Chapter 12

Why—or When—Should we Hedge our Currency Exposure?
Overview

Why/When Hedge Exposure?

P. Sercu, *International Finance: Theory into Practice*

Overview

How the Hedge can Interact with Other Cash Flows

Financial Distress
Hedging May Reduce Agency Costs
Hedging may Reduce Expected Taxes

Better In/External Information

Frequently Asked Questions
Won’t Home-made Hedging Do?
Hedging makes the Currency of Invoicing Irrelevant?
Hedging may be Costly
Hedging Affects Tax Shields?
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Main Q&A

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Hedge Interacts with Cash Flow

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i-FAQs

What have we learned?

- **Main Issue:** how can a zero-value contract add value?
  - The $\text{PV}_t$ of $\tilde{S}_T - F_{t,T}$ is zero; but
  - the hedge’s pay-off may also interact with other cash flows in the firm—e.g. reduce chance of financial distress
  - if this change is beneficial, the interaction caused by hedging adds value

- **Won’t MM-style home-made hedging do?**
  - shareholder can just buy/sell $\tilde{S}_T - F_{t,T}$, not the interactions it has with the firm’s cash flow
  - etc
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Financial Distress

◊ **Direct Costs**

▷ receivers, lawyers, assessors, and courts
▷ destruction of the firm’s clientele and reputation

◊ **Indirect costs:** even the mere risk of future distress is harmful:

▷ sales fall, if after-sales service and product warranties matter
▷ employees quit—the best first—unless you pay extra
▷ credit lines canceled / Loan covenants can trigger repayment / extra spread
▷ suppliers cancel credit, demand cash before delivery

Conclusion: If hedging reduces the expected financial distress costs, it adds value

Also agency costs (./.) are often linked to financial distress:
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Hedging May Reduce Agency Costs

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▷ The problem: When close to bankruptcy, shareholders may make decisions that reduce the value of the firm but make them better off:

- undertake negative-NPV risk-increasing projects (gambling)
- refuse positive-NPV but risk-reducing projects

Example (gambling):

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Hedging May Reduce Agency Costs (2)

Managers v Owners

- Managers’ human wealth is exposed to firm’s risks
- In the absence of hedging they may seek risk-reduction by refusing positive-NPV but risky projects
- Hedging may reduce the conflict of interest
Hedging may Reduce Expected Taxes

 ◊ **Progressive Taxes**

**Example:** Income ≤ 100 taxed 20%, rest 30%

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- tax loss carry forward: you wait at least one year for a refund, and maybe forever
- tax loss carry back: you get a refund, but it’s limited; rest must be carried forward

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- One can report profits with less noise ⇒ better internal decisions
- Clearer picture is signaled to outsiders (financiers)—and Wall Street does like predictable profits
- There are alternatives, though
  - internally report profits also on an as-if-hedged basis
  - shift all exchange risk towards a reinvoicing center (which may/may not hedge)

Note: other gains of a reinvoicing center include
- reduce hedging transactions through netting
- economies of scale in costs (e.g. pooling), search costs; division of labor
- use tax havens or special tax status (DDCy, BCC)
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- **The crucial part is missing**
  - Shareholder just adds/eliminates \( \tilde{S}_T - F_{t,T} \), and
  - misses the interactions that are the whole point of hedging

- **Even if hedging were just additive** home-made hedging would not work equally well:
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  - Scale economies make corporate hedging superior
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The Currency-of-Invoicing (non-?)issue

◇ **Radical Young Turks’ point of view:** “currency of invoicing is immaterial”

Giovanni wants to import a Toyota:

▷ **Mr Toyota ask JPY 2m 60 days.**
  Giovanni agrees and immediately hedges at JPY/EUR 125 60 days, thus locking in \(2m/125 = \text{EUR }16,000\) 60 days.

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◇ **Conclusion:** currency of invoicing does not matter if
  – there is no delay between price quote and decision to buy
  – both sides have access to the same rates

By implication, the currency of invoicing may matter if/because of delays or differential costs.
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◊ **Delays?**

▷ **Catalog or List Price:** you cannot hedge perfectly because you do not know who will buy how much at what time

◊ **Delays and costs:** the international tender

▷ Traditionally: in buyer’s currency
  – if bidder hedges, the risk is that ...
  – if bidder does not, the risk is that ...
  – forward-to-tender contract is costly

▷ Alternative: let every supplier chose his/her HC; the buyer choses and immediately hedges using a regular forward—no delay issue!

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Hedging Often is Costly?

Whom to believe?: “You said forward hedging is free, but my accountant tells me that it has cost me 2.17m.”

- 2.17m may be the *ex post* loss from hedging.
  - This is just bad luck—not a cost with an *ex ante* PV.

- 2.17m may be the *forward discount* on a hedged A/R (or the *premium* on a hedged liability).
  - Not a cost either, just an accounting fiction that follows from translation at the spot rate.

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</tr>
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Example

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>at $r$:</td>
<td></td>
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<tr>
<td>A/R (Fc 2,500)</td>
<td>2,250</td>
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Why/When Hedge Exposure?

P. Sercu, *International Finance: Theory into Practice*

Hedge Interacts with Cash Flow

Better In/External Information

i-FAQs

Home-made Hedging?

Hedging v Invoicing Policy

Hedging Affects Tax Shields?

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Financial Distress
Hedging May Reduce Agency Costs
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Better In/External Information

In Frequently Asked Questions
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