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Dynamic Currency Conversion and Consumer Protection: Finding the right rules

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Several policy options are under discussion for better regulation of the dynamic currency conversion (DCC) payment service, each of which offers specific advantages but also poses distinct challenges. Enhancing transparency, for example, will require creative solutions. The imposition of fixed price caps would call for the design of robust criteria to determine the level of the caps. And the adjustment of the payment card chip would necessitate the adoption of common standards between card providers. From a consumer protection perspective, a ban on DCC makes sense only if all other options have been exhausted and if consumers can find satisfactory alternatives. Overall, despite the challenges it presents, the first option – enhancing transparency – is the most promising. The mandatory disclosure of an indicative spread seems to be the best way for most consumers to truly understand what is at stake and how much they are paying for what.

Dynamic currency conversion (DCC) is a process service allowing cardholders to pay for or withdraw money in their home currency when conducting transactions in a different currency abroad. This service is generally offered by third-party operators rather than by card issuers. In general, more suppliers mean healthier competition. The growing choice of payment services should *a priori* be good news for consumers. But, in practice such theoretical views make sense only if consumers have complete information about the products being sold and the prices charged by each firm. The absence of full information violates one of the postulates of ‘perfect competition’, as taught in microeconomics textbooks.¹

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¹ In theory, perfect competition entails a multitude of suppliers and consumers who have complete information on every aspect of their transaction. Applied to card-based payments, this concept requires full information on the total costs of each payment type. If only the supplier is informed about the total cost of the transaction, this situation is referred to as an information asymmetry. A large body of economic literature has shown that markets are not functioning to the best of their potential if there is an asymmetric distribution of information.

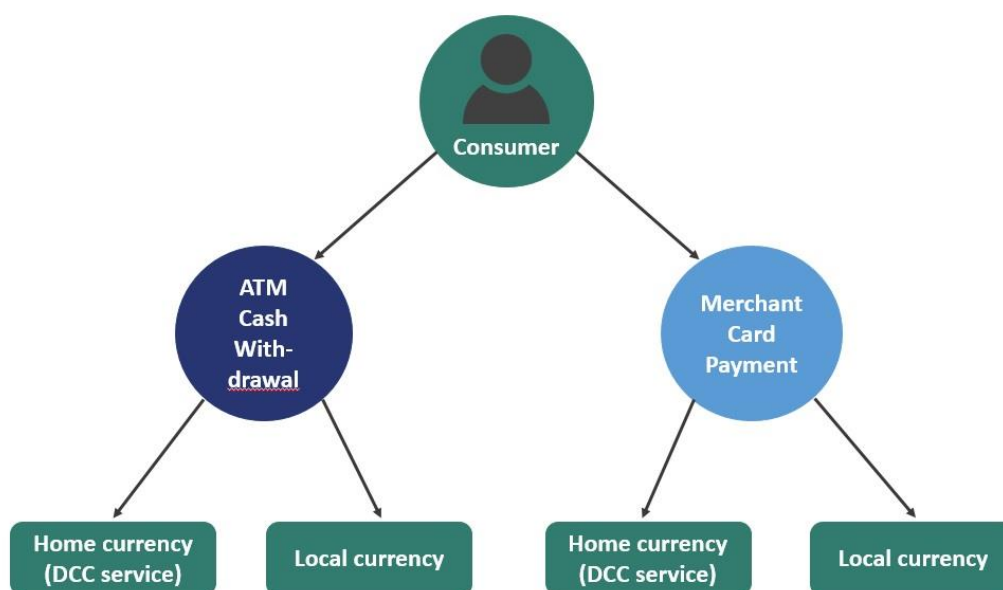
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In its 2017 Action Plan on Consumer Financial Services, the European Commission emphasised the difficulty consumers have in determining which option is more attractive. When making purchases abroad with a bank or credit card, is it better to be billed in your home currency or in the local currency? Several case studies indicate that paying in the home currency is generally the more expensive option. This so-called ‘positive spread’ is justified by the added value of the DCC service. It is easier for many consumers to understand prices and costs displayed in their home currency. Yet consumers are often unaware of the costs of each type of payment. This lack of transparency poses two problems. Consumers might choose the DCC service without truly understanding its costs. And given the lack of clarity on fees, some DCC providers might be inclined to inflate their prices.

Figure 1. To use DCC or not? Transaction choices for consumers



Note: Consumers are offered DCC services for card-based transactions at ATMs by banks and at stores by merchants. In principle, it is the consumers’ decision to either use the DCC service for a transaction in the home currency or decline the option and pay in the local currency.

Source: Author’s own configuration

The Commission therefore stressed the need for further transparency in the different products and prices offered. Its Action Plan favours policy actions in the near future to improve disclosure. This could be achieved through better enforcement of existing rules (i.e. Art. 59 of the [Payment Services Directive 2](#) on DCC), voluntary approaches or reinforced regulation. Regardless of which approach is taken, improving transparency might prove to be a daunting task.

