

FINANCIAL INTERMEDIATION SERVICES NDRECTY MEASURED (FS

Statistical Training Course on Banking, Insurance and Financial Statistic' **Brunei Darussalam** 17-19 November 2020

> Organized by: Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

Mohd Yazid Kasim National Accounts Statistics Division Department of Statistics, Malaysia















20 OCT



2016 - 2030





MEASUREMENT OF FISIM IN MALAYSIA



Conventional Bank

Estimation of FISIM - Conventional

FISIM is calculated using the following formula:

FISIM = FISIM on Loans + FISIM on Deposits

Where:

FISIM on Loans = Stock of Loans * [Lending Rate - Reference Rate]

FISIM on Deposits = Stock of Deposits * [Reference Rate - Deposits Rate]

- Reference Rate: Midpoint between the loan and deposit rate
 - o less volatile
 - FISIM values with greater transparency

MEASUREMENT OF FISIM



FISIM - Calculation

FISIM should be calculated according to the formula

$$(rL - rr) yL + (rr - rD) yD$$

Where by:

yL- loans

yD- deposits

rr - reference rate

rL - interest rates on loans

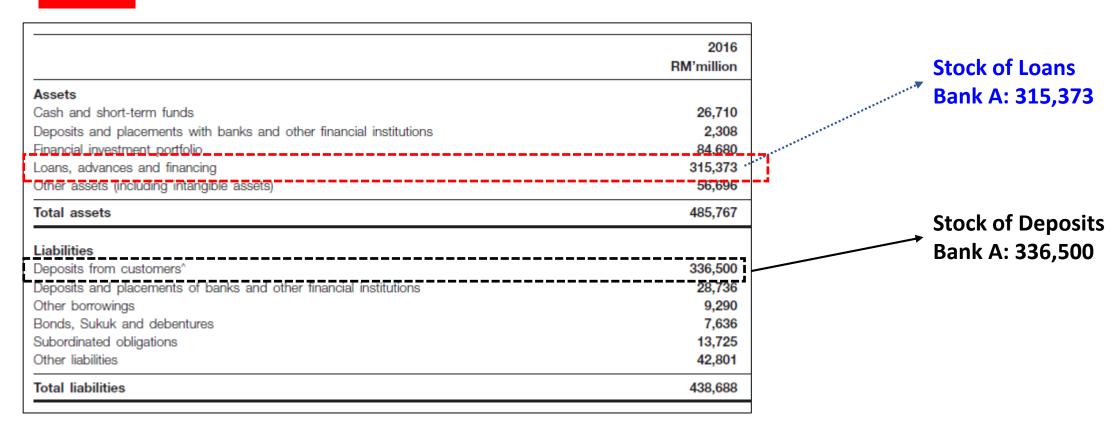
rD - interest rates deposits

CALCULATION OF FISIM

STATEMENTS OF FINANCIAL POSITION



BANK A



STATEMENTS OF FINANCIAL POSITION



		Group	Ban	k		
BANK B	Note			2016 RM'000		
Assets						
Cash and short-term funds	5			38.350.931		
Deposits and placements with financial institutions	6			19,339,287		
Financial assets purchased under resale agreements	7(a)			2,213,113		Charles Charles
Financial assets at fair value through profit or loss	8			7,980,314		Stock of Loans
Financial investments available-for-sale	9			74.904.201		
Financial investments held-to-maturity	10			12,582,311		Bank B: 295,020,136
Loans, advances and financing	11			295,020,136		
Derivative assets	12			8,320,918	† - -	
Reinsurance/retakaful assets and other insurance receivables	13			_		
Other assets	14			5,603,512		
Investment properties	15			_		
Statutory deposits with central banks	16			7,530,325		
Investment in subsidiaries	17			21,586,547		
Interest in associates and joint ventures	18			451,518		Stock of Deposits
Property, plant and equipment	19			1,290,761		
Intangible assets	20			530,049		Bank B: 331,878,295
Deferred tax assets	28			358,687		Dank D. 331,070,233
Total assets				496,062,610		
Liabilities						
Customers' funding:					l_ /	
- Deposits from customers	21			331,878,295	T	
- Investment accounts of customers*	62(q)				† ⁴	
Deposits and placements from financial institutions	22			29,856,710		
Obligations on financial assets sold under repurchase agreements	7(b)			2,957,951		
Derivative liabilities	12			8,802,221		
Financial liabilities at fair value through profit or loss	23			2,685,139		
Bills and acceptances payable				1,000,777		
Insurance/takaful contract liabilities and other insurance payables	24			_		
Other liabilities	25			12,498,698		
Recourse obligation on loans and financing sold to Cagamas	26			974,588		



