



The Role of Consumer Protection in the Digital Economy

This brief on the role of consumer protection in the digital economy starts with the position that governments want to ensure that people remain protected as digital tools and experiences transform their countries. It is part of a series of briefs that takes a broad view of how policy and regulatory frameworks can be leveraged to create a well-functioning digital economy.

Typically, governments want to ensure that people remain protected as digital tools and experiences transform their countries. This brief, written in close collaboration with [Macmillan Keck](#), seeks to identify specific attributes of a consumer protection framework that can help policymakers and regulators build a digital economy that includes — and serves — everyone.

BRIEF

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Summary

Consumer protection policy seeks to mitigate information asymmetries between providers and consumers and other factors, such as limited bargaining power and digital literacy, that impede consumer choice, and to provide protections for vulnerable consumers. Many of these factors are exacerbated in digital commerce where consumers may have less knowledge about providers and the quality of goods and services they are offering online. Legal frameworks generally impose obligations of fairness, accountability and transparency on providers and grant consumers certain rights consistent with these values. These frameworks may be enforced by national or sector regulators or through private rights of action, sometimes with assistance from consumer advocates and industry or professional associations.

Considerations while reading this brief

1. Which challenges related to consumer protection and the digital economy are most prominent in your market, both 1) in general and 2) for underserved groups such as women and low-income people?
2. Do consumer protection regulations in your country address:
 - **Digitization:** The application of consumer protection regulation to the digital economy?
 - **Inclusivity:** The specific consumer protection challenges faced by women, low-income people, and/or other marginalized groups?
3. Which entities are responsible for regulation of consumer protection? Are responsibilities clear, and are mechanisms in place to avoid regulatory arbitrage? If not, how could this be improved?

Note

In this brief, we distinguish between “Consumer Protection” as an economy-wide concept and “Financial Consumer Protection” as a concept specific to Financial Services and Digital Financial Services.

Why we need consumer protection

Rationale

Providers of goods and services often have greater knowledge, power or resources than consumers. Providers may leverage this to dictate the terms of use of their products to their advantage and the consumer's disadvantage. This is particularly accentuated in the absence of effective competition, when consumers have few or no alternatives to the product or services that are being offered. Conversely, robust competition can incentivize providers to hide the true cost of goods and services in an effort to gain a competitive advantage.

In addition, consumers may face limitations on their ability to make rational, self-interested decisions. In the context of digital financial services (DFS), for example, consumers might not fully understand how a financial product works or the consequences that may follow if they are unable to comply with the terms in full. Consumers may also make poor choices due to their vulnerabilities, such as psychological biases or their position (and decision-making autonomy) in their respective households, and these can be exploited by providers.¹ Consumers might run up debt due to a "present bias"² towards immediate gratification, or they may take out a payday loan without considering the difficulty of repaying due to a "projection bias"³.⁴ In recent years, it became apparent that consumers were borrowing extensive digital credit in South Africa, Kenya and Nigeria to spend on sports betting.⁵ By 2020, more than a quarter of the consumers reported on by Kenya's credit reference bureaus had been blacklisted for defaults on loans.⁶ Similarly, a consumer biased about their insurance needs (either being over- or

under-confident), especially among populations with low financial literacy levels, may end up under- or over-insured and even sometimes be deprived of access to healthcare due to unexpectedly high costs. Factors pertaining to the insurance providers may also adversely impact consumers. For example, opaque terms and conditions in an insurance contract can leave users unexpectedly unprotected, or inadequate prudential requirements can lead to provider insolvency without customer recourse.

Women often feel sidelined and discriminated against by formal financial institutions, which – when coupled with lower [financial literacy](#) – can create mistrust that can prevent women from accessing and using different services.⁷ In addition, recent research has found that gendered differences in risk perceptions can explain women's preferences for different types of financial products and that a key determinant of adoption of certain services is trust in financial institutions, which is often lower among women compared to men.⁸

Consumer protection policy seeks to mitigate these factors that impede consumer choice and provide protections for vulnerable consumers.

Relationship to competition policy

The risks to consumers are even higher where there is a lack of competition, and especially in monopolistic markets. In an efficient free market, competition among providers should enable consumers to purchase goods and services at the lowest prices and on the most optimal terms. Competition policy focuses primarily on the supply side of the market, aiming to maximize the range of choices available by optimizing the functioning of markets. Using the same insurance example above,

competition policy would focus on how competitive the insurance market is, whether there are any monopolistic tendencies, and whether competitors engage in any anti-competitive behaviour such as collusion, price-fixing, and predatory pricing.