Within the four-party card scheme, as diagrammed in Figure 2, the DCC surcharge paid by the consumer is usually accompanied by additional fees (see Figure 2). Consumer purchases by card result in a transaction between their banking account at the issuing bank and that of the merchant at the acquiring bank, for which the issuing bank charges an interchange fee to the acquiring bank. As shown in ECB

(2014),² five other fees are applied: merchant service charge,³ cardholder fees,⁴ scheme fees,⁵ incentive payments⁶ and surcharges.⁷ The card network provider can also charge a fee to both the issuing and acquiring banks for completing the authorisation, clearing and settlement. Finally, although often limited in extent, variations in exchange rates can distort the reliability of the total fee disclosed at the time of the payment: it often takes a couple of days between payment by the consumer and completion of the transaction.

When DCC is brought into this complex arrangement, paying in home currency incurs a surcharge by the DCC provider for every single transaction. The DCC provider passes part of this generated revenue on to the merchant. DCC providers generally facilitate acceptance of their service by offering merchants revenue participation.⁸ DCC providers usually partner with the card scheme networks, with whom they agree on a certain revenue distribution.⁹

It is hoped that technology will be able to enhance the transparency of fees and make simultaneous payment and settlement possible in the future, but it might take some time. Meanwhile, the challenge is threefold. First, an intelligible total fee needs to be calculated before the payment. Second, consumers should be able to compare this fee with the one they would incur if the payment was made in the local currency. Third, tools need to be developed to display this information in a user-friendly manner. The development of mobile payments with applications displaying this information could offer a partial solution to this challenge. Policymakers should thus provide incentives for payment providers to develop these tools and make them readily available to consumers.

² The card payments market is characterised by a two- or multi-sided market structure, which partly explains the variety of fees applied to different parties involved in the transaction. A more detailed description of the fees that are typically charged (merchant, consumer, issuing bank and acquiring bank) in the four-party card scheme can be found on the ECB [website](#).

³ The card acquirer charges the card payment acceptor a fee to receive compensation for all the services offered by him to the card payment acceptor and to recover the interchange fee to be paid to the card issuer.

⁴ Card issuers can charge cardholder fees, for example, fees for the issuance of the card, periodical fees, fees per transaction, and account statement and billing information fees.

⁵ Governance authorities can charge various scheme fees to card issuers and to acquirers. These fees are for membership in the card scheme and are generally based on the number of cards issued and/or the number of transactions carried out on the acquiring side.

⁶ Card issuers, and sometimes cardholders, receive incentive payments.

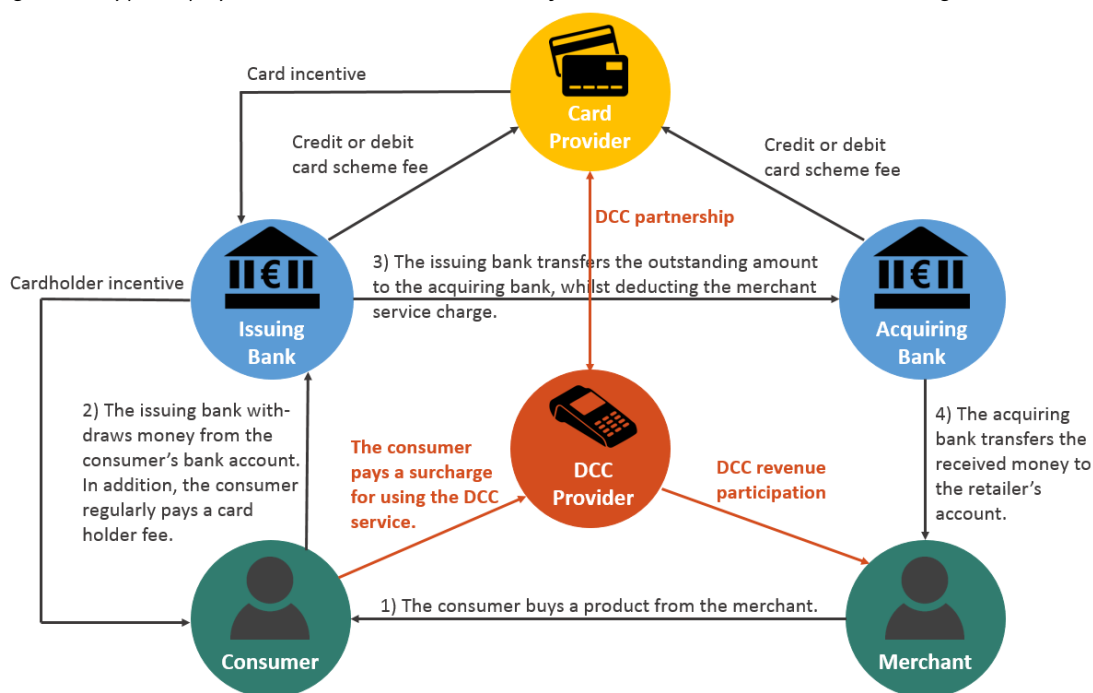
⁷ Card payment acceptors can (within the limits set by the card scheme and the relevant legal framework) require cardholders to pay a surcharge for the use of specific payment cards.

