

Household Credit in Guyana

2000-2010

By

**Dr. Gobind Ganga
Deputy Governor
Bank of Guyana**

1.0 Introduction

Over the last decade, Guyana has been experiencing rapid growth of credit in the household sector. Household credit by the financial system grew from G\$21.3 billion in 2000 to G\$74 billion in 2010 and represents about 44 percent of the financial sector's total loan. Mortgages have been the largest component of household credit with its share ranging from 47 percent to 69 percent during the same period. Credit growth to the household sector seems to reflect both demand and supply factors. The demand factors include modest economic growth with higher household income, single digit inflation, falling interest rates and increased acquisition of house lots from government allocation. The supply factors include the robustness of the household sector, strong macroeconomic fundamentals of the economy, financial sector deepening, increase in deposits and liquidity, rising house prices for collateralized lending as well as tax incentives.

High levels of household credits offer both opportunities and challenges. On the demand side, increase in household credit is associated with high-volume and low-value loans to diversify credit risks and minimize the potential for large losses stemming from the failure of a few large borrowers. Also, household credit has the positive welfare effect of increasing and smoothing consumption as well as increasing economic growth. Notwithstanding, the distribution/sector-allocation, high levels of household credit towards individual consumption and the non-producing sectors may constitute risk factors for the financial system beyond sector-risks, such as those faced by agricultural loans. Financial market turmoil may have an additional risk factor that could affect real incomes in the economy through higher cost of borrowing and a lower volume of loans. This would have a negative effect on the overall economy, in taking production and consumption risks. Supply side factors in the form of monetary policy stands and loan standards may have implications for household credit. Consequently, it is crucial for policymakers to be aware of the implications of and for rising household credit.

This paper analyses the development of household credit and the determining factors—risk-inhibiting factors and economic growth factors in Guyana. The supply of credit through the deposit creation process is derived as a consequence of monetary and financial policies. The paper is organized as follows: Section 2.0 provides a review of the

literature on the determinants of household credit. Section 3.0, provides an overview of the trend, composition and providers of household credit. Section 4.0, provides a statistical analysis and the opinions from a survey of the major Licensed Financial Institutions (LFIs) on the key factors impacting household credit in Guyana. Section 5.0 develops and estimates an econometric model and discusses the results; Section 6.0 discusses the implications of credit growth and; Section 7.0, provides some concluding remarks.

2.0 Literature Review on the Determinants of Household Credit

Household credit are linked both to supply and demand side factors, which in many cases are interdependent and therefore it is difficult to isolate the channels of their influences. One of the main determinants of credit by households is the scale variables of expenditure, income or level of economic activity. In this regard, households borrow funds to meet their consumption and investment decisions when these cannot be financed by their current level of income. Further, financial institutions lending policies do take into consideration the perceptions of the macroeconomic risks prevailing at each point in time (Nieto, 2007).

The cost of financing is another important factor influencing the recourse to credit by households. Higher interest rates tend to have an adverse effect on the demand for loans because of increased debt servicing. On the supply side, the volume of loanable funds may be higher if a rise in interest rates increases the flow of net interest income as customer deposits obtained by credit institutions. Cost factors or credit rationing may restrain the supply of loans. A hidden cost factor is the financial sector perception of loan-risks arising from higher interest rate policies or risk factors emanating from outside the financial system, such as the level of business confidence in the economy (Stiglitz and Weiss, 1981).

Household creditworthiness is another critical factor in the supply of funds by financial institutions. Creditworthiness is often related to the wealth or financial position of households which acts as collateral in loans. The credit allocation process helps reduce asymmetrical information problems in the credit market and therefore, allows financial institution to extend or contract loans to balance their portfolio risks. A readiness to exceed real risks in the financial system could lead to future economic inefficiencies and

financial instabilities. An external injection in wealth, such as remittances would also raise households borrowing capacity and hence the demand for loans.