CUITPUIT CAI CUI ATION:

Source	Item	Formula
Assets, Liabilities and Equities Statements	Loans/ Financing and Advances	а
Income and Expenditure Statement	Interest/ Finance Income	b
Derive	Notional Financing Rate	c=b/a
Assets, Liabilities and Equities Statements	Deposits Accepted	d
Income and Expenditure Statement	Interest/ Finance Expense	е
Derive	Notional Deposits Rate	f=e/d
Derive	Reference Rate	g=(c+f)/2
Derive	Finance Rate Spread Current	h=c-g
Derive	FISIM on Finance	i=h*a
Derive	FISIM on Deposits	j=h*d
Derive	Total FISIM	k=i+j
Income and Expenditure Statement	Fee and Commission Income	I
	Total Output	k + I

Bank A	Bank B	
RM mill.	RM mill.	Remark
315,373	295,020	yL
		rL
336,500	331,878	yD
		rD
		rr
		FISIM
		Explicit Service Charges

Output of FISIM = (rL - rr) yL + (rr - rD) yD



]		
BANK A			Note	2016 RM'000			
Interest income Interest expense			34 35	18,826,017 (9,000,091)	*******		
Net interest income Income from Islamic banking operation Net non-interest income	ons		58	9,825,926 1,704,043	100000	······································	
	DANKE		Group	Ва	nk	, et et et e	Bank B: 15,076,353
Overheads	BANK B	Note			2016 RM'000		
Profit before allowances Allowance made for impairment loss	Operating revenue	35			26,592,229		Interest Expense
Allowance made for impairment loss Allowance made for commitments at	Interest income Interest expense	36 37			15.076.353 (7,134,624)		Bank A: 9,000,091
Allowance made for other impairmen	Net interest income Income from Islamic Banking Scheme operations	62(b)			7,941,729		Bank B: 7,134,624
	Net earned insurance premiums Dividends from subsidiaries and associates Other operating income	38 39 40			7,941,729 - 2,400,457 4,272,439		
	Total operating income Net insurance benefits and claims incurred, net fee and commission expenses, change in expense liabilities and taxation of life and takaful fund	41			14,614,625		
	Net operating income				14,614,625		



CUITPUIT CALCUL ATION:

Source	Item	Formula
Assets, Liabilities and Equities Statements	Loans/ Financing and Advances	а
Income and Expenditure Statement	Interest/ Finance Income	b
Derive	Notional Financing Rate	c=b/a
Assets, Liabilities and Equities Statements	Deposits Accepted	d
Income and Expenditure Statement	Interest/ Finance Expense	е
Derive	Notional Deposits Rate	f=e/d
Derive	Reference Rate	g=(c+f)/2
Derive	Finance Rate Spread Current	h=c-g
Derive	FISIM on Loans	i=h*a
Derive	FISIM on Deposits	j=h*d
Derive	Total FISIM	k=i+j
Income and Expenditure Statement	Fee and Commission Income	1
	Total Output	k+I

Bank A	Bank B	_
RM mill.	RM mill.	Remark
315,373	295,020	yL
18,826	15,076	
0.0597	0.0511	rL
336,500	331,878	yD
9,000	7,134	
0.0267	0.0215	rD
0.0432	0.0363	rr
0.0165	0.0148	
5,196	4,367	
5,544	4,913	
10,739	9,280	FISIM
		Explicit Service Charges

