

Digital Markets in South Africa

Comments on “Competition in the Digital Economy”

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1 Introduction

Digital markets are becoming increasingly important in international economies. The increasing prominence and prevalence of such markets can present a variety of challenges to competition authorities.

For instance, digital markets are often highly technical in nature. As such, a greater amount of preparatory work and knowledge building is required on the part of competition authorities for them to properly understand how competition works in these markets. The increased use of pricing algorithms, which will inevitably require authorities to develop the capability to understand how these algorithms work, is an often-cited example of this.

Digital markets may also require authorities to grapple with economic features that are less common in more traditional markets, and thus potentially less well understood. The most often cited example of this is indirect network effects, which can play a significant role in the definition of relevant antitrust markets, evaluating market power, and assessing merger effects (although multi-homing is another important example).

Finally, digital markets are also often highly dynamic. While this feature is certainly not unique to digital markets, it can introduce higher levels of uncertainty into competitive assessments than in markets that are more stable. This can pose its own challenges, particularly in the context of merger assessments, which are inherently forward-looking, and require the establishment of a post-merger counterfactual against which the competitive effects of a merger must be compared.

On 7 September 2020, the Competition Commission of South Africa (“the Commission”) released its *“Competition in the Digital Economy”* paper (“the Paper”) for public comment. The Paper provides a preliminary overview of how the Commission plans to address the aforementioned considerations in the South African context.

The Paper offers valuable contributions on several fronts. These include, but are not limited to, the following.

- The Paper provides a useful introduction to the digital landscape in South Africa, and identifies the various ways that anticompetitive harm may arise in digital markets.
- The Paper identifies a series of strategic actions (e.g. publication of supplementary guidelines for the assessment of competition issues in digital markets, increased collaboration with international regulators, and improved cartel detection capacity) that can be expected to increase effective enforcement, and thus improve the overall South African competitive landscape, provided the Commission pursues these actions in a participatory and evidence-based manner.
- The Paper outlines the linkages between digital market regulation and broader economic development goals, noting that highly competitive digital markets are likely to be an important driver of economic growth in South Africa. The Paper’s willingness to connect competition policy with socio-economic goals suggests a developmental purpose, which is welcome in a country facing the triple burden of poverty, inequality and unemployment.

However, there are several aspects of the Paper that, in our view, require further consideration and/or revision. Given the limited time available to offer comments, we have focussed on what we consider to be the most important of these in this submission.

First, a central thesis that is advanced throughout the Paper is that, due to the presence of network effects in particular, digital markets are prone to tipping. That is, if left unchecked, these markets will become more and more skewed towards a situation where customers are served by one or a small number of large incumbents, and where it is extremely difficult for smaller players or new entrants to compete effectively with these larger players. On this basis, the Paper motivates for a higher degree of intervention in digital markets, in order, inter alia, to avoid high levels of concentration (which the Commission views as detrimental in and of itself).

In this regard, several strategic actions are mooted, including the instigation of a sector-wide market inquiry and ongoing scrutiny of “specified” firms. This appears to be underpinned by the assertion that there has historically been under-enforcement of digital markets, due to capacity, knowledge and jurisdictional constraints.

However, the notions that all digital markets are prone to tipping, and that concentration in digital markets is a problem per se, are, in our view, misguided. That is not to say that certain digital markets cannot be prone to tipping, or that in some digital markets high levels of concentration may imply a lack of effective competition, but this can only be established through careful and considered case-by-case analysis.

As such, the position that digital markets should be the subject of greater intervention than other markets does not have a sound economic basis. Moreover, there is a very real risk that consumers would be harmed by overly invasive or generally misplaced intervention in digital markets, which is not considered in any material detail in the Paper.

Second, the Paper highlights several specific areas of concern, namely “killer” acquisitions, the use (and potential abuse) of Big Data, the ways in which pricing algorithms may result in collusive conduct, and potential anticompetitive conduct by existing incumbents. In each case, the Paper asserts that these areas are likely to have been under-enforced historically, and that anticompetitive harm arising from the above is therefore likely to continue absent a more interventionist approach.

However, from the outset we find little evidence to support assertions of under-enforcement, largely undermining the justification for increased intervention. Moreover, mirroring the aforementioned discussion on tipping markets and concentration levels, there is genuine concern that increased scrutiny of each of the aforementioned will result in adverse consequences for consumer welfare and the competitive process more broadly. In particular:

- With respect to killer acquisitions, it is extremely challenging to accurately identify when a small start-up is likely to represent a major future competitive threat, while many mergers between large tech firms and small start-ups lead to procompetitive outcomes, particularly regarding the investment incentives for small entrepreneurs.
- With respect to the use of big data, the Paper identifies theories of harm (namely, input foreclosure and efficiency offenses) that are well-grounded in economics. However, we note that potential features of data (for example, its replicability) may mean that these theories are less likely to be realistic concerns in digital markets. Moreover, we urge particular caution regarding intervening based on potential efficiency offenses, given the likelihood of artificially advantaging less efficient rivals at the expense of consumer welfare.
- With respect to the use of pricing algorithms, we note that there is little evidence to suggest that the use of algorithms in and of themselves is likely to create anticompetitive harm. Moreover, algorithm-driven increases in market transparency (which may facilitate anticompetitive conduct if other conditions are also met) provide significant efficiency enhancements, to which the Paper gives little more than cursory consideration.
- With respect to the regulation of existing incumbents, we note that the introduction of “reverse onus”, where specified dominant firms are required to justify conduct as efficiency-enhancing, is likely to disincentivise behaviour that is likely to create procompetitive outcomes.

As a result, while the Paper is a welcome initiative from an authority aiming to improve and update its capacity to enforce, its overarching intention to take a more interventionist approach is not well-grounded in economics, and may lead to significant adverse consequences for consumer welfare and the competitive process more broadly.

1 See Katz, M.L. and Shapiro, C. (1994). Systems competition and network effects. *Journal of economic perspectives*, 8(2), 93-115.

2 The Paper, page 62.

2 Economics of Digital Markets

2.1 Overview

The overarching theme of the Paper is that digital markets have unique features (principally, network effects and multi-sidedness) that make them particularly prone to tipping. That is, digital markets possess features that indicate “a tendency of one system to pull away from its rivals in popularity once it has gained an initial edge”¹

This is the primary basis provided in the Paper for its overarching contention that a more interventionist approach is required for digital markets. The Commission appears particularly keen to intervene in digital markets before tipping can occur. These sentiments are neatly captured in the conclusion of the Paper, which states that:²

*“The over-riding strategy in the enforcement of competition law is to proactively prevent what are mostly contestable digital markets currently from becoming concentrated. This strategy is premised on the fact that **digital markets have tendencies to tip** towards a ‘winner takes all’ environment, or one where a few firms dominate, and the accepted difficulties in reversing that position once the markets have tipped, as well as regulating the behaviour of dominant firms. A strategy aimed at retaining contestability also supports the broader objective of more inclusive digital markets and a reversal of some of the high levels of concentration in industrial markets. As such, it is consistent with the overall mandate of the Commission in respect of reducing concentration and increasing participation in the economy.”* [Own emphasis added]

However, there are three significant concerns regarding the approach outlined above. These concerns are introduced here and discussed in turn in the sections below.

- First, while it is certainly the case that some digital markets may be prone to tipping, the Paper’s central assertion that all digital markets are prone to tipping is incorrect and not well grounded in economics. As we explain in more detail below, the propensity of a given market to tip will depend on the specific features of the markets concerned. For instance, there is significant evidence to suggest that multi-homing (a common feature of digital markets that is mentioned only once in the Paper) can reduce the likelihood of tipping, and can limit the exercise of market power more generally.
- Second, competition law ought to support the dynamic competitive process, and protect consumer welfare. These objectives are distinct from and not necessarily aligned with deconcentration, which cannot be an end in and of itself. High levels of concentration do not necessarily imply ineffective competition, particularly in dynamic markets. Moreover, network effects can constrain market power even in highly consolidated markets, and if consumers derive significant benefit from large networks (implying that network effects are strong), they may be better off in more concentrated markets than in highly fragmented markets.
- Third, over-intervention is likely to chill important incentives to compete and innovate, which are evidently beneficial to consumer welfare enhancements. While this is a common motivation against an overly-interventionist approach in general, it may be a particularly important consideration in digital markets since such markets are often characterised by high levels of innovation (where the implications of chilling such innovation will necessarily be more severe).

