondents felt more financial stress and one-fourth felt less financial stress (Table 7). Additional cost, over time, due to the loan consolidation was experienced by 37.5% (Table 7). Respondents were confused in perceiving total cost over period of time versus monthly payment. Confusion was probably from not knowing how to figure total cost, interpretation of the question and poor wording of the question. The need for education in procedures for figuring total cost was confirmed.

Table 6
Differences of Total Payback between Original Debt Program and Loan Consolidation by Benefit and Cost by Assumption (n=189)

Assumption*		Differences Between Original Debts and Loan Consolidation							
		Benefits: Fewer Dollars with Loan Consolidation				Cost: More Dollars with Loan Consolidation			
Rate(%)	Years	Number	Percent	Mean	Median	Number	Percent	Mean	Median
15	5	36	19	16,240	4,085	153	81	2,388	817
23	5	19	10	22,414	4,235	170	90	4,622	1,627
20	5	25	13	19,371	3,912	164	87	3,786	1,315
9	10	28	15	18,439	4,068	161	85	3,330	1,151
16	10	13	7	21,093	5,012	176	93	7,576	2,605
13	10	17	9	22,567	3,781	172	91	5,395	1,885
15	15	6	3	14,670	7,329	183	97	12,371	4,168
23	10	6	3	12,391	5,528	183	97	12,816	4,301

* Interest rates offered at time of study for loan consolidation for consumers in various circumstances.

Since increasing income and reducing expenses are alternatives to loan consolidation, these were assessed in the mailed survey (Table 7). The highest frequency (62.5%) reported using a more rigid budget whereas 37.5% reported getting a second job or that other household members started a job.

Lifestyle changes made after loan consolidation probably reflected respondents' priorities. The lifestyle changes and reduced spending, were in relative order: recreation, miscellaneous, clothing and travel (Table 7).

Changes in lifestyle or income that respondents had wished they had made before taking loan consolidation included adhering to a more rigid budget, waiting to spend money until they had it, getting a second job sooner, and reducing impulsive spending (Table 7). The comments about less impulsive spending, less spending, and telling spouse about the entire budget reflect general areas of cooperation and control. Evidently, research and techniques are needed about negotiation, deception, and conflict in family financial matters.

Conclusions

Calculating total payback in various debt arrangements illustrates a tool for the financial advisor to use in cost/benefit decisions. The total payback of debts on the initial program compared to the consolidated debt program can be used to estimate percentage of client families benefitting and those losing in dollar terms, at given interest rates. Results indicate that more clients would experience negative economic consequences than would benefit from loan consolidation. Over 80% of clinic participants would have incurred $2,388 to $12,816 additional costs in loan consolidation when comparing the lowest interest rate and term to the highest rate and term. Assuming various interest rates and terms, future value of debts in loan consolidation ranged from a minimum of $803 to a maximum of $12,144. Additional costs for the typical family was from about $1,205 to $8,000 in loan consolidation arrangements.

More negative experiences and perceptions of loan consolidation than positive were reported by respondents in the mail survey. Only a few months elapsed before respondents accumulated additional debt after consolidation. About half reported the same financial stress as before consolidation.

Table 7
Self-reported Evaluation of Loan Consolidation from Mailed Survey by Category (n = 16)

Response Category with Sample Reports and Comments	Percent
Received sufficient credit education before decision to consolidate	62.5
Number of months until another debt was accumulated:	
1-3	37.5
4-5	12.5
10-12	37.5
24-48	12.5
Number of months until number of debts equaled pre-consolidation	
1-3	25.0
4-5	12.5
6-9	25.0
24-48	25.0
Don't know	12.5
Perceptions	
Stress	
Same financial stress	50.0
Increased financial stress	25.0
Decreased financial stress	25.0
Cost	
No answer about total cost	50.0
Increased total cost over time	37.5
Less total cost over time	12.5
Lifestyle changes made in areas	
Recreation	81.3
Miscellaneous	62.5
Clothing	50.0
Travel	25.0
Income change	
Same income but using a more rigid budget	50.0
Starting a second job	25.0
Other household members started a job	12.5
Action that would have benefitted before loan consolidation, in retrospect	
Reducing impulsive buying	43.8
Spending control and budget implementation	37.5
Waiting to spend until income was actually obtained	31.2
Waiting to spend until after job promotion	12.6
Getting a second job sooner	18.7
Communicating more with spouse about budget	18.7

Advice to others from experience
Advantages
"To those in similar situation, I would advise to take the same course as a way to ease stress."
"To take loan consolidation - clear all debts with a loan - plus you can include it with your taxes."
"Take - if you can really learn from the experience, it is a good idea."