⁸ Many leading DCC providers offer revenue participation to the merchants using the DCC service at their terminals.

For instance, see fact sheets and offers on the websites of [Fexco](#) and [Moneris](#), and in a paper by [First Data](#).

⁹ For instance, on its [website](#), MasterCard announces that it has “partnered with an industry-leading DCC provider to offer the service”, which is Gateway Sales.

Figure 2. Typical payment and revenue streams for a card-based transaction using the DCC service



Note: Figure 2 illustrates the main payment and revenue streams for a card-based transaction when using the DCC service in a four-party card scheme. The payment stream includes several steps, during which the fees explained in the figure are applied. If the consumer decides to pay in the home currency, a mark-up is added to the payment by the DCC provider. The DCC provider usually partners with the card scheme provider and partly shares the generated revenue with the merchant involved in the transaction. No evidence was found on additional fees perceived by issuing and acquiring banks, and the degree to which these banks participate in the revenue streams of DCC providers. For this illustration, the DCC service is explained in the four-party model as it is the most common scheme in the EU. However, the DCC service is also available within a three-party model, where the card scheme provider is also both the issuing and acquiring bank. This illustration covers typical fees, payment and revenue streams and there might be variations in practice.

Source: Partly based on the ECB's illustration of charging models within a four-party card scheme, see European Central Bank, "[Card Payments in Europe](#) - a Renewed Focus on SEPA for Cards", Frankfurt, April 2014; partly based on the EC's illustration of interchange fees, see European Commission, Fact Sheet "[Antitrust: Regulation on Interchange Fees](#)", Memo 2016-2162, Brussels, 9.6.2015.

Other policy options are worth assessing beyond those foreseen in the Action Plan. One possibility would be to build on the 2015 [Interchange Fees Regulation](#) (IFR). The aim would be to impose fixed price caps on the total fees charged by DCC providers. This option would contribute to eliminating excessive fees. But what criteria should be applied for fixing the level of the caps? For the IFR, interchange fees for credit and debit cards are capped at a level such that average costs to the retailer are no higher for card than for cash payments. This approach is based on the so-called Merchant Indifference Test developed in the economic literature.¹⁰ In the context of the DCC service, this would

¹⁰ A major hurdle would be the definition of the appropriate level of price caps. Economic research suggests the application of the Merchant Indifference Test (also referred to as the 'tourist test'). This test takes into account the cost of cash and could indicate reasonable, welfare-enhancing price levels. Developed by the renowned French economists Charles Rochet and Jean Tirole (Nobel laureate), the Merchant Indifference Test determines the level of price surcharges or discounts at which a merchant would have no preference between cash and card payments. This test served as one of the main theoretical foundations for the IFR, which set price caps at 0.2% and 0.3% for interchange fees on card-based payments within the EU. See Rochet J.C. and J. Tirole (2011), "[Must-Take Cards](#):"

mean that the merchant's average cost would be assessed as a cash payment in a foreign currency. Although such payment is often used in some EU economies, its use is prohibited in several other countries, which would make the Merchant Indifference Test more complex. Also, the option of imposing caps on fees could take some time before being finalised.

Another possibility concerns the chip of the payment card. The DCC service could be added (or not) directly in the chip. This could be based on an 'opt-out' model (insertion by default unless the consumer disagrees) or an 'opt-in' model (insertion only at the request of the consumer). While *a priori* attractive, this option does not really solve the issue of transparency. Also, the need for common standards is likely to delay its implementation.

Should a ban be the ultimate solution, as endorsed by the European consumer organisation BEUC?¹¹ This option raises the question of available alternatives for consumers preferring to pay in their home currency. Either these consumers would pay in their home currency directly in cash, or another payment supplier could offer the service under a different scheme. Under either scenario, the impact of a ban on consumer welfare and the local economy should be properly assessed. The first scenario might weaken frail local currencies, through rising 'euroisation' or 'poundisation'. And the new scheme emerging from the second might not prove any more beneficial for consumers. Finally, a ban could be perceived as a sign of regulatory weakness. Regulators unable to monitor market forces through non-coercive means would ban a product despite its clear appeal among many consumers.

So, what is the best policy option? Despite the challenges involved, the first option on transparency offers the most benefits. To deliver on expectations, this option should focus on the mandatory disclosure of an indicative spread between fees on payment in the home currency and the fees on payment in the local currency. This is probably the only way for most consumers to truly understand what is at stake. If the spread is positive, then it will be up to the consumer to decide if the additional service of DCC is worth the extra expense.

[Merchant Discounts and Avoided Costs](#)", *Journal of the European Economic Association*, Vol. 9, No. 3, 1 June 2011, pp. 462–495.

¹¹ See the BEUC publication, "[Dynamic currency conversion: When paying costs you more than it should](#)", Brussels, 30 October 2017.

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