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EU-wide comparison of the characteristics and presentation of branded food products (2021)

Annex 4 – Conceptual analyses to understand brand owners' (potential) responses to the amended UCPD

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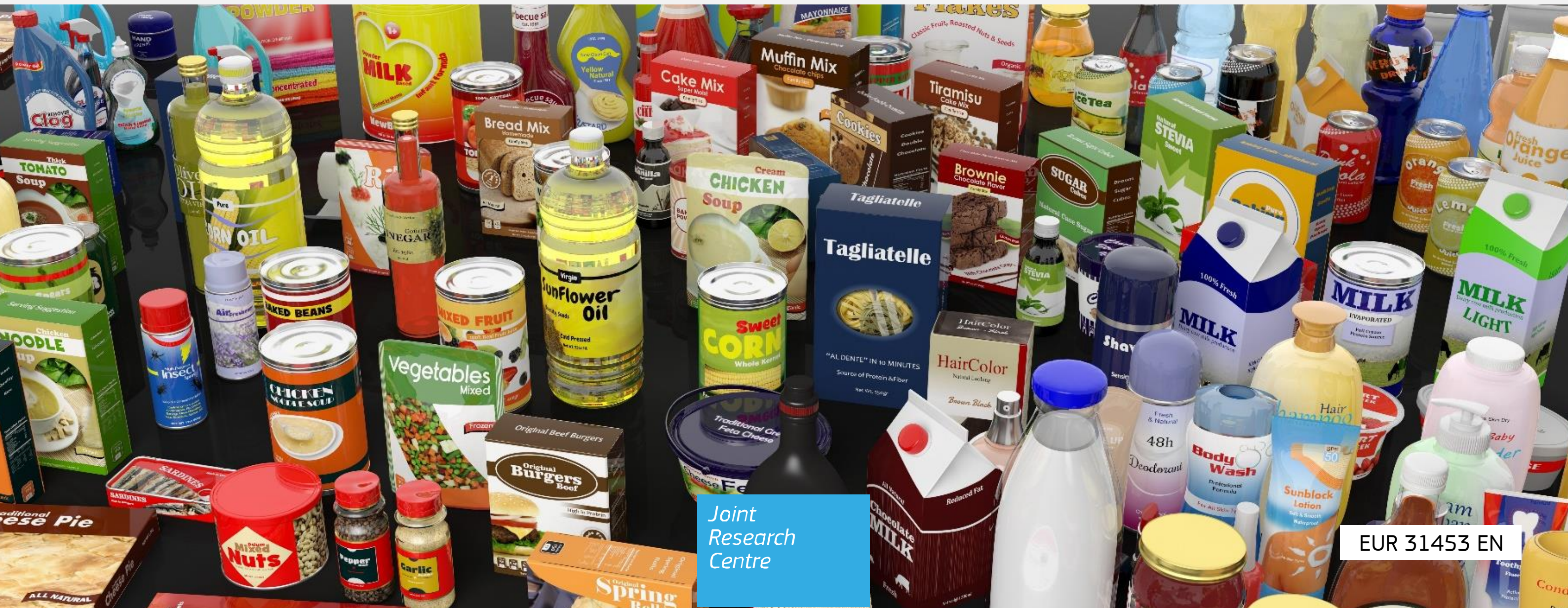

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Contents

1 Introduction

This annex aims to provide a conceptual understanding of how businesses active in the European single market may react to the recently added provision of Directive 2005/29/EC – the Unfair Commercial Practices Directive (UCPD) ([1]) – concerning differences in composition of seemingly identical branded food products (DC-SIP). The analyses employ a theoretical approach to investigate this issue. More specifically, first, this annex attempts to explain theoretically the potential responses of companies to the amended UCPD by building on the previous work done in the field. Second, this annex provides a detailed theoretical analysis of the role of consumers' trust and brand equity and their implications for companies' potential responses to the amended UCPD. The purpose of this annex is to develop more comprehensive theoretical insights into companies' potential responses to the amended UCPD and to provide a conceptual basis for the empirical analyses carried out for this report based on the online company surveys. The theoretical analyses presented in this annex serve as a basis to identify relevant relationships, reduce biases when interpreting the empirical results and deploy related knowledge available in the literature when deriving and analysing the implications of the amended UCPD for companies' potential actions on DC-SIP.

