

INTERNATIONAL MONETARY FUND

Personal Insolvency and Data Collection Systems

José M. Garrido, Jason Kilborn, and Anjum Rosha

WP/25/124

IMF Working Papers describe research in progress by the author(s) and are published to elicit comments and to encourage debate.

The views expressed in IMF Working Papers are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

**2025
JUN**



WORKING PAPER

IMF Working Paper
Legal Department

Personal Insolvency and Data Collection Systems*

Authorized for distribution by Brian Patterson
June 2025

IMF Working Papers describe research in progress by the author(s) and are published to elicit comments and to encourage debate. The views expressed in IMF Working Papers are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

ABSTRACT: Countries around the world are introducing or improving their personal insolvency regimes, but frequently the effects of these reforms are not evaluated, and the reforms themselves are not supported by adequate data analysis. This paper proposes the establishment and implementation of data collection systems for personal insolvency, and examines the characteristics of such systems to assess the performance of personal insolvency regimes and to extract information useful not only for the design of personal insolvency, but also for other social policies. Adequate data collection can contribute to effectively achieving the goals of personal insolvency reform.

RECOMMENDED CITATION: Garrido, J. M., Kilborn, J., and Rosha, A., 2025, *Personal Insolvency and Data Collection Systems*, IMF WP 25/124.

JEL Classification Numbers:	G33; K35, C81, D14
Keywords:	Bankruptcy; Insolvency; Data Collection Systems; Personal Finance
Author's E-Mail Address:	JGARRIDO@imf.org ; jkilborn@uic.edu ; arosha@imf.org

*The authors would like to thank Stefan Van Hemmen, Joseph Spooner, Christiane Roehler, Akito Matsumoto, and Mike Li for their extremely valuable comments.

WORKING PAPERS

Personal Insolvency and Data Collection Systems

Prepared by José M. Garrido, Jason Kilborn, and Anjum Rosha

Contents

Glossary	3
Executive Summary	4
I. Introduction	6
II. The effects of personal insolvency law	8
III. Designing a data collection system for the personal insolvency regime	14
1. Examples of data reports in comparative practice.	18
2. Data collected on procedures	20
3. Data collected on users	26
4. Implementing the data collection system	30
IV. Conclusion	36
Annex I. Information on Personal Insolvency in Selected Sources	38
Annex II. Examples of data reporting on personal insolvency regimes	49
Annex III. Sample of simplified proposal for data collection system	54
References	57

Glossary

ADR: Alternative Dispute Resolution

AFSA: Australian Financial Security Authority

BAPCPA: Bankruptcy Abuse Prevention and Consumer Protection Act (US)

DRO: Debt Relief Order

EC: European Commission

EU: European Union

IBC: Insolvency and Bankruptcy Code (India)

IMF: International Monetary Fund

INSOL: International Association of Insolvency Professionals

IP: Insolvency Professional

NCR: National Credit Regulator (South Africa)

SICAAC: Alternative dispute resolution system (Colombia)

SOU: Swedish Government Official Reports

UNCITRAL: United Nations Commission for International Trade Law

WSNP: Law for the restructuring of natural persons' debt (Netherlands)

YOY: year-over-year

Executive Summary

This paper examines the crucial role of data collection in personal insolvency regimes, highlighting its importance for effective policy making, legislative reforms, and economic analysis. As personal insolvency laws have evolved to address the complexities of modern credit-based economies, the need for comprehensive, systematic data collection has become increasingly apparent.

Personal insolvency laws offer several critical benefits across different stakeholders. For creditors, these laws maximize value and preserve inter-creditor equity through collective action processes. Debtors benefit from the relief provided and the opportunity for a "fresh start" or "second chance" through debt discharge. The broader economy and society gain from limiting the negative systemic effects of unregulated distressed debt, encouraging responsible lending practices, and fostering entrepreneurship.

Data collection serves two primary functions in personal insolvency: measuring the effectiveness and efficiency of the personal insolvency regime and gathering information for analysis and development of social policies. Robust data collection allows for informed decision-making and evidence-based policy reforms. It enables the identification of trends and patterns in personal insolvency, ensures fairness and equity in the application of insolvency laws, facilitates research and analysis of consumer behavior and economic trends, and enables international comparisons and benchmarking.

When designing a data collection system, several key considerations must be taken into account. These include defining clear objectives aligned with the goals of the personal insolvency regime, ensuring data privacy and protection of sensitive personal information, standardizing data elements and formats for consistency and ease of analysis, minimizing the burden on respondents while collecting necessary information, and integrating data collection into existing insolvency processes and forms.

Effective implementation of a data collection system involves assigning responsibility to a relevant authority, such as a national statistics agency, insolvency regulator, or the courts. It requires designing user-friendly data collection forms with clear instructions, conducting pilot tests to identify and address potential challenges, implementing robust data security measures, providing training for staff involved in data collection and analysis, and regularly reviewing and updating the data collection process.

The paper recommends collecting data on various aspects of the personal insolvency system. This includes system efficiency metrics such as the number of applications, rejection rates,

reasons for rejection, processing times, and costs. Procedural outcomes, including discharge rates, reasons for denial of discharge, and plan completion rates, should also be tracked. Debtor demographics like age, gender, education, occupation, and geographic location provide valuable insights. Financial information, including types of creditors, debt composition, asset values, and income levels, is crucial for understanding the nature of personal insolvency cases. Additionally, institutional performance metrics for courts and insolvency practitioners should be collected to assess the efficiency of the system's administration.

In conclusion, implementing comprehensive data collection systems for personal insolvency is essential for assessing the effectiveness of personal insolvency laws in achieving their objectives. These systems provide valuable insights into broader economic and social trends, enable evidence-based policy decisions and legislative reforms, and enhance transparency and accountability in the personal insolvency system. While data collection requires investment in resources and infrastructure, the cost of not developing these systems is far higher. Countries should prioritize the assessment and improvement of their personal insolvency data collection mechanisms to ensure their insolvency regimes remain responsive, effective, and fair in the face of evolving economic challenges. By doing so, they can create a solid foundation for understanding and addressing the complex phenomenon of personal insolvency, ultimately contributing to more robust and equitable financial systems.

I. Introduction

In recent times, with rising levels of consumer debt in many countries, there has been an increased interest in personal insolvency laws. In this paper, “personal insolvency” refers to the insolvency of natural persons. An insolvent natural person may have debts arising from business activities as well as consumer debts, and in many cases, it can be difficult to distinguish between the two. Legal frameworks that provide relief for natural persons vary as to whether and the extent to which business debts of a natural person can be addressed through a personal insolvency procedure. This paper does not comment on the appropriate scope of personal insolvency laws but focuses on aspects of data collection in cases of insolvency of natural persons that are likely to be relevant to most systems. Many countries have adopted or are considering adopting personal insolvency legislation, and others have introduced or are in the process of reforming existing personal insolvency law regimes. This impetus may be driven in part by the increase in the levels of household and consumer debt in banks’ portfolios, and concerns around the impact of economic challenges on affordability (inflation, rising interest rates, soaring energy costs, and the like). Recent crises (US mortgage crisis and European crisis) have also highlighted the importance of a strong personal insolvency framework to contribute to financial stability.

Personal insolvency legislation, like corporate insolvency legislation, is often designed without a proper empirical foundation. Unlike international best practices in corporate insolvency, there is only limited guidance in the area of consumer insolvency law.¹ In addition, detailed data on the actual performance of the personal insolvency regime of a country are not available, and sometimes the issues experienced in its application in practice are not carefully studied. As a result, there are few assessments of personal insolvency systems based on either qualitative or empirical data. Occasionally, evaluations of the efficacy of personal insolvency regimes are generally based on cross-country experience and anecdotal evidence collected by policy makers and practitioners from a variety of stakeholders in the process. Even where data collection systems exist for commercial or corporate insolvency cases, it is not possible to simply extend their scope to cover personal insolvency cases, which as explained in this paper, require their own data collection framework. Further, concerns about privacy and the issue of stigma in personal insolvency represent a much more significant issue than in commercial insolvency.

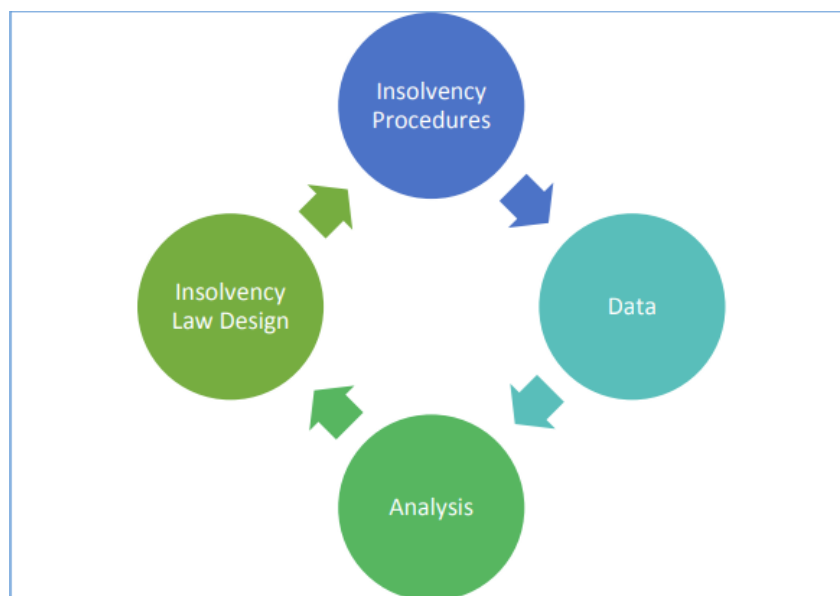
Empirical data is invaluable in supporting crucial analysis that should feed into the design and reform of personal insolvency laws. While the framework for data collection

¹ World Bank, 2013; INSOL 2001 and 2011; see Ramsay, 2017.

should ideally be considered ex ante at the design stage of the personal insolvency law, subsequent reforms to such laws also provide a window of opportunity for the introduction or the overhaul of data collection systems. It is difficult to monitor the impact and success of a specific law or any reforms to it without data. Systematic collection of data and its analysis can help assuage fears among policy makers that personal insolvency laws may harm the financial system by providing debtors with a path to discharge without full repayment of their debts. Statistics compiled based on the collection of empirical data can help price risks more efficiently, identify trends, assist in the efficient allocation of institutional resources, and contribute to keeping the insolvency system accountable.

