THE EFFECT OF FINANCIAL CONSUMER PROTECTION ON BANKS' COMPETITIVENESS AND PROFITABILITY

Demeh Daradkah *, Rowaa Janaideh **

* Corresponding author, Department of Finance and Banking Science, Faculty of Economics and Administrative Sciences, Yarmouk University, Irbid, Jordan
Contact details: Yarmouk University, P. O. Box 566, Irbid 21163, Jordan
** Department of Finance and Banking Science, Faculty of Economics and Administrative Sciences, Yarmouk University, Irbid, Jordan

Abstract

This study examines the effect of Financial Consumer Protection (FCP) on banks' competitiveness and profitability, using data from Jordanian banks for the period 2013–2020. The study constructs a FCP index related to customer complaints statistics, communication channels, dispute resolution, and protection of the rights of special needs people. Fixed-effect model is used as an estimator based on balanced panel data. The study finds evidence that stricter and complying with FCP requirements tend to decrease banks' profitability in Jordan. The main result is confirmed by different robustness tests (dynamic panel estimation by applying the generalized method of moments (GMM) and random-effect). Overall, this study contributes to the existing banking literature and provides a better understanding and balancing between customers of financial products' interests and financial institutions' rights and obligations. Finally, this study has essential implications for customers of financial products, policymakers, and researchers. Thus, future studies in this area are recommended.

Keywords: Financial Consumer Protection, Banks, Competitiveness, Profitability, Jordan

Authors' individual contribution: Conceptualization — D.D. and R.J.; Methodology — D.D. and R.J.; Software — R.J.; Validation — D.D. and R.J.; Formal Analysis — D.D.; Investigation — R.J.; Resources — R.J.; Data Curation — D.D. and R.J.; Writing — Original Draft — D.D. and R.J.; Writing — Review & Editing — D.D.; Visualization — D.D.; Supervision — D.D.; Project Administration — D.D.; Funding — D.D.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Serious attention has moved toward re-examining the relationship between consumers of financial products and financial institutions after the great global financial crisis of 2007–2009. More specifically, foreground the Financial Consumer Protection (FCP) issue on the global financial development strategy, in which Ardic, Ibrahim, and Mylenko (2011) argue that one of the most important reasons for the great global financial crisis of 2007–2009 was the poor protection of the consumer of financial products. As a result, international bodies such as Organisation for Economic Co-operation and Development (OECD), the World Bank, and the Financial Stability Board (FSB) introduced a set of regulations and supervisory mechanisms to decrease information asymmetry and

unequal distribution of power between consumers and financial institution to enhance competitiveness, efficiency, and performance in financial markets (Kriese, Abor, & Agbloyor, 2019).

FCP is defined as the act of protecting purchasers of products and services from unfair market practices. Such acts are intended to prevent firms from participating in deceptive activities in order to obtain an edge over competitors or to deceive consumers (Akinbami, 2011). Furthermore, FCP entails improving consumer awareness and enabling them to make well-informed financial decisions by encouraging them to develop the knowledge and skills necessary for asset management (Poliakh, 2018).

Banking literature has noticed the importance of FCP as a driver of banks' stability, profitability, and competitiveness (Benston, 1999; de Serres, Kobayakawa, Sløk, & Vartia, 2006; Wright & Zywicki, 2009; Rutledge, 2010; Campbell, Jackson, Madrian, & Tufano, 2011; Pasiouras, 2018; Kriese et al., 2019; Gaganis, Galariotis, Pasiouras, & Staikouras, 2020). This study aims to contribute to the existing banking literature connecting FCP and its significance on banks' profitability and competitiveness. Moreover, given that Jordan is a small and open country in the Middle East, it has been successful in achieving rapid economic growth with a GDP at the current market price of JD 34,115.6 million at the end of the year 2020 (Central Bank of Jordan, 2020). The banking system in Jordan is considered among the most innovative in the Middle East and the region (Miani & Daradkah, 2008). Jordan was one of the first countries to respond and was aware of the importance of this issue. Jordan worked to reformulate the existing legislations, creating new ones, and established a special department in the Central Bank of Jordan in 2013 (Central Bank of Jordan, 2013). This study has major implications for customers of financial products, regulators, and researchers.