This annex builds on previous studies analysing DC-SIP (Colen et al., 2020; Di Marcantonio et al., 2020; Russo et al., 2020; Nes et al. 2021). For example, this includes the study of Russo et al. (2020), which investigated the factors incentivising brand owners to market different versions of the same product in different Member States and the market implications of different regulatory options. This also includes the reports of Colen et al. (2020) and Di Marcantonio et al. (2020), which investigated DC-SIP from the consumer's perspective by looking at the potential impact on consumers' purchasing decisions and welfare. Relevant for this analysis is also the study of Nes et al. (2021), which empirically estimated the economic factors and drivers (from both a producer's and a consumer's perspective) affecting the incidence of DC-SIP across Member States. Finally, this annex builds on previous studies that are indirectly related to the topic but can improve our understanding of the economic aspects of DC-SIP (e.g. Melewar and Vemmervik, 2004; Grunert, 2005; Schmid and Kotulla, 2011; Passarini et al., 2017; European Commission Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, 2020).

This annex, along with the rest of this report, analyses the differences in the composition of branded food products offered in different Member States. These compositional differences should not be interpreted as quality differences, because differences in the composition of a product do not necessarily affect its quality. In addition, the theoretical analyses conducted in this annex do not investigate whether the DC-SIP practices constitute a misleading practice within the meaning of the UCPD. This type of legal analysis is out of the scope of this annex and would require case-by-case assessment by competent national authorities. Moreover, the analyses in this annex are hypothetical in nature and do not have legal implications as such.

([1]) Article 6(2)(c) inserted by the Enforcement and Modernisation Directive (EU) 2019/2161.

2 Potential responses from companies to the amended UCPD

This section attempts to provide an understanding of brand owners' potential responses to the amended UCPD. The analyses are primarily based on related economic studies and the conceptual framework developed by Russo et al. (2020) and Colen et al. (2020) to analyse the rationale for adoption of DC-SIP practices and their implications for consumers.

Product composition is a choice variable for firms. Firms are incentivised to choose the composition of a product that maximises profit. DC-SIP can be considered to be a special case of spatial segmentation/differentiation of the market, as it involves offering different versions of a product across Member States and consumers are spatially dispersed and unable to simultaneously shop in multiple Member States (Russo et al., 2020). If market conditions vary across Member States, firms may be incentivised to adjust the composition of products to reflect Member States' specific conditions. That is, rational firms will choose the product composition that maximises their profits as determined by the market conditions they face in different Member States. According to Russo et al. (2020), DC-SIP are more likely to occur when factors such as demand (consumer preferences), production factors (e.g. production costs, the cost of input sourcing), technological factors (e.g. cost of transportation, cost of product preservation, local weather conditions), competition (e.g. market structure) and regulations and institutions are heterogeneous. If these factors vary across Member States, there is an incentive to adjust product composition and offer different versions in the European single market.

The responses of companies to the amended UCPD will depend on the factors that drive DC-SIP and the perceived benefits. We assume a hypothetical reference situation without the amended UCPD in place in which some companies operating in the food sector use DC-SIP practices while others do not. For the first group of companies, it is assumed that DC-SIP practices represent a profit-maximising choice. For the second group of companies, the opposite is assumed (i.e. the profit-maximising choice is not to use DC-SIP practices) ([2]).

A rational company will choose a response to the amended UCPD that will adversely affect its profit the least by taking into consideration the change in direct costs, indirect company performance effects and impact on intangible assets. The direct costs may include an increase in the cost of information campaign (where the company considers and can demonstrate that DC-SIP are objectively justified), marketing costs associated with the change of front-of-pack appearance or brand name and costs of recipe reformulation and production processes (including sourcing of ingredients). The indirect company performance effects could include changes in margins and sales volume (including market share and competitive advantage). The primary impact on intangible assets may include changes in consumer trust in and loyalty to the brand and brand reputation. Companies for which DC-SIP practices are an optimal strategy without the amended UCPD in place will choose an action as a response to the amended UCPD which will lead to the lowest net adverse profitability effect. That is, they will weigh the impact of their action on direct costs, indirect company performance and the value of intangible assets.

Companies' potential responses to the UCPD could include the following actions.

1. **Disclosure of information to consumers if the company considers and can demonstrate that DC-SIP are objectively justified** ([3]). Communicate version differences to consumers on product-related websites or other online tools, through advertisement or by other means (e.g. information provision at the point of purchase) ([4]).
2. **Relabelling**. Adjust the presentation of product versions (e.g. by changing the front-of-pack appearance, packaging or brand name) to visually differentiate the versions for consumers ([5]).
3. **Recipe reformulation**. Harmonise or change recipes between versions.
4. **Market exit**. Product withdrawal from some markets.
5. A combination of the above.