Sound insolvency policies and reforms that improve the personal insolvency regime are possible with the systematic collection of data and its careful analysis. Designing systems based on experience captured through statistics allows targeted and impactful legislative changes that can address specific problems in a personal insolvency framework. The continuous collection and analysis of data feeds into the design of reforms and the assessment of effectiveness of reforms, in a virtuous feedback loop that reinforces the legislative interventions (figure 1). Legislating “in the dark” is a disadvantage and in the age of big data would be incongruous. Impact assessments and legislative reforms that are not backed up by empirical data, risk being inefficient or even detrimental.²

Figure 1



Source: J. Garrido et al., *The Use of Data in Assessing and Designing Insolvency Systems*, IMF WP/19/27

² J. Garrido et al., 2019, at 35.

Of course, data has its limitations and is only one of many tools for improved policy making. Data collection and statistics support analytical work, rather than replacing it. Data and statistics cannot [always] offer details about the context, history, externalities or country-specific circumstances that have led to the observed outcomes. Information on the underlying policy problems or the policy changes that could result in improvements to the system requires expert and independent analysis.³

The assessment and design of personal insolvency regimes should ideally be based on complete and reliable data, which can provide a sound foundation for making appropriate policy choices when considering reforms. We also recommend that digitalization and technological tools be used to the maximum extent possible to limit human errors, as well as easily store, share, search and review data. This paper seeks to contribute a first step towards the development of data gathering systems that will support the analysis of personal insolvency regimes. It provides an overview of the key challenges in designing and collecting data in personal insolvency cases and reflects on the existing country experience. It proposes some preliminary principles that could be useful in developing data collection models by countries that aim to assess and design their personal insolvency systems, while recognizing the inherent limitations of all data systems and varying country circumstances. This paper is targeted at policy makers, regulators, insolvency practitioners and advisors, as well as academics. The paper is structured as follows: Section II discusses the effects of personal insolvency law and the need to measure the benefits, and other possible effects, of the introduction of personal insolvency regimes. Section III offers guidance on the design of a data collection system for personal insolvency and examines in detail the information that could be collected about the performance of the personal insolvency regime and the demographic and economic data produced by the operation of the regime itself. The section also offers advice on the implementation of data collection systems and the publication of statistics and reports. Section IV concludes.

II. The effects of personal insolvency law

Benefits of personal insolvency laws

Personal insolvency is a complex phenomenon and differs significantly from corporate insolvency. While some aspects of corporate and household insolvency frameworks overlap, the human element in the insolvency of natural persons introduces

³ J. Garrido et al., 2019, at 9.

unique challenges. Unlike corporations, natural persons cannot be liquidated and, even in insolvency, must be offered incentives to continue to pursue productive activities. Concerns about privacy and stigma tend to be more acute in personal insolvency cases and need to be overcome to create confidence in the system.

Personal insolvency procedures can have a wide range of desired benefits. Chief among these are the following: (i) benefits for creditors, (ii) benefits for debtors, (iii) benefits to the economy and society as a whole. While in the past, the main benefits of a personal insolvency regime were understood to be to creditors as well as to debtors and their families, recent literature highlights the economic and social benefits of a well-functioning insolvency law applicable to natural persons.⁴

(i) Benefits to creditors

Value maximization for creditors and preserving inter-creditor equity are important goals of a personal insolvency law. As in corporate insolvency, the protection and maximization of value for the benefit of all interested parties and the economy in general is an important goal. Personal Insolvency laws can help maximize value for creditors and ensure fair distribution of proceeds between creditors by establishing a collective action process. This eliminates the inherent duplication of efforts of various creditors in pursuing separate individual enforcement actions and value lost in conducting fire sales of the debtor's assets. Individual creditor actions require each creditor conduct its own investigations and valuations regarding a debtor's (often insubstantial) assets in a situation of information asymmetry and considerable uncertainty.

In an insolvency process, the administrative expenses of enforcement are bundled into one proceeding and shared between creditors, and orderly liquidation of assets can be undertaken by an independent, neutral administrator, maximizing the value of assets for all creditors and ensuring equitable distribution among creditors. The process can also provide for ongoing monitoring of the debtor's situation, for the benefit of all creditors. Personal insolvency laws do not generally deprive creditors of any of their substantive rights. Moreover, in practice, often creditors' claims against an insolvent individual debtor have little or no practical value and creditors are likely to have greater recovery if they gain access to some source of future value from the debtor for a limited period under a payment plan. The most important type of future property of the debtor is wages and other earnings, with the incentive of a "fresh start" or "second chance" within a reasonable period motivating the debtor to continue to be productive.⁵

(ii) Benefits to debtors

⁴ See World Bank, 2013, para. 57.

⁵ See World Bank, 2013, paras. 58-69.

In addition to the aim of enhancing value for creditors, personal insolvency systems have been used also to provide relief for debtors. Personal insolvency laws can help debtors who are honest but unfortunate through procedures that result in a fresh start or second chance through the discharge of the individual's residual debts. In this way, over-indebted individuals can recover from their financial challenges and move forward.⁶

A second chance or a discharge for the debtors has both economic and other benefits. Once residual debts are discharged, the debtor can return to productive activities. There are significant intangible benefits of discharge such as an individual debtor's increased productivity, peace of mind, reduced suffering and anxiety, freedom from pursuit by creditors, and the like. These benefits may also extend to the debtor's family who may also be impacted by the insolvency of the debtor.

Permitting a second chance through a discharge of the debtor is also rooted in societal considerations. Personal insolvency law and policies to support individual debtors may have benefits such as preventing homelessness and reducing the reliance on state resources and social support schemes such as welfare payments or unemployment claims. Discharged individuals can return to productive activities that contribute to the economy and to fiscal revenue for the state.

(iii) Benefits to the economy and society

Insolvency laws do not function in a vacuum and have economic and social consequences.⁷ Overall, the design of personal insolvency regimes influences risk-taking behavior by both borrowing individuals and financial institutions, with significant macroeconomic implications. A significant concern driving the adoption and reform of personal insolvency laws is limiting the negative systemic effects of unregulated distressed debt. Two categories of benefits can be conceived: (i) benefits associated with disciplining creditors to acknowledge the reality of their low-value claims against distressed debtors, internalize the costs of their own lax credit evaluation, and more effectively and fairly redistribute those costs among the society that benefits from the availability of credit; and (ii) benefits, both national and international, of maximizing engagement and productivity by debtors. More specifically:

- For banks and other regulated financial institutions, it is important that the book value of their claims reflect the reality with regard to the likely prospects of recovery. Failure to do so can result in hidden weaknesses in the financial system and impede timely and appropriate supervisory actions. Personal insolvency laws can force creditors to recognize the impairment of their claims and the likelihood of loss. It is

⁶ See World Bank, 2013, paras. 70-75.

⁷ See World Bank, 2013, paras. 76 -111.

important to note that the personal insolvency law does not cause losses, rather it forces realism in the valuation of existing claims by creditors.

- As most insolvent individuals have little or no assets, it is likely that collections from the seizure and sale of the debtor's assets would not be sufficient to cover the cost of the enforcement process. An insolvency framework dealing with such cases can help save creditors time and offer the debtor swift relief.
- An insolvency regime can encourage creditors to engage in more responsible lending practices by concentrating risks with lenders rather than allowing the costs of the risks to be externalized and passed on to other borrowers. Creditors who know that their debtors have access to a framework that offers a second chance have an incentive to engage in more careful lending practices.
- The expectations for burden sharing between stakeholders, as well as efficient, effective, and fair distribution of costs can take place through a predictable and well-functioning insolvency system.
- A variety of direct and indirect social costs of leaving debtors to languish in a state of perpetual debt distress can be addressed through the second chance offered through a personal insolvency law. Debt-distressed individuals may rely on unemployment, social security and other welfare benefits. A second chance allows debtors to return to productivity and no longer draw on state resources.
- Along with reducing social costs, an insolvency system that restores debtors to productive activity that generates regular income results in positive contributions towards taxes and social security. In addition, debtors who benefit from a second chance and become productive members of society can contribute to consumption in the economy.
- A well-functioning insolvency regime can provide a powerful impetus to individuals to undertake the risks that necessarily accompany the rewards of starting a business and could help foster entrepreneurship.
- Insolvency systems function essentially as a safety valve, to release pressure that builds up in a financial system as a result of excessive leverage and pent-up productivity.

Risks associated with personal insolvency laws

Three particularly critical risks can hamper the adoption or proper functioning of a personal insolvency law: moral hazard, debtor fraud and stigma.⁸ These are described in greater detail below.