3 The Paper, page 10.

4 The Paper, page 10.

2.2 Are all digital markets prone to tipping?

It is clear that the prevention of tipping of digital markets is a (if not the) central motivation behind the Commission's intention to adopt a more interventionist approach in respect of such markets. In this context, the Paper notes that *"digital markets [...] threaten a new era of global concentration and the marginalisation of developing country business unless purposefully regulated"*.³

However, the Paper does not seek to distinguish between digital markets that, as a consequence of their features, are likely to be prone to tipping and those that are not. Instead, the Paper treats the propensity to tip as ubiquitous in digital markets. For example, the Paper asserts that *"digital markets are themselves prone to extreme 'winner-take-all' outcomes due to first-mover advantages combined with 'tippy' market dynamics"*.⁴ This sentiment is reiterated throughout the Paper.

It is highly questionable as to whether the mere fact that a market is likely to be prone to tipping is justification itself for intervention. Nevertheless, the implication of the above is that, according to the Paper, the Commission should adopt a more interventionist approach in all digital markets, irrespective of their propensity to tip in reality.

The assertion that all digital markets are prone to tipping is simply incorrect, and not well-grounded in economics. Indeed, there is considerable economic literature dedicated to establishing the particular features of a market that create a propensity to tip. As discussed in further detail below, there is little to no evidence that *all* digital markets have the necessary features to make them likely to tip.

At the outset, it is important to acknowledge that **tipping is not a phenomenon that is unique to digital markets. Indeed, network effects themselves are not constrained only to the realm of digital markets, and there are many physical markets where such network effects exist** (e.g. newspapers and shopping centres). There are no doubt examples of situations where physical markets that are the subject of indirect network effects (or for that matter direct network effects) that have tipped, just as there are no doubt many examples of such markets where, despite the prevalence of network effects, competition has remained highly effective.

Moreover, tipping is not ubiquitous to digital markets. The Paper notes correctly that the potential for tipping will be affected by network effects, which are present in some digital markets and not others. However, the Paper does not propose that different approaches should be taken for different kinds of digital markets, nor does it acknowledge that the mere presence of network effects does not mean that digital markets are likely to tip.

As a reminder, the term "network effects" refers to a phenomenon where existing users gain incremental benefits as additional users make use of a platform (or service). Direct network effects are effects where this benefit is felt by customers on the same side of the platform. An example of a direct network effect is the benefit to existing users of Instagram if people they wish to follow also join Instagram (i.e. the social media platform becomes more attractive to potential users if there are more users already on the platform). In this way, direct network effects can be felt by multi-sided platforms, as well as more conventional single-sided entities.

In contrast, indirect network effects arise where customers on the one side of a platform benefit from additional users joining the other side of the platform. Using Instagram as an example again, the benefit that advertisers derive from additional users signing up to Instagram, thus providing a greater number of eyeballs to which to advertise, is an indirect network effect. Indirect network effects are thus confined to multi-sided platforms only.

Network effects, be they direct or indirect, can create a positive feedback loop that can make larger players more attractive and smaller players less attractive. As such, network effects can cause a market to tip. However, whether this occurs will evidently depend the strength of the network effects at play, and the ability of smaller players to overcome them.

5 Provided in the case of the former that the point at which network effects begin to peter out is sufficiently small relative to overall market demand, to allow for the presence of multiple significant competitors.

6 See for example Gürkaynak, G., İnanılır, Ö., Diniz, S. and Yaşar, A.G. (2017). Multisided markets and the challenge of incorporating multisided considerations into competition law analysis. *Journal of Antitrust Enforcement*, 5(1), 100-129.

7 See the Paper, page 20, which notes that *“some platforms, like social media platforms, allow for multi-homing by users thus switching costs become less relevant.”*

8 See for example Wismer, S. and Rasek, A. (2018). Market definition in multi-sided markets. In OECD (2018) *Rethinking antitrust tools for multi-sided platforms*, page 61.

9 While demand from shoppers at a particular online retailer might depend on the range and volume of products that the retailer sources from upstream suppliers, the number (or type) of shoppers will generally not influence these suppliers' decisions to supply the retailer in question. Instead, this will simply affect the products that the retailer itself sources from upstream suppliers. By the same token, one shopper will not derive any intrinsic benefit from another shopper using that retailer.

10 The Paper, page 62.

11 See for example OECD (2003). *The Objectives of Competition Law and Policy*. Page 2 states that *“the basic objectives [of competition policy] are to maintain and encourage the process of competition in order to promote efficient use of resource while protecting the freedom of economic action of various market participants.”*

For example, **some platforms may exhibit weak network effects**, such that the incremental benefit to a user from joining a platform or service with a comparatively large base of users (on either side) is relatively small. In this case, prospects of tipping can reasonably be expected to be remote.

Network effects can also be dynamic, in that **their strength may change over time**. For example, while gaining additional users may make a platform more attractive to all users (both existing and prospective), there may quickly come point where attracting yet more users may not have a material impact on the platform's attractiveness. Indeed, some platforms will reach a “saturation point”, where the platform becomes so congested that each additional user imposes a cost on existing users (i.e. a negative network effect). In either case, the prospects of tipping can reasonably be expected to be limited.⁵

Furthermore, even if network effects are strong, this does not mean that they cannot be overcome through innovation. Indeed, there are countless examples in digital and other technology-related markets of large incumbents being thoroughly outcompeted by new entrants, despite having significant network and/or scale advantages. This is particularly so where competition through innovation plays a significant role.⁶ This is not to say that the presence of strong network effects is irrelevant, but rather that case-by-case analysis is required to understand the degree to which strong network effects (if they exist) impede competition.

In addition (to the strength of network effects), the Paper also does not adequately reflect on the implications of other market features that may affect the propensity of markets to tip. Multi-homing, which refers to the practise of customers utilising more than one platform in a given market (e.g. sellers using more than one online classified portal), is an obvious example of this.

Multi-homing is only mentioned once in the Paper, where it is correctly noted to reduce user switching costs.⁷ **However, multi-homing also has potentially significant implications for the prospects of tipping.**

Where multi-homing is prevalent, this suggests that the costs of doing so are relatively low. Where customers multi-home, this means that smaller players do not need to attract customers away from larger players (i.e. so that they stop using these larger players) in order to grow, benefit from their own network effects, and in turn become more effective competitors to larger players. This can naturally be expected to significantly reduce the prospects of tipping, and more generally result in lower barriers to entry and expansion.⁸

Finally, as indicated above, it is important to acknowledge that network effects are not present in all digital markets. For example, in much the same way that a bricks and mortar retailer of a particular category of products is unlikely to experience network effects, neither is an online retailer.⁹

2.3 Is concentration in and of itself bad for consumers?

The Paper suggests that the Commission views one of its core mandates to be preventing the concentration of digital markets in South Africa. The Paper states that *“the over-riding strategy in the enforcement of competition law is to proactively prevent what are mostly contestable digital markets currently from becoming concentrated”*.¹⁰

Notwithstanding that, for the reasons explained above, digital markets will not inevitably consolidate absent intervention, there is little economic basis upon which to assume that concentration, in and of itself, will lead to anticompetitive harm. As a result, it is commonly accepted that **deconcentration should not be an end in and of itself, and rather that the objective of competition law should be to support the dynamic competitive process, and to protect consumer welfare**.¹¹

12 Though there are of course exceptions to this, some of which are discussed later in this note.

13 See the Paper, page 5, which notes that *“the tendency toward concentration arising from [...] network effects [...] requires competition policy to proactively identify and prevent entrenchment strategies before they are too difficult to reverse.”*

14 See for example Katz, M. and Shapiro, C. (1994). Systems competition and network effects. *Journal of economic perspectives*, 8(2), 93-115.

Indeed, while high concentration does not necessarily imply a lack of effective competition in general, this is even less so in many digital markets, where the constraints acting on large firms that prevent them from exerting market power may be more (rather than less) prevalent. This is even before one considers, as is discussed in further detail below, that the presence of network effects in digital markets can create significant efficiencies (which have been largely overlooked in the Paper).