Consumer protection policy and competition policy are complementary in striving for the proper functioning of markets and promotion of consumer welfare. Consumer protection addresses dysfunctions on the demand side of the market, aiming to ensure that consumers can exercise their choices effectively, confidently and under fair conditions, and in some cases requiring minimum common standards.⁹ In the case of insurance, for example, consumer protection will seek to empower consumers with better information about different insurance offerings so that they understand coverage under each plan, can compare costs and benefits, and can assess the solvency of different providers.¹⁰

Barriers to optimal consumer choice

Barriers to optimal consumer choice include information and bargaining power asymmetries between consumers and providers that are exacerbated by certain characteristics of human psychology.

Information asymmetries manifest when a provider has greater knowledge and understanding of the specific goods or services or the nature of the market than a consumer and the average consumer cannot invest the time necessary to build countervailing expertise.¹¹ For example, when borrowing money, consumers may struggle to calculate the true cost of a flat interest vs. declining balance interest loan. Similarly, when deciding which forex bureau to use, consumers may find it difficult to compare the relative cost of two remittance

services with different fees and forex rates.

Information asymmetries can also operate in reverse. For example, if providers have insufficient knowledge of a consumer's ability and willingness to repay a loan, they may exclude certain individuals or groups from access to credit or offer them credit at a much higher cost. A study of microfinance institutions in South Africa¹² found that expanding credit to marginal borrowers increased women's access relatively more than that of men. This has important implications because women are often less likely than men to be able to borrow from formal sources. Global evidence also demonstrates that private-sector lending increases in countries with better information-sharing¹³ and that small and medium enterprises (SMEs) have fewer financial constraints in countries where credit bureaus have been established.¹⁴

Differences in economic scale can also lead to **asymmetries in bargaining power**. In many transactions, the consumer has no choice but to agree to one-sided terms and conditions in order to access goods or services. For example, the terms of a life insurance policy or a license to use cloud software are typically non-negotiable. However, with more choices at their fingertips, in theory consumers can more easily and efficiently compare prices and terms, enhancing their bargaining power. Indeed, standardized products intentionally avoid the transaction costs of individual negotiations.

These asymmetries can be further compounded by the effects of human psychology. The field of behavioural economics has found that consumers may be subject to **bounded rationality**, where flawed memories or limited computational

skills can result in bad decisions. Individuals also tend to rely on heuristics or 'rules of thumb' when facing complex decisions, or where salient information is obscured in some way. Consumers may also be limited by **bounded willpower**, choosing to take actions that are attractive in the moment but contrary to their long-term interests.¹⁵ Unscrupulous providers may use these psychological effects to exploit consumers.¹⁶

The challenges and opportunities of the digital economy

The rise of the digital economy has raised unique consumer protection issues and opportunities. The availability of e-commerce and other digital transactions offers consumers a wider range of choices in potentially global markets. With more choices at their fingertips, in theory consumers can more easily and efficiently compare prices and terms, enhancing their bargaining power. While these factors may alleviate some traditional concerns of consumer protection, they exacerbate others and raise new ones.

For example, in online purchases, consumers may have limited knowledge about the provider, including where it is located, its reputation for quality or fairness, its responsiveness to complaints, or even whether it is who it purports to be. They may not have an opportunity to inspect products to ensure they are safe, effective, and high-quality. This can create significant information asymmetries between the providers and the consumers making online purchases.¹⁷

Moreover, the nature of digital payments and collection of personal data also raises new issues about data security, the potential

for fraud, and violations of privacy. Recent research shows that 17% of online shoppers who abandon their online cart prior to completing their purchase cited a lack of trust in providing payment information to the provider.¹⁸ Providers can attempt to mitigate this distrust through the use of measures such as recognized security certifications or trust badges and partnerships with reputable online payment system providers. However, these measures may require significant investments that some smaller providers cannot afford.