Output of FISIM = (rL - rr) yL + (rr - rD) yD

STATEMENTS OF INCOME: FOO & Commission



BANK A	Note	2016 RM'000
Interest income	34	18,826,017
Interest expense	35	(9,000,091)
Net interest income		9,825,926
Income from Islamic banking operations	58	1,704,043
Net non-interest income	36	4,535,286
		16,065,255
Overheads	37	(8,651,690)
Profit before allowances		7,413,565
Allowance made for impairment losses on loans, advances and financing	38	(2,408,883)
Allowance made for impairment losses on other receivables		(87,160)
Allowance made for commitments and contingencies	24	(30,461)
Allowance made for other impairment losses	39	(118,605)
		4,768,456
Share of results of joint ventures	14	4,236
Share of results of associates	13	111,452
Profit before taxation and zakat		4,884,144
Taxation and zakat		
- Company and subsidiaries	41	(1,251,187)
Profit for the year		3,632,957

	2016
	RM'000
Net fee and commission income:	
Commissions	875,280
Fee on loans, advances and financing	582,133
Portfolio management fees	24,261
Service charges and fees	667,196
Corporate advisory and arrangement fees	51,198
Guarantee fees	66,553
Other fee income	283,655
Placement fees	19,002
Underwriting commission	15,226
Fee and commission income	2,584,504
Fee and commission expense	(648,159)
Net fee and commission income	1,936,345

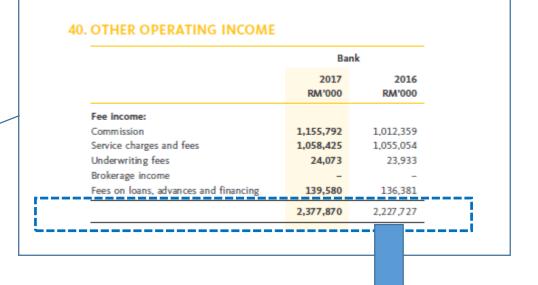
Fee and Commission Income:

Bank A: 2,584,504

STATEMENTS OF INCOME: FOO & Commission



DANIK D		Bank	
BANK B	Note	2017 RM'000	2016 RM'000
Operating revenue	35	24,841,318	26,592,229
Interest income Interest expense	36 37	16,099,945 (7,306,999)	15,076,353 (7,134,624)
Net interest income Income from Islamic Banking Scheme operations	62(b)	8,792,946 -	7,941,729 -
Net earned insurance premiums Dividends from subsidiaries and associates Other operating income	38 39 40	8,792,946 - 1,920,144 3,681,248	7,941,729 - 2,400,457 4,272,439
Total operating income Net insurance benefits and claims incurred, net fee and commission expenses, change in expense liabilities and taxation of life and takaful fund	41	14,394,338	14,614,625
Net operating income Overhead expenses	42	14,394,338 (5,880,703)	14,614,625 (5,339,639)
Operating profit before impairment losses Allowances for impairment losses on loans, advances, financing and other debts, net (Allowances for)/writeback of impairment losses on financial investments,	44	8,513,635 (1,163,238)	9,274,986 (1,787,868)
net	45	2,217	(139,851)



Fee and Commission Income:

Bank B: 2,227,727

MEASUREMENT OF FISIM



OUTPUT CALCULATION:

Source	Item	Formula
Assets, Liabilities and Equities Statements	Loans/ Financing and Advances	а
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	Total Output	k+I

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0.0267	0.0215	rD
0.0432	0.0363	rr
0.0165	0.0148	
5,196	4,367	
5,544	4,913	
10,739	9,280	FISIM
2,584	2,227	Explicit Service Charges

Output of FISIM = (rL - rr) yL + (rr - rD) yD

13,323

11,507

ALLOCATION OF FISIM



- A full allocation the use of FISIM across the relevant sectors & industries.
- Identify the purchase of these services explicitly.
- FISIM on Loans were allocated to industry, government and household based on Classification of Loans by sector data (source data from Central bank).
- FISIM on Deposits were allocated based on Deposit by holder data (source data from Central bank).

