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Competition and regulation issues in the mobile banking industry in Zimbabwe

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Keywords: mobile banking, mobile money, competition, regulation, EcoCash, market power, network effects, telecommunications

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Introduction

- This paper examines competition and regulatory issues in Zimbabwe, with particular focus on the market structure of the mobile money vis mobile banking sector and the conduct of EcoCash, through the assessment of market workings, prices, and market outcomes.
- This involves the evaluation of key regulatory decisions pertaining to the market power of Econet and EcoCash, and the effectiveness of these regulations in relation to the competition complaint, and the subsequent decisions.

- **Research questions** - main areas of analysis addressing the core concern of the study:
- Assessment of the structure, conduct and role of network effects in the mobile money sector.
- Evaluation of EcoCash's market power in the context of rivalry from other MNOs and the banking system
- Effectiveness of key regulatory decisions and competition enforcement.

Short message service (SMS), Unstructured Supplementary Service Data (USSD)

Competition concerns - barriers to entry, reducing bank innovation, and dampening the growth of the mobile banking services

Background

In Zimbabwe, mobile money and mobile banking platforms have grown rapidly alongside a rise in competition concerns.

The Competition Complaint against EcoCash, 2014

- Initially refused to share its USSD infrastructure with banks, later granted access on discriminatory terms
- Indications that EcoCash had abused its dominance by refusing to interoperate, strongly lessening competition, raising rival's costs, and squeezing the margins for its rivals.
- Advocacy procedure between the Reserve Bank of Zimbabwe (RBZ), the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) and the MNOs.
- Resulted in a series of regulatory pronouncements which have been rolled out over several years.

- Limited focus on the regulatory instruments employed by POTRAZ and RBZ, and their effectiveness in the market dynamics of the mobile money sector.
- Market structure, market power in the mobile money/banking sector in Zimbabwe, the conduct of EcoCash, regulatory challenges these pose

Both provided through digital platforms using telecommunications infrastructure, provided by MNOs, accessed through the SMS and the USSD technology

Disruptive competition in the traditional banking and telecommunications sector, rendering traditional regulatory toolkits redundant, new hybrid of regulation concerns focused on digital platforms.

Mobile money and mobile banking

Mobile money has penetrated the most remote areas of the country, reflecting the importance of a growing informal sector and the growth in inward remittances from the diaspora (FSD Africa, 2020).

- Customers can now save, spend money directly from their mobile money wallets, and access insurance and loan services in addition to sending and receiving money (Kawimbe, 2020).
- Establishing the specific economic effects of mobile money requires impact measurement at various levels, and quantifying the spillover effects can be a challenge (Jack & Suri, 2011; Aron, 2018).
- Development through the provision of financial services to previously marginalized segments of society (Jack & Suri, 2011).
- Mobile money and linked mobile banking services are subject to network effects which arise from multi-homing costs and the value customers place on a network that has more users (Anderson, 2010; Rysman, 2009).
- Increased competition through variety, quality, and lower prices for financial services.
- Dominant mobile network operators have likewise established dominant positions in the provision of mobile money services, partly due to inherent network effects, giving rise to a lot of competition and regulatory concerns. (Robb & Vilakazi, 2015).

mobile money facilities from one SIM card, they are likely to keep it as a main SIM card for calls and internet

**nature of competition in the mobile money services industry is tiered

Network effects in multisided markets and market power

- Digital platforms multi-sided due to the nature of transactions that occur in these markets.
- Connect two or more distinct, interdependent groups of market participants via a digital platform (OECD, 2018).
- Network effects, huge economies of scale and scope due to the high costs of setting up operations.
- Customer's decisions influenced by the number of people they know that are affiliated to the service provider, with an expectation of maximising consumer surplus (Stigler Center, 2019).
- People prefer network with more users, connect to more people than cheaper rival with fewer users.
- Default options influencing customers not necessarily mean best decisions (Stigler Center, 2019).
- Network effects inherent in digital platforms: direct and indirect (Katz & Shapiro, 1985).
- Not always beneficial: they may entrench dominant firms even if they are inefficient and lack innovation
- Multi-sided markets naturally tip towards the control of a few dominant firms and monopoly due to these network effects, leading to rapid growth, creating barriers to entry, challenges for competition enforcement also increasing levels of concentration (Weyl & White, 2014, Fletcher, 2021).
- Strong winners and losers, winner takes it all. Smaller rivals remain small, with no influence on competitive outcomes in the market (Rysman, 2009).
- Dominant firms may enjoy market power arising from network effects which may lead to consumers bearing the burden of higher prices or inducement (Paelo & Roberts, 2022)
- Difficulty to coordinate switching to rival platforms due to the value they place on a platform (Weyl & White, 2014).

