

European Valuer



Depreciated replacement cost – the ultimate in valuer judgement. Roger Messenger explains



This article is a prequel to a technical paper to be issued by TEGoVA on the topic of Depreciated Replacement Cost (DRC). The DRC method or basis of

valuation has been around for valuers to use for very many years. A poll amongst TEGoVA members in various countries in the EU suggests that it is used rather more in some jurisdictions than others, with some suggesting the use of the method is minimal and others very common.

The effectiveness of using DRC to measure value is dictated by the skill in the application of the methodology, with the judgement at each stage required by the valuer critically affecting the outcome valuation by very large potential percentage margins.

Fundamentally, the methodology has been employed by valuers as the method of last resort. The main reason for this can be summarised by the concept that cost does not necessarily equal value and this is primarily a cost-based appraisal. A number of years ago, the DRC appraisal was upgraded to “market value” by both the valuation profession and the accountancy profession. This still represents an uneasy description, as the appraisal is not normally tested by any market transactions.

The theory is that between similar specialised users, the property might be transferred between them at the DRC figure and hence there could be a “market value”. An example of this might be a public

authority-owned building, which might be transferred to another public authority. I personally think that justification is a bit tenuous as an indicator of market value.

However, in more recent times and certainly immediately in the aftermath of the financial crisis in 2008/09, there existed, for many types of properties in many countries, little or no transaction market and therefore comparables upon which to base a market value were historically driven from transactions. Faced with a requirement for a value appraisal, the DRC was adopted in a number of countries as the only method available to derive a figure.

Up to the financial crisis, the main use of DRC for the majority of valuers had been largely confined to specialised properties, unusual uses, or for locations where transactions rarely, if ever, occurred. Post financial crisis, the use of DRC became more prevalent for properties that historically may have been valued by reference to transaction comparables. The need for value appraisals has been driven by financial regulations, including IFRS (13) – lending institutions and investors who need an ongoing valuation for property assets.

Historically, the guidance when using a DRC has been that in a company, the directors of that company should sign a declaration with the valuation that the entity is a going concern and similarly, if the asset was in the public sector, the user was required to sign a declaration that the current use was viable and would continue for the foreseeable future.

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Shedding light on AVM accuracy and debating their regulation in the open is the task, says Michael MacBrien



Readers of European Valuer understand the background to the Automated Valuation Model (AVM) question. Dutch law transposing the Mortgage Credit Directive enabled

properties serving as mortgage collateral to be valued by AVMs without any intervention by a valuer. TEGoVA alerted the European Commission to this infringement of EU law and fortified its own European Valuation Standards with a new EVS 6 on AVMs.

The valuer-free AVM issue led to timely introspection by the valuation profession on the necessary limits to the use of AVMs **even as a valuer's tool**. A valuer using a “black box” AVM, i.e. an AVM producing an estimate of value but not informing the user of the inputs that underscore the estimation, can be as dangerous as a stand-alone AVM. TEGoVA addressed this in two ways:

- EVS's new European Valuation Guidance Note (EVGN) 11 “The Valuer's Use of Statistical Tools” lays down that, “In order to use data as selected by the AVM, the valuer must know:

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Confirmation of the ongoing viability of the use was critical to underpin the valuation appraisal under a DRC. Since the financial crisis, the method has been advanced by some countries in the absence of any semblance of a market. Greece is one example where the DRC has been taken forward to effectively a going concern value. Over time, it can be shown now as a market return that the approach was both reliable and accurate, albeit with the benefit of hindsight.

This demonstrates that the method, when properly applied, might be more reliable than some valuers believe. However, this also underlines that the valuer needs a great deal of information about the entity to be valued and, in the case of a business, needs to understand how that business operates in its market or how it might operate if more prudently managed. The emphasis has changed from the users – directors of companies or public sector bodies – to the valuer to pass judgement on ongoing viability. This is a skill set that valuers have had to, or will need to, acquire.

Problems with the method in terms of the variables that go to make up an appraisal have not changed. For example, would a modern replacement structure be materially different in size, cost of provision and area location? How to reflect depreciation? Technical, functional and economic obsolescence? How to assess land value for a use for which there is no material market evidence? What construction period (if any) should be assumed? According to the risk, what interest cost, on the cost of provision?

For example, if you follow an accountant's view of depreciating a build cost for, say, 1% or 2% per annum, after 50 or 100 years, the "value" attaching to the structure would be nil. Is that realistic? Structures much older than that have positive value.

In the absence of a suitable valuation methodology, the DRC approach has been used for some historic buildings. Recent litigation in the UK on property tax has delivered a judgement that such an approach has no place in the assessment in valuing an historic building.