@StatsMalaysia @Dr_Uzir

ALLOCATION OF FISIM: FISIM on Loan



FISIM on Loan = RM20.0 billion (a)

SECTOR	Loan (RM Bil.)	Share (%) (b)	FISIM (RM Bil.) = a*b	
Primary agriculture	35.2	1.9	0.4	
Mining and quarrying	11.6	0.6	0.1	
Manufacturing	122.8	6.7	1.3	
Electricity, gas and water supply	15.1	0.8	0.2	
Wholesale, retail, restaurants and hotels	136.4	7.5	1.5	
Construction	93.1	5.1	1.0	Supply Side
Real estate	116.4	6.4	1.3	Olde
Transport, storage and communication	40.1	2.2	0.4	
Financing, insurance and business services	115.8	6.3	1.3	Supply +
Education, health & others	54.7	3.0	0.6	Demand Side
Household sector (A)	1,069.0	58.6	11.7	
Other sector	14.0	0.8	0.2	→ Demand Side
Total	1,824.1	100.0	20.0	15

ALLOCATION OF FISHE FISHM on Loan



FISIM on Loan for Household = RM11.7 billion need to allocate for HH on Demand Side and OOD on Supply side

	Loan (RM Bil.)	Share (%)	FISIM (RM Bil.)
Household sector (A)	1,069.0	100.0	11.7
Demand Side	623.5	58.3	6.8
Supply Side (OOD)	445.5	41.7	4.9

Loan by Purpose	Loan (RM Bil.)	Share (%)
Residential Loan	636.5	100.0
OOD (70%)*	445.5	70.0
Others (30%)	191.0	30.0

^{*70%} assumptions based on Home Ownership source from Population and Housing Census 2020

ALLOGATION OF FISIM: FISIM on Deposit



FISIM on Deposit = RM25.0 billion (a)

Holder	Deposit (RM Bil.)	Share (%) (b)	FISIM (RM Bil.) = a*b	
Federal Government	39.9	1.9	0.5	
State Government	32.3	1.6	0.4	├─ Demand Side
Statutory Agency	84.2	4.1	1.0	
Financial Institution	372.2	17.9	4.5	Supply Side
Business Enterprises (A)	642.7	31.0	7.7	Supply Side
Individuals	788.6	38.0	9.5	──→ Demand Side
Others (B)	116.6	5.6	1.4	Supply Side
Total	2,076.6	100.0	25.0	

FISIM on Deposit for Business Enterprises and Others needs to allocate by sector/industries other than Finance

ALLOGATION OF FISIM: FISIM on Deposit



Business Enterprises (A) + Others (B) = RM 7.7 billion + RM1.4 billion = RM9.1 billion (C)

SECTOR	Value Added (RM Bil.)	Share (%) (D)	FISIM (RM Bil.) = C*D
Primary agriculture	26.6	11.2	1.0
Mining and quarrying	20.8	8.7	0.8
Manufacturing	66.1	27.8	2.5
Electricity, gas and water supply	9.3	3.9	0.4
Wholesale, retail, restaurants and hotels	54.9	23.1	2.1
Construction	9.6	4.0	0.4
Real estate	4.1	1.7	0.2
Transport, storage and communication	30.6	12.9	1.2
Business services	9.6	4.0	0.4
Education, health & others	6.1	2.6	0.2
Total	237.8	100.0	9.1

ALLOGATION OF FISIM: FISIM ON SUPPLY



FISIM for Supply Side = FISIM on Loan (Supply) + FISIM on Deposit (Supply)

SECTOR	FISIM on Loan (Supply)	FISIM on Deposit (Supply)	Total FISIM on Supply
Primary agriculture	0.4	1.0	1.4
Mining and quarrying	0.1	0.8	0.9
Manufacturing	1.3	2.5	3.8
Electricity, gas and water supply	0.2	0.4	0.6
Wholesale, retail, restaurants and hotels	1.5	2.1	3.6
Construction	1.0	0.4	1.4
Real estate	1.3	0.2	1.5
Transport, storage and communication	0.4	1.2	1.6
Financing, insurance and business services	1.3	4.5+0.4=4.9	6.2
Education, health & others	0.6	0.2	0.8
OOD	4.9		4.9
Total	13.0	13.6	26.6