- **Moral hazard:** In the context of personal insolvency systems, “moral hazard” refers to the creation of incentives for individual debtors to act irresponsibly with respect to their finances and obligations. Indeed, the risk appetite of some debtors may increase in response to the presence of a “safety net” in the event of failure, and inevitably there will also be some attempts by debtors to attempt to evade their obligations by seeking insolvency relief when they are not in fact insolvent. There is consensus that personal insolvency laws should be designed in a way that does not shield debtors who have the means to pay but choose not to pay (“strategic default”). Strategic default takes place when the gains from the default outweigh the perceived cost of presumed sanctions.⁹ Even in well-designed systems, debtors may find it possible to exploit the various inefficiencies of the system to avoid the consequences of default (e.g., design flaws in the law, no procedure for weeding out ineligible applicants to a relief measure, weak enforcement laws, delays and low capacity in the institutional framework, high volume of applications, or lack of information on the debtors’ assets).
- **Debtor Fraud:** The possibility of debt fraud is closely linked to the moral hazard problem described above. Debtors may improperly take advantage of an insolvency system to evade their legitimate obligations, for instance: debtors may lie about their financial situation or conceal assets or income.
- **Stigma:** Stigma has the opposite effect as moral hazard and fraud in that it acts as a deterrent for debtors to initiate formal insolvency proceedings. A crucial challenge in many jurisdictions is encouraging eligible good faith debtors to initiate personal insolvency procedures, which in many parts of the world are still prone to stigma. Even in countries where insolvency frameworks are relatively long-standing and well-developed, significant numbers of debtors continue to avoid or delay seeking relief through the formal system, going to extreme lengths to do so. It is difficult to measure or estimate the volume of debtors that may be seeking to avoid insolvency as a result of the stigma attached to entering into a formal resolution process.

It has been argued that moral hazard and fraud have been exaggerated as arguments against debtor-friendly bankruptcy reforms.¹⁰ The incidence of moral hazard and fraud is difficult to study with precision as debtors typically make significant efforts to conceal such

⁸ See World Bank, 2013, paras. 112 -125.

⁹ See IMF, 2017.

¹⁰ See J. Kilborn, 2018.

actions, thus only the detected cases are known. In addition, there are very few studies on the subject.

The benefits of a well-designed personal insolvency law seem to outweigh the risks, but more research is needed. Many countries have successfully adopted personal insolvency laws without a detrimental effect on credit culture, but there are no empirical studies on the introduction of personal insolvency regimes. There seems to be a correlation between the development of consumer credit markets and the existence of an active personal insolvency practice, and in that regard, it could be inferred that the introduction of personal insolvency regimes does not cause substantial damage to access to credit..¹¹ This suggests that the concerns regarding the introduction of a personal insolvency laws causing a spike in loan delinquencies may be misplaced. However, there is a need for more research on the economic impact of the introduction of personal insolvency laws (see Annex III for a suggestion on economic indicators to be collected in connection with the introduction of personal insolvency regimes).

Challenges in Measuring Benefits and Risks

Before proceeding to the discussion on measuring the effectiveness and efficiency of personal insolvency frameworks (Section III.2), it may be useful to outline the challenges in measuring the benefits and risks of personal insolvency frameworks. In general, it is quite difficult to measure the beneficial impact or the risks of a personal insolvency law on debtors and the economy, but it may be easier to measure for creditors.

Value maximization as a benefit to creditors could be measured in a manner similar to corporate insolvency cases. The key indicators used in corporate insolvency of time, cost and recovery would be relevant also to personal insolvency, with a few adjustments to account for the successful execution of payment plans undertaken by debtors and to account for costs of administration of such payment plans. The changes in the time, cost and recovery rates following the introduction of a personal insolvency law can be tracked and recorded. Of course, unlike in corporate insolvency, in personal insolvency cases, the cost of administration of a payment plan is significant relative to the amounts recovered from debtors.

¹¹As indicated in the text, there seems to be a general correlation between the development of consumer credit and the establishment of personal insolvency frameworks that provide a second chance to individuals (see Gerhard, 2009). However, there is a need for more detailed research on insolvency reforms. On specific changes to personal insolvency laws, there are some empirical studies showing, for instance, that a more restrictive personal insolvency system results in lower interest rates for consumer debt (see Gross et al, 2019), that generous rules on exemptions may result in credit restrictions (Gropp, Scholz, and White, 1997), or that allowing the cramdown of mortgage loans in bankruptcy increases the cost of credit (Goodman and Levitin, 2014, showing modest increases in interest rates, and a differential effect on riskier and less risky debtors, as for the latter there was no increase in interest rates).

Benefits to debtors are more difficult to measure as they may only materialize over time making it challenging to assess the effectiveness of the personal insolvency system against the markers set out in this Section. That said, the number of debtors receiving a second chance or discharge is relatively straightforward to measure. It may also be useful for policy makers to collect information on debtor demographics. Of course, it is inherently more difficult to measure the ultimate intangible benefits of discharge to the debtor and the debtor's family such as an individual debtor's increased productivity, peace of mind, reduced suffering and anxiety, freedom from pursuit by creditors, and the like. Similarly, measuring societal benefits such as preventing homelessness and reducing the reliance on state resources and social support schemes such as welfare payments or unemployment claims is more challenging. One potential way to measure these benefits is to survey debtors who have successfully completed the personal insolvency process to gauge their experience.

Of all the benefits of personal insolvency laws, benefits to the economy and society are the most difficult to measure accurately. Many of these benefits are only apparent in the long-term, it is difficult to collect data with regard to these, and it is difficult to control for the many economic variables that are at play. However, it could be possible to study the change in interest rates for unsecured personal loans before and after a personal insolvency reform; or comparing interest rates between two countries that have different insolvency regimes. This paper does not attempt to design a model to measure these benefits but only notes that the literature recognizes that personal insolvency laws can contribute positively to the economy and society. The design of data collection systems, as recommended in this paper, paves the way for a deeper analysis of the macroeconomic implications of the personal insolvency regime.

III. Designing a data collection system for the personal insolvency regime

A data collection system requires, first of all, careful and conscientious design.¹²

Mistakes in the design of the data collection system come at a very high price: the correction of mistakes requires modifications in the data to be collected and results in lack of continuity and incompleteness of statistical series. For this reason, it is preferable to devote sufficient time and resources to the design of the system, including appropriate consultations with stakeholders, relevant authorities, and experts.

Data collection systems should be considered an integral part of the personal insolvency regime. Unfortunately, this is not always the case. In some countries, there are no systems for

¹² On the design of data collection systems for insolvency regimes, see J. Garrido et al., 2019, *passim*.

the collection of data for commercial insolvency cases, and for this reason, the country may feel that there is no need for a data collection system for the personal insolvency regime either. On the other hand, even when such systems exist for commercial or corporate insolvency cases¹³, it is not possible to simply extend their scope to cover personal insolvency cases. As this paper argues, the data to be collected in connection with the functioning of a personal insolvency regime is distinct from that collected in commercial or corporate insolvency regimes, due to their different functions and characteristics.

Reforms of personal insolvency law provide a window of opportunity for the introduction or the overhaul of data collection systems. At the time when personal insolvency reforms are first introduced, or when broad reforms of the personal insolvency regime are adopted, there is an opportunity for the establishment or the overhaul of data collection systems. The data collection systems need to be aligned with both the substantive and the procedural provisions of the personal insolvency law. The data points and the possibility of obtaining the information according to the approach suggested in this paper depend on the specific legal design (e.g., type of personal insolvency procedures, information included in applications or in reports).

There are several important reasons that justify the establishment of data collection systems for personal insolvency. The main justification for data collection is that it is the only way of assessing the effectiveness and efficiency of the personal insolvency regime in the achievement of its goals. In addition, the personal insolvency regime itself can generate extremely useful information for the analysis of the problems underlying personal insolvency and for the design of social policies. Personal insolvency reforms should be accompanied by data collection mechanisms to ensure that these reforms are evidence-based, effective, fair, and adaptive to changing circumstances. Data-driven policymaking is essential for addressing the complex and evolving challenges of personal insolvency while safeguarding the interests of both debtors and creditors.

The two key functions of data collection in personal insolvency are: measuring the effectiveness and efficiency of the personal insolvency regime and gathering information for analysis and development of social policies. Measuring the effectiveness and efficiency of insolvency procedures begins with establishing the desired *objectives*, or *outcomes* of an insolvency regime.¹⁴ As discussed before, the personal insolvency regime and the commercial

¹³ As indicated before (see section 1), this paper distinguishes between personal insolvency and commercial/corporate insolvency. The distinction between corporate and personal insolvency is not neat, insofar as the insolvency of merchants can be subject to a regime that has more similarities with the corporate insolvency regime than with the personal insolvency regime. For this reason, commercial and corporate insolvency are treated as synonyms throughout this paper. However, new regimes for the insolvency of individual micro-entrepreneurs share more characteristics with personal insolvency regimes (see World Bank, 2018).

¹⁴ See Garrido et al., 2019, at 5.

or corporate insolvency regime do not share the same objectives, and for that sole reason it is necessary to set up a personal insolvency data collection system with specific characteristics. Since the critical goal of the personal insolvency regime is to offer a second chance to over-indebted individuals,¹⁵ the main indicator of effectiveness of the personal insolvency regime is the number of discharged individuals.¹⁶ Other goals of the system have their own indicators to measure effectiveness. In terms of efficiency, data collection should allow an assessment of the time, cost, and resources that it takes to achieve the goals of the personal insolvency regime. These ideas are developed further in the next section of this paper.

Measuring the effectiveness and efficiency of the personal insolvency regime is essential for informed decision-making. The effects of the introduction -or the reform- of a personal insolvency regime can only be assessed with the assistance of data. Implementing personal insolvency reforms without a data collection mechanism would make it challenging, if not impossible, to assess their impact.¹⁷ To gauge the success of these reforms, it is crucial to track the relevant variables.¹⁸ This information can help policymakers determine whether their efforts are achieving the desired outcomes and make necessary adjustments.

