

Implementation of EU digital regulations: What is the role for economics?

Neil Dryden, Guillaume Duquesne, and Ben Dubowitz ¹ 25 February 2025

The Digital Markets Act (DMA) was designed to ensure fair markets in the digital sector through formalistic rules, but does economic analysis still have a role to play? In this article, **Neil Dryden, Guillaume Duquesne** and **Ben Dubowitz** examine whether the expected rule-based approach has materialised in practice or if a more substantive economic assessment has already become necessary. They argue that while formalism provides clarity and efficiency, it has limitations in evolving digital markets, requiring a balance with effects-based analysis to ensure regulatory goals are met.

Introduction

The Digital Markets Act ("**DMA**") aims to ensure contestable and fair markets in the digital sector. It introduces a regulatory framework designed to prioritise clarity, speed, administrability and enforceability.² As such, it is characterised by strict rules and clearly defined lines.³ The implication is that even if economics played a pivotal role in motivating and informing the objectives and *ex-ante* design of the DMA's rules, the day-to-day application of these rules would not require detailed economics or analysis.⁴

In this paper, we look at the implementation of the DMA so far, to consider whether the simplistic checklist approach that some expected has emerged in practice and suffices, or if a more substantive assessment is necessary and already evident in the ongoing designation and compliance processes.

Effective regulation requires a balance between form-based and effects-based approaches. Formalism has a clear benefit. It allows regulators to address clear-cut cases efficiently, securing the low-hanging fruits. However, once those initial quick wins are achieved, one must shift to an effects-based approach to analyse the more ambiguous and challenging cases. Extreme formalism, while administratively convenient, would be extremely problematic. The benefit of hard lines has a limit. It is not always possible to impose fixed binary concepts onto complex and dynamic markets. Ultimately, when faced with nuanced circumstances, insisting on simplicity may fail to achieve the policy objectives those simple lines were designed to secure.

This balance is necessary, and we already see evidence of it emerging in the implementation of the DMA. The reliance on quantitative thresholds has provided a straightforward way of designating gatekeepers. At the same time, designation based on qualitative criteria and informed by market investigations reflects a deeper engagement in specific circumstances. As such, the implementation of the DMA so far underscores its commitment to not just enforcing rules but achieving outcomes that promote fairness and competition in digital markets.

This dual approach – form-based where possible, effects-based where necessary – is



critical to ensure that the regulation remains robust, effective, and relevant in fast-evolving digital markets. We would therefore expect the role for economics to be even more prominent going forward as the affected parties and markets change.

Form-based vs effects-based approaches: why is neither extreme perfect?

The DMA has been conceived as a form-based approach to regulating digital markets. It holds undeniable appeal. By establishing clear rules and objective thresholds, the DMA accelerates decision-making and provides some legal certainty for regulators and stakeholders, while overcoming possible asymmetry of information.

However, formalism comes at a cost. No rule, however well-intentioned, can simultaneously be straightforward to apply and perfectly aligned with policy objectives. Fast-evolving digital markets defy the static simplicity that strict *ex-ante* rules rely upon. As a result, a purely form-based approach risks misalignment of rules with changing market context.

Economists, by contrast, often favour effectsbased approach. This approach seeks to tailor regulatory interventions to specific circumstances. Its appeal lies in its flexibility and its potential to precisely achieve policy objectives.

Yet, this approach has drawbacks of its own. An effects-based approach can be protracted, resource-intensive, and fraught with uncertainty. The lack of clear boundaries can result in lengthy debates and ultimately fail to deliver valuable legal certainty.

This highlights a fundamental trade-off in regulatory design.⁵ Effective regulation must strike a balance between the rigidity of a form-based approach and the flexibility of an effects-based approach. In practice, this involves categorising conducts into three broad groups:

- conducts that unequivocally comply with the rules.
- conducts that unambiguously violate the rules, and
- the grey area in between.

It is in this grey area that limitations of a pure form-based approach emerge. To minimise errors, regulators must engage in a more substantive assessment to ensure regulatory intervention meets intended policy objectives. This nuanced approach ensures that regulation remains both effective and fair.

