

## Calculation of Debt Service Ratios

Treatment of Key Inputs



# AGENDA

- Overview of debt service ratios
- Background
- Treatment of key inputs
- Sample calculations
- Minimum documentation requirements
- Review questions

## Gross Debt Service (GDS) Ratio Formula

Principal + Interest + Taxes + Heat (PITH)\*

**Borrower's Gross Annual Income**

\* Include 50% of condominium fees and 100% of annual site lease, when applicable

# TOTAL DEBT SERVICE RATIO FORMULA

## Total Debt Service (TDS) Ratio Formula

PITH + Other Debt

**Borrower's Gross Annual Income**

# DEBT SERVICE GUIDELINES

(Credit Score: GDS/TDS)

- < 680 : 35% / 42%
- 680 + : 39% / 44%
- Debt service flexibilities are based on an assessment of the strength of the overall application, and not minimum credit score alone



- Effective July 2012, the Government of Canada fixed the maximum GDS and TDS ratios for insured mortgage loans
- This change reinforces the importance for CMHC to ensure that debt service ratios provide the same measure of a specific borrower's ability to service the mortgage debt, regardless of the lender submitting the application
- CMHC collaborated with many mortgage lenders to clarify the treatment of key inputs included in the calculation of debt service ratios and minimum documentation requirements
- Clarifications are effective on December 31, 2013

# KEY INPUTS BEING CLARIFIED – INCOME

## Income

- Fixed income
- Variable income
- Self-employed income
- Rental income
- Guarantor income



## Fixed Income

- Make reasonable inquiries and take reasonable steps to obtain third party verification of the underlying income for all borrowers
  - Pay stubs
  - History of salary deposits
  - Employer confirmation
  - Statement of RRIF income
  - T4 slips and/or T1 General accompanied with Notice of Assessment





## Fixed Income

- Confirming employment status/ income sustainability
  - Employer confirmation and/or history of salary deposits



## Variable Income

- Make reasonable inquiries and take reasonable steps to obtain third party verification of the underlying income for all borrowers
  - Pay stubs
  - History of salary deposits
  - Employer confirmation
  - T5 slips
  - T4 slips and/or T1 General accompanied with Notice of Assessment



## Variable Income

- Confirming employment status/ income sustainability
  - Statements of savings/investments
  - History of salary deposits
  - Employer confirmation
- Variable income must have been sustained over at least two years
- Lenders must use an income amount not exceeding the average of the past two years



## Self-Employed Income

- Obtain standard documentation to support gross annual income
- Where traditional income documentation is not available, assess plausibility of the income reported



## **Rental Income (not subject property)**

Net rental income can form part of the borrower's gross income for properties that are:

- not owner-occupied; and
- not the subject of the current insurance application

Lenders may use their own internal guidelines for determining net rental income provided that the P.I.T.H. expenses are either:

- deducted from gross rent revenue
- included in “other debt obligations”

## Guarantor Income

- The guarantor/covenantor must be assessed separately from the borrower
- The guarantor's/covenantor's income can be used to satisfy borrower qualification criteria when the guarantor/covenantor occupies the home and is the spouse or common-law partner of the borrower



## Debt Obligations

- Unsecured lines of credit and credit cards
- Secured lines of credit
- Heating costs
- Bridge financing

## **Unsecured lines of credit and credit cards**

- Factor in amount of no less than 3% of the outstanding balance
- In determining the amount of revolving credit that should be accounted for, make a reasonable inquiry into the background, credit history and borrowing behaviour of the prospective borrower



## Secured lines of credit

- Factor in an amount of at least a monthly payment on the outstanding balance amortized over 25 years
- Use the contract rate or the 5-year Benchmark rate published by Bank of Canada if contract rate is unknown



## Heating Costs

- Make a reasonable effort to obtain actual heat cost records for the subject property
- Where no history of heating cost is available, the heat expense must be a reasonable estimate, taking into consideration factors such as property size, location and/or type of heating system



## Bridge Financing

Repayment of a bridge loan can be excluded from calculation of the TDS ratio providing:

- There is a firm purchase and sale agreement for the previous property; and
- The bridge loan is for a period of no longer than 90 days following the closing date of the new property being purchased



# GROSS DEBT SERVICE RATIO CALCULATION

- Annual Principal and Interest Payment: \$19,200.00
- Taxes: \$2,000.00
- Heat: \$1,800.00
- Gross Income: \$87,000.00

What is the debt service ratio?