In addition, data collection provides policymakers with a wealth of information about the background and circumstances of personal insolvency. Through the operation of the personal insolvency regime, it is possible to gather information about the debtors who file for insolvency,¹⁹ and the factors contributing to personal insolvency.²⁰ This data can help in understanding the root causes of financial distress, enabling more targeted and effective reform measures,²¹ and it also allows for the design of social policy measures to tackle the underlying problems that cause personal insolvency.²² Policy measures are adequately informed by the collection of precise data on the characteristics of insolvent debtors. It enables a better

¹⁵ See World Bank, 2013, at paras. 25-27.

¹⁶ See below, section III.2.

¹⁷ See Sullivan, Warren, and Westbrook, 1987, at 195.

¹⁸ The specific data points are discussed in sections III.2 and III.3. below.

¹⁹ It is also possible to gather information about the creditors involved in personal insolvency cases, and this information can also be relevant for multiple purposes.

²⁰ Systematic data collection would allow reliable studies on the sociology of personal insolvency. Early studies on the characteristics of insolvent persons had to rely on manual data collection and the cooperation of volunteers: see Shuchman, 1983, and the landmark study by Sullivan, Warren, and Westbrook, 1989.

²¹ For instance, if data shows that a significant number of insolvencies result from consumer loans or job loss, policymakers can tailor reforms to address these specific issues.

²² Of course, the data gathered in personal insolvency should be cross-referenced to other existing databases for a much broader analysis (for instance, income levels and race per county to assess the influence of social networks on the bankruptcy decision: see Miller, 2015; or data on automobile ownership – see Foohey, Lawless, and Thorne, 2020). A study cross-referencing data from the census offers an accurate picture of the persons filing for bankruptcy: see Fisher, 2019. More recently, new techniques such as web scraping have been identified as useful to complete information on the spatial and demographic distribution of personal insolvencies: see Klingwort, Bocker, and Borgs, 2023.

understanding of who is most affected by financial distress and why, leading to more targeted and effective social policies that address the specific needs of different groups of insolvent debtors.²³ Data collection can also help identify and monitor inequalities in the impact of financial distress. It allows policymakers to assess whether certain demographic groups or regions are disproportionately affected by insolvency and take steps to reduce these disparities. Consistent data allows the development of evidence-based social policy measures and programs, with higher probabilities of success and a more efficient allocation of resources.

There are other advantages in the establishment of a data collection system for personal insolvency. These advantages include the following:

- *Identifying trends:* data collection allows for the identification of trends and patterns in personal insolvency. This can help policymakers anticipate future challenges and proactively address them.²⁴
- *Ensuring fairness:* data can help ensure that personal insolvency reforms are applied fairly and equitably. By collecting demographic information, policymakers can monitor whether certain groups are disproportionately affected by insolvency, and if they receive appropriate treatment through the personal insolvency regime.²⁵ If unjustified disparities exist, reforms can be designed to reduce these inequalities. Adequate data collection of financial information of debtors can also assist in the prevention of fraud.²⁶
- *Research and analysis:* data collected during personal insolvency processes is an extremely valuable resource for researchers and academics.²⁷ It can contribute to a better understanding not only of the personal insolvency regime as such, but it can also be relevant for the analysis of consumer behavior, financial literacy, and social and economic trends.²⁸ This research can inform not only insolvency reforms but also broader initiatives.
- *International comparisons:* data collection allows for comparisons with international standards and practices. This can help a country benchmark its personal insolvency

²³ For example, if a significant portion of insolvent debtors are persons who cannot pay their medical bills, social policies could focus on providing relief in that area.

²⁴ For example, if data reveals an increasing trend in student loan-related insolvencies, it may prompt discussions about the need for student debt reform. Analysis can also identify relationships with macro-economic variables: see Hall, and McDermott, 2021.

²⁵ See Morrison, Pang and Uettwiller, 2020; Argyle et al., 2023 (on race in the USA); Agarwal et al., 2018 (on gender and ethnicity in Singapore).

²⁶ By tracking data on the financial circumstances of individuals seeking relief, authorities can identify cases of dishonesty or misuse of the personal insolvency regime, ensuring that it remains accessible to those who genuinely need it.

²⁷ The scarcity of empirical data is often mentioned as a constraint for the development of more robust research, see, for instance, Isa, Ahmad, and Zainol, 2022, at 44 (on Malaysia and Singapore). See also Frade and de Jesus, 2020 (lamenting the lack of sufficient data on insolvent debtors in Portugal).

²⁸ See the work on the social and economic characteristics of US bankruptcy filers by Foohey, Lawless and Thorne, 2022. This work required extensive analysis of source data and would have benefited greatly from public reports.

regime against those of other countries, although comparisons always need qualification because of the specific circumstances affecting each country's insolvency regime.²⁹

The design of the data collection system for personal insolvency needs to incorporate safeguards to avoid risks in its operation. Data collection in personal insolvencies needs to be done carefully and ethically. Privacy concerns in the collection of data of personal insolvencies represent a much more significant issue than in commercial or corporate insolvencies. The design of the data collection system needs to ensure that sufficient information is collected for the assessment of the personal insolvency regime and the design of reforms, while, at the same time, confidentiality and the privacy of individuals is respected. This calls for robust *data protection* measures and *anonymization* and *aggregation* processes.³⁰ The use of anonymization tools can reconcile the demands of data accuracy in sensitive areas (e.g., gender, race or ethnicity of insolvent debtors). Collection of data needs to be based on the informed consent of the affected persons, with clear communication and transparency about the objectives of data collection.³¹ In any event, since the data collected includes sensitive information, it is necessary to implement strong data security measures to prevent data breaches and protect individuals from any negative consequences, including identity theft. There is a risk of stigmatization even if data is anonymized and aggregated and therefore does not allow the identification of individual debtors. The reason is that aggregate information can show certain trends that affect groups of individuals, and this can create or reinforce creditor or social bias against them. However, it is always preferable to collect this information and provide contextual information for its adequate use. As indicated before, when done responsibly, data collection can lead to more effective and equitable social policies that address the specific needs of individuals facing financial distress.

1. Examples of data reports in comparative practice.

There is no best practice or guidelines for the contents of data reports on personal insolvency. Existing reports in numerous countries provide insights into the trends, causes, and outcomes of personal insolvency proceedings. However, there is no uniform practice, and countries around the world have implemented various approaches to the contents and publication of data reports on personal insolvency.

²⁹ Even if there are no standards for personal insolvency regimes (World Bank, 2013, at 5), it is possible to establish comparisons across legal systems and also compare outcomes of reforms.

³⁰ This distinguishes data collection for the statistical reports considered in this paper from the data collection and treatment for personal insolvency registers and for credit information systems, which have to be necessarily individualized.

³¹ This is especially important, given that many insolvent debtors tend to be in a vulnerable situation and may not have sufficient legal advice or support.

An overview of data reports illustrates the goals pursued by countries with the collection of personal insolvency data. To be sure, there is no perfect correlation between the data collected by countries and the data included in published reports. It is quite possible that internal data collection systems, such as the ones that the judiciary manages in many countries, collect far more information than the information reflected in the reports that are published. The fact that countries decide to include certain categories of data in the reports on personal insolvency is reflective of the goals pursued through such publication. There is also a certain asymmetry with the development of statistical systems for insolvency in general: for example, China has made remarkable progress in the design of insolvency data collection systems but does not have a personal insolvency regime in place. India is a front-runner in the elaboration of statistical corporate insolvency reports, but the information on the insolvency of natural persons is minimal.³² Indeed, in many countries where personal insolvency regimes do exist, the only information available is the number of cases. On the other hand, there are numerous examples that show various approaches to data collection and also show differences in the selection of aspects, due to a diverse prioritization, or the fact that some issues are more relevant in certain countries. For instance, the US produces a special report on fraud and procedural abuse in personal bankruptcy as mandated by Congress; Colombia publishes detailed information on the demographics of insolvent individuals). We have categorized the data reporting practices of a number of countries in a set of tables (Annex I): Table 1 illustrates the reporting on aspects related to access to the personal insolvency regime. Table 2 focuses on the performance metrics of the personal insolvency regime itself (duration, cost, discharges, repayment plans, and overall repayment rates). Table 3 looks at the institutional performance of the judiciary and insolvency representatives in personal insolvency cases. Table 4 refers to the information on debtors, and Table 5 refers to the economic analysis of data in personal insolvency proceedings. Annex II includes some examples of these reports, and links to the websites where they can be accessed.

There are other countries where published information is only a fraction of the information available to the authorities. For instance, in the US, the reports produced by the Administrative Office of the U.S. Courts include annual data on bankruptcy filings, which include the number of bankruptcy cases filed and concluded, and distinguish business and nonbusiness insolvency proceedings, as well as the type of personal insolvency proceedings. However, a data set created by the AOC included the following information for a representative fraction of personal insolvency cases : a filing and closing, name of the person(s) filing, whether the filing

³² This can be related to the act that the provisions of the Insolvency and Bankruptcy Code (IBC) of 2016 related to the bankruptcy of natural persons have not entered into force, and the old colonial legislation still applies. Only the insolvency of personal guarantors of companies under the IBC has been notified and entered into force, and the reports produced include basic information on these special proceedings (number of applications including dismissed and accepted applications, and amount of debt).

was joint, district and county of residence, number of creditors, dollar value of priority, secured and unsecured claims, total value of assets of the person filing before the bankruptcy exemption, whether a discharge or dismissal was issued, how much (if anything) was paid to priority secured and unsecured creditors, and the amount of various types of administrative costs incurred.³³

Data reports on personal insolvency represent a “public good.” These reports are valuable resources for policymakers, researchers, financial institutions, and the general public interested in understanding the dynamics of personal insolvency. The amount of information offered, and its value, are variable, and in a way is reflective of the concerns and challenges observed in each country. In most cases, personal insolvency data reports could be seen as a starting point on which to build a more comprehensive approach that can help inform policy decisions, support research, and provide other insights into the operation and circumstances of the personal insolvency regime. Authorities responsible for data collection should be encouraged to share their data with researchers for empirical study.