Over time, the balance between form-based and effects-based approaches may shift as markets evolve. Initially, the alignment between rules and market context is strong, as the regulation is designed with current market dynamic in mind. However, as markets continue to transform – shaped in part by the implementation of the regulation – the grey area may well expand or shift. So, what was once a well-fitting regulatory framework may no longer align with the realities of the market it governs.⁶

As with any other regulation, the success of the DMA depends on its ability to maintain this delicate balance. By blending strengths of formalism with insights of effects analysis, the DMA is likely to be able to navigate the complexities of digital markets while remaining adaptable to their inevitable evolution.

This is evident in the first year's implementation of the DMA. The designation process, while anchored in formalism, has already begun to incorporate elements of effects analysis. Similarly, the compliance process demonstrates how blind application of rules may fall short in delivering the intended outcome. We further discuss this in the following.



Designation process: strict adherence to formalism may not suffice

The designation process was initially envisioned as the epitome of formalism.

At first glance, its formal rules seem to have been a success. The Commission has applied them to catch seven gatekeepers, namely Alphabet, Amazon, Apple, ByteDance, Meta, Microsoft and Booking (see Table 1 in the Appendix). This outcome aligns with expectations. It is, however, unclear whether it results from any robust, sound economic assessment or the combination of strict rules and strong priors.

In theory, the designation process should be pretty straightforward. It is a matter of identifying and classifying well-defined core platform services ("CPSs") and identifying whether quantitative thresholds are met or not.8 In practice, it has proven more involved. This is not completely surprising. The delimitation and classification of CPSs are of strategic importance for gatekeepers. This is for three reasons. It impacts whether the quantitative thresholds are ultimately met; what the scope is of obligations vis-à-vis third parties; and, finally, what the scope is of obligations within their ecosystem (e.g., ability to combine data across CPSs).

There is a compounding factor. The undertakings under consideration generally control an ecosystem of integrated services in which drawing lines between core services is difficult, but still of critical importance. Therefore, the designation process has ultimately faced some of the same difficulties that one generally encounters in market definition.

A strong desire for formalism

To engage with these difficulties, gatekeepers have on occasion put forward economic evidence, but it was not given very much weight. The Commission, so far, has clearly signalled its desire to stay away from

any effects discussion and stick to formalism. 10 11 For example:

- Regarding the delineation of CPSs, the Commission considers the "purpose" of a CPS, which relates to "features and the components of the services offered". 12 In principle, economic insights could help distinguish whether two CPSs have the same purpose,13 whether two integrated services should be considered as a single CPS or not,14 and/or for ambiguous cases assess the impact of using different potential classifications on the overall purpose of the DMA. However, in practice, the Commission considers both product characteristics and the uses made by businesses and consumers which is similar to the first step of market definition, but far from an in-depth investigation. So far, the Commission has not engaged in any in-depth market definition exercise, nor has it relied on existing market definition from the case law¹⁵ or economic analysis. Absent a clear framework for delineation (informed by economics), this simple approach is prone to inconsistency across designation decisions.16
- The Commission has been resistant to rebuttal of the quantitative presumption. Although there has been little controversy in assessing whether the presumption is met under Article 3 (2) of the DMA, there has been more debate when it comes to rebutting the quantitative presumption under Article 3 (5) of the DMA.¹⁷ In theory, economic insight would help assess the likely impact of CPSs on contestability or fairness - for instance, in line with criteria listed under Article 3 (8) of the DMA.¹⁸ However, prima facie the DMA foresees limited scope for economic evidence: "the Commission should take into account only those elements which directly relate to the quantitative criteria" "any justification on economic grounds seeking to enter into market definition [...] should be discarded, as it is not relevant to the designation as a gatekeeper."19 practice, In the



Commission interprets this recital very narrowly and discussions have focused on whether quantitative numbers are representative or not.²⁰ The Commission however refuses to enter into substantive discussion on criteria listed under Article 3 (8) and in particular discusses qualitative arguments on whether the platform is a gateway and ultimately negatively impact contestability.