This is of course not to say that mergers that give rise to high levels of concentration may not be problematic, or that firms with high market shares may not be able to exert market power. However, any concern that a large firm is behaving anticompetitively, or that a merger may give rise to anticompetitive harm, must be supported by a clear and evidence-based theory of harm that goes beyond a simplistic “big is bad” approach.

In this context, market shares are typically used as a screening tool for the assessment of mergers or conduct investigations. This is because where market shares are low, this implies consumers will have sufficient external options to avoid the firm(s) in question, disincentivising the firm(s) from exerting market power in the first place. As a result, it is typically the case that where market shares are small, anticompetitive conduct is unlikely to arise.¹²

However, the converse is not true since, in many cases, market shares are often a poor proxy for market power. For example, market shares do not account for any differentiation between competing suppliers. Mergers between two large firms (that therefore give rise to high levels of concentration) may in fact be unproblematic if these firms are not close competitors. In addition, market shares do not take into account other competitive constraints, such as the threat of entry or expansion, or the existence of countervailing buyer power.

Moreover, market shares are likely to be even less reliable indicators of market power in fast-paced, innovative markets, such as in the digital arena. This is primarily because in such markets, a firm’s ability to compete effectively in the future may, at best, be only weakly related to its existing position. In these circumstances, new entrants and innovative rivals have the ability to grow market share rapidly at the expense of larger incumbents, regardless of historical competitive position.

The above notwithstanding, the Paper contends that the caution that is typically applied to drawing conclusions based on market shares can be largely disregarded in the context of digital markets. It appears to justify this on the basis that such markets are (often) subject to network effects.¹³

In our view, this justification is misguided. Notwithstanding the fact that not all digital markets exhibit network effects (as explained above), it is important to appreciate that the implications of network effects for both market power and merger assessment are *a priori* ambiguous.¹⁴

In certain instances, the presence of network effects can contribute to the entrenchment of large incumbents (i.e. via the mechanisms outlined in the discussion of tipping above). However, in other instances network effects can serve to actively constrain market power.

This is because the positive feedback loops described above can also work in a negative direction. To see this, consider the case of indirect network effects where, as explained above, an increase in the number of users on one side of a two-sided platform makes that platform more attractive to users on the other side.

In such a context, if the platform’s offering worsens on one side of the market (e.g. due to an attempt to exercise market power) this will not only adversely affect demand on that side of the platform, but will also have an adverse effect on demand on the other side. This will make any attempt to exert market power, all else equal, less profitable than in a one-sided setting. Moreover, these adverse feedback effects will be mutually reinforcing, in the sense that a worsening in the offering on side A will not only result in the loss of users on side B, but it will also result in an indirect further loss of users on side A due to the loss of users on side B (and so on).

15 See for example Armstrong, M. (2006). Competition in two-sided markets. The RAND Journal of Economics, 37(3), 668-691.

16 This is on the basis that either consumers use the platform, or they do not. However, there may be instances where customers can vary their spend on each platform that they use, and in this case there may still be competition between two platforms across which consumers multi-home for a greater share of consumer spend.

17 See Robles Martin-Laborda, A., (2017). Merger control and online platforms: the relevance of network effects. Market and Competition Law Review.

18 See for example Durand, B. (2008). Two-sided markets: Yin and Tang – A review of recent UK mergers. Concurrences; Correia-da-Silva, J., Jullien, B., Lefouilli, Y. and Pinho, J. (2019). Horizontal mergers between multisided platforms: Insights from Cournot competition. Journal of Economics and Management Strategy, 28(1), 109-124.; and Leonello, A., 2010. Horizontal mergers in two-sided markets. Mimeographed, European University Institute.

19 See the Paper, page 27, which states that “South Africa’s merger control regime reflected a similar trend [...], suggesting a degree of underenforcement and false negatives”. See also the Paper, page 38, which outlines “challenges resulting in underenforcement” in the context of potential abuses of dominance.

20 See for example Bishop, S. and Walker, M. (2010). The economics of EC competition law: concepts, application and measurement, page 232.

21 See the Paper, page 16, which notes that “the first characteristic of the digital technology is the rapid rate of technological change and innovation, providing scope for market disruption through new entrants and new products to the benefit of consumers.”

Accordingly, relative to one-sided settings, large platforms will face a reduced incentive to worsen their competitive offerings. In this way, the presence of network effects does not give cause to infer market power from high market shares – in fact quite the opposite.

This is notably even before one considers those digital markets where multi-homing is prevalent. As the Paper acknowledges, multi-homing implies that there are low barriers to switching, and it is generally accepted that horizontal mergers are less likely to give rise to anticompetitive effects where switching barriers are low.

Moreover, where customers on one side of the market already multi-home as between two platforms pre-merger, this may imply that the two platforms are not engaged in significant competition for such consumers.¹⁵ Here a merger between two firms with high market shares might be unlikely to give rise to unilateral effects on the side(s) of the market where multi-homing occurs, since it is not the threat of losing customers to one another that is constraining the firms’ competitive offerings pre-merger.¹⁶

Finally, it is also important to appreciate that the presence of network effects can mean that concentrated markets can deliver better outcomes for consumers than fragmented markets. Network effects, by definition, imply that consumers derive a greater benefit from being part of large networks than being part of smaller ones. For example, a social media platform with few members is unlikely to be of as much benefit to users than a social media platform with more members.

The implication of this is that lower levels of concentration in markets with network effects will not necessarily improve consumer welfare. In fact, some evidence suggests that increases in concentration in certain kinds of markets actively improves consumer welfare. This is summarised neatly below in a quote from a 2017 academic paper by Robles Martin-Laborda:¹⁷

“Since a monopolistic platform maximizes network effects, it has been considered that competition between platforms does not actually increase welfare. In fact, a higher number of platforms may decrease consumer welfare as the aggregate utility from network effects can be higher with a lower number of platforms. When network effects are present, a high level of concentration in the market can increase consumer’s surplus. Market concentration reinforces the network effects and, thus, consumer’s surplus. Even if prices for the services of a dominant platform may be higher because of the lack of competition, the thickness provided by it may offer greater value to its users.”

There are numerous theoretical economic papers that confirm this intuition by showing that, under certain circumstances, even mergers to monopoly can enhance consumer welfare.¹⁸ Notably, this is particularly so where network effects are strong.

Accordingly, there is no sound basis in economics to be more concerned about high levels of concentration *per se*, even in markets where network effects are prevalent. In fact, the presence of network effects may render concentration indicators even less reliable indicators of market power than in markets where network effects are absent.

2.4 Intervention carries a significant risk of harming consumer welfare

The Paper dedicates significant attention to potential anticompetitive harm that may arise in digital markets, and suggests that such markets have been subject to under-enforcement historically.¹⁹ However, it offers only passing consideration to the potential adverse consequences for consumers of misplaced or overly-invasive intervention.

In this regard, it is generally accepted that intervention can, in some cases, have a dampening effect on the incentives of firms to compete aggressively with one another and innovate.²⁰ While this is a standard concern that applies to all markets, it may be particularly relevant in the context of digital markets, which, as the Paper acknowledges, are often highly dynamic, complex, and characterised by high levels of innovation.²¹

For this reason, the risks associated with a chilling of competitive behaviour and innovation through misguided or overly invasive intervention may be more pronounced (i.e. there may be a greater risk of consumer harm) in many digital markets as compared to other markets.

Such risks may be particularly high if the Commission is to focus, as the Paper suggests, on preventing firms from becoming large and markets becoming concentrated, rather than to examine the implications of scale and concentration on a case-by-case basis. Indeed, if such an approach is to be followed, the adverse consequences for consumers would seem all-but guaranteed. For instance, as discussed above, horizontal mergers and increased scale in multi-sided markets can give rise to significant pro-competitive benefits, of which consumers would naturally be deprived by an overly-interventionist approach.

2.5 Summary

The Paper correctly identifies that, in certain circumstances, digital markets may be prone to tipping, and the presence of network effects can insulate larger incumbents from competition. However, the implications that the Paper seeks to draw from this, namely that *all* digital markets are prone to tipping, that concentration in digital markets is a problem *per se* and, as a consequence, a comparatively more interventionist approach to digital markets is required, are, in our view, misguided.

