Research in International Business and Finance 38 (2016) 404–416

Contents lists available at ScienceDirect

Research in International Business and Finance

journal homepage: www.elsevier.com/locate/ribaf

Full length article

The impact of SEPA in credit transfer payments: Evidence from the euro area

Vânia G. Silva[a,*], Esmeralda A. Ramalho[b], Carlos R. Vieira[b]

[a] CEFAGE-UE, Universidade de Évora, Palácio do Vimioso, Largo Marquês de Marialva, 8, 7000-809 Évora, Portugal
[b] Department of Economics and CEFAGE-UE, Universidade de Évora, Departamento de Economia, Largo dos Colegiais, 2, 7000-803 Évora, Portugal

ARTICLE INFO

Article history:
Received 12 December 2015
Received in revised form 26 April 2016
Accepted 28 April 2016
Available online 7 May 2016

JEL classification:
F36
G21
C25
C35

Keywords:
European union
Retail payments
Credit transfers
SEPA
Fractional regression models

ABSTRACT

This paper analyses the effect of the implementation process of the Single Euro Payments Area (SEPA) project on credit transfer payments in euro area countries during the period between 2008 and 2013. Using both univariate and multivariate fractional regression models, we found that, when controlling for socio-demographic, economic, technological and institutional factors, the progress in the migration to SEPA formats had a relevant positive impact on the share of payments made with credit transfers. Our results provide for the first time empirical evidence of the direct effect of the implementation of SEPA on payment habits and set the basis for the discussion of some of the possible implications of payments digitalization from both economical and societal perspectives.

1. Introduction

The Single Euro Payments Area (SEPA) project is, undoubtedly, a key milestone for European integration. By establishing a single set of conditions, rights and obligations for euro payments regardless of the location, this project aims to increase harmonization and efficiency in euro payments and, for that reason, contribute to take complete advantage of the Economic and Monetary Union (ECB, 2013).

Understanding the impact of the progress in SEPA migration on the use of credit transfers is of great interest to both payment service providers and policymakers. The implementation process required significant investments by the banking community, for which a financial return is expected in the near future. By supporting the SEPA project, authorities intended to encourage the substitution of less efficient means of payment, since this might reduce the costs supported by society with the use of payments instruments (Schmiedel et al., 2012) and also contribute to economic growth (Hasan et al., 2013). But the relevance of this topic does not extinguish in this positivist approach. The effect of the SEPA project should be explored

* Corresponding author. Permanent address: Banco de Portugal—Departamento de Sistemas de Pagamentos, Av. Almirante Reis, 71, 1150-012 Lisboa, Portugal.
E-mail address: vgcgsilva@gmail.com (V.G. Silva).

http://dx.doi.org/10.1016/j.ribaf.2016.04.013
0275-5319/

in more than just an economic angle. As a matter of fact, money—an ever-present element in our daily lives—has deep and complex social, economic and political connections as Dodd (2014) underlines. Due to technological developments, the way money is used to make payments has seen significant changes and credit transfer payments form part of a broader phenomenon of payments' digitalization. Identifying and discussing the different implications of this dematerialization is therefore another aim of this paper.

Examining the overall impact of SEPA implementation on credit transfer payments in euro and non area countries will only be feasible in the years following the complete conclusion of the migration (i.e., after 31 October 2016). Note that a considerable period after completing SEPA migration must be guaranteed before a general analysis is performed, since the possible substitution effects with other payment instruments might take some time to occur. Yet, at this stage, it is feasible to evaluate what was the impact of the progress in the migration in euro area countries. In fact, between 2008 and 2013 the migration of credit transfers to SEPA standards has seen considerable progress. In December 2008 only 2% of euro area credit transfers were SEPA compliant, but in December 2013 around 74% of credit transfers were made in accordance with SEPA rules.

In this context, this paper examines the effect of the progress in SEPA migration on credit transfer payments in euro area countries between 2008 and 2013. While a small number of the existing papers have explored the potential benefits of the implementation of SEPA (see an overview in Schmiedel, 2007) and a few cross-country studies identified some of the factors that might influence the use of credit transfers (for example, Humphrey et al. (1996b), Deungoue (2008) and Martikainen et al. (2015)), none of them focuses on the effect of SEPA adoption on credit transfer payments. Thus, this study complements the existing literature in several ways. First, according to our knowledge, it provides the first empirical examination of the effect of SEPA migration on the use of credit transfers, therefore enriching the existing literature which is mainly focused on the theoretical analysis of SEPA or on the computation of potential economic benefits of this project. Second, the analysis of the effect of SEPA migration progress on the use of credit transfers – measured as the proportion of the number of credit transfer payments on the total number of payments made with credit transfers, direct debits, cards and cheques – is performed using estimation techniques that take into account the fractional nature of the dependent variable under estimation. Third, the analysis includes not only the most well known fractional regression models (FRM), which are univariate in the sense that only the share of interest is described, but also FRM that allow for the presence of neglected heterogeneity, recently proposed by Ramalho and Ramalho (2014), and multivariate FRM that describe simultaneously the share of interest and other shares of non-cash payments instruments, controlling for potential substitution effects between them.

From our regression results we conclude that, after taking into consideration the potential impact of socio-demographic, economic, technological and institutional variables, the progression in the migration of credit transfers to SEPA formats had a statistically significant positive effect on the use of this payment instrument. This result suggests that the migration to SEPA impacted credit transfer payments in more than just a technical way. The fact that the pattern of use of this payment instrument was affected by the project can unveil future advantages when full migration is achieved in terms of: (i) the returns obtained by payment service providers with the use of this payment instrument; (ii) the social costs supported with the use of payment instruments; and (iii) the evolution of consumption and trade. Indeed, since the use of this payment instrument is still relatively low in some euro area countries (for example, in Portugal, Spain, France and Malta, the share of payments made through credit transfers in 2013 was less than 20%), the migration to SEPA might contribute to an increase in credit transfers usage, with the potential benefits that might result from it.

The remainder of this paper is structured as follows. Section 2 presents an outline of the use of credit transfers in euro area countries and of the SEPA project, as well as a summary of relevant literature. Section 3 describes the data and illustrates the methodology used. Section 4 reports the empirical results. Section 5 discusses the findings and concludes.

2. Framework

In this section it is presented a summary of the evolution of credit transfer payments in euro area countries between 2008 and 2013, as well as a brief overview of the SEPA project. The relevant literature is also reviewed.

2.1. Credit transfer payments in the euro area

According to Kokkola (2010), credit transfers have been the most commonly used non-cash payment instrument in the euro area. In fact, the share of payments made with credit transfers in the euro area (computed considering the relative importance of the number of credit transfer payments – SEPA compliant or not –, on the total number of payments made with credit transfers, direct debits, cards and cheques) has been stable across the period in analysis, ranging from around 33% in 2008 to about 32% in 2013 (Table 1).

The relative importance of this payment instrument in the euro area is quite substantial when compared to the United States of America (US) or Canada. Still, it is lower than the proportion found in Switzerland (of around 51% in 2013). In fact, the majority of cashless payments in Switzerland are made by credit transfers due to the historical relevance of the Swiss Postal Administration which contributed to a payment culture based on credit transfers (BIS, 2011).

Focusing on the various euro area countries, we can observe considerable differences among them. On the upper bound we have countries such as Slovakia, Finland, Greece, Slovenia and Austria, where the proportion of credit transfer payments