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SESSION 2: MINI PRESENTATIONS ON PRODUCER PRICE INDICES

DEVELOPING A PRICE INDEX FOR BANKING SERVICES IN THE USA (AND UK)

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Basic principles:

- **FISIM (Financial Intermediation Services Indirectly Measured)**
- **User cost framework**

FISIM

- **Indirect charges**
- **Pay/charge different rates of interest to lenders and borrowers**
  - **To cover costs and generate operating surplus**

User Cost Framework

Margin between:

- **accrued payments to the owner of an asset (such as a loan) and**
  - **opportunity cost of money**

Reference rate = opportunity cost rate of money (excludes intermediation services)

Applying principles to loans

Interest payments received by bank,

plus service charges,

less reference rate.

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Price of a loan:

$$\left[\left(\frac{\text{Earned interest income} + \text{Fees}}{\text{Average loan balance}}\right) - \text{Reference rate}\right] * \$1000$$

(For an entire portfolio of loans)

Applying principles to deposits

Reference rate, less

(interest payments to depositor less service charges)

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Price for a deposit:

$$\left[\text{Reference rate} - \left(\frac{\text{Interest payments} - \text{Earned fees}}{\text{Average deposit balance}} \right) \right] * \$1000$$

Note: same reference rate for loans and deposits.

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US approach:

- **Total interest payments and charges for an entire portfolio**
  - **(different types of portfolio, e.g. car loans, each with own weight)**
- **Calculation produces a rate, then multiplied by 1,000 to give a price**

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Possible UK approach:

- **Copy US approach**
- **Utilise data already collected by Bank of England ?**
- **Aggregate data only (no individual portfolios)**
  - **All commercial loans**

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PROPOSED PRICE INDEX METHODOLOGY FOR LOANS AND DEPOSITS
(DUMMY DATA SHOWN)

		QTR 1	QTR 2	QTR 3	QTR 4
LOANS					
A	Interest payments (£m)	2,000	2,050	2,150	2,200
B	Fees (£m)	70	75	80	80
C	Interest + fees = A+B (£m)	2,070	2,125	2,230	2,280
D	Balances (£m)	100,000	101,000	104,000	105,000
E	Effective percentage charged = C/D*100	2.070	2.104	2.144	2.171
F	Reference rate (%)	6.000	6.000	6.100	6.100
G	Ref rate per qtr (%) = F/4	1.500	1.500	1.525	1.525
H	Annualised service price (%)	0.570	0.604	0.619	0.646
I	**INDEX: LOANS (QTR 1 = 100)**	**100.0**	**106.0**	**108.6**	**113.4**

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DEPOSITS

K	Interest payments (£m)	500	500	500	550
L	Fees (£m)	10	15	20	20
M	Interest - fees = K-L	490	485	480	530
N	Balances (£m)	70,000	71,000	72,000	75,000
O	Effective percentage paid = M/N*100	0.700	0.683	0.667	0.707
P	Reference rate (%)	6.000	6.000	6.100	6.100
Q	Ref rate per qtr = P/4 (%)	1.500	1.500	1.525	1.525
R	Annualised service price = Q - O (%)	0.800	0.817	0.858	0.818
S	**INDEX: DEPOSITS (QTR 1 = 100)**	**100.0**	**102.1**	**107.3**	**102.3**
	WEIGHTED INDEX (70% loans, 30% deposits)	**100.0**	**104.8**	**108.2**	**110.1**