In practice, there are many other factors, beyond whether or not a market is “digital” and is the subject of network effects, that will determine whether a given market (digital or not) will be one in which high levels of concentration are likely to result in a lack of effective competition and the ability of large firms to exert market power. The strength of any network effects and the prevalence of multi-homing are but two examples.

At the same time, there is a very real risk that intervening in digital markets where intervention is not warranted, or is not warranted to the degree being contemplated in the Paper, will harm consumer welfare. Misplaced or overly zealous intervention can deprive consumers of efficiency benefits and stifle innovation.

Accordingly, it is only through a careful and considered case-by-case analysis that the Commission will be able to identify whether (and if so what) intervention is required to protect and enhance consumer welfare in a particular market.

22 See Cunningham, C., Ederer, F. and Ma, S. (2020). Killer acquisitions.

3 Competition Enforcement in Digital Markets

3.1 Overview

In this section we comment on the following specific aspects of digital markets that have been highlighted in the Paper:

- so-called “killer” acquisitions, and the likely effects on competition of the acquisition of a small recent or potential entrant by a much larger tech firm;
- data, its role as a potential source of market power, and a potential tool for exclusionary conduct;
- the potential for pricing algorithms to soften competition amongst firms; and
- possible plans to regulate big tech firms.

As an aside, we note that the Paper refers to connectivity as being of critical relevance in accessing digital markets within the South African context. While we agree with this sentiment, we have not seen robust analyses that support the Paper’s conclusions that markets for providing access to digital markets are uncompetitive, or that the Commission’s recent and proposed regulatory interventions are likely to substantially enhance competition and consumer welfare.

3.2 Killer acquisitions

3.2.1 Introduction to killer acquisitions

The potential for anticompetitive harm to arise from so-called “killer” acquisitions has received increasing focus amongst competition professionals, following a seminal paper by Cunningham, Ederer and Ma.²² Killer acquisitions refer to mergers between large incumbents and small start-ups that are likely to pose a serious future competitive threat, where the purpose of the merger is for the incumbent to shut down or “kill” the nascent competitor.

In this case, the theory of harm is that the incumbent removes a potential rival and stifles its innovations, harming the competitive process and ultimately the consumer. In an alternative formulation, an incumbent might acquire a smaller, innovative rival, and then “kill” off its own innovation in a particular area – integrating the smaller rival’s efforts, but ceasing its own pre-merger innovation; this may be termed a “reverse killer” acquisition. Importantly, these transactions may be small enough to avoid mandatory notification thresholds set by competition authorities (in jurisdictions where such thresholds exist).

The Paper argues that killer acquisitions (and digital mergers more generally) have not received sufficient scrutiny by the Commission historically, and outlines several initiatives aimed at combatting this concern. These include ensuring compulsory notification of all mergers by specified tech firms, providing updated guidelines on valuation assessments for merger thresholds, and prioritising digital market merger control for the period 2020-2025.

A pro-active approach to enforcement is to be commended. However, it is concerning that the Paper does not sufficiently reflect on the potential unintended consequences of the above, and of adopting a more interventionist stance in the context of possible killer acquisitions. We identify two potential concerns in this regard.

- First, the difficulties of predicting growth paths for start-ups mean that identification of potentially killer acquisitions is hugely challenging, increasing the concern that regulation will lead to false convictions, which would further harm incentives to invest and innovate.
- Second, transactions of this type may often give rise to procompetitive outcomes, particularly with respect to the investment incentives of small and innovative start-ups.
- Third, it is not clear that under-enforcement is a problem in the first instance, particularly within the South African context.

23 See Friedrich, C. (2013). How Can South African Entrepreneurs Succeed.

24 See Gage, D. (2012). The Venture Capital Secret: 3 out of 4 Start-Ups Fail.

25 See OECD (2019). Barriers to Exit – Note by BIAC.

3.2.2 Identification difficulties

Identification of a “killer” acquisition requires reasonable certainty that the acquired start-up would have become a significant competitor to the incumbent absent the merger, and moreover that there exist substantial barriers to entry that would prevent a number of other start-ups from entering this segment, and restoring any lost competitive tension. However, even on the first limb, it is incredibly difficult to determine the growth path of a given firm, given the risky nature of start-ups.

In the first instance, most start-ups fail. A commonly cited statistic is that ninety percent of start-ups fail within two years of operation. Of the ten percent that survive, only a select few grow sufficiently such that they can challenge the incumbent. In South Africa, only 1% of all microenterprises that begin with under five employees grow to employ ten people or more.²³ It is thus evident that very few start-ups are likely to pose a serious competitive threat.

Furthermore, it is incredibly difficult to predict which firms will come out of this funnel. The most compelling evidence to support this statement is that experienced investors, whose careers are predicated on some degree of success, invest in failing businesses more often than not. For example, the Wall Street Journal reports that approximately 75% of venture capital-backed firms fail.²⁴

Given how difficult it is (even for those well-versed in the innovation ecosystem, and with strong incentives to guess correctly) to predict small firm growth, it is reasonable to expect competition authorities to struggle to reliably identify nascent competitors. As a result, increased scrutiny increases the risk of false convictions, which are highly detrimental to the rate of investment and innovation. **It is an absolute imperative for South African policymakers to encourage and incentivise investment, in particular investment by smaller entrepreneurs, in order to contribute towards addressing the triple challenges of poverty, unemployment and inequality.**

3.2.3 Procompetitive outcomes

While mergers between incumbent tech firms and small start-ups can have anticompetitive motives, they can often be motivated by procompetitive considerations. This is particularly evident when considering the relative advantages of each firm type.

Start-ups are often characterised by significant innovation – their *raison d’être* is to provide novel offerings unavailable elsewhere. However, these firms may lack the scale, capital and expertise necessary to bring their offering to market in a timely and profitable manner. Incumbent firms, on the other hand, are typically endowed in the exact areas in which start-ups struggle – economies of scale and scope, capital and expertise.

As a result, acquisitions can increase the pace and probability at which a novel offering reaches the market, while economies of scale mean that consumers can access the product at a lower price than in the counterfactual. In addition, economies of scope mean that the start-up’s innovation may be combined with existing IP owned by the incumbent, resulting in further improved offerings.

In this context, an overly-interventionist approach will not only prevent existing innovations from reaching the market, but will also lead to dynamic chilling effects for both entrepreneurs and investors. Entrepreneurs are only incentivised to innovate where there is a potential path to reward. In many cases, the only feasible channel through which to receive such a reward is a buyout by a large firm, which (as mentioned above) has the scale, capital and expertise to ensure the innovation efficiently reaches the market.

Indeed, the OECD notes that “*the business model of such nascent competitors may be built upon such an exit.*”²⁵ By removing this channel, the regulator will disincentivise innovation and investment in the first instance.

Equally, many investors are incentivised to invest by a similar potential reward path. In addition, some investors prioritise the pace of return – by way of example, five years to exit is a common strategy among private equity firms. Again, a buyout becomes an extremely appealing option for investors, and removing it is likely to harm innovation.

26 Holmström, M., Padilla, J., Stitzing, R. and Sääskilähti, P. (2018). Killer Acquisitions? The Debate on Merger Control for Digital Markets.

27 See Lewis, C. and Gasealahwe, B. (2017). Lowering barriers to entrepreneurship and promoting small business growth in South Africa.

28 Madl, A.C. (2020). Killing Innovation?: Antitrust Implications of Killer Acquisitions. JREG Bulletin, 38, page 28.

29 The Paper, page 27.

Holmstrom et al. articulate this concern as follows:²⁶

“Venture capitalists seek return for their investments and selling the start-up to the incumbent can be a more lucrative strategy compared to an initial public offering. Similarly, many start-ups have been created with the idea of becoming bought by the incumbent eventually. Raising the hurdle for such acquisitions surely impacts the financial incentives of venture capitalists and entrepreneurs, and this may have a negative outcome on rate of innovation.”