How consumer protection supports the digital economy

In order for a digital economy to flourish, consumers need to have trust in the integrity and fairness of digital markets. **Effective consumer protection laws and procedures can engender such trust, giving consumers the confidence to engage and transact. These aim to address the asymmetries, consumer irrationalities and other barriers to optimal consumer choice.** They typically involve the application of rules, principles and procedures to impose obligations of fairness, accountability and transparency (sometimes referred to as FAT) on providers and grant consumers certain rights consistent with these values. While approaches vary across jurisdictions, a cluster of six core principles particularly applicable to the digital economy can be distilled.¹⁹

Fair practices

Consumers may be vulnerable to deception where online transactions do not allow the opportunity to properly evaluate goods, services or the provider before making the purchase. For example, a consumer purchasing clothing online will not be able to verify the quality of the fabric or the fit or

assess whether the branding is authentic. Online product reviews by other consumers are a potential means of increasing pre-purchase transparency. A 2016 study showed that 82% of adults read such reviews before making an online purchase.²⁰ However, such reviews may not be reliable and fraudulent reviews are becoming increasingly prevalent, for example with businesses artificially increasing their ratings or artificially lowering competitors' ratings through fake reviews.²¹

Consumer protection frameworks typically require providers to adopt fair business practices through the entire lifecycle of consumer transactions, from promotional and advertising materials through the terms and conditions attached to a purchase. This includes prohibiting any deceptive, fraudulent or unfair representations and ensuring that products are genuine, the quality is accurately depicted, pricing is clear and not presented in a misleading manner, any online reviews or endorsements are authentic, and the provider accurately discloses its identity and qualifications.

Appropriate disclosures

Consumers require accurate and relevant information in order to assess and compare products and services. For example, a consumer purchasing agricultural equipment online will want to know the specifications to ensure it is suitable, the brand and model to be able to compare prices across providers, and the return policy in case the equipment arrives damaged. Consumer protection frameworks often require providers to provide clear disclosures about the products and services offered, pricing, purchasing conditions, warranties, refunds, or other redress policies in order to reduce the information asymmetries inherent in many transactions. For example, the Competition Authority of Kenya, which is

also responsible for consumer protection, has engaged in an extensive campaign to require digital financial service providers to improve their disclosures to ensure they adequately explain financial charges and the cost of borrowing to consumers.

To maximize the chance that disclosures are read and understood by consumers, some frameworks require that they are formulated simply and concisely, in an accessible format and displayed at times that maximize their effectiveness. This may include providing disclosures in consumers' local or primary languages in jurisdictions where multiple languages are commonly spoken.²²

Clear and easy-to-understand product terms may be especially important for low-income women, given their relatively limited financial experience and literacy/capability.²³

In some industries, oral advice must be provided regarding information such as the material terms of the service to be provided, associated costs and risks, customers' rights and obligations, and dispute resolution,²⁴ but this is rare and difficult to achieve with services provided digitally.

Clear processes for transaction confirmation

Because digital commerce can happen literally "at the push of a button," it is critical that a consumer understand the point at which he or she is committing to a transaction. Features such as "one-click buying" and "in-app purchases" add convenience but may inadvertently result in unexpected or unwanted purchases. This is a particular risk to children or other vulnerable groups that may not fully understand the implications of the icons and links they access. Consumer protection frameworks often require that transaction confirmation processes be clear and unambiguous and

require express consent of the consumer to avoid unintentional transactions. Payment mechanisms available to the consumer may also be required to implement protections that prevent consumer liability for unauthorized transactions.

Data privacy and security

Digital transactions often require the collection of personal data about the consumer. Sometimes this is limited to information necessary to complete the transaction, such as name, delivery or billing address and payment information. But a vast array of other data can potentially be extracted from these transactions as well, including search habits, purchase history and geolocation data. Some providers may also use tools to track consumers across other websites or their use of unrelated apps. For example, a consumer may browse for baby clothes on one website, and then be inundated with advertisements and offers for diapers, toys and related items at other unrelated websites, by email or even by regular mail. To engender trust, providers are often required to adopt practices that ensure personal data collection and use is lawful, transparent and fair, and accords with other good data protection and security practices.

Product safety

The rise of e-commerce has given consumers access to a global range of providers who themselves might source their products and inputs globally. This exposes consumers to products that might not have been available for sale in their home jurisdiction due to product safety requirements. In addition, the inability to physically inspect products prior to purchase further limits the consumer's ability to mitigate such safety risks. When safety problems do arise, consumers might not be able to take advantage of local product

liability laws because manufacturers are located abroad. Accordingly, consumer protection frameworks may require that e-commerce providers provide information on the safety of products, where relevant, and not offer any products that present unreasonable risks. They may also require providers to cooperate with authorities in removing any such products from the market.

