RENTABILITAS

## Rentabilitas

Meliputi penilaian atas
$\square$ kinerja rentabilitas,
$\square$ sumber-sumber rentabilitas,
$\square$ sustainability rentabilitas bank dan
$\square$ kecukupan manajemen rentabilitas bank

## Concept of Sustainable Banking

$\square$ What is a Sustainable Bank?
$\square$ 'A publicly or privately owned financial institution whose central mission is investment in a society that values human development, social cohesion and responsibility for our natural environment' (source: Global Alliance for Banking on Values).
$\square$ Generally adheres to the following principles:

- Using money as a tool for enhancing the quality of life through human, social, cultural and environmental development;
- Responsibility for the long term impact of efforts to improve interdependent environment and communities;
- Transparency, trust, clarity, and inclusiveness in delivering sustainable finance products and services.


## Concept of Sustainable Banking (cont')

$\square$ How do these banks conduct their business?
$>$ Financing projects with sustainable development goals
> Using their shareholder power to improve the social, environmental and governance performance of the companies in which they invest
$>$ Refuse investment opportunities based on ethical concerns
$>$ Provide for transparency and openness in their banking operations
> Show leadership through putting in place a sustainability policy within their own organisation

## Sustainable internal growth

A general rule is that if a bank can finance all of its capital needs internally without hurting its owners or stock price, it should do.
Retained earning are not free sources of capital (the cost of retained earning include the different between cash value of money today and cash received in future years.)
There are three variable that combine to determine how much of a bank growth can be sustained through the retention of earning:
1- the amount of capital the bank and its regulators determine to be adequate.
2- The earning the bank is able to generate .
3 - the proportion of these earning that is retained in the bank. (retained earning )

## Formula for calculating sustainable growth

(a) Sustainable growth $\mathrm{SG}=(\mathrm{PM}) \times(\mathrm{AY}) \times(1-\mathrm{D})$

$$
\text { EC/TA- }(\mathrm{PM}) \times(\mathrm{AY}) \times(1-\mathrm{D})
$$

(b) $\mathrm{SG}=\underline{(\mathrm{PM}) \times(\mathrm{AY}) \times(\mathrm{LM}) \times(1-\mathrm{D})}$
$1-(\mathrm{PM}) \times(\mathrm{AY}) \times(\mathrm{LM}) \times(1-\mathrm{D})$
(c) $\mathrm{SG}=(\mathrm{ROA}) \times(1-\mathrm{D})$

EC/TA $-($ ROA $) \times(1-D)$
(d) $\mathrm{SG}=\underline{(\mathrm{ROE}) \times(1-\mathrm{D})}$
$1-($ ROE $) \times(1-\mathrm{D})$
Where
$\mathrm{SG}=$ sustainable growth, or the annual rate of increases in average total assets that can be supported by internally generated equity capital.
$\mathrm{PM}=$ profit margin or net income after tax divided by total operating income .
$\mathrm{AY}=$ assets yield , or total operating income divided by total average assets .
$\mathrm{D}=$ percentage of after tax net income paid in cash dividends .
$\mathrm{EC}=$ average equity capital.
TA= average total assets .
$\mathrm{LM}=$ leverage multiplier , or average total assets divided by divided by average equity capital .
$\mathrm{ROA}=$ return on average total assets
$\mathrm{ROE}=$ return on equity
Notice: Equation (c) is the most common formula for calculating sustainable growth
Example p. 341

## The Effect of Capital Requirements on Bank Operating Policies

## Limiting Asset Growth

The change in total bank assets is restricted by the amount of bank equity

$$
\Delta \mathrm{TA} / \mathrm{TA}=\frac{\mathrm{ROA} \times(1-\mathrm{DR})+\Delta \mathrm{EC} / \mathrm{TA}}{\mathrm{EQ} / \mathrm{TA}-\mathrm{ROA} \times(1-\mathrm{DR})}
$$

Where

> TA = Total Assets
> EQ = Equity Capital
> ROA = Return on Assets
> DR $=$ Dividend Payout Ratio

EC = New External Capital

## Maintaining Capital Ratios With Asset Growth: Application

Case 1: $8 \%$ asset growth, dividend payout $=40 \%$, and capital ratio $=8 \%$.
What is ROA?

$$
0.08=\frac{\operatorname{ROA}(1-0.40)+0}{0.08-\operatorname{ROA}(1-0.40)}
$$

Solve for ROA $=0.99 \%$
Case 2: $12 \%$ asset growth, dividend payout $=40 \%$, and capital ratio $=8 \%$.
What is required ROA to support the $12 \%$ asset growth?

$$
0.12=\frac{\operatorname{ROA}(1-0.40)+0}{0.08-\operatorname{ROA}(1-0.40)}
$$

Solve for ROA $=1.43 \%$
Case 3: ROA $=0.99 \%, 12 \%$ asset growth, and capital ratio $=8 \%$.
What is the required $\downarrow$ dividend payout to support the $12 \%$ asset growth?