Chilled incentives to invest are particularly concerning in a developing context, where entrepreneurs (particularly women and historically disadvantaged persons) routinely cite poor access to finance as a key inhibitor of entrepreneurial success. The Global Entrepreneurship Monitor found that “problems with finance” led to 28% of firm exits in South Africa, compared to 11% in OECD countries.²⁷

Accordingly, this note concurs with Madl, who argues that “neutral to procompetitive motivations predominate for enough overlapping acquisitions [such] that heightened review is unlikely to prevent killer acquisitions from occurring, while raising costs for all legitimate transactions”.²⁸

Separately, any theory of harm regarding the potential of a nascent competitor to become a significant market player is predicated on the understanding that market shares are not indicative of likely future competitive constraints. This is because, for a nascent competitor to represent a future competitive threat, it must play in a market where certain firms (regardless of existing market shares) are able to rapidly increase their scale.

However, this is in significant tension with the Paper’s concerns that, in digital market, network effects prevent smaller firms from competing effectively with larger ones and that high levels of concentration are *per se* problematic. **If the acquisition of small and comparatively new entrants is deemed likely to be problematic on the basis that such players would, absent the acquisition, grow quickly in order to be strong and effective competitors, this would imply a competitive environment in which existing scale does not insulate larger players from competition and where barriers to entry and expansion are low. This is precisely the kind of environment when one would ordinarily consider high levels of concentration to be especially poor indicators of market power.**

3.2.4 Alleged under-enforcement

A key purpose of merger control is to balance the minimisation of Type I errors (i.e. false convictions) against the minimisation of Type II errors (i.e. false acquittals). The key risk of a Type I error, or false conviction, is that an authority would incorrectly convict a firm or group of firms, and thus disincentivise substantial and effective competition. The risk of a Type II error, or false acquittal, is that firms may be able to engage in anticompetitive conduct, harming consumers.

The Paper dedicates significant attention to the minimisation of Type II errors, stating that “South Africa’s merger control regime ... suggest[s] a degree of underenforcement and the risk of false negatives”.²⁹ In support of this assertion, the Commission cites the fact that all digital market mergers between 2011 and 2018 have been passed without the imposition of competition conditions. The Paper attributes the alleged under-enforcement to jurisdictional and capacity constraints.

However, this quick summary statistic (even setting aside how such a statistic was defined and created) does not show that under-enforcement is endemic, or even somewhat problematic. Most mergers, as a matter of course, do not give rise to competitive concerns. As a result, the large majority of mergers are passed without conditions. Showing that each of the limited number of notified mergers in the digital space was cleared unconditionally therefore simply does not constitute credible evidence of under-enforcement. Put simply, given the small sample size considered, it is entirely plausible that none of these mergers would have been found to be problematic, even if subjected to some higher standard.

Moreover, even if there were conclusive evidence that under-enforcement is a concern, the subsequent regulatory approach must remain cognisant of the potential for Type I errors, or false convictions, and the implications of such errors for consumer welfare. As noted above, over-enforcement will disincentivise effective and healthy competition, and will critically disincentivise entrepreneurship, investment and innovation in South Africa, as the incentive for firms to compete for market share is reduced by the likelihood that any gains will be eroded by regulation. The Paper does not reflect adequately on this possibility.

3.3 Data

3.3.1 Introduction to data

Data are increasingly important in the modern economy, particularly in digital markets. If available, they are used to inform many decisions taken by a firm, including but not limited to production, pricing, marketing, hiring, and distribution. The increasing importance of so-called “Big Data” (i.e. larger, more complex datasets, often arising from new sources) has given rise to increased scrutiny among regulators, who look to update their “toolkit” to better evaluate the ways in which data may impact competition.

From a competition perspective, there are well-established ways in which the use of Big Data may lead to anticompetitive harm in the context of a merger, or in ongoing anticompetitive conduct amongst firms. Typically, these concerns are not novel, and can be evaluated under traditional competition frameworks. The Paper outlines two such theories.

- First, the Paper raises standard vertical foreclosure concerns, such as that a vertical merger involving a data-rich upstream firm may incentivise input foreclosure, such that the costs of downstream rivals are raised due to an inability to access the upstream data. Similarly, a large, vertically integrated firm may have access to substantial and uniquely attractive data that is simply not made available to downstream rivals on attractive terms.
- Second, it states that in some cases a firm may possess a dataset that is simply unmatched by a rival – a merger between two data-rich firms may give rise to an entity with an unassailable competitive advantage accruing from the combination of the two datasets. Much like in markets that have allegedly “tipped”, smaller rivals may complain that they will never be able to gain the scale and attractiveness of the incumbent’s dataset.

While the Paper identifies the ways in which harm may arise, it does not provide a comprehensive framework through which these theories of harm should be assessed, and, in our view, it overemphasises the likelihood of anticompetitive harm.

Importantly, the mere presence of Big Data within a firm is insufficient to conclude that conduct by that firm is likely to create anticompetitive harm. Instead, assessments of the content, replicability, and dynamic importance of the relevant datasets, are important in determining the incentives and actions of the parties, which in turn determine the competitive outcomes. We look to address these limitations in the sections below, engaging with each of the Paper’s theories in turn.

3.3.2 Input foreclosure

Input foreclosure arises where the incumbent or a merged entity has the ability and incentive to restrict access to products or services that it would have supplied to downstream rivals in the counterfactual, and where that restriction is likely to have substantial adverse effects on competition. However, the latter can only occur where those downstream rivals have little access to alternative sources of the relevant input, where the relevant input is important to downstream competition, and where the anticompetitive effect outweighs any pro-competitive effects.

This foreclosure can refer to the cessation of supply to downstream rivals (complete foreclosure) or supplying downstream rivals at less favourable terms than it supplies the downstream arm of the merged entity (partial foreclosure). In both cases, the restriction in supply increases the cost of accessing the input for downstream rivals.

³⁰ See for example European Commission (2008). Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings. Official Journal of the European Communities, C 265/07.

This theory of harm is extremely well-established in both merger control and abuse of dominance investigations, and there is little to suggest that it ought to be evaluated any differently in the digital space. In looking to establish whether an incumbent or merged entity will pursue anticompetitive input foreclosure, three criteria must be addressed.³⁰ First, the **ability** of the entity to substantially foreclose access to inputs or customers must be evaluated. Second, the undertaking must have the **incentive** to engage in foreclosure. Third, the **overall competitive effect** must be assessed, and conduct will only be deemed anticompetitive if it gives rise to substantial consumer harm and outweighs any countervailing efficiencies that arise.

When viewed appropriately through this logical framework, it quickly becomes apparent that anticompetitive input foreclosure is relatively unlikely to arise where data are the relevant input. This is because (assuming the data in question are actually beneficial to the downstream operations of the integrated firm), for a firm to have the ability to engage in such conduct, the input (i.e. the relevant dataset) must be critical in the production process of the downstream rivals, and must be difficult to obtain in another way. However, in most instances, data are more easily replicated than physical inputs, meaning that downstream firms are likely to be able to accrue data inputs from other sources (such as existing rivals, new entrants or vertical integration). Accordingly, any cessation of supply will not foreclose rivals, and no anti-competitive incentives, let alone effects, can arise.

3.3.3 Efficiency offense

In rare cases, a dominant undertaking will be able to make a competitive offering so compelling that rivals will be wholly unable to compete in the long run, leaving the dominant firm facing reduced competitive constraints. This is known as the “efficiency offense”. The Paper is concerned that this may arise in the context of Big Data, where the application of either a post-merger combination of datasets, or the existing strength of an incumbent’s dataset, will create an unassailable competitive advantage.

However, efficiency offense claims should be assessed with a high degree of caution, largely because improved offerings are typically viewed as procompetitive. Unfounded intervention risks providing less efficient competitors with an unearned advantage, at the direct expense of consumers. Where more efficient competitors are artificially punished for their efficiency, this is likely to substantially chill incentives to make the necessary investments to achieve such an efficiency advantage in the first place.

In order for an efficiency offense claim to constitute a genuine competitive concern, it must first be shown with a reasonable degree of certainty that the dominant undertaking has an unassailable competitive advantage in the relevant market. Importantly, this should not be based on mere speculation or conjecture (especially if that conjecture is provided by those competitors that stand to lose business as a consequence of the efficiency) – it must be well grounded in evidence. Where this criterion alone is not met, any conduct will likely be procompetitive.