([2]) These companies are not expected to be affected by the UCPD and therefore are not discussed. They may be affected only indirectly, through potential feedback market effects resulting from actions taken by companies for which DC-SIP practices are an optimal strategy without the amended UCPD in place (Russo et al. 2020).

([3]) Article 6(2)(c) of the UCPD allows traders to (continue to) market goods that significantly differ in composition or characteristics as identical when this is justified by 'legitimate and objective factors'. Recital 53 to the Enforcement and Modernisation Directive 2019/2161 stresses that traders who differentiate the versions of their goods because of legitimate and objective factors should still inform consumers thereof.

([4]) Note that under the UCPD, companies need to demonstrate that product version differences are objectively justified.

([5]) For more detailed analyses of consumer perceptions of differences in packaging of seemingly identical branded food products, see Solano-Hermosilla et al. (2023).

Each potential action implies different profitability effects for companies, which are likely to be specific to the product and brand and depend on market conditions driving the companies to use DC-SIP practices.

Disclosure of information about DC-SIP to consumers while maintaining composition differences and identical or similar front-of-pack appearance may be the least costly response for companies to the UCPD, as it implies incurring primarily some direct costs (e.g. advertisement costs), whereas indirect company performance (e.g. margins, sales volume, market share) is expected to be less affected. However, this is conditional on the fact that the disclosure of information about the DC-SIP does not induce significant adverse effects on the company's intangible assets (e.g. brand trust and loyalty among consumers) and hence also on indirect company performance. Additionally, this action can be applied only if composition differences can be justified in line with the amended UCPD requirements.

Relabelling is likely to be a more costly action than information disclosure as it involves both direct costs, for example related to changing the front-of-pack appearance or brand name and marketing costs, and indirect costs, for example related to brand recognition of relabelled products among consumers, which may affect sales, margins and market share. The impact of relabelling depends also on the 'magnitude' of the label change. Solano-Hermosilla et al. (2023) show that communicating to consumers that product versions are different may require introducing a more significant change to the front-of-pack appearance (i.e. significant relabelling). Consumer perception of product version differences depends, among other things, on the type of front-of-pack elements that differ between versions, the number of different elements and the product.

Recipe reformulation (full or partial harmonisation) is likely to be a more significant and costly response to the amended UCPD than disclosure of information or relabelling. This is because it may require a change in production processes, input sourcing and marketing. Additionally, recipe reformulation may affect company performance (e.g. sales, margins and market share) induced by potential changes in brand reputation among consumers and consumer acceptance of the adjusted product composition. Note that, to minimise the adverse profitability effects, companies may not necessarily implement full harmonisation but respond with partial harmonisation where version differences can be justified in line with the requirements of the amended UCPD.

Probably the most drastic response would be company exit from certain markets. For example, this may occur when the costs of information disclosure, relabelling and recipe reformulation is high, leading to a significant market share loss and profit decrease (e.g. because of loss of brand trust among consumers and consumers switching to competing brands).

The above ranking is only indicative and does not hold in all situations. Although the direct costs can be more straightforwardly identified and used to indicate which response is least costly, the impacts on intangible assets and the effects on indirect company performance (e.g. sales, profits, margins, market share) are more difficult to evaluate. As discussed in more detail in the next section, consumer trust and brand equity may be affected by both DC-SIP practices and DC-SIP-related action taken by companies, which may considerably affect the costs and benefits of each action and may reverse the ranking. These effects may be reinforced by various factors that are either in the company's control (e.g. information campaign, advertisement, investment in brand reputation) or external to the company (e.g. consumer boycott, social media activity, involvement of consumers' associations).

Overall, it is expected that if the heterogeneity in market conditions (particularly heterogeneity in consumer preferences, competition and production costs) are the main drivers for DC-SIP, companies using DC-SIP practices will be incentivised to maintain differences between product versions as much as possible. In this case, the profit-maximising response to the amended UCPD is to continue exploiting the heterogeneity in market conditions by having product versions that differ between Member States. To maintain product differences and ensure compliance with the directive, the disclosure of information or relabelling may represent the optimal (most cost-efficient) actions. Disclosure of information would maintain product differences (but inform consumers), whereas relabelling would eliminate DC-SIP, as presentation would differ between versions. In the opposite case, when market conditions are more homogenous, the harmonisation of recipes may represent a more feasible response. Note that companies may apply a combination of different strategies to balance the costs and benefits. For example, companies may harmonise recipes for product versions between a group of Member States where the heterogeneity in market conditions (e.g. consumers preferences) is low, yet relabel product versions in groups of Member States with heterogeneous consumers preferences. Alternatively, companies may both change recipes and relabel product versions to better adjust products to market conditions.