Policy and regulation in multisided markets

- Unmatched growth between international competition policy awareness and the rise in digital markets and associated competition concerns, calls for a rethink in effective competition and regulation policy on a global scale, and international cooperation (Fletcher, 2021).
- Platforms a major contributor to economic growth, also a competition regulation concern, with countries seeking to amend their competition regulatory frameworks to enable them to deal with antitrust conduct in such markets (Anderson, 2010, Andreoni & Roberts, 2020).
- High concentration levels in digital markets may encourage strategic behaviour by incumbents, thus the need for regulation of the sector.
- Mandate interoperability and devise effective regulatory frameworks to encourage competition and entry by smaller rivals (Mondliwa, 2016).
- Market power for platform markets is derived from network effects as well as access to and control of data, which grants them the ability to develop new and innovative products (Weyl & White, 2014).
- Historical methodologies of defining markets do not capture the dynamic features of digital markets, since market demand is multi-sided and there is a need to consider the consumers' welfare in multiple groups, need for increased scrutiny in market conduct reviews and stronger antitrust laws, to avoid the common tipping of the markets to monopolization (Evans & Schmalensee, 2013).
- Enabling interoperability does not immediately result in fierce market competition, as the dominant firm's position may be otherwise entrenched, and firms in a tight oligopoly may not have the incentive to compete vigorously (Katz & Shapiro, 1985).

Methodology and data sources

1. Quantitative measures of market outcomes
- market shares
- prices (tariff rates – MNOs, ZIPIT, peer countries)
- transaction volumes

2. Qualitative methods
- role of regulation and regulatory performance through interviews with industry players
- comparing the interventions made by regulators of peer countries

DATA SOURCES
- Interviews - POTRAZ, RBZ, CTC, Econet, NetOne
- Publicly available data on institution websites, academic papers, publications and media

Challenges in data collection - Interviews with banks access not granted, delays in getting authorization (POTRAZ), interviews done with participants in their individual capacity

Market structure and concentration in Zimbabwe

1. Mobile money and mobile telecoms

- Econet consistently dominated the mobile telecoms market, growing its market share to a high of 69.08% of subscribers in 2019, with a small decline in 2021 to 65.90% (Table 1).
- NetOne has consistently been in second place with a share varying between 22,87% and 35,94%, Telecel negligible.
- Econet resilient in its market share
- NetOne's market share declining from 2016 to 2019, and then starting to grow steadily from 2020, exerting pressure on Econet's market share.

Operator	Year					
	2016	2017	2018	2019	2020	2021
Econet	50,62%	51,11%	65,81%	69,08%	68,04%	65,90%
NetOne	35,36%	35,94%	24,00%	22,87%	26,24%	29,78%
Telecel	14,02%	12,94%	10,20%	8,05%	5,72%	4,32%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

Table 1: Active mobile subscriptions for the different MNOs (2016 -2021).

Source: POTRAZ Quarterly Reports

Econet, NetOne and Telecel, the three main mobile telecommunications firms in Zimbabwe, all provide mobile telephone and mobile money services.

Market structure and concentration in Zimbabwe…

- EcoCash was a late entrant in 2011, later than OneMoney and TeleCash - quickly gained, remained dominant through 2016 to 2020 with an overwhelming share of the market, albeit declining somewhat from 98.05% in 2016 to 88,01% in 2020 in terms of active mobile money subscribers (Table 2).
- TeleCash - negligible share of under 1%, OneMoney increased to 11,59% in 2020 likely due to government regulations - NetOne used as the preferred mobile money provider for the COVID19 relief funds disbursements

Operator	Year				
	2016	2017	2018	2019	2020
EcoCash	98,05%	97,42%	96,04%	93,76%	88,01%
OneMoney	0,73%	0,84%	2,82%	5,47%	11,59%
TeleCash	1,22%	1,74%	1,14%	0,76%	0,40%
Total	100,00%	100,00%	100,00%	100,00%	100,00%

Table 2: Market shares of different MNOs in the mobile money market - active subscribers (2016 - 2020).