So, if there is no market, no profit, and DRC is not appropriate – where to now? The paper to be issued will address these issues and a host of others that challenge valuers in using this approach, and will hopefully alert valuers to the potential pitfalls in assessing some of the constituent parts of an appraisal.

What has been demonstrated is that,

whilst cost is not a proxy for value, in the absence of anything else, it may be used to produce the reliable assessment of value. My own view is that the method should still only be used where there is no ability to measure or test a market, and should not be used in preference to market transactions.

The valuer needs to be skilled in ensuring he or she understands the entity they are looking at in order to judge what would comprise a going concern. He or she also needs to be wary of adopting radically different structures to that being assessed, and perhaps in alternative locations also, because as this becomes more and more removed from the reality of the bricks and mortar actually on the ground, the valuation risk attaching to this subjectivity escalates considerably.

Not for the faint-hearted, not a quick job, and not suitable for an AVM. To that extent, valuers with suitable expertise should be able to earn appropriate recompense for their skill, time and effort in adopting a DRC. ●

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- *the scope of the data source used by the AVM (regional, national, all transacted properties, only mortgaged properties...)*
 - *the type of data (sale prices, asking prices, valuation results)*
 - *the volume and homogeneity of data under investigation*
 - *how regularly the source of information is updated and then consider its relevance to the subject property."*
- EVG 11.2.4.2*

• The draft EVS-compliant Valuation Report for Residential Property to be integrated into the next edition of EVS lays down detailed requirements on the research criteria for relevant comparables and their analysis. These requirements are not compatible with the blind use of AVMs, even when the AVM is only one tool among others in the valuer's estimation of value.

It is not necessary to be a computer scientist to judge AVMs. There is no need to understand an explanation of the algorithms used, even if that were forthcoming. Professor George Matysiak in his groundbreaking work on [Assessing the Accuracy of Individual Property Values Estimated by AVMs](#) set down ten basic pieces of information that should

be provided in individual AVM reports and that the valuer can easily understand. These include, *inter alia*, confirmation that comparables¹ were used, geographic distribution of the comparables, the range of comparable sales prices used, confirmation of the earliest and most recent sales dates of the comparables and explanation of any adjustments.

But that basic information is not forthcoming. AVM manufacturers are reserving that and much more for their bank clients, who in turn have a clear valuer-free AVM business case. Earlier this year in a major newspaper, the CEO of a leading European bank outlined his vision of the future – complete automatism of the mortgage credit application and granting process by 2020. Valuations weren't mentioned, and the immediate objective was clearly elimination of the borrower interface with the bank employee, but the logical consequence is that the valuer and his report have now become the big spoilers in an otherwise fully automated process, slowing down credit granting by days or weeks. We see this already in the Netherlands under their new law enabling valuer-free AVM use – one of the major Dutch banks is still doing real valuations but its all-AVM competitor is advertising credit granting within 48 hours of request. Meanwhile, banks promote valuer irrelevance and dispensability by insisting on ever shorter, tick-box valuation reports at ever lower prices.

This state of affairs is hardly surprising. For banks, major miscalculations by AVMs in individual cases are immaterial – their business case remains solid as long as the cumulative valuations of their collateral portfolios "average out". For their part, AVM manufacturers have every reason to avoid the light. As Prof. Matysiak demonstrated in an earlier report on [The Accuracy of AVMs](#), U.S. research reveals persistent, way-off-the-mark AVM estimates according to location.

But the true challenge may well not be willful AVM manufacturer opacity. It could be something more in tune with the Zeitgeist – self-deluding over-confidence in hyped-up technology or even just indulgence in the beauty of mathematical constructions. Professor Ewa Kucharska-Stasiak nails this in her seminal work on [Statistics in the Context of Economic Theory and the Limits of AVMs in the Valuation of Individual Properties](#). Readers who went straight to the property valuation section and passed over the austere titled "Use of Mathematics in Economics" missed the hilarious story

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of “Ricardo’s Sin”, constructing abstract models and using false and misleading assumptions to prove the desired results, the folly of trying to make an exact science out of economics – a field with a strong social and behavioural dimension. You can ramp that up to the power of ten with property valuation, the ultimate “ungranular” activity with diverse properties impeding isolation of data sets, a low efficiency property market where prices don’t reflect all changes taking place in the environment and low awareness of individual property characteristics. As Prof. Kucharska-Stasiak so eloquently concludes, “... future progress in valuation methodology should not rely on improving statistical methods but on discovering the relationships between market participants and the increasingly complex environment and their impact on value. To answer this call, valuation should open up to the accomplishments of behavioural economics.”