The types of actions that companies take affect their brand in terms of introducing product varieties (lines) ([6]) on the market. For example, relabelling requires extending brand lines to different varieties as opposed to recipe harmonisation, which does the opposite. Brand extension (i.e. introducing a new product variety or varieties) could include horizontal extension within the same price/quality level or vertical extension across price/quality levels. Studies often find an asymmetric effect in which vertical brand extension to higher quality levels improves the overall brand perception, whereas lower-quality extensions may damage it (Heath et al., 2011). As relabelling makes salient (or more visible) brand heterogeneity, companies may be reluctant to adopt this action if it also results in extension into varieties of lower quality, as perceived by consumers, and causes damage to the brand perception. Instead, companies may prefer to extend varieties horizontally within the same quality level or adopt other responses (e.g. recipe harmonisation, information disclosure).

1. **Consumer preferences** ([7])

Heterogeneity in consumer preferences is identified in the literature as a key driver for firms' product differentiation (Gabszewicz and Thisse 1979; Mussa and Rosen 1978; Lancaster 1990; Saitone and Sexton, 2010; Cheng and Peng, 2014). Because consumer preference is subjective, it may vary within space, depending, among other things, on variations in norms, culture, education, income level and individual taste, which define spatially differentiated markets and consumer segments, thus offering a primary explanation for companies offering distinct product versions in multiple geographical markets (Russo et al., 2020). Differentiation strategy is instrumental for profit-maximisation behaviour: differing consumer tastes and preferences incentivise differentiation in product composition to meet consumer expectations, which may also entail different cost structures and hence different prices.

Whether consumer preference affects companies' responses to the amended UCPD depends on the extent to which differences in composition between versions matters to consumers. Important from a consumer preference perspective is how the composition affects consumers' perception of the quality of food products. The formulation of consumers' quality perceptions is a complex and often subjective process. Consumers use an array of available signals or cues to infer the quality of food products, which ultimately determines their purchasing behaviour. The process of food quality perception formation has vertical and horizontal dimensions (Grunert, 2005; Colen et al., 2020). The vertical dimension of food quality perception refers to the use of intrinsic or extrinsic cues to infer the quality of a food product. Intrinsic cues refer to the physical properties of the product, such as ingredients, which cannot be changed without also altering the physical properties of the product. Extrinsic cues refer to everything else, such as price, brand name, packaging, store image and advertising, which are not part of the physical product (Olson and Jacoby, 1972). The horizontal dimension of food quality perception refers to consumers' adjustment of quality perceptions over time (before and after purchase) ([8]). The extent to which cues are used to infer product quality vary by product and by consumer. Consumers use only those cues that they believe to be predictive of the quality they want to evaluate and feel confident using (Cox, 1962; Olson and Jacoby, 1972; Steenkamp, 1990; Colen et al., 2020).

This implies that if ingredients that differ between product versions are not important cues used by consumers to infer product quality, then recipe harmonisation may be a feasible response by companies to the amended UCPD, as it would not induce significant change in consumer product quality perception and purchase choice. On the contrary, when ingredients that differ between product versions are relevant to consumers' quality perception, companies will be incentivised to preserve product differences to avoid consumers changing their purchase choices. In this case, the company's preferred response is likely to be disclosure of information or relabelling while maintaining the product versions across markets.

In certain situations, only the presence of DC-SIP may affect consumers' purchase choices, even if ingredients that differ between product versions are not important cues in consumers' quality perception. According to Colen et al. (2020), this may occur when the DC-SIP result in consumer dissatisfaction because they generate a perception of deception (disconfirmation of expected value) and/or a perception of unfairness (resulting from

([6]) Product 'variety' here refers to the number of variants within a specific product group.

([7]) Note that consumer preferences can be accepted as objective justification for DC-SIP under the UCPD only if firms provide evidence for the existence of such preferences and that the product version differences address those preferences. Otherwise, DC-SIP may lead to an infringement of the UCPD if it affects the purchasing decisions of consumers and if not objectively justified.

