LECTURE 7.5

AUTHORITY STRUCTURES

FLAT VERSUS HIERARCHICAL STRUCTURES

What type of decision making structure should a firm adopt?

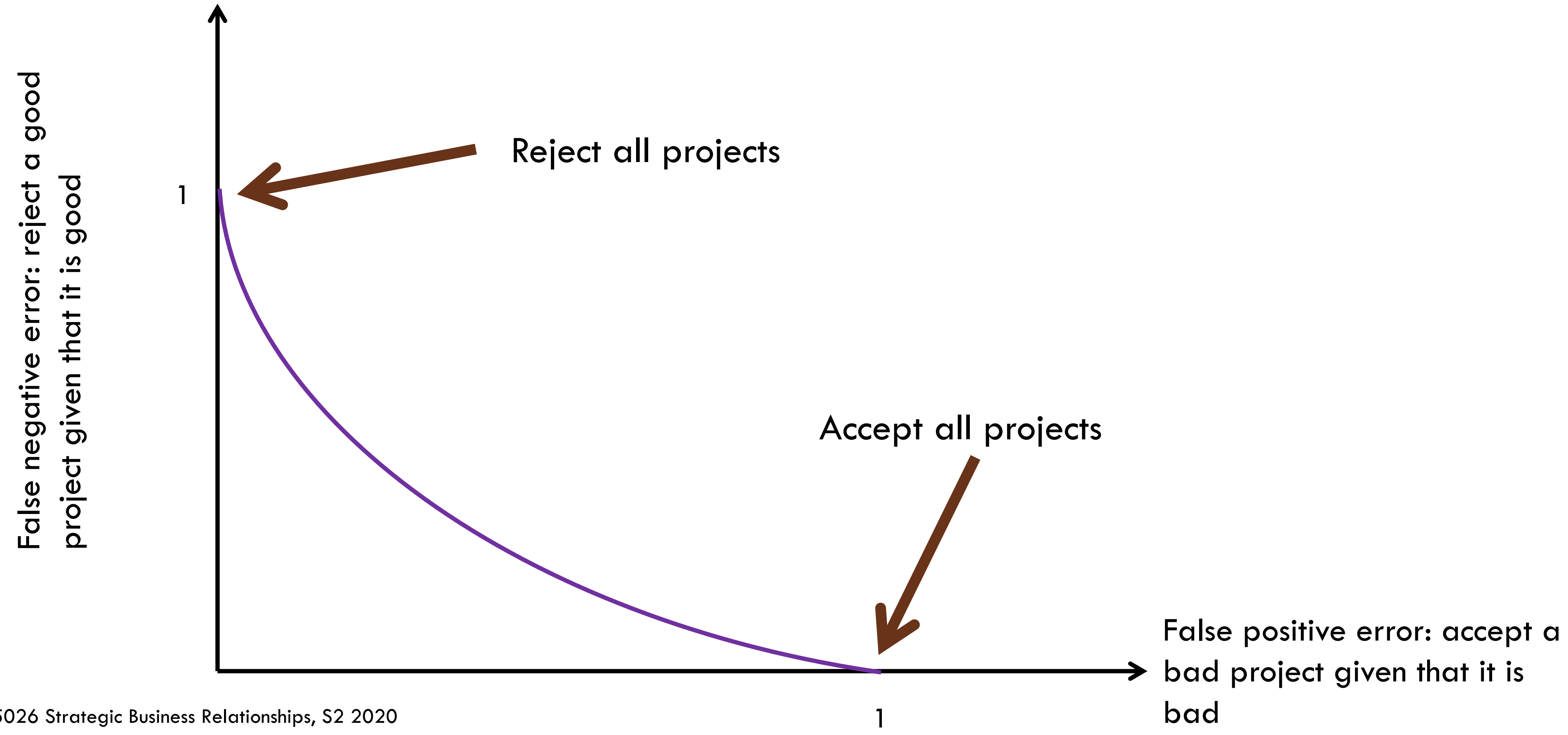
- Flat structures give individuals control over decision making.
- Hierarchical structures allow ‘higher levels’ to veto lower level decisions

An organisation’s structure influences the types of error made The error trade-off:

- False positive: accept an unprofitable option.
- False negative: reject a profitable option.

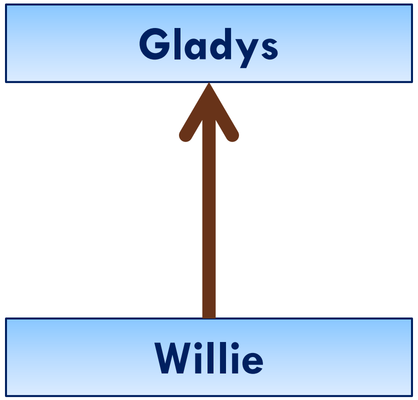
It is always possible to avoid one type of errors. ‘Always reject’ means there is no false positives; ‘always accept’ means there is no false negatives.