ALLOGATION OF FISIM: FISIM on Demand



FISIM for Demand Side = FISIM on Loan + FISIM on Deposit

Demand Side	FISIM on Loan	FISIM on Deposit	FISIM (RM Bil.)
Household	0.2+6.8=7.0	9.5	16.5
Government		0.5+0.4+1.0=1.9	1.9
Total	7.0	11.4	18.4

FISIM	FISIM (RM Bil.)	Share (%)
Supply Side	26.6	59.1
Demand Side	18.4	40.9
Total	45.0	100.0

DATA AVAILABILITY

STATEMENT OF ASSETS & LIABILITIES



TOTAL 1005TO
TOTAL ASSETS
Cash and Cash Equivalents
Deposits Placed and Reverse Repurchase Agreement
Statutory Deposits with Bank Negara Malaysia
Pledged Securities under Repurchase Agreement
Financial Assets Designated as Fair Value Through Profit or Loss
Financial Assets Held for Trading
Held to Maturity Investments
Available for Sale Financial Assets
Loans/Financing and Receivables (Net of Provision)
Loans/Financing and Advances
Trade and Other Receivables
Amount Due from Designated Financial Institutions
Overdrawn Vostro Accounts
Nostro Accounts
Interbank Placements
Surplus in SPICK
Other Amount Due from Designated Financial Institutions
Derivatives Financial Assets
Fair Value Changes of the Hedged Items in Portfolio Hedge of Interest Rate Risk/Profit Rate Risk (Assets)
Other Assets
Investment Properties
Inventories
Prepaid Lease Payment
Investment at Cost
Investment Accounted for Using Equity Method
Property, Plant and Equipment
Land
Buildings
IT Equipment
Fixtures and Fittings
Office Equipment
Motor Vehicles
Other Property, Plant and Equipment
(-) Depreciation and Impairment of Property, Plant and Equipment
Goodwill
Intangible Assets Other Than Goodwill
Tax Assets

Non Current Assets or Disposal Groups Classified as Held for Sale @StatsMalaysia @DrUzirMahidin

TOTAL EQUITY AND LIABILITIES
TOTAL EQUITY
TOTAL LIABILITIES
Deposits Accepted and Repurchase Agreement
Deposits Accepted
Repurchase Agreement
Financial Liabilities Designated as Fair Value Through Profit or Loss
Financial Liabilities Held for Trading
Amount Due to Government
Amount Due to Designated Financial Institutions
Vostro Account Balances
Overdrawn Nostro Accounts
Deficit in SPICK
Interbank Borrowings
Other Amount Due to Designated Financial Institutions
Derivatives Financial Liabilities
Fair Value Changes of the Hedged Items in Portfolio Hedge of Interest Rate
Risk/Profit Rate Risk (Liabilities)
Trade and Other Payables
Staff Employment Benefits
Other Provisions
Borrowed Funds
Debt Certificates Issued/Sukuk Issued
Other Liabilities
Tax Liabilities
Liabilities Included in Disposal Groups Classified as Held for Sale
TOTAL COMMITMENTS AND CONTINGENCIES

