



EU Payment Observatory

How electronic invoicing helps reduce late payments in commercial transactions

3rd Thematic Report

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List of abbreviations

| | |
|------|-----------------------------------|
| B2B | Business-to-business |
| B2C | Business-to-consumer |
| B2G | Business-to-government |
| ERP | Enterprise resource planning |
| ETD | Electronic tax document |
| SME | Small and medium-sized enterprise |
| VIDA | VAT in the Digital Age |

Introduction

Any sale of goods or services is accompanied by an invoice of some form. Through the invoice, a seller and buyer exchange information on the quantity, nature, price and (often) payment due date for the goods or services sold. Invoices therefore play a crucial role in facilitating the sale and purchase of goods and in the smooth functioning of an economy. This report looks at the process of invoicing. In particular, it focuses on the shift from paper-based invoices to electronic invoices (eInvoices) and the impact this may have on late payments.

Once, paper-based invoices were the norm, implying a back-and-forth by mail between sellers and buyers that ultimately resulted in a transfer of funds. Now, paper-based invoices are losing ground to electronic invoices. The switch to eInvoices (i.e. statements issued, sent and received in a digital format that allows for automatic and electronic processing) is bringing about significant changes for the seller and buyer alike.

While the changes in how invoices are issued, transmitted and received as a result of the shift from paper to digital have been well studied, less attention has been paid to the effect on when a seller gets paid. This report is specifically concerned with that effect. Put simply, it aims to answer the question of whether the adoption of eInvoicing reduces late payments.

The short answer is that eInvoicing has great potential to improve *payment efficiency*, yet it doesn't necessarily improve *payment behaviour*. Although eInvoicing increases the efficiency and therefore the speed of invoice processing, organisations that have never intended to pay their invoices on time will not magically do so when using eInvoicing. As such, eInvoicing should at most be thought of as a powerful complement to regulatory intervention. It is not a standalone remedy for the harmful effects of late payments.

The report is part of a series of thematic reports published by the EU Payment Observatory (European Observatory of Payments in Commercial Transactions). In line with the Observatory's goal to 'monitor trends and developments on payment performance and behaviour in commercial transactions in the EU', it informs the debate on payment performance in commercial transactions. Moreover, it contributes to the understanding of the detrimental effects that late payments can have on the liquidity of businesses.

The findings presented in this report are based on a combination of desk research, data analysis and interviews with stakeholders. By combining in-house analysis with insights from a diverse set of stakeholders, we seek to provide a complete picture of the potential of eInvoicing to reduce late payments, and to identify the pitfalls and opportunities. An overview of the stakeholders interviewed can be found in the [Appendix](#).

The report continues with a section on definitions. Next, it offers a background section on technical, market and regulatory developments. It then discusses the potential benefits of eInvoicing for reducing late payments, including gains in time efficiency, enhanced transparency and its prospects for facilitating alternative financing solutions. This is followed by a section on challenges, highlighting the obstacles to realising the potential of eInvoicing. Lastly, the conclusion briefly recaps the report and its main findings.

Definitions

Electronic invoices replace traditional paper invoices with digital formats that are electronically created, delivered and stored. These can be rendered as both machine-readable, structured formats (e.g. in Extensible Markup Language, XML) and as unstructured formats (e.g. a portable document format, PDF).

Business-to-business (B2B) invoices, both paper and electronic, are a summary of a transaction for the supply of goods and services, a claim for payment, and a tax instrument for triggering the collection of value added tax (VAT) and other similar indirect taxes.

In the invoicing and payment process, the invoice is usually preceded by the exchange of a purchase order and various fulfilment/transport documents. The issue, receipt and approval of the invoice is followed by payment, by whatever means is agreed.

In this report, we only consider machine-readable structured formats, in line with the definition of eInvoices used in European legislation². Unstructured formats, while digital, do not facilitate the easy automation of eInvoice creation and processing, and therefore do not unlock the same efficiency gains as their structured counterparts.

Background

The shift from paper-based invoices to eInvoices is gaining momentum. First implemented by larger enterprises in a quest to automate their internal processes, eInvoicing has spread to other organisations within the economy, ultimately also reaching small and medium-sized enterprises (SMEs).

This trend has been supported by government intervention – initially by implementing policies for the compulsory use of eInvoicing in public procurement³, and later by routing eInvoices through a government entity so as to continuously monitor transactions. Whereas the first step incentivises government and business to digitalise and realise efficiency gains, the second step enables the government to better monitor VAT receipts and aims to reduce the VAT gap⁴.

The adoption of eInvoicing is a key priority of EU digitalisation policy. There is legislation requiring public sector acceptance of eInvoices. In addition, several EU Member States are making eInvoices mandatory for tax reporting, and thus compulsory for businesses in the process.

Many other governments around the world have implemented similar measures, including the Latin American countries that became pioneers in the development of continuous transaction controls and digital reporting requirements. They are now joined by others in the Middle East, Africa and Asia. In the US, the Federal Reserve has been working with the Business Payments

² See European Commission, 'eInvoicing': 'An eInvoice is an invoice that has been issued, transmitted and received in a structured data format which allows for its automatic and electronic processing, as defined in Directive 2014/55/EU' (2024), <https://ec.europa.eu/digital-building-blocks/sites/display/DIGITAL/eInvoicing>

³ Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0055>

⁴ Agenzia delle Entrate (2022), Electronic Invoicing in Italy – White Paper, <https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/Italy-Electronic-invoicing-May-2021.pdf>

Coalition, which has an agenda to promote the use of electronic means of payment and the complementary use of eInvoicing to reinforce one another⁵.

EU LEGISLATION

Regulatory activities on eInvoicing are primarily driven by tax collection and increasingly seek to promote the benefits of digitalisation and smart processes. Over more than 15 years, the EU has adopted bold policy positions to develop and support eInvoicing.

This has included legislating that eInvoices enjoy the same legal and fiscal basis as paper with rules for authenticity, integrity and legibility (2010), covering both structured machine-readable and unstructured formats⁶. The latter are less the object of policy promotion as they bring fewer benefits in terms of automatisisation and tax monitoring.

Among the key tools at the disposal of regulators to promote eInvoicing are 'mandates' – regulatory requirements for businesses and public administrations to generate, transmit and/or receive electronic invoices. Mandates can relate to business-to-government (B2G), B2B or business-to-consumer (B2C) transactions.

In 2014, the EU legislated to mandate all public contracting authorities, at all levels, to be able to receive eInvoices in a prescribed standard, which came into effect as European Standard EN 16931⁷. The standard was published in 2017, but the legislation relied on voluntary adoption by senders, although Member States are free to issue B2G mandates requiring suppliers to send eInvoices when contracting with the government, which has become a growing trend.

This activity in the public sector reflects the reality that governments have more direct leverage in the public sector than through a 'whole economy' approach. But attention is now turning to wider adoption by the B2B market. This has partly been stimulated by the initiatives of various EU governments to introduce tax reporting based on eInvoices or defined digital reporting requirements, having discovered the benefits of eInvoicing and data capture for 'tax gap' elimination. As these initiatives progress, B2B mandates are becoming more common and accelerating the delivery of the wider supply-chain efficiency benefits of eInvoicing.

But these national solutions are currently quite different from one another. The European Commission has recently started its VAT in the Digital Age (VIDA) programme to coordinate policy in this area and in particular address intra-EU flows. The 2022 VIDA proposals, which modify the VAT Directive, aim to create a real-time digital reporting system to collect VAT on the basis of eInvoices. Electronic invoices would, in consequence, become the default system for invoicing at the European level. Consultation on the VIDA proposal is underway and has been left for the next legislative term.

