Teach Yourself:
Economic Evaluation:

2n: So how much do we bid for the business?

The purpose of this module is to …

Level 3: Decision making

Look briefly at how much to bid for a business or project

Level 2: Evalua

Level 1: Hands-on economic modelling

So we want to buy a business or project! Our comprehensive evaluation comes up with an NPV of $200 million. But how much do we bid?

This is impossible to answer.

It is a matter of judgement and experience in the field.

The seller's perspective

Equally important as assessing the business/project, is assessing the seller. There is a saying that *"when negotiating to buy you should get to know the seller as well as you know yourself."*

In parallel with assessing the business/ project you should be investigating the seller. Research the Internet and the industry. Talk with people who know the seller.

1. What is the true reason for selling?
2. What is its financial status?
3. What is its urgency?
4. How much does it think the business/ project is worth?

Most importantly –

5. What are the personal motivations of the people selling? These may be key!

State of the world economy

Years ago when the resources industry was awash with money and everyone wanted to grow , people often looked at the $200M NPV as the starting point. They would search for ‘blue sky’ or ‘strategic reasons’ to pay substantially higher.

Now-a-days money is much tighter and people look to pay less. Some have turned to the following method.

Status of the project /business

One method of deciding how much to bid is to rate the maturity of the project /business. In the following example the percentages given are illustrations: they are not to be taken as the appropriate levels.

Illustration of the approach	% of NPV
Concept stage	70%
PreFeasibility	75%
Feasibility	80%
In construction	85%
Early in life cycle	105%
Late in life cycle	90%

There would not be any science or mathematics underlying these percentages but more a guestimate or feeling based on experience and similar transactions in recent times.

I am open minded about this approach because the NPV should already take into account the risks inherent in the development stages ahead. The NPV should be risk adjusted. But it may be useful when only a single 'mid case' NPV is calculated? It certainly provides a framework for discussion.

Status of the project /business

But the seller would have a different perspective. It would see the $200 million as representing the value today after risks. As an illustration it might see the 'fair' price as

Illustration of the approach	% of NPV
Concept stage	120%
PreFeasibility	120%
Feasibility	120%
In construction	120%
Early in life cycle	120%
Late in life cycle	120%

Competitors' bids

It is likely that when bids for a project/business are received, that they would cover a range.

- *A low one , perhaps from a company hoping for a bargain – just in case no-one else bids higher*
- *A few clustered together because these companies have similar price forecasts, exchange rates, production, costs, discount rates, etc*
- *One slightly higher because it is the natural buyer – it has similar operations nearby and could integrate and get synergies.*
- *A high one from a company whose valuation has a mathematical error because it was not audited properly or because the specialists got lost in sophisticated, highly mathematical computer generated numbers. During negotiations the error is realised and the bid is withdrawn ← this probably happens more with ego driven teams.*
- *A high bid where the executives are driven by doing a deal and getting a bonus. (see later)*

NPV and other measures

Too many people incorrectly regard NPV as an objective and true measure of value. The error of this thinking is exposed in the 'Level 2 Modules' on NPV

Most of these mistaken people would have a working knowledge of how NPV is calculated.