Product safety can have international implications. Products that are deemed unsafe in one market might be redistributed in another jurisdiction, harming residents of countries with weaker consumer protection regimes. For example, a 2018 study found that nearly 36% of the toys purchased from one of China's largest online shopping platforms exceeded the equivalent US and EU regulatory standards for lead-based paint.²⁵ Such challenges require international coordination.

Redress and dispute resolution mechanisms

Products and services sometimes fail to meet consumer expectations, and disputes about payment or other purchase conditions will inevitably arise. The risks of such outcomes are magnified in digital transactions which are completed remotely. For example, delivery of an online purchase that is needed urgently may be significantly delayed, requiring the consumer to make a replacement purchase elsewhere and attempt to cancel the first. To engender consumer trust, consumer protection frameworks often require providers to establish fair, accessible and expeditious redress mechanisms and dispute resolution mechanisms. These can include internal mechanisms instituted by providers or by platforms that host providers as well as broader institutional mechanisms (discussed

below). In some cases, these frameworks protect consumers from contracting away their rights to dispute resolution. For instance, many jurisdictions do not enforce mandatory arbitration provisions that would have consumers bargain away their rights to bring claims in a court of law.

It is also important to establish gender-sensitive grievance resolution mechanisms that consider the extent to which social norms may hinder the willingness of women to initiate recourse; as well as the barriers that they are more likely to face to follow established processes, such as literacy levels, access to information, and lack of time due to unpaid care responsibilities, among others.

Institutions that support consumer protection

Consumer protection authorities

In many jurisdictions, government authorities or agencies are established to administer and enforce consumer protection legal frameworks. These may be standalone entities dedicated entirely to consumer protection issues (such as the National Consumer Commission (NCR) of South Africa or Consumer Financial Protection Bureau (CFPB) in the US), or entities with broader mandates extending to related matters including competition (such as the Competition and Fair-Trading Commission of Malawi). In some cases, a government Ministry is tasked with the mandate of consumer protection.

Sector regulators may also have a mandate that includes consumer protection in their given sector. For example, in the United States, the Federal Trade Commission has a mandate that extends to consumer protection and competition

across the economy, but (like many telecommunications regulators) the Federal Communications Commission also has an overlapping mandate to protect consumers in the communications sector.

Some common functions of a consumer protection authority include:

- Enforcing consumer protection laws
- Issuing administrative rules or regulations
- Advising the government on consumer protection issues
- Educating consumers on their rights
- Overseeing mechanisms to resolve consumer complaints

Ombudsman

Some jurisdictions establish an office of the *ombudsman* to serve as an advocate for consumers in resolving complaints.

An ombudsman is traditionally tasked with resolving complaints against public authorities, but this mandate can extend to consumer issues generally.

Courts

Many consumer protection frameworks provide consumers with a *private right of action* against providers for violations. This permits them to bring a legal claim directly against provider in court.

Civil society

Professional and industry organizations may adopt their own codes of conduct or rules relating to treatment of consumers which they can enforce against their members. They may also establish complaints and dispute resolution mechanisms. For example, the Malaysia Association of Money Services Business (MAMSB), an industry organization for licensed remittance providers, has adopted a Code of Conduct that requires fair and transparent dealings with customers and confidentiality of customer information.²⁶

The MAMSB receives complaints about providers from the public or from other members and can launch an inquiry. If a member is determined to have violated the Code, they may be subject to censure or suspension of their membership.

Consumer associations may also advocate on behalf of consumers. This may include providing input on policy and legislation, bringing claims in court on behalf of groups of affected consumers, or publishing comparative information useful for consumers evaluating providers.

Platform and Technology Providers

Platform and technology providers may also incentivize good behavior by businesses and consumers transacting on their platform. **User ratings have served as a powerful incentive for good behavior by platform participants without regulatory intervention.** Platform providers can also establish their own recourse mechanism to ensure that the consumers are able to lodge their complaints with the platform even if the businesses using the platform are unreachable.

The future of consumer protection in the digital economy

Transparency of pricing in digital financial services

With the rise of digital financial services, consumers are increasingly conducting financial transactions on smartphones and over other devices and channels. In many parts of the developing world, including sub-Saharan Africa, these services have exploded due to the lack of traditional banking services for poor and rural populations.

Given that this segment of the population may have relatively low levels of financial

and digital literacy, it is important that pricing and terms and conditions of these services are presented in a way that they are accessible and understood by the users.