⁵ The Federal Reserve FedPayments Improvement (2024), Electronic Invoices, <https://fedpaymentsimprovement.org/strategic-initiatives/payments-efficiency/electronic-invoices/>

⁶ Council Directive 2010/45/EU of 13 July 2010 amending Directive 2006/112/EC on the common system of value added tax as regards the rules on invoicing, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32010L0045>

⁷ Directive 2014/55/EU of the European Parliament and of the Council of 16 April 2014 on electronic invoicing in public procurement, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0055>

The major challenge here is to reap the benefits of supply chain efficiency while at the same time close the tax gap. Coordination is crucial for finding a solution that serves all stakeholders well.

MEMBER STATE UPTAKE AND MANDATES

Despite the efforts of the European Commission, progress on the adoption of eInvoices remains mixed across Member States. One cause of divergence is the varying degrees to which B2G or B2B eInvoicing mandates are implemented. A second cause is the extent to which Member States or national business coalitions promote eInvoicing uptake through campaigns and policy initiatives. Lastly, the extent to which an economy is digitalised is a contributing factor too.

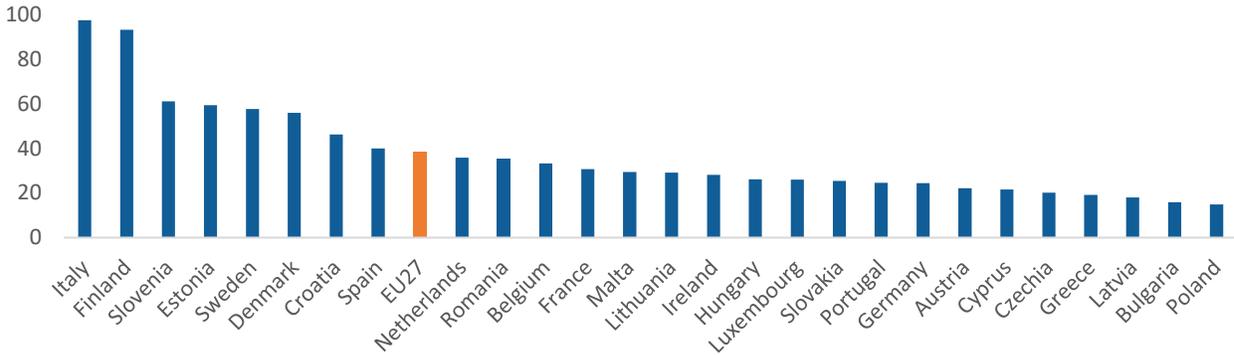
Figure 1 shows that whereas in some countries practically all enterprises send eInvoices (Italy and Finland) in others the share is minimal (Poland and Bulgaria). Italy is an unsurprising leader in the uptake of eInvoicing by enterprises given it was the first Member State, and until recently the only one, with a national mandate that requires all enterprises to send and accept eInvoices. The objective of that legislation, as in other cases, was primarily to increase tax collection and reduce tax evasion.

In Finland, the high eInvoicing uptake is not mainly driven by national policy, according to the stakeholders surveyed for the evaluation of the eInvoicing Directive⁸. Instead, they credit service providers and large companies. National legislation does not require enterprises to receive and accept eInvoices. However, it does state that a buyer can require a seller to use an eInvoice, which might be one of the reasons why large enterprises have great influence in the adoption of eInvoicing by their supply chain companies. Nonetheless, the promotion and awareness of eInvoicing benefits, in which service providers play a relevant role, has been very important in the Finnish case.

The countries with the lowest adoption rates of eInvoicing generally lack an eInvoicing mandate. Bulgaria, for example, has no mandate for B2G eInvoicing. Neither does Poland, but it is close to implementing a B2B eInvoicing mandate, following which a jump in eInvoicing adoption is expected.

⁸ European Commission (2024), Evaluation accompanying the report on the effects of Directive 2014/55/EU on the uptake of electronic invoicing in public procurement, https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=comnat%3ASWD_2024_0039_FIN

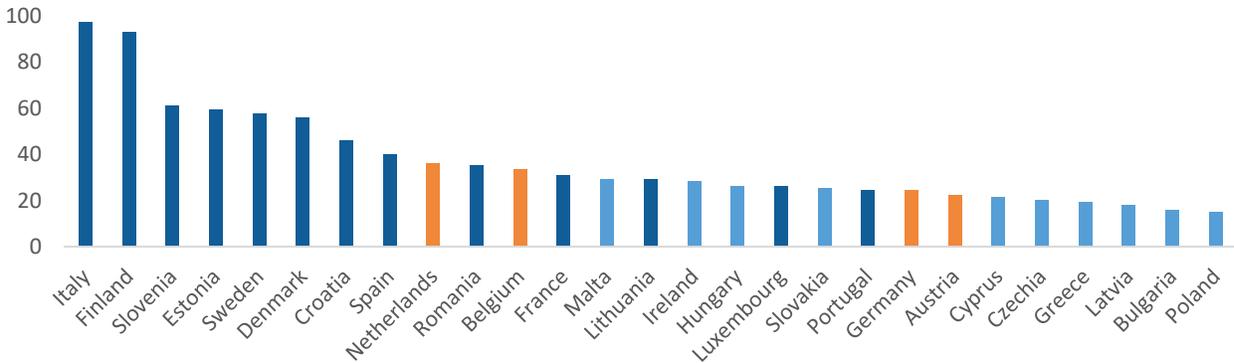
Figure 1: Share of enterprises sending eInvoices by EU country (plus the EU27 average), 2023 (%)



Source: Eurostat.

If the above figure is adapted to group countries by the extent to which they have implemented B2G eInvoicing mandates, one trend becomes clear: Member States that require suppliers to eInvoice for B2G services/goods are much more likely to have higher adoption rates of eInvoicing across all enterprises in the country (see Figure 2). As noted above, large differences still exist among countries within the same group (for example, eInvoicing adoption in Lithuania, Luxembourg and Portugal is a fraction of Italy’s or Finland’s) suggesting multiple factors come into play when enterprises choose to adopt eInvoicing.

Figure 2: Share of enterprises sending eInvoices by type of B2G mandate, 2023 (%)⁹



Note: Blue = mandate, orange = partial mandate, light blue = no mandate.

Source: Eurostat, European Commission eInvoicing Country Fiches.

The country groups are detailed in

⁹ When there is a partial mandate, suppliers are required to issue invoices only when contracting with certain public administrations. In Austria, Germany and the Netherlands, this refers to the central and federal governments. In Belgium, it is only in Flanders.

Table 1 as well.

