

The Basis of Value and the Approach

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Formal definition. A *basis of value* sets out the kind of value that an assignment is required to produce; it states which value is sought, the conditions that define it, and for whom it is sought. It occupies the second level in the hierarchy explained in *The Purposes of Valuation* and is selected according to the assignment’s purpose; it also determines which evidence is acceptable. The basis of value must not be confused with two closely related concepts. A premise of value refers to the assumed situation in which the asset is transferred, for example an open market, a bulk sale, an orderly liquidation, a forced sale, or continued use (the property kept in its present use); a bulk sale means all the units sold together to one buyer. Liquidation value is a basis; orderly liquidation and forced sale are the premises (sale conditions) under which it is estimated. An approach to value is the general procedure (sales comparison, cost, income) employed to arrive at a value after both the basis and the premise have been established. In American practice, these approaches are called sales comparison, cost, and income (in the International Valuation Standards: market, income and cost). The approach does not fix the basis; instead, each approach gives an *indication of value*, and the kind of value indicated will depend on the assignment’s definition and on the inputs that have been chosen.

Intuitive framing. The word “value” in a column heading is where the confusion this entry addresses usually starts. For instance, where an appraiser designates a column as *Indicated Value by the Income Approach*, the method in question is made clear, but the meaning of the figure is still obscure. The appropriate heading should be *Indication of Market Value by the Income Approach* since this makes the result clear. If the column in question is based on different assumptions it might indicate investment value; yet the page contains no indication to show the difference between the two cases.

In the cost approach, using shorthand expressions can be more misleading than simply omitting them. The term “cost value” wrongly brings together two different concepts. Cost, price, and value are all distinct: cost refers to the amount that is spent or has to be spent, price is the amount actually paid in a particular transaction, and value is an opinion as to what would be paid under given conditions. This distinction existed before the present standards were introduced, and every system examined in this entry respects it. Estimates of reproduction cost new and replacement cost new are cost estimates; they become an indication of value only after the land value has been added and the accrued depreciation has been deducted. The kind of value indicated depends on the type of depreciation taken into account and on the components included.

Where appraisers encounter it. Appraisers speak of a “cost value” and an “income value”, but not of a “sales comparison value”: they speak of the market value indication per the sales comparison approach. The shorthand arose where it does harm: the cost and income approaches can each be used to estimate more than one kind of value, so naming the approach does not say which value was found. The sales comparison approach most often indicates market value, and its result is named for the value it indicates.

Each approach can be used to estimate more than one kind of value, and the range differs from approach to approach; that difference is the subject of what follows.

The sales comparison approach is the one that is most clearly defined; it establishes value by looking at the prices paid for similar properties and then making adjustments for the differences between them. If the comparable sales in question are arm's-length transactions which meet the conditions that define market value — among them, typically motivated parties, reasonable exposure to the market, and cash or cash-equivalent terms — then the result shows what the market value is. This is the approach's usual use. It can likewise be used to establish fair market value in the cases of estates, gifts, and some tax matters, even though the legal definition differs, provided that the transaction evidence is similar. In such instances, the definition comes from tax law (for United States estate and gift tax, the Treasury regulations) rather than from appraisal practice. It supports the assessed value in mass appraisal when it has been adjusted to a statutory standard, and it supports liquidation value when the comparables themselves are distressed or forced sales and the valuation is based on the assumption of liquidation. It should be noted, however, that ordinary market sales do not result in a liquidation value.

The income approach is applicable in the widest variety of situations because each of its inputs can be taken either from the market or from a particular party. Estimates of market value are obtained from market rent, market vacancy, market expenses, and a market-derived capitalization or discount rate. Conversely, an individual investor's expectations as to rent, his or her expense arrangements, the length of the holding period, the financing arrangements, tax position, and the rate of return required result, by means of the same arithmetic calculations, in an estimate of the investment value for that investor. With the same arithmetic it can also estimate use value — the value of the property for a particular continuing use rather than its highest and best use — by capitalizing the income from that use. It also permits the calculation of going-concern value, this involving the income from the operations of a business which is not separated from the real estate, and assessed value, in which a statute prescribes the use of an income method. On its own, however, it does not produce insurable value, which is a cost-based figure, nor liquidation value, which requires a different set of assumptions and a different kind of evidence.