Therefore, this study investigates the customers of financial products and financial institutions' relationship and their effect on banks' profitability and competitiveness. To the best of our knowledge, this is considered the first study to shed light on this issue in Jordan, and considered the first study to take into account the protection the rights of special need people indicators when constructing the FCP index. The sample provides a comprehensive period from 2013 to 2020 since the implementation of FCP legislation in Jordan. Moreover, the study provides further tests (e.g., robustness check) to confirm the main results and control for potential dynamic endogeneity.

Apart from this introduction, the study contains five sections. Section 2 presents the previous literature review and hypotheses development. Section 3 presents the study data and research methodology. Section 4 presents the study results and its discussion. Section 5 provides further tests (robustness check), and, finally, a conclusion and recommendations are presented in Section 6.

2. LITERATURE REVIEW

Several studies have examined the issue of consumer protection on a broad level. Despite this, there are just a few studies that examined the issue

of FCP. The starting point was evident in the most important works of La Porta, Lopez-de-Silanes, and Vishny (1997) and Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998), who examined the effect of investor protection on economic growth. Followed by Levine (1999), who found evidence that countries with well-recognized FCP regulations have a superior working financial market. Llewellyn (1999) investigates the effect of FCP on the demand for financial products. The author investigates FCP by Akerlof's Market for Lemons (the case where customers cannot recognize between bad and good quality products). The results show that FCP increases the demand for financial products.

Recent studies focused on FCP regulations with indicators related to disclosure requirements; dispute resolution; fair treatments; and recourse mechanisms (Melecky & Rutledge, 2011; Ardic et al., 2011; Ahmed & Ibrahin, 2018). They showed that FCP tends to increase participation in financial markets because customers of financial products are more informed. Consequently, Campbell et al.'s (2011) results show evidence that FCP increased investments, access, and economic growth. Thus, de Serres et al. (2006) and Melecky and Rutledge (2011) found evidence that FCP increases market efficiency.

On the other hand, recent studies (Evans & Wright, 2009; Wright & Helland, 2011) found evidence that financial institutions' profit decreases when responding to FCP regulations. Evans and Wright (2009) suggest that implementing the Dodd–Frank Wall Street Reform and Consumer Protection Act will decrease consumer borrowing by 2.1 percent due to an increase of 1.6 percent in consumer borrowing interest rate.

Most of the succeeding studies were conducted with the collaboration of international institutions such as the World Bank, and the Consultative Group to Assist Poor (CGAP) in the context of increasing financial literacy and financial inclusion (Rutledge, 2010; Meleck & Rutledge, 2011; Ardic et al., 2011; Selvakumar & Sathyalakshmi, 2016). For instance, a comprehensive work by Ardic et al. (2011) was conducted for 142 countries with the collaboration of the World Bank and CGAP, where they found out that most of the study sample is in place with consumer protection enactment, but these do not essentially address FCP issue.

Furthermore, most of the previous studies have examined the effect of banks' supervision and regulations on economic growth (Djankov, McLiesh, & Ramalho, 2006; Hartarska & Nadolnyak, 2007; Mersland & Strøm, 2009; Kriese et al., 2019). Similarly, Cull, Demirgüç-Kunt, and Morduch (2011) and Kilinc and Neyapti, (2012) examined the effect of banks' supervision and regulations on bank profitability.

To date, the form of a balanced relationship between customers of financial products and financial institutions is still not clear. Pasiouras (2018) documents evidence that FCP requirements positively affect banks' profitability for developing countries, thus having no effect on banks' profitability for advanced countries during the period from 2010 to 2013. Moreover, this result is in regulatory with Gaganis et al. (2020) who found that FCP negatively affects profit efficiency for an international sample from 82 countries.

Overall, the previous studies show prosperous FCP research, a part remains to be done to set up the effect of FCP on banks' profitability and competitiveness. However, most of these studies were conducted in industrialized countries and emerging markets from Africa and Latin America, and it has not been conducted in MENA countries and, more specifically, in Jordan. Hence, post a gap in the literature, which this study tries to fill. Therefore, this study examines the effect of FCP on banks' profitability and competitiveness in Jordan during the period 2013 to 2020. The study is triggered by this period when the FCP law was enacted in 2012 and began to be implemented in 2013 by the Central Bank of Jordan (CBJ). Hence, the following two hypotheses will be tested:

H1: FCP has an effect on banks' profitability in Jordan.