Table 1: Overview of eInvoicing mandate by country

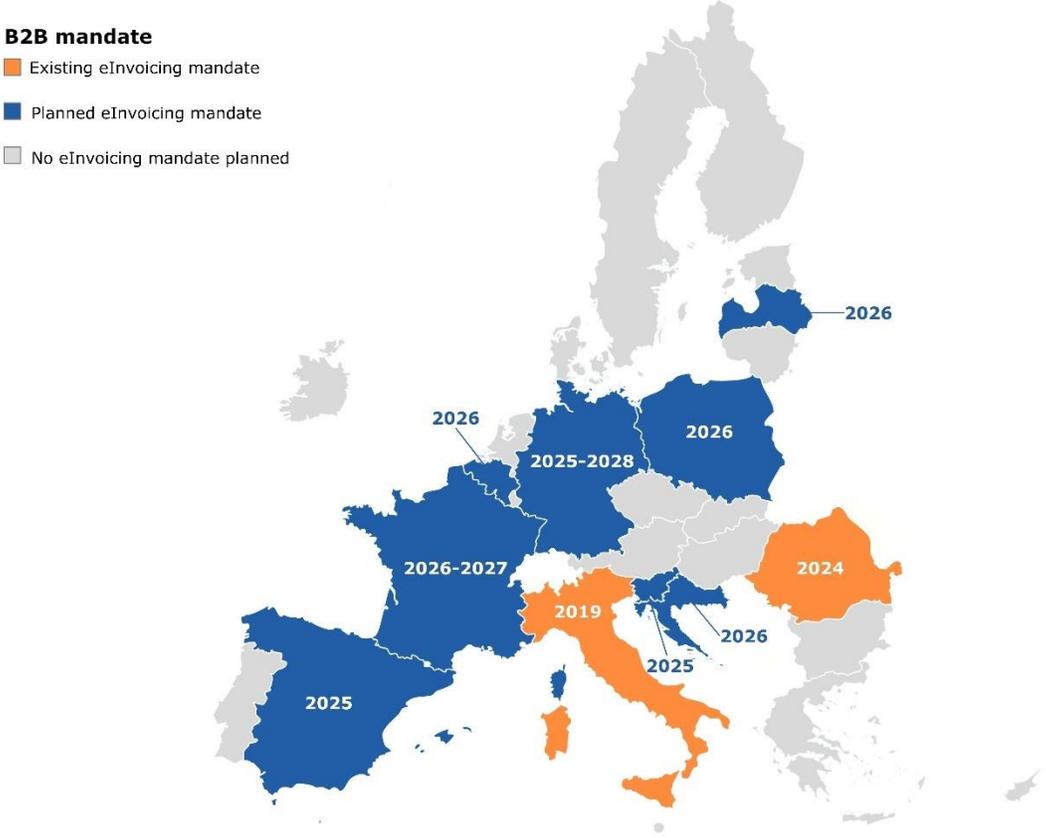
| | | | |
|-----------------|-----------------|--------------------|-----------------|
| Austria | Partial mandate | Italy | Mandate |
| Belgium | Partial mandate | Latvia | No mandate |
| Bulgaria | No mandate | Lithuania | Mandate |
| Croatia | Mandate | Luxembourg | Mandate |
| Cyprus | No mandate | Malta | No mandate |
| Czechia | No mandate | Netherlands | Partial mandate |
| Denmark | Mandate | Poland | No mandate |
| Estonia | Mandate | Portugal | Mandate |
| Finland | Mandate | Romania | Mandate |
| France | Mandate | Slovakia | No mandate |
| Germany | Partial mandate | Slovenia | Mandate |
| Greece | No mandate | Spain | Mandate |
| Hungary | No mandate | Sweden | Mandate |
| Ireland | No mandate | | |

Source: European Commission eInvoicing Country Fiches.

In addition to the various approaches to B2G mandates shown in

Table 1, there are also B2B and B2C mandates. The map in Figure 3 provides an overview of the planned implementation of B2B mandates in EU Member States. In Italy and Romania, a B2B eInvoicing mandate is currently in place alongside a B2G mandate. In the near future, Member States such as Spain and Poland intend to implement a B2B mandate. The adoption rates of eInvoicing are therefore expected to change (improve) substantially over the coming years as more eInvoicing mandates are implemented across Member States. Italy is the only Member State with a B2C invoice mandate (adopted in 2019).

Figure 3: Map of B2B mandates on eInvoicing in EU Member States by year of planned implementation



Sources: Authors' elaboration based on several sources, mainly the European Commission eInvoicing Country Fiches¹⁰.

¹⁰ European Commission Country Fiches, <https://ec.europa.eu/digital-building-blocks/sites/display/DIGITAL/eInvoicing+Country+Factsheets+for+each+Member+State+and+other+countries>

Impacts of adopting eInvoicing on reducing late payments

TIME EFFICIENCY GAINS

The adoption of eInvoicing has significant potential to increase payment efficiency. Along the steps in the invoice-to-payment cycle (i.e. from preparation of the invoice by the supplier all the way to the scheduling of payment by the buyer), eInvoicing enables automation, faster error-checking and instant data transfer. As a result, the cycle can be completed much faster compared with a paper-based invoice-to-payment cycle.

To illustrate the efficiency gains from the adoption of eInvoicing¹¹, the invoice-to-payment cycle is broken down, on both the supplier and buyer sides, in Figure 4.

Figure 4: Invoice-to-payment cycle



Source: European Commission, Consortium analysis.

In the first step, the preparation of the invoice by the supplier, the adoption of eInvoicing can lead to fewer mistakes. A recent study found that for 15.1 % of the invoices transacted in Europe, incorrect information was a reason for delay¹². EInvoicing software can alert users to mistakes such as typos or prevent them altogether by automatically filling in fields based on selection criteria provided by the user. Even if a shift is made to a more complex invoicing format, for example because it requires the entry of more data, a reduction in error rates can be achieved. In Finland, authorities found this to be the case when adopting the EN 16931 format¹³. In addition, the automation of fields also accelerates the preparation of the invoice.

In the second and third steps, the issuing and sending of the invoice, the shift from a paper-based system to an eInvoicing system means that no more printing and posting is required. Instead, a digital invoice is instantly created and e-mailed to the recipient. Beyond the time savings from no longer physically printing the document and sending it by post, there is also no risk of missing post or ambiguity around the recipient having received the eInvoice or not¹⁴. In fact, a supplier might instantly get confirmation that an eInvoice has been received by the buyer.

Moving along to the buyer's side of the process, steps four, five and six can be executed significantly faster when adopting eInvoicing. Unlike a paper-based system, where invoices

¹¹ Adapted from European Commission (2024), What are the benefits of eInvoicing? <https://ec.europa.eu/digital-building-blocks/sites/display/DIGITAL/What+are+the+benefits+of+eInvoicing>

¹² Billentis (2024), The global e-invoicing and tax compliance report: Watch the tornado! <https://www.pagero.com/guides/billentis-report>

¹³ European Commission (2024), Report on the effects of Directive 2014/55/EU on the Internal Market and on the uptake of electronic invoicing in public procurement, p. 163, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024SC0039>

¹⁴ Idem, France case study, p. 139.

are generally posted to a central unit within an organisation and from there onwards distributed to the receiving unit, with eInvoicing the receipt is instantaneous and, depending on the format used, can even specify the unit to which it is to be delivered.

Consequently, when using eInvoices there's no need for an operator to manually enter details in its enterprise resource planning (ERP) system, which reduces the potential for errors. Similarly, the software can perform a first check on the information entered by the supplier to save the operator the effort of checking the accuracy of the invoice provided.

Overall, the aforementioned steps provide significant potential for shortening the invoice-to-payment cycle. Research from Italy, where eInvoicing has been common since the introduction of B2G and B2B mandates, shows that 29 % of eInvoice senders report benefits following the adoption of eInvoicing, among which are time savings. At the same time, 53 % of eInvoice receivers report benefits, including time savings¹⁵. According to a recent report by Billentis, eInvoices tend to be settled 5 to 7 days earlier than paper invoices.¹⁶

On top of the time efficiency gains, eInvoicing also results in reduced costs for companies. Indeed, this is often the main reason companies adopt eInvoicing. The potential is significant. A study by the Hasselt University calculated that compared with paper-based processing, electronic invoicing could save 54.5 % of total invoicing costs for the issuer, and 71.8 % for the receiver¹⁷. A Billentis analysis based on a real company with 5 000 employees concluded that the cost gains would be 59 % for the issuer and 64 % for the receiver¹⁸.

These cost benefits are also linked to time efficiency gains. A study conducted in Germany found that a shorter payment cycle translates into a savings potential of EUR 4.5 per invoice processed¹⁹. However, those savings do not automatically take place with the adoption of eInvoicing. The same Hasselt University study, which was based on the invoicing costs of Belgian private sector firms, found that despite significant adoption levels, the actual invoicing savings of those firms were lower than expected²⁰.

In that regard, in its evaluation of the eInvoicing Directive²¹, the European Commission concluded that the cost efficiency benefits depend mostly on two factors: (i) the actual cost of the eInvoicing system, and (ii) the network effects, or in other words, the number of invoices that can be exchanged electronically. The first factor depends on multiple elements,

¹⁵ Idem, p. 145.