The Australian Securities & Investments Commission (ASIC) recommends making terms and conditions (T&Cs) available to users on an ongoing basis via social media, a particular application or an online platform to help mitigate the difficulties of conveying full T&Cs via mobile channels.²⁷ This will allow existing and potential users to access T&Cs at their convenience.

The Central Bank of Armenia (CBA) is adapting its supervisory processes to ensure that digital providers' practices related to disclosure and transparency are monitored adequately and misconduct is penalized. As with traditional providers, CBA receives and analyzes consumer complaints, conducts mystery shopping, and assesses digital providers' offers and product terms and conditions. Upon detecting a violation, CBA issues a warning to the provider, alerting the provider to their malpractice and asking them to adjust or remove the product. If a provider does not resolve the violation, CBA will penalize and charge the provider, depending upon the precedent.²⁸

It is also important to note, however, that ensuring transparency in pricing and terms and conditions does not always prove to be an effective way to protect consumers.

The absence of effective competition amongst DFS providers leaves consumers with few or no alternatives to the product or services that are being offered. As such, even if they are unhappy with the pricing or terms and conditions, they will opt for the product available. This is why incentivizing competition may help complement consumer protection efforts.

Emerging issues

Artificial intelligence in financial products

Artificial intelligence (AI) and machine learning present unique challenges to consumers.²⁹ Some providers incorporate computer algorithms that sort, analyze, and make decisions about consumers. These algorithms often operate in a “black box”, as their functioning exceeds the comprehension of most of the population. The resulting decisions can be subject to errors and bias leading to decisions about digital services that are unfair, unaccountable, and non-transparent.

One emerging use of artificial intelligence is to determine consumer eligibility for loans, credit cards, or other financial products. In theory, automating such decisions offers the potential to eliminate human bias that can affect the assessment process.³⁰ In practice, however, AI-driven decisions may also incorporate *profiling* based on factors such as gender, race, ethnicity, or religion that would be unlawfully discriminatory if the decision were made by a person.³¹

Attempting to address this issue, some jurisdictions grant consumers a right not to be subject to decisions based solely on such *automated processing* that result in legal consequences for the consumer. This is a very important caveat, as providers can still use automated processing if there is also active human intervention in the decision-making process.

In an alternative approach, the US Federal Trade Commission has issued guidelines for providers, recommending transparency in how algorithms are used and what data is being collected, disclosure of any factors that resulted in adverse decisions, and

measures to ensure that decisions are fair and not in violation of anti-discrimination laws.³²

The European Banking Authority (EBA) also requires that when using automated models for creditworthiness assessment and credit decision-making, financial institutions should have in place internal policies and procedures to detect and prevent bias and ensure the quality of input data. Moreover, EBA further advises that for technology-enabled innovation for credit granting, it is important to understand the quality of data and inputs to the model and detect and prevent bias in the credit decision-making process, ensuring that appropriate safeguards are in place to provide confidentiality, integrity, and availability of information and systems.³³

Additional resources

Consumer Protection Models

- [G20 High-level Principles on Financial Consumer Protection, 2011](#)
- [UN Guidelines on Consumer Protection, 2016](#)
- [OECD Recommendation on Consumer Protection for E-commerce, 2016](#)
- [Consumer Protection in the States: A 50-State Evaluation of Unfair and Deceptive Practices Laws, 2018](#)

Resources for further reading

- [UNCTAD Manual on Consumer Protection, 2017](#)
- [OECD Toolkit for Protecting Digital Consumers, 2008](#)

Organizations

- [OECD \(Consumer Policy Page\)](#)
- [Consumers International](#)
- [BEUC \(The European Consumer Organisation\) Federal Trade Commission Bureau of Consumer Protection](#)
- [National Consumer Law Center \(USA\)](#)
- [ACCC \(Australian Competition & Consumer Commission\)](#)
- [What Consumer \(UK\)](#)
- [International Consumer Protection and Enforcement Network \(ICPEN\)](#)
- [Consumer Council \(Hong Kong\)](#)