# GROSS DEBT SERVICE RATIO CALCULATION

Principal + Interest + Taxes + Heat (PITH)  
Borrower's Gross Annual Income

\$19,200.00 + \$2,000.00 + \$1,800.00  
\$87,000.00

\$23,000.00  
\$87,000.00

**GDS = 26.4%**

# TOTAL DEBT SERVICE RATIO CALCULATION

## Other Debt

- Credit Card: \$5,000.00 limit / \$2,000.00 balance
- Credit Card: \$4,000.00 limit / \$350.00 balance
- Unsecured Line of Credit: \$10,000 limit / \$7,500 balance

# TOTAL DEBT SERVICE RATIO CALCULATION

## **Credit Card 1: \$2,000.00 balance**

$$\$2,000.00 \times 3\% = \$60.00$$

$$\text{Annual Payment: } \$60.00 \times 12 = \mathbf{\$720.00}$$

## **Credit Card 2: \$350.00 balance**

$$\$350.00 \times 3\% = \$10.50$$

$$\text{Annual Payment: } \$10.50 \times 12 = \mathbf{\$126.00}$$

## **Unsecured Line of Credit: \$7,500.00 balance**

$$\$7,500.00 \times 3\% = \$225.00$$

$$\text{Annual Payment: } \$225.00 \times 12 = \mathbf{\$2,700.00}$$

# TOTAL DEBT SERVICE RATIO CALCULATION

PITH + Other Debt  
Borrower's Gross Annual Income

\$19,200.00 + \$2,000.00 + \$1,800.00 + \$720.00 + \$126.00 + \$2,700.00  
\$87,000.00

\$26,546.00  
\$87,000.00

**TDS = 30.5%**



# MINIMUM DOCUMENTATION REQUIREMENTS

- Lenders should maintain complete documentation of the information that led to a mortgage approval submitted for insurance for a period of seven years
- This should include debt service ratio calculations, including verification documentation for key inputs



# REVIEW QUESTION 1

When a borrower has credit card debt, how do you calculate the dollar amount to be included as 'other debt' in the calculation of the total debt service ratio?

- a) 3% of the credit limit
- b) 3% of the outstanding balance
- c) 5% of the credit limit
- d) 5% of the outstanding balance

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- b) 3% of the outstanding balance**
- c) 5% of the credit limit
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## REVIEW QUESTION 2

For secured lines of credit, lenders must factor in an amount corresponding to at least a monthly payment on the outstanding balance amortized over 25 years using the contract rate. What rate can be used if the contract rate is unknown?

- a) 5%
- b) 3%
- c) 5 year Bank of Canada Benchmark rate
- d) A or C

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- c) 5 year Bank of Canada Benchmark rate**
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## REVIEW QUESTION 3

Net rental income can form part of the borrower's gross income for properties that are:

- a) Owner occupied
- b) The subject of the current insurance application
- c) Not owner-occupied
- d) Not the subject of the current insurance application
- e) C and D

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- b) The subject of the current insurance application
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- d) Not the subject of the current insurance application
- e) **C and D**

## REVIEW QUESTION 4

A guarantor's or covenantor's income must not be used for the purpose of satisfying CMHC's borrower qualification criteria unless:

- a) The guarantor or covenantor occupies the home
- b) Is the spouse or common-law partner of the borrower
- c) Is a direct family member of the borrower
- d) All of the above
- e) A and B only



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- d) All of the above
- e) **A and B only**

## REVIEW QUESTION 5

Examples of supporting documentation for confirming the fixed income amount include:

- a) Paystubs
- b) History of salary deposits
- c) Employer confirmation
- d) T4 slips
- e) T1 General
- f) All of the above
- g) A, B, C and D only

## REVIEW QUESTION 5

Examples of supporting documentation for confirming the fixed income amount include:

- a) Paystubs
- b) History of salary deposits
- c) Employer confirmation
- d) T4 slips
- e) T1 General
- f) All of the above
- g) **A, B, C and D only**

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