¹⁶ Billentis (2024), The global e-invoicing and tax compliance report: Watch the tornado!, <https://www.pagero.com/guides/billentis-report>

¹⁷ Poel, K., Marneffe, W., Vanlaer, W. (2016), Assessing the electronic invoicing potential for private sector firms in Belgium, the International Journal of Digital Accounting Research, Vol. 16, pp. 1–34, https://efactuur.belgium.be/sites/default/files/1577-8517-v16_1.pdf

¹⁸ Billentis (2017), Business case e-Invoicing/E-Billing, <https://www.billentis.com/assets/reports/e-invoicing-businesscase.pdf>

¹⁹ European Commission (2024), Report on the effects of Directive 2014/55/EU on the Internal Market and on the uptake of electronic invoicing in public procurement, p. 235, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024SC0039>

²⁰ Poel K., Marneffe, W., Vanlaer, W. (2016), Assessing the electronic invoicing potential for private sector firms in Belgium, the International Journal of Digital Accounting Research, Vol. 16, p. 23, https://efactuur.belgium.be/sites/default/files/1577-8517-v16_1.pdf

²¹ European Commission (2024) Report on the effects of Directive 2014/55/EU on the Internal Market and on the uptake of electronic invoicing in public procurement, p. 11, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024DC0072>

including the number of eInvoicing transactions and competition between service providers. The second is dependent on the uptake of eInvoicing by business partners. The evaluation concludes that mass adoption of eInvoicing would enable the full reaping of its cost benefit potential. This would be the result of lower fees for eInvoicing services, stemming from a higher number of transactions and more competition between service providers.

Another aspect that might reduce eInvoicing costs is greater harmonisation of technical requirements across the EU. At the moment, when setting up a mandate each Member State establishes different technical specifications that eInvoicing systems have to comply with. This leads service providers to developing different systems in each country. A single solution

Box 1: The case of Italy - the European frontrunner

In 2019, Italy was the first EU country to adopt a B2B mandate. The Italian experience can serve as an example for EU Member States of the impact of eInvoicing mandates in terms of the benefits as well as the challenges the process entails. According to [Eurostat](#), 41.6 % of Italian enterprises sent eInvoices in 2018. After implementation of the mandate, 94.9 % did so in 2020, a figure that rose to 97.5 % in 2023.

According to [a study](#) conducted by the Observatory of the eInvoicing and B2B e-commerce of Politecnico Milan, 6 months after the mandate entered into force, more companies (53 %) reported benefits in receiving eInvoices than in sending them (29 %). Of these gains, 19 % of large companies and 14 % of SMEs had witnessed a reduction of payment terms. Other benefits were faster registration of invoices, indicated by 33 % of large companies and by 31 % of SMEs, simpler invoice verification (21 % of all companies) and payment approval (20 % and 14 %, respectively) as well as faster payment reconciliation (25 % and 19 %, respectively).

On a more negative note, on the sending side almost the same share of companies consider that eInvoicing brings benefits (29 %) as those reporting that it involves extra burdens (28 %). These extra burdens stem from the requirement to customise eInvoices as well as the fact that when using Italy's current centralised system for eInvoicing, companies often end up issuing two invoices for the same transaction. Specifically, one is issued in the fixed format required by the Italian authorities and another with additional information required by their clients that is not included in the official standard. Therefore, 20 % of large companies and 18 % of SMEs report a bigger burden in the management of eInvoices, and 15 % and 12 % respectively stated that it increased payment times.

The benefits of eInvoicing were perceived more by those that had already undergone a digitalisation process (56 %) than by those that still do not have adequate technological equipment such as ERP or software for supply chain management (51 %). Also, large companies benefit more than SMEs, which suffer from lack of awareness about the benefits of digitalisation in general and eInvoicing in particular. For instance, in relation to late payments, the perception among the SMEs consulted is that time efficiency gains stemming from eInvoicing are not going to be a game changer because the real issue relates to the will of companies to pay on time.

at the EU level would reduce their implementation costs and consequently their likely fees. It would further lead to lower costs for those engaged in cross-border transactions.

ENHANCED TRANSPARENCY

Time efficiency gains in the invoice-to-payment cycle, following increased data quality, data accuracy and automation, are the most straightforward and quantifiable impacts of eInvoicing in the reduction of late payments. There are other benefits too, but they are more indirect and difficult to measure.

As stated earlier, eInvoicing is being promoted by governments around the world, including in Europe, because it has a positive effect on transparency, allowing governments to better monitor invoices and hence reduce tax evasion. Although eInvoicing systems are designed mostly to close the VAT gap, some of the benefits of greater transparency may also help in reducing late payments.

In fact, improved transparency has been recognised as a key element in the fight against delayed payments. As stated by the European Parliament in a 2019 resolution, 'the introduction of enhanced transparency concerning payment behaviour could discourage late payments and access to this information can act as an incentive for public entities and businesses to improve their payment practices and uphold their monetary obligations²².

In that regard, a positive effect of eInvoicing is that it increases transparency between the buyer and seller. One of the main characteristics of any eInvoicing system is its traceability. By using an online platform, every step of the eInvoicing process is logged in the system. These steps include, as specified in the previous section, issuing the invoice, sending it, receiving it, approving or rejecting it, and scheduling and confirming payment, among others. The buyer and seller can then check the exact status of the payment process.

For instance, this means that a supplier can have absolute certainty that it sent an invoice on day 1, that it correctly reached its counterpart on day 2, that it was approved on day 5, but on day 67 it still had not been paid. There are no misplaced emails or lost communications when eInvoicing is used. The accuracy of the information results in a much more transparent relationship between the buyer and supplier, which also enhances trust between them and at the same time helps clarify accountability, in other words who is to blame when something goes wrong.

This information could also help in cases in which there is a complaint. As pointed out by the French Ministry of Economy and Finance, 'eInvoicing would in particular limit the disputes with regards to late payments'²³. Through enhanced transparency, these disputes are easier to settle.

EInvoicing could furthermore assist companies in monitoring their own payment behaviour and that of their clients. This would ease the work of large undertakings, which, under the

²² European Parliament, Resolution of 17 January 2019 on the implementation of Directive 2011/7/EU on combating late payment in commercial transactions, https://www.europarl.europa.eu/doceo/document/TA-8-2019-0042_EN.html

²³ French Ministry of Economy and Finance (2020), Rapport de la Direction Générale des Finances Publiques : La TVA à l'ère du digital en France, <https://www.vie-publique.fr/files/rapport/pdf/277192.pdf>

new Corporate Sustainability Reporting Directive, will have to report their payment practices, particularly with respect to late payments to SMEs, in alignment with the [European Sustainability Reporting Standards](#).

The experiences with G2B eInvoicing mandates can be used as an example of how the additional insights that entities gain into their payment behaviour can help reduce late payments. The impact assessment of the Late Payments Directive highlights how the introduction of eInvoicing helped the Italian and Spanish public administrations assess the magnitude of the amounts they owed. In addition, it facilitated better monitoring and the adoption of corrective measures, such as budgetary allocations²⁴.

The adoption of eInvoicing can also benefit the monitoring of payment performance by externals. Examples are government authorities or payment observatories (such as the publisher of this report). Overall, the more information there is, the more closely payment behaviour can be monitored. Still, most of the traceability features of eInvoice platforms are only available to those conducting the transactions. This means that they can make it available to a public authority or to a mediator in the event of litigation or a dispute, but it's not automatically available.

Governments may gain some additional insights through the clearance systems they are setting up. However, in principle the information is only being collected for VAT purposes. The design of these systems determines what information is available to public administrations. For instance, in the case of the centralised system developed by Italy, there is no information on payment conditions. Other Member States such as Spain and France are setting up systems that include the reporting of payment information to the authorities.