H2: FCP has an effect on the bank's competitiveness position in Jordan.

3. RESEARCH METHODOLOGY

The Jordanian banking industry is relatively a young industry, where only 24 banks are operating in Jordan at the end of the year 2020. Of these, 16 are domestic commercial banks (3 of them are Islamic commercial banks). On the other hand, 8 of them are foreign commercial banks (1 of them is an Islamic commercial bank) (Central Bank of Jordan, 2020). The study sample includes all listed banks on Amman Stock Exchange (ASE). Foreign banks have been dispensed because they are branches of parent banks and also Islamic banks because they have a different nature of work. Therefore, it constraints the study database to 13 banks during 2013–2020.

The data gathering process was difficult because the FCP index was built from banks' financial reports. Moreover, banks' control data were gathered from the ASE bulletin.

3.1. Study variables

3.1.1. Dependent variables

Competitiveness: Since the level of competition is not perceptible, numerous alternative ways of measuring and evaluating it has been developed (Tabak, Fazio, & Cajueiro, 2011). One of the most widely used is concentration, as a proxy for competitiveness. Following Lloyd-Williams, Molyneux, and Thornton (1994), Berger and Hannan (1998), Tabak et al. (2011), and Iacovoiu and Stancu (2017), competitiveness is measured by the Herfindahl-Hirschman index (HHI) from credit facilities, and it is the most generally used measure of concentration. It is measured as the sum of the squares of exposures relative to total exposure for a given classification:

$$HHI = \sum_{i=1}^{n} (xi|x)^2 \qquad (1)$$

The *HHI* ranges between $(1/n)$ and 1. The lowest *HHI* indicates more competitiveness in the market and indicates that all banks in the market are of equal size. Meanwhile, the highest *HHI* indicates the case of monopoly.

Profitability: One of the most common measures of banks' profitability is the return on assets (*ROA*), which indicates the ability of managers in converting total assets into profits (Rose & Hudgins, 2013). Following Berger, Hasan, and Zhou (2010a), Berger, Hasan, Korhonen, and Zhou (2010b), Türkmen and Yiğit (2012), and Pasiouras (2018).

$$ROA_{it} = (Net\ income_{it}/Total\ assets_{it}) \qquad (2)$$

3.1.2. Financial consumer protection index

It is a critical metric for assessing bank performance, reputation, and competitiveness across banks. It is measured using different indices; however, this study follows the law of FCP issued by the Central Bank of Jordan (2013), Pasiouras (2018), and Gaganis et al. (2020). Hence, it includes four key indicators to calculate the FCP index: 1: Customer complaints statistics; 2: Communication channels; 3: Dispute resolution, and 4: Protection of the rights of special needs people.

The first indicator is the customer complaints statistics, in which banks have complained, as well as the extent to which they are disclosed. The second indicator is the communication channels and the means of communication that customers use to submit complaints and that the bank provides. The third indicator is dispute resolution in banks, which is based on resolving conflicts, and the study focuses on that between banks and consumers, and how banks can protect the consumer and handle disputes in a friendly, appropriate, and timely manner. Consumers are not charged for any of the procedures, and they are resolved outside of the courts. The fourth indicator is the indicator of protection of the rights of special needs people, which determines what the bank does to protect the rights of special needs people, as well as the amount of implementation and disclosure of these items. The contents of indicators are not reported, although they are available upon request.

The study determines the level of disclosure, assigning a score of 1 when revealing and a value of 0 when not disclosing. The proportion is then calculated for each bank and each year for all banks for each indicator.

Furthermore, the study utilizes a set of banks' characteristics to evaluate their effect on banks' competitiveness and performance. This is bank size (*Log(Total assets_{it})*), following Kras and Villamil (1992), De Haas, Ferreira, and Taci (2010), Türkmen and Yiğit (2012), and Lee, Hsieh, and Yang (2014). Banks' debt ratio (*Total liabilities_{it}/Total assets_{it}*), following Chen, Wei, and Zhang (2013), Lee et al. (2014), and Berger and Hannan (1998). Banks' credit risk (*Provision for loan losses_{it}/Total loans_{it}*), following Berger et al. (2010a, 2010b), Türkmen and Yiğit (2012), and Lee et al. (2014).