$$
0.12=\frac{0.99(1-\mathrm{DR})+0}{0.08-0.99(1-\mathrm{DR})}
$$

Solve for DR = 13.42\%
Case 4: $\quad$ ROA $=0.99 \%, 12 \%$ asset growth, capital ratio $=8 \%$, and dividend payout $=40 \%$.
What is the required $\uparrow$ external capital to support the $12 \%$ asset growth?
$0.12=\frac{0.99(1-0.40)+\Delta \mathrm{EC} / \mathrm{TA}}{0.08-0.99(1-0.40)}$
Solve for $\Delta \mathrm{EC} / \mathrm{TA}=0.29 \%$
$\Delta \mathrm{EC}=\$ 294,720$

## Maintaining Capital Ratios With Asset Growth: Application

| Ratio | Intitial Position | Case 1 <br> Initial 8\% <br> Asset <br> Growth | $\begin{gathered} \text { Case } 2 \\ 12 \% \end{gathered}$ <br> Growth: $\uparrow$ ROA | Case 3 12\% Growth: $\downarrow$ ROA | Case 4 12\% Growth: $\uparrow$ External Capital |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Asset growth rate (percent) |  | 8.00\% | 12.00\% | 12.00\% | 12.00\% |
| Asset size (millions of \$) | 100.00 | 108.00 | 112.00 | 112.00 | 112.00 |
| ROA (percent) ${ }^{\text {a }}$ |  | 0.99\% | 1.43\% | 0.99\% | 0.99\% |
| Dividend payout rate (percent) |  | 40.00\% | 40.00\% | 13.42\% | 40.00\% |
| Undivided Profits (millions of \$) | 4.00 | 4.64 | 4.96 | 4.96 | 4.665 |
| Total capital less undivide profits (millions of \$) | 4.00 | 4.00 | 4.00 | 4.00 | 4.295 |
| Total capital / total assets (percent) | 8.00\% | 8.00\% | 8.00\% | 8.00\% | 8.00\% |

$\square$ If bank management believes that dividends will not significantly affect the market price of the bank stocks, the preferable policy is to bay a reasonable cash
dividends and use typically low-cost retained earning to finance as much of the expansion as possible .
$\square$ On the other hand, if management believe that dividends will have an expected positive effect on the bank stocks price, the bank may gain from paying higher dividends and raising more of its needed equity capital by selling higher-priced common stock .

## Raising Capital Externally

$\square$ When a bank finds that it may need additional external capital, it must decide whether all of its capital should be common equity capital, or whether senior securities (subordinated debt or preferred stock).

Type Description
Capital notes Usually smaller-denomination subordinated debt at fixed rate with original maturities of 7 to 15 years .can be sold to bank customers .

Capital debentures

Generally larger (in denomination and total size ) subordinated debt at fixed rates and with original maturity of over 15 years a few issues have no interest payment and are sold at a deep discount .

| Type | Description |
| :---: | :---: |
| Convertible debt | Subordinated debt that usually convertible at the option of the debt holder into common stock of the bank at a predetermine price . Interest is usually 10 to $20 \%$ below the rate of straight debt : conversion price is 15 to $25 \%$ above stock market price . |
| Variable rate debt | Subordinated debt on which the interest rate varies with some interest rate index . |
| Option rate debt | Subordinated debt initially issued as a variable rate debt but convertible into fixed rate debt at the option of the debt holder during at least some period of the life of the debt. |
| Preferred stock | Sock paying a fixed rate ( nondeductible for corporate income tax )divituryubysudydytya cetaim on income and |


| Type | Description |
| ---: | :--- |
| Convertible <br> preferred <br> stock | Preferred stock that is convertible at the option of the <br> holder into common stock of the bank at predetermine <br> price . Issued at a lower rate and a higher conversion <br> price than straight issues |
| Common <br> stock | Residual but unlimited claim on income and assets of <br> bank : voting shares that elect boarder of directors . <br> common stock may be issued , however some new <br> shares are sold through dividends reinvestment plans <br> , |

Should all Capital be equity
Issue new capital in some market situation a bank cant sell new common equity because there are no potential buyers or situation in which existing bank, stockholders would be severely
penalized (generally be caused the common stock price in significantly below the book value ) if the regulators were to insist on an injection of new common equity funds .

## -Non callable preferred stock and convertible debt is used to raising capital externally .

-The restraint against using preferred stock generally come from bank management, because the dividends on preferred stock are not tax deductible as is interest on debt.
Financial leverage is usually more favorable for debt issues than for preferred stock issue .

- Preferred stock should be considered when :

1- the bank does not pay income tax.
2- the bank cannot sell either debt or common stock .
3- preferred stock rates, which can be fixed or variable are now low

A bank should evaluate three factors when deciding whether all capital should be equity capital.
1- the availability of the various forms of external capital .
2- the need for flexibility in issuing capital in future years .
3- the financial effect of the various forms of capital (such as leverage, immediate dilution and earning per share over long period ).

## Convertible debentures

Is an option available to some community bank, these debenture typically are sold locally in small denomination to bank friends, customers, and stockholders .
Bank regulatory authorities have criticized this sources circulates funds within the banking system .

- Some institutional investors don't buy common stocks from bank, but instead consider bank capital notes or debentures as an investment .