France, for example, has indicated the 'reduction of payment terms' as one of the objectives of its eInvoicing reform²⁵. Companies will have to report to the public administration information such as payment terms and the status of the invoice²⁶. For the latter, the mandatory information to report is when an invoice has been sent, rejected, refused or paid²⁷. More information will be collected for services, such as the date of delivery. It will not be necessary to report other data on the lifecycle of the invoice, such as invoice approval or invoice in litigation, although it is recommended that companies do so.

This means that the French administration will have information on the transaction status which could potentially help in monitoring late payments. Yet, the information will not be comprehensive, as it will not cover the whole lifecycle of the invoice. For instance, the French administration will know when an invoice has been rejected, but it is not mandatory to report when it has been approved. This is quite important in the case of late payments, as that is normally the point when the clock starts ticking with regard to complying with payment terms. In other words, in many cases, if you don't know when the invoice is approved you won't

²⁴ European Commission (2023), Impact Assessment report of the Proposal for a Regulation of the European Parliament and the Council on combating late payments in commercial transactions, https://single-market-economy.ec.europa.eu/system/files/2023-09/SWD_2023_314_1_EN_impact_assessment_part1_v2.pdf

²⁵ French Public Finances (2024), Q&A, <https://www.economie.gouv.fr/entreprises/factures-mentions-obligatoires> https://www.impots.gouv.fr/sites/default/files/media/1_metier/2_professionnel/EV/2_gestion/290_facturation_electronique/faq_fe_05_01_2024_vf.pdf

²⁶ French Ministry of Economy and Finance (2023), Mentions obligatoires d'une facture, <https://www.economie.gouv.fr/entreprises/factures-mentions-obligatoires>

²⁷ In French: 'Dépot, rejet, refus, encaissée'.

know the payment deadline. Equally, the French administration is in principle only collecting such information for tax purposes with no indication that it also intends to use it to track late payments.

Another potential use of information collected by public administrations could be enforcement, particularly now that the proposal for a regulation of late payments includes the appointment of enforcement agencies. Nevertheless, again, the information is not being collected for that purpose. The only Member State identified as using tax information for the enforcement of late payment legislation is Poland, through its enforcement agency UOKiK. The Polish mandate on B2B electronic invoicing was supposed to enter into force in July, but it has been delayed until further notice. UOKiK is interested in including the data coming from the eInvoicing system in their analysis on the likelihood of payment delays. But they are still only in the initial stages of exploring how to do it.

The additional information on company payment behaviour that comes with electronic payments could also help organisations in the selection of customers. This could especially be the case for governments and big companies, which would be able to collect significant amounts of data about the payment behaviour of their clients and assess if they pay better or worse than other clients in the same sector. Intermediate-sized companies and SMEs are less likely to possess sufficient data. There are also companies that collect information on payment behaviour and sell it to others for a fee. Their databases could significantly increase the uptake of eInvoicing. An example is the Dun & Bradstreet Network and the companies that belong to it.

Box 2: New late payments proposal

On 12 September, the European Commission adopted a [proposal for a regulation revising the Late Payments Directive](#). The proposal mentions eInvoicing in Recital 28: 'It is important to promote systems that give legal certainty as regards the exact date of receipt of invoices by the debtors, including in the field of eInvoicing'.

Article 17 mentions that 'Member States shall use digital tools for effective enforcement' and ensure that credit management tools are available for SMEs, including on the use of digital tools.

Electronic invoicing may also be relevant with regard to Articles 5 and 8, which specify that interest for late payment and compensation for recovery costs should be 'automatically due by the debtor to the creditor'. Electronic invoicing, due to its traceability and its automatization features, might be the more straightforward way to comply with this requirement.

In addition, Article 5(5) introduces an obligation for the debtor to provide 'all relevant information to ensure that the invoice is accepted and processed by the debtor as soon as it is received'. EInvoicing would facilitate compliance with this obligation by enabling quicker acceptance and processing of the invoice as well as the automatization of a message to the supplier informing them of invoice approval.

SUPPLY CHAIN FINANCE

Another possible advantage of electronic invoicing with regard to late payments is its potential to make alternative financing solutions possible for companies that enable them to receive funds earlier (minus a fee). These solutions fall into the realm of supply chain finance, which can be divided into two categories: (i) receivable purchases, in which a company sells all or some of their invoices to a finance provider; and (ii) loans made using the invoices as collateral.

In 2018, the volume of supply chain finance was calculated as EUR 1 633.5 billion or 10 % of EU GDP²⁸. The most widespread solution in Europe, particularly for SMEs, is factoring. When factoring, a supplier sells its invoices to a financing company at a discounted rate from the total amount due to them. The factoring company will then take care of the collection of the invoices. Another common method is dynamic discounting in which the buyer pays the invoice earlier in exchange for a discount.

The above-mentioned methods of finance act as alternative ways for companies to improve their cash flow. They ensure firms can get the money earlier and can be particularly useful for SMEs suffering from chronic late payment issues as well as those struggling to access more traditional forms of finance such as loans.

However, they come at a cost. Companies must assess if resorting to these solutions is worth more than waiting to receive the full amount of their invoice. In addition, on a few occasions, supply chain finance has resulted in longer payment terms for suppliers. This has happened with buyer-led options such as Confirming in Spain.

The advent of eInvoicing has been described as a game changer for supply chain finance²⁹. Even so, with regard to late payments, it is important to explore whether it could also enable more cost-efficient and attractive options of supply chain finance for companies, in particular SMEs, which are more adapted to their particular needs. In other words, if it would make such solutions a more worthwhile recourse for companies.

Electronic invoicing allows providers of supply chain finance to reach to a wider pool of potential clients. Traditionally, the greatest barrier to it was the onboarding costs. The setting up of connectivity systems required large investments. This resulted in many SMEs not having access to supply chain finance³⁰. Thanks to digitalisation and in particular to eInvoicing, many companies have gained access to it. Investment costs have gone down. Supply chain financing products can easily be built into eInvoicing platforms as value added services. This is also facilitated by the move towards more embedded finance, in which companies look not for single-solution providers but for packages in which the same company offers them solutions for accounting, eInvoicing, tax reporting and supply chain finance.

In addition, eInvoicing should also be able to significantly reduce the costs of delivering supply chain finance. Its providers normally manage large numbers of invoices, which means they benefit more from efficiency gains. Electronic invoicing can also reduce the risks they take. The increased transparency brought by eInvoicing and the generation of more standardised

²⁸ European Commission (2020), Study on Supply Chain Finance, <https://op.europa.eu/en/publication-detail/-/publication/f0b68a88-5136-11ea-aece-01aa75ed71a1/language-en>

²⁹ Idem.

³⁰ Idem.

data on transactions helps to ensure the authenticity and creditworthiness of invoices. For instance, the use of electronic invoicing can provide a factoring company with a clearer view of the transaction history of companies when taking up new invoices. This facilitates their assessment of the invoice payment likelihood and the potential timeline for its payment.

The efficiency gains and the reduction in risks, as well as the potential increase in the number of clients of supply chain providers, should result in reduced fees. As a consequence, the appeal of such financing products may grow for companies, in particular for SMEs. Moreover, eInvoicing fosters innovation and the emergence of new kinds of potentially more attractive supply-chain finance products that provide enhanced flexibility and can be better adapted to clients' needs than traditional ones.

For example, the norm in factoring has been for companies to sell their invoices in bulk, in an all-or-nothing approach. The reason for not undertaking single-invoice transactions, as explained by the International Finance Corporation-World Bank, was that it 'could not be justified from a cost/return perspective, nor was this seen as capable of providing the necessary information on a small firm's activity to credibly assess the financing risk'³¹. Yet now, single-invoice have emerged, thanks to systems that are cheaper and easier to use and to the possibilities of enhanced data collection. Such an option can be far more attractive for companies, especially SMEs, than more traditional forms of factoring because of the flexibility it offers. For example, a company simply could opt to sell one of its invoices, at a discounted rate, in order to get the liquidity it needs at the time and then wait for the rest of its pending invoices to be paid by its clients.