([8]) For example, before purchase, consumers' quality assessment can be based on observable intrinsic and extrinsic cues, whereas after purchase their quality perception might be confirmed or disconfirmed after the product is tasted (experienced), which will affect repurchasing decisions. On the other hand, credence qualities (e.g. health or sustainable production processes, occurrence of DC-SIP or other characteristics which cannot be observed or experienced after consuming the product) might be revealed by information provided at any stage of the purchasing choice process, and may lead to adjustment of quality perception and affect repurchasing decisions (Colen et al., 2020).

product versions not being equal across countries). As discussed in the next section, this may lead to damage to brand trust among consumers alongside other potential consumer reactions (e.g. product boycott), including altering consumers' purchase choices. In this case, if the DC-SIP practice is not addressed, it may have an adverse impact on a company's sales and profits. As a result, as discussed in more detail in the next section, harmonisation of the recipe or relabelling seems to be a more rational company response to the amended UCPD in such cases.

2. Production factors

Companies' responses to DC-SIP may have direct impacts on production-related factors, which affect primarily direct costs such as production costs, sourcing costs and marketing costs. Companies will be incentivised to choose the response to the amended UCPD that minimises these costs. For example, recipe harmonisation may be costly if ingredient sourcing is location specific and homogenisation is expensive (e.g. due to local sourcing) or if it may require costly adjustments to production process (e.g. in some factories). Similarly, relabelling may imply changes in packaging that require investment in new design, advertisement and production process, for example if the packaging change is significant. From this perspective, information disclosure may be the preferable action.

When the potential for economies of scale (e.g. in production and international advertisement) when providing the same product version across Member States is limited and transportation/preservation costs are high, the incentive to supply goods with different compositions increases, as companies can better exploit benefits from market segmentation (Eaton and Lipsey, 1989; Motta, 1993; Melewar and Vemmervik, 2004; Brécard, 2010; Russo et al. 2020). In this case, there are benefits stemming from spatial product variation; therefore, relabelling and information disclosure seem to be the more feasible actions. In the opposite case, the benefits from market segmentation are smaller and thus version homogenisation could be the preferable response.

3. Market structure

The structure of the market – the level of competition and market segmentation – may also have significant effects on how companies respond to the amended UCPD. When the market structure is heterogeneous, firms may strategically respond by offering products with differences in composition to maximise their competitive advantage in multiple markets. Companies may place product versions in different market segments across Member States depending on the market structures prevailing in a given Member State. Consequently, if the degree of competition (i.e. the number of competitors offering a similar product) differs across markets, DC-SIP are more likely to occur, even if consumer preferences and production costs are homogeneous (Motta, 1993; Bonanno et al., 2018; Russo et al., 2020). Indirectly, competition level is linked to the price elasticity of demand. Indeed, the greater the competition, the more elastic the demand (i.e. demand is more responsive to price changes), implying that any adjustment to the product ([9]) could have a significant effect on demand (Schmid and Kotulla 2011). The demand elasticity for a product may also vary across market segments within a Member State depending on the level of competition, product differentiation and sorting of consumers (in terms of low and high price sensitiveness) (Coibion et al., 2007) ([10]).

The market structure may shape a company's response to the amended UCPD because it may have an indirect effect on company performance, such as affecting sales, market share and competitive advantage. This will be the case if the company's response induces changes in prices and/or consumer acceptance of the product. In general, if the degree of competition is low, a company using DC-SIP practices may be able to afford to introduce more significant changes (e.g. harmonise products, relabel product versions) as the market is expected to be less responsive to the introduced changes. On the other hand, if the competition level is high, companies will have the incentive to react minimally (e.g. by communicating differences through online platforms or advertising while maintaining differences between versions) because they risk losing consumers and market share if the response induces changes in price and/or consumer acceptance of the product.

When there is heterogeneity in market structure across Member States or if companies compete in multiple market segments across Member States, companies' responses to the amended UCPD may be more complex. This is because an undifferentiated response to the amended UCPD will generate heterogeneous impacts across Member States. For example, an undifferentiated response is expected to have a more significant impact in Member States with a competitive market segment and a smaller impact in other Member States.

([9]) This refers in particular to adjustments to the product (e.g. composition) that are reflected in a price change.
([10]) For example, higher-standard products are usually found to have lower demand elasticities because these market segments usually face higher entry costs and have consumers have lower price sensitivity levels (Coibion et al. 2007).

Additionally, in some Member States the company's response may change the market segment in which the company operates (potentially less profitable and/or more competitive) if consumer acceptance of the product is adversely affected. A response from rational companies would be to apply differentiated responses across Member States tailored to the specific characteristics of each market (i.e. to the competitiveness level and type of market segment in which they compete), such as harmonising recipes in a group of Member States and relabelling in another group of Member States. Some companies may even exit from some Member States or some market segments if the introduced changes are expected to significantly reduce margins and sales or affect market positioning relative to other competitors' products.