Notes

- ¹ UNCTAD. Rep. Digital Economy Report, 2019. https://unctad.org/system/files/official-document/der2019_en.pdf.
- ² O'Donoghue, Ted, and Matthew Rabin. "Doing It Now Or Later". *American Economic Review* 89, no. 1 (1999): 103-124. doi:10.1257/aer.89.1.103
- ³ . Loewenstein, George. "Projection Bias In Medical Decision Making". *Medical Decision Making* 25, no. 1 (2005): 96-105. doi:10.1177/0272989x04273799.
- ⁴ Financial Conduct Authority. "Applying Behavioural Economics At The Financial Conduct Authority", 2013.
- ⁵ Chamboko, Richard, and Sevias Guvuriro. "The Role Of Betting On Digital Credit Repayment, Coping Mechanisms And Welfare Outcomes: Evidence From Kenya". *International Journal Of Financial Studies* 9, no. 1 (2021): 10. doi:10.3390/ijfs9010010.
- ⁶ "Borrowers Blacklisted On Crbs Hit 3.2 Million". *Business Daily*, Last modified 2021. <https://www.businessdailyafrica.com/bd/economy/borrowers-blacklisted-on-crbs-hit-3-2-million-2286146>.
- ⁷ Bin-Humam, Yasmin, Juan Carlos Izaguirre, and Emilio Hernandez. "4 Regulatory Enablers For Digital Finance: A Gender Perspective". CGAP, Last modified 2018. <https://www.cgap.org/blog/4-regulatory-enablers-digital-finance-gender-perspective>.
- ⁸ Gammage, Sarah, Aslihan Kes, Liliane Winograd, Naziha Sultana, Sarah Hiller, and Shelby Bourgault. "Gender And Digital Financial Inclusion: What Do We Know And What Do We Need To Know?". *International Center For Research On Women*, Last modified 2017. <https://www.icrw.org/wp-content/uploads/2017/11/Gender-and-digital-financial-inclusion.pdf>.
- ⁹ OECD. "The Interface Between Competition And Consumer Policies", 2008. <https://www.oecd.org/daf/competition/40898016.pdf>.
- ¹⁰ UNCTAD. "Manual On Consumer Protection". Part 1, 2017. https://unctad.org/system/files/official-document/ditccplp2017d1_en.pdf.
- ¹¹ "Information Asymmetry Explained (With Examples)". *Master Class*, Last modified 2021. <https://www.masterclass.com/articles/information-asymmetry-explained>.
- ¹² Karlan, Dean, and Jonathan Zinman. "Expanding Credit Access: Using Randomized Supply Decisions To Estimate The Impacts". *Review Of Financial Studies* 23, no. 1 (2009): 433-464. doi:10.1093/rfs/hhp092.
- ¹³ Jappelli, Tullio, and Marco Pagano. "Information Sharing, Lending And Defaults: Cross-Country Evidence". *Journal Of Banking & Finance* 26, no. 10 (2002): 2017-2045. doi:10.1016/s0378-4266(01)00185-6.
- ¹⁴ McKinsey & Company. "The National Credit Bureau: A Key Enabler Of Financial Infrastructure And Lending In Developing Economies.", 2009. https://www.mckinsey.com/~/media/mckinsey/dotcom/client_service/risk/working%20papers/14_the_national_credit_bureau.ashx.
- ¹⁵ For a detailed discussion of these behavioural factors, see Cass Sunstein, Christine Jolls and Richard Thaler, *A Behavioural Approach to Law and Economics*, *Stanford Law Review* 50 (1998); and Cass Sunstein and Richard Thaler, *Nudge* (2008) Yale University Press.
- ¹⁶ Costa, Elizabeth, and David Halpern. "The Behavioural Science Of Online Harm And Manipulation, And What To Do About It". *The Behavioral Insights Team*, Last modified 2019. <https://www.bi.team/publications/>

the-behavioural-science-of-online-harm-and-manipulation-and-what-to-do-about-it/.

¹⁷ UNCTAD, "The Digital Economy Report" (2019).

¹⁸ "44 Cart Abandonment Rate Statistics – Cart & Checkout". Baymard Institute, Last modified 2019. <https://baymard.com/lists/cart-abandonment-rate>.

¹⁹ TOECD. "Toolkit For Protecting Digital Consumers", 2008. <https://www.oecd.org/sti/consumer/toolkit-for-protecting-digital-consumers.pdf>.

²⁰ Smith, Aaron, Monica Anderson, and Dana Page. "Online Shopping And E-Commerce". Pew Research Center, 2016. https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2016/12/PI_2016.12.19_Online-Shopping_FINAL.pdf.