Regarding designation based on qualitative criteria under Article 3(8), economics played a slightly greater role. However, criteria were almost considered as check boxes with no clear threshold to draw a line.²¹

Push back from the courts

Initially, the approach the Commission has taken leaves little room for economic discussion as soon as thresholds are met. However, this form-based approach has already been challenged by courts.²²

In particular, TikTok's designation process has introduced a significant stress test for the DMA's formalistic approach to designation. The process was initially crafted to address existing dominant players. So, understandably, the rules that developed are informed by those existing companies' market presence and behaviour in mind. However, TikTok's designation process highlights the limitations of strict formalism once those rules encounter new potential gatekeepers.

In this case, the Court pushed back, requiring the Commission to consider elements of analysis alongside formalistic thresholds. The Court made it clear that both quantitative and qualitative elements are relevant; contrary to the Commission's view that only quantitative threshold-related elements are relevant.²³ The Court, however, also made it clear that the standard of proof is quite high, referring to a "high degree of plausibility".24 Ultimately, the Court considered that TikTok did not manage to meet the bar for avoiding designation as a

gatekeeper. Importantly, however, neither did it consider that bar against which undertakings are measured should be entirely quantitative; the Court did not reject the relevance of economic arguments made by TikTok — such as the absence of ecosystem benefits, the presence of multihoming, the absence of lock-in, and the role of TikTok as a challenger. The case underscores that strict adherence to formalism may not always suffice.

Looking ahead, the designation process is likely to evolve further with more room for economics. As digital markets change, the grey area - where formalistic rules meet the complexity of the real-world dynamic - is expected to grow. If the DMA achieves its goal of increasing market contestability, we may see reductions in the market shares of existing gatekeepers over time. evolution raises important questions about the re-designation process. While many of today's gatekeepers may have accepted their designation as inevitable in the short term, future challenges could involve more extensive economic arguments to justify changes in designation status. Both the Commission and gatekeepers are likely to engage more deeply in debating the precise boundaries of designation as digital markets transform.

Does this shift toward effects analysis threaten to undermine the formalistic simplicity the DMA was designed to provide? Not necessarily. A good effects-based approach does not replace formalism; instead, it complements it. By incorporating effects-based insights, regulators can ensure that formalism remains relevant and practical in an evolving market landscape.

Compliance process: formalism as a starting point for negotiation

Compliance is inherently more nuanced, as it involves evaluating how gatekeepers implement measures to adhere to obligations set out by the DMA.



Unsurprisingly, therefore, it was anticipated that effects analyses would play a larger role than in the designation process. ²⁵ So far, however, its role has been pretty limited in the compliance process. That might seem unexpected, but we argue that this is actually a predictable reality, given the early stage of this process. We expect a growing role for economics in the compliance process, for exactly the same reasons that it has a greater role in the designation process than some expected: ultimately, rules must achieve the intended outcomes, and as markets and parties evolve, it requires analysis to ensure that they do.

In theory, economics helps inform whether the compliance measures proposed by gatekeepers are proportional to achieve the policy objectives. intended Even compliance report template itself mentions the relevance of including economics.²⁶ It explicitly mentions several instances where data and data analysis - such as, A/B testing²⁷ or customers survey – would need to be submitted to support gatekeepers' compliance reporting and demonstrate effects on contestability and fairness. The compliance report however leaves it to gatekeepers to put forward the data and analysis they believe are most appropriate and relevant to assess effectiveness.

As such, one could expect an effective compliance report to contain technical and economic facts and information describing how the gatekeeper complies with the DMA. This includes gatekeepers own impact assessment of proposed measures on contestability and fairness. Contestability might be reflected in quantitative indicators and measures such as business user access to consumers, business user entry, end user choices, end user switching, price changes, and the like. Fairness might be measured by analysing the different prices, fees, and rules concerning data.

So far, this is not the case in practice. The compliance reports that have been submitted are lists of technical measures implemented to comply with the DMA.²⁸ There is virtually

no discussion on their concrete expected effects on contestability and fairness. That makes it extremely difficult to appreciate whether they indeed contribute to DMA's objectives and ultimately identify failure to comply and opportunistic behaviours from competitors who complain on insufficiencies of compliance measures.²⁹ An example would be the way Apple complies with the DMA by opening up to alternative distribution channels; prima facie that looks good, but at the same time Apple changes terms and conditions which disincentivise app developers to use those alternative channels, as claimed by some commentators. Actually, the Commission has already opened several investigations for non-compliance with the DMA.30

In these initial stages, therefore, gatekeepers have adopted a largely formalistic approach compliance, not the Commission.31 Gatekeeper's initial strategy understandable. It allows them to explore and define the boundaries of what Commission and stakeholders consider acceptable under the DMA. Gatekeepers aim to establish clarity on regulatory expectations while avoiding unnecessary concessions, which could have implications in the vast amounts of on-going litigations.