THE ERROR TRADE-OFF



AUTHORITY STRUCTURES

Hierarchy



Under a hierarchical structure, the lower level employee makes recommendations that are accepted or not. That authority lies 'further up' the hierarchy with Gladys.

Flat

Under a flat structure, both employees can make a decision to accept or not.

AUTHORITY STRUCTURES

Hierarchical:

- Reduces false positives (accept a bad project): projects are scrutinised by more people
- Increases false negatives (reject good proposals): decision making is slower, so fewer projects are evaluated

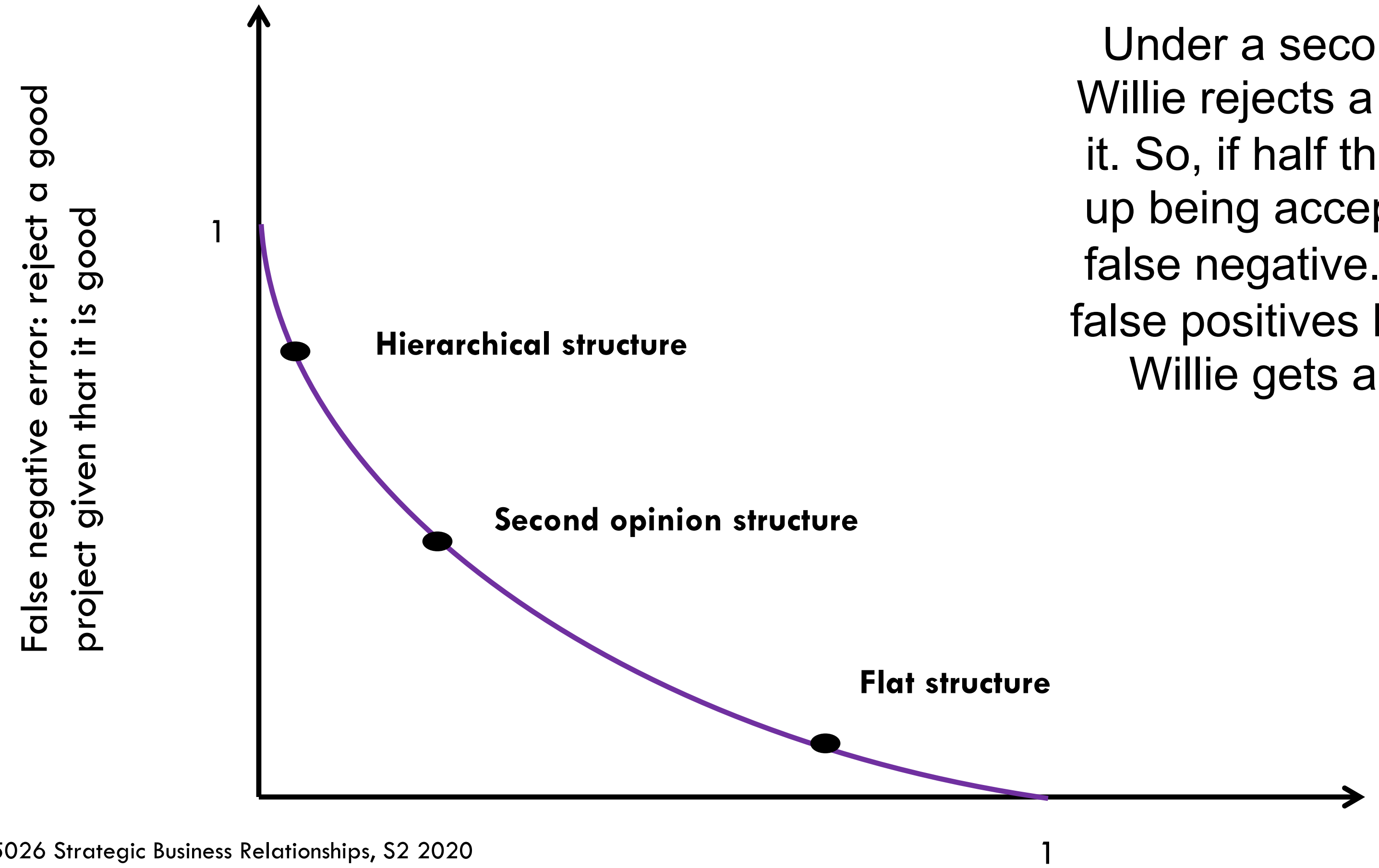
Flat:

- Reduces false negatives
- Increases false positives

An alternative might be a ‘second opinion’, whereby both review all projects:

- Agreement means decision is made.
- Disagreements resolved by some other rule.