Another development in the supply-chain finance business that is making its products more attractive for companies is the appearance of online marketplaces where suppliers can auction their invoices to the highest bidder, reducing the cost of supply chain finance. Such models are particularly successful in [Latin America](#) and a few of them already exist in Europe, for instance the Estonian [Supplier Plus](#) (previously known as Inwise).

Incoming eInvoicing mandates, whether they come from VIDA or are nationally based, will multiply the possibilities for supply chain finance. The prospects of the industry, however, don't end there. Further new technology, such as AI, will bring new developments, like the ability to take advantage of predictive analytics³². Blockchain technology has also been identified as a potential tool to reduce risk, by helping to verify the authenticity and ownership of invoices³³.

Box 3: Factoring, a state-sponsored solution in Chile

Latin America has pioneered electronic invoicing in the world. Latin American governments started to develop eInvoicing systems in the early 2000s to fight tax evasion. Nowadays, almost all Latin American countries have a B2B mandate.

Chile was the first country to introduce a voluntary eInvoicing system in 2003, which was then imitated by many other countries in the region. It became mandatory for B2B

³¹ International Finance Corporation World Bank Group (2020), Handbook – Technology and Digitization in Supply-Chain Finance, <https://www.ifc.org/en/insights-reports/2020/digitization-scf-handbook>

³² Idem.

³³ European Commission (2024), Report on the evolution of eInvoicing in the Digital Age, <https://op.europa.eu/en/publication-detail/-/publication/0648478c-c192-11ee-b164-01aa75ed71a1/language-en/format-PDF/source-304327075>

transactions in 2014. Since the early years of electronic invoicing, Chilean authorities have complementarily promoted factoring as an alternative financing method for its SMEs, which have very limited access to more traditional forms of payment such as loans. A 2004 [law](#) regulates and gives legal certainty to invoice transfers. It was modified in 2016 to adapt it to the eInvoicing mandate as well as to create a [registry of invoice transfers](#) hosted by the SII, the Chilean tax administration. The aim was to encourage factoring and dynamize the transfer of invoices³⁴.

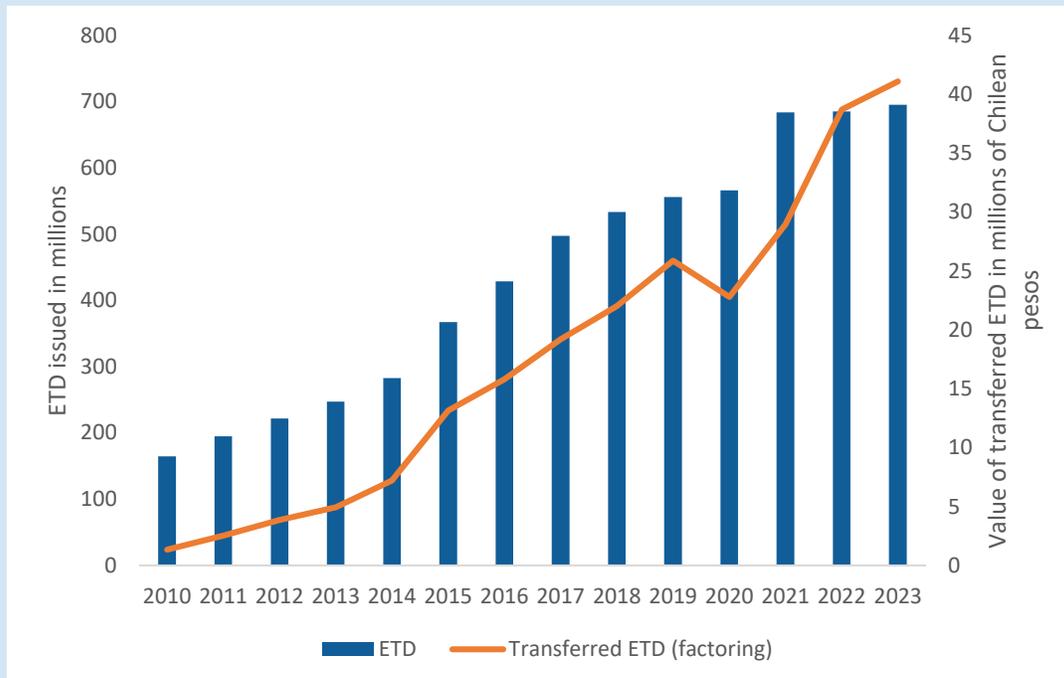
All invoice transfers need to be reported to the government registry, which provides reassurance to companies. Although many factoring transactions are undertaken first and then reported to the government, the registry also functions like a factoring marketplace for companies. All electronic invoices are registered there and companies can choose to 'publish them' on an invoice-by-invoice basis, in other words, make them available for purchase. Factoring companies can then present offers to take on those invoices.

As can be seen in Figure 5, the uptake of eInvoicing in Chile has correlated with an increase in the use of factoring, showing how the former can be an enabler of the latter. As a result, Chile has one of the more developed factoring industries in the world, which has become a widespread solution among SMEs.

There are multiple factoring companies in Chile. A particularly relevant one is the [Bolsa de productos](#), a commodity exchange platform on which invoices are traded. A prerequisite is that the buyer is registered with the Bolsa, which conducts solvency checks to ensure invoice creditworthiness. As with a stock exchange, there are traders that act as intermediaries between suppliers and investors. The offer with the lower fee gets the invoice, resulting in a lower cost than directly operating through a factoring company.

³⁴ Barreix, A. and Zambrano, R. (ed.) (2018), La factura electrónica en América Latina, Interamerican Development Bank, <https://publications.iadb.org/es/factura-electronica-en-america-latina>

Figure 5: Electronic tax documents issued and transferred in Chile, 2010-2023 (Chilean pesos)



Notes: Electronic tax documents (ETDs) stands for eInvoices as well as credit and debit notes on other additional tax documents. In 2023, eInvoices made up 59 % of all ETDS. There are no data for other years. Source: Servicio de Impuestos Internos de Chile (SII).

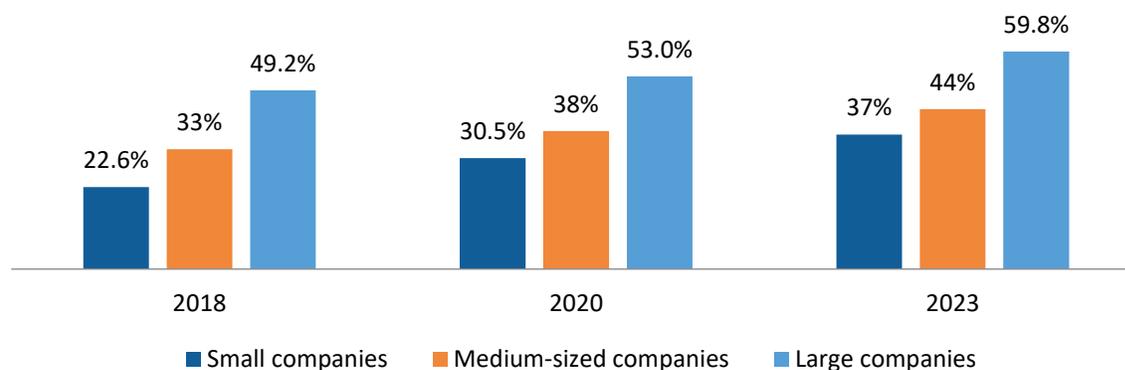
Challenges of adopting eInvoicing for the reduction of late payments

While the adoption of eInvoicing has the potential to reduce late payments, not all organisations are able to realise this potential. This boils down to two reasons. First, many organisations do not take up eInvoicing at all, which prevents them from benefiting from it altogether. Second, for organisations that have adopted eInvoicing the standards in place are not correctly followed or are designed in such a way that their ability to reduce late payments, along the steps outlined in the previous section, is blunted. The following subsections discuss these two reasons in more detail.