This phase is likely to serve as a precursor to more substantive discussions. Eventually, the focus will shift to whether compliance measures genuinely align with the DMA's overarching objectives. The distinction between good faith compliance and attempts to circumvent regulation hinges on this question. While checkbox measures provide a baseline, they will not suffice. The only way to truly distinguish meaningful compliance from superficial efforts is by analysing effects gatekeeper actions in achieving contestability and fairness. Economic analyses are critical in this respect and should be an important part of gatekeepers annual reporting.32

As with designation, formalism in compliance is effective at addressing straightforward, clear-cut issues – the low-hanging fruit of



regulatory enforcement. However, the true test lies in whether those measures improve contestability and fairness in practice. Over time, as industries evolve and the digital market landscape becomes more complex, compliance questions will grow trickier. When such issues reach the Court, the relationship between compliance measures and their actual effects will become a focal point. Courts will likely emphasise whether these measures fulfil the DMA's policy objectives, necessitating a more effects-based analysis.

Although we anticipate this shift, that does not suggest, nor do we expect, a collapse into formless, unstructured regulation. Instead, effect analysis should serve as a guiding framework that refines and enhances formalistic rules to ensure they work in practice. In short, the objective is not to abandon formalism, but to complement it.

Conclusion

The DMA has demonstrated the strengths of formalism in its early implementation. By relying on strict, clear, objective criteria, the Commission has successfully designated expected gatekeepers. This success reflects the value of formalism in delivering swift and predictable outcomes.

While formalism has been effective thus far, the role of effects-based analysis has already emerged and is set to grow. Addressing the complexities of the designation and compliance often processes involves answering challenging auestions that formalistic rules alone cannot resolve. For the DMA to achieve its goals of contestability and

fairness, regulators must grapple with the nuanced realities of digital markets, which are shaped by rapidly changing dynamics and interdependencies.

Effects-based analysis becomes especially critical when dealing with trickier questions – issues that lie at the intersection of formalistic rules and real-world market dynamics. Without a deeper engagement with effects, the DMA risks falling short of its broader objectives. As digital markets evolve and become more contestable, and new gatekeepers emerge, the challenges facing formalism will intensify. Rigid rules that worked well for today's dominant players may not align with the characteristics of tomorrow's markets.

When these challenges inevitably reach courts, the relationship between the rules and their intended effects will become increasingly important. Courts are likely to scrutinise whether the rules effectively promote the DMA's core objectives. This dynamic will require formalism to evolve, ensuring that it remains relevant and effective in achieving policy goals while addressing the realities of changing market conditions.

This adaptation does not imply a reversion to the lengthy and uncertain processes associated with purely effects-based regulation. Instead, it suggests a balanced approach where formalism and effects-based analysis complement one another: applying the form-based approach where possible, supported by an effects-based approach where necessary.



Appendix

Table 1: Gatekeeper designations

Gatekeeper	Core platform services	Reason(s) for designation and potential appeal of the designation decision(s)
Alphabet	Google Maps Google Play	Meet quantitative threshold of Article 3 (2) of the DMA. No appeal of the designation decisions.
	Google Shopping Chrome YouTube	
	Google Search Google Android Google ads	
Amazon	Amazon Marketplace Amazon ads	Meet quantitative threshold of Article 3 (2) of the DMA. No appeal of the designation decisions.
Apple	App Store Safari iOS iPadOS	Meet quantitative threshold of Article 3 (2) of the DMA for App Store, Safari and iOS. Qualitative market investigation for iPadOS. Appeal of the designation decisions.
Booking	Booking.com	Meet quantitative threshold of Article 3 (2) of the DMA. No appeal of the designation decision.
ByteDance	TikTok	Meet quantitative threshold of Article 3 (2) of the DMA. Appeal of the designation decision.
Meta	Facebook Instagram WhatsApp Messenger Marketplace Meta ads	Meet quantitative threshold of Article 3 (2) of the DMA. Appeal of the designation decisions for Messenger and Marketplace.
Microsoft	LinkedIn Windows PC OS	Meet quantitative threshold of Article 3 (2) of the DMA. No appeal of the designation decisions.