With respect to data-related efficiency offenses, the content of the datasets in question is critical to understanding whether an unassailable advantage is likely to exist. In particular, the complementarity and replicability of the datasets available to the relevant undertaking (typically either a large firm or a merged entity) must be assessed.

- **Complementarity:** This refers to the ease with which two datasets can be integrated. Where there is minimal common information across the relevant sets, the combination is unlikely to result in an improved offering. There are several ways in which a lack of complementarity may arise, including different levels of aggregation, different time horizons, or incomparable methods of observation identification.
- **Replicability:** As discussed above, replicability refers to the ease with which a particular dataset can be replicated, either through surveys, third-party purchases, web-scraping, or some other method. Where a combined dataset can be replicated, it is unlikely to give rise to anticompetitive constraints, as its use will be constrained by rival responses.

In addition, dynamic competition must be assessed. Economic theory shows us that where prices are supra-competitive, there is an incentive for rivals or new entrants to undercut the supra-competitive price. Similarly, where an undertaking may make a substantially more attractive offer in the future, rivals and new entrants are incentivised to compete vigorously in order to avoid customer loss.

Where a dataset is replicable, it is likely that rivals and new entrants will mitigate the short run competitive advantage of the merged entity by replicating the relevant dataset, and using it to match the more attractive offering. Importantly, even where a combined dataset is unique (i.e. not replicable), rivals and new entrants may respond by innovating to offer a differentiated but equally attractive product/alternative. In both cases, consumer welfare is not harmed and is in fact enhanced significantly. Moreover, consumers would be left substantially worse off from intervention (since datasets would not be replicated and/or rival's innovations would not occur).

It is thus evident that while efficiency offenses may occur, they will do so only under strict conditions that are relatively unlikely to arise in the vast majority of digital markets. Undue regulation threatens to artificially advantage less efficient competitors, harming consumer welfare and dampening dynamic investment incentives.

Notwithstanding the above, where authorities do robustly identify vertical foreclosure concerns, it is important to consider the impact of potential remedies. Typically, authorities mandate licence terms for data to flow from large upstream firms to small downstream firms. However, this is likely to disincentivise the larger firm from making the necessary investments to improve its own dataset, as there is the expectation that rivals may be able to free ride on this investment. This is likely to worsen the competitive offering of large firms.

Relatedly, where small firms expect to access market-leading data, they are unlikely to invest in challenger datasets, harming both the competitive process and consumer choice. This can be expected to be of particular relevance to developing economies, such as South Africa. For example, if Bing were to expect free access to Google's datasets, Bing would be unlikely to invest in South Africa-specific search data of its own, depriving consumers of competition in this important dimension and a key aspect of differentiation between the two search services. Accordingly, regulation aimed at improving access to datasets among all firms may, in fact, ultimately worsen the quality of the relevant data, undermining competitive offerings and harming consumer welfare.

3.4 Pricing algorithms

3.4.1 Introduction to pricing algorithms

Pricing algorithms are increasingly common in today's economy. Typically, algorithms are just simple rules for processing inputs (e.g. market conditions, consumer characteristics or competitor prices) into outputs (namely, prices). However, some algorithms "learn" from their own conduct, such that they can solve increasingly complex problems over time.

Newer pricing algorithms will often monitor the pricing or conduct of competitors in order to generate an automated response along certain parameters. For example, a pricing algorithm may ensure that a firm matches or undercuts the prices of its rivals when certain conditions are met.

The Paper outlines the ways in which pricing algorithms may give rise to anticompetitive harm. In particular, it expresses the concern that pricing algorithms may facilitate both explicit and tacit collusion, ultimately harming consumers.

- Regarding the former, the Paper argues that algorithms can increase market transparency and allow more rapid punishment for deviation from a coordinated strategy, such that firms can more easily monitor and incentivise compliance with an explicit agreement to collude.

31 Successful coordination will also of course be undermined by external destabilisations, such as new entry or countervailing power.

32 See Salcedo, B. (2015), "Pricing Algorithms and Tacit Collusion", Manuscript, Pennsylvania State University.

33 See for example RBB Economics (2018). Automatic harm to competition? Pricing algorithms and coordination. RBB Brief 55.

- Regarding the latter, the Paper suggests that the rapid pace of algorithmic price-setting can facilitate tacit collusion. This may occur purposefully, where algorithms are actively programmed to sustain artificial price levels, or "by accident", where an algorithm is programmed to pursue a neutral profit-maximising objective resulting in a pricing strategy that mimics a coordinated agreement.

However, there are several issues that this discussion does not address. First, the theoretical concerns that are expressed are largely based on assumptions that do not hold in the real world. In particular, concerns about the use of algorithms typically rest upon a notion that increased transparency (brought about by the aforementioned algorithms) is likely or even necessarily anticompetitive (as it will facilitate collusion). However, transparency is also a key tenet of vigorous and effective competition, which the Paper largely overlooks. Moreover, the Paper does not adequately consider the considerable efficiencies that may arise from algorithmic price setting.

3.4.2 Algorithms and coordination

Coordinated outcomes arise when oligopolistic firms are able to restrict output and sustain prices at a supra-competitive level. However, coordination is inherently difficult to sustain due to the incentive for an undertaking to undercut its rivals, or "cheat" on any coordinated understanding. By following a low-price strategy while its rivals charge supra-competitive prices, the cheating firm will attract new customers, increasing its short run profits at the expense of rivals.

Game theory shows us that particular conditions must be met for this incentive to be overcome. Specifically, successful coordination requires a focal point (i.e. an easily identifiable strategy for all firms to follow), monitoring and transparency (in order for coordinators to determine that no members are following a "cheating" strategy) and an effective punishment mechanism (to disincentivise cheating).³¹

Theoretically, algorithms may increase the likelihood of meeting the aforementioned conditions, as posited by the Paper. A paper by Salcedo supports this notion, finding algorithms that monitor and match prices in real-time can lead to coordinated outcomes.³²

However, this result only applies under certain conditions. First, transparency needs to be perfect. Second, the price response needs to be immediate. In real-world imperfect markets, neither of these assumptions is likely to hold. Accordingly, the fact that coordination is only sustained under stringent assumptions indicates that coordination arising due to pricing algorithms is likely to be the exception, rather than the rule.

This is largely because the use of algorithms is unlikely to sufficiently disincentivise a cheating strategy.³³ Even where an algorithm increases the ability of firms to monitor compliance or improves the pace at which firms react to deviation, firms will likely be incentivised to pursue more covert cheating options, such as secret discounts or customer-specific price discrimination.

In addition, while the Paper repeatedly acknowledges that algorithms are likely to increase market transparency, it offers no consideration of the potential benefits of transparency to both consumer welfare and the competitive process more broadly. High levels of transparency can be highly beneficial for the efficient functioning of markets. This is because, in transparent markets, information flows without friction, such that prices are able to respond efficiently to any changes in market conditions. In short, transparency can significantly reduce the prospects for market failure.

Thus, while there are potential mechanisms through which the use of pricing algorithms could lead to coordination, it is far from certain that these will arise. Accordingly, onerous regulation, particularly where such regulation avoids a careful case-by-case assessment of the relevant facts, is likely to create significant adverse consequences, particularly through the removal of algorithm-driven efficiencies (as discussed in more detail below).

34 See for example European Commission (2009). Guidance on the Commission's enforcement priorities in applying Article 92 of the EC Treaty to exclusionary conduct by dominant undertakings. Official Journal of the European Communities, C 45/7.

3.4.3 Algorithm-driven efficiencies

As noted above, pricing algorithms are typically simple rules that convert inputs into outputs, conditional on particular parameters. The process itself is neutral – anticompetitive harm or procompetitive benefits depend on the inputs and parameters. While regulators typically focus on potential anticompetitive harm (as the Commission does in the Paper), there are key mechanisms through which procompetitive outcomes are likely to arise.