2. Data collected on procedures

Monitoring the output of a personal insolvency system along with its general operation is vital, especially following the introduction of a new personal insolvency regime, or even a new series of provisions. This monitoring often reveals roadblocks, expected and unexpected, that interfere with the normal and expected functioning of the system. This data can guide lawmakers in adopting targeted reforms to optimize the desired functioning and outcomes of what tends to be a high-volume procedure with many potential pitfalls that threaten not only to reduce the effectiveness of the system, but also to divert precious public resources away from their most efficient use.

The most basic data point is the number of applications for relief, both in the aggregate and for each separate pathway to relief (e.g., liquidation-and-discharge versus reorganization payment plan). In much of the world, applications for personal insolvency relief do not result immediately or necessarily in the opening of a case. Indeed, historically and even presently in some countries, the great bulk of such applications have been rejected, never becoming “cases” that can be followed to resolution. Such vigilant guarding of the gateway to insolvency relief may be desirable, but it comes at a cost of often significant expenditure of public resources of the institution charged with assessing application for relief. The application-and-admission stage often has revealed the most significant inefficiencies and roadblocks in

³³ This is the dataset used for the empirical research conducted by White, 1987 (at 32).

many existing personal insolvency regimes, prompting authorities to reconsider (usually in a way that leads to more open access) such bedrock notions as the eligibility criteria for relief,³⁴ the proper institution to assess applications,³⁵ and the cost structure for debtor access.³⁶ To assess whether a system is attracting the proper level of debtor applications, it is necessary to connect this data point with analyses of overindebtedness in society conducted by the central bank or by other specialized institutions.

It is thus advisable to track not only the total numbers of submitted and rejected applications, but also the reasons for rejection of applications, especially if a limited number of bases account for significant percentages of rejection. For example, in many new personal insolvency regimes, debtors struggle to complete the forms and submit the proper paperwork to establish eligibility and access the procedure. If non-substantive reasons like this hinder access, system operators might consider implementing advisory services to assist debtors in preparing or submitting their materials.³⁷ Contrarily, substantive restrictions on access have often had outsized effects in preventing debtor access, and only careful data tracking can reveal that certain criteria are being interpreted or applied in a way undesirable to lawmakers.³⁸

³⁴ In Denmark, for example, after 15 years of tightly restricted access criteria under which debtors were presumed ineligible for relief, this presumption was reversed in 2005 to presume eligibility. Kilborn, 2009, at 175-76. A similar relaxation of access criteria occurred between 2009 and 2015 in Poland, where debtors originally had to show their insolvency resulted from factors entirely outside their control, later eased to allow entry to debtors whose insolvency was not the direct result of the own gross negligence. Kilborn, 2018, at 1337-38.

³⁵ The 2021 personal insolvency law in Shenzhen, China, originally charged judges with the arduous task of reviewing all applications for relief, resulting in depressed admissions figures, so beginning in June 2022, a dedicated bankruptcy administration department began conducting first-round review, which boosted accepted applications by nearly a factor of three. Kilborn, 2024, at 46-47.

³⁶ The first few years of the new German consumer insolvency law saw few admitted applications for relief, primarily due to cost barriers, so lawmakers eased those barriers in 2001, immediately resulting in a spike in admitted applications. Kilborn, 2004, at 278-79, 287. Similar reforms to ease cost barriers were adopted in Poland in 2015 and in Slovakia and Austria in 2017. Kilborn, 2018, at 1335, 1338; Kilborn, 2020, at 444. More recently, in July 2020, Russia adopted and later gradually expanded access to a simplified discharge system with vastly simplified procedural requirements, specifically to increase access for low-income debtors. Kilborn, 2020, at 435.

³⁷ Part of the Slovak reform of 2017 involved the creation of just such a publicly supported debtor-assistance agency, Kilborn, 2018, at 1335. Likewise, since June 2022, the bankruptcy administration department in Shenzhen, China, not only screens applications, but also offers advisory and guidance services to support potential applicants. Kilborn, 2024, at 46-48.

³⁸ The new consumer bankruptcy law in Kazakhstan, for example, imposes several unique access limitations, including a requirement of no payment of any kind to creditors for 12 full months, and making out-of-court bankruptcy available only to debtors with no property of any kind. Kilborn, 2023b, at 258-59. Unless these restrictions are interpreted in an unexpected way, they threatened to throttle access all but entirely, but careful data reporting will be vital to indicate the effect of these provisions. See also the discussion above in note 34 of early access restrictions and their relaxation in Denmark and Poland.

Cost has been an especially common impediment to access to relief, and authorities in various countries have responded to ease or eliminate this burden on debtors. Because little if any value is distributed to creditors in most personal insolvency procedures, the primary focus here is on the upfront burden on debtors. Data to be potentially tracked here thus include fees paid to lawyers or other advisors (along with whether such fees are paid before or as part of an asset-collection procedure), judicial and other official access and administration fees (such as fees paid to an administrator/trustee), and especially applications rejected (or cases dismissed) due to insufficiency of available or anticipated asset value to cover case administration expenses. Such cost barriers have frequently been revealed to be among the greatest obstacles to proper relief delivery, and careful data tracking has allowed lawmakers to address this problem in a variety of ways.³⁹

In cases where substantial value is available for distribution to creditors, careful tracking of the allocation of that value is advisable to avoid inefficiency and unfairness. If preferential claims such as government tax claims, or administrative fees for case administrators, consume most or all available value, lawmakers might reconsider either the priority of government or other preferential claims or the proper level of remuneration offered/allowed for case administrators.⁴⁰

One other type of “cost” that should be tracked is the family support budget allocated to debtors in cases involving income collection from the debtor for some period of time (either established by law or the court, or by the debtor’s proposed restructuring plan). The family support budget represents the reasonable living expenses of debtors and their dependents. This “operational cost” of maintaining the debtor as a productive entity has a direct and powerful bearing on the effectiveness and fairness of relief. Many existing systems have been revised after data revealed that debtors’ reserve budgets were insufficient, leading to high failure rates, and/or unequally allocated among otherwise similarly situated debtors in various regions.⁴¹

In terms of measuring institutional efficiency, the time taken to arrive at a decision on acceptance or rejection of applications is a key data point. In some existing systems with

³⁹ Among many other examples around the world, see the discussion above in note 36 about cost barriers in Germany, Austria, Poland, Slovakia, and Russia, and see generally Kilborn, 2020.

⁴⁰ Reducing remuneration for administrators may have a negative effect on recruitment of such crucial professionals, however, or lead them to impose costs on debtors through other avenues. See Kilborn, 2020, at 430-38.

⁴¹ Prominent examples of this include Denmark, Germany, France, the Netherlands, and Taiwan Province of China, all of which adopted reforms setting uniform, objective guidelines for minimum debtor budgets, often substantially increasing such allowances over prior practice. Kilborn, 2009, at 176-78; Kilborn, 2004, at 284-85; Kilborn, 2005, at 642-44; Kilborn, 2006a, at 98-101; Kilborn, 2020, at 201-02.

simple entry criteria, this happens quickly, sometimes instantaneously,⁴² relying on the possibility of eventual case dismissal if irregularities are discovered later (which should also be tracked). But if, as is commonly the case, criteria for case initiation are numerous, nuanced, or complex, the stage of application consideration can be the most institutionally burdensome and time-consuming. In the context of personal insolvency, justice delayed is often justice denied, so it is especially important to track the delay between application and a decision on admission to the relief procedure. Tracking application consideration timing has often revealed institutional shortcomings (e.g., that an administrative agency rather than the courts should contribute to or undertake such review, or that judicial or administrative institutions are understaffed and should be allocated additional resources⁴³). In this respect, tracking the numbers of not only judges, but also administrators/trustees who are both qualified and willing to take on personal insolvency matters (not only on an aggregate national level, but also within various districts), can reveal a crucial inadequacy of resources (either in general or in particular, underserved regions) to fulfill the legislative expectations of certain procedural aspects requiring the participation of such administrative actors.⁴⁴ Finally, in conjunction with reexamination of certain access criteria, tracking admissions timing might reveal that consideration of certain criteria is too onerous to be worth the effort, and such criteria should be amended or abandoned.

Tracking these data points separately for each discrete procedure can reveal significant disparities in resource allocation and potential inefficiencies. If the great bulk of applications request liquidation-and-discharge, for example, resources can be concentrated on that pathway. And if the application processing time for restructuring proposals is vastly greater than for liquidation-and-discharge, for example, this can be revealed only if the two types of applications are tracked, and data reported, separately. Such a result might be expected, but if later data tracking reveals that most restructuring plans are eventually rejected (by creditors or the courts—as is most often the case in many systems), this might suggest that protracted application consideration times for such cases are unwarranted and should be revised in some way.

⁴² In the United States, for example, the debtor's filing of a bankruptcy petition is automatically considered a Bankruptcy Court "order for relief." 11 U.S.C. § 301(b).