3.2. Empirical methods

To investigate the effect of FCP on a bank's competitiveness and profitability, this model is applied following Iacovoiu and Stancu (2017), Pasiouras (2018), and Gaganis et al. (2020):

$$Performance_{it} = \alpha + \beta_1 FCP_{it} + \beta_2 Bank's\ characteristics_{it} + \partial_i + \varepsilon_{it} \qquad (3)$$

where, *Performance$_{it}$* is the dependent variable of either competitiveness or profitability of bank *i* in year *t*; *FCP$_{it}$* is the financial consumer protection index of bank *i* in year *t*; *Bank's characteristics$_{it}$* is a bank-specific characteristic for bank *i* in year *t*; ∂ denotes the fixed effect of banks *i(1,2,…,13), t(2013,2014,…,2020),* and *ε* represents the residual term.

The study uses a fixed-effect model as an estimator based on balanced panel data, as the Hausman test indicates that a fixed-effect model is more appropriate than a random-effect model.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics

Descriptive statistics of the study variables is reported in Table 1. For the FCP index, it is noticed that the average value is 21.94%. The sub-indicators

have a comparable average value, where customer complaints statistics are 23.82%, 21.95% for dispute resolution, whereas communication channels are higher at 32.88%, and protection of the rights of special needs people is lower, at 2.88%. Also, it was noticed the improvement in the FCP index during the study period, where the average value was 13.10% in 2013 and increased to 29.84% in 2020. Those data are not reported, although they are available upon request.

The average of the study sample's *ROA* is 1.12%, this value indicates high profitability for banks in Jordan. Thus, the average of the study sample's *HHI* is 3%, this value indicates a high competitiveness position in the Jordanian banking sector.

As for bank characteristics variables, the average bank's size is JD 4,020,405,151. The average bank's debt ratio is 81.71%, and the average bank's credit risk is 5.8%.

Table 1. Descriptive statistics

Variable	Mean	SD	Min	Max
Dependent variables				
Profitability (%)	1.12	0.63	0.05	4.00
Competitiveness	0.03	0.09	0.00	0.64
Independent variable				
FCP (%)	21.94	26.86	0.00	82.14
Banks characteristics				
Bank size (billion JD)	4.020	6.010	27.164	263.3
Debt ratio (%)	164	798	81.71	82.69
Credit risk (%)	5.81	2.75	1.01	11.89

Note: This table presents bank-fixed effect panel regression results. Competitiveness (measured by the HHI) is the dependent variable, and profitability (measured by ROA) is the dependent variable. For 13 commercial banks listed on ASE between 2013 and 2020. FCP is the financial consumer protection index related to customer complaints statistics, communication channels, dispute resolution, and protection of the rights of special needs people. Bank size (Log total assets at the end of the year). The debt ratio (Total liabilities/Total assets). Credit risk (Provision for loan losses/Total loans).

4.2. Empirical results and discussion

Table 2 shows the regression findings estimating FCP on banks' competitiveness and profitability, where bank and year fixed-effects are employed. In column 1, regression is employed where competitiveness is employed as a dependent variable, thus in column 2, regression is employed where profitability is employed as a dependent variable.

The findings indicated no evidence supporting the effect of FCP on banks' competitiveness in Jordan (column 1). Therefore, the study rejected the hypothesis that FCP affects banks' competitiveness in Jordan (*H2*). This result is consistent with the results of Iacovoiu and Stancu (2017) who found that the competitive position of the Romanian sector does not provide an adequate FCP over the period from 2013 to 2015.

On the other hand, the findings indicated negative and statistical evidence supporting the effect of FCP on banks' profitability at a 5% confidence level (column 2). Hence, accepting the hypothesis that FCP has an effect on banks' profitability in Jordan (*H1*). This result indicates that stricter and complying with FCP requirements (related to customer complaints statistics, communication channels, dispute resolution, and protection of the rights of special needs people) will significantly decrease banks' profitability. This result is consistent with Gaganis et al. (2020) who found that FCP negatively affects profit efficiency for an international sample from 82 countries.