First, as discussed previously, it is common for algorithms to monitor and match prices of rivals. Where rivals offer discounts, firms utilising pricing algorithms will be able to respond in real time, such that all firms in a particular market will offer lower prices. Accordingly, customers will be able to accrue the benefit of lower prices from the discounting firm, without incurring the cost of switching to the firm that first offered the discount. While this could, in theory, create disincentive effects to offer the discount in the first instance, there will likely be at least short run gains available to consumers as firms increase adoption of pricing algorithms.

Second, the ability of algorithms to price discriminate based on market conditions and consumer characteristics can increase the efficiency with which products are priced, and can increase output, in particular to consumers with a lower willingness to pay. In addition, firms can more accurately predict sales and can thus optimise production, which in turn may reduce variable costs and lead to passed-through benefits for consumers.

There may be public policy and consumer protection issues that arise from algorithm-driven price discrimination that are typically beyond the ambit of competition authorities. However, there is little indication that price discrimination increases the likelihood of coordination. In fact, the existence of widespread price discrimination it is generally accepted to work against coordination, since it drastically increases the complexity of the coordinated understanding that would be required. As a result, an overly-interventionist approach may depress procompetitive outcomes and disincentivise future use of efficiency-enhancing pricing algorithms.

3.5 Regulation of Big Tech firms

3.5.1 Introduction to the regulation of Big Tech firms

The Paper sets out a number of ways in which Big Tech firms might be regulated, either under some form of abuse of dominance legislation, potentially following a market inquiry, or possibly by some other regulatory authority. These mooted regulatory actions are primarily proposed within the framework of abuse of dominance investigations.

An abuse of dominance refers to conduct by a firm with significant market power that serves to artificially entrench or improve its competitive position within the existing or neighbouring market(s). Examples of abusive conduct include exclusive dealing, tying and bundling, price gouging, predation, and refusal to supply.³⁴ While these concerns can be applied to digital markets, they are not in any way novel, and can typically be evaluated under traditional competition frameworks.

Mirroring the earlier discussion regarding killer acquisitions, the Paper begins by asserting that the Commission has historically under-enforced abuses of dominance in digital markets, before outlining theories of harm and the planned actions aimed at reducing under-enforcement. In particular, the Commission plans to map South Africa's digital landscape, pro-actively instigate conduct investigations, publish guidelines for key areas of abuse, institute a digital market inquiry, and track foreign cases against global giants.

This section assesses the proposals in the context of competitive dynamics between large firms, in the following manner:

- First, this section discusses the nature of competition between large, technologically enabled firms, noting significant procompetitive outcomes that may arise.

35 This is demonstrated, for example, by the popularity of the incumbent social media platform at the time, MySpace, being overcome by Facebook, and subsequently a large number of younger social media users switching away from Facebook to Instagram. These examples highlight how seemingly significant network effects can be readily overcome through innovation.

36 See Dayaram, S. (2020). Apple ramps up efforts to build own search engine to rival Google, says report. *Cnet*.

37 In terms of public policy more broadly, it is important to establish whether the models that facilitate low-cost offerings (typically driven by selling user data to advertisers) are creating adverse effects in, for example, privacy matters. However, it may be the case that consumers are well-informed about the business models, but choose to engage with the product because, in their mind, welfare-enhancing effects outweigh potential external concerns. Regardless, this is not typically a concern of competition authorities.

38 In some cases, automation and digitisation of production may lead to public interest concerns around employment. However, it should not automatically be presumed that automation will decrease employment. For example, Statistics Canada finds that firms who invested in robots employ more workers, not less. See Dixon, J., Hong, B. and Wu, L. (2020) *The Employment Consequences of Robots: Firm-level Evidence*.

- Second, it assesses the scope of existing legislation and the possible consequences of mooted legislative adjustments. In particular, we show that the introduction of “reverse” onus (where conduct by specified firms is presumed to be anticompetitive unless proven otherwise), is likely to create severe adverse consequences for consumers.
- Third, it outlines key lines of inquiry that should be pursued before any intervention. Here, we also offer suggestions for potential interventions that are likely to be effective while at the same time being less likely to give rise to adverse consequences.

3.5.2 Nature of competition

At the outset it is important to appreciate that Big Tech firms may often be subject to competitive constraints that are not immediately evident from a cursory look at market shares. In addition to the typical caveats applied in simple market share analyses (e.g. differentiated products and dynamic entry and expansion), particular features of digital markets are likely to render market shares an even less reliable indicator of market power, far less so the persistence or abuse of market power.

For example, as noted previously, incumbent firms may be constrained by the competitive threat of innovative start-ups, where innovative rivals and new entrants can rapidly gain significant market share regardless of their existing competitive position.³⁵ In addition, the presence of indirect network effects tends to limit the exercise of market power, as any worsening of competitive offering is punished on two sides of the markets, unravelling a multi-sided platform’s competitive position.

Moreover, Big Tech firms tend to exert important competitive constraints on one another, even across different markets. This is because the threat of entry by a major rival is a consistent incentive for firms to ensure maximum efficiency within a given market, such that competitors are disincentivised from entering in the first instance. By way of example, murmurings of an Apple-developed search engine would likely exert a constraint on any putative abuses of market power by Google.³⁶

This vigorous competition has given rise to significant procompetitive outcomes. These outcomes are numerous and interrelated – an inexhaustive list is presented here.

- **Improved access to information.** A truism worth noting is that the internet has improved the ability of individuals, across all income levels, to access information that was previously inaccessible. As a matter of consumer welfare, this means that people can more effectively take decisions that reflect their preferences, and experience lower barriers to entry in many entrepreneurial markets.
- **Innovative products available at little-to-no cost to the consumer.** Non-traditional business models allow many digital firms to provide offerings at negligible cost to the consumer, improving access to services for disadvantaged individuals.³⁷ For example, Facebook, Google and Instagram are all available at no cost to users, allowing even the most resource-constrained individuals the opportunity to engage with these services.
- **Increased within-firm productivity and expanded output.** Use of digital technologies can improve the efficiency of a firm’s production process, which can result in greater output available at lower cost to the consumer.³⁸
- **Low barriers to entry.** As noted by the Paper, digital markets are often subject to very low barriers to entry, as potential entrepreneurs have access to considerable information, easier access to customers, and, increasingly, easier access to finance (although South Africa still has significant room for improvement with respect to financial inclusion).
- **Expanded consumer choice.** In conjunction with each of the aforementioned features, consumers (and particularly low-income consumers) are able to access a wider range of goods and services than prior to the arrival of digital markets.

39 World Bank (2020). The Digital Economy for Africa Initiative.

40 The Paper, page 38.

41 See the Cremer Report, page 6, which states that *“there are many ways to restrict multihoming or makes it less attractive – once again, case by case analysis is primordial. However, we believe that any measure by which a dominant firm restricts multi-homing should bear the burden of providing a solid efficiency defense.”*

- **Negligible search costs.** While there is a greater range of products/services available, this would be of little use if consumers could not sort through the options in order to determine and act upon their preferences. Low search costs have largely been driven by continual improvements in algorithms, whether this refers to web search such as Google, search within a software environment such as an email or file storage program, or search for products on platforms such as Amazon.
- **Negligible switching costs.** In addition to having much greater choice, minimal switching frictions mean that consumers can actively move between options, as new and innovative offerings arise. This places a further competitive constraint on firms that understand that artificial frictions will not protect them from customer loss in the face of more attractive rival offerings.

More broadly, active consideration of the transformative potential of digital markets is critical for the achievement of country-level developmental goals – a point on which this note and the Paper are aligned. Indeed, the World Bank notes that *“Africa has the opportunity to harness the digital economy as a driver of growth and innovation”*.³⁹

However, it is important to appreciate that these benefits are largely made possible through active investment and innovation by Big Tech firms. Accordingly, where incentives to invest and innovate are chilled, this growth opportunity dwindles.

3.5.3 Legislative considerations

The Paper suggests that South African legislation may be ill-equipped to assess abuse cases in digital markets. It takes particular issue with the fact that the current onus of demonstrating harm from potential abuses lies with the regulator, who may not have the capacity to investigate in a fast-paced, innovative market. Citing the Cremer report, the Paper suggests that a “reverse” onus may be preferred, as follows.⁴⁰

“As raised by the expert report for the European Union on competition policy in digital markets, the preferred position may be for a reverse onus in certain circumstances whereby dominant digital firms should have to demonstrate why certain conduct is net efficiency-enhancing and not restrictive of new entry.”

