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Determinants of the development of cashless transactions in Poland

PhD thesis summary

This dissertation discusses the determinants of the development of cashless transactions in Poland. Cashless payments are the foundation of the cash flow system in the modern economy. Understanding the determinants of the development of cashless transactions requires knowledge of the factors determining the acceptance of cards by enterprises and the use of cashless payments by consumers. Therefore, in her doctoral dissertation, the author planned a comprehensive approach, taking into account number of factors, such as: consumer needs and expectations, preferences and economic calculations of entrepreneurs, progress in the development of digital technologies and payment solutions.

The first chapter presents theoretical aspects related to non-cash transactions and cash payments, supplemented with a summary of market data on the state and dynamics of development of payment instruments in Poland against the background of selected European countries. This made it possible to multidimensionally illustrate the differences in terms of advancement in the development of cashless transactions in individual countries and to refer them to the Polish market. In addition, on the basis of the reviewed world literature and data from domestic and foreign reports of central banks, the importance of cashless payments for the economy from a macroeconomic perspective was confirmed, with particular emphasis on the analysis of the costs of individual payment instruments, as well as the issue of the shadow economy.

The second chapter analyses the programmes supporting the development of cashless transactions in Poland introduced in the years 2007-2022, as well as describes regulatory activities. Particular emphasis was placed on (a) the effects of the Cashless Poland Foundation's programme and (b) the effects of measures to limit the spread of the SARS-COV-2 virus, introduced during the outbreak of the COVID-19 pandemic, recognised by the author as catalysts for changes in the field of payment services. In addition, this chapter presents the author's classification of legal changes introduced in the years 2021-2023, as well as planned for 2024. The discussion on the domestic market is concluded by a calendar of activities concerning the payment system in Poland undertaken for over two decades, with the current number of non-cash transactions made with a payment card in relation to the European Union average. The chapter is complemented by a presentation and discussion of programs for the development of cashless transactions in selected European countries, enriched with a short analysis of available statistical data from the European Central Bank.

The third chapter focuses on the universal determinants of the development of the retail payments market, which have been demonstrated in the results of previous studies available in the literature on the subject. The author focused on (a) determinants of consumers' payment choices and (b) factors influencing entrepreneurs' decision to start accepting non-cash payment methods. Due to the two-sided nature of the payment services market, it was necessary to take into account the interaction between two groups of users - payers and payment merchants - and to refer to the economic theory concerning the impact of network externalities. In order to comprehensively capture the factors influencing consumer payment behavior in dynamically changing economic conditions, the theoretical assumptions of the Davis Technology Model (TAM) were used. In this chapter, potential determinants identified in the literature on the subject have been identified, which will constitute a framework for the author's empirical research.

The fourth chapter is empirical and concerns the factors of consumers' choice of payment method and covers the determinants influencing the more frequent use of payment cards by their users. This chapter is entirely based on the results of a comprehensive longitudinal study, carried out from 2018 to 2022, on the payment habits of Polish consumers. The chapter presents selected results of the above-mentioned research on changes in the time of use of payment cards and cash, depending on socio-demographic characteristics as well as consumer preferences and perceived availability of EFT-POS payment terminals. For the purposes of the study, the author's definition of the so-called "certainty of acceptance" was formulated and models concerning the factors determining its level were estimated. On the basis of the literature review and available statistical data, the author's research models were developed and the research sample was characterized. The applied methodology, using probit and tobit models, allowed for empirical verification of the theory of network effects in the field of interactions on the payment card market, which have so far been difficult to capture in empirical studies

The last, fifth chapter of the thesis includes the results of the author's own empirical research, including: (B1) quantitative research on the determinants of acceptance of cashless payments by enterprises and (B2) qualitative research of entrepreneurs using payment terminals under the Cashless Poland Programme and companies not accepting payment cards. An econometric model, based on the results of a survey, was evaluated, allowing for the assessment of factors determining entrepreneurs' decision to accept payment cards. A comparison of the results of the survey for the years 2016 and 2019 made it possible to learn about the stimulators and barriers to the development of cashless transactions on the part of entrepreneurs before and during the introduction of the Cashless Poland Programme. It is complemented by the results of individual in-depth interviews with entrepreneurs, conducted by the author in 2018, 2020 and 2023.

Conclusions

In the summary, the analysis and presentation of conclusions formulated on the basis of the obtained research results was made, allowing to illustrate the conditions for the development of cashless transactions in Poland at physical points of sale, taking into account the needs of two sides of the market - consumers and entrepreneurs. In addition, a number of applications were presented – at the general and national level, containing recommendations for the financial sector and broadly understood business. The dissertation concludes with a section on future research areas