Moreover, this result is in regulatory with Pasiouras (2018) who documents evidence that FCP requirements positively affect banks' profitability for developing countries, thus having no effect on banks' profitability for advanced countries during the period from 2010 to 2013. These results can be explained by the fact that compliance with FCP requirements may add extra costs decreasing banks' profitability. These costs are mostly related to disclosure, reporting statistics numbers, and collaborating with regulators. Elliehausen and Lowery (1997), Elliehausen and Kurtz (1988), Stango and Zinman (2011), Pasiouras (2018), and Gaganis et al. (2020) document evidence that disclosures are costly. Thus, documenting statistics numbers and cooperating with regulators require extra personnel resources, increasing personnel expenses and therefore decreasing banks' profit (Pasiouras, 2018; Gaganis et al., 2020).

Finally, for control variables, bank size indicated positive and statistical evidence supporting its effect on banks' profitability and competitiveness position. This suggests that larger banks have more profitability and competitiveness position as they benefit from economies of scale. Thus, this result is in line with the results of Kras and Villamil (1992), De Haas et al. (2010), Türkmen and Yiğit (2012), and Lee et al. (2014). Moreover, the results indicate a statistically significant and positive effect of debt ratio on banks' profitability and competitiveness position. This result is consistent with the results of Türkmen and Yiğit (2012) and Lee et al. (2014).

Table 2. Bank fixed-effects results

Variable	(1) Competitiveness	(2) Profitability
FCP	-0.024	0.003**
	(0.407)	(-0.017)
Bank size	0.066***	0.002***
	(0.000)	(0.000)
Debt ratio	0.000***	0.000***
	(0.000)	(0.000)
Credit risk	0.500	0.861
	(-0.064)	(-0.008)
(Bank, year) Fixed-effects	Contained	Contained
No. of obs.	104	104
Within R^2	0.156	0.089

Note: This table presents descriptive statistics of study variables. Competitiveness (measured by the HHI) is the dependent variable, and profitability (measured by ROA) is the dependent variable. For 13 commercial banks listed on ASE between 2013 and 2020. FCP is the financial consumer protection index related to customer complaints statistics, communication channels, dispute resolution, and protection of the rights of special needs people. Bank size (Log total assets at the end of the year). The debt ratio (Total liabilities/Total assets). Credit risk (Provision for loan losses/Total loans).

5. ROBUSTNESS TEST

In general, the findings state that FCP diminishes banks' profitability for Jordanian banks in the period from 2013 to 2020. To affirm the main result, extra tests are run. Wintoki, Linck, and Netter (2012) dispute that endogeneity in the conventional fixed-effect estimation may develop a biased result, therefore, the study runs the generalized method of moments (GMM). GMM findings are presented in Table 3, which affirms the main result; and indicated negative and statistical evidence supporting the effect of FCP on banks' profitability at a 5% confidence level. Hence, the study results are not referred to as dynamic endogeneity or negligent variables. Moreover, the study re-runs the analysis using random-effect estimation. Random-effect results are presented in Table 4, which affirm the main result; and indicated negative and statistical evidence supporting the effect of FCP on banks' profitability at a 5% confidence level.

Table 3. GMM results

Variable	Profitability
Profitability$_{t-1}$	0.050 **
	(0.602)
FCP	-0.05**
	(0.014)
Banks characteristics	Yes
No. of obs.	78
Arellano-Bond test AR (2)	0.849
Hansen test-identification	0.396

*Note: This table presents bank-random effects panel regression results using profitability (measured by ROA) as the dependent variable in column 2. For 13 commercial banks listed on ASE between 2013 and 2020. FCP is the financial consumer protection index related to customer complaints statistics, communication channels, dispute resolution, and protection the rights of special needs people. Banks' characteristics are bank size (Log total assets). The debt ratio (Total liabilities/Total assets). Credit risk (Provision for loan losses/Total loans), all measured at the end of the year. Statistical significance are denoted as ***, **, *, at the levels of 1%, 5%, 10%, respectively.*

