Structured Note.  Assume that the current peso exchange rate is $1 to 10 pesos. You are considering the purchase of a one-year note with the following redemption value formula:

Redemption Value

\[ \text{Redemption Value} = \$10,000,000 \times \max \left[ 0, \ 1 + \ Peso_{\text{1 term}} \right] \times \left( \frac{10}{Peso_{\text{1}}} \right) \]

where:

\[ Peso_{\text{1 term}} = \frac{10 - Peso_{\text{1}}}{10} \]

and where:

\[ Peso_{\text{1}} = \text{spot exchange rate (pesos/dollar) in one year} \]

a) What is the payoff of this note for the following spot exchange rates of the peso in one year?

i) $0.05/peso

ii) $0.10/peso

iii) $0.15/peso

iv) $0.20/peso

b) Briefly describe this note in terms of vanilla instruments such as bonds, forwards, or options.