⁴³ The first major reform of the French consumer overindebtedness law in 1995 involved shifting the burden of this high-volume system from the courts to administrative commissions headed by the Banque de France. Kilborn, 2005, at 645. See also the discussion above in note 35 about delegation of application review responsibility in Shenzhen, China, away from the court and to a dedicated administrative department. Similarly in England, since 2016 the initial review of bankruptcy applications has been conducted by a state agent of the Insolvency Service, called the Adjudicator. See Kilborn, 2020, at 445.

⁴⁴ See Bermant et al., 1991 (study on the amount of time spent by US bankruptcy judges on their caseloads, showing a great disparity between the time allocated to business and non-business cases). See Iverson, Elias, and Roe, 2020-2021 (using the same methodology to assess the number of new bankruptcy judges necessary to address an increase in cases).

Once data are established for the number of each type of case accepted and underway, the duration of each distinct stage of each type of proceeding should be carefully monitored. In liquidation-and-discharge cases, in particular, if the outcome in most cases is little or no value distribution to creditors (as is usually true), significant time spent on gathering and verifying creditor claims might be shown to be inefficient and thus restricted to cases involving substantial assets available for distribution.⁴⁵ Similarly, if the period for an administrator to investigate, liquidate, and distribute available asset value is revealed to be longer than lawmakers anticipated, this process might be revisited as both inefficient and injurious to creditors and debtors, alike. In particular, if the law requires debtors to apply for discharge relief following the conclusion of an asset-liquidation or income-collection period, the duration of consideration of such applications should be kept within tight limits, and close monitoring of the timing of the ultimate decision in such cases is vital to ensure efficient and effective relief delivery.⁴⁶

While input measurements are generally more easily and commonly collected and reported, the acid test of a personal insolvency regime is whether it achieves its objectives in conferring relief on debtors. Regrettably, however, output data is often more variable, especially in terms of timing, and is thus often tracked and reported less vigilantly. Proper assessment of the operation of a personal insolvency system, however, is not possible without accurate data on the numbers of debtors who ultimately receive a discharge of part or all of their debt (and the duration of earned-discharge proceedings, particularly in systems with various timetables), and for those denied a discharge, the reasons for such denials. Especially following a major reform, tracking ultimate discharge rates and figures can indicate not only the presence of a positive (i.e., increased relief delivery) but also the absence of a negative (i.e., no worrying increase in “opportunistic” over-reliance on bankruptcy relief).⁴⁷

This analysis parallels the examination of application data discussed above, but it is far more telling. Even if all applications for relief are accepted, if few debtors receive relief in the end, the encouraging input-based access data turns out to be misleading. There may be

⁴⁵ In 2008, to reduce complexity and expense, the Dutch personal debt adjustment law was revised to scrap the previously required hearing for verifying creditors’ claims, other than in (exceptional) cases where a distribution to creditors is expected. Kilborn, 2011, at 26-27. Similarly, in the United States, the case opening announcement for a consumer bankruptcy case usually directs creditors not to even submit a claim unless and until they are informed that distributable value appears to have become available. Official Form B309A, Notice of Chapter 7 Bankruptcy Case (item 10 on p. 2).

⁴⁶ In many systems, the time for discharge is set by the law, counting from the moment the insolvency proceeding starts (see, for EU systems, art. 21 of the European restructuring and insolvency Directive). For these legal systems, the concept of “time” does not connect with the efficiency of the regime in providing a fresh start to individuals.

⁴⁷ The major 2016 reform of personal insolvency in Singapore, for example, offered both of these indicators. More discharges were expected to be granted in ordinary course pursuant to the reform, consistent with legislative intention to provide clear incentives and exit-points from bankruptcy. But filing figures in the several years following the reform indicated no race to relief or erosion of payment morality. Kilborn, 2023a, 154-57.

multiple reasons for denial of debt relief, and among these, lack of compliance with a repayment plan and denial of discharge by the court are the most relevant ones. For example, on the one hand, it is important to track the numbers of payment plans accepted and rejected by creditors and courts, respectively, and if known, the reason(s) for rejection (along with the terms, including duration, of both accepted and rejected plans, which may reveal important trends). But on the other hand, even for creditor-accepted and court-confirmed plans, a plan that the debtor fails to complete represents an opportunity lost and a significant expenditure of effort largely wasted. It is vital to establish the number of truly successful plans by carefully tracking plans terminated before successful completion, along with the most prominent reasons for termination (failure to make plan payments likely being the most prominent). A system that admits many such cases is not a success and should be modified in some way to more carefully track and support plan viability or divert debtors to a more reasonably viable form of relief (such as standardized disposable-income-collection periods). This is especially true if debtors are admitted primarily or exclusively on the basis of a proffered payment plan.⁴⁸ For cases in which discharge is denied by a court (as opposed to as a result of a failed payment plan), as with application denials, the most common bases for discharge denial should be catalogued (e.g., failure to cooperate with the administrator/trustee/court, criminal or fraudulent conduct before or during the proceedings, concealing assets). If one or more bases for denial of discharge are applied differently or more frequently than lawmakers intended, this skews the entire operation of the system, undermining both legislative expectations and system effectiveness.⁴⁹

A final aspect of efficiency for the system is its effectiveness for creditors (primarily unsecured creditors). The primary objective of a personal insolvency regime is the discharge of debts, but it is also possible to look at the objective of creditor recovery.⁵⁰ Data concerning the amount of value promised to and ultimately distributed to creditors should be monitored and reported, along with the aggregate amount of the original debts, thus revealing the percentage payment (dividend) delivered to creditors. As noted above, deeply depressed distributions to creditors might reveal that (1) one or more procedures are unduly complex and should be

⁴⁸ For example, the overwhelming majority of individual bankruptcy cases in Taiwan Province of China and Shenzhen involve debtor-proposed payment plans, many of which appear likely to fail in light of an obvious mismatch between debtors' promises and their reported resources. Kilborn, 2024, at 52-54, 59-61; Kilborn, 2022, at 189-90.

⁴⁹ In Taiwan Province of China, for example, data reporting indicated that courts denied some 90% of applications for discharge relief under the original 2008 consumer debt clearance act, usually on the subjective basis that the debtor's obligations evidenced "waste" that harmed creditors. After discovering that this factor was being applied to an undesirable degree, legislators greatly relaxed it in 2012. Kilborn, 2022, at 191, 202.

⁵⁰ Certainly, there may be a tension between a fresh start policy and the recovery of claims (see Spooner, 2019, at Ch.3). A high rate of recovery may imply that there are difficulties for a fresh start. On the other hand, a system that provides the same opportunities for discharge, but with less damage to creditors, is a superior system to that in which the fresh start is accompanied by a higher destruction of creditor value.

simplified,⁵¹ (2) too much value is being diverted to administrative expense, also prompting consideration of systemic simplification, and/or (3) an entire procedural pathway (e.g., formal investigation and liquidation of assets) is producing insufficient returns to creditors to warrant the expenditure of public resources.⁵² For payment plans in particular, if successfully completed plans are producing only nominal returns to creditors, debtors might be prevented from pursuing this pathway unless they can show an expected more substantial dividend.⁵³ Finally, if cases can be converted from one pathway to another (such as payment plan to liquidation-and-discharge, or vice versa), such conversions (along with the reasons for such conversion) should be tracked and might again reveal an unjustified preference for one pathway that is frequently converted to another.

3. Data collected on users

Along with data on the operation of the personal insolvency system, it is useful to collect data on the users of that system and their economic and family situations. This can reveal very enlightening information about aspects of society or the economy that might warrant special attention beyond the insolvency resolution process itself.

Information on the users of the personal insolvency system begins with a basic survey of which party applies for relief. While bankruptcy has historically been a creditor-driven institution, modern personal insolvency procedures are overwhelmingly invoked by debtors petitioning for their own relief. If data do not indicate such a shift, this might indicate a lack of public information about the nature and benefits of the system for debtors themselves.⁵⁴ If data reveal that a significant portion of applications are filed by government agencies (e.g., tax and

⁵¹ See the discussion above in note 45 about simplifying and vastly limiting the claims submission process in the Netherlands and the United States.

⁵² In a series of major reforms of French consumer overindebtedness law, administrators were in 2004 empowered to route hopelessly insolvent debtors to an immediate asset liquidation and discharge (with no attempt to negotiate or implement a payment plan), and then in 2010 to skip the asset liquidation stage if it seemed unlikely to produce any significant value. Kilborn, 2005, at 655-60; Kilborn, 2011, at 27.

⁵³ In the 2016 reform of Slovak personal insolvency law, lawmakers limited debtors' ability to pursue a payment plan by requiring a showing that such a plan would produce at least a 30% dividend. Kilborn, 2018, at 1336.