AUTHORITY STRUCTURES

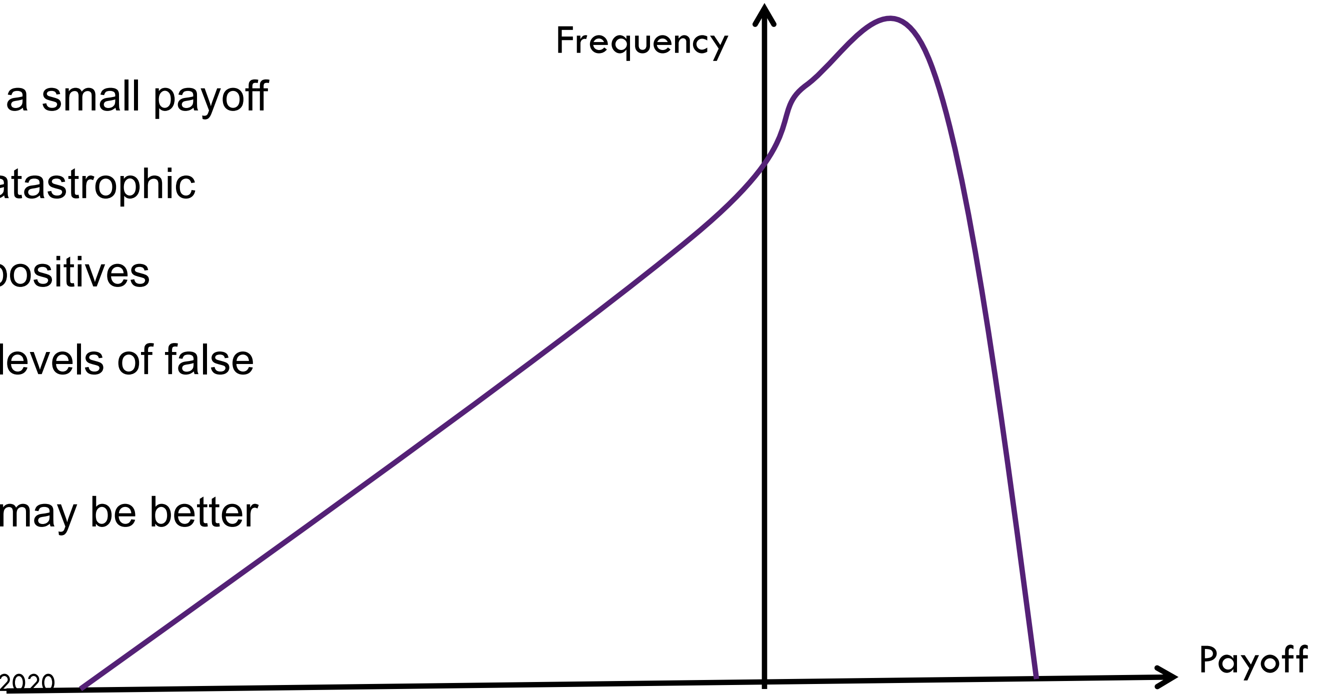


Under a second opinion structure, even if Willie rejects a proposal Gladys still reviews it. So, if half the time the good projects end up being accepted, then there will be fewer false negative. But there may also be more false positives because a project rejected by Willie gets a second look and might be accepted.

AUTHORITY STRUCTURES: PAYOFFS

Consider a firm facing a small upside risk and a large downside risk.

- doing the job well gives a small payoff
- doing the job badly is catastrophic
- want to minimise false positives
- willing to accept higher levels of false negatives
- a hierarchical structure may be better



AUTHORITY STRUCTURES: PAYOFFS

Example: $bn loss in the case of Exxon Valdez where alcohol was a consideration. The ‘project’ here is deciding to proceed before being sober.

- Want to minimise false positives (accepting an unprofitable ‘project’) and willing to accept higher levels of false negatives (rejecting profitable options).
- Proceeding while intoxicated and having an accident is a false positive (i.e. accept the ‘challenge’ of going through straits even though it leads to an accident)
- Sobering up before proceeding when proceeding would not have led to an accident is a false negative (reject proceeding even though you may make it through the strait without an accident)

In this situation wat to reject false positives because they are so costly, therefore a hierarchical structure is better.

AUTHORITY STRUCTURES: PAYOFFS

Consider a firm facing a small downside risk and a large upside risk.

- Big payoff to a good job
- Small cost to a poor job (e.g. investment in project is limited)
- Want to minimise false negatives
- A flat structure encourages creativity. Individuals have the opportunity to make decisions. Think about start up firms where there are opportunities that can potentially lead to large payoffs.