Disadvantages
"Those in deep debt I would not advise to take this course as their spending habits/traits need to be adjusted first. Otherwise they will probably just dig a new deeper hole and/or end up destroying their credit rating or ultimately filing for bankruptcy."
"In the same situation, no. I should have sold the house as is, bought a larger 'fix-it-upper' and worked on it as I could."
"Not a consolidation but equity or second mortgage. Not to pay off bills. The bills always come back."
"I would not necessarily consolidate loans to pay off credit cards or anything you know. You have the loan payment plus new charges you may have incurred."
"No, because the family is not really making drastic changes that are cheaper in the long run."

The worksheet was useful in developing the issues and variables for the research. Commercial programs can be used in counseling or research to make decisions or calculate cost/benefit of loan consolidation, for example, on the internet. Financial planning programs have built in the possibilities for calculations if the researcher or advisor would make additional calculations. Business calculators can also perform necessary functions for comparing debt arrangements.

Since most individuals think in terms of monthly payments, the financial advisor can use tools to show the various loan consolidation costs over time. Alternatives can then be presented including the number of months to make extreme changes in lifestyle, income or expenses until the payments would be reduced to a comparable payment in loan consolidation but for a shorter period of time.

Results of this study of clinic participants and the typical family case imply that 11 months of extreme changes in income and/or spending are required until the total payments of original debts are similar to that of loan consolidation lasting several years longer. Average length to repay initial debtors excluding mortgage for clinic participants was 27 months and for typical case was 48 months, whereas in loan consolidation the length was usually longer. Advantages and disadvantages of various alternatives to loan consolidation is valuable information for rational decisions.

Financial advisors can assess appropriateness of loan consolidation by applying techniques of time value of money. In addition they must understand psychological and managerial responses to it. Financial advisors can be aware of the deficiency of the economic model for deciding strategies for clients in crisis. The issues, assessment of loan consolidation, and data analysis in this paper increase understanding of the credit process in general and variables with loan consolidation in particular. This research may be important when the next economic downturn starts, real wages decrease after expectations have increased, and more families file for bankruptcy possibly because loan consolidation did not solve financial problems as anticipated.

References

Canner, G. B., Luckett, C. A. & Durkin, D. A. (1990). Mortgage refinancing. *Federal Reserve Bulletin, 76* (8), 604-612.

Canner, G. B., Durkin, D. A & Luckett, C. A. (1998). Recent developments in home equity lending. *Federal Reserve Bulletin, 84*(4), 241-251.

Courtless, J. C. (1993). Trends in consumer credit. *Family Economics Review, 6*(3), 8-15.

Dahlstrom, H. S. (1988). *Out of hock*. Holliston, MA: Dahlstrom & Company, Inc.

Dunaway, R. (1992, January). Prime's decline means it's refinancing time. *Farm Journal*, pp. A4-A5.

Eugeni, F. (1993). Consumer debt and home equity borrowing. *Economic Perspectives*, Federal Reserve Bank of Chicago. XVII(2), 2-13.

G-Yohannes, A. (1988). Mortgage refinancing. *Journal of Consumer Affairs, 22*, 85-95.

Hanna, S., Fan, J. X. & Chang, Y. R. (1995). Optimal life cycle savings. *Financial Counseling and Planning, 6*, 1-15.

Holloway, T. M. (1990). Economic trends. *Mortgage Banking, 51*, 131-135.

Jacobs, F. A. & Tyson, T. (1986). It may not pay to refinance an old loan. *Real Estate Review, 16*(3), 84-87.

Kennickell, A. & Shack-Marquez, J. (1992). Changes in family finances from 1983 to 1989: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*, 78 (1), 1-18.

Manchester, J. M. & Porteba, J. M. (1989). Second mortgages and household saving. *Regional Science and Urban Economics, 19*, 325-346.

Peterson, R. L. (1986). Second mortgage survey 1985. Lubbock: College of Business Administration, Texas Tech University.

Sullivan, T. A., Warren, E, & Westbrook, J. L (1989). *As We Forgive Our Debtors*: *Bankruptcy and Consumer Credit in America*. New York: Oxford University Press.

U.S. Bureau of the Census (1995). *Statistical abstract of the United States: 1995* (115th edition.) Washington, D.C.

U.S. Bureau of the Census (1996). *Statistical abstract of the United States: 1996* (116th edition.) Washington, D.C.

Zuckerman, G. (2000, July 5). Borrowing levels reach a record, sparking debate. *The Wall Street Journal*, pp. C1, C18.