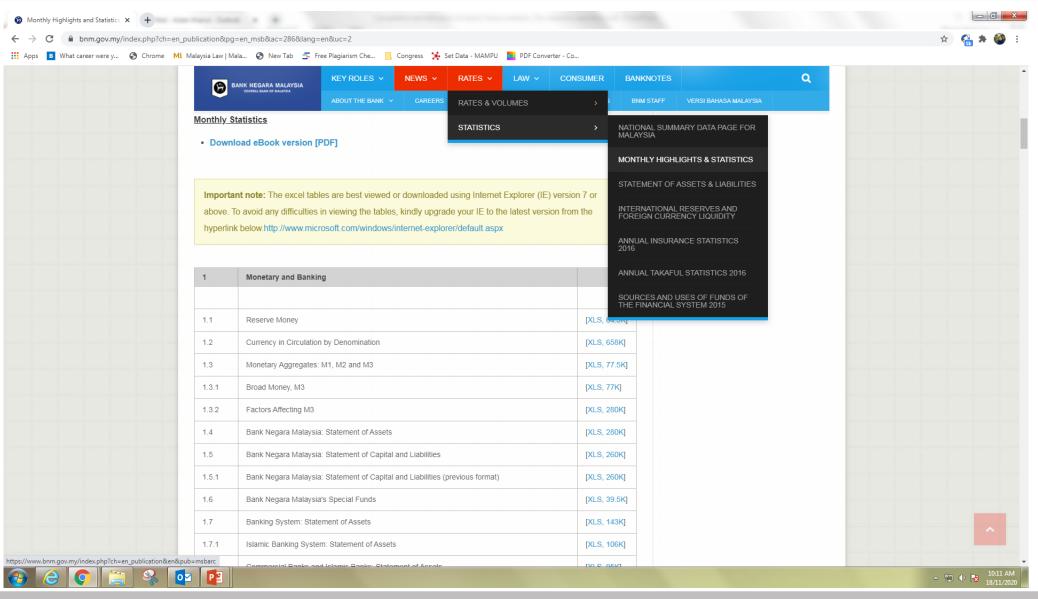


Net Interest/Finance	
Interest/Finance Income	
Interest/Finance Income from Loans/Financing and Advances	
Interest/Finance Income from Amount Due from Financial Institutions	
Interest/Finance Income from Financial Assets Held for Trading	
Interest/Finance Income from Held to Maturity Investments	
Interest/Finance Income from Available for Sale Financial Assets	
Through Profit or Loss	
Other Interest/Finance Income	
Accretion of Discount on Securities	
Miscellaneous Other Interest/Finance Income	
(-) Interest/Finance Expense	
Interest/Finance Expense on Deposits Accepted	
Interest/Finance Expense on Amount Due to Financial Institutions	
Interest/Finance Expense on Amount Due to Government	
Interest/Finance Expense on Subordinated Liabilities	
Interest/Finance Expense on Financial Liabilities Designated as Fair Value	
Interest/Finance Expense on Finance Expense on Converted Funds	
Other Interest/Finance Expense	
Net Fee and Commission	
Fee and Commission Income	
Fees and Commission Income Securities Issuances and Management	
Fees and Commission Income Securities Issuances and Management Underwriting Fees	
Underwriting Fees Brokerage Fees	
Underwriting Fees Brokerage Fees Portfolio Management Fees	
Underwriting Fees Brokerage Fees	
Underwriting Fees Brokerage Fees Portfolio Management Fees	
Underwriting Fees Brokerage Fees Portfolio Management Fees Other Fees Relating to Securities Issuances and Management	
Underwriting Fees Brokerage Fees Portfolio Management Fees Other Fees Relating to Securities Issuances and Management Fees and Commission Income for Corporate Advisory	
Underwriting Fees Brokerage Fees Portfolio Management Fees Other Fees Relating to Securities Issuances and Management Fees and Commission Income for Corporate Advisory Fees and Commission Income Assets Management	
Underwriting Fees Brokerage Fees Portfolio Management Fees Other Fees Relating to Securities Issuances and Management Fees and Commission Income for Corporate Advisory Fees and Commission Income Assets Management Fees and Commission Income Credit Commitments	
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Underwriting Fees Brokerage Fees Portfolio Management Fees Other Fees Relating to Securities Issuances and Management Fees and Commission Income for Corporate Advisory Fees and Commission Income Assets Management Fees and Commission Income Credit Commitments Commitments Fees Processing Fees Syndication Fees Guarantee Fees Service Charges & Fees Acceptance Fees Other Fees Relating to Credit Commitments	

Brokerage Expenses

SIUS: Bank Kegara Mala







THANK YOU





Make Sure You're
COUNTED

For More Info: www.dosm.gov.my www.mycensus.gov.my