It should be noted that these effects are conditional on the company's changes leading to noticeable changes in prices and/or consumer acceptance of the product; otherwise, market structure is likely to play a smaller role in determining companies' responses.

4. Regulations

Regulations refer to private or public rules (e.g. food quality and safety standards, the tax system, public dietary guidelines) that firms need to follow if they want to operate in a market. Regulations usually aim to address possible information asymmetries in the food chain (e.g. labelling, certification), prevent the trade of unsafe food products (e.g. food safety standards, minimum food quality standards) and/or reduce negative externalities related to unsustainable consumption and production (e.g. sugar tax, public dietary guidelines, environmental standards) (Vandevijvere and Vanderlee, 2019; Russo et al., 2020, 2022; Nes and Ciaian, 2022; Ricome et al. 2022). Differences in regulations and institutions between markets influence production and composition choices and therefore may lead to DC-SIP. Indeed, the differences in national regulations is one of the most commonly reported reasons by companies for the occurrence of DC-SIP (European Commission, 2019; Nes et al., 2021).

When regulations are the main source of DC-SIP, the company's response to the amended UCPD depends on the nature of the national rules. If the rule is mandatory (public), the company may not have much room for manoeuvre (e.g. harmonising recipes may be out of the question). The company would need to comply with both the national rule and the amended UCPD. Voluntary standards and norms may provide more options to companies, as usually these are not prescribed by legislation. However, if the private standards are industry-wide or followed by most companies in a sector, then deviation from the standards may be costly and thus their implications for the company's response to the amended UCPD is similar to the implications in the case of mandatory public rules.

5. Legislative sanctions

The risk of facing the sanctions set in the amended UCPD is expected to be the key driver deterring companies from using DC-SIP practices ([11]). According to the theory of deterrence, as described by Weber (2016), 'the incentives of a (potential) wrongdoer to break the law can be eliminated if the sanction for her wrongdoing multiplied by the probability of detection and the dependent probabilities of apprehension and conviction are at least equal to benefits from a violation.' Similarly, Ginsburg and Wright (2010) and Wils (2006) explain that the optimal sanction should follow two principles: '(1) the total sanction must be great enough, but no greater than necessary' – this is to prevent the profit outweighing the cost for the misleading conduct; and (2) the potential wrongdoer must be 'given a sufficient disincentive to discourage them from engaging in the [unlawful] activity'.

Besides the level of the fines, the effectiveness of enforcement also plays an important role in suppressing unfair practices. Depending on the legal procedures put in place, the final rulings may take a relatively long time, allowing companies in the meantime to benefit from their unfair commercial practices through the acquired competitive advantage. Furthermore, companies have the ability to learn how investigations and intervention processes take place and can adjust their responses, particularly in a way that avoids or hampers the application of sanctions (Passarini et al. 2017). For example, Passarini et al. (2017) studied the effectiveness of the fines and sanctions of the Italian system of consumer protection on multinational agribusiness companies. They found that companies were capable of adapting to the set of imposed rules and reducing the efficacy of the sanctions. Passarini et al. (2017) also report that fines are not an issue in the operations of multinationals as such, but rather the more significant issue is their reputational effect.

([11]) Note that DC-SIP practices do not automatically lead to sanctions under the UCPD. The Member States' competent authorities need to assess, on a case-by-case basis, whether such DC-SIP practices are misleading, taking into account the impact of the practice on consumers' transactional (purchase) decisions and legitimate and objective factors that may justify the composition differences.

Furthermore, Passarini et al. (2017) found that after companies were warned by the national authority regarding misleading marketing campaigns, they stopped the campaign within a certain time period, thus avoiding sanctions but initially profiting from the campaign. The amended UCPD requires Member States to put in place 'effective, proportionate and dissuasive' penalties for infringements. The Modernisation Directive ([12]) also introduced a more effective system of penalties for large-scale cross-border infringements of the UCPD when those are jointly investigated by the consumer protection cooperation network of the Member States' authorities. Among other things, it required Member States to set the maximum penalty for such widespread infringements to at least 4 % of the company's annual turnover. DC-SIP are not banned in all circumstances but could be considered misleading subject to case-by-case assessment. Furthermore, the Representative Actions Directive ([13]) makes it possible for collective entities – e.g. consumer organisations – to launch collective actions on behalf of consumers harmed by illegal commercial practices.

([12]) Directive (EU) 2019/2161 of the European Parliament and of the Council of 27 November 2019 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules.

([13]) The Representative Actions Directive (EU) 2020/1828 adopted in November 2020 makes it possible for qualified entities – e.g. consumer organisations – to launch collective actions on behalf of consumers harmed by unfair commercial practices of companies.