The problem is, things have worsened since Ricardo’s time. “Proptech” noise saturates the environment, led by believers. I see this in practice. I was recently a panellist at a prestigious conference – 200 qualified valuers, many REVs. The proptech panellists were high flying “property advisers” and AVM designers. The advisers were using statistical models for a lot of their work, but they were so proud of going beyond real estate to master “catchment”, “footfall” or “workplace innovation”, that the moderator ended up asking if they still do anything remotely related to real estate! I was fascinated by the AVM designers. No one understood anything they said, so no questions. I put the case of a hard Brexit scenario that would cause a flow of traders to a specific city, escalating demand for

the very large and particular open-space that trading floors need. How would such a scenario be computed by the AVM in estimating existing open-space value? I was expecting an acknowledgment that such complex work requiring very specific market knowledge would be beyond the scope of the machine. No way. He said they would do all the market research and then feed it to the machine with the proper weightings and correlations. No matter how much human labour it took, the machine would be fed and would spit out “the Truth”. This was no charlatan. It was a believer.

I fear there may be a sort of “Stockholm syndrome” for some valuers, who may actually believe this stuff and feel threatened. I think, on the contrary, in line with the Kucharska-Stasiak school, that by its very nature, real estate, in all its forms and in an ever more complex and ever-shifting EU, national and local regulatory environment, is one of the fields of activity least conducive to the well-defined definitions of success that computer algorithms are good at optimising to. But banks and the AVM industry can recruit any number of geeks who will argue the contrary.

No problem. Let there be debate. We need openness, transparency and accountability so that professionals, the public and their political representatives can judge. Release of the basic information described by Professor Matysiak should be a legal obligation and alongside that, given the high consumer protection and financial and real estate market security stakes, EU law needs to buttress its restrictions on use of valuer-free AVMs.

Help us make this a public issue.

Please tell us if you have any friends on the European Parliament’s [Internal Market and Consumer Protection Committee](#) and [Economic and Monetary Affairs Committee](#)

(substitutes are as valuable as Full Members) or whether you know [other MEPs](#) or have political party friendships that could help us take this to the MEPs on the key committees. Scanning each committee for your nationals or even the full list of nationals will take five minutes. All we need is the introduction and we can take it from there. Please contact me at info@tegoval.org or on +32 478 22 54 53.

There is a tide in this affair. All over Europe, with ever greater political impact, citizens are demanding to know how the decisions affecting them were computed. Just as for the closely related GDPR, the natural forum is the European Union.

It’s all about shedding light. Rest assured that if this does not become a public debate, vested interests will smother it hinter den Kulissen. Hurry! They’re already telling us that machine learning is so complex that it’s no longer possible to understand how the machines do their magic! ●

Michael MacBrien is an advisor to TEGoVA.

Footnote:

1. Comparables are sold properties, similar to the property which is being AVM valued.

“Companies must be able to explain what was integrated into their algorithms’ recommendations, what sources are used and why. Users must know who taught the machine. It’s fundamental, so that each of us can understand why the system recommends such or such a conclusion and consider it, modulate it or discard it according to our intuition or experience.”

“Artificial Intelligence: neither naïveté nor pessimism”, Nicolas Sekkaki, president of IBM France, Le Monde, 1st March 2018 (translation by TEGoVA)

As the European Semester starts to focus on valuation, TEGoVA and its Bulgarian members have already provided the solutions. Michael MacBrien reports

Born of the financial crisis, the European Semester is the annual process by which, on the basis of European Commission analysis, EU member states agree in ‘Council Recommendations’ on the reforms that each state must carry out to contribute to the financial stability and economic health of the Union. The degree of coercion of the

‘Recommendations’ is higher for Eurozone states with macroeconomic imbalances (they can be fined up to 0.1% of GDP for non-compliance) or for states under EU financial assistance.

TEGoVA follows the European Semester because of its potential to trigger or support country reforms of real estate markets. It’s

good for practicing valuers to have this property market intelligence. The chart below shows what is being targeted in your country. [The detail is in the Council Recommendation and Country Report](#) (in the Country Report, look under ‘Reform priorities’ in the ‘Public finances and taxation’ and ‘Financial sector and housing’ sections).

Valuation-specific issues

This year, apart from the ongoing concern with updating cadastral values, other valuation-specific issues have appeared, significantly for Bulgaria, incipiently for

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Denmark and Latvia.