In the range of bases it can support, the cost approach falls between sales comparison and income. It values the land at its highest and best use as if vacant, adds the replacement or reproduction cost new, and deducts the depreciation the market recognizes, to arrive at market value. It is most appropriate for use for new construction and for special-purpose properties that do not sell frequently. If the assignment's definition of value is changed to insurable value, the same procedure gives insurable value.

The insurable value is the amount required to replace the improvements that are covered, often without including the land, the site work, and the below-grade foundations, and with depreciation either partially or completely excluded as stated in the policy. This is the most typical non-market use of the method. Use value and assessed value are obtained only when a specific definition or a statutory cost model calls for them. The cost approach does not give investment value or liquidation value.

Subdivision development analysis is one of the land valuation techniques (with sales comparison, allocation, extraction, land residual and ground-rent capitalization); it is not a fourth approach. In procedure it is a discounted cash flow, so it belongs with the income approach, not the cost approach. It projects the prices at which the lots will sell; from them it deducts the costs of development, the costs of holding the lots until sold, and the developer's profit; it then discounts what is left over the absorption period (the time needed to sell all the lots). This is a form of yield capitalization (discounting a stream of future income). Although the worksheet may list a number of cost figures, sorting the approach by line items would wrongly imply that it is a cost approach. Even when the approach is clear, the basis cannot be read from it; the inputs decide it, as the next paragraph shows.

The basis of a subdivision analysis is set by its inputs: market lot prices, absorption rates, development costs, a market-supported entrepreneurial incentive and a market-derived discount rate produce the land's market value. On the other hand, a developer's own profit requirements, the way they have arranged their financing, their holding period, their tax position, or their absorption assumptions all result in that developer's investment value, even though both models are based on the same structure. In a developer's own model, the entrepreneurial incentive line shows that developer's required profit; that line is where a market-value analysis most easily slides into investment value.

In subdivision work both the retail value of the completed lots (sold one by one) and the bulk value of the inventory (sold to a single buyer who takes on the sell-out risk) are market values; they differ in premise, not in basis of value.

Why it matters for defensibility. How wide an approach's range of bases is depends on how much of its input comes from observed market behavior and how much from definitions set by the assignment. The sales comparison approach draws its inputs almost wholly from actual transactions, with none specific to one party. The income approach makes use of both inputs taken from the market (market rent, market rates of return) and inputs specific to one party (that party's required return, financing, tax position), which in turn widens its range. The cost approach occupies an intermediate position: the cost new is largely a matter of fact, while what is included and what depreciation is taken are set by the definition in the assignment.

It follows that the greater the proportion of a method's inputs that come from the assignment rather than from the market, the more the justification given depends on the appraiser's judgment and the more it can be challenged. A Swiss decision summarized in this issue's Recent Court Decisions points the same way. In case 1C_224/2025 (24 September 2025), the Swiss *Bundesgericht* stated that, in the case of formal expropriation (an outright taking of the property, as opposed to a regulatory restriction, which Swiss law calls material expropriation), market value is mainly determined by comparison; it dismissed the income approach since its results depend on the capitalization rate and on rents which may not be attainable; in this case, two properly adjusted comparable properties were enough.

This principle also holds true in the statistical context used by this department since *Hedonic Regression* (Issue 1). In the case of hedonic regression, the basis depends on the sample and the way the model is specified. If the model is based on arm's-length open-market transactions, it will estimate market value; but if it is applied to distressed sales or to transfers between related parties, a different result is obtained, even though the form of the equation is the same and the diagnostics and fit statistics may look just as good. The method itself does not change, yet the basis changes and this is not recorded in the output.