3 Consumer trust and brand equity: implications for food companies and their strategic responses

The UCPD regulates business-to-consumer relationships and the concern is that DC-SIP may distort consumers' purchase choices (Colen et al., 2020). Hence, this puts the prime focus of the analysis on consumers – what DC-SIP may entail from the consumer's point of view and what possible actions the affected companies may take.

Probably the primary consequence of DC-SIP concerns consumer trust and brand equity, which can depend on the type and extent of information available to the consumer and whether the information is easily accessible. When DC-SIP are confirmed and publicly communicated, consumers can have the perception that they are being treated differently – e.g. as 'second-class citizens' subject to 'double standards – as suggested by some Eastern European Member States (The Economist, 2017; Jancarikova, 2017; Euractiv, 2018). According to Colen et al. (2020), DC-SIP may lead to a perception among consumers of deception (i.e. disconfirmation of consumers' expectations associated with a brand) and of unfairness (i.e. unequal treatment compared with other consumers as a result of product versions not being equal across countries). Such different treatment among Member States' consumers may affect consumer trust in the company, lowering the brand equity and potentially reducing sales and market shares, leading to consumers switching to other brands (Vassilikopoulou, Lepetsos, & Siomkos, 2018). Consumer responses will depend on how significantly trust is affected.

Morgan and Hunt (1994) explain that trust is a prerequisite and pivotal factor in successful marketing. Sirdeshmukh et al. (2002) define trust as 'the expectations held by the consumer that the service provider is dependable and can be relied on to deliver on its promises'. The literature differentiates between trust and trustworthiness, with Mayer et al. (1995) identifying ability, benevolence and integrity as core drivers of perceived trustworthiness, which in turn affects trust. Working with this definition, Kim et al. (2004) investigated trust in the light of competence, benevolence and integrity, defining integrity as the adherence to a set of principles and benevolence as relating to the genuine interest of a company in consumer interests ([14]). This understanding of trust seems to relate to DC-SIP. Kim et al. (2004) explain that trust combines both belief and intent; trust is one of the most valuable resources and, owing to its fragility, can be the first thing companies want to recover after negative publicity. Dirks et al. (2009) describe trust as the element underpinning the relationship between organisations and consumers and brands, and others describe consumer trust per se as a sustainable competitive advantage (Barney & Hansen, 1994) and both a strategic and relational asset (Castaldo, Premazzi, & Zerbini, 2010). Lack of trust hampers relationships with consumers, which can translate into a loss of sales and a loss of competitive advantage for companies (Barney and Hansen, 1994; Castaldo et al., 2010; Gargiulo and Ertug, 2006; Richards et al., 2011; Bozic, 2017).

Pullig et al. (2006) demonstrate that negative publicity affects consumers' satisfaction, purchasing intentions and overall perception of the company, weakening brand equity. Relatedly, Xie and Peng (2009) extensively detail how negative publicity affects several aspects of a company, especially when consumer trust is violated. Such scenarios may appear in cases of DC-SIP: when news about unfair commercial practices reaches consumers, consumer trust in the company may decrease.

Overall, when DC-SIP are understood to be unfair commercial practice under the UCPD and publicly communicated it may disrupt consumer trust in the company, potentially decreasing brand equity, sales and market share. This may constitute an important deterrent for companies, disincentivising them from engaging in prohibited DC-SIP practices. Given the impact on consumer trust, companies with DC-SIP may be incentivised to take remedial measures such as harmonisation of recipes or relabelling.

([14]) Competence refers to the ability of respecting promises made by the company.

4 Conclusions

In November 2019 the European Parliament and the Council amended the UCPD, introducing a more specific provision on the DC-SIP issue, namely Article 6(2)(c) of the UCPD. This new provision of the UCPD provides that competent authorities need to assess, on a case-by-case basis, whether DC-SIP practices are misleading, while taking into account the impact of the practice on consumers' transactional (purchase) decisions as well as legitimate and objective factors that may justify the differences in composition. Brand owners are allowed to adapt the composition of their goods that they market as identical to different markets when it is justified by objective factors. In such cases, companies still need to inform consumers about the DC-SIP ([15]).

This annex built on the existing literature to conceptually analyse the potential response of companies to Article 6(2)(c) of the UCPD.