Table 4. Random-effects results

Variable	Profitability
FCP	-0.005**
	(0.05)
Banks characteristics	Yes
No. of obs.	104
Within R^2	0.089

*Note: This table presents the dynamic GMM results using profitability (measured by ROA) as the dependent variable in column 2. For 13 commercial banks listed on ASE between 2013 and 2020. FCP is the financial consumer protection index related to customer complaints statistics, communication channels, dispute resolution, and protection the rights of special need people. Banks characteristics are bank size; it is the natural logarithm of the total assets at the end of the year. Debt ratio it is the bank's total liabilities divided by the total assets. Credit risk it is the bank's provision for loan losses divided by total loans, all measured at the end of the year. Statistical significance are denoted as ***, **, *, at the levels of 1%, 5%, 10%, respectively.*

6. CONCLUSION

The form of a balanced relationship between customers of financial products and financial institutions is still not clear. Therefore, the study seeks to contribute to the existing banking literature related to FCP and its effect on banks' profitability and competitiveness in Jordan during the period from 2013 to 2020. FCP is related to customer complaints statistics, communication channels, dispute resolution, and protection of the right of special needs people. The results indicate that stricter and responding to FCP requirements tend to decrease banks' profitability in Jordan. On the other hand, the study finds no evidence supporting the effect of FCP on banks' competitiveness in Jordan. These results are robustly confirmed by different robustness tests.

These results have essential implications for customers of financial products, and policymakers since FCP tends to decrease banks' profitability. However, the previous studies point out the importance of the banking system for economic growth and stability. Hence, regulators have to better understand and balance between customers of financial products' interests and financial institutions' rights and obligations.

FCP requirements and rules may have distinctive and particular necessities in each country, and, hence, these results only explain the effect of FCP on banks' profitability and competitiveness in Jordan. Consequently, these results cannot clarify all financial institutions. Furthermore, the results should be used only at the level of institutional quality and financial freedom. Future studies in this area are recommended, where they may examine the effect of FCP on banks' stability and economic growth. Moreover, examining other countries, especially other countries from MENA countries is value-added.