Source: POTRAZ Quarterly Reports.

This demonstrates how government can use regulatory incentives to foster effective competition in a market which has a dominant player and few small players, and is highly concentrated.

Market structure and concentration in Zimbabwe…

Table 3: Active mobile banking subscribers and active mobile money subscribers (2016 – 2020).

Year	No. of mobile banking subscribers	No. of mobile money subscribers
2016	3 339 355	3 264 445
2017	3 750 348	3 797 179
2018	5 633 368	5 811 332
2019	6 331 432	7 059 239
2020	5 041 264	6 988 050

2. Mobile money and mobile banking

- Competition for the provision of mobile payments services exists between the three MNOs in Zimbabwe, as well as between banks and MNOs.
- Mobile money subscribers on average higher than mobile banking subscribers in the economy
- EcoCash is dominant in the provision of mobile payments services – both in comparison to its MNO and its banking sector rivals – market shares.

Source: POTRAZ and RBZ Quarterly Reports

Interview with RBZ staff member in the Regulatory Department. 9 September 2021.

Market power and pricing

- EcoCash prices increased by more than 300% from 2017 to 2020 for a given transaction amount, accompanied by only a 5% decrease in their market share (Table 4) indicating market power.
- Comparison of prices for MMT indicated that EcoCash prices are higher than other MNOs and banking rivals at all transaction levels (Table 5).

Transaction amount	EcoCash	OneMoney	TeleCash	*ZIPIT (average across all banks)
10	14,20%	7,50%	5,90%	1,58%
20	10,50%	6,75%	4,75%	1,58%
30	8,77%	5,83%	4,07%	1,58%
50	10,62%	6,58%	4,60%	1,58%
100	8,01%	6,39%	4,20%	1,58%
300	5,96%	3,22%	4,62%	1,58%
500	6,89%	2,00%	4,04%	1,58%
1000	5,23%	1,00%	1,50%	1,58%
3000	1,91%	1,70%	1,50%	1,58%

Table 5: Comparison of mobile money and mobile banking tariff rates as a % of transaction amount (2021).

Transaction amount	2017	2019	2020	2021
10	0,37	0,81	1,42	1,42
20	0,53	0,95	2,10	2,10
30	0,69	1,22	2,50	2,63
50	1,22	2,39	4,62	5,31
100	2,12	4,41	6,96	8,01
300	2,58	5,29	14,59	17,87
400	2,62	5,31		
500			27,54	34,43
1000				52,31
3000				1,91%

Table 4: EcoCash mobile money tariff rates to registered subscribers – including cash-in charges (ZWL), 2017-2021.

Source: Econet website, bank websites and author’s calculations

Peer country comparison

- 2017 – EcoCash rates higher for high transaction amounts, lower for low transaction amounts.
- US$5 transfer, EcoCash was charging 10 cents, lower compared to Uganda charging the highest rate of 28 cents, and Kenya and Tanzania (15 cents and 14 cents respectively) (Table 6). However, for a US$150 transfer, EcoCash charged the highest transaction charge of US$2.86, almost three times the next highest rate charged by Kenya.
- Using Kenya as a benchmark for 2017, EcoCash overcharged its subscribers by 286%, which was exploitative in nature.
- For 2020, the analysis showed that EcoCash charged supracompetitive prices for its mobile money transfer services.

Table 6: Peer country comparison of mobile transfer tariff rates 2017 and 2020 (converted to USD).

Transaction amount	Zimbabwe (EcoCash, 2017)	Tanzania (2017)	Uganda (2017)	Kenya (2017)	Kenya (MPESA 2020)	Zimbabwe (EcoCash, 2020)
$5	0,1	0,14	0,28	0,15	0,15	0,18
$15	0,29	0,16	0,28	0,39	0,41	0,51
$150	2,86	0,68	0,56	0,98	1,00	Not applicable

Source: Paelo, 2019 and author's calculations from Econet gazetted prices.