Source: https://digital-markets-act.ec.europa.eu/gatekeepers_en



- Neil Dryden is Co-Head of EMEA practice, Guillaume Duquesne is a Senior Vice President, and Ben Dubowitz is a Senior Economist at Compass Lexecon. The authors would like to thank Javier Ballesteros for his research assistance. The views expressed in this article are the views of the author only and do not necessarily represent the views of Compass Lexecon, its management, its subsidiaries, its affiliates, its employees or its clients.
- Impact assessment report accompanying the document proposal for a regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act). https://digital-strategy.ec.europa.eu/en/library/impact-assessment-digital-markets-act
- Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act), available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022R1925
- Fletcher, A., Crémer, J., Heidhues, P., Kimmelman, G., Monti, G., Podszun, R., ... & De Streel, A. (2024). The Effective Use of Economics in the EU Digital Markets Act. Journal of Competition Law & Economics, 20(1-2), 1-19. https://academic.oup.com/jcle/article/20/1-2/1/7513584
- ⁵ DMA impact assessment, aforementioned.

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- These are critical considerations for the DMA compared to regulations implemented in more mature and stable markets (e.g., telecom and energy sectors).
- 7 https://digital-markets-act.ec.europa.eu/gatekeepers_en
 - Article 3 (1) of the DMA posits that an undertaking shall be designated as a gatekeeper if (a) it has a significant impact on the internal market; (b) it provides a core platform service which is an important gateway for business users to reach end users; and (c) it enjoys an entrenched and durable position, in its operations, or it is foreseeable that it will enjoy such a position in the near future. Article 3 (2) of the DMA clarifies that an undertaking shall be presumed to satisfy the aforementioned requirements (a) where it achieves an annual Union turnover equal to or above EUR 7.5 billion in each of the last three financial years, or where its average market capitalisation or its equivalent fair market value amounted to at least EUR 75 billion in the last financial year, and it provides the same core platform service in at least three Member States; (b) where it provides a core platform service that in the last financial year has at least 45 million monthly active end users established or located in the Union and at least 10,000 yearly active business users established in the Union; (c) where the thresholds in point (b) were met in each of the last three financial years.
 - For instance, the Commission and gatekeepers debated whether advertising services should be considered as a separate CPS or as an integrated part of other (intermediation and/or social network) CPSs. The Commission concluded the former, restricting *de facto* gatekeepers' ability to use and combine data from their core services for advertising purposes. See for instance, Meta designation decision.
- Designation decisions available at: https://digital-markets-act.ec.europa.eu/gatekeepers_en
 Bostoen, F., & Monti, G. (2024). The Rhyme and Reason of Gatekeeper Designation under the Digital Markets Act. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4904116
 Annex to the DMA available at: https://eur-lex.europa.eu/legal-
- content/EN/TXT/HTML/?uri=CELEX:32022R1925#anx_1
 - For example, if a gatekeeper owns one social network that primarily involves video sharing and another that is more based on text, photos and links, are their "purposes" sufficiently "different" to count as distinct CPSs? It is clearly not envisaged that answering this question requires a standard market definition test, assessing the extent of price-substitution between the different "purpose"-related services. But equally, economic insights may help to identify alternative measures, such as the extent of multi-homing across services, which could be an indicator that they serve different purposes in the eyes of users.