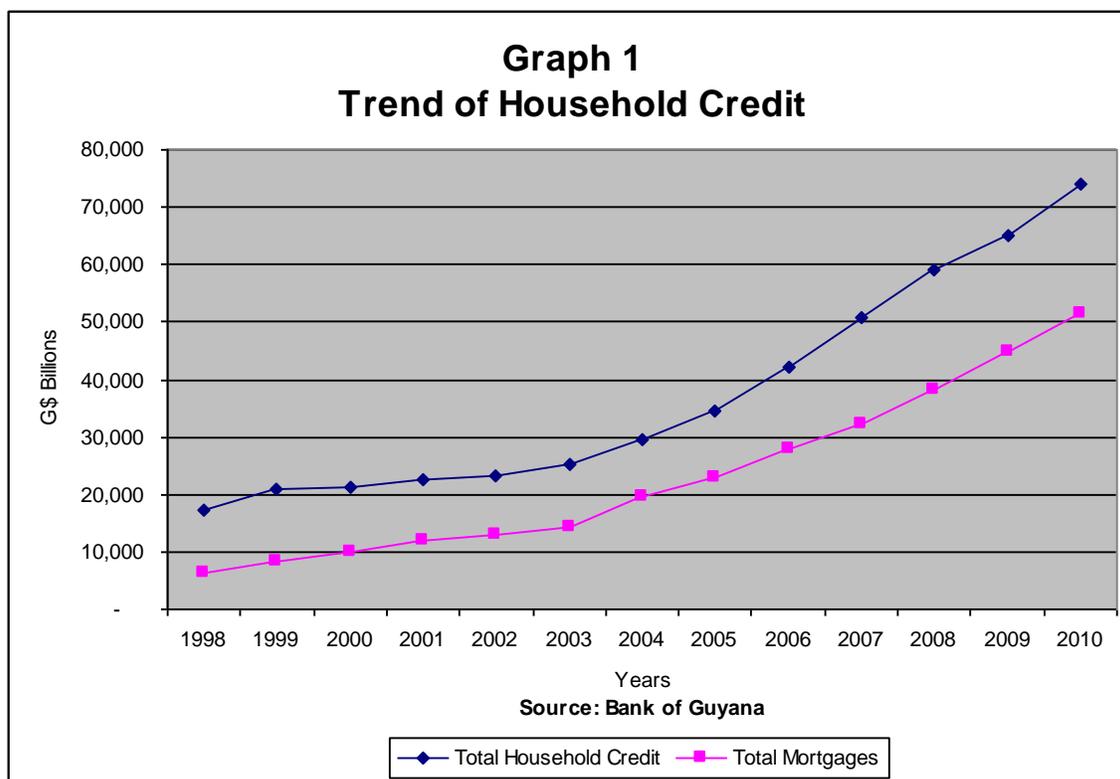
The deepening of the financial sector with greater competition between financial institutions as well as financial product or service innovations can provide an enhanced credit supply. This may be in the form of easing of lending standards, securitization and credit default swap. Financial innovations may result in regulatory arbitrage which usually underpriced risk as experienced in the recent financial crisis. However, this can be neutralized through improved supervision and regulation which can lower lending risks and increase the supply of credit to the economy.

Other factors such as increase in the middle class households and labour market related factors such as higher and stable employment can positively influence the demand and supply of loans. Government policies can also influence credit growth through tax incentives to financial institutions to lend to specific sectors and groups such as low interest mortgage loans to low income groups. Similarly, the provision of low cost and uncollateralized credit to vulnerable and special groups, to alleviate poverty, can also affect the supply of credit and economic growth.

3.0 Trends in Household Credit

3.1 Level and growth rate of household debt

Household credit has grown three and a half folds or from G\$21.3 billion to G\$74.0 billion during the period 2000-2010. The growth occurred mostly after 2003 since the average annual growth rate of household credit was modest at 4.9 percent during the 2000-2003 period compared with 16.7 percent during the period 2004-2010. As a consequence of household credit growth, the share of household credit in total outstanding financial system loans grew from 26.7 percent in 2000 to 43.5 percent in 2010. As a percent of GDP, household credit growth was higher, increasing from 16.4 percent in 2000 to 21 percent in 2005 and to 26.4 percent in 2010.



3.1.1 Composition of household debt

The composition of household credit changed significantly over the period 2000–2010, with the bulk of it going for house financing. Total loans for housing grew from G\$9.9 billion in 2000 to G\$23.0 billion in 2005 and to G\$51.4 billion in 2010 with an average annual growth rate of 18.3 percent during the same period. Housing loans as a percent of total household credit grew from 46.6 percent in 2000 to 66.3 percent in 2005 and to 69.4 percent in 2010. These trends reflect the expansion of demand deposits at commercial banks and monetary policies pursued by government.

Lending to the household sector was also higher due to borrowings for home improvements, cars and for other purposes such as education, durable goods, and travel.¹ Loans for home improvement by commercial banks declined from G\$4.1 billion in 2000 to an average of G\$3.88 billion between 2001 and 2010. Consequently, the share of home improvement loans by commercial banks decreased from 45 percent in 2000 to

¹ The classification of personal loan is only available for commercial banks.

20.1 percent in 2010. Loans for the purchase of passenger cars accounted for the third largest proportion of household credit. Car loans increased from G\$968 million in 2000 to almost G\$4.4 billion in 2010. It accounted for 20.4 percent of total household loans.

Financing via non-secured credit cards has grown briskly since it's launched by commercial banks in 2007, although the amount has been modest. Outstanding credit card loans grew by 40.3 percent between 2007 and 2010 or from G\$1.24 billion in 2007 to G\$1.74 billion in 2010. This outturn reflected the strong demand for consumer loans, coupled with aggressive marketing and advertising strategies by banks to attract customers. At end 2010, credit card loans accounted for 2.35 percent of total household debt.

3.2 Providers of Household Credit

There are many financial entities providing credit to households in Guyana. These include commercial banks; other deposit taking institutions – New Building Society (NBS), and trust companies; and other non depository Institutions – insurance companies, finance companies, pension schemes and microfinance institutions.