REFERENCES

1. Ahmed, H., & Ibrahim, I. R. (2018). Financial consumer protection regime in Malaysia: Assessment of the legal and regulatory framework. *Journal of Consumer Policy, 41*(2), 159–175. https://doi.org/10.1007/s10603-018-9369-0
2. Akinbami, F. (2011). Financial services and consumer protection after the crisis. *International Journal of Bank Marketing, 29*(2), 134–147. https://doi.org/10.1108/02652321111107620
3. Ardic, O. P., Ibrahim, J., & Mylenko, N. (2011). *Consumer protection laws and regulations in deposit and loan services: A cross-country analysis with a new data set* (Policy Research Working Paper No. 5536). World Bank. https://doi.org/10.1596/1813-9450-5536
4. Benston, G. J. (1999). *Regulating financial markets: A critique and some proposals* (Vol. 135). American Enterprise Institute. Retrieved from https://iea.org.uk/publications/research/regulating-financial-markets-a-critique-and-some-proposals
5. Berger, A. N., & Hannan, T. H. (1998). The efficiency cost of market power in the banking industry: A test of the "quiet life" and related hypotheses. *Review of Economics And Statistics, 80*(3), 454–465. https://doi.org/10.1162/003465398557555
6. Berger, A. N., Hasan, I., & Zhou, M. (2010a). The effects of focus versus diversification on bank performance: Evidence from Chinese banks. *Journal of Banking & Finance, 34*(7), 1417–1435. https://doi.org/10.1016/j.jbankfin.2010.01.010
7. Berger, A. N., Hasan, I., Korhonen, I., & Zhou, M. (2010b). *Does diversification increase or decrease bank risk and performance? Evidence on diversification and the risk-return tradeoff in banking* (BOFIT Discussion Paper No. 9/2010).
8. Campbell, J. Y., Jackson, H. E., Madrian, B. C., & Tufano, P. (2011). Consumer financial protection. *Journal of Economic Perspectives, 25*(1), 91–114. https://doi.org/10.1257/jep.25.1.91
9. Central Bank of Jordan. (2013). *Annual report*. Retrieved from https://www.cbj.gov.jo/EchoBusV3.0/SystemAssets/7d038d87-5c15-47bd-aede-f047ea221f64.pdf
10. Central Bank of Jordan. (2020). *Annual report*. Retrieved from https://www.cbj.gov.jo/EchoBusV3.0/SystemAssets/53402c47-8249-4661-9a9d-56f891b89ae9.pdf
11. Chen, Y., Wei, X., & Zhang, L. (2013). A new measurement of sectoral concentration of credit portfolios. *Procedia Computer Science, 17*, 1231–1240. https://doi.org/10.1016/j.procs.2013.05.157
12. Cull, R., Demirgüç-Kunt, A., & Morduch, J. (2011). Does regulatory supervision curtail microfinance profitability and outreach? *World Development, 39*(6), 949–965. https://doi.org/10.1016/j.worlddev.2009.10.016
13. De Haas, R., Ferreira, D., & Taci, A. (2010). What determines the composition of banks' loan portfolios? Evidence from transition countries. *Journal of Banking & Finance, 34*(2), 388–398. https://doi.org/10.1016/j.jbankfin.2009.08.005
14. de Serres, A., Kobayakawa, S., Sløk, T., & Vartia, L. (2006). *Regulation of financial systems and economic growth* (OECD Working Paper No. 506). OECD. https://doi.org/10.2139/ssrn.965693
15. Djankov, S., McLiesh, C., & Ramalho, R. M. (2006). Regulation and growth. *Economics Letters, 92*(3), 395–401. https://doi.org/10.1016/j.econlet.2006.03.021
16. Elliehausen, G. E., & Kurtz, R. D. (1988). Scale economies in compliance costs for federal consumer credit regulations. *Journal of Financial Services Research, 1*(2), 147–159. https://doi.org/10.1007/BF00116385
17. Elliehausen, G., & Lowery, B. R. (1997). *The cost of implementing consumer financial regulations: An analysis of experience with the Truth in Savings Act*. Retrieved from https://www.federalreserve.gov/pubs/staffstudies/1990-99/ss170.pdf
18. Evans, D. S., & Wright, J. D. (2009). The effect of the Consumer Financial Protection Agency Act of 2009 on consumer credit. *Loyola Consumer Law Review, 22*(3), 277. Retrieved from https://lawecommons.luc.edu/lclr/vol22/iss3/2
19. Gaganis, C., Galariotis, E., Pasiouras, F., & Staikouras, C. (2020). Bank profit efficiency and financial consumer protection policies. *Journal of Business Research, 118,* 98–116. https://doi.org/10.1016/j.jbusres.2020.06.033
20. Hartarska, V., & Nadolnyak, D. (2007). Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence. *Applied Economics, 39*(10), 1207–1222. https://doi.org/10.1080/00036840500461840
21. Iacovoiu, V., & Stancu, A. (2017). Competition and consumer protection in the Romanian banking sector. *Amfiteatru Economic, 19*(45), 381–396.
22. Kilinc, M., & Neyapti, B. (2012). Bank regulation and supervision and its welfare implications. *Economic Modelling, 29*(2), 132–141. https://doi.org/10.1016/j.econmod.2011.08.023
23. Kras, S., & Villamil, A. P. (1992). A theory of optimal bank size. *Oxford Economic Papers, 44*(4), 725–749. https://doi.org/10.1093/oxfordjournals.oep.a042072
24. Kriese, M., Abor, J. Y., & Agbloyor, E. (2019). Financial consumer protection and economic growth. *International Journal of Emerging Markets, 14*(5), 1060–1080. https://doi.org/10.1108/IJOEM-05-2018-0229
25. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Legal determinants of external finance. *The Journal of Finance, 52*(3), 1131–1150. https://doi.org/10.1111/j.1540-6261.1997.tb02727.x
26. Lee, C.-C., Hsieh, M.-F., & Yang, S.-J. (2014). The relationship between revenue diversification and bank performance: Do financial structures and financial reforms matter? *Japan and the World Economy, 29,* 18–35. https://doi.org/10.1016/j.japwor.2013.11.002