ADOPTION CHALLENGES

The adoption of eInvoicing is mostly lagging among SMEs. Given that in principle, SMEs stand to benefit most from a reduction of late payments, the importance of this observation cannot be overstated. As can be seen in Figure 6, 37 % of small companies in Europe sent eInvoices in 2023, which is more than 20 points lower than large companies. But the gap has significantly reduced since 2018, due to significant progress in SME adoption of eInvoicing. Three Member States have a lower share of SMEs sending eInvoices: Poland (13.7 %), Bulgaria (14.7 %) and Latvia (15.7 %). On the other side of the spectrum, Italy (97.4 %) and Finland (92.9 %) stand out. At a significant distance, almost 40 points, 58.9 % of Slovenian small companies send eInvoices.

Figure 6: Enterprises sending eInvoices by size, EU average (%)



Source: Eurostat.

Various reasons are given for the lagging adoption of eInvoicing among SMEs. First, as explained above, the cost reductions from eInvoicing increase with the number of invoices sent. Larger organisations will more easily make the investment in a shift from paper-based invoicing to eInvoicing and will more quickly recover the costs of the investment given the higher number of invoices they send.

In that regard, a recent European Commission report on eInvoicing considered that the prices for eInvoicing services 'are still relatively high'. For SMEs, the price per eInvoice normally ranges between EUR 0.05 and EUR 0.30. However, there is a big difference in pricing models for SMEs, particularly for those with a very low invoice flow, in some exceptional cases even reaching EUR 10 per eInvoice³⁵.

For smaller SMEs, the costs involved in implementing an eInvoicing solution can therefore seem prohibitive, especially when the potential reduction in late payments is harder to quantify and not guaranteed. Moreover, the experts interviewed note that SMEs are not always aware of the reduction in late payments that eInvoicing can potentially bring about (which also applies to other efficiency gains).

The technical complexity of eInvoicing can also be problematic for SMEs, with technological barriers identified as a crucial factor in the uptake of eInvoicing by small enterprises³⁶. Notably, 41 % of SMEs report having technical difficulties when using eInvoicing. The issues include interoperability with trading partners and support of eInvoicing formats, archiving for audit purposes, infrastructure, data security and privacy concerns, and connectivity³⁷. In that

³⁵ European Commission (2024), Report on the effects of Directive 2014/55/EU on the Internal Market and on the uptake of electronic invoicing in public procurement, p. 10, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024DC0072>

³⁶ Kapler, M. (2021), Barriers to the implementation of innovations in information systems in SMEs, *Production Engineering Archives* 2021, 27(2), pp. 156-162, <https://intapi.sciendo.com/pdf/10.30657/pea.2021.27.20>

³⁷ European Commission (2024), Report on the effects of Directive 2014/55/EU on the Internal Market and on the uptake of electronic invoicing in public procurement, p. 9, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024DC0072>

regard, SME United considers that SMEs would need additional accompanying actions to help them overcome technical challenges if eInvoicing is made mandatory³⁸.

Another struggle for SMEs comes from the practice of large companies of imposing their own tailored eInvoicing platforms across their supply chains. As a result, many SMEs end up having to register on the different platforms of their clients and to input different information into each one, which is very time-consuming.

In addition to the forementioned obstacles for SMEs, survey results show that one of the main challenges for SMEs in their adoption of eInvoicing is the lack of integration between eInvoicing software and their ERP³⁹ software⁴⁰, which is a basic digital tool used by SMEs. Employing more than one digital system can be very cumbersome and complex for them. If these two types of software were well-integrated, SMEs would more rapidly adopt eInvoicing.

The aforementioned challenges can be overcome, however. Across Member States there are examples of SMEs successfully adopting eInvoicing, often through cooperation with governments. While survey outcomes have shown that SMEs struggle with the integration of ERP software and eInvoicing software, Member States with more mature eInvoicing infrastructure are found to have taken measures to increase eInvoicing uptake among SMEs by promoting the use of (compliant) eInvoicing modules in ERP software distributed in their country⁴¹.

Similarly, while the costs of adopting eInvoicing are usually highest for SMEs, in Slovenia micro-enterprises were actually considered to bear the lowest costs (large enterprises, large contracting authorities and service providers were deemed to have borne the highest cost)⁴². Two factors stand out: first, Slovenian ERP software providers have integrated interoperability with eInvoicing service providers into their software⁴³. Second, for those small businesses that do not (yet) possess advanced software solutions, a certain number of eInvoices can be submitted manually to the national eInvoicing platform for free. Examples such as Slovenia show that while certain barriers for SMEs will always exist, concrete steps can be taken to alleviate some of the (cost) pressures and promote adoption of eInvoicing among businesses of all sizes. In addition, as previously explained, mass adoption of eInvoicing prompted by mandates is likely to reduce the cost of the service in the near future.

Equally, interoperability issues are becoming less and less common due to a mix of public and private initiatives. EInvoicing mandates require channelling invoices through networks or platforms that in turn require interoperability, like Chorus Pro in France and Sdl in Italy. Similar initiatives exist on the private side, with many of them being able to connect to public administration networks. A very relevant one is [Peppol](#), which was initially created as a European Commission initiative and then developed further by the private sector. It has

³⁸ SME United (2022), Position paper: Suggestions for VAT in a digital age, <https://www.smeunited.eu/admin/storage/smeunited/20220908-digitalvat-ppfinal.pdf>

³⁹ ERP systems include the basic tools to run a company, for instance HR, supply chain, accounting, procurement and more.

⁴⁰ European Commission (2024), Report on the effects of Directive 2014/55/EU on the Internal Market and on the uptake of electronic invoicing in public procurement, p. 55, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024SC0039>

⁴¹ Idem.

⁴² Idem, p. 332.

⁴³ European Commission (2024), eInvoicing in Slovenia, <https://ec.europa.eu/digital-building-blocks/sites/display/DIGITAL/eInvoicing+in+Slovenia>

expanded internationally, having been recently taken up in Singapore, Australia, New Zealand and Japan, allowing for global interoperability.

Regarding technical difficulties, SMEs may have fewer resources and technological skills than bigger companies. Still, there are multiple eInvoicing solutions on the market that target SMEs and favour simplification. Integration with ERP systems that SMEs already know would also help. Public authorities can contribute by providing easy-to-understand information on the application of eInvoicing mandates and offering support to SMEs when needed. Training can also be offered by public authorities as well by service providers. In addition, awareness-raising campaigns such as those conducted in Finland can play an important role by informing small businesses of the benefits of electronic invoicing.

EInvoicing uptake among SMEs has significantly increased in the last few years. While in 2018 only 22.6 % of small companies sent eInvoices in the EU, in 2023 it was already 37 %. The share is expected to grow, particularly as new mandates are put in place. Testimony to that is Italy, where 40 % of small companies sent eInvoices in 2018. Its B2B mandate entered into force in 2019. As a result, almost all small companies, 97 %, send eInvoices now.

DESIGN CHALLENGES

A second set of challenges is presented through the design or use of national eInvoicing systems. Once adopted, the potential efficiency gains of eInvoicing are dependent on the design of the (national) eInvoicing system and the extent to which all users comply with the rules and requirements.

For example, in a call for evidence, the French Builders Association reported that although France has a national system (Chorus Pro) for invoicing public entities, not all public entities comply with Chorus Pro regulations. Non-compliance is said to manifest in only partial use of Chorus Pro, creating informal steps in the payment process that lead to hidden payment delays⁴⁴. The French Builders Association reports that if all steps are completed in full compliance with Chorus Pro, companies see an improvement in (payment) deadlines.

As the example shows, just the implementation of a national eInvoicing platform or in fact adoption of a B2G/B2B mandate is not enough to materialise the gains that eInvoicing offers for reducing late payments. Without enforcement of rules and regulations, buyers may find ways around mandates to in effect extend payment deadlines, as this example reveals.

Another block to fully realising the potential of eInvoicing to reduce late payments can follow from the design choices of the national system. When opting for a centralised system, such as the one implemented in Italy, businesses sending eInvoices might find themselves setting up a dual eInvoicing system. One to send the eInvoice in the format mandated by the government to the national exchange. The other to communicate directly with the receiving business in an eInvoicing format that allows for more information to be contained and therefore for more efficiency in processing.

Going into more detail, in the Italian centralised system businesses are required to clear every eInvoice sent through a national exchange. This enables the Italian authorities to continuously

⁴⁴ European Commission (2024), Report on the effects of Directive 2014/55/EU on the Internal Market and on the uptake of electronic invoicing in public procurement, p. 227, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024SC0039>

monitor all transactions taking place in Italy, and to make sure the correct amount of VAT is collected. In setting up the system, the Italian government has designed a format for eInvoicing that does not allow for customisation. In doing so, it provides one template for straightforward uptake across the country, which is a plus. Yet it also means that all businesses have to fit their eInvoices into the same mold.

The latter can be an obstacle to more eInvoicing efficiency as businesses might want to include more information on their eInvoice to speed up processing. For example, beyond just addressing an eInvoice to a certain company, a supplier might want to specify the buyer within the organisation in order to have the eInvoice delivered straight to the person in charge of approving it. If the nationally mandated format does not allow for such information to be included, it constitutes a barrier to the efficiency gains eInvoicing can potentially bring about.

What stakeholders report is that as a result of the centralised system, businesses in Italy may opt to create two parallel eInvoicing processes. One is cleared through the national exchange, which fulfils a firm's legal obligations towards the Italian authorities by transmitting an eInvoice that has the data required by the government but which can contain no more. And the other concerns a more elaborate format, containing more information, sent directly to the buyer.

Having to set up two parallel systems, and not being able to use one process to both share the required information with the government and maintain flexibility in the design of the eInvoice sent to the buyer, imposes extra costs. As such, it is a bar to easy implementation of eInvoicing and to reaping its full potential, particularly for SMEs.

A decentralised model, where service providers create an invoice and take care of both sharing the relevant information with government authorities and delivering a correct eInvoice to the buyer, could address the shortcomings of a centralised model. Such models are also known as five-point models. These are not without downsides of their own. For example, corruption can still prevent proper tax collection, as was witnessed in Mexico⁴⁵. That being said, the stakeholders interviewed report significant potential for efficiency gains. In Norway, for example, a decentralised model is in place and eInvoicing uptake is high (77 % of enterprises send eInvoices)⁴⁶. Moreover, decentralised models are planned in France and Spain.

Low eInvoicing uptake by micro companies might also result from the design of B2B mandates. Those that fall below VAT registration thresholds are not required to apply for VAT and, given that the mandates' main aim is to increase tax collection, in many cases they are not obliged to send and receive eInvoices, as the obligation is for those with a VAT number. In some cases, however, the mandate is specifically designed to include all companies. For instance, in Spain it mentions 'all companies and [the] self-employed'⁴⁷.

Lastly, the absence of payment data in the template of a national system can be a hindrance to achieving the full potential of eInvoicing. As noted previously, the inclusion of payment data can provide transparency on whether funds have been transferred, and when. Consequently, this allows for the faster resolution of conflicts, and the transparency in itself

⁴⁵ Baker, T. (2019), Criminal prosecution touted in Mexico's new anti-tax-evasion law, <https://www.bakertilly.com/insights/criminal-prosecution-touted-in-mexicos-new-anti-tax-evasion>

⁴⁶ Eurostat (2023), [https://ec.europa.eu/eurostat/databrowser/view/isoc_eb_ics\\$defaultview/default/table](https://ec.europa.eu/eurostat/databrowser/view/isoc_eb_ics$defaultview/default/table)

⁴⁷ Spain (2022), Ley 18/2022, de 28 de septiembre, de creación y crecimiento de empresas, <https://www.boe.es/buscar/act.php?id=BOE-A-2022-15818>

might incentivise buyers to pay on time, in compliance with payment terms. Lastly, it gives public authorities the possibility to gather statistics on payment behaviour straight from their national system. This would allow for comprehensive and accurate statistics on payment behaviour across company sizes and sectors, giving public authorities valuable insights that can inform tailored policies.

In the Italian system, this information is not currently being gathered through the national clearing system for B2B or B2G invoices (whereas the future French system will be able to gather it). Were it to do so, further benefits of eInvoicing would be unlocked. Future clearing systems, such as the one in France, are expected to contain payment data and will therefore provide an example of how its inclusion in national templates can benefit payment behaviour⁴⁸, even though, as mentioned, at the moment there are no plans for compiling statistics based on that information.

Conclusion

This report has set out what the shift from paper-based invoicing to eInvoicing means for late payments. EInvoicing is gaining ground, driven by both market developments and a regulatory push from governments. As it does so, its benefits are becoming available to more and more organisations, specifically SMEs. SMEs also happen to be the group of enterprises suffering most from late payments. As this report shows, there is potential for late payments to reduce after a continued uptake of eInvoicing. However, this potential mostly stems from efficiency gains.

Efficiency gains can be valuable in reducing the length of the invoice-to-payment cycle. A buyer that has all the intention to pay a seller as soon as possible is likely to do so earlier when using eInvoicing. That being said, if the buyer has no intention to pay the seller early, let alone on time, the adoption of eInvoicing will not change that. As such, eInvoicing has great potential to improve *payment efficiency*, yet doesn't necessarily improve *payment behaviour*.

Given that payment behaviour is as big a piece of the puzzle as payment efficiency (if not bigger), eInvoicing is best thought of as a powerful complement to regulatory intervention that focuses on payment behaviour. By itself, it cannot be seen as a remedy to the pressing issue of late payments.

EInvoicing does carry other benefits beyond improved payment efficiency. While again, these won't remedy the issue of late payments, they can provide some additional relief. Increased transparency in the invoice-to-payment cycle through eInvoicing may amplify incentives to improve payment behaviour. Moreover, it could enable more effective enforcement of existing laws through the data it provides authorities.

EInvoicing can also expand the provision of financial services. These financial services, such as factoring, can lessen the detrimental effects of late payments on the liquidity position of companies. Successful examples from Latin America are discussed in the report, yet it remains to be seen whether similar developments will materialise in the EU.

⁴⁸ French Ministry of Economy and Finance (2020), Rapport de la Direction Générale des Finances Publiques : La TVA à l'ère du digital en France, <https://www.vie-publique.fr/files/rapport/pdf/277192.pdf>

Improved VAT collection and further digitalisation are two additional examples. While this report does not focus on these benefits – but instead on the impact of eInvoicing on late payments – they are not to be forgotten in a broader discussion of the prospects of eInvoicing.

While the conclusion from this report is that eInvoicing is no silver bullet, there remains much to look forward to. The VIDA programme of the European Commission will likely usher in the next phase of eInvoicing adoption. What is more, European regulators are discussing new, stricter, regulation to combat late payments. Together, these efforts provide new impetus to the fight against late payments. This report aims to serve as a starting point about what eInvoicing can, and cannot, do to reduce late payments.

Appendix - List of interviewed stakeholders

| Name | Type of stakeholder |
|--|----------------------------|
| Billentis | Consultancy |
| Eurocommerce | Trade association |
| European Commission | DG Grow |
| French national forum on eInvoicing | Trade association |
| Italian Confederation of Craft Trades and Small and Medium-Sized Enterprises (CNA) | Trade association |
| Pagero | Service provider |