To analyse the potential response of companies to Article 6(2)(c) of the UCPD, this annex built on the conceptual framework developed by Russo et al. (2020) and Colen et al. (2020), which seeks to understand DC-SIP from a company and consumer perspective, namely the rationale for brand owners to use DC-SIP practices across different markets and the effect of DC-SIP on consumer choice and welfare. Product composition is a choice variable for a company. Companies are incentivised to use the product composition that maximises profits. A rational company is expected to choose a response to the amended UCPD that will decrease profits the least, taking into consideration changes in direct adjustment costs (e.g. increases in cost of information campaign, marketing costs and costs of recipe reformulation and production process), indirect company performance (e.g. changes in margins and sales volume) and intangible assets (e.g. brand trust and reputation).

Companies' potential responses to the amended UCPD could include the following actions.

1. **Disclosure of information to consumers**. Communicate version differences to consumers on product-related websites or other online tools, through advertisement or by other means (if companies consider and can demonstrate that the differences are objectively justified).
2. **Relabelling**. Adjust the presentation of product versions (e.g. by changing the front-of-pack appearance, packaging or brand name) to visually differentiate the versions for consumers.
3. **Recipe reformulation**. Harmonise or change recipes between versions.
4. **Market exit**. Product withdrawal from some markets.
5. A combination of the above.

Each of these potential actions implies different profitability effects, which are likely to be specific to the product and brand and depend on market conditions driving the companies to use DC-SIP practices. Overall, disclosure of information to consumers while maintaining composition differences may be the least costly response for companies to the UCPD, followed by relabelling of product versions. Recipe reformulation (full or partial harmonisation) is likely to be a more costly response to the UCPD than disclosure of information or relabelling, and company exit from certain markets might be the most drastic response. This ranking is only indicative and does not hold in all situations. Although direct costs can be more straightforwardly identified and can be used to indicate which response is least costly, the impacts on intangible assets and indirect company performance (e.g. sales, profits and margins) are more difficult to evaluate, which may considerably affect the economics of each action and may reverse the ranking.

Overall, it is expected that if the differences are objectively justified and the heterogeneity in market conditions (particularly heterogeneity in consumer preferences, competition and production costs) are the main drivers for DC-SIP, companies using DC-SIP practices will be incentivised to maintain differences between product versions as much as possible, while informing consumers about the differences or relabelling product versions. This strategy allows companies to continue exploiting the heterogeneity in market conditions. In contrast, if market conditions are homogenous and are not the main driver for DC-SIP, the harmonisation of recipes may represent a preferable response. Note that companies may use a combination of strategies to balance the costs and benefits.

An important tool to deter DC-SIP practices under the UCPD is the sanction system. The recent amendments to the UCPD aim to reinforce the system of penalties, particularly for large-scale cross-border infringements. The effectiveness of sanctions depends on the extent to which they are set sufficiently high to offset the gains obtained from the misconduct. Additionally, their effectiveness depends on the procedural complexity of enforcing sanctions on non-compliant companies. Companies are capable of learning how procedures and

([15]) Directive (EU) 2019/2161 amending Council Directive 93/13/EEC and Directives 98/6/EC, 2005/29/EC and 2011/83/EU as regards the better enforcement and modernisation of Union consumer protection rules (OJ L 328, 18.12.2019, p. 7–28).

intervention processes are undertaken and adjusting their practices to avoid or hamper the application of sanctions. This may be relevant to the UCPD to some extent, given that DC-SIP need to be assessed on a case-by-case basis to establish whether they constitute misleading practice. This needs to be carried out while taking into account the impact on consumer transactional decisions and objective factors, which may justify the DC-SIP.

The analyses of this annex highlight that important factors that can affect the response of companies to the amended UCPD are consumer trust and brand equity, which can be affected by both the DC-SIP themselves and the companies' responses to the amended UCPD. Consumer trust is a critical asset for companies, as it affects brand equity and reputation, ultimately determining the company's performance, market share and competitive advantage. Companies may prefer to reformulate recipes, achieving homogenisation across Member States, particularly if the breakdown of consumer trust is expected to be significant in the event of the DC-SIP practice being determined to be misleading under the UCPD.

This annex analysed the potential responses of companies to the amended UCPD based on the existing conceptual and empirical economics literature. The existing literature does not provide a specific assessment of companies' responses to the amended UCPD. As a result, the assessments carried out in this annex do not identify the consequences of the amended UCPD, but rather provide an understanding of companies' potential responses. Obtaining a more exact understanding of companies' responses is an empirical question. Some empirical evidence in this respect is provided in this report based on information collected through company surveys.

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List of abbreviations and definitions

DC-SIP	differences in composition of seemingly identical branded food products
UCPD	Unfair Commercial Practices Directive