²¹ Ananthakrishnan, Uttara M, Beibei Li, and Michael D. Smith. "A Tangled Web: Should Online Review Portals Display Fraudulent Reviews?". SSRN Electronic Journal, 2018. doi:<http://dx.doi.org/10.2139/ssrn.3297363>.

²² Brix, Laura, and Katharine McKee. "Consumer Protection Regulation In Low-Access Environments: Opportunities To Promote Responsible Finance". CGAP, Last modified 2010. <https://www.cgap.org/sites/default/files/CGAP-Focus-Note-Consumer-Protection-Regulation-in-Low-Access-Environments-Opportunities-to-Promote-Responsible-Finance-Feb-2010.pdf>.

²³ "Advancing Women's Digital Financial Inclusion". GPMI, Last modified 2020. https://www.gpmi.org/sites/gpmi/files/sites/default/files/saudig20_women.pdf.

²⁴ Chien, Jennifer. "Designing Disclosure Regimes For Responsible Financial Inclusion". CGAP, Last modified 2012. <https://www.cgap.org/sites/default/files/Focus-Note-Designing-Disclosure-Regimes-for-Responsible-Financial-Inclusion-Mar-2012.pdf>.

²⁵ Shen, Zhengtao, Deyi Hou, Ping Zhang, Yinan Wang, Yunhui Zhang, Peili Shi, and David O'Connor. "Lead-Based Paint In Children's Toys Sold On China's Major Online Shopping Platforms". *Environmental Pollution* 241 (2018): 311-318. doi:10.1016/j.envpol.2018.05.078.

²⁶ "Code Of Conduct". MAMSB, Last modified 2014. <https://mamsb.org.my/wp-content/uploads/Code-of-Conduct-EN-v1.pdf>.

²⁷ "Facilitating Digital Financial Services Disclosures". ASIC, Last modified 2016. <https://asic.gov.au/media/vxzipwsw/rg221-published-29-march-2016-20210728.pdf>.

²⁸ "Digitally Delivered Credit: Consumer Protection Issues and Policy Responses to New Models of Digital Lending." AFI, 2017. https://www.afi-global.org/wp-content/uploads/2019/07/AFI_CEMC_digital-survey_AW2_digital.pdf

²⁹ Kate Crawford et al., *The AI Now Report: The Social and Economic Implications of Artificial Intelligence Technologies in the Near Term 6-8* (2016).

³⁰ "Women Are Less Likely to Access Consumer Credits." CAF, 2020.

³¹ Smith & Rustagi, "When Good Algorithms Go Sexist: Why and How to Advance AI Gender Equity." (2021).

³² Andrew. "Using Artificial Intelligence And Algorithms". Federal Trade Commission, Last modified 2020. <https://www.ftc.gov/news-events/blogs/business-blog/2020/04/using-artificial-intelligence-algorithms>.

³³ "Guidelines on loan origination and monitoring." EBA, 2021. https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2020/Guidelines%20on%20loan%20origination%20and%20monitoring/884283/EBA%20GL%202020%2006%20Final%20Report%20on%20GL%20on%20loan%20origination%20and%20monitoring.pdf.

About UNCDF

The UN Capital Development Fund makes public and private finance work for the poor in the world's 46 least developed countries (LDCs). UNCDF offers "last mile" finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development. UNCDF pursues innovative financing solutions through: (1) financial inclusion, which expands the opportunities for individuals, households, and small and medium-sized enterprises to participate in the local economy, while also providing differentiated products for women and men so they can climb out of poverty and manage their financial lives; (2) local development finance, which shows how fiscal decentralization, innovative municipal finance, and structured project finance can drive public and private funding that underpins local economic expansion, women's economic empowerment, climate adaptation, and sustainable development; and (3) a least developed countries investment platform that deploys a tailored set of financial instruments to a growing pipeline of impactful projects in the "missing middle."

The UNCDF Policy Accelerator works with governments to help them create policies and regulations that include everyone in the digital economy, shares practical tools and guides based on our technical assistance model and our go-to resources, and provides scholarships to policymakers and regulators to study with our world-class partner organisations.

About Macmillan Keck

Macmillan Keck Attorneys & Solicitors advises clients on strategy, advocacy, deals, controversies and reforms in the digital economy. The firm's clients include telecom operators, digital financial service providers, online health and education providers, other digital content, application and service providers, governments and sector and competition regulatory authorities, and international organisations. The firm has successfully completed numerous complex projects across a majority of countries in every continent.

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