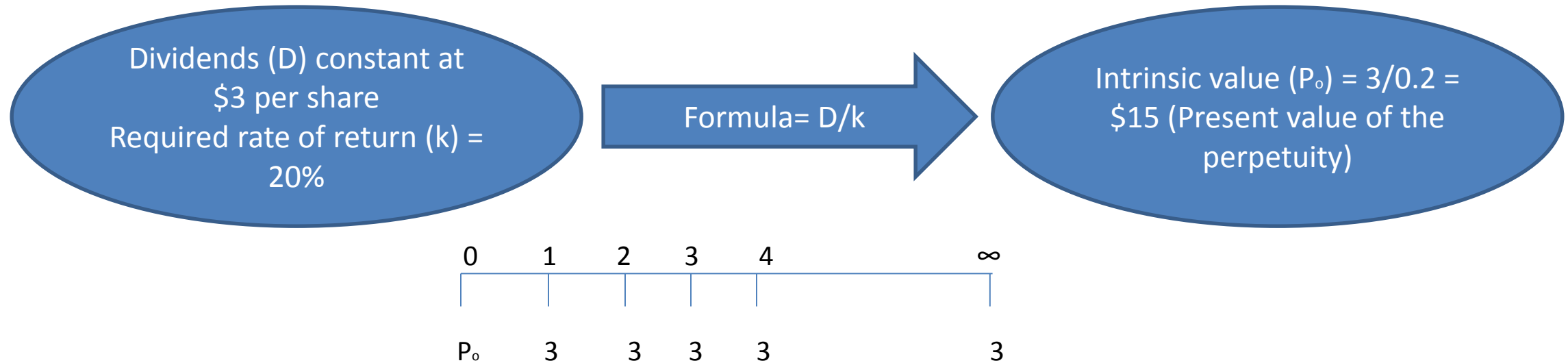


Dividend (cash flow) discount models

- Cash flow data can be employed from any point on it, sales/EBITDA/Net Income/EPS/Dividends depending on which series is more reliable for the company at hand.
 - Dividend Yield = $\text{Dividend} / \text{Price}$
 - Dividend Payout = $\$ \text{Dividends} / \$ \text{Earnings (per share)}$
 - Retention Ratio (b) = $1 - \text{Payout Ratio}$
- Basic idea is that intrinsic value for a stock is the present value of all future cash flows discounted appropriately.
- Interaction between dividend (or other) payout policy, buybacks, price targets and analyst forecasts

Valuation of constant cash flows



- Compare Intrinsic Value(15) vs. Market Price (\$35)
- **DECISION: DO NOT BUY**
- Typically used for preferred stock where dividend flows exist and are predictable
- Realistic specification of dividend policy for common stock ?
- What if dividends tend to grow?

Valuation of cash flows which grows at constant rate

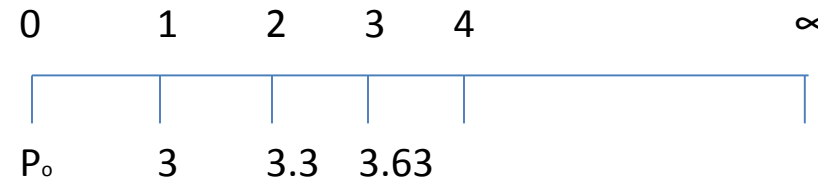
- Valuation of infinite cash flows

$$Value = \frac{D_1}{(1+k)^1} + \frac{D_2}{(1+k)^2} + \dots + \frac{D_\infty}{(1+k)^\infty}$$

assume that the dividends
grow at a constant rate of 'g'

$$Value = \frac{D_0(1+g)}{(k-g)} = \frac{D_1}{(k-g)}$$

- Say dividends grow at constant rate $g = 10\%$



- Intrinsic Value (P_0) =
$$\frac{3}{(1.20)} + \frac{3.3}{(1.20)^2} + \frac{3.63}{(1.20)^3} + \dots = \frac{3}{(0.2-0.1)} = \$ 30$$

© All Rights Reserved.

This document has been authored by Prof S G Badrinath and is permitted for use only within the course “Introduction to Investments” delivered in the online course format by IIM Bangalore. No part of this document, including any logo, data, illustrations, pictures, scripts, may be reproduced, or stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior permission of the author.