

# Homework — Book Values, Market Values, Inflation, and Currency

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*Required questions - turn in to the TAs*

Homework for Week 5. Each set belongs to the video of the same number. **One question in each set is required**; answer it and turn it in to the TAs. The rest are optional practice, and worked answers to those are published alongside the set. A full set takes about twenty minutes. Work them before the case session.

## Homework · 5.1

1. A firm bought machinery six years ago for ₦60M and depreciates it straight-line over ten years (so 6M per year). Comparable used machinery currently sells for ₦28M. State the book value (hint: subtract 6 years of depreciation), the market value, and the gap, and explain the direction of the gap.

## Homework · 5.2

1. Company A buys Company B for ₦500M, of which ₦180M is for identifiable assets. What appears on A's balance sheet, and what would have appeared if A had built B's business itself over ten years? Explain why the accounting treatment differs.

## Homework · 5.3

1. A firm has ₦600M of equity at market and ₦400M of debt. It borrows a further ₦150M and immediately pays it out as a dividend. Describe the direction of the effect on the market value of the existing debt, and explain who gains and who loses.

## Homework · 5.4

1. A Ghanaian treasury bill yields 21% and inflation is 18%. Compute the exact real return.

## Homework · 5.5

1. A Ghanaian firm exports to Europe and borrows in euros. Is it more or less exposed than a Ghanaian firm that exports to Europe and borrows in cedis? Explain.

## Homework · 5.6

1. A firm has total assets of ₦200M, naira liabilities of ₦90M, and a \$80,000 loan at ₦800/\$. Compute its equity. Then recompute if the rate moves to ₦1,400/\$, and state the percentage of equity destroyed.