Bulgaria: Council Recommendation:

“Ensure adequate valuation of assets, including bank collateral, by enhancing the appraisal and audit processes”; *Recital:* “ ... improving asset valuation is key to further strengthening balance sheets and boosting the resilience of banks and insurance companies;” *Country Report:*

- Some examples of valuation problems include: “Real estate collateral in the banking sector and receivables and real estate holdings in the insurance and pension funds sector”
- “Anecdotal evidence from debt collectors suggests that mismatches between the bank auditor’s valuation (19) and the market price can be significant. ... This is partly due to outdated collateral valuations. The frequency of collateral estimates is not in line with the relevant EU regulations, which require banks to value commercial immovable property at least once a year and residential real estate at least once every three years.” (19. “The valuation is provided by the real estate valuator but certified by the auditor.”)
- “For real estate valuations, auditors rely

on locally-licensed appraisers. Despite the advantage of local expertise, valuation standards vary greatly and the licensing system does not appear to be sufficiently tight.”

- “In the absence of mandatory standard methodology, commercial banks have the discretion to use different valuation frameworks, which may create considerable discrepancies.”
- “In addition, methodologies for indexed valuations are not reviewed by the BNB.”

By the time of publication of the Council Recommendation in June, TEGoVA and the Chamber of Independent Appraisers in Bulgaria (CIAB) had already provided the solution with EVS-templated Bulgarian Valuation Standards produced and enforced by CIAB by government decree, and with the granting of REV-awarding status to both of TEGoVA’s Bulgarian members. Crucially in this context, REV is a qualification which needs to be renewed every five years.

Denmark: In the Country Report, the Commission welcomes the fact that from 2021, property taxes will be linked to the property valuation, which will be updated every two years. To avoid a bigger tax bill,

the government will lower the property tax base and the average municipal land tax. The Commission also notes that the reform of property valuation is progressing under the government’s plan for new and more accurate assessments, expected in 2019. Property owners will have access to the assessment criteria and be able to correct errors. Under the planned reform of the tax administration (SKAT), a new property evaluation agency will be set up.

Latvia: In the Country Report, the Commission notes that “Property taxation is becoming gradually detached from market values. By design, the property values used for property tax should follow market values with a two year lag. The successive postponement of reassessing cadastral values amounts to a freeze at 2012/13 property prices. The most recent update planned for 2018 has been postponed for two years. This sends undesirable signals to the property market, encouraging speculative behaviour and price increases. It also accounts for some 0.1 % of GDP in foregone revenues, due to the lower valuations used for taxes. Moreover, inconsistencies in the value of similar properties persist due to underreporting of the value upon registration and misidentifying the type of property usage (different property types are taxed at different rates). These issues serve as a pretext for postponing the update of cadastral values until a new methodology is devised by 2020.” ●

TABLE OF EUROPEAN SEMESTER 2018 REAL ESTATE RECOMMENDATIONS AND COUNTRY REPORTS

‘X’: Council Recommendation

‘CR’: ‘Country Report’. Problem raised by European Commission but has not yet graduated to a Council Recommendation

‘✓’: Commission/Council satisfied with progress

	Liberalise Rent Regulation	Remove Barriers to Large Retail	Reform Planning Law / Building Permits	Instate or Increase Recurrent Property Tax (1)	Update Cadastral Values on which Recurrent Property Tax is Based
Austria				X	X
Belgium			X		
Bulgaria					
Croatia				(2)	
Cyprus (3)					
Czech Rep.			X		
Denmark				✓	✓
Estonia				CR	CR
Finland		✓		CR	
France				CR	CR
Germany		CR			
Greece (4)					
Hungary		X		CR	CR
Ireland			X		
Italy				X	X
Latvia				X	X
Lithuania				X	
Luxembourg			CR		
Malta					
Netherlands	X				
Poland			CR		
Portugal					
Romania					
Slovakia				CR	
Slovenia			✓	Delayed to 2020	
Spain				X	
Sweden	X		X	X	
UK			X		

Table footnotes:

1. The objective used to be exclusively to reduce the tax burden on labour in a revenue-neutral way by shifting from income tax to recurrent property tax. Now, for some CEE states with low tax revenues, the goal is to increase revenues with this tax that has limited potential for evasion so as to have more to spend on public services.
2. The already legislated introduction of the property tax was postponed with no indication of whether and when will it be implemented.
3. The issue with Cyprus is unique and does not fit with any of the columns in the Table: Council’s sole longstanding concern is that Cyprus ensure reliable and swift systems for the issuance of title deeds and the transfer of immovable property rights.
4. Greece was not included in the European Semester exercise because for this final year it was under a special regime.

Source: TEGoVA Secretariat. Chart content based on European Semester 2018 Council Recommendations and Commission Country Reports.