However, it is important to appreciate that this position is not necessarily reflective of consensus within the economic literature, and that the Cremer report itself only raises “reverse onus” as an option for very particular circumstances (such as the restriction of multi-homing by a dominant firm).⁴¹ This is not acknowledged in the Paper.

In addition, the Paper does not reflect on the potential adverse consequences of this change. It is important to note that, in general, the same “type” of conduct can be either abusive or procompetitive, depending on the case at hand. For example, while some price cuts are predatory, most simply lower costs for consumers. Equally, while tying and bundling may be indicative of a firm leveraging power in one market to artificially improve competitive position in another, it is more often engaged in to simply improve the ease with which consumers purchase complementary products.

Requiring regulatory approval for each piece of conduct that may cause anticompetitive harm (but is more likely to be procompetitive) is likely to add significant cost to engaging in said conduct, in terms of both time and resources. This is precisely what is recognised by the placing of the onus on competition authorities. As a result, reversing the onus may disincentivise unilateral conduct that is likely to create procompetitive outcomes.

Furthermore, in several digital markets hundreds of prices are set on a near-continuous basis, meaning that regulators would simply not have the capacity to timeously evaluate the competitive effects of every change. Moreover, if there were an attempt to do so, it would significantly reduce the rate at which firms could respond to rival conduct. This would lead to a notable lag, where offerings do not accurately reflect supply and demand conditions of the market at any given time. In addition, it would remove short run disincentives to engage in anticompetitive conduct, as rivals would be unable to respond without regulatory approval.

42 We note that the Paper indicates the Commission's intention to issue a guidance note on key areas of abuse. This section aims to assist the Commission with compiling said note.

3.5.4 Framework for assessment

The Commission identifies on-platform competition (platforms using data accrued from other sellers on its platform to launch their own competing offering), self-preferencing (preferential treatment of own downstream products by a vertically integrated firm), conglomerate effects (leveraging power in one market to foreclose competition in another) and resale price maintenance (agreements to maintain second-hand prices at or above a certain level) as the key ways that abuses may occur in digital markets. These theories are well-established and can be genuine sources of competitive concern.

However, as mentioned previously, the same form of conduct can lead to either anticompetitive or procompetitive outcomes. In order to determine which is more likely, a robust economic framework for assessment is required. For a theory of harm to be credible, it must explain with a reasonable degree of certainty the mechanisms through which conduct will lead to anticompetitive harm, and a proper evidence-based assessment must be performed to show that these mechanisms will be likely to give rise to that harm in practice.

The Paper does not offer adequate consideration of the fact that the abovementioned forms of conduct can be procompetitive and, accordingly, does not offer a robust framework with which to assess the ultimate competitive outcome.⁴² Absent a robust economic framework, regulation based on the notion that conduct *may* be anticompetitive is likely to miss (and subsequently disincentivise) any potentially procompetitive effects. This concern is exacerbated where the justification for regulation is the unfounded conclusion of under-enforcement.

Several questions must be evaluated for a framework to a robust assessment of abusive conduct, listed as follows:

- **Is the firm dominant?** This is the starting point of any abusive claim. Where a firm is not dominant, conduct is unlikely to create anticompetitive harm, as consumers will have ample opportunity to switch to rivals.
- **Are competitive constraints exerted by the expansion of rivals or actual or potential entry?** Even if a firm is found to be dominant (for example, on the basis of market shares), dynamic competitive responses may reduce the potential for anticompetitive harm to arise.
- **Are competitive constraints exerted by countervailing buyer power?** Where buyers enjoy significant power, there is an incentive to constrain anticompetitive conduct by renegotiating or threatening to purchase from rival suppliers.
- **Is the conduct objectively necessary?** Even if the conduct is found to be exclusionary, it may be objectively necessary. For example, conduct may be objectively necessary for the health or safety of consumers purchasing the product in question.
- **Are there countervailing efficiencies?** Conduct may also be both exclusionary and efficiency-enhancing. Where a dominant undertaking is able to demonstrate verifiable and (in the case of mergers specific) efficiencies beneficial to the consumer, the conduct may not be anticompetitive.
- **What is the ultimate effect of the conduct on consumer welfare?** The ultimate purpose of the questions above is to determine the overall impact on consumer welfare. In many cases, conduct will have both anticompetitive and procompetitive elements, and the authority must determine the net effect.

Where these lines of inquiry are robustly applied, any regulatory intervention is less likely to give rise to unintended adverse consequences for consumers.

In addition, there are opportunities for the Commission to pursue sensible *ex ante* regulation in digital markets, that will limit the exercise of market power without compromising the broader competitive process.

In particular, mandated personal data portability is likely to offer an attractive regulatory avenue in this regard. This refers to the practise of *"allow[ing] individuals to obtain and reuse their personal data for their own purposes across different services."*⁴³ This process intensifies competitive constraints through several mechanisms.

First, it significantly decreases switching costs, as consumers are able to move their data from platform to platform with negligible friction, and are not disadvantaged should they choose to do so. In other words, data portability allows consumers to switch platforms without losing the benefits of their existing data. These benefits range from the seemingly benign (such as saving bookmarks on an internet browser) to critically important (such as maintaining access to historical health data).

Moreover, data portability reduces barriers to entry and expansion. Existing rivals and potential challengers are more likely to exert an important competitive constraint on incumbent firms where there is reasonable opportunity to induce consumers to switch platforms. Absent data portability, lock-in effects may dominate, such that consumers are unlikely to switch platforms even in the face of a superior offering. Mandated personal data portability negates these dynamics, inducing a more competitive process.

A further option for authorities to consider is the facilitation of multi-homing. As explained previously, multi-homing significantly reduces the prospects of network effects insulating larger players from competition. This is because, where consumers multi-home, it is not necessary for consumers to stop using larger platforms in order to use smaller platforms, which lowers the barriers to entry and expansion for smaller rivals.

3.6 Summary

In summary, the Paper indicates that under-enforcement of various mechanisms for harm is likely to have been endemic in the South African context, and that digital markets, at this point in time, are likely characterised by ineffective competition. However, while the Paper identifies some of the ways in which harm may arise, there is little evidence to support the view that such harm arises (and has arisen) systematically.

Moreover, the Paper offers only passing acknowledgment of the likely procompetitive outcomes that may arise in digital markets. Where regulatory intervention does not properly account for the mechanisms through which procompetitive outcomes may arise, it will likely disincentivise firms from pursuing the types of behaviour that create these outcomes in the first instance.

4 Concluding remarks

Digital markets are likely to continue increasing in prevalence and prominence in the South African economy. Maintaining and supporting the competitive process in these markets is thus increasingly important. By articulating the ways in which anticompetitive harm may arise in these markets, the Paper takes a welcome step in this direction.

However, the overarching intention to follow a more interventionist approach in digital markets is unlikely achieve the stated aim of a more competitive environment that protects consumers.

- First, the underlying justifications for increased regulation, as offered by the Paper, are not well-grounded. More particularly, the assertions that all digital markets are likely to tip, and that high concentration is *per se* problematic in the presence of network effects, are simply incorrect. Suggestions of historical under-enforcement are also not robustly supported.
- Second, the theories of harm articulated by the Paper are less likely to arise than the Commission anticipates. In our view, the Commission incorrectly characterises important competitive constraints faced by firms active in this space.
- Third, the Paper's negligible acknowledgment of the potential efficiencies that are likely to arise in the digital arena creates concern that these benefits will not properly be accounted for in competition assessments, which in turn is likely to depress the kinds of behaviour that give rise to procompetitive outcomes.

As a result, increased scrutiny of the nature proposed in the Paper is unlikely to lead to more procompetitive outcomes. Instead, it is likely to chill important investment and innovation incentives that drive a multitude of consumer welfare benefits. Accordingly, we urge the Commission to amend its intended approach to regulation in digital markets, to reflect a more nuanced approach that seeks to better account for case-by-case competitive constraints and other market features that determine the nature of competition.

To pursue additional intervention based upon "broad-brush" premises will harm competition in this space, stifling South Africa's ability to harness digital markets for growth.