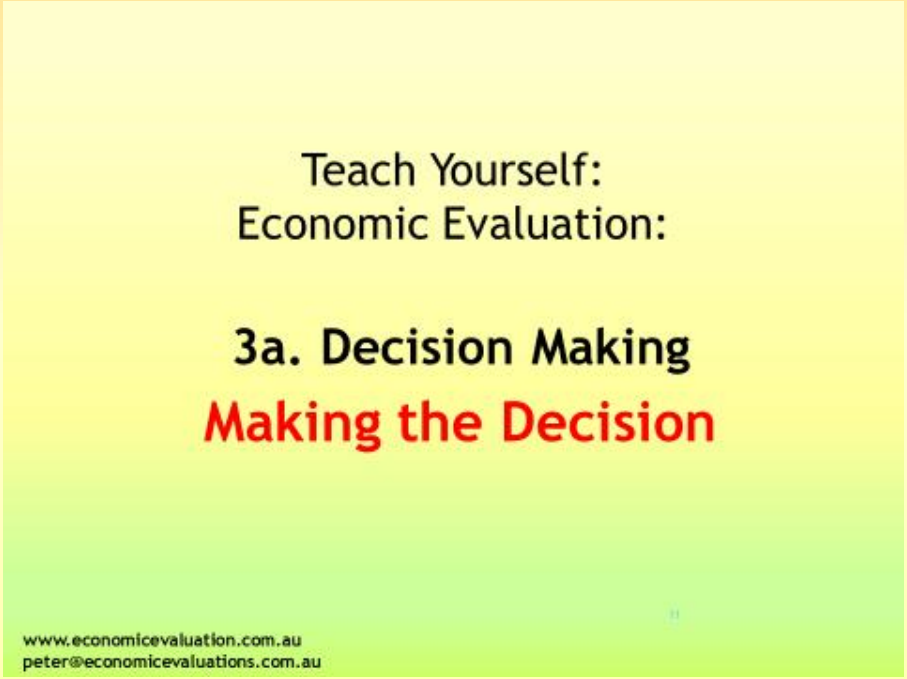
They would be used to everything around the business being computed and think of NPV being just another definite result.

They do not pause to think through NPV – As has been discussed in the Level 2 Modules, NPV is nothing more than the mathematical expressions of a whole lot of opinions. The most important often being from someone ('in the backroom') forecasting prices and exchange rates.

NPV is nothing more than one set of opinions.

So it is sensible to complement NPV with other metrics

The module in Level 3 “Making the Decision”



has the following slide ...

1. A basket of measures …

The basket of economic measures could include:

1. NPV, IRR, Payback
2. The full range of possible outcomes with risk weightings
3. The economic health of the underlying business, regardless of ownership
4. The outcomes for each entity in a joint venture
5. The outcomes for other stakeholders, such as government, community, minorities
6. Key parameters/assumptions and their impacts/risks
7. The flexibility of the project to be able to adapt to severe improvements and severe deteriorations in business conditions and to the resource,
8. Minimum prices to avoid bleeding cash compared with history and forecasts
9. Optionality if the project proceeds and does not proceed - probability weighted
10. Position on the industry cost curves
11. Competitive advantages and competitive weakness of the project/business
12. Status of the industry - maturity, relative strengths of sellers/buyers

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Here are eleven more ways of assessing a business/project.

NPV is a very useful and a prime measure but only one of a basket.

Ounces of gold or tonnes of copper in the ground

Some people like to value resource businesses/ projects by the amount of metal in the ground: -

1. For example gold projects often are valued by how many ounces are in the ground in Reserves or Resources. They use recent transactions in the gold industry to say that gold in the ground has been valued at between US$xx per ounce and US$yy per ounce. The business/ project under consideration is related to similar ones across this range and given $kk per ounce * ounces in Reserves = US$ XXX million.

2. The same is done for copper, zinc, lead, diamonds, coal, iron ore, ... etc

3. I have extreme reservations about this method and cannot recall ever using it. It is so broad brush in its understanding of the business/ project as to be very unreliable.

4. The 'similar" businesses/ projects might at first seem reasonable, but what about the cumulative impact of all the subtle differences in production rate, rock hardness, slope angles, waste ratio, head grade, minor elements, contaminant chemistry, recoveries, operating costs and private royalties? In Queensland lies one of the world's biggest undeveloped copper deposits – by the above method it is worth US$ hundreds of millions. But its NPV and market value are tiny.
   - Whenever you read some metal's resource is the largest undeveloped deposit in the world be wary – there is some major reason as to why

5. It is perplexing how popular this valuation method has become.

Price to ride out market troughs

I am a great believer in understanding what combination of future market conditions is needed to make the business/project break even: -

- If we acquire the business/project what price & forex rate is required for it to achieve at least zero net cash flow on a year by year basis
- What price & forex rate is required to achieve zero NPV?
- How do these two prices/forex compare with the graph of prices/forex in real terms for the past 30 years?
- How deep and long were the troughs in the market in the past? Use Real terms and you might find the result a bit worrying!

Are you being brave or conservative?

- It is pretty important for your new business/project to be able to ride out market downturns no matter how deep and long they are likely to be.

If the business/project has good margins and can ride out troughs its NPV will be relatively high anyway. Perhaps it deserves a higher bid.

If it is running close to breakeven then its NPV will be relatively low anyway. Should you bid? Will it survive downturns? Can you introduce major cost savings or price increases that present owners can not?

Natural owners

Frequently when a business/ project is available to purchase one potential bidder is the 'natural owner'. For example a zinc deposit is for sale and close by is the natural owner with an operating zinc mine and concentrator.

- The natural owner should be able to pay more for the deposit because its development costs and risks should be much lower.
- The seller would hope to share some of these savings in its selling price
- But how much sharing depends on whether the seller urgently needs cash or the natural owner urgently needs a new ore source.

You can be working on a competitive bid and think *"Why are we bothering? ABC Ltd is the natural owner. We are just being used by the sellers to create competitive tension."*

To which the reply is *"Lets get in to the data room, get the numbers and find out about our competitors"*

Synergies

An acquisition by a natural owner and the merger of two like companies can bring about substantial cost savings, or synergies. We read about them regularly in the media. These can be a valid driving force for transactions.

- Some synergies will be 100% genuine where two identical separate functions are reduced to one.
- Some will be tenuous. Some companies set targets for cost savings for their managers that are rewarded with big bonuses. Somehow the targets are achieved – at least on paper after lots of calculations and extrapolations. So be wary about forecasts of cost reductions in nebulous areas when creating your evaluation.

Think about probability weighting each major synergy inside your NPV.

When bidding be cognisant how much value is being ascribed to synergies.

Sound industries ...

I vividly remember working on a major project that appeared to have good economic returns, low operating costs to ride out market troughs, manageable risks and good fit with the existing businesses. As happens I became emotionally involved and my ego wanted it to be completed.

It was a huge investment but at the last minute the top management/Board decided against what appeared to be an attractive investment. *They decided that the industry itself was in long term decline and so this amount of money should not be invested in that industry.*

It is now years later.

They were right!

Bad incentives to do a deal ...

There is a vast graveyard of bad deals: of bad acquisitions.

One major cause has been the way Company Boards have offered their senior management huge bonuses if they grow the company.

- *The company searches for acquisitions – just as their competitors are doing.*
- *They find that the really good projects/businesses are not for sale or too expensive.*
- *They find the companies holding poor businesses are willing to talk.*
- *They do a valuation using production, prices, synergies and cost savings that are somewhat ambitious.*
- *They negotiate a deal, acquisition or merge that gets the executives the bonuses – even if not so good for the shareholders.*
- *Big celebrations and lots of hand-shaking.*
- *Big bonuses paid to executives.*

- *A few years later it is a disaster or a quagmire. The shareholders have lost out.*

Why do Boards continue to do this? Why give senior management bonuses to do their job? At the minimum, Boards should pay bonuses after say five years on the basis of an undisputable increase in the long-term value of the company brought by the deal. (and not on production levels)

When bidding for a business/project remember there are two driving forces:

1. what is best for the company
2. what is best for the individuals ← ego and bonus

Which one will be stronger?

That is where we need seasoned professionals who have not been directly involved (but who know the industry and our business), to stand back and say:
"Yes this project really fits our business, our skills, has unvalued upsides and we probably can pay $....."

or

"You have done an excellent valuation, you know it extremely well but this is wrong for us because ..."

Boards are supposed to do this but they can be mislead – especially if the chief executive is a driving force.

End