Conduct of EcoCash

- Agent exclusivity - EcoCash strategically spread its agent network across the country, riding on Econet's widespread network infrastructure and ensuring that their agents exclusively served their customers.
- Resisted interoperability - EcoCash exerted its market power by resisting interoperability while charging high tariff rates while growing its subscriber base over the years, without facing any consequences.
- Exploitative behaviour; raising its prices anticompetitively between 2017 and 2020. Transferring ZWL50 cost ZWL1,22 in 2017, and this rose to ZWL4,62 in 2020. In a market where the dominant firm exclusively and exploitatively abuses its dominance, substantial consumer harm - regulation needs to address this outright.
- Prevented smaller rivals from effectively competing in the mobile money market, indirectly harming consumers by limiting their choices in an exclusionary manner and extracting rents from them through anticompetitive prices.

It remains to be seen if RBZ will effectively oversee this function since it has failed to restrain EcoCash from charging uncompetitive prices

Effectiveness of competition and regulation

- Various regulatory instruments to address the competition concerns raised by BAZ.
- Guidelines for both physical and USSD infrastructure sharing between service providers
- EcoCash's prices, which are regulated by RBZ are still substantially higher than other MNOs and peer countries, indicating some level of political power and a great deal of market power.
- November 2015, POTRAZ – regulations mandating all three MNOs to facilitate interoperability and cross network mobile money transactions between their mobile money platforms (POTRAZ, 2015). EcoCash did not implement the wallet-to-wallet and bank-to-wallet transfers immediately.
- Statutory Instrument 137 of 2016 under the Postal and Telecommunications (Infrastructure Sharing) Regulations – physical infrastructure sharing to minimise unnecessary duplication of telecoms infrastructure and the promotion of competition in the telecoms sector.
- The 2018 call for full mobile money interoperability between operators, as at the time MNOs still had limited interoperability, with no wallet-to-wallet transactions across platforms.
- New Banking (Money Transmission, Mobile Banking and Mobile Money Interoperability) Regulations of 2020, implemented by RBZ to ensure that all mobile money transfer providers were registered under the National Payment System Act [Chapter 24:23] and mandated such providers to connect to the national payments switch, ZimSwitch, to harmonise the regulation, monitoring, and evaluation of mobile payments.
- The regulators have, since 2021, started moving the oversight of mobile money operations for MNOs from POTRAZ to the financial regulator, RBZ.

CONCLUSION

- EcoCash has substantial market power, it has abused its dominance EcoCash continues to charge anti-competitive prices despite regulation
- EcoCash prices high in comparison to market rivals and peer country mobile money providers
- EcoCash was not the first-mover
- EcoCash platform is sustained by network effects
- Regulation was not effective in restraining EcoCash from abusing its market power
- Competition and regulation policy failed to prevent EcoCash from engaging in harmful anticompetitive conduct - substantially lessening competition and harming consumers in the study period
- Great concern about EcoCash’s ability to continue charging high tariff rates yet still retain subscribers despite these rates.
- Competition in the mobile money sector exists on two levels (the three mobile money providers and between the mobile network operators and the banking system)
- Important impact of regulation - the adoption of USSD price regulation and the LRIC pricing model by POTRAZ yielded lower USSD tariff rates, though high in comparison to peer countries
- Platform interoperability now exists; where customers can transact between MNO and ZIPIT wallets.
- Lack of enforcement has impeded the adoption and application of regulations. The lack of a transparent role of the relevant regulators in regulating mobile money services has contributed immensely to this inadequacy.

REMARKS

- *Fundamental for competition and regulation policy to work together to generate a level playing field for market participants, need for increased cooperation*
- *Mandatory interoperability between mobile wallets to foster competition is a solution that the regulators should have explored early on.*
- *A need for a probe into the prices of EcoCash that have remained uncompetitive, in order to achieve the ultimate goal of generating fair prices for the consumer.*
- *Lack of prosecution is problematic to efforts by regulators to develop a conducive environment for growth of mobile money and mobile banking services.*
- *Regulation without enforcement does not yield full economic and competition benefits - no disincentive to deter exploitative conduct.*
- *A review of regulatory roles to include enforcement across the board is also recommended.*

- *Future studies could focus on establishing if regulatory cooperation being undertaken ultimately restrains anti-competitive conduct in Zimbabwe's mobile money sector, resulting in lower prices for the consumer*