3.2.1 Commercial Banks

The commercial banking system, with its extensive branch network and increasingly flexible financing packages, is the largest provider of household credit in Guyana, accounting for 69 percent of total household debt or G\$51.1 billion at end-2010. As the main mobilizer of funds in the Guyanese economy, the banking sector has been able to meet the increasing demand for finance arising from the growth in household consumption. It also reflected banking system significant rebalancing of their loan portfolios into the retail segment. The share of household credit in their credit to the private sector increased from 17 percent in 2001 to 27 percent in 2010.

Table 1
Selected Economic Financial Indicators

G\$M

Year	THD	THD % of GDP	CCHD	CCHC	GDP	CCPSC	NBPSC	TPSC	IR	YR	HIR	Comm. Banks Household REML	NBS REML	THD % of TPSC
	Total Household Debt		Comm. Banks Household Debt	Comm. Banks Household Credit	GDP @ Market Price	Comm. Banks Private Sector Credit	Non-Banks Private Sector Credit	Total Private Sector Credit	Interest Rate (weighted avg len.rate)	Inflation Rate	Housing Inflation Rate			
1998	17,427	16.1	11,324	9,947	108,003	51,838	14,277	66,115	18.3	4.7	-0.3	1,377	4,921	26.4
1999	20,767	16.8	12,587	10,462	123,665	55,823	17,589	73,412	17.9	8.7	10.2	2,125	6,089	28.3
2000	21,286	16.4	11,783	9,157	130,014	58,341	21,505	79,846	17.7	5.8	13.0	2,627	7,282	26.7
2001	22,526	16.9	12,309	8,761	133,404	57,810	24,358	82,168	17.6	1.5	1.6	3,548	8,306	27.4
2002	23,208	16.8	12,365	9,074	138,447	58,665	28,609	87,274	16.8	6.0	9.5	3,292	9,777	26.6
2003	25,163	17.5	12,197	8,825	144,064	48,594	34,732	83,326	15.7	5.0	6.9	3,372	10,869	30.2
2004	29,402	18.8	15,380	8,192	156,230	48,386	34,804	83,190	14.3	5.5	7.1	7,188	12,413	35.3
2005	34,648	21.0	19,372	10,303	164,871	52,429	42,786	95,214	13.5	8.2	10.4	9,069	13,897	36.4
2006	42,013	22.9	24,870	12,513	183,087	61,789	47,789	109,578	13.1	4.2	3.6	12,357	15,600	38.3
2007	50,626	23.3	32,094	17,005	217,553	73,347	55,561	128,908	12.4	14.1	6.2	15,089	16,992	39.3
2008	59,044	25.0	38,938	19,646	236,059	89,335	59,302	148,636	12.3	6.4	6.8	19,292	19,046	39.7
2009	64,953	25.4	42,822	18,824	255,823	94,390	57,831	152,221	12.2	3.6	18.9	23,998	20,965	42.7
2010	74,013	26.4	51,113	21,384	280,656	112,333	57,952	170,285	11.9	4.5	-0.3	29,729	21,625	43.5

3.2.2 Other Deposit Taking Institutions

The other major deposit taking institutions that provided household credit are the New Building Society (NBS) and trust companies. The New Building Society was established in 1940 to provide affordable cost mortgages to lower and middle income households for the purchase, renovations and building of houses². Since the early 1990s the NBS has witnessed a significant growth in mortgage loans which increased from G\$744.5 million in 1993 to G\$7.3 billion in 2000 and to G\$21.6 billion or 29.2 percent of household credit in 2010. NBS mobilized funds from the private sector into various savings accounts such as save and prosper account, five dollar share account and deposit account. Total resources mobilize by the NBS amounted to G\$41.8 billion in 2010 which was more than three times the amount mobilized in 2000 when the amount was G\$12.6 billion. The trust companies have provided less than one percent of credit to the households. In 2000,

² NBS Act, Chapter 36:21 of the Laws of Guyana
www.nbsgy.com/mortgages/mortgage

household credit by trust companies amounted to almost G\$900 million but this declined to G\$640 million in 2005 and to G\$216.7 million in 2010.

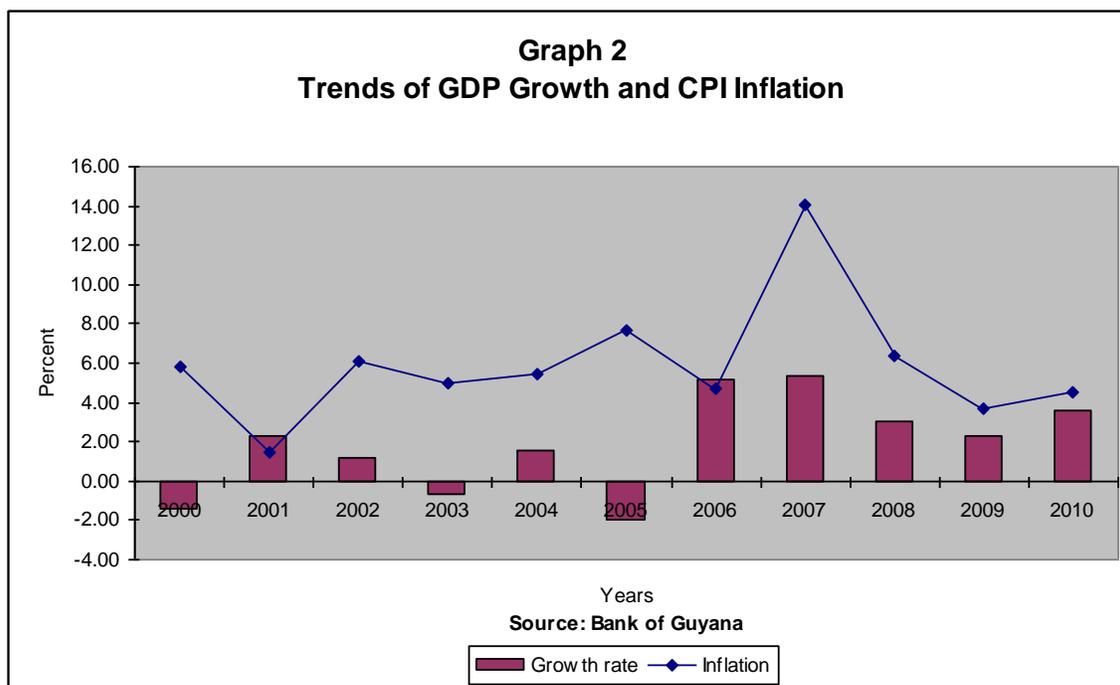
3.2.3 Other Non Deposit Taking Institutions

The insurance companies, as part of the wider financial system, with less than one percent of total household credit, are the major non-deposit taking institutions that have been providing mortgage finance credit to households. In 2000, insurance companies credit to household amounted to G\$654 million but this declined to G\$331 million in 2005 and to G\$237 million in 2010. Finance Companies have also provided credit to households with G\$503 million in 2000. But, this declined to G\$300 million in 2005 and to G\$161 million in 2010. Microfinance institutions lending to households increased from G\$281 million in 2007 to G\$364 million in 2010. The loans in this sector are used primarily for production uses and pose less risks than the traditional individual customer loans at commercial institutions (a separate study will develop this comparison further).

4.0 Key Factors Driving Household Credit

(a) Statistical Analysis

External and portfolio risk factors alongside environmental factors, including macroeconomic stability, financial sector development and government policies have all played an important role in influencing the supply of and demand for mortgages and other household credit. Figure 2 shows that Guyana experienced sustained real economic growth, averaging 0.17 percent and 3.89 percent a year during the 2000-2005 and 2006-2010 periods, respectively. This has raised household incomes and boosted consumer confidence, which, in turn, has induced optimistic expectations of future income to increase their borrowings. Furthermore, the low inflation rates, which averaged 5.9 percent a year during 2000–10, caused a declined in nominal interest rate. This has reduced the cost of borrowing and provided the incentives for households to borrow more, especially for housing, in order to smooth their desired path of consumption over the life cycle. Consequently, there has been an increase in the average size of new loans and those loans outstanding. This was supported with a vibrant housing market and rising house prices as reflected in the housing inflation rate in Graph 3.

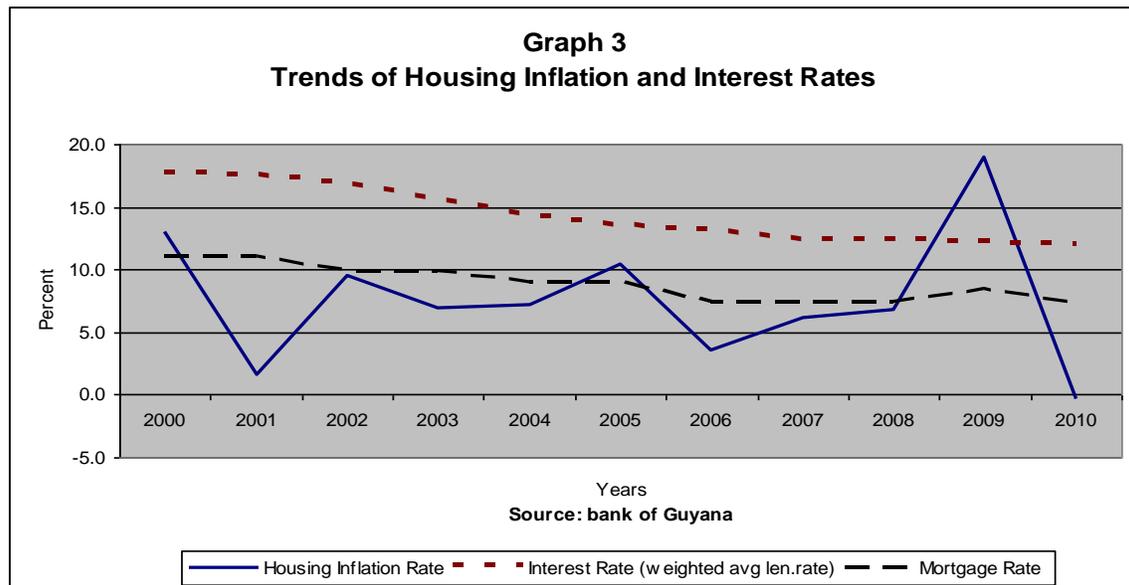


The increase in households borrowing has been reinforced by progressive financial liberalization, deregulation, financial sector consolidation and technological advances. The emergence of a more diversified and competitive banking system has resulted in downward pressure on nominal interest rates, narrowing lenders interest spreads, expanded credit coverage and increased loan amounts. The strengthened risk management of household credit portfolios has enabled financial institutions to lend more to households.

Government policies, alongside prudential banking and supervisory regulations have also facilitated greater allocation of credit to households. In line with the government's efforts to promote home ownership, banks have been provided with tax incentives similar to those of the New Building Society to offer housing loans, especially to low and middle income borrowers. Specifically, commercial banks were exempted from reserve requirement and were not liable to pay tax on profits derived from the said housing loans. In addition, the government provided households with house lots amounting to almost 90 thousand between 1993 and 2010 as shown in Table 2. The latter provided households with the minimum collateral for accessing housing loans.

Table 2		
Mortgage Rates and Houselots Allocation		
Years	Mortgage Interest Rates ¹	Total # of House Lots allocated
1993	16.00	359
1994	14.00	1176
1995	14.00	4727
1996	14.00	4494
1997	12.00	3064
1998	11.00	7734
1999	11.00	6544
2000	11.00	22831
2001	11.00	975
2002	9.95	4195
2003	9.95	4739
2004	8.95	5003
2005	8.95	5040
2006	7.50	4414
2007	7.50	1424
2008	7.50	2438
2009	8.45	4377
2010	7.35	6331

¹ New Building Society
Source: New Building Society and Ministry of Housing



The streamlining and reduction of duties on cars as well as the promotional activities undertaken by lending institutions and car companies have also boosted the demand for household credit. Passenger cars are subject to taxation, including import duty, VAT and an excise tax that is dependent on the age of the car and its CIF value. As a result, tax rates cover an enormous range. For cars under four years, the combined rate ranges

from 118 percent for cars under 1500cc engine capacity to 303.7 percent for cars over 3000cc. Further, for each size class of vehicles the excise tax rate rises above the rate charged on a vehicle aged less than four years as the import value falls below the break even value.

(b) Survey of License Financial Institutions (LFIs)

A survey of the six Commercial Banks and the New Building Society was carried out during the October-November period. The survey is designed to compliment the existing statistics on the supply and demand for household credit by the major LFIs in Guyana. The questionnaire for the survey which is in appendix I, addresses issues such as reasons for household credit growth, criteria for household credit, major constraints to provide household credit, importance of economic fundamentals, effects of central bank monetary policy and regulations and challenges for providing household credit. The survey is address to the CEO's of the major LFIs. The six commercial banks and the New Building Society responded to the questionnaire.

With respect to the growth in household credit over the last decade, the majority of the LFIs reported that this was largely due to the government housing drive, increase in household income, economic growth, aggressive marketing, willingness to take on risks in this sector so as to also diversify credit risks and higher rate of return. Other factors contributed to the growth also included market demand, easier terms and conditions for lending, exchange rate stability, low inflation and low mortgage rates.

Regarding the criteria used for household credit, LFIs reported that at the very minimum it is required that the borrower has equity contribution, debt service ability, net worth, collateral and income stability. In addition, there is consideration of income stability and pattern of savings. Banks also reported that there are differences in the assessment of mortgage loans and other household loans as well as differences in interest rates. With regards to the latter LFIs indicated that interest rates on mortgage loans are lower than other household loans.

The major constraints LFI's identify to provide household credits are the lengthy time and the high cost in registering collateral security, absence of credit history, unwillingness of employers to provide salary assignment for employees and slow response from other LFI's on the borrower's credit history. These are also seen as the major challenges in providing household credit by LFI's.

With regards to the Central Bank's monetary policy and regulations effect and the provision of household loans LFI's reported that these have had largely positive with little or no negative impact. More specifically, most LFI's indicated that the Central Bank's policies have contributed to the strong economic fundamentals that the economy has been experiencing which positively impacted household lending. Some aspects of prudential regulations such as the classification of loans and provisioning are seen as having a negative impact on household credit.

5.0 Empirical Model of Household Credit

The Model

In view of the above stylized facts, the movements in household credit are assessed empirically through a simple econometric model. The model is constructed to include GDP which is the scale variable, interest rate which is the cost of funds, availability of funds and price of real estate. An increase in real GDP is expected to result in a rise in household credit because of its association with higher income. Low interest rates should promote credit to the private sector, since it is associated with declining debt servicing. This implies a negative relationship between the interest rate and credit. The supply of credit is assumed to be constant in estimating the demand for credit. The level of excess liquidity of the commercial banking system and change in deposits of the NBS tend to promote loan expansion. Excess liquidity should induce competitive behavior and provide for lower borrowing cost and higher levels of lending. If excess liquidity is voluntarily held, it may not have the desired effect. In general, the relationship between household credit and involuntary excess liquidity should be positive. A rise in house price usually leads to increases in household credit, since mortgage lending is a

significant portion of the increases in household credit. Rising house prices also provide the requisite collateral for lending by financial institutions. The model to be estimated is of the following form.

$$\text{THD}_t = \alpha (\text{GDP}_t, \text{IR}_t, \text{HIR}_t, \text{EL}_t) + e_t$$

Where, THD denotes total household credit from the financial system, real GDP is the scale variable associated with income, IR is the interest rate, HIR is house prices proxy by the housing inflation index and EL is excess liquidity of the commercial banking system and change in deposits at the NBS. All the variables in the model are estimated in natural logs, except for interest rates and housing inflation index. The estimation method is Ordinary Least Square (OLS). The data used in the model are half yearly and are taken from the Bank of Guyana Annual Reports. The sample period is 1998 to 2009.

Table 3

Dependent Variable: LOGTHD					
Method: Least Squares					
Date: 02/24/11 Time: 16:21					
Sample: 1998S1 2009S2					
Included observations: 24					
	Coefficient	Std. Error	t-Statistic	Prob.	
EL	-0.097082	0.038320	-2.533424	0.0203	
HIR	0.001901	0.002407	0.789750	0.4394	
IR	-0.055737	0.007604	-7.329996	0.0000	
LOGGDP	0.419183	0.141849	2.955136	0.0081	
C	3.488609	0.822334	4.242326	0.0004	
R-squared	0.952834	Mean dependent var		4.475000	
Adjusted R-squared	0.942905	S.D. dependent var		0.193930	
S.E. of regression	0.046339	Akaike info criterion		-3.122622	
Sum squared resid	0.040798	Schwarz criterion		-2.877194	
Log likelihood	42.47146	Hannan-Quinn criter.		-3.057509	
F-statistic	95.95851	Durbin-Watson stat		1.866142	
Prob(F-statistic)	0.000000				
Substituted Coefficients:					
=====					
LOGTHD = -0.0970819162953*EL + 0.00190122658876*HIR - 0.0557366595415*IR + 0.419182541086*LOGGDP + 3.48860898407					
	EL	HIR	IR	LOGGDP	LOGTHD
Mean	3.608333	5.970833	15.26667	5.191667	4.475000
Median	3.700000	5.450000	15.45000	5.200000	4.400000
Maximum	4.000000	18.90000	18.50000	5.400000	4.800000
Minimum	3.100000	-0.600000	11.90000	4.800000	4.200000
Std. Dev.	0.268517	4.638823	2.466059	0.141165	0.193930
Skewness	-0.489710	0.839788	-0.047175	-0.513556	0.397340
Kurtosis	2.159288	3.667656	1.338020	3.807273	1.888369
Jarque-Bera	1.666062	3.266740	2.771080	1.706649	1.867239
Probability	0.434730	0.195270	0.250189	0.425996	0.393128
Sum	86.60000	143.3000	366.4000	124.6000	107.4000
Sum Sq. Dev.	1.658333	494.9296	139.8733	0.458333	0.865000
Observations	24	24	24	24	24

Results of the Model

The results in Table 2 show that household credit depends positively on income and on house prices and negatively on the level of excess liquidity and cost of obtaining the funds. Specifically, households tend to borrow more when faced with increases in income; there is the event of an improvement in the terms of access to financing; and house prices are higher. In addition, households have improved access to borrowing when financial institutions have excess liquidity. Regarding the values of the estimated coefficients, the income variable coefficient of (0.419) has the largest impact on household credit. This is followed by the excess liquidity coefficient which is estimated at

(-.097). The variable impact is marginal and seems to suggest that excess liquidity maybe voluntarily held. The cost of borrowing has a smaller impact with the estimated coefficient of (-.056). With regards to the price of houses, the estimated effect is very low at (.002) and is only significant at the 44 percent level.

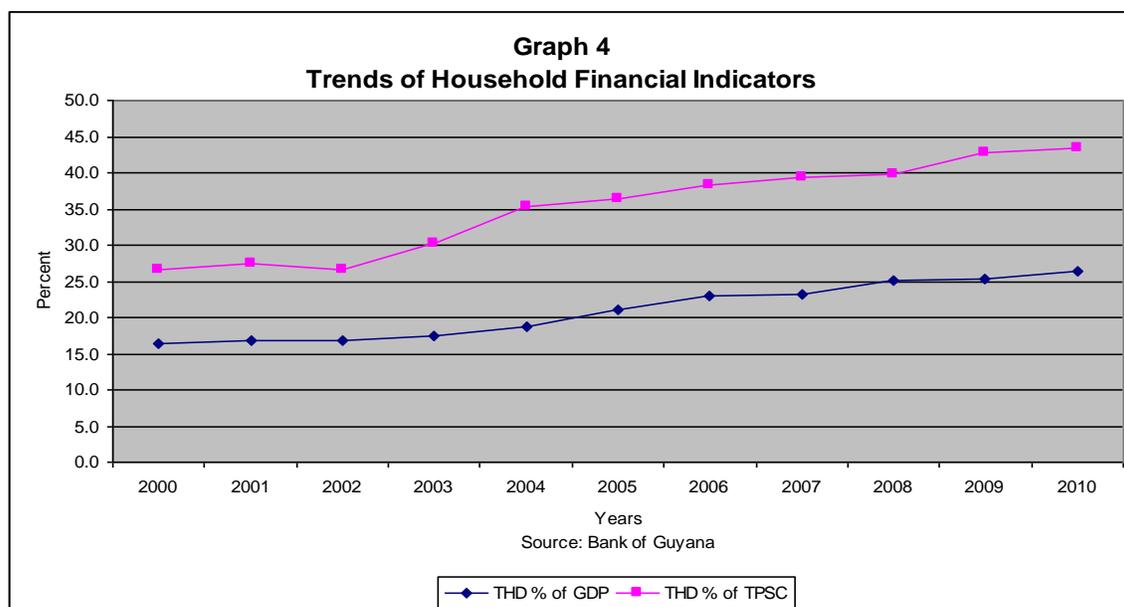
6.0 Implications of household credit

The household sector plays a major role in the financial system and overall economy. Consequently, fluctuations in their financial position can have major implications for financial stability and monetary policy, especially when household credit and its share in the total outstanding financial sector loans are increasing. The concerns about financial stability could be evaluated through various aspects of households' financial vulnerabilities of the households.

The financial exposure of households' assets and liabilities provides an important assessment of their vulnerabilities. In Guyana, households tend to put their financial assets in bank deposits instead of investing them in the bond or equity markets which are almost non-existent in the local economy. As a result, Guyanese households are not directly exposed to market risks which may adversely affect their asset value. In addition, their liability exposure is largely in the form of loans from formal financial institutions which provide for predictable payment streams. This tends to be softened as a result of reliance on accumulation of personal income (net worth) in financing their debt.

Households are net depositors in the financial sector and this helped ease credit conditions through enhanced supply of credit to provide for stable and declining interest rates so as to make debt servicing terms more manageable. Specifically, in the banking system, the level of household savings significantly exceeds credit. Household credit as a percent of deposits amounts to 20.8 percent in 2000, 22.7 percent in 2005 and 34.1 percent in 2010. At the New Building Society, households are also net depositors but credit as a percent of deposits is higher at 57.8 percent in both 2000 and 2005 and 69.4 percent in 2010. Weighted average interest rates at commercial banks declined from 17.7 percent in 2000 to 13.5 percent in 2005 and to 11.9 percent in 2010. At the NBS, ordinary mortgage rate for declined from 11 percent in 2000 to 8.95 percent in 2005 and to 7.35 percent in 2010 as shown in Table 2. Lower interest rates resulted in household

debt servicing ratio (total household installment and interest cost) to be about 25 percent of income which is the acceptable level.



The risk to the financial system by households credit growth has been low and limited. Specifically, the level of households' non performing loans to total loans in the banking system averaged 1.62 percent between 2004 and 2010. This is relatively low when compared with that of the total banking system non performing loans which averaged 11.1 percent during the same period. This outturn seems to be associated with the growth in income which has been supported by stable employment levels and a favourable economic environment. In addition, housing is the largest assets owned by households and with rising house prices, this has enhanced the value of the collateral for the homeowners to reduce the effective cost of borrowing and hence lowered default rates. In addition, since home owners generally leave their houses to their children rather than selling them, they are unwilling to take unnecessary risk to lose their houses.

The relatively low level of non performing loan (NPL) ratio of household debt was also due to the adaptation of sophisticated risk management techniques as well as innovated financial products by financial institutions which have shifted some types of risk to households. These policies have been in line with stricter policies and standards imposed by Bank of Guyana. Specifically, the Central Bank conducted surveillance at both the institutional and systemic levels as well as adopting the required regulations to ensure prudent banking practices and supervisory activities.

The high level of credit to the household sector has diversified credit risks to the major lending institutions. This has minimized the potential for large losses stemming from the failure of a few large borrowers. In 2005, the top 20 borrowers' loans to total loans were 38.5 percent. However, at end 2010, the ratio of the top twenty borrowers' to total loans was approximately 30 percent.

Household credit growth seems to pose risk to the financial system through the maturity mismatch of assets and liabilities. Financial institutions in Guyana liabilities are generally in the form of short term deposits with the maximum maturity of 3 years. However, their assets are in the form of housing loans which accounts for a significant percent of total household loans. They are long term with maturities of between 15 and 30 years. This may result in an inability of financial institutions to cover its contractual commitment and may be expose to the risk of rising interest rates when mortgage rates are fixed. However, in Guyana most of the mortgages are on floating interest rates. Therefore, households are made more vulnerable to rising interest rates since debt servicing costs would be higher.

With regards to monetary policy, the growth in household credit seems to have no immediate effect during the review period. Although, the demand for credit and its supply have separate determinants and require a balance in risk-taking behavior at banks, the prevailing monetary policy was able to stimulate deposit expansion and loan creation at lending institutions/commercial banks. This is largely due to the high levels of excess liquidity in the financial system. In view of this, interest rates have declined or remained relatively stable in the face of rapid growth in deposits and household credit. Private sector deposits increased from G\$69.9 billion in 2000 to G\$100.6 billion in 2005 and to G\$182.7 billion in 2010. The interest rates have also stimulated the demand for credit and in particular housing loans as shown in Table 1.

The growth of housing loans has caused higher house prices. This has increased households net worth and consumption which contributed to higher economic growth. In addition, the contribution of housing inflation to the overall Inflation rates was small causing the latter to remain mostly single digits during the 2000-2010 periods. Therefore, this did not cause any significant change in monetary policy which remained focus on sterilizing excess liquidity in the financial system.

Household credit has the positive welfare effect of increasing and smoothing consumption as well as increasing economic growth. Private sector consumption increased from G\$64.8 billion in 2000 to G\$121 billion in 2005 and to G\$392.9 billion in 2010. The percent of GDP, private consumption increased from 43 percent in 2000 to 56 percent in 2005 and to 68 percent in 2010.

Overall, the level of household indebtedness in Guyana seems to be generally in line with the economic fundamental and poses minimal threat to the financial sector. When measured as a percent of GDP, household credit growth was moderate, increasing from 16.4 percent in 2000 to 26.4 percent in 2010. This level is significantly lower than those of other countries such as Malaysia and Korea with household debt to GDP of 67 percent and 82 percent, respectively. Therefore, household credit/loan indebtedness in Guyana can be deemed to be manageable.

7.0 Conclusions

Household credit in Guyana increased noticeably over the last decade and is due largely to the sharp rise in housing mortgages. The increase in household credit is associated with the favourable macro economic conditions of the economy with strong economic growth and low single digit inflation. Deregulation and financial innovation as well as declining interest rates also contributed to the increase in the household sector's access to credit. In addition, government policies positively impacted the growth in household credit supply and demand. This was done through the provision of tax incentives for financial institutions to lend for housing as well as basic collaterals through the allocation of house lots.

The single equation model for household credit used basic macro economic fundamentals as the explanatory variables. The results obtained indicate that household credit is positively related to economic activity or GDP and the price of houses and negatively associated with the level of liquidity cost of loans. The evidence suggests that household credit has evolved in line with economic fundamentals and therefore credit obtained is reflective of the economic position of households and the economy.

Household credit growth, as measured by the ratio of household credit to GDP, over the last decade shows that it is quite modest when compared with other developing countries. The level of household indebtedness in Guyana remains manageable while the risk to the financial system is limited because of the household sector strong income position and a resilient banking and financial system. These resulted from the favorable macroeconomic performance of the economy with higher income as well as enhanced risk management through supervision and regulation of licensed financial institutions by the Bank of Guyana. However, as with most forms of credit, continuous growth of household debt can create vulnerabilities if the debt reaches an unsustainable level out of alignment with the economy's macroeconomic performances/fundamentals.

Households play an integral role in the financial system of an economy. They are investors or surplus units and debtors or deficit units. Hence, impairment in household's balance sheets can pose a threat to the financial system and the economy. Consequently, it is important that policy makers continue to monitor household credit developments and have the necessary tools to address potential problems. In this regard, timely and detailed micro level information on household debt are necessary to detect and assess emerging vulnerabilities. To this end, the establishment of the credit bureau will be beneficial in providing information about the payment behaviour of consumers.

In view of the large proportion of household debt being in the form of housing loans, it is imperative that household debt soundness and financial sector capitalization is maintained. This would require the avoidance of housing boom and bust cycle. In this regard, there must be macroeconomic policies that are conducive for macroeconomic stability and growth. The Central Bank continued monitoring and regulating of financial institutions will be critical with the growing competitiveness of the residential mortgages market. Specifically, given the importance of real estate loans in the balance sheets of lending institutions and the need to increase market share, some institutions may loosen loan standards which may undermined the safety of their assets.

The financial risk management capability of consumers through education is also important to empower them to take responsibility for their financial position. Greater

efforts should be undertaken to educate consumers on financial management so as to enable them to make informed decisions to manage financial risk in a proactive manner.

Finally, on the supply side, monetary policy sets a limit on the credit creation process. Consequently, it is crucial for policymakers to be aware of the implications of rising household credit beyond what the lending institutions could sustain and what the economy could produce in real terms. Balancing the real economy with the financial sector is therefore an essential pre-requisite for monetary policy and financial stability in the domestic economy. The major constraints and challenges identified by LFIs would also have to be addressed. While the establishment of a Credit Bureau will alleviate the problems associated with credit worthiness of borrowers, the timely and costly registration process will require legislative changes.

APPENDIX I

1. What are the reasons for the growth in household credit over the last decade?
2. What are the criteria used for household credit such as:
 - (a) Mortgage Loans
 - (b) Other Household Loans
3. Are there differences in the interest rate for (a) and (b)?
4. What are the major constraints to provide households credits (e.g deposits, excess liquidity, household income, credit history, collateral, legal issues, type of risk, etc)?
5. How important is the state of the economy in the provision of loans (e.g Economic growth, inflation, exchange rate stability, interest rate, etc.)?
6. How has the Central Bank monetary policy and regulations affected the provision of household loans?
7. What are the major challenges to provide household credit including mortgage loans?

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