The stream of earnings approach

It is possible to develop a valuation stream approach not only with dividends but earnings. The definition overlooks the fact that firm is a separate entity and these profits cannot freely be withdrawn by shareholders. It also neglects the fact that additional capital must be acquired at a cost to maintain future earnings stream at specific level.

The capital to be raised in any future period is I(t) and its opportunity cost, no matter how financed, is P% per period thereafter. Hence, the value of the firm is given by:

$$(18)\ V(0) = \sum_{t=0}^{\infty} \frac{1}{(1+\rho)^{t+1}} \times \left[X(t) - \sum_{\tau=0}^{t} \rho I(\tau) \right]$$

Rewriting the formula, the formula reduces to the reference formula (9).

To conclude, the paper states that all these approaches converge to our reference formula where the results will be equivalent.

$$(9)\ V(0) = \sum_{t=0}^{\infty} \frac{1}{(1+\rho)^{t+1}} \times [X(t) - I(t)]$$