

Household Credit in Guyana 2000-2010

By

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1.0 Introduction

- Households 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 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.
- High levels of household credits offer both opportunities and challenges.
- Consequently, it is crucial for policymakers to be aware of the implications of and for rising household credit.

1.0 Introduction (Con'd)

- This paper analyses the development of household credit and the determining factors.
- 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.
- The main determinants of credit by households is the scale variables of expenditure, income or level of economic activity.
- The cost of financing is another important factor influencing the recourse to credit by households.
- Household creditworthiness is another critical factor in the supply of funds by financial institutions.

2.0 Literature Review on the Determinants of Household Credit (Con'd)

- 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.
- 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.

3.0 Trends in Household Credit

- 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 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.

3.0 Trends in Household Credit (Con'd)

- The composition of household credit changed significantly over the period 2000–2010, with the bulk of it going for house financing.
- 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.
- 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.
- There are many financial entities providing credit to households in Guyana. These include commercial banks with G\$51.1 billion or 69%, other deposit taking institutions - New Building Society (NBS) with G\$21.6 billion or 29.2%, and trust companies; and other non depository Institutions – insurance companies, finance companies, pension schemes and microfinance institutions.

4.0 Key Factors Driving Household Credit

- **(a) Statistical Analysis**
 1. 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.
 2. The low inflation rates, which averaged 5.9 percent a year during 2000–10, caused a decline in nominal interest rate. This has reduced the cost of borrowing.
 3. The increase in households borrowing has been reinforced by progressive financial liberalization, deregulation, financial sector consolidation and technological advances.

4.0 Key Factors Driving Household Credit (Con't)

3. 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.
4. 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.

4.0 Key Factors Driving Household Credit (Con't)

- **(b) Survey of License Financial Institutions (LFIs)**
 1. 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.
 2. Other factors contributed to the growth also included market demand, easier terms and conditions for lending and low mortgage rates.
 3. 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.

4.0 Key Factors Driving Household Credit (Con't)

4. The major constraints and challenges 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.
5. 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.

5.0 Empirical Model of Household Credit

- 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.

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

- 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.

5.0 Empirical Model of Household Credit (Con'd)

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:

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$$\text{LOGTHD} = -0.0970819162953 \cdot \text{EL} + 0.00190122658876 \cdot \text{HIR} - 0.0557366595415 \cdot \text{IR} + 0.419182541086 \cdot \text{LOGGDP} + 3.48860898407$$

	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

5.0 Empirical Model of Household Credit (Con'd)

- The results in Table above 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.

6.0 Implications of Household Credit

- Fluctuations in households 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.
- Households tend to put their financial assets in bank deposits instead of investing them in the bond or equity markets. Hence, they are not directly exposed to market risks which may adversely affect their asset value.

6.0 Implications of Household Credit (Con'd)

- In addition, their liability exposure is largely in the form of loans from formal financial institutions which provide for predictable payment streams.
- 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.
- 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.

6.0 Implications of Household Credit (Con'd)

- 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.
- 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.
- 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.

6.0 Implications of Household Credit (Con'd)

- 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.
- 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.

6.0 Implications of Household Credit (Con'd)

- The growth of housing loans has caused higher house prices. This has increased households net worth and consumption which contributed to higher economic growth.
- 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

- 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.
- 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.

7.0 Conclusions (Con'd)

- The Central Bank continued monitoring and regulating of financial institutions will be critical with the growing competitiveness of the residential mortgages market to avoid the loosening of 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.
- 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.