⁵⁴ When data indicated a slower than expected uptake of the recently liberalized personal debt adjustment procedure, the Swedish Enforcement Agency in 2013 launched a campaign to publicize its availability and benefits, leading to a sustained increase in applications in the following years. See *Betänkande av Nystartsutredningen, F-skuldsanering—en möjlighet till nystart för seriösa företagare*, (Report of the Fresh Start Investigation, Business Debt Adjustment—an opportunity for a fresh start for serious entrepreneurs) SOU 2014:44, at 113-14. To fund a similar public information campaign, lawmakers in Belgium imposed a tax on creditors holding defaulted consumer debt. Kilborn, 2006b, at 107. Contrarily, as in Singapore, a paucity of debtor-initiated filings might indicate that social stigma or other factors inhibit debtors from engaging the relief system other than as a last resort, which may be desirable to lawmakers and offer reassurance that a liberalized relief system is not being “abused.” Kilborn, 2023a, 157.

social benefit agencies), this might prompt lawmakers to consider if this is an appropriate use of the system and/or a justified and constructive means of pursuing such debts. Tracking demographic data separated by the party initiating the procedure, can be quite revealing e.g., if tax authorities are the primary applicants for the insolvency of small business entrepreneurs, this might suggest authorities consider a way of better supporting such debtors to facilitate their ongoing contribution to the economy. Eventually, once a system is well-established, one indicator of its effectiveness is the degree of repeat filing, which should be specifically tracked.⁵⁵ A significant presence of repeat filers might well indicate a deficiency in the nature of relief offered, potentially prompting lawmakers to offer more expansive and effective relief in the first instance (although particularly for long-term low-income debtors, a repeat filing might simply evidence their especially vulnerable financial state and the increased likelihood of quite legitimate and inevitable need for repeat relief, not implying system failure).⁵⁶

Where possible, applications and cases should be categorized by the various types of debtors involved. Especially in a unified system that treats both business and personal debt, data should be tracked separately for business entities, perhaps a separate category for “small” business entities (however defined), and individuals. Cases involving self-identified sole proprietors (or partners) can be usefully distinguished from cases not involving such business-oriented debtors, although distinguishing “pure” consumer debtors from individual entrepreneurs based on the prevalence of business debt is a fraught endeavor. Individuals can and often do substitute personal debt for business debt, and vice versa, and categorizing various debts can be quite challenging and potentially misleading.⁵⁷

Demographic data is collected in any number of contexts, and the personal insolvency context can be an especially enlightening one. Data on the age, gender, marital and family status, race/ethnicity/religion, occupation, highest education level attained, and place of residence of debtors can reveal trends of importance far beyond the personal insolvency system. For example, if insolvency applications or cases are concentrated in a particular region, this might indicate localized economic challenges that warrant government intervention (and for systemic efficiency, notably disparate treatment of applications and cases by different regional courts/administrators might signal a need for regulation to ensure greater equality of

⁵⁵ See Golmant and Ulrich, 2006.

⁵⁶ This “revolving door” effect was the major impetus for the several rounds of reform of the French consumer overindebtedness system, when data indicated that many debtors were returning to the system as a result of inadequate relief. Kilborn, 2005, at 648-51, 655, 662.

⁵⁷ UNCITRAL, *Legislative Guide on Insolvency Law* 284 (2014) (“it may not always be possible to separate the debts into clear categories”).

treatment⁵⁸). A disproportionate representation of women, especially those with minor children, in the population of debtors might indicate a need for more general, targeted efforts to support a vulnerable element of society. And while lifecycle data generally indicate that debtors often face financial challenges in mid-life, if debtors on the margins of the age distribution appear with greater frequency than would be expected, this might indicate a specific underlying problem (such as elderly debtors still struggling with student loans, either their own old loans or new ones guaranteed for younger family members⁵⁹) or again a general need to provide greater support to vulnerable citizens. Such data should be anonymized and aggregated, of course, applying standard practices in demographic data collection.

One data point should be treated with caution: the reasons for the debtor's insolvency.

Some regimes invite or require debtors to explain the reasons for their inability to fulfill their financial obligations, and these reasons are sometimes used to come to conclusions as to the nature of the population being served or the fundamental purpose of the insolvency regime. Such data reporting is often misleading. A complex phenomenon like insolvency seldom has a single cause, so any such question should allow (if not prompt) debtors to offer multiple responses.

Debtors often lack the ability to identify the causes for their insolvency. Most debtors lack both ability and proper perspective to identify the real causal culprits. Sophisticated consumer debt marketing and design techniques are often engineered in ways that increase debtors' financial vulnerability without their noticing this; indeed, one of the purposes of properly structured personal insolvency systems is to force creditors to reinternalize the negative externalities of overly risky lending to debtors unaware of the accumulating risks. Debtors tend to be very self-judgmental, in some cultures more than others, when faced with their financial collapse, yet those closest to the situation may ironically be the least qualified to judge its many causes (e.g., overemphasizing recent salient events and downplaying less visible chronic factors).

Causes of personal insolvency tend to be external rather than being directly attributable to debtors' behavior. The most common causes of personal insolvency are interruptions and

⁵⁸ Data revealed such regional disparities in Slovakia and Denmark, sparking heated debate about the desirability of taking action to impose regional uniformity. Kilborn, 2018, at 1335; Kilborn, 2009, at 174-76 (noting legislative hesitancy, ironically, based on the lack of empirical data suggesting regional differential treatment of debtors was *not* based on consistent distinctions in regional debtor characteristics).

⁵⁹ The rising burden of student loan debt on those over 50 years old in the United States has become a topic of significant concern. See, e.g., John Waggoner, "Student Loan Debt Is an Unheralded Burden for Older Borrowers: Americans 50 and over owe hundreds of billions for themselves, children," *AARP.org*, 26 Aug. 2022, <https://www.aarp.org/money/credit-loans-debt/info-2021/student-debt-crisis-for-older-americans.html>; Eleni Schirmer, "The Aging Student Debtors of America," *The New Yorker*, 27 July 2022, <https://www.newyorker.com/news/us-journal/the-aging-student-debtors-of-america>.

shocks to otherwise well-laid plans responsibly made when conditions were brighter, e.g., unemployment, health issues, divorce and childbirth. Moreover, even sober judgment can be misled due in part to the fluid nature of debt in modern society. While one might easily come to the conclusion that “excessive credit card spending” might indicate “overconsumption” as a reason for insolvency, one must consider the substitution effects occurring in the background. Such spending might have been perfectly justified before a bout of unemployment, or a health crisis intervened. Credit card spending might represent essentials such as medical care, and even if it does not do so directly, other sources of value might have been used to acquire medical care, leaving a gap to be filled by credit card spending. Even families with moderate incomes struggle to make ends meet in supplying the basic needs of a household, especially one with children, and the trade-offs of “*robbing Peter to pay Paul*” are often hidden in the messy (if not incomprehensible) accounting records of such debtors. It may well appear that questionable debt management behaviors have contributed to any given debtor’s insolvency, but data collectors should take care to consider the whole picture of debtors’ financial lives and avoid presenting a skewed portrayal of personal irresponsibility when other explanations are available, even if not as easily noticed or documented.

Financial data is of course a necessary indicator of the nature of the disease being treated. The types of creditors most commonly encountered might usefully be tracked (e.g., to indicate a particular pressure point in the economy, such as payday lenders or certain taxing authorities), along with the type (e.g., credit card bank, personal loan, utility arrearage) and constitution of their claims, including secured, preferential, and unsecured debt, all of which broken down by principal, interest, and penalty amounts. This information also contributes to drawing a profile of creditors in personal insolvency cases.⁶⁰

Information on the debt of insolvent individuals is key. The aggregate debt burden of each debtor should be noted, to assess the fundamental nature of the problem being treated (i.e., a rough indication of large-volume business debt versus lower-volume consumer-related debt). A prevalence of low-debt cases might counsel in favor of simplification of the procedures and/or the development of a low-formality procedure for lower-value case.

Collecting data on the debtors’ assets is also critical. On the right side of the ledger, debtors’ available sources of value should be reported, as well. Even for cases not allowed to proceed through a relief procedure, collecting debtors’ reports of their present and anticipated assets and income (at least that portion available for distribution to creditors) is vital to assessing whether the system is treating financial distress rather than offering an easy way out

⁶⁰In line with the policy objectives of personal insolvency regimes, information on debtors is far more important than the information on creditors, in contrast to the situation in corporate insolvency regimes, where the information on creditors can be as important.

for financially sound debtors. For cases that do proceed to a relief procedure, collecting data on actual value collected from asset sales and/or future income collection (reported separately) contributes significantly to assessing many aspects of each type of procedure and the insolvency system as a whole; e.g., are debtors exhibiting real financial distress and of what nature/degree, can creditors expect (or are creditors receiving) a meaningful dividend, is the administrative expense of each type of procedure worth the value collected and distributed, etc. If the great bulk of debtors report “no assets” available for distribution (as is true in many personal insolvency systems), this is useful information for the most appropriate structure for and assessment of the personal insolvency system.

Finally, one of the most challenging and vexing questions in personal insolvency administration is whether such procedures are facilitating fraud by debtors or exacerbating moral hazard (e.g., hiding asset value and/or seeking an “easy way out” of debts they could reasonably pay). Data tracking can contribute to this ongoing debate by reporting on the (generally very few) instances of fraud investigations initiated and/or fraud cases pursued (along with their conclusion). The nature of the fraud might be reported by prominent categories (e.g., undervaluation assets, concealment of assets and/or income, inclusion of fictitious debts purportedly owed to related persons). Reports on the vanishingly few cases of fraud proceedings concluding with a conviction can play a productive role in assuaging ever-present, often misplaced, and counterproductive concerns about debtor fraud.

4. Implementing the data collection system

There is no uniform practice for the implementation of data collection systems in the area of personal insolvency. Since there is no standard practice for the design of data reports on personal insolvency, it is hardly surprising that there is no standard solution for the question of determining the authority responsible for data collection.