27. Levine, R. (1999). Law, finance and economic growth. *Journal of Financial Intermediation, 8*(1–2), 8–35. https://doi.org/10.1006/jfin.1998.0255
28. Llewellyn, D. T. (1999). *The economic rationale for financial regulation* (FSA Occasional Paper Series 1). The Financial Services Authority. Retrieved from https://www.fep.up.pt/disciplinas/pgaf924/PGAF/Texto_2_David_Llewellyn.pdf
29. Lloyd-Williams, D. M., Molyneux, P., & Thornton, J. (1994). Market structure and performance in Spanish banking. *Journal of Banking & Finance, 18*(3), 433–443. https://doi.org/10.1016/0378-4266(94)90002-7
30. Melecky, M., & Rutledge, S. S. (2011). *Financial consumer protection and the global financial crisis* (MPRA Paper). Retrieved from https://mpra.ub.uni-muenchen.de/28201/
31. Mersland, R., & Strøm, R. Ø. (2009). Performance and governance in microfinance institutions. *Journal of Banking & Finance, 33*(4), 662–669. https://doi.org/10.1016/j.jbankfin.2008.11.009
32. Miani, S., & Daradkah, D. (2008). The banking industry in Jordan. *Transition Studies Review, 15*(1), 171–191. https://doi.org/10.1007/s11300-008-0168-1
33. Pasiouras, F. (2018). Financial consumer protection and the cost of financial intermediation: Evidence from advanced and developing economies. *Management Science, 64*(2), 902–924. https://doi.org/10.1287/mnsc.2016.2585
34. Poliakh, S. (2018). The consumer protection as a driver of innovative development: Case study for consumers of financial services. *Marketing and Management of Innovations, 2,* 2378–387. https://doi.org/10.21272/mmi.2018.2-29
35. Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy, 106*(6), 1113–1155. https://doi.org/10.1086/250042
36. Rose, P. S., & Hudgins, S. C. (2013). *Bank management and financial services*. McGraw-Hill/Irwin Publishing.
37. Rutledge, S. L. (2010). *Consumer protection and financial literacy: Lessons from nine country studies* (Policy Research Working Paper No. 5326). World Bank. https://doi.org/10.1596/1813-9450-5326
38. Selvakumar, M., & Sathyalakshmi, V. (2016). Financial consumer protection and customer satisfaction. A relationship study by using factor analysis and discriminant analysis. *EuroEconomica, 34*(2), 71–94. Retrieved from https://journals.univ-danubius.ro/index.php/euroeconomica/article/view/2962
39. Stango, V., & Zinman, J. (2011). Fuzzy math, disclosure regulation, and market outcomes: Evidence from truth-in-lending reform. *The Review of Financial Studies, 24*(2), 506–534. https://doi.org/10.1093/rfs/hhq089
40. Tabak, B. M., Fazio, D. M., & Cajueiro, D. O. (2011). The effects of loan portfolio concentration on Brazilian banks' return and risk. *Journal of Banking & Finance, 35*(11), 3065–3076. https://doi.org/10.1016/j.jbankfin.2011.04.006
41. Türkmen, S. Y., & Yiğit, İ. (2012). Diversification in banking and its effect on banks' performance: Evidence from Turkey. *American International Journal of Contemporary Research, 2*(12), 111–119. Retrieved from https://www.researchgate.net/publication/291166534_Diversification_in_Banking_and_its_Effect_on_Banks'_Performance_Evidence_From_Turkey
42. Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics, 105*(3), 581–606. https://doi.org/10.1016/j.jfineco.2012.03.005
43. Wright, J. D., & Zywicki, T. J. (2009). Three problematic truths about the Consumer Financial Protection Agency Act of 2009. *Lombard Street, 1*(12), 1–26. Retrieved from https://www.academia.edu/2821041/Three_Problematic_Truths_About_the_Consumer_Financial_Protection_Agency_Act_of_2009
44. Wright, J., & Helland, E. (2011). The dramatic rise of consumer protection law. In F. H. Buckley (Ed.), *The American illness: Essays on the Rule of Law* (pp. 361–378). Yale University Press. https://doi.org/10.12987/9780300195071-018