Neither fixes the other: the approach does not determine the basis, and the basis does not determine the approach unless a statute says so, as Poland's does. Two statutes reported in this issue illustrate both of these features. The Austrian *Liegenschaftsbewertungsgesetz* (LBG, BGBl. Nr. 150/1992, the Federal Law Gazette) fixes the basis but leaves the choice of approach open. In court proceedings, unless a statute or an agreement provides otherwise, the value to be found is the *Verkehrswert* (the statute's term for market value; § 2, para. 1), which is defined as the price that would normally be obtained through a sale carried out in honest business dealings (§ 2, para. 2). Sections 3 to 7 describe the comparative, income and cost approaches and allow the court-appointed expert (appraiser) to select among them according to the state of science and existing market practice.

Poland also shows the other side of this relationship. Under the *ustawa o gospodarce nieruchomościami*, compensation in cases of expropriation is measured by market value (art. 134(1));

replacement value (*wartość odtworzeniowa*) is used only where property of that kind does not trade, so that no market value can be found (art. 135(1)), the land in such cases being valued separately from the buildings and other improvements. Here the statute goes further than Austria's: art. 152(3) also ties each basis to approaches — market value to the comparative or income approach, replacement value to the cost approach. The two values are not in competition; the Supreme Administrative Court (*Naczelny Sąd Administracyjny*, NSA), in a tax case (III FSK 560/24, 10 April 2026), made this point clear by stating that market value and replacement value are not opposing measures. A statute may choose the basis, specify the circumstances in which a different basis applies, and, as here, tie each basis to an approach.

Worked appraisal example. One parcel, one effective date, one approach, two figures.

A corner site of about 12,900 square feet (1,200 m²) on a road due to be widened. The widening was announced two years ago; since the announcement, sites along the corridor have traded at higher prices, because a wider road brings more traffic and visibility. Two assignments arrive on the same day, both asking for a figure their instructions call market value, both to be answered by sales comparison.

The lender's instruction. Value the site as it stands, for mortgage security. Three arm's-length sales in the corridor, all post-announcement, adjust to \$540,000. The comparables carry the higher price and so does the subject; nothing needs to be taken out, because the lender is being told what the site would fetch tomorrow.

The expropriation assignment. Value the same site on the same date for compensation, under a statute that disregards the effect of the scheme (in United States practice, the project) itself on value (see *The Scheme, and Effects on Value*). The same three sales, the same adjustments, and then one more: the corridor price difference attributable to the widening, measured at 12 % against sales outside the corridor, comes out. The indication is $\$540,000 \div 1.12$, or \$482,000 to the nearest thousand.

Two figures, \$58,000 apart, from the same approach, the same comparables, the same date and the same premise of an open-market sale. No arithmetic error separates them and no adjustment is hidden. What separates them is the basis — the definition of the value sought, which the shared name *market value* hides: one assignment asks what the market would pay, the other asks what the market would have paid had the scheme never been announced. A reader shown only the two worksheets, headed *Indicated Value by the Sales Comparison Approach*, would have no way to tell which is which, and would be entitled to think one of them wrong.

Note what the example does *not* show. The premise never changes: both are open-market sales, neither is a forced sale or a liquidation. The approach never changes. Only the definition of the value sought changes, and the scheme-free figure is lower by \$58,000: the lender's figure is 12 percent above it. That is the whole claim of this entry, in one line of arithmetic.

Cross-references: 012 The Purposes of Valuation — the level above this one; the purpose constrains the basis, and the governing law often prescribes the basis.

013 Terminological Divergence — how translation can blur basis and approach (the Polish example).

005 Hedonic Regression — where the sample and the specification take the place of the inputs discussed here.

Dictionary: basis of value; premise of value; indication of value; insurable value; investment value.

Recent Court Decisions, this issue: the Austrian and Polish instruments and the Swiss decision cited above.

Addendum: Prolog Formalization

The following machine-readable companion (014-basis-of-value.pl) formalizes this entry in the journal's Prolog knowledge base. It is also published as a browsable galley alongside this article.

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%% 014-basis-of-value.pl
%%
%% Prolog companion to Foundations entry 014, "The Basis of Value and
%% the Approach" (concept id: basis_of_value).
%%
%% Encodes the three-way separation the entry defends -- basis, premise,
%% approach -- and the support matrix between approaches and bases, with
%% the condition under which each support holds. The point of writing it
%% down is that the matrix is asymmetric: an approach supports several
%% bases, a basis is reachable by several approaches, and neither
%% determines the other.
%%
%% It deliberately does NOT map bases onto purposes; the level above this
%% one is left to F012, whose companion also carries the concordance to the
%% court digests' eight litigation categories.
%%
%% Diacritics are omitted in atoms and quoted strings for galley
%% portability; the entry text carries the full forms.

:- module(basis_of_value,
    [ basis/2, premise/2, approach/2,
      supports/3, does_not_support/2,
      indication/3, worked_example/4,
      basis_of/2, approach_of/2, distinguishes/3,
      check/0 ] ).

% Portability: Scryer Prolog loads the list predicates on request and has
% no built-in forall/2 inside a module; for_all/2 below is the ISO
% definition, so the module runs unchanged in Trealla, SWI and Scryer.
:- use_module(library(lists)).

for_all(Cond, Action) :- \+ ( call(Cond), \+ call(Action) ).

% =====
% THE THREE LEVELS
% =====
% A basis is the definition of value the assignment must produce.

basis(market_value,      'The price obtainable in an open-market sale on defined conditions').
basis(fair_market_value, 'Market value as defined by tax law (for US estate and gift tax, the
    ↪ Treasury regulations), for estate, gift and tax work').
basis(investment_value,  'Value to a particular party, on that party's own requirements').
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basis(use_value,          'Value in a particular continued use, not necessarily the highest and best
    ↪ ').
basis(assessed_value,    'Value as a statutory assessment standard defines it').
basis(insurable_value,   'The cost to replace the insured improvements, as the policy defines them
    ↪ ').
basis(liquidation_value, 'Value realisable under a compressed or compelled sale').
basis(going_concern_value, 'Value of the whole operating enterprise, real estate not separated out
    ↪ ').

% A premise is the assumed transactional circumstance.

premise(open_market,      'A willing buyer and seller, adequate exposure').
premise(bulk_sale,        'The remaining inventory sold as one lot to one buyer').
premise(orderly_liquidation, 'Sale under time pressure but not compulsion').
premise(forced_sale,      'Sale under compulsion, exposure curtailed').
premise(continued_use,    'The asset stays in its present use, in place').

% An approach is a technique for producing a figure once basis and
% premise are fixed.

approach(sales_comparison, 'Prices paid for similar property, adjusted for difference').
approach(income,           'Capitalisation or discounting of a projected income stream').
approach(cost,             'Land plus cost new less accrued depreciation').

% Subdivision analysis is a METHOD INSIDE the income approach, not a
% fourth approach: its structure is a residual discounted cash flow,
% however many cost figures appear on its worksheet.
method_within(subdivision_analysis, income,
    'Residual DCF: sell-out prices less costs, discounted over absorption').

% =====
% THE SUPPORT MATRIX
% =====
% supports(Approach, Basis, ConditionUnderWhichItHolds)

supports(sales_comparison, market_value,
    'Comparables are arm's-length sales meeting the market-value conditions').
supports(sales_comparison, fair_market_value,
    'Same transaction evidence, read against the tax-law definition').
supports(sales_comparison, assessed_value,
    'Individual appraisal to the statutory assessment standard, as on an assessment appeal').
supports(sales_comparison, liquidation_value,
    'Only where the comparables are themselves distressed or forced sales').

supports(income, market_value,
    'Market rent, market vacancy, market expenses, market-derived rate').
supports(income, investment_value,
    'One party's rent expectations, expenses, holding period, financing, tax position, required
    ↪ yield').
supports(income, use_value,
    'Income of the present continued use rather than of the highest and best use').
supports(income, going_concern_value,
    'Stream includes business operations not separated from the real estate').
supports(income, assessed_value,
    'Where a statute prescribes an income method').

supports(cost, market_value,
    'Land at highest and best use, cost new, less depreciation the market recognises').
supports(cost, insurable_value,

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'Policy definition: insured improvements only, depreciation limited or absent').
supports(cost, use_value,
'Where the definition calls for the cost of the present use').
supports(cost, assessed_value,
'Where a statutory cost model prescribes it').