First of all, a data collection system needs to be placed under the supervision of a competent, relevant authority. As the previous examples show (see section 3.1), there is a wide variety of practices in this regard. Compilation and publication of personal insolvency statistics may be the responsibility of the national statistics agency but can also be assigned to insolvency regulator (Australia, Chile, England, New Zealand), the courts (Colombia, Japan, Portugal, US), the commercial registry (Spain), the Ministry of Economy and Finance (Greece) or even the central bank (France) (see Table 6). There is no specific best practice and any decision on the assignment of the competence over the insolvency statistics depends on the

purpose of the data collection and on the availability of resources in the specific authority to collect the information and publish statistical reports.⁶¹

The choice of authority to lead the efforts in data collection and statistics reporting may depend on a number of factors. These include the following:

- *Objective and purpose:* The choice of the organization best suited to publish the reports depends on the primary objective of the data collection. If the goal is to inform policy decisions and regulatory changes, insolvency regulators and government authorities responsible for insolvency may be the most appropriate entities.⁶² In general, insolvency regulators should be considered as the natural candidates for performing the function of collecting and publishing data relative to personal insolvency cases, because of the close connection between the information gathered and their functions as overseers of the personal insolvency regime.
- *Data integrity and impartiality:* To ensure data integrity and impartiality, it is often preferable to have an independent body like a statistics office involved in data collection and reporting.
- *Legal requirements:* In some countries, the law may already dictate that a specific authority will be responsible for collecting and reporting insolvency data.
- *Accessibility and transparency:* Consideration should be given to the accessibility and transparency of the data. Most authorities have established mechanisms for making (at least some portion of the data) data publicly accessible.
- *Technical expertise:* The organization responsible for collecting and publishing the data should have the necessary expertise in data collection, analysis, and reporting. This may vary depending on the complexity of the insolvency system and the data involved.
- *Privacy and security:* Given the sensitivity of personal financial data, it is crucial that the authority handling the data at the source has strong privacy and security measures in place to protect confidential information. Data collection and treatment must respect data protection rules and the guidance provided by data protection authorities.

⁶¹ Each of the authorities listed as examples may have a specific leaning towards certain data pertaining to the personal insolvency regime. Judicial authorities tend to emphasize the stock and flow of cases; insolvency regulators may include information on insolvency professionals; and other institutions such as Ministries of Finance, commercial registries, and the central bank will pay special attention to the economic aspects of personal insolvencies.

⁶² It is important to distinguish the preparation of statistical reports, which is the object of this paper, from the use of personal insolvency data in personal insolvency registers or in credit reporting systems. The purpose of those systems is to offer information to creditors and other parties to encourage responsible lending and does not bear relation with the assessment of the insolvency system as a whole.

Ultimately, the choice of the best organization to publish personal insolvency data reports should prioritize accuracy, objectivity, transparency, and alignment with the overarching goals of the data collection effort.

Although a single authority will be generally responsible for the production of statistical reports, there can be fruitful cooperation among various authorities. In most cases, the origin of the data is found in the judicial processes. However, in some cases, there may be administrative processes that deal with personal insolvency, and in such cases the administrative authorities in charge have the direct access to the data. The source of the data does not necessarily dictate that a specific authority or institution should be in charge of data collection or of publication of statistical reports. What is important is that there is a reliable mechanism for data transmission. This mechanism or channel may exist due to inherent characteristics of the insolvency regime (for instance, insolvency regulators can receive information from the courts or even directly from insolvency professionals; registries can also be notified of most of the decisions of the courts in an insolvency process). Cooperation of court officials, practitioners, and law experts in design stages is key in defining application templates and meta-data. Expertise in statistics is necessary for the correct treatment of data. This expertise is naturally found in statistical agencies, and also in financial sector authorities, but other authorities may find the process more challenging. A collaborative approach involving multiple stakeholders can be an effective way to collect and publish personal insolvency data. Close institutional cooperation is necessary to reduce the gap between information contained in internal data systems and reports.

Despite the clear benefits of cooperation among authorities in personal insolvency data collection, several impediments may hinder effective information sharing among authorities. Legal and regulatory barriers represent the most significant challenge, as privacy legislation, confidentiality requirements, and statutory restrictions often prevent authorities from sharing sensitive financial and personal data across institutional boundaries. Data protection laws may impose conflicting obligations on different authorities, creating uncertainty about permissible uses and disclosures. Technical incompatibilities compound these difficulties, particularly when authorities operate systems with incompatible data formats, collection methodologies, or security protocols. Institutional factors can also play a role, including resource constraints, competing priorities, and concerns about maintaining control over data.

Where these impediments exist, comprehensive reforms are necessary to address them. Legislative reform should establish clear legal frameworks for data sharing in insolvency contexts, including specific exemptions or permissions within privacy legislation that balance transparency goals with individual privacy rights. Technical solutions such as data *anonymization* and *aggregation* can further mitigate privacy concerns by removing personally identifiable information while preserving the statistical value of the data for policy and research

purposes. Technical standardization initiatives can address interoperability challenges by developing common data formats and secure transmission protocols that allow different systems to communicate effectively. Institutional reforms may also include formal inter-agency agreements, joint governance structures, and funding mechanisms to distribute costs equitably among participating authorities.

Implementation of the data collection system requires careful design and the completion of a series of steps. As indicated before (section 3.1), the starting point for the design of the system is the definition of the data collection objectives. Once these objectives are defined, the structure of the data templates needs to foresee the sources for the elaboration of the reports (see sections 3.2 and 3.3. above). Careful design facilitates swift adaptation subsequent to legal reforms.

Data forms and mechanisms to collect and compile data deserve special attention.

Designing effective data forms for collecting accurate personal insolvency data requires careful consideration of various factors to ensure accuracy, efficiency, and compliance with privacy regulations. The following are some key considerations for the design of the forms:

- *Connection of data collection with formal steps in personal insolvency proceedings:* one of the most efficient ways of organizing data collection is by embedding data fields in the forms used in the personal insolvency process itself. The application forms for personal insolvency proceedings can be designed in such a way that allows the easy capture of relevant data fields. The involvement of court officials in the design stages can contribute to cost minimization and streamlined solutions. This also applies to the reports of insolvency representatives and, to a certain extent, can also be adopted for the reports generated by case management systems used by the courts. Naturally, the data collection strategy needs to consider the cooperation with the relevant authorities in charge of the design and regulation of the respective forms.
- *Minimization of the amount of data to be collected:* the data to be collected must be necessary to achieve the objectives of the system. If the objectives are ambitious and comprehensive, as this paper recommends, the amount of data to be collected will be significant, but even so, the data collected must not exceed what is necessary. It is better to avoid the collection of extraneous information to minimize the burden on the system and to reduce the risk of privacy breaches.
- *Standardization of data elements:* the data collection forms should encourage the use of standardized data elements and formats to ensure consistency and facilitate data analysis. Some technical solutions, such as drop-down menus, checkboxes, and predefined response options are instrumental in ensuring standardization of data.

- *Use of clear and simple language*: data collection forms, particularly those that rely on responses by non-expert users, should include questions and instructions in clear and simple language to ensure that the correct data is reflected. Other data collection forms can be used for communication between various institutions with responsibilities over the insolvency process and the production of statistical reports.
- *Adoption of best practices for the organization of data collection*: these include the prioritization of data fields (i.e., arranging data fields in a logical order, prioritizing essential data fields early in the forms); inclusion of validation checks (these ensure data accuracy), and integrate guidance in the forms to obtain better responses to specific questions.
- *Compliance with privacy and data protection laws*: it is necessary to ensure that the data collection process complies with relevant privacy and data protection laws. This involves obtaining informed consent from individuals whose data will be collected and processed and anonymizing the data in the data collection process.

Once data collection forms are designed, implementation can benefit from tests. A test or pilot can show the possibilities and challenges in obtaining the targeted data and adopt correcting measures. Pilots are also useful to evaluate data security measures. From the technical point of view, sensitive data need to be protected from unauthorized access and data breaches and for that reason, sensitive data needs to be encrypted. The use of online platforms (as in Greece) allows for advanced techniques of data collection that offer features such as data validation and real-time data storage, therefore streamlining the process and reducing errors. Staff charged with the collection and treatment of data should receive proper training to ensure quality control and to verify data accuracy.

Data collection forms benefit from regular reviews and updates. Changes in the law may require changes in the data collection forms. Other reviews may be necessary because of changes in technology, or variations in the data needs. In any event, changes should be made without interfering with the continuity of the core collected data.

It is good practice to document the data collection process and to disclose the methodology to the public. Transparency of the data collection process increases its legitimacy and acceptance by the public and stakeholders. Publication of the methodology (e.g., Spain, or England and Wales) is a very positive step in this regard. The authority responsible for data collection should maintain detailed documentation of the data collection process, including the methodology, and any changes made over time, and disclose to the public the purpose and use of the collected data.

Data collection is the first step of a process that includes analysis, treatment of the data, and publication of reports. Once the authority has collected comprehensive data on personal

insolvencies, as recommended in this paper, the authority will need to proceed with data cleaning and validation, by way of scrutinizing the collected data for accuracy and completeness and addressing any inconsistencies or errors to ensure the reliability of the dataset. Then, specialized staff can proceed to data segmentation, according to the data categories relevant for the personal insolvency reports, and statistical analysis. Generally applicable statistical methods can be used to identify trends, correlations, and patterns in the data. The use of tools such as regression analysis, data visualization, and hypothesis testing can produce valuable insights on the operation of the personal insolvency regime and the surrounding economic and social circumstances. Close connection with the court system operation offers extended analytical possibilities, from diagnosis and error detection to simulation and prediction.

The publication of reports culminates the process data collection and analysis.

Publication of statistical reports is a key transparency measure, and it contributes to raise awareness of the importance of personal insolvency regimes and of their economic and social impact and helps communicate to the public and to other authorities the critical functions performed by the institutions in charge of administering the personal insolvency regime.

Ideally, reports on personal insolvency should be as comprehensive as possible. This paper advocates for an approach that maximizes the collection of information for analysis of the personal insolvency regime itself and for the assessment of economic and social circumstances of personal insolvency. The periodicity and characteristics of personal insolvency data reports can vary depending on the specific objectives, the resources available, and the legal requirements of the jurisdