European Commission

ISSN 2443-8022 (online)

Insolvency Frameworks across the EU: Challenges after COVID-19

Leonor Coutinho, Andreas Kappeler and Alessandro Turrini

DISCUSSION PAPER 182 | FEBRUARY 2023

EUROPEAN ECONOMY

Economic and Financial Affairs

European Economy Discussion Papers are written by the staff of the European Commission's Directorate-General for Economic and Financial Affairs, or by experts working in association with them, to inform discussion on economic policy and to stimulate debate.

DISCLAIMER

The views expressed in this document are solely those of the author(s) and do not necessarily represent the official views of the European Commission.

Authorised for publication by Géraldine Mahieu, Director for Investment, Growth and Structural Reforms.

LEGAL NOTICE

Neither the European Commission nor any person acting on behalf of the European Commission is responsible for the use that might be made of the information contained in this publication.

This paper exists in English only and can be downloaded from https://economy-finance.ec.europa.eu/ecfin-publications_en.

Luxembourg: Publications Office of the European Union, 2023

PDF ISBN 978-92-76-52950-7 ISSN 2443-8022 doi:10.2765/524729 KC-BD-22-019-EN-N

© European Union, 2023
Non-commercial reproduction is authorised provided the source is acknowledged. For any use or reproduction of material that is not under the EU copyright, permission must be sought directly from the copyright holders.

CREDIT
Cover photography: © iStock.com/g-stockstudio

European Commission
Directorate-General for Economic and Financial Affairs

Insolvency Frameworks across the EU: Challenges after COVID-19

Leonor Coutinho, Andreas Kappeler and Alessandro Turrini

Abstract

Efficient insolvency frameworks align incentives in such a way that viable corporate debt is repaid, while unviable debt is resolved. Moreover, in a context of high corporate indebtedness, the insolvency framework requires sufficient capacity to adequately deal with a rising number of insolvency cases. The aim of the present paper is fourfold: (i) to illustrate the main concepts relating to insolvency frameworks and their economic relevance; (ii) to review the main characteristics of insolvency regimes across EU countries; (iii) to evaluate the severity of corporate vulnerabilities stemming from the COVID-19 crisis, taking into account how insolvencies and non-performing loans have developed in response to the global financial crisis; and (iv) to highlight the remaining challenges for insolvency systems in the EU on the basis of an estimate of the potential increase in insolvencies (insolvency gaps) and existing institutional settings and structural characteristics.

JEL Classification: D40, E31, L51.

Keywords: insolvency, non-performing loans, COVID-19, non-financial corporations.

Acknowledgements: We would like to thank our referees for very useful comments and ECFIN country desks for valuable inputs and feedback.

Contact: Leonor Coutinho, leonor.coutinho@ec.europa.eu, European Commission, Directorate-General for Economic and Financial Affairs.

CONTENTS

LIST OF TABLES

LIST OF GRAPHS

REFERENCES

ANNEX I - MAIN ELEMENTS OF INSOLVENCY SYSTEMS

ANNEX II - RESOLVING INSOLVENCY INDICATORS

ANNEX III – ECONOMETRIC MODEL FOR INSOLVENCY GROWTH

ANNEX IV - INSOLVENCY REFORMS

1. INTRODUCTION

Since 2019, a series of shocks have strained the financial situation of non-financial corporations across the EU. For the EU as a whole, Archanskaia et al. (2022) estimate that 10% of firms which appeared viable prior to the COVID-19 pandemic, became insolvent as a result of the shock. In addition, a range of support measures, during 2020 and 2021, have kept non-performing loan ratios and insolvency fillings low compared to pre-pandemic. ECB (2022) estimated insolvency gaps for four euro area countries (difference between predicted and realised, in percent) in the COVID-19 period ranging between around 10% in Italy to around 75% in France. Most of the support measures had been phased out by end-2021 and empirical results find little evidence that support policies were directed to less productive firms that would otherwise have exited even in the absence of crisis.[1] However, the shock was very large, particularly in some sectors, and it is likely that there will be a lag between the phasing out of policy measures and firms being forced or deciding to file for insolvency. Furthermore, the financial situation of many firms in the EU has been aggravated by the Russian unprovoked invasion of Ukraine, the related sanctions and increase in energy prices, and supply bottlenecks.

Sound insolvency procedures are key to deal with a potential increase in non-financial corporate insolvencies. A corporate solvency crisis could have serious long-term negative effects by dragging down employment, productivity, growth and well-being (European Commission, 2018; OECD, 2020a; OECD, 2020b). Efficient insolvency frameworks align incentives in such a way that viable corporate debt is repaid, while unviable debt is resolved. On top, in the context of a severe economic downturn, the insolvency framework requires sufficient capacity to adequately deal with a rising number of insolvency cases. Otherwise, there is a risk that the performance of the institutional system worsens precisely at the time when it is needed the most. Failure of insolvency frameworks to perform under strain can result into a rapid accumulation of private debt and non-performing loans and the rapid build up of private debt stock imbalances. Ensuring efficient insolvency frameworks is therefore a key component of the Macroeconomic Imbalance Procedure (MIP) surveillance.

EU Member States have taken a number of measures to strenghen their insolvency legislation, in line with the Commission recommendation of 2014 and with the 2019 EU Directive. Despite this, significant differences in the effectiveness of insolvency frameworks persist. Recovery and Resilience Plans adopted in the course of 2021 incorporate measures to address policy gaps in the area of insolvency identified in the 2019 CSRs, while the Commission proposal for a Directive harmonising certain aspects of insolvency law, of December 7, 2022, should also contribute to the adoption of best-practice principles throughout the EU.

The IMF (2022) assesses the preparedness of a number of advanced and emerging market economies to handle a large-scale restructuring of businesses according to a proposed indicator, which includes five dimensions of the insolvency and restructuring regime (out-of-court restructuring, hybrid restructuring, reorganisation, liquidation, and the institutional framework). They show that corporate sector vulnerabilities post-pandemic tend to be more pronounced in jurisdictions with shortcomings in crisis preparedness, enhancing the need for those countries to step up efforts to improve their insolvency systems. The IMF indicator, however, covers only nine EU countries.

The present paper provides an assessment framework for insolvency regimes in the EU with a view to inform economic surveillance, notably in the context of the European Semester and the MIP. Its aim is fourfold: (i) to illustrate the main concepts relating to insolvency frameworks and their economic relevance; (ii) to review the main characteristics of insolvency regimes across EU countries; (iii) to evaluate the severity of corporate vulnerabilities stemming from the COVID-19 crisis, taking into account how insolvencies and non-performing loans have developed in response to the global financial crisis; and (iv) to highlight the remaining challenges for insolvency systems in the EU on the basis of

[1] See for instance Harasztosi et al. (2021). Hadjibeyli et al. (2021) and Gourinchas et al. (2021).

an estimate of the potential of future increase in insolvencies (insolvency gaps) and existing institutional settings and structural characteristics.

The remainder of the paper is organised as follows. Section 2 introduces basic concepts related to insolvency frameworks. Section 3 presents the main characteristics of insolvency frameworks across EU countries. Section 4 focuses on the particular implications of a high non-financial corporation (NFC) debt environment for the adequate design of insolvency frameworks. Section 5 outlines challenges and reform needs for insolvency frameworks after the COVID-19 crisis. Section 6 concludes.

2. INSOLVENCY FRAMEWORKS: BASIC CONCEPTS

2.1. THE MAIN ELEMENTS OF INSOLVENCY FRAMEWORKS

Insolvency frameworks define procedures for dealing with insolvent debtors (Bricongne et al., 2016). The definition of insolvency is not homogenous across the EU, but broadly speaking, insolvent debtors are those whose financial position does not permit fulfilling their obligations either in the short-term (cannot meet their payment obligations as they fall due) or in the medium-term (their assets do not cover their liabilities), or both. The insolvency legislation generally sets out the conditions for initiating insolvency procedures, aimed at redressing a situation of insolvency. The legislation outlines creditors and debtors' rights and obligations, describes the role of courts, and the steps and timeframe to be followed once the procedure starts. Insolvency frameworks may also define conditions for the early restructuring of private sector debt, either in the context of an insolvency or before actual insolvency occurs. Annex 1 provides a typology of the different elements typically found in EU countries' insolvency regimes. Frameworks may concern corporates, entrepreneurs as well as households or may be targeted to a specific typology of private debt or to specific situations. An effective insolvency framework is one which minimises overall losses for the economy.

Insolvency frameworks have economic effects as they shape private agents' incentives (Bricongne et al., 2016):

- By reducing legal and procedural uncertainty and delays, transparent and speedy insolvency frameworks strengthen the incentives to engage in financial relations ex-ante and reduce deadweight costs linked to dealing with insolvency ex-post.
- Ex-ante, i.e., when debt is created, insolvency frameworks affect borrowers' incentives to take on debt and lenders' incentives to provide credit. By providing adequate protection to lenders in case of default, a good framework helps maintain incentives to supply credit. In parallel it mitigates opportunistic behaviour on the part of borrowers without discouraging responsible borrowing. Insolvency legislation also affects creditor incentives to screen borrowers and monitor their capacity to repay.
- Ex-post, after debt becomes distressed, insolvency frameworks can affect borrowers' incentives to create value to repay outstanding debts. Insolvency frameworks also matter for insolvent debtors to have a fresh start and engage in new projects and activities after having become bankrupt.

The economic role of insolvency frameworks is particularly relevant in situations of high outstanding private sector debt, by affecting credit supply and allocation, and the supply of production factors. Under conditions of widespread high private sector indebtedness, high non-performing loan (NPL) stocks may impair the supply of credit. Moreover, debt overhang reduces the incentives for firms to invest. Insolvency frameworks matter for the extent and speed at which viable debt is repaid, while unviable debt is resolved, thereby having an impact on:

- Credit supply: Insolvency frameworks determine how NPLs are resolved and the conditions at which NPLs can be offloaded from bank balance sheets and sold on the secondary market. As the writing off of NPLs affects the capital position of banks, additional measures may be needed to ensure the maintenance of adequate capital margins.

- Credit allocation: Insolvency frameworks ensure that financing directed towards non-viable or unprofitable "zombie" firms is freed for more productive and dynamic activities.
- Investment: Insolvency frameworks allow to restructure problematic non-financial corporate (NFC) debt and restore incentives to invest.

The design of insolvency frameworks matter for their economic effects. If corporate debt distress is identified and addressed sufficiently early, attempts to reorganise firms and their liabilities in such a way to keep the company active as a going concern have a higher probability of success. Informal solutions with limited court involvement are suited to that purpose as they can be swifter. However, a limitation of systems with no court involvement is that restructuring deals can generally be agreed only by unanimity of creditors, while restructuring solutions with some dissenting minority creditors can still be enforced if insolvency is dealt with by a court. Hybrid systems with limited court involvement can help addressing the above issue (Garrido, 2012).

2.2. EFFICIENCY PRINCIPLES AND BEST PRACTICES

Although there is no single superior model to organise insolvency, a few broad principles have been developed, some of which based on the economic literature. These principles have been translated to some extent into international best practices, mostly in the case of corporate insolvency. The Eurogroup in 2016 put forward efficiency principles for insolvency frameworks, taking into account best practices, as follows:

- **Early identification of corporate debt distress**. Detection and resolution of distress at an early stage helps preserving the value that can be recovered by creditors while minimising overall deadweight costs to the economy. In this respect, early warning tools enable debtors, particularly small and medium sized enterprises, to test regularly their financial soundness and timely resort to adequate instruments to deal with debt distress.
- **Availability of early restructuring procedures**. For viable businesses, debt restructuring coupled with the reorganisation of corporate operations as a going concern is preferable to serving debt via the piecemeal liquidation of assets. Preventive restructuring procedures with limited court involvement help carrying out restructuring measures in a timely fashion while reducing uncertainty on outcomes. Moreover, guidelines for collective creditor procedures can be instrumental in promoting both preventive and post-insolvency restructuring agreements.
- **Availability, accessibility and affordability of insolvency procedures**. A variety of well-suited insolvency procedures covering different types of debt distress need to be available to corporations, entrepreneurs and individuals. Insolvency procedures should be easy to start for both debtors and creditors, on the basis of clear criteria.
- **Effective enforcement of creditor claims in secured lending** (e.g., via foreclosure on real estate collateral) in a predictable and transparent manner provides incentives for responsible borrowing, contributes to the efficiency of insolvency frameworks by reducing deadweight losses, and makes outcomes more equitable.
- **Allowing distressed debtors a genuine fresh start**. The adverse consequences of insolvency on the incentives to work and invest for distressed debtors, namely entrepreneurs or households, can be reduced by granting honest debtors discharge after a reasonably short period of time and repayment programmes compatible with repayment capacity. Such mechanisms need to be structured in a way to incentivise responsible borrowing and debt management upfront.
- **Clear rules on cross-border insolvency** are required for a speedy and cost-effective workout of international corporate insolvency, including with a view not to discourage cross-border investment. Activities of firms that span across national borders, and in particular cross-border groups of companies, can be subject to different jurisdictions. Clarity in the way cross-border insolvency cases are handled helps a quick and efficient resolution in the event of bankruptcy.

Some of the above principles, notably those regarding pre-insolvency and providing a second chance for entrepreneurs, underpin the 2019 EU Directive on preventive restructuring frameworks. These principles also underpin the European Commission's initiative for the harmonisation of key discrepancies in national corporate (non-bank) insolvency laws, which have been recognised as obstacles to a well-functioning Capital Markets Union. This initiative kick started in 2020 and the adoption of a Commission Recommendation is aimed for 2022.[2]

Beyond the efficiency of the insolvency framework, complementary flanking policies need to ensure the proper functioning of institutions implementing insolvency procedures (Bricongne et al., 2016; European Commission, 2016b):

- **An effective justice system** is key to improve the implementing framework. This includes several aspects such as judicial independence and transparency; the training of judges and practitioners; the creation of specialised courts; and alternative dispute resolution procedures, for instance through the appointment of mediators to assist the debtor and creditors while negotiating a restructuring plan (European Commission, 2016c).
- **Effective enforcement of contracts and creditor claims** in a predictable and transparent manner builds a responsible payment culture and provides incentives for responsible borrowing, contributing to the efficiency of insolvency frameworks by reducing deadweight losses, and making outcomes more equitable.
- **The enforcement of claims secured by immovable property**, through foreclosure or insolvency procedures, rely on a clear definition of property rights and clear and transparent information on property registration. Foreclosures in particular can only be accelerated by the use of contracts that define conditions for an extra-judicial path to foreclosure if sales contracts are properly registered and property titles are valid. Problems regarding the issuance and transfer of property rights (or title deeds) can significantly delay foreclosure as well as insolvency procedures involving secured claims.
- Measures to improve the quality of information available on the debtor's liability and assets, for example via **credit and property registries**, can foster a faster treatment of insolvency procedures. In time of large-scale corporate debt distress, measures contributing to offload non-performing debt from the banking system may be needed to reduce the impact on credit supply and provide incentives against the "ever-greening" of non-performing loans.

3. INSOLVENCY FRAMEWORKS ACROSS THE EU

The assessment of insolvency frameworks across the EU is a complex undertaking. As clear from previous sections, insolvency frameworks cannot be assessed by simply comparing legal frameworks. Many other factors affect the implementation, from cultural aspects to the working of courts and other institutional settings. The next subsections aim at providing a snapshot of the main features of insolvency frameworks in the EU, including their strengths and weaknesses.

3.1. EFFICIENCY OF INSOLVENCY PROCEDURES

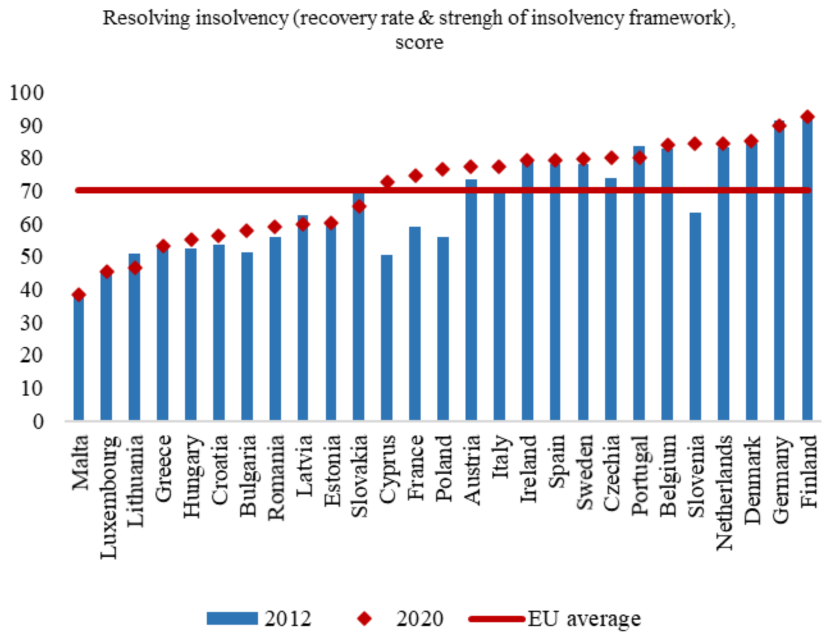
Homogeneous data to compare insolvency frameworks along various dimensions is scarce and has caveats. Readily available scores specifically designed to assess insolvency frameworks include those provided by the World Bank Doing Business indicators and those of the OECD. The OECD indicators do not cover all EU countries and are therefore less useful in tracking changes in EU insolvency frameworks. The European Banking Authority (EBA) has also collected data on recovery rates from

[2] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12592-Insolvency-laws-increasing-convergence-of-national-laws-to-encourage-cross-border-investment_en.

loan enforcement procedures (including insolvency), judicial costs to recover and time to recovery, from a number of banks in the EU, on loans to small and medium enterprises (SMEs), corporates, residential and commercial real estate loans and retail loans. However, the range of enforcement procedures covered is broader than insolvency and the banks' response rate and the loan coverage varied substantially across countries, raising doubts on the representativeness of some of the results (see European Banking Authority, 2020).

The World Bank's Doing Business indicators have the drawback that they have been interrupted in 2021. Nonetheless, they do provide a useful overall score for the efficiency of corporate insolvency in the wake of the COVID-19 crisis (Graphs 3.1-3.3 and Annex 2).[3] The indexes apply to corporate insolvency only (Djankov et al., 2008). They aim at capturing recovery rates allowed by insolvency regimes as well as their main characteristics ("strength"). The World Bank indicators cover all of the EU countries and are also available for the period of the EU financial and sovereign debt crisis, which allows drawing lessons from this period. Data have been derived from questionnaire responses by local insolvency practitioners, based on a specific case study (i.e., the insolvency of a hotel). Results should therefore be used cautiously for policy advice on general insolvency proceedings.

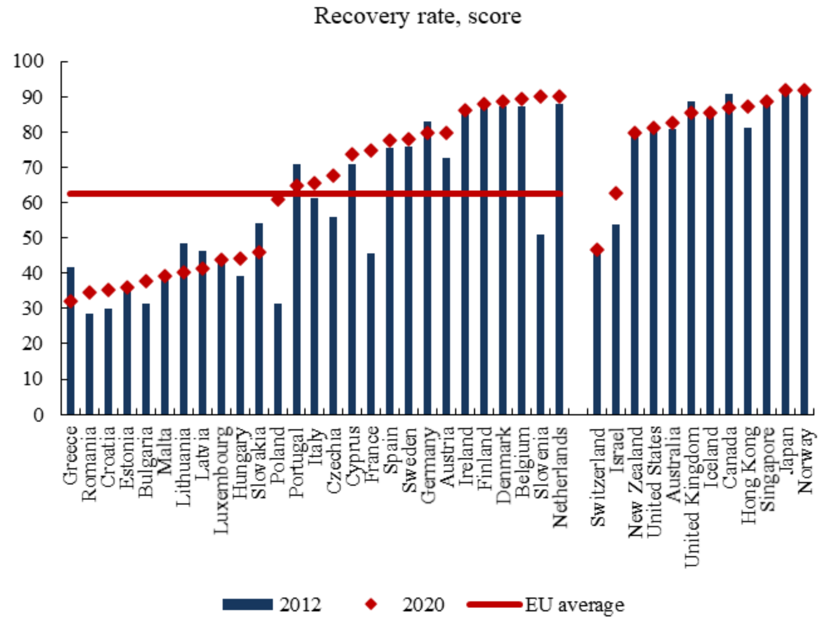
Graph 3.1 **Resolving Insolvency Indicator**



Source: World Bank Doing Business 2020. Note: The higher the score the better is the framework assessed.

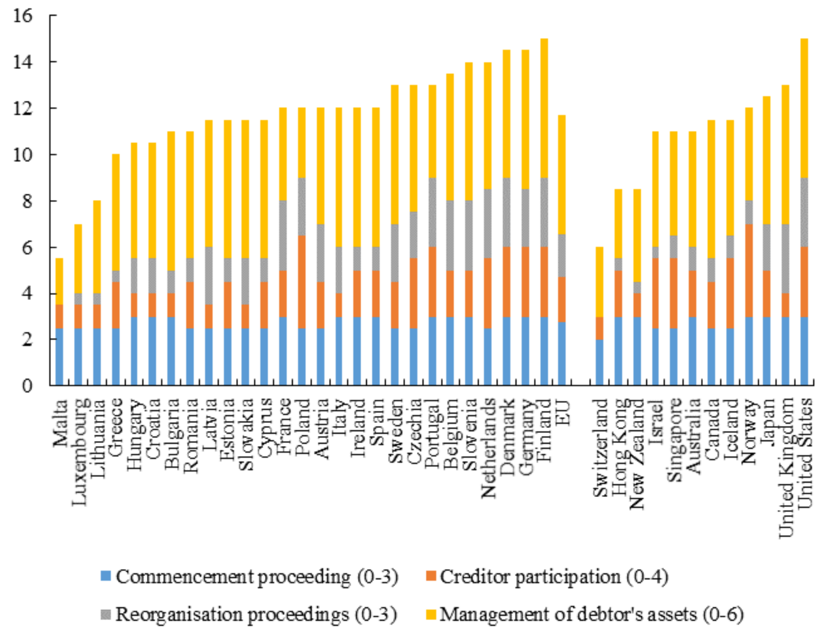
[3] The publication was suspended due to irregularities found in relation to four countries, namely Azerbaijan, Saudi Arabia, United Arab Emirates and China. The review process did not identify any further specific data irregularities beyond those affecting these four countries as described in this document. https://www.worldbank.org/en/news/statement/2021/09/16/world-bank-group-to-discontinue-doing-business-report.

Graph 3.2 **Recovery rate Sub-indicator**



Source: World Bank Doing Business 2020. The recovery rate score was calculated based on the time, cost and outcome of insolvency proceedings in each economy. The higher the score the better is the framework assessed.

Graph 3.3 **Strength of the Insolvency Framework Sub-indicator**



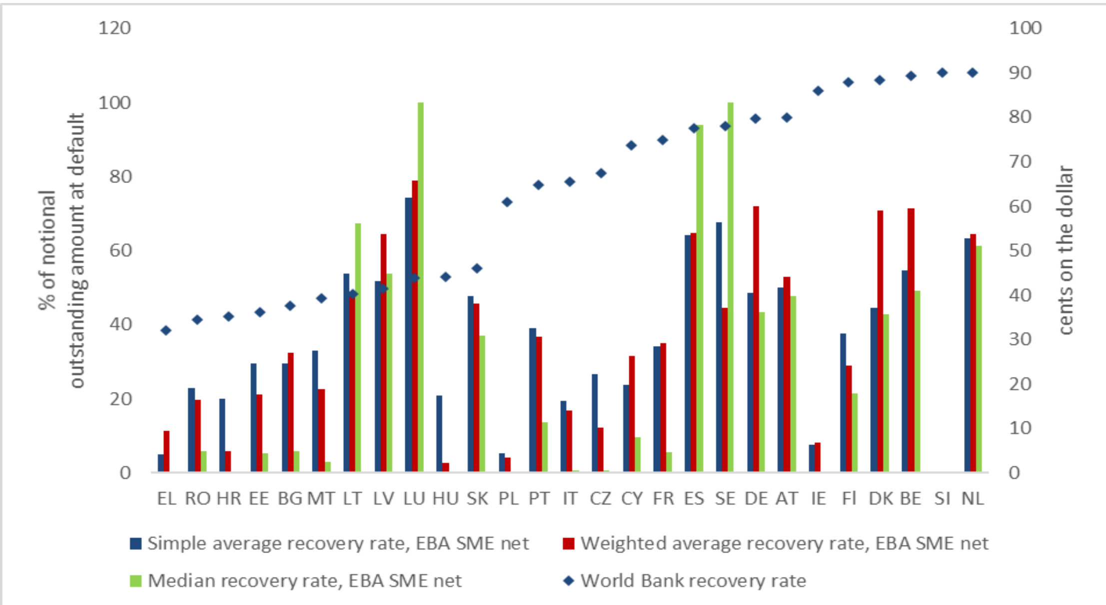
Source: World Bank Doing Business 2020. Note: The higher the score the better is the framework assessed.

A synthetic score of "resolving insolvency" is obtained as the simple average of an indicator of the “recovery rate” from insolvency proceedings and of the “strength of the insolvency framework” (see Annex 2). Synthetic scores are measured as distances from frontier, i.e., percentage of the highest score available in the World Bank sample. The indicators and its subcomponents (Graphs 3.1-3.3 and Annex 2) suggest a number of findings as follows:

- Indicators point to remarkable discrepancies across the Member States;
- The recovery rate index for EU countries is, on average, slightly below that of non-EU advanced economies. Some Northern European countries are characterised by a relatively high score, whereas some Eastern and Southern European countries record relatively low scores (Graph 3.2);
- It takes comparatively long time to resolve insolvency in Slovakia, Greece, Bulgaria, Romania, Croatia, Estonia and Malta, indicating that procedures are either too complex or there are barriers to their implementation (Annex 2);
- The cost of resolving insolvency is comparatively high in Italy, Slovakia, Lithuania, Poland, Cyprus, Croatia, Hungary and Luxembourg;
- Insolvency is most likely to result of a piecemeal liquidation in Bulgaria, Croatia, Estonia, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta and Romania, indicating that restructuring procedures are likely suboptimal.
- In the strength of the insolvency framework sub-indicator (Graph 3.3), differences across countries differ by subcomponent. In the commencement of proceedings, country scores are similar.
- As to reorganisation procedures, countries that rank particularly poorly include Cyprus, Austria, Belgium, France, Hungary, Ireland, Lithuania, Luxembourg, and Malta.
- Countries ranking particularly low in terms of the management of debtors' assets include Bulgaria, Croatia, Lithuania, Luxembourg, Malta and Slovakia.
- Some countries also rank poorly in terms of creditor participation, including Cyprus, Greece, France Ireland, Lithuania, Luxembourg, Malta, Spain and Slovenia.

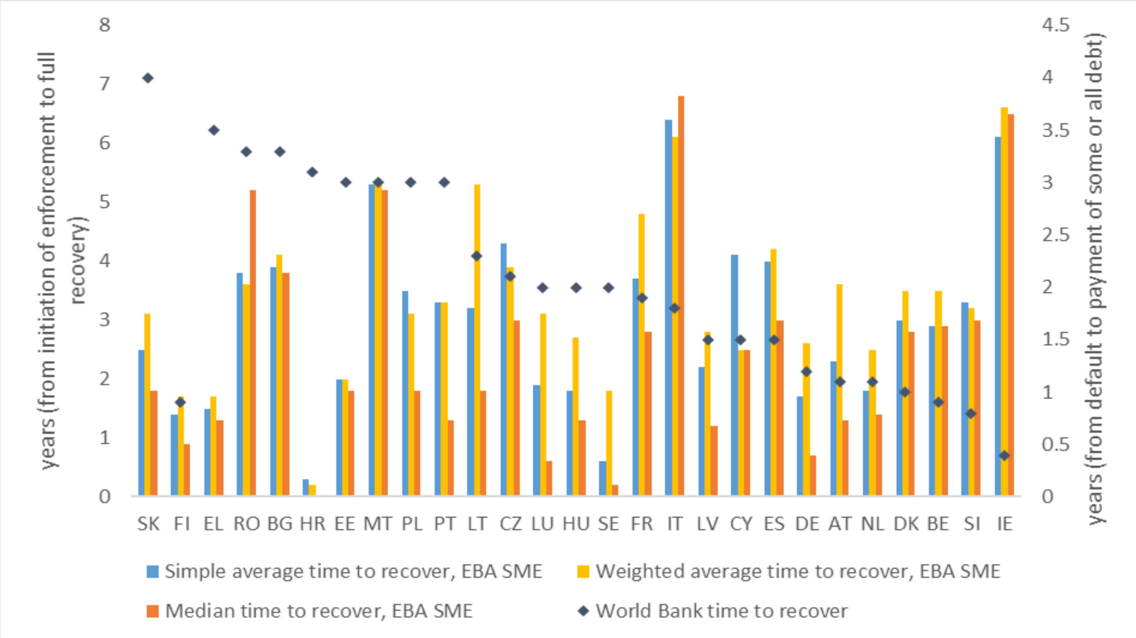
More detailed information about different features of insolvency regimes in EU countries can also be found in Leeds (2016). Alternative quantitative indicators of recovery rates and time to resolve insolvency are also provided by the European Banking Authority (Graphs 3.4 and 3.5).

Graph 3.4 **Recovery rate EBA vs World Bank**



Source: European Banking Authority (2020) and World Bank Doing Business Indicators 2020. Note: Where non-judicial debt settlement (i.e., voluntary sale/surrender of property) is a prominent feature of workout in national financial systems distressed debt workout (e.g. IE), judicial enforcement benchmarks will not reflect work out recovery rates, costs, or duration. For SI, the number of loans with negative net recovery amounts represent 66% of the total number of loans in the sample for the country. If these loans were considered, the simple average of the net recovery rate and gross recovery rate would be 31% and 31.7%, respectively.

Graph 3.5 **Time to recover EBA vs World Bank 2020**



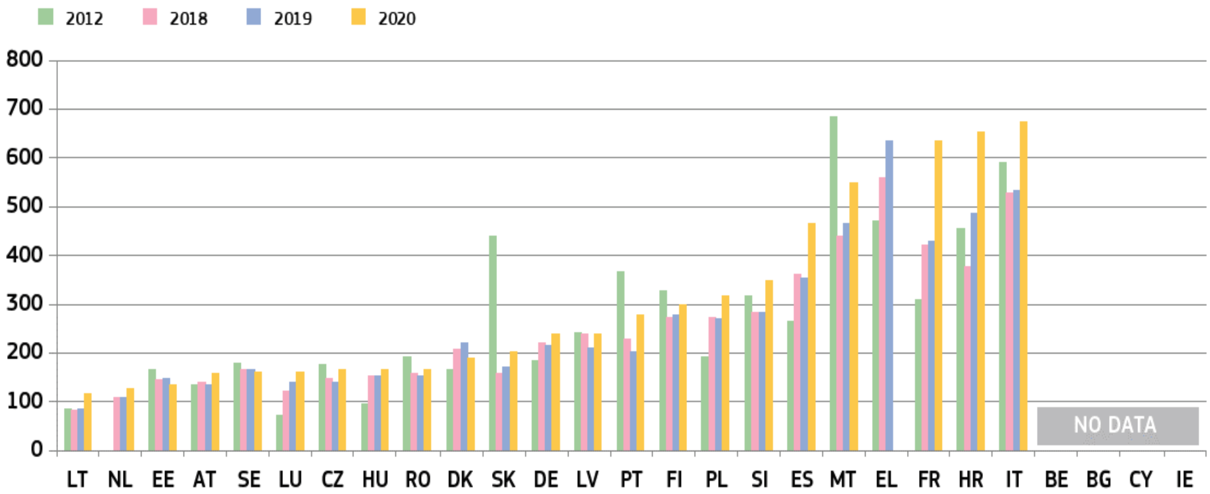
Source: European Banking Authority (2020) and World Bank Doing Business Indicators 2020. Note: for EBA, where non-judicial debt settlement (i.e., voluntary sale/surrender of property) is a prominent feature of workout in national financial systems distressed debt workout, judicial enforcement benchmarks will not reflect work out recovery rates, costs, or duration (IE).

The European Banking Authority (2020) recovery rates and time to recover indicators reflect data on enforcement outcomes but should also be taken with caution. The methodology for constructing these indicators is very different from that used by the World Bank. While the World Bank indicators rely on expert judgement on a hypothetical case study, the EBA indicators are based on ex-post loan enforcement data collected among a sample of 160 European Banks, by asset class (SMEs, corporates, real estate and retail). The asset class that is perhaps closest to the World Bank case study of a single hotel is loans to small and medium enterprises (SMEs), hence the EBA net recovery rate for SMEs is used for the comparison. The EBA net recovery rate takes into account costs (which are also accounted for in the World Bank indicator) but it does not incorporate the information on time to recover. In Graph 3.4 there is a cross-country correlation of 0.4 between the EBA and World Bank recovery rates. More discrepancies are found in times to recover (Graph 3.5). It is important to note that the participation in the EBA survey varies substantially across countries, from 1 bank in Estonia, to 14 in Italy; and from a coverage of 14 loans in Estonia to 24,086 in Greece. As stressed by European Banking Authority (2020), this is the first attempt at collecting individual loan level information across the EU and remaining data quality issues suggest that the results should be interpreted with appropriate caution.

3.2. FLANKING POLICIES

Dealing with insolvencies requires not only a sound insolvency framework but also effective so-called flanking policies. A few policy areas are of particular importance in this context: credit and property registration, the former relating to information regarding debtors and the latter referring to procedures to legally transfer immovable property; and the quality of the justice system, which influences the enforcement of contracts and the payment culture. The World Bank provided indicators summarising the efficiency of contract enforcement and the quality of the judicial system (see also World Bank Group, 2019). The 2020 EU Justice Scoreboard (see European Commission, 2022) provide a number of indicators for EU countries, regarding the efficiency of their jurisdicial systems, including backlog, digital adoption, training, independence and transparency indicators. According to the scoreboard, on average, solving litigious civil and commercial cases was estimated to take longer in Greece, Malta, Croatia, France and Spain, while no data was available for Belgium, Bulgaria, Cyprus and Ireland (Graph 3.6).

Graph 3.6 **Estimated time needed to resolve litigious civil and commercial cases**



Source: Council of Europe's European Commission for the Efficiency of Justice (CEPEJ); EU 2022 Justice Scoreboard.
Note: Cases at first instance in 2012 and 2018–2020. Under the CEPEJ methodology, litigious civil/commercial cases concern disputes between parties, e.g. disputes about contracts. Methodology changes in EL and SK. Pending cases include all instances in CZ and, up to 2016, in SK. In IT the temporary slowdown of judicial activity due to strict restrictive measures to address the COVID-19 pandemic affected the disposition time. Data for NL include non-litigious cases.

Other institutional features may also affect the incentives of creditors and debtors in insolvency cases. These features include tax incentives (e.g., limited tax deductibility of write-downs and provisions can be a barrier to the use of debt resolution); and social policies, which can limit excessive hardship on the most vulnerable debtor categories (notably, mortgage debtors subject to foreclosures). Moreover, the interconnection of indebtedness with housing requires both provision of social backstops as well as introducing innovative private solutions (e.g., mortgage-to-rent schemes).

4. INSOLVENCY FRAMEWORKS IN A HIGH DEBT ENVIRONMENT

The economic role of insolvency frameworks is particularly relevant during economic crises and in situations of high outstanding private sector debt (Bricongne et al., 2016). Waves of insolvencies during economic downturns can entail heavy adjustment burdens for the society. Private debt overhang reduces the incentives to invest and consume (Dynan et al., 2012). Moreover, high NPL stocks impair the supply and allocation of credit. Effective insolvency frameworks are key to limit these undesired developments. However, ensuring that insolvency frameworks continue operating efficiently during economic downturns and in a high private debt environment is particularly challenging.

4.1. ECONOMIC CRISES, NON-PERFORMING LOANS AND INSOLVENCIES

Past crisis episodes show that non-performing loans can suddenly increase during economic crises, especially in a context of already high private debt. The performance of the institutional system in charge of insolvency procedures is therefore at risk of worsening precisely at the time when its efficiency is the most critical. Understanding the implications of a high-private-debt environment for insolvency frameworks provides useful insights into the possible consequences of a possible new wave of insolvencies, once the impact of the shocks that have affected Europe since 2019 is fully felt.

Table 4.1 **Selected statistics: NPL, growth and insolvencies at the time of the global financial crisis and the COVID-19 crisis**

	Average change in NPL ratio 2009-2013, pps	Average growth in corporate insolvencies, 2009-2013 (%)	Corporate insolvencies, average 2005-2008 vs average 2009-2013, change per 10,000	Change NFC debt 2008-2013, % of 2008 GDP	Post GFC crisis real GDP growth decline (2004-2007 vs 2009-2013), pps	Change NFC debt 2019-2021, % 2019 of GDP	Change in GDP real growth 2019-2020, pps
AT	0.5	-2.6	-44	9.1	-2.7	9.2	-8.2
BE	0.3	6.8	18	2.5	-2.3	-4.0	-7.8
BG	2.8	58.5	.	7.6	-6.7	6.4	-8.4
CY	6.6	9.4	8	17.9	-6.8	-6.7	-10.3
CZ	0.5	7.7	43	7.8	-6.2	4.1	-8.8
DE	0.0	-2.1	-8	2.0	-1.5	8.8	-5.6
DK	0.4	8.6	140	-2.8	-2.6	11.6	-4.2
EE	-0.1	2.8	13	5.8	-8.4	7.6	-7.0
EL	4.2	5.5	-1	-13.2	-9.5	12.5	-10.8
ES	1.1	28.7	18	-22.5	-5.4	4.9	-12.9
FI	0.0	4.4	21	10.3	-5.0	9.4	-3.5
FR	0.3	2.6	14	13.1	-1.9	15.0	-9.7
HR	2.1	74.9	.	1.6	-7.1	1.6	-11.6
HU	2.1	36.1	236	5.9	-4.1	20.8	-9.2
IE	5.0	16.3	58	38.3	-6.0	-12.0	0.9
IT	1.6	17.3	10	2.3	-2.9	-1.4	-9.5
LT	1.0	19.0	20	-11.7	-8.2	6.3	-4.7
LU	0.1	13.0	141	59.9	-3.8	25.3	-5.1
LV	0.6	3.6	24	-12.7	-11.4	-3.3	-6.3
MT	0.1	.	.	12.2	0.2	10.7	-14.2
NL	0.2	14.6	7	24.7	-3.2	8.7	-5.8
PL	0.5	19.2	1	14.7	-2.6	6.5	-7.3
PT	1.2	18.2	85	2.9	-3.3	5.1	-11.1
RO	3.3	69.2	66	12.8	-8.0	6.4	-7.9
SE	0.0	4.3	7	6.1	-2.7	25.7	-4.9
SI	1.8	10.9	303	-5.7	-7.0	3.6	-7.5
SK	0.4	10.6	5	6.3	-6.7	1.6	-7.0
Simple Mean	1.3	17.6	49	7.2	-5.0	6.8	-7.7
Bottom quintile WB rank	2.4	30.9	81	10.0	-5.8	9.6	-9.3
Top quintile WB rank	0.4	7.3	60	3.1	-3.1	8.7	-6.1
Bottom 2 quintiles WB ra	1.8	26.2	52	8.8	-6.0	8.4	-8.7
Top 2 quitiles WB rank	0.9	11.1	38	6.8	-3.5	6.5	-6.1

Source: Ameco, Eurostat and ECB, Bankruptcies from Macrobond, Credit Reform and National Sources. Macrobond data on bankruptcies of companies, national sources (AT, BE, CY, DE,DK, EE, ES,FI, FR, LU, LT, NL, RO, PL, PT, SE); Macrobond data on bankruptcy for mixed legal forms, national sources (SI - Limited Liability and joint stock, natural persons and other legal forms; CZ - commercial and entrepreneurs); EL - Business partnerships, sole proprietors and other legal forms; HU - bankruptcies and liquidation proceedings). Credit Reform data corporate bankruptcies (BG, HR - reform of insolvency in 2015, break in series, IE, IT - change of data source in 2006 but data corrected for break, LV, SK). National sources: MT (Malta Business Registry), available from 2013 only. Macrobond series extended back with credit reform data when both available. Number of firms from Eurostat business demographics, total firms sector B-N excluding K. Notes: NPL data corresponds to total non-performing exposures, including loans and debt securities (NPEs). Bottom and top quintiles refer to the quintiles of the distribution of resolving insolvency scores among EU and other advanced economies.

The dynamics of non-performing loans and insolvencies following the global financial crisis in Europe over the period 2008-2013 can shed light on what could be expected after large shocks. Despite the very different nature of the global financial crisis and more recent crises and the different policy responses, the impact of the global financial crisis on NPLs and insolvencies can help to shed some light on the consequences that a significant drop in output can have on payment capacity of businesses.

The global financial crisis started as a credit crunch, following extreme credit buoyancy and was characterised by timid and late policy intervention. In contrast, the COVID-19 crisis can be best described as a combination of supply and demand shocks affecting mainly sectors subject to physical contact and supported by policy intervention. Although in terms of output loss the two crises were comparable (Table 4.1) and also led to an increase in debt of non-financial corporations, the impact of the COVID-19 crisis on NPLs and bankruptcies is difficult to evaluate due to loan moratoria and temporary changes to insolvency procedures, which kept the numbers low. On the other hand, a sharp rise in non-performing loans among many European countries took place over the 2008-2013 period against the background of the global financial crisis and the European sovereign debt crisis. The ratio of non-performing loans (NPL) increased by about 1.3p.p on average (unweighted) each year between 2008 and 2013 (Table 4.1), that is an average increase of about 6.5 p.p. accumulated over that period (five times the average change).[4] The increase in the NPL ratio was particularly pronounced and above 2p.p. annually in Bulgaria, Croatia, Cyprus, Greece, Hungary, Ireland and Romania. It is important to note, however, that following a series of measures including changes in macro-prudential regulations, the banking sector in the EU was in much better health at the start of the COVID-19 crisis and much better prepared to offer restructuring solutions in a preventive manner (see Aiyar et al., 2021).

Regarding insolvencies, on average, there was an increase of almost 50 insolvencies per 10,000 firms after 2008 as compared with the pre-crisis period across the EU. This is equivalent to an increase of almost 18% per year on average over five years (simple cross country-average, see Table 4.1). This provides a magnitude of what can potentially happen after a crisis, without judgement on the cleansing role of insolvencies.[5]

The evolution of NPLs during the global financial crisis appears related to the quality of insolvency frameworks that existed at the time. The World Bank resolving insolvency scores provide a synthetic picture of differences in the quality of insolvency frameworks across countries (see section 3 and Annex 1). The last four rows of Table 4.1 provide simple averages of variables by quantiles of the resolving insolvency scores observed at the time of the crisis. A number of remarks can be made as follows:

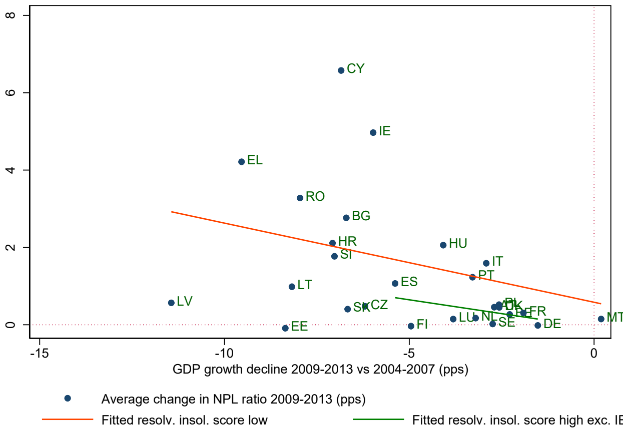
- Following the global financial crisis (and during the European sovereign debt crisis), the increase in NPLs was more pronounced in countries with low scores in the World Bank's resolving insolvency index (Table 4.1).
- The EU countries with a comparatively low score in the resolving insolvency index were also marked by more severe recessions after the global financial crisis and by a much bigger increase in corporate insolvencies.
- Although the more acute increase in NPLs in countries with low insolvency scores is largely attributable to the fact that the crisis was more severe in these countries, NPLs and insolvencies have also shown a bigger response to recessions, suggesting that insolvency frameworks may have mattered for such different response (see Consolo at al. 2018 for an analysis supporting this view).
- The relation between NPLs and insolvencies and GDP growth is characterised by limited statistical significance, reflected in the high dispersion illustrated in Graphs 4.1 (a) and (b).

[4] Throughout the note, the data for NPLs corresponds to non-performing exposures, which is a broader measure of non-performing debt, encompassing both loans and debt securities.

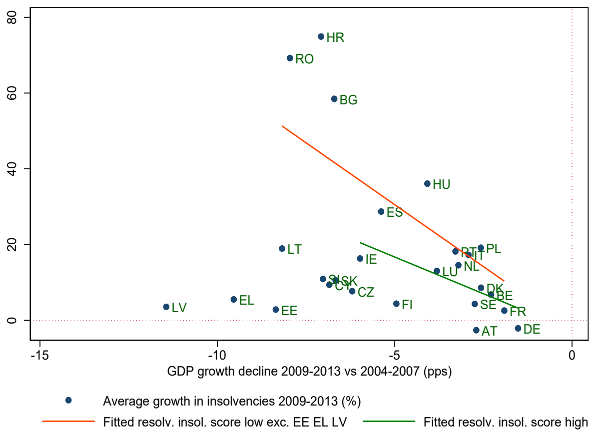
[5] Insolvencies of non-viable firms are needed but as the principles listed above refer, should happen fast and at relatively low cost for the economy.

Graph 4.1 **Average growth in NPLs and insolvencies vs. GDP growth decline post- GFC**

(a) NPLs growth



(b) Insolvencies growth



Source: World Bank Doing Business 2020. Note: The higher the score the better is the framework assessed.

4.2. THE NEED TO ADAPT INSOLVENCY FRAMEWORKS IN A HIGH-PRIVATE-DEBT ENVIRONMENT

Ensuring effective insolvency frameworks is particularly challenging during economic downturns and in a high-private-debt environment (Bricongne et al., 2016; European Commission, 2016b; Ari et al., 2020). As argued in the previous section, NPLs can suddenly increase during economic crises, especially in a context of already high private debt. This leads to externalities and coordination problems such as:

- The rise in the number of insolvency cases risks clogging the institutions in charge of the implementation, and notably the court system, at the time when an efficient insolvency framework is needed the most.
- The simultaneous liquidation of collateral by creditors affects the market value of collateral, including that of performing debt, thereby reducing the extent to which bad debts are recovered. This is a coordination issue that is of particular relevance for mortgage debt.
- Incentives to delay the moment in which bad debt is resolved prevail. Creditors have an incentive to wait for the macroeconomic environment to improve, in the hope distressed loans start to perform again. This attitude however ends up in a coordination problem because it creates a tendency to delay the moment in which bad debt is resolved, keeping resources employed in non-viable uses. Equally, banks may have an incentive to delay provisioning and the work out of NPLs from their balance sheets not to deteriorate their capital positions.

Ensuring that insolvency frameworks remain efficient during economic downturns and in a high-private-debt environment may require policy interventions beyond what is needed during normal times. Beyond the general principles of effective insolvency frameworks and the associated flanking policies outlined in section 2, addressing the rise in insolvencies in a high private debt environment may call for adapting insolvency frameworks and institutional settings in such a way to deal with externalities, coordination and systemic problems. Some of the measures that can be taken to address these additional issues are summarised below:

- Adaptation of specific aspects of insolvency frameworks, such as easing access or incentivising the use of hybrid or out-of-court restructuring frameworks would help addressing court congestion.
- Reforms may be needed to ensure sufficient capacity in courts and insolvency services to deal with high numbers of insolvencies.

- Authorities may encourage the initiation of large-scale private debt resolution processes to overcome coordination failures which could lead to inertia. For example, this may involve defining NPL resolution targets to be achieved within time limits.
- Temporary revisions of enforcement conditions, such as foreclosure moratoria or government sponsored initiatives to prevent disorderly large-scale foreclosure, can be used to reduce negative externalities linked to excessive depreciation of collateral assets and address social distress.

Additional flanking policies may also be needed to ensure that insolvency frameworks are effective in dealing with NPLs, and to address social implications of large-scale insolvency. This can include stricter prudential supervision of banks to foster the resolution of bad debt (Aiyar et al, 2015). Moreover, the development of secondary markets, also through the creation of Asset Management Companies (AMCs) for NPLs can help to offload bad private debt from the balance sheets of banks. Measures to address capital shortages associated with the work out of NPLs may become necessary. Also, tax implications of debt resolution should be assessed to avoid disincentives both on the creditor and the debtor side. Finally, social policy measures should ensure that the debt resolution through insolvency frameworks does not generate excessive hardship on the most vulnerable debtor categories (notably, mortgage debtors subject to foreclosures).

5. INSOLVENCY FRAMEWORKS AFTER THE COVID-19 CRISIS: CHALLENGES AND REFORM NEEDS

The economic turmoil associated to the COVID-19 crisis and subsequent shocks calls for reforms to address remaining gaps in insolvency frameworks and prepare for a potential increase in insolvencies. The COVID-19 crisis and its impact on non-financial corporate debt has raised awareness on the possible need of adapting insolvency frameworks. Remaining gaps in insolvency frameworks and associated flanking policies should be closed to ensure a swift and effective handling of insolvencies. [6]

5.1. CHALLENGES RELATING TO THE COVID-19 CRISIS

The European economy entered a sudden recession in the first half of 2020 with the deepest output contraction since World War II. To counter the spread of COVID-19, major containment measures were introduced, shutting down large parts of the economy. A string of indicators suggests that the euro area economy operated at between 25% to 30% below its capacity during the period of the strictest lockdowns. Overall, the EU economy contracted 5.7% in 2020 before recovering at a growth rate of 5.4% in 2021 and forecast to slowdown to 3.3% in 2022 and 0.3% in 2023 (Autumn 2022 Forecast, see European Commission, 2022). This however hides important differences across countries.

Although support measures averted the initially feared wave of insolvencies, there are remaining pockets of vulnerability.[7] The decline in activity varied significantly across sectors depending on their

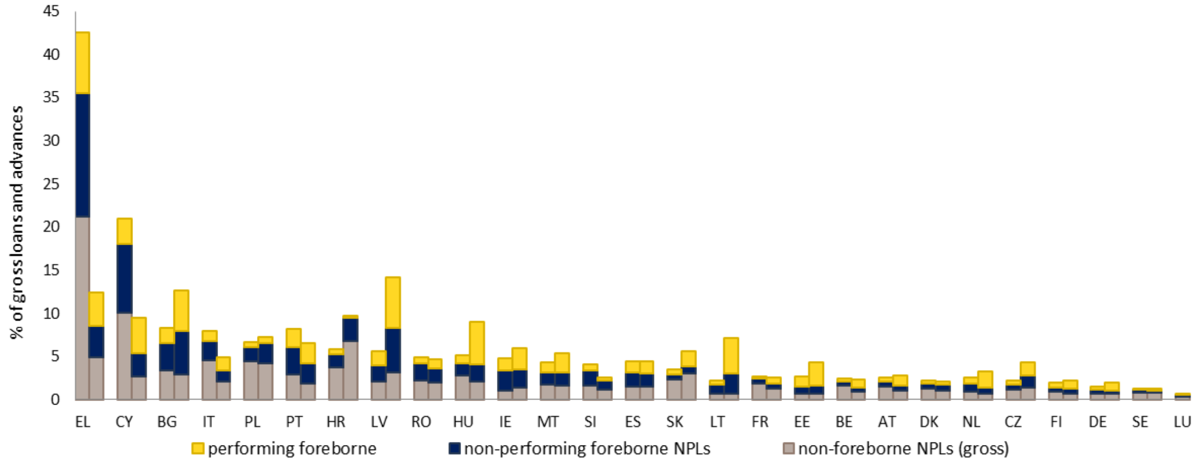
[6] Although this paper does not analyse the role of insolvency franeworks in the recovery phase, efficient insolvency frameworks should in principle also serve as insurance for investors, particularly foreign investors, by supporting the birth of new companies. To our knowledge this line of research has not yet been exploited.

[7] Initial estimates indicated that around 30% of European firms could face liquidity shortages after two months of confinement measures in the absence of policy actions (OECD, 2020a). Archanskaia et al. (2022) find that between 25 and 30% of European firms exhausted their liquidity buffers by the end of 2021 and therefore developed higher liquidity needs due to the pandemic. Moreover, about 10% of pre-pandemic viable firms are estimated to shift into insolvency status by the end of 2021, reflecting the cumulative adverse revenue shock experienced over 2020-2021.

ability to adapt to new production and consumption patterns. Measures on social distancing and mobility restrictions dramatically affected services involving direct contact between customers and providers, activities gathering people in public and private places, travelling, as well as non-essential manufacturing and construction activities involving close physical contact among workers. Activities that could be automatised or undertaken remotely were relatively less affected (OECD, 2020a).

Loan moratoria curbed the increase in NPLs in 2020 and 2021. Both legislative and non-legislative loan moratoria (debt holidays) were introduced in most EU countries to allow for delayed payments without a sharp increase in the NPLs ratios, which would require large increases in provisioning by banks and could affect credit supply. In light of this, it is not surprising that NPL data up to 2021-Q4 showed a decline in NPL ratios relative to 2019-Q4, across the board (Graph 5.1). However, in a number of countries, forbearances (instruments with modified terms and conditions) registered an increase in 2021-Q4 relative to pre-pandemic. Graph 5.1 shows performing bank loans granted forbearance in 2019Q4 and 2021Q4 (yellow bars) and non-performing bank loans granted forbearances for the same two periods (blue bars).

Graph 5.1 **Non-performing loans of domestic banks and forbearances 2019Q4 vs 2021Q4**



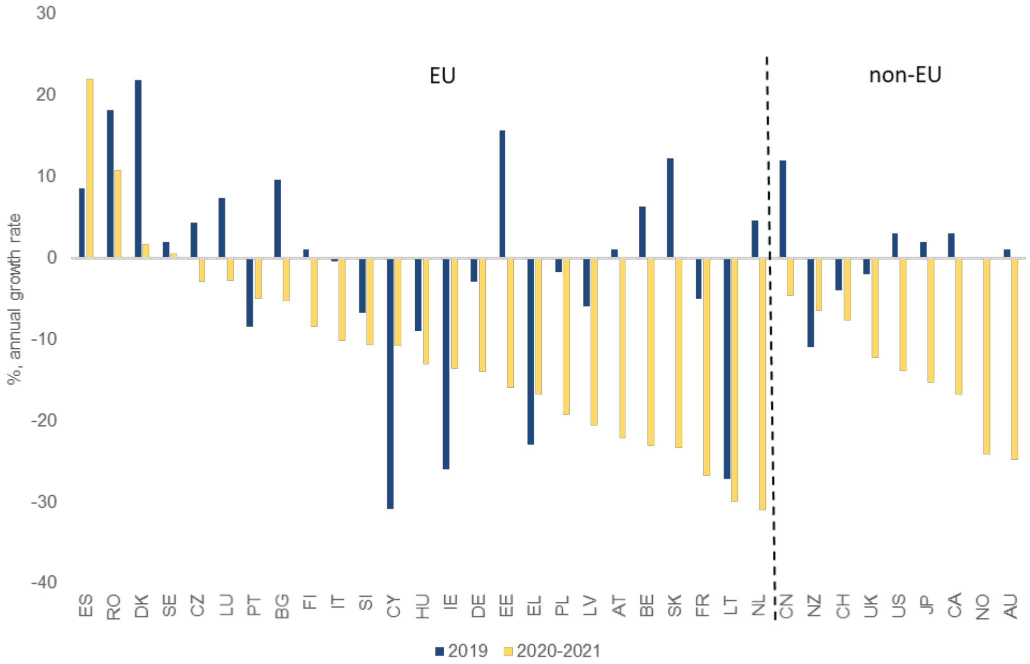
Source: ECB, MFloans and advances (domestic banking groups and stand-alone banks, foreign - EU and non-EU - controlled subsidiaries and foreign - EU and non-EU - controlled branches. Note: Member states are ordered by decreasing order of gross NPL ratio in 2019-Q4. Non-performing loans are typically 90 days past due but there are conditions for upgrading NPLs. Forbearance is a concession granted to a counterparty for reasons of financial difficulty that would not be otherwise considered by the lender. Suspended credit facilities due to COVID-19 have not been necessarily counted as forbearances.

Available statistics reveal a decline in corporate insolvencies relative to pre-pandemic in the majority of countries, except for Spain, Romania and to a small extent Denmark (Graph 5.2, where blue bars refer to 2019 y-o-y growth and yellow bars to the annual growth over 2020-2021 relative to 2019), including because countries adapted specific elements of corporate insolvency frameworks after the COVID outbreak. Although the adaptation measures described in best practices (see section 4.2) typically refer to measures that speed up the insolvency process, most countries introduced measures to halt insovencies and give companies breathing space, which may have been justified by the exogenous nature of the shock:

- Examples of measures aimed at halting bankruptcies are the suspension of the obligation to file for insolvency under certain conditions, the extension of deadlines in insolvency proceedings, moratoria to prevent certain creditor actions, the raising of the threshold limit of un-paid debt to initiate bankruptcy proceeding and winding up applications.
- Only in very few cases, did adaptation measures aim at speeding up insolvency procedures. Ireland extended the period of asset protection and facilitating online meetings of creditors. In

Slovakia the emergency law introduced faster and less expensive insolvency process for small businesses. In the Netherlands, a new restructuring scheme which combines features of the US Chapter 11 (cram down mechanism) with elements of the UK scheme of arrangement was introduced in 2020. The new procedure allows companies to rebalance their capital structure, by operating mostly outside formal proceeding with the court possibly called upon to confirm the plan and the eventual cram down (imposition of the plan on dissenting borrowers).

Graph 5.2 **Corporate insolvencies 2019-2021, y-o-y growth**



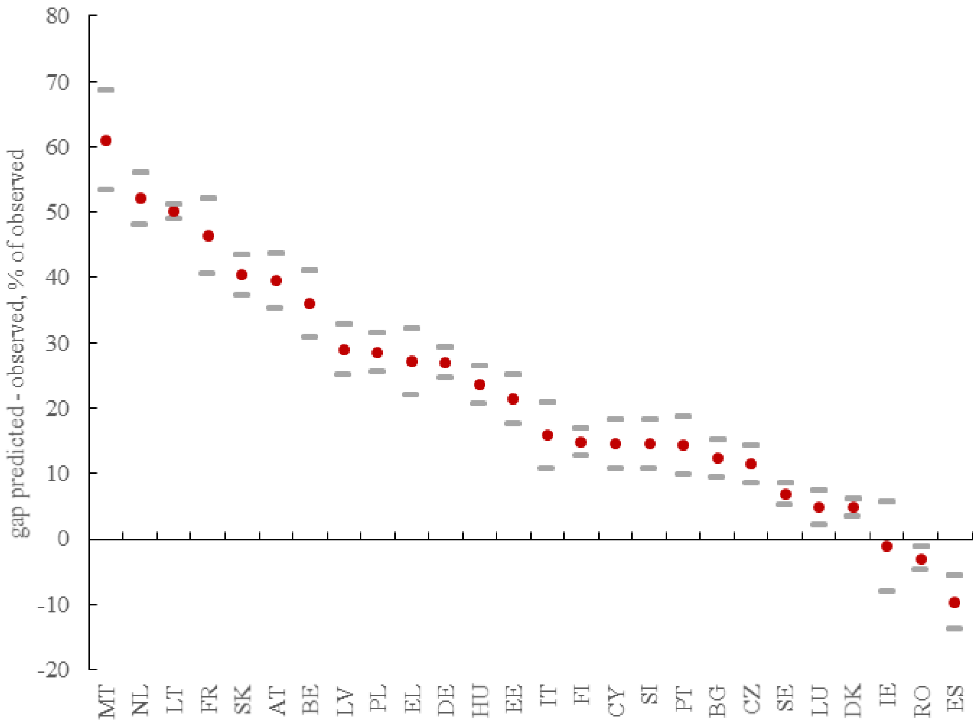
Source: Eurostat, Heuler Hermes and Macrobond. Malta has been omitted from the chart because the 2019 data is out of range. In Malta, according to Eurostat insolvencies grew by 134% in 2019 and declined by -35% annually over 2020-2021.

5.2 ASSESSING REFORM NEEDS

Challenges associated to the COVID crisis and reform needs differ across EU Member States. The fact that support measures and moratoria contained bankruptcies in 2020 and 2021, with bankruptcies in most EU Member States during this period even lower than pre-pandemic, may imply a rebound in insolvencies, once support measures are fully withdrawn and the full impact of the pandemic and subsequent shocks makes its way through the economies.

To estimate the risk of new insolvencies across Member States originating from the COVID-19 shock, Graph 5.3 shows estimates of the insolvencies gap for the period 2020-2021, as the difference between the annual insolvencies that would have been expected on the basis of an econometric model and those observed, in percent of the observed. The econometric model relates the growth of insolvencies to real GDP growth, as previous studies do. A novelty of the model is that it is also able to find a relationship between insolvency growth and previous year changes in NFC debt, consistent with the observation that insolvencies are more likely when firms accumulate debt. The analysis takes into account the endogeneity of GDP growth by instrumenting it with regional GDP growth (model estimates and robustness checks are shown in the Annex 3). [8] The estimates range between 60% in Malta, where insolvencies declined by 35% over 2020-2021 (see note to chart 5.2) and -10% in Spain, where insolvencies instead grew over the same period.[9]

Graph 5.3 **Insolvency gaps**



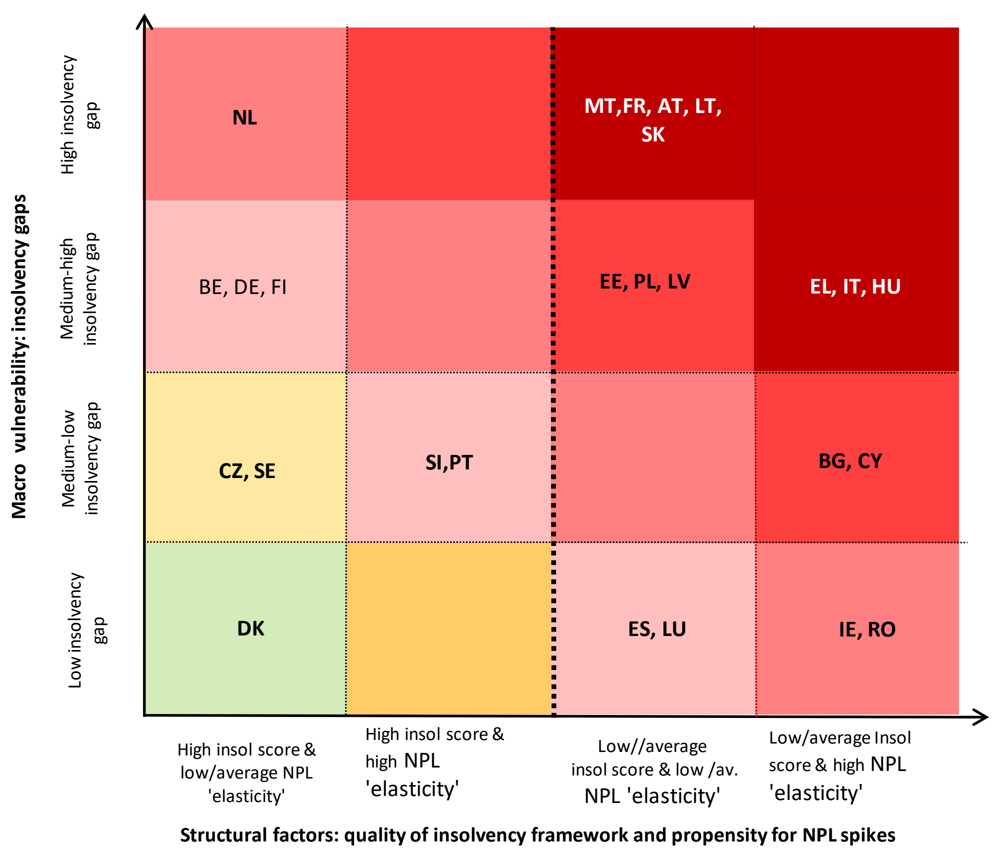
Source: Eurostat, Euler-Hermes, Macrobond, ECB, Ameco and authors' estimates. Note: the chart shows the central estimate (red dot) as the difference between the annualised 2020-2021 insolvencies predicted, by the model that relates corporate insolvency growth to economic growth and corporate debt, and the actual annual number of insolvencies, in percent of the actual (see also ECB, 2022, for alternative estimations). The upper and lower bars show the upper and lower range for the estimates taking into account the standard errors of the estimated coefficients.

Graph 5.4 summarises attempts to identify the relative position of EU countries in terms of reform needs. The vertical axis reports the estimated insolvency gap. The horizontal axis reports differences in policy settings regarding insolvency (summarised by the 2020 World Bank resolving insolvency score) and structural factors determining the increase in NPLs associated with recessions. Reform needs are higher in countries where the estimated corporate insolvency gaps are higher and where structural conditions suggest higher potential gains from adapting existing frameworks.

[8] Data on insolvencies is not homogenous for all EU countries, with sources, definitions and coverage varying significantly. For these reasons, econometric analysis to estimate the growth in the number of insolvencies suffers from many caveats.

[9] ECB (2022) provides comparable estimates for insolvency gaps but only up to 2020 and only for the four largest EU economies. The results indicate a gap of roughly 30% for Germany, around 75% for France, close to 10% for Italy and around 40% for Spain. The model estimated in Annex 4 yields similar results for 2020 for Germany (35%), France (62%) and Spain (35%), but not for Italy (54%), although taking into account 2020 and 2021 reduces the estimated gap for Italy. Forecasts for insolvency growth in 2020 by Allianz Research and Euler Hermes (2020a) and Banerjee et al. (2020) are also within our estimated ranges.

Graph 5.4 **Reform needs**



Source: Eurostat, Euler-Hermes, Macrobond, ECB, Ameco and ECFIN B1 estimates. Note: The insolvency gap is not available for Croatia, as recent data on insolvencies is not available, however, insolvency growth for 2020-2021 estimated at 2%, which is relatively low when compared with other countries. In terms of insolvency scores and NPL elasticity, though, Croatia would fall in the 'low/average Insol score & high NPL elasticity' column.

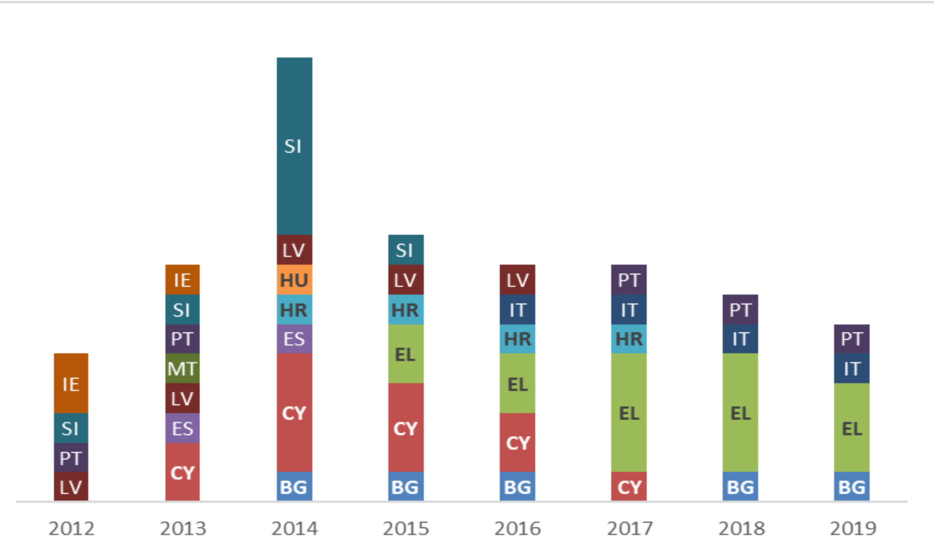
Despite the limitation of the estimation of insolvency gaps and the known caveats of the World Bank indexes the analysis points to reform needs mainly in three group of countries.

- A first group of countries may face reform needs because of both a severe deterioration in macroeconomic conditions and the presence of structural weaknesses. These are the countries that appear in the upper right quadrant of the matrix in Graph 5.4 (four top right squares). They combine weaker insolvency frameworks and a tendency for NPLs to react strongly to recessions with a high estimated corporate insolvency gap. Among those, the matrix highlights Malta, France, Austria, Lithuania, Slovakia, Greece, Hungary, Italy, Estonia, Poland and Latvia.
- A second group of countries could benefit from addressing possible shortcomings in their insolvency frameworks, although not facing high estimated corporate insolvency gaps. These are the countries in the lower right quadrant of the matrix. In this set, Cyprus, Bulgaria, Ireland and Romania have recorded a high response of NPLs to recessions during the global financial crisis and are characterised by insolvency frameworks where room for improvement can be found according to the World Bank indicator. In the same set, Spain and Luxembourg do not show a high responsiveness of NPLs to shocks, but still have insolvency index scores signalling potential room for raising the effectiveness of existing frameworks.
- A third group of countries may benefit particularly from reforms to ensure existing frameworks can deal with a potentially sharp increase in insolvencies following the COVID crisis. These would be the countries in the top left quadrant of the matrix. These countries, including Netherlands, Belgium, Germany and Finland, have relatively higher estimated

corporate insolvency gaps. Belgium, Germany and Finland have displayed a lower responsiveness of NPLs in the past but have relatively higher estimated insolvency gaps.

While the EU economy started to recover from the COVID-19 shock, the growth outlook for 2023 deteriorated and risks increased, with Russia's invasion of Ukraine in February 2022, and the unprecedented surge in energy prices. As inflation increased, the ECB and EU-non euro area central banks have tightened monetary conditions, and the increase in the cost of borrowing will translate in higher debt servicing costs for firms, particularly where variable rate contracts predominate, and NFC debt is high. The expected slowdown in nominal growth will also pose challenges for countries with high debt. Insolvencies are likely to increase in 2023, particularly if NFC debt increases.

Graph 5.5 **CSRs and MoU commitments directly related to insolvency**



Source: Cesar database and adjustment programme reports. Includes insolvency related MOU commitments for IE 2012-2013; PT 2012-2013; CY 2013-2015; EL 2015-2017 and 2019 July Eurogroup commitments.

Priorities for reform of insolvency frameworks should reflect countries' individual situations and the new challenges associated to the COVID-19 crisis and the subsequent crisis related to Russia's invasion of Ukraine. Reform priorities need to be articulated taking into account country-specific conditions and challenges arising in the context of the post-crises' environment. Reforms of insolvency frameworks should also ideally reflect broad economic principles and international best practices:

- A number of countries received Country Specific Recommendations in the context of the European Semester relating to NPLs or insolvency (Graph 5.5). A range of reforms in the area of insolvency have been implemented over the years to address these recommendations (see Annex 4 Table A.4.1 for a list of reforms undertaken for the period 2007-2021). In 2019, five countries received CSRs related to reducing the level of NPLs (Bulgaria, Cyprus, Greece, Italy and Portugal) and two had CSRs directly related to the reform of insolvency frameworks (Bulgaria, and Greece; for Greece included in the all-encompassing CSR to abide by the June 2018 commitments). Recovery and Resilience Plans adopted in the course of 2021, are bound to address the 2019 CSRs to a significant extent (see Annex 4 Table A.4.2).
- The effective transposition and effective implementation of the 2019 European Commission Directive on preventive restructuring frameworks due by July 2022, but delayed in the case of some EU countries, would help put in place minimum standards on early restructuring procedures and second chance for natural persons across the EU.
- Linked to the above point, an effective use of hybrid restructuring mechanisms with limited court involvement would help dealing with widespread private debt distress in a timely fashion in a context where courts would become congested. To this purpose, what appears crucial is not

only the presence of legislation allowing for restructuring procedures with limited court involvement but also an effective use in practice.

- Resorting to extra-judicial avenues to foreclosure, notably by means of contracts defining ex-ante conditions for collateral repossession, would also help accelerating insolvency procedures in a context where courts and insolvency practitioners must deal with a sudden increase of cases.
- Weaknesses in institutional settings that affect the implementation of insolvency procedures need also to be addressed, particularly in what concerns the working and the availability of resources to courts as well as the availability and quality of insolvency practitioners. The quality and availability of information about debtors can also be improved by means of credit registries and interconnectivity among various registries.

6. CONCLUSIONS

There was widespread concern that COVID-19 induced liquidity shortages could cause firm balance sheet distress on a large scale. Widespread bankruptcies have been avoided thanks to resolute and timely policy support. However, there are still pockets of vulnerability, which could be further weakened by Russia's invasion of Ukraine, the related hike in energy prices, ensuing inflation, the rise in financing costs and the growth slowdown.

The present paper has outlined an assessment framework for insolvency regimes with a view to inform economic surveillance, notably in the context of the European Semester and MIP assessments. Insolvency frameworks play a relevant economic role, especially in a high-private-debt context. They shape the incentives of private agents to take on debt, and to repay it in case of distress. Insolvency frameworks also determine the extent to which legal and procedural uncertainty affects the willingness to engage in debt relations or the speed and cost at which debt can be recovered by creditors. Effective insolvency frameworks permit viable debt to be repaid while unviable debt is resolved. The effectiveness of insolvency frameworks thus has implications for credit supply, credit allocation, productivity and investment, particularly in crisis times, because they permit to reorient financial resources towards profitable and dynamic activities.

Effective insolvency frameworks also require adequate flanking policies that matter for the extent to which insolvency procedures can be carried out speedily and effectively in practice. These include the capacity of courts and insolvency practitioners, the availability of relevant information on private debt, including from credit registries, and the enforcement of property rights.

EU countries differ markedly in the characteristics of their insolvency frameworks, as revealed by available synthetic indicators. In particular, the World Bank resolving insolvency index shows that the efficiency of the insolvency frameworks still exhibits relatively large differences across the EU for what concerns timing, costs and expected recovery rates. Differences persist, even though a large number of Member States took measures to reform their insolvency legislation after the 2008 financial crisis, including with a view to introduce hybrid restructuring frameworks with limited court involvement and personal insolvency allowing a second chance for entrepreneurs, in line with the Commission recommendation of 2014 and the 2019 EU Directive. Recovery and Resilience Plans adopted in the course of 2021, are also bound to address the 2019 CSRs related to insolvency, to a significant extent. Finally, the Commission proposal for a Directive harmonising certain aspects of insolvency law, of December 7, 2022, should also contribute to the adoption of best-practice principles throughout the EU.

To deal with liquidity shortages during the COVID-19 crisis, notably during lockdowns, corporations had to borrow, helped by the provision of credit guarantees. Private debt repayment dynamics were also affected by moratoria, put in place to prevent a sudden and large-scale increase in bankruptcies. Overall, private debt to GDP ratios increased across the EU, notably for corporations. A number of factors have worked in the direction of containing private debt expansion, including the expiration of support policies like moratoria and credit guarantees and the economic recovery in 2021. At the same time, the capacity of repaying existing debts continues to be challenged. Hence, the current non-performing loan (NPL) ratios could still rise above current levels, particularly in face of the deteriorating economic conditions following Russia's invasion of Ukraine.

The dynamics of non-performing loans and insolvencies following the global financial and sovereign debt crises in Europe over the period 2008-2013 can shed light on what could be expected this time around. Although the nature of the two crises is very different (the previous followed a period of credit buoyancy which is not the case for the COVID-19 crisis) the response of NPLs and insolvencies to the last crisis can be insightful to quantify the link between those variables and a significant drop in economic output. Between 2008 and 2013 the NPL ratio increased by about 6.5 p.p. The increase in the NPL ratio was particularly pronounced in Bulgaria, Croatia, Cyprus, Greece, Hungary, Ireland and Romania. The growth rate in the number of corporate insolvencies across the EU between 2009 and 2013 was about 18% per year on average. The more acute increase in NPLs in countries with low insolvency scores is largely attributable to the fact that the crisis was more severe in these countries. Nonetheless, the analysis shows that the quality of insolvency frameworks also mattered for the extent to which the economic slowdown implied higher NPL ratios and insolvencies.

The present paper attempts to identify reform needs across EU countries on the basis of insolvency gaps (i.e. the difference between the predicted and actual insolvencies for 2020-2021) and existing institutional settings and structural characteristics (the performance of insolvency frameworks as measured by the World Bank resolving insolvency scores and how large is the typical response of NPLs to crises). Despite the limitation of the estimation of insolvency gaps and the known caveats of the World Bank indexes, the analysis points to reform needs mainly in three different groups of countries.

- A first group of countries is characterised by both structural weaknesses and a large estimated insolvency gap (Malta, France, Austria, Lithuania, Slovakia, Greece, Hungary, Italy, Estonia, Poland and Latvia).
- A second group could benefit from reforms mostly because of structural weaknesses, despite a lower estimated insolvency gap (Cyprus, Bulgaria, Ireland and Romania, Spain and Luxembourg).
- In a third group of countries, challenges relate mostly to a large estimated insolvency gap, so that reforms may help to ensure that institutions can cope with a potential significant increase in insolvencies (Netherlands, Belgium, Germany and Finland).

Reform efforts to improve insolvency frameworks should reflect broad economic principles and international best practices. In order to be speedy and cost-effective, insolvency procedures should be predictable, easily accessible to both debtors and creditors, and corporate debt distress should be identified at an early stage. Early restructuring procedures with limited court involvement help in this respect and are particularly suited to deal with risks of court congestion when corporate debt distress becomes a widespread phenomenon. Reforms in the current context should also ensure that appropriate flanking policies are in place. The capacity of courts may need to be adapted to deal with a steep increase in insolvency cases, as well as the supply and skills of insolvency practitioners. As large-scale insolvencies allow to work out NPLs from bank balance sheets, measures may need to be taken to ensure the maintenance of sound capital ratios. In some countries, dealing with the social implications of large-scale insolvencies may also require an adaptation of social safety nets.

REFERENCES

Adalet McGowan, M. and D. Andrews (2018), Design of Insolvency Regimes across Countries, Economics Department Working Papers, No. 1504. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2018)52&docLanguage=En.

Aiyar, S., Dao, M. C., Jobst, A. A., Mineshima, A., Mitra, S., & Pradhan, M. (2021), "COVID-19: How Will European Banks Fare?" International Monetary Fund Departmental Papers, 2021(008).

Aiyar, S., W. Bergthaler, J. M. Garrido, A. Ilyina, A. Jobst, K. Kang, D. Kovtun, Y. Liu, D. Monaghan, and M. Moretti (2015), A Strategy for Resolving Europe's Problem Loans, IMF Staff Discussion Note, 15/19, September.

Allianz Research and Euler Hermes Global (2020a), Calm before the storm: Covid-19 and the business insolvency time bomb 16 July 2020. https://www.eulerhermes.com/en_global/news-insights/economic-insights/Calm-before-the-storm-Covid19-and-the-business-insolvency-time-bomb.html.

Allianz Research and Euler Hermes Global (2020b), European banks: could EUR300BN of additional NPLs crunch the recovery in Europe? https://www.eulerhermes.com/en_global/news-insights/economic-insights/european-banks-could-eur300bn-of-additional-NPLs-crunch-the-recovery-in-europe.html.

Archanskaia, L., E. Canton, A. Hobza, P. Nikolov and W. Simons (2022), "The Sectoral Nature of the COVID-19 Shock: A Novel Approach to Quantifying its Economic Impact", European Commission Discussion Paper 162, May.

Arellano, M., and Bover, O. (1995), "Another look at the instrumental variable estimation of error-components models", Journal of econometrics, 68(1), 29-51.

Ari, A., Chen, S. and Ratnovski, L. (2020a), "The dynamics of non-performing loans during banking crises: a new database", ECB Working Papers, No 2395, Frankfurt am Main.

Banerjee, R., G. Cornelli and E. Zakrajšek (2020), The outlook for business bankruptcies, BIS Bulletin N.30.

Banerjee, R., J. Noss and J.-M. Vidal Pastor (2021), Liquidity to solvency: transition cancelled or postponed, BIS Bulletin N.40.

Bricongne, J-C., M. Demertzis, P. Pontuch and A. Turrini (2016), Macroeconomic Relevance of Insolvency Frameworks in a High-debt Context: An EU Perspective, Discussion Paper, 032, European Economy, European Commission, June 2016.https://ec.europa.eu/info/sites/info/files/dp032_en.pdf

Caballero, R. J. and M. L. Hammour, 1994. The Cleansing Effect of Recessions, The American Economic Review, Vol. 84 No. 5, pp. 1350-1368.

Consolo, A., Malfa, F., and Pierluigi, B. (2018), "Insolvency frameworks and private debt: an empirical investigation", ECB working paper 2189.

Djankov, S., O. Hart, C. McLiesh, and A. Shleifer, 2008. Debt Enforcement around the World, Journal ofPolitical Economy, vol. 116, no. 6, pp 1105-1149.

Dynan K., Mian A. and Pence K. (2012), Is a Household Debt Overhang Holding Back Consumption?,Brookings Papers on Economic Activity, Spring, pp 299-362.

European Banking Authority (2020), Report on the benchmarking of national loan enforcement frameworks: response to the European Commission's call for advice of benchmarking of national loan enforcement frameworks (including insolvency frameworks) from a bank creditor perspective, EBA/Rep/2020/29.

European Central Bank (2022), Assessing corporate vulnerabilities in the euro area, ECB Economic Bulletin, Issue 2/2022.

European Commission (2022), European Economic Forecast, Autumn 2022, Institutional Paper 187, November.

European Commission (2020a), "Corporate financing needs: illiquidity, financial distress and firm productivity after COVID-19", DG-EFIN-Unit B2 presentation to the EPC LIME Working Group, November.

European Commission (2020b), The 2020 EU Justice Scoreboard, Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, COM(2020) 306, https://ec.europa.eu/info/sites/info/files/justice_scoreboard_2020_en.pdf.

European Commission (2018), Taking Stock of Reforms of Insolvency Frameworks in the EU, (Note to the Economic Policy Committee), Brussels, 27 June, 2018, Ref. Ares(2018)3315990 - 22/06/2018.

European Commission (2016a), Benchmarking Insolvency Frameworks for Non-financial Corporations, Insights from the World Bank Doing Business Resoling Insolvency Indicators, (Note to the Eurogroup) https://www.consilium.europa.eu/media/23659/insolvency-in-doing-business-eurogroup.pdf.

European Commission (2016b), Insolvency Frameworks in the Euro Area: Efficiency Principles and Benchmarks, Ref. Ares(2016)1616825 - 05/04/2016.
https://www.consilium.europa.eu/media/23679/22-eurogroup-insolvency-egares-note.pdf.

European Commission (2016c), Report from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the application of Directive 2008/52/EC of the European Parliament and of the Council on certain aspects of mediation in civil and commercial matters, COM(2016) 542 final, Brussels, 26.8.2016.

Garrido, J. M. (2012), "Out-of-Court Debt Restructuring", A World Bank Study, Washington D. C., https://openknowledge.worldbank.org/bitstream/handle/10986/2230/662320PUB0EPI00turing0978082 1389836.pdf?sequence=1

Gourinchas, P. O., Kalemli-Özcan, Ş., Penciakova, V., & Sander, N. (2021, May). COVID-19 and Small-and Medium-Sized Enterprises: A 2021" Time Bomb"?. In AEA Papers and Proceedings (Vol. 111, pp. 282-86).

Hadjibeyli, B, G Roulleau and A Bauer (2021), "Live and (don't) let die: the impact of COVID-19 and public support on French firms", Direction générale du Trésor, Working Papers 2021/2, Ministère de l´Économie, des Finances et de la Relance.

Harasztosi, P, L Maurin, R Pál, D Revoltella and W van der Wielen (2021), "Policy support during the crisis: So far, so good?", EC Annual Research Conference, 15 November. Forthcoming in the EIB Working Paper Series.

IMF (2020), Global Financial Stability Report: Bridge to Recovery, October 2020, IMF, Washington DC. https://www.imf.org/en/Publications/GFSR/Issues/2020/10/13/global-financial-stability-report-october-2020.

Insol (2020), Coronavirus (COVID-19) Tracker of insolvency reforms globally, Insol Europe in partnership with LexisNexis. https://www.insol-europe.org/download/documents/1817.

Leeds (2016), Study on a new approach to business failure and insolvency: Comparative legal analysis of the Member States' relevant provisions and practices, European Commission Tender No. JUST/2014/JCOO/PR/CIVI/0075.

Liu, Y. and C. B. Rosenberg, 2013. Dealing with Private Debt Distress in the Wake of the European Financial Crisis - A Review of the Economics and Legal Toolbox, IMF WP/13/44, February.

OECD (2020a), Corporate sector vulnerabilities during the Covid-19 outbreak: assessment and policy responses, 5 May2020.
https://read.oecd-ilibrary.org/view/?ref=132_132712-uivd1yagnx&title=Corporate-sector-vulnerabilities-during-the-Covid-19-outbreak-assessment-and-policy-responses

OECD (2020b), Supporting businesses in financial distress to avoid insolvency during the COVID-19 crisis, 27 May2020. http://www.oecd.org/coronavirus/policy-responses/supporting-businesses-in-financial-distress-to-avoid-insolvency-during-thecovid-19-crisis-b4154a8b/.

Valiante, D. (2016), Harmonising insolvency laws in the Euro Area: rationale, stock-taking and challenges. What role for the Eurogroup?, Centre for European Policy Studies, Report provided at the request of the European Parliament's Economic and Monetary Affairs Committee, July 2016.

World Bank Group (2020), Doing Business Report 2020, Washington, USA. https://www.doingbusiness.org/.

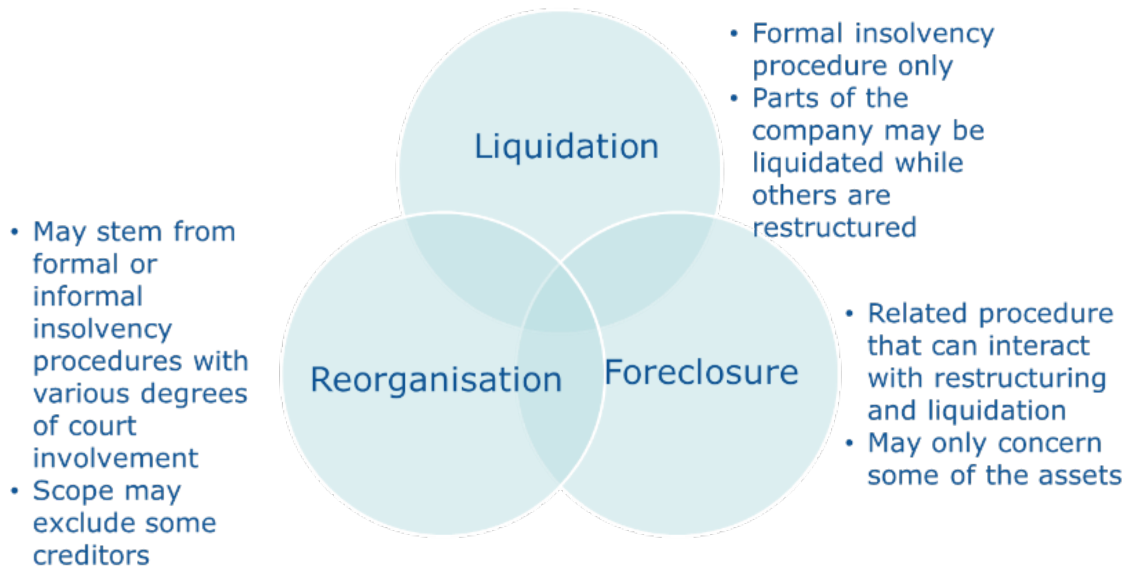
World Bank Group (2019), Doing Business Report 2019, Enforcing Contracts and Resolving Insolvency Washington, USA.
https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB19-Chapters/DB19-Enforcing_Resolving.pdf.

ANNEX I - MAIN ELEMENTS OF INSOLVENCY SYSTEMS

Insolvent debtors face three, non-excludable, possible outcomes: foreclosure, reorganisation, liquidation (Graph A.1.1):

- Secured creditors can claim collateral for defaulted claims through a procedure called *foreclosure*. This is often the outcome of mortgage default. Foreclosure is in some cases foreseen in contracts as the instrument to deal with mortgage payments default, according to modalities defined ex ante. In such cases, court involvement is not necessary. Foreclosure can take place also in the context of corporate insolvency and be a way through which individual creditors can enforce their claims. Unsecured creditors can also seize assets through a judicial order.
- *Reorganisation* applies to corporate insolvency and generally entails a change in the business plan and practices, and some form of debt restructuring to maintain the firm as a going concern. Debt restructuring may include partial debt discharge, rescheduling or other changes in the characteristics of the claims. Reorganisation can be part of the pre-insolvency or formal insolvency proceedings and can also entail the disposal of some of the assets of the company.
- *Liquidation* refers to piecemeal sale of all assets or of pieces of 'going concern' business to cover creditors' claims, as the final outcome of an insolvency proceeding. In some jurisdictions, restructuring and liquidation are two separate procedures with distinct applications, while in others they are two possible outcomes of a single insolvency application. A liquidation process may follow foreclosure or an unsuccessful reorganisation (European Commission, 2018; Valiante, 2016).

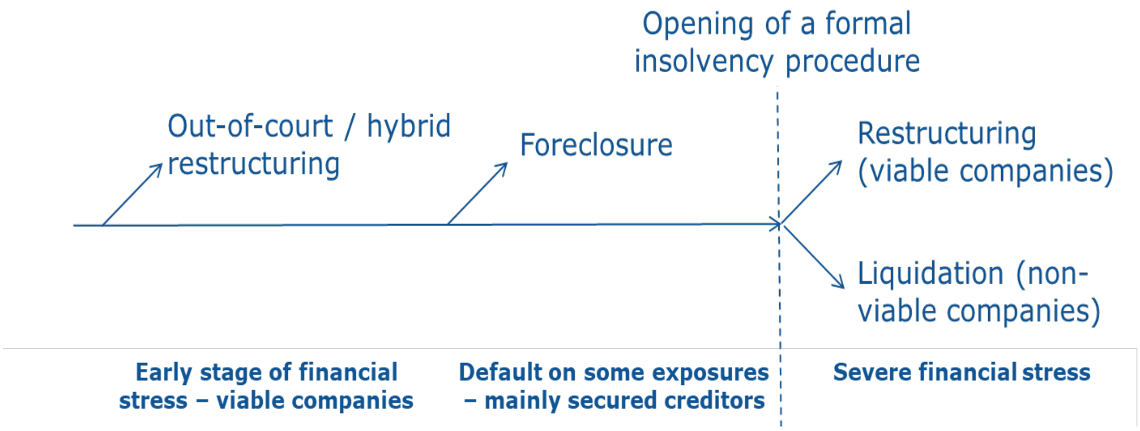
Graph A.1.1 **Main outcomes for insolvent debtors**



Source: Adapted from European Commission (2018).

During formal insolvency proceedings, foreclosure can be used by secured creditors against a defaulting borrower. Courts may however enforce a "stay" on the actions by the creditors, aimed at protecting the assets of the debtor company from the effects foreclosure, with a view to potentially maintain active the firm or parts of it. Under formal insolvency, assets are typically managed by an insolvency practitioner or court agent, who will seek to address creditors' rights in a coordinated manner, and according to an established order of priorities, either with the firm continuing to operate or under liquidation (Graph A.1.2).

Graph A.1.2 **Typical sequence of procedures facing insolvent borrowers**



Source: Adapted from European Commission (2018). Note: Distressed companies may or may not use the various options made available by the insolvency framework. Conversely, they may also use several of them in a sequence or in parallel.

ANNEX II - RESOLVING INSOLVENCY INDICATORS

Resolving Insolvency: The Synthetic Insolvency Indicators (World Bank Group, 2020)

The World Bank Doing Business indicators included quantitative indicators measuring the recovery rate of insolvency proceedings as well as the strength of the legal framework applicable to liquidation and reorganisation proceedings. Their production has been interrupted in 2021.[10] The indexes were based on previous research by Djankov et al. (2008) and apply to corporate insolvency only. A synthetic score of "**resolving insolvency**" was obtained as the simple average of an indicator on the “**recovery rate**” from insolvency proceedings and of the one on the “**strength of the insolvency framewor**k”. The indicators were derived from questionnaire responses by local insolvency practitioners and are verified through a study of laws and regulations as well as public information on insolvency systems. The indicators are typically expressed as "distance to frontier", and hence range from 0 (the weakest) to 100 (the strongest).

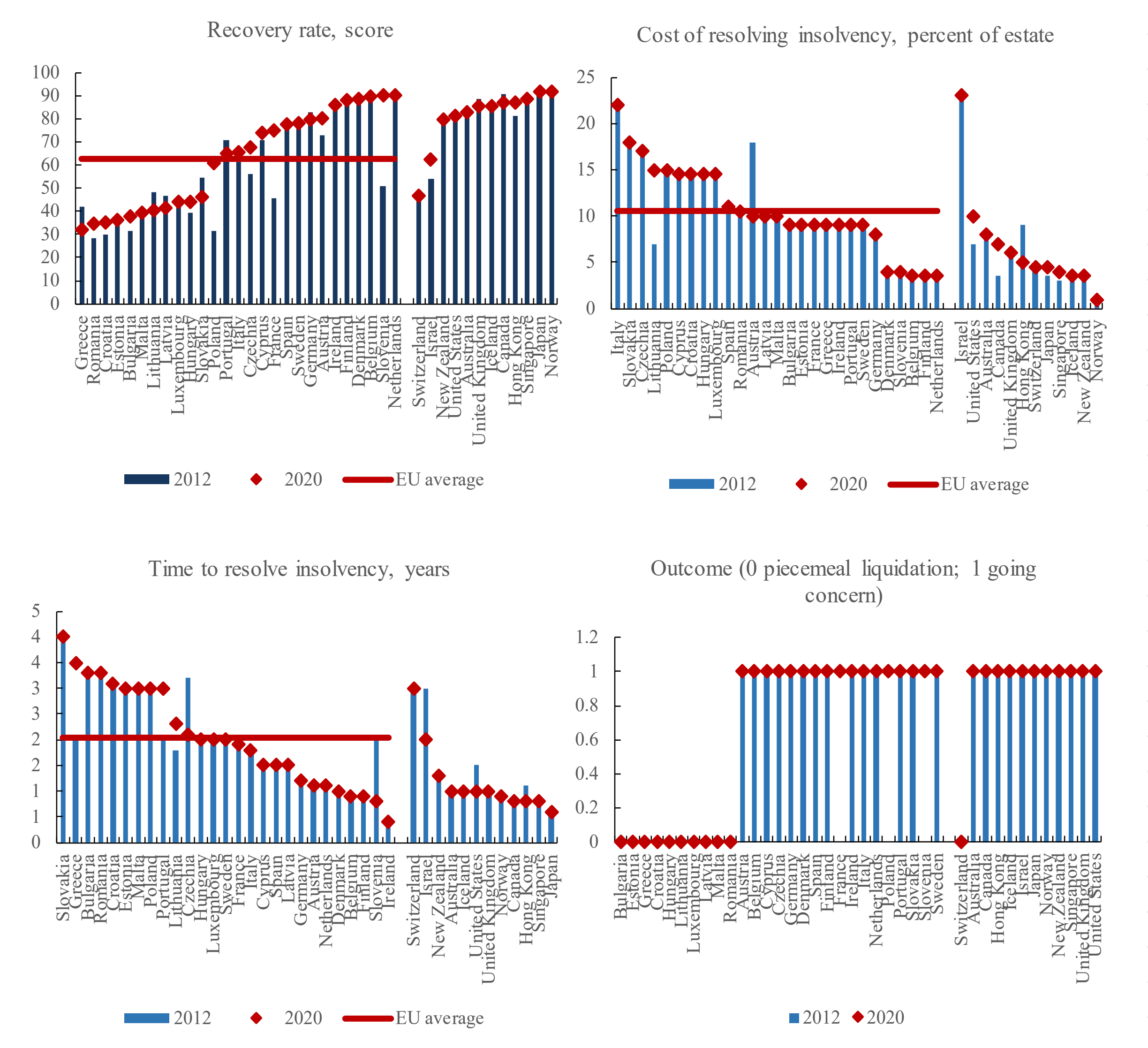
The **recovery rate indicator** was recorded as cents on the dollar recovered by secured creditors through reorganisation, liquidation or debt enforcement (foreclosure or receivership) proceedings and builds on separate indicators on time to complete insolvency, its cost, and the outcome. The index was based on expert judgements on how a typical insolvency case for an hotel – owning its buildings as the single asset – would be solved in light of the available legislation and the practice followed in the country considered. The outcome depends on whether the business emerges from the proceedings as a going concern or the assets are sold piecemeal. Then the costs of the proceedings were deducted (1 cent for each percentage point of the value of the debtor’s estate). Finally, the value lost as a result of the time the money remains tied up in insolvency proceedings was taken into account, including the loss of value due to depreciation of the hotel furniture (set conventionally at 20% a year). The recovery rate was the present value of the remaining proceeds.

The **strength of the insolvency framework** indicator was based on four indices: (i) commencement of proceedings (the easier to start proceedings for debtors or creditors the higher the score), (ii) management of debtor’s assets (the more advantageous the treatment of debtors' assets to company stakeholders the higher the score), (iii) reorganisation proceedings (the score is higher if the legislation is in compliance with international principles of best practice); (iv) creditor participation (the higher creditors' participation in the definition of insolvency proceedings, the higher the score).

Synthetic indicators permit easy cross-country comparisons. However, caution is needed in interpreting such indicators as their construction is based on a number of assumptions. Notably, when interpreting the World Banks’s insolvency indicator, it should be kept in mind that it was largely judgmental as it was based on expert opinions related to a specific case study. Moreover, the World Bank Doing Business insolvency score offered only a partial picture of insolvency regimes in a country as it refers to corporate insolvency only.

[10] https://www.worldbank.org/en/news/statement/2021/09/16/world-bank-group-to-discontinue-doing-business-report.

Graph A.2. **Recovery rate and subcomponents**



Source: World Bank Doing Business 2020.

ANNEX III – ECONOMETRIC MODEL FOR INSOLVENCY GROWTH

The econometric model to use to predict insolvency growth departs from Banerjee et al. (2020), but extends it in various dimensions. Firstly, it extends the country sample from 13 to 33 countries, covering 27 EU countries and 6 non-EU advanced economies (Australia, Japan, Norway, Switzerland, Japan, United Kingdom and United States), as a small sample size could bias the estimates. The time sample of the regressions is 1995-2019, but the sample is unbalanced. Secondly, it considers the endogeneity of output, instrumenting it with the GDP of a benchmark economy. For EU countries excluding Germany the benchmark used is Germany, for the remaining countries it is the US. Finally, a role for the NFC debt accumulation is also considered and the NFC debt-to-GDP ratio is proved to be significant in the analysis. This corroborates concerns by the BIS (2021) that firms' reliance on credit during the COVID 19 sock could increase solvency risk. The estimated model is given by equation (1):

$$\Delta \ln\left(Insolvencies\right)_t = \alpha + \beta \Delta \ln\left(GDP\right)_t + \gamma \Delta ln(NFCdebt_{t-1}) + e_{it} \quad \text{or} \qquad (1)$$

$$gInsolvencies_t = \alpha + \beta gGDP_t + \gamma gNFCdebt_{t-1} + e_{it}$$

Where GDP is real GDP and NFCdebt is NFC debt (loans plus debt securities in national currency and g denotes growth rate in percent. Table A.4 presents the results for alternative estimations methods. The estimated regressions pass the standard IV tests. Table A.4 (columns 3 and 4) also shows an alternative model specification, suggested by ECB (2022), which also includes the unemployment rate. Even though, the lagged change in the unemployment rate is significant, the model excluding this variable has been preferred. First, its significance may be derived simply by collinearity with the real GDP growth (which gets a smaller-sized coefficient when this variable is included). Secondly, during 2020 and 2021, this variable has also been strongly affected by policy measures. Thirdly, because theoretically the relationship between unemployment and insolvencies can be ambiguous as also reflected in the different signs for the coefficients obtained in columns (3) and (4).[11] The estimated regressions pass the standard IV tests. The coefficients used in the insolvency gaps are those of column (6) although results do not change significantly if the other estimates are used.

Table A.3 **Insolvencies model**

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	IV	IV	IV	IV-EU	IV-FOD
Real GDP growth	-1.729**	-2.476**	-2.319**	-1.913**	-2.313**	-1.990**
	(0.550)	(0.476)	(0.483)	(0.568)	(0.484)	(0.518)
NFC debt growth (lagged)	0.365**	0.395**	0.352**	0.371**	0.355**	0.422**
	(0.126)	(0.098)	(0.092)	(0.101)	(0.101)	(0.127)
Unemployment rate (lagged)			-0.179			
			(0.513)			
Change in unemployment rate (lagged)				1.581**		
				(0.576)		
Constant	3.426*	5.238**	7.016+	4.503**	5.738**	4.309**
	(1.365)	(1.389)	(3.789)	(1.560)	(1.485)	(1.159)
Observations	597	597	520	518	474	676
Countries	33	33	30	30	27	33
Overall R2	0.06	0.05	0.06	0.06	0.05	
p-value of Sargan/Hansen J statistic		0.7847	0.7826	0.9014	0.7380	0.5037
(Cragg-Donald or Kleibergen-Paap)		79.72	74.07	46.92	72.96	
p-value of underidentification LM stati		0.0000	0.0001	0.0001	0.0002	
p-value of C-statistic		0.8670	0.7637	0.6676	0.7861	

Notes: Dependent variable insolvencies growth. Growth rates estimated as difference of the logarithm. Robust standard errors in parenthesis + $p<0.10$ * $p<0.05$ ** $p<0.01$. The overall R^2 is low but this is common to panel data models. Hansen test H0: instruments are adequate (satisfy orthogonality condition). Cragg-Donald statistic rule of thumb>10 no weak instruments. LM statistic H0: equation is under-identified. C-statistic endogeneity test H0: variable can be treated as exogenous (test on variables assumed exogenous). Column (1) shows OLS estimation. Column (2) instruments GDP with regional GDP, column (3) restricts the model to EU countries and column (4) uses GMM with forward orthogonal deviations (transforms each observation by subtracting the average of all future observations, see Arellano and Bover, 1995).

[11] For instance, higher unemployment does not need to necessarily lead to more insolvencies, on the contrary, when there is an economic recession if firms can lay off workers, firms are better able to survive. On the other hand, higher unemployment may also signal firm distress and higher insolvency fillings subsequently. The causation can also be the other way, higher insolvency fillings leading to higher subsequent unemployment.

ANNEX IV - INSOLVENCY REFORMS

Table A.4.1 **Reforms implemented in EU countries over the 2010-2021**

Country	Year	Summary description of the reform
Austria	2010	Adoption of the Insolvency Law Amendment Act 2010, which introduced reorganisation as the preferred alternative.
Belgium	2011	Introduction of a new law to promote and facilitate the survival of viable businesses experiencing financial difficulties.
Belgium	2015	Strengthened obligations, notably in terms of documentation, for the commencement of reorganisation procedures.
Belgium	2018	Creation of an informal and confidential procedure between the debtor and some creditors. The agreement is vetted by a mediator, which can be appointed by the court and can be homologated and registered by the court. Early warning indicators to identify dormant companies were also improved.
Belgium	2021	Introduction of a pre-packaged insolvency procedure, allowing the debtor to discretely prepare for judicial reorganisation proceedings under the supervision of a judicial administrator.
Bulgaria	2009	Amendment to the commerce act to extend further rights to secured creditors and increase the transparency of insolvency proceedings.
Bulgaria	2013	Reform to broaden the basis to start insolvency procedure and to avoid suspect transactions.
Bulgaria	2016	Set up of a preventive restructuring for companies that are not yet insolvent but runs an immediate risk of becoming insolvent
Bulgaria	2017	Legislation for insolvency for over-indebted individuals (personal insolvency) submitted to parliament.
Croatia	2012	Creation of the Pre-Bankruptcy Settlement Procedure: an out-of-court settlement handled by FINA.
Croatia	2015	Adoption of the Bankruptcy Act (Official Gazette of the Republic of Croatia (OG) No. 71/15), which aimed to improve restructuring procedures and established early warning for insolvency.
Croatia	2016	Introduction of personal bankruptcy for consumers.
Croatia	2017	Specific law, linked to the Agrokor case, which creates the possibility for the State to assume chairmanship when the company is of systemic importance.
Cyprus	2015	Introduction of a new corporate reorganisation procedure, called examinership, to allow the preparation of a restructuring plan, with only court approval, by an independent expert. Set up of an automatic discharge after 3 years for honest individuals, which can be expanded to 8 years or revoked if wrongdoing is found.
Cyprus	2015	Introduction of new measures to streamline the liquidation process. Delays are limited, voting rights are simplified. Review of the foreclosure process to speed up the related delays.
Cyprus	2016	Introduction of an alternative between speedy debt relief for debtor with little ability to repay and repayment plans for the others. Micro enterprise cases are addressed by coordinating the repayment plan and restructuring of the micro company.
Cyprus*	2018	Reinforcement of insolvency and foreclosure frameworks in the context of commitments to DG COM as a precondition for approval of state aid to facilitate the sale of the Cooperative Central Bank. Among other things, the changes simplified notification procedures and facilitated e-auctions.
Czechia	2008	Introduction of reorganisation as the preferred method for resolving insolvency, strengthening the rights of creditors, set up of an electronic insolvency register.
Czechia	2014	Introduction of a discharge period for debts of entrepreneurs (formerly only for non-entrepreneurs natural persons could benefit from such a measure).
Czechia	2018	Amendment to the CZ insolvency law adopted by government and currently under discussion in parliament.
Czechia	2019	Comprehensive Insolvency Act amendment (Act No. 31/2019 Coll.) introducing new ways of discharging debts for physical persons. A special regime applies for the discharge of debts of vulnerable physical persons (e.g., pensioners and certain handicapped persons).
Estonia	2008	Adoption of a new Restructuring Act which allows distressed companies on the verge of insolvency to reorganise and restructure their debt outside insolvency with debtor staying in possession and a stay on court enforcement activities.

Estonia	2010	Creation of a bankruptcy procedure for individuals including a debt discharge after 5 years.
Finland	2019	Adoption of a set of legislative acts to simplify and speed up the bankruptcy procedure and also to lay down provisions on the maintenance, responsibilities, access rights and data stored in the case management system for bankruptcy and corporate restructuring matters.
France	2010	Creation of an accelerated restructuring procedure ahead of insolvency for financial creditors only.
France	2014	Creation of an accelerated procedure for reorganisation beyond the financial restructuring only.
France	2021	Transposition of the 2019 EU Restructuring and Insolvency Directive. Major changes: creditors are organised in 'classes of affected parties' to vote on the draft restructuring plan and the powers of the court are extended; strengthening of mechanisms for detecting and preventing companies' difficulties and of the right of individual entrepreneurs to a second chance; amend the rights of secured creditors (collateral) in the event of the opening of preventive or collective procedure to deal with difficulties; facilitate the financing of undertakings subject to a safeguard procedure or to a reorganisation plan.
Germany	2012	Possibility to restructure before company enters insolvency provided debtor remain in possession with limited role for courts. Introduction of cram-down mechanisms during insolvency.
Germany	2014	Act to Shorten Residual Debt Discharge Proceedings and to Strengthen Creditors' Rights which facilitates a faster new financial start for individuals.
Germany	2020	Shortening the duration of the private insolvency (for 6 to 3 years)
Germany	2021	Restructuring of an enterprise admissible in resolving an insolvency procedure.
Greece	2007	Modernisation of the insolvency code and creation of a restructuring procedure modelled on the French conciliation.
Greece	2010	Creation of an insolvency procedure for private individuals.
Greece	2011	Creation of a rehabilitation procedure as a preventive mechanism for the insolvency of distressed businesses. The process is initiated by the debtor and is designed to address situations of illiquidity by means of a restructuring agreement subscribed by a majority of the creditors.
Greece	2012	Introduction of a new rehabilitation procedure replacing the conciliation procedure.
Greece	2013	Streamlining of the personal insolvency by eliminated the compulsory extrajudicial phase.
Greece	2015	Reform to improve some aspects of the restructuring, including access to financing and use of insolvency professionals. Creation of an out-of-court setting for preventive restructuring with simplified requirements for SMEs.
Greece	2015	Inclusion of tax and social security debt in the scope of debt discharge. Improved control of strategic default, through strengthen reporting requirements.
Greece	2017	Establishment of a mechanism for out-of-court debt settlement for indebted businesses (Law 4469/2017). Introduction of the option of electronic auctions for pending foreclosure proceedings of immovable property sales (Law 4472/2017)
Greece	2018	Introduction of mandatory use of electronic auctions for all types of immovable property (Law 4512/2018). Expansion of the scope of the out-of-court debt settlement framework, enabling creditors with smaller claims to participate in the out-of-court workout with an indebted business (Law 4587/2018).
Greece	2020	New integrated corporate and personal insolvency regime, which fully entered into force in June 2021. Pre-bankruptcy proceedings, including an automated out of court process and a prepack business recovery process contingent to court ratification. A safety net is also established for vulnerable debtors (subsidy in out-of-court restructuring; sale-and-leaseback regime in cases of declared insolvency or if the primary residence is at risk of being auctioned). Introduction of an early warning mechanism and IT platform.
Hungary	2010	Adoption of a recommendation for a self-regulating model for dealing with companies in financial distress in May 2010.
Hungary	2015	Creation of a personal bankruptcy framework, which combines the interest of creditors and the need to provide relief to qualifying debtors.
Hungary	2017	Adoption of a law which increases the minimum sale price of a residential property in the enforcement procedure from the 70% to 100% of the market value.
Hungary	2018	Adoption by the central bank of a recommendation for out-of-court restructuring to further build on the initiative taken in 2010.
Ireland	2013	Set up of the personal insolvency law introducing pre-insolvency procedures and a discharge period of 3 years (later reduced to 1 year).
Ireland	2021	Introduction of the small company administrative rescue process (SCARP), providing a framework for the rescue of small and micro companies.

Italy	2007	New legislation giving trustees greater discretion in liquidating assets and granting creditors the right to propose new arrangements with other creditors as part of the liquidation procedure.
Italy	2012	Facilitation of majority approval of restructuring plans. Easier use of restructuring agreements and rescue plans. Measures to allow firms to enter reorganisation without a plan. Creation of a specific procedure for liquidation and reorganisation of SMEs.
Italy	2015	Measures to increase the commencement criteria for restructuring, to streamline the process and to better ensure that the companies continue activities (e.g. through interim financing, expanded cram down mechanism).
Italy	2016	Creation of a mechanism for tut-of-court enforcement of secured claims (Patto Marciano).
Italy*	2017	An enabling law of the insolvency framework passed by Parliament in October 2017, authorising the government to overhaul its bankruptcy legislation.
Latvia	2008	Introduction of personal bankruptcy, providing for a debt discharge after seven years.
Latvia	2008	Introduction of a "legal protection" procedure to restructure companies outside the in-court insolvency procedure. Set up of stronger standard for insolvency practitioners.
Latvia	2010	Introduction of an out-of-court settlement procedure.
Latvia	2017	Reform making insolvency practitioners public officials to reduce the risk of conflict of interest and frauds.
Latvia	2021	Streamlining of the examination of the insolvency administrators.
Lithuania	2011	Regulations relating to insolvency administrators that set out clear rules of liability for violations of law.
Lithuania	2012	Simplification of reorganisation proceedings together with strengthening of secured creditor's rights. Introduction of professional requirements for insolvency administrators.
Lithuania	2013	Creation of a personal insolvency for natural person if they are not fraudulent. Discharge period is set at 5 years.
Lithuania	2020	Reform of the Insolvency framework for Legal Persons, including: a new concept of insolvency which allows for the timely initiation of insolvency proceedings; more opportunities for viable businesses facing temporary financial problems to restructure; quick and objective liquidation procedures for non-viable companies; measures to improve the efficiency of insolvency practitioners by enhancing accountability and linking fees to results.
Lithuania	2021	Creation of the Early Warning System which identifies business experiencing financial difficulties and informs them about the possible threat of insolvency and providing business assistance.
Luxembourg	2013	Set up of a debt discharge for entrepreneurs as part of the over-indebtedness of consumer.
Luxembourg	2018	Strengthening of the system for early warning, which creates the possibility for debtor to initiate a conciliation. Set up of a procedure for "good-faith" entrepreneurs who could see a debt discharge at the end of the procedure.
Malta	2017	Measures to strengthen the roles of mediators throughout insolvency procedures.
Netherlands	2018	Presentation of a draft law introducing preventive restructuring in the otherwise secured creditor-friendly legal system.
Netherlands	2021	Entry into force of the Act on Court Confirmation of Extrajudicial Restructuring Plans (WHOA), introducing the possibility to offer a restructuring plan to prevent insolvency or a controlled liquidation. The restructuring plan can also be initiated by the creditors and shareholders.
Poland	2016	Introduction of new a new out-of-court restructuring mediated by an insolvency practitioner. Set up of a restructuring and bankruptcy register and definition of guidelines for the remuneration of insolvency practitioners.
Portugal	2012	Creation of the SIREVE, which is an out-of-court restructuring procedure for SMEs and PER, a reorganisation procedure with limited court involvement.
Portugal	2013	Creation of a framework for insolvency administrator and of a new supervisory authority (CAAJ).
Portugal	2017	Measures to make it less easy to appeal to reorganisation procedures and to ensure that company can continue as a going concern in case of a plan.
Portugal	2020	Introduction of a mandatory partial apportionments in all pending insolvency proceedings (with liquidation proceeds above € 10 000).
Romania	2014	Introduction of time limits for the reorganisation procedure, which can then be transformed into liquidation. Revisions of rules to ease the approval and the viability of the company throughout the
Romania	2017	Introduction of a personal insolvency law.

Slovakia	2012	Revision of the framework to strengthen the rights of secured creditors, improve commencement criteria for creditors and redefine rules for the conversion of restructuring into liquidation.
Slovakia	2017	Creation of a procedure for personal insolvency, including debt discharge (either after all assets are sold or after a 30% repayment after 5 years).
Slovenia	2013	Introduction of a pre-insolvency restructuring proceeding for large and medium-sized firms to restructure financial claims (including secured claims). Simplified reorganisation procedure for micro and small enterprises, although with limited options for the restructuring of their debt.
Spain	2013	Introduction of a specific out-of-court restructuring procedure for SMEs. Procedure foresees the assistance of a mediator.
Spain	2015	Introduction of a cross-class cram-down mechanism for restructuring. Measures to allow honest entrepreneurs a fresh start.
Spain	2015	Introduction of new rules for out-of-court restructuring, with notably a focus on pre-packaged reorganisations.
Spain	2020	Restated text of the insolvency law streamlining the structure and clarifying interpretation of provisions (following 28 amendments of the pre-existing law since its approval in 2003).

Source: European Commission (2018), updated with input from ECFIN gepgraphical desks. Notes: The table includes only changes to insolvency legislation adopted until end-2021. In 2022 a number of EU countries adopted or were in the process of adopting legislation to transpose the EU 2019 Restructuring Directive. The table does not include judicial reforns linked to insolvency nor temporary changes to the insolvency framework linked to COVID-19. * Subsequent changes to the foreclosure law in 2020, introduce new delays.

Table A.4.2. **Reforms and investments included in Recovery and Resilience Plans (2021-2026)**

Country	Measure Name	Measure Level	Measure Type
Bulgaria	Strengthening insolvency procedures	Measure	Reform
Croatia	Increasing the efficiency of the justice system to increase citizens' trust	Measure	Reform
Cyprus	Reinforcing and strengthening the insolvency framework	Measure	Reform
	Reinforcing and strengthening the insolvency framework - Digital	Sub-Measure	Reform
	Reinforcing and strengthening the insolvency framework - Other	Sub-Measure	Reform
Greece	Implementation of the new unified insolvency framework for the restructuring of debt and 2nd chance	Measure	Reform
Italy	Reform of insolvency framework	Measure	Reform
Lithuania	Tools available to businesses to manage insolvency risk	Measure	Reform
Portugal	Economic justice and business environment	Measure	Reform
Romania	Legislative transparency, de-bureaucratisation and procedural simplification for business	Measure	Reform
Slovakia	Harmonising and digitalising insolvency procedures	Measure	Reform
Slovakia	Digitalisation of insolvency processes	Measure	Investment
Spain	Improving business regulation and climate	Measure	Reform

Source: European Commission, RRF.

EUROPEAN ECONOMY DISCUSSION PAPERS

European Economy Discussion Papers can be accessed and downloaded free of charge from the following address: Publications (europa.eu).

Titles published before July 2015 under the Economic Papers series can be accessed and downloaded free of charge from:
http://ec.europa.eu/economy_finance/publications/economic_paper/index_en.htm.

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct Information Centres. You can find the address of the centre nearest you at: http://europa.eu/contact.

On the phone or by e-mail

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696 or
- by electronic mail via: http://europa.eu/contact.

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: http://europa.eu.

EU Publications

You can download or order free and priced EU publications from EU Bookshop at: http://publications.europa.eu/bookshop. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see http://europa.eu/contact).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex at: http://eur-lex.europa.eu.

Open data from the EU

The EU Open Data Portal (http://data.europa.eu/euodp/en/data) provides access to datasets from the EU. Data can be downloaded and reused for free, both for commercial and non-commercial purposes.

Publications Office
of the European Union