% Explicit non-support, as argued in the entry.
does_not_support(income, insurable_value). % insurable value is cost-based
does_not_support(income, liquidation_value). % needs a different premise and evidence
does_not_support(cost, investment_value).
does_not_support(cost, liquidation_value).

% =====
% WHAT AN APPROACH RETURNS
% =====
% An approach returns an INDICATION of whatever basis the assignment
% defined; the label on the column names the technique, not the value.

indication(Approach, Basis, indication_of(Basis, by(Approach))) :-
    supports(Approach, Basis, _).

% =====
% THE WORKED EXAMPLE
% =====
% One parcel, one date, one approach, two bases, two figures.
% worked_example(AssignmentId, Basis, Approach, Figure)

worked_example(lender_instruction, market_value, sales_comparison, 540000).
worked_example(expropriation, market_value, sales_comparison, 482000).

% The two differ because the compensation statute disregards the effect
% of the scheme on value (F011); the corridor price difference measured at 12%
% comes out of the second and not the first.
scheme_disregard(expropriation, 0.12).

basis_of(Assignment, Basis) :- worked_example(Assignment, Basis, _, _).
approach_of(Assignment, Approach) :- worked_example(Assignment, _, Approach, _).

% What separates two assignments: the useful query is the one that
% returns the empty list for approach and premise, and a difference for
% basis or for what the basis requires.
distinguishes(A, B, approach) :- approach_of(A, X), approach_of(B, Y), X \== Y.
distinguishes(A, B, basis) :- basis_of(A, X), basis_of(B, Y), X \== Y.
distinguishes(A, B, statutory_disregard) :-
    scheme_disregard(A, _), \+ scheme_disregard(B, _).

% =====
% INTEGRITY CHECKS
% =====
% Run check/0 after editing. These are the invariants the entry's
% argument depends on.

check :-
    findall(E, problem(E), Es),
    ( Es == []
    -> format("014 basis-of-value: OK~n", [])
    ; for_all(member(E, Es), format("PROBLEM: ~w~n", [E]))
    ).

```

```

problem(unknown_basis_in_support(A, B))      :- supports(A, B, _), \+ basis(B, _).
problem(unknown_approach_in_support(A, B))   :- supports(A, B, _), \+ approach(A, _).
problem(unknown_basis_in_denial(A, B))       :- does_not_support(A, B), \+ basis(B, _).
problem(support_and_denial(A, B))            :- supports(A, B, _), does_not_support(A, B).
problem(basis_no_approach_supports(B))       :- basis(B, _), \+ supports(_, B, _),
                                              B \== going_concern_value.
problem(method_parent_not_an_approach(M, A)) :- method_within(M, A, _), \+ approach(A, _).
problem(example_basis_unknown(Id, B))        :- worked_example(Id, B, _, _), \+ basis(B, _).
problem(example_approach_unknown(Id, A))     :- worked_example(Id, _, A, _), \+ approach(A, _).

% The example must make the entry's point: same approach, same basis
% name, different definition (the statutory disregard), and so a
% different figure.
problem(example_does_not_isolate_the_basis) :-
    worked_example(lender_instruction, _, A1, F1),
    worked_example(expropriation,      _, A2, F2),
    (   A1 \== A2          % a different approach would confound it
    ;   F1 \== F2          % no difference to explain
    ;   \+ distinguishes(expropriation, lender_instruction, statutory_disregard)
    ).

```