- For example, TikTok could be argued to be at once both an online social networking service and a video-sharing platform service, with these two aspects of the service intrinsically linked. This raises the question of whether such services should be designated twice, as two separate CPSs, or just once. And, if the latter, in which CPS category. This issue is important as it affects which provisions apply. For example, if TikTok comprises two separate CPSs, it could be argued that it will need permission from end-users to combine data across them. However, if TikTok comprises just one CPS, then the choice of whether it is a social networking service or a video-sharing platform service will affect whether it is covered by the FRAND requirement that applies to the former but not the latter.
- The Commission classified TikTok as an online social networking service, while it considered it as a videosharing platform service in the previous decisions. See ByteDance designation decision, para. 65.
- Ribera Martínez, A. (2024). The Requisite Legal Standard of the Digital Markets Act's Designation Process. *Journal of Competition Law & Economics*, *20*(4), 265-291.
 - https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4681963
 - The undertaking providing core platform services may present, with its notification, sufficiently substantiated arguments to demonstrate that, exceptionally, although it meets all the thresholds in Article 3 (2), due to the circumstances in which the relevant core platform service operates, it does not satisfy the requirements listed in Article 3 (1). DMA, Article 3 (5).
- See footnote 21.

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- ¹⁹ DMA, Recital 23.
 - The most important consideration is the scale of the service in absolute and compared to designated services in the same CPS category. This is in part on this basis that the Commission decided not to designate web browsers of Samsung and of Microsoft Edge. Another important consideration is the importance of a gatekeeper's ecosystem. This is in part on this basis that the Commission decided not to designate Microsoft Bing and Edge, and Apple iMessage. The Commission explicitly acknowledged the fact that the implementation of the DMA would limit benefits that these services could draw from other Microsoft's and Apple's ecosystem.
 - The Commission shall designate as a gatekeeper any undertaking providing core platform services that meets each of the requirements of Article 3 (1) but does not satisfy each of the thresholds in Article 3 (2). The commission should conduct in this respect a market investigation within 12 months (Article 17). The question is whether such an undertaking would be able to substantially undermine the contestability of the core platform services. (DMA, Recital (24)). For that purpose, the Commission shall take into account some or all of the following element (Article 3 (8)): (i) the size, including turnover and market capitalisation, operations and position of that undertaking; (ii) the number of business users using the core platform service to reach end users and the number of end users; (iii) network effects and data driven advantages, in particular in relation to that undertaking's access to, and collection of, personal data and non-personal data or analytics capabilities; (iv) any scale and scope effects from which the undertaking benefits, including with regard to data, and, where relevant, to its activities outside the Union; (v) business user or end user lock-in, including switching costs and behavioural bias reducing the ability of business users and end users to switch or multi-home; (vi) a conglomerate corporate structure or vertical integration of that undertaking, for instance enabling that undertaking to cross subsidise, to combine data from different sources or to leverage its position; or (vii) other structural business or service characteristics.
- ²² Case T-1077/23, Bytedance v Commission,
 - https://curia.europa.eu/juris/document/document.jsf?text=&docid=288383&pageIndex=0&doclang=en&mode =req&dir=&occ=first&part=1&cid=4449539
- ²³ Case T-1077/23, Bytedance v Commission, para. 36.
- ²⁴ Case T-1077/23, Bytedance v Commission, para. 71.
- ²⁵ Fletcher et al. (2024), aforementioned.
- https://digital-markets-act.ec.europa.eu/legislation_en#templates



- In an A/B test, the researcher randomly allocates users to a 'control' A group and a 'treatment' B group. The treatment group is offered a different set of services compared to the control group. The researcher records the responses of the control and treatment groups for different metrics over a period and compares the two. The difference in responses is an estimate of the effect of the services on users. Kohavi, R., Tang, D., & Xu, Y. (2020). Trustworthy online controlled experiments: A practical guide to a/b testing. Cambridge University Press.
- Compliance reports available at: https://techcrunch.com/2024/08/08/spotify-and-epic-games-call-apples-revised-dma-compliance-plan-confusing-illegal-and-unacceptable/
- https://digital-markets-act.ec.europa.eu/commission-opens-non-compliance-investigations-against-alphabet-apple-and-meta-under-digital-markets-2024-03-25_en
- Arguably, compliance reports were submitted at a time before compliance measures were implemented and could have had any impact. This may in part explain the lack of empirics to evidence effectiveness of the compliance measures. It remains to be seen whether gatekeepers include more empirics in their annual reporting.
- Interestingly, the DMA does not formally tie compliance to whether compliance measures allow to achieve contestability and fairness objectives. That said, while formalism was viewed as a panacea for regulators in making their lives easier, it could also be a straitjacket they want to break out of if (and when) they realise their formal rules have not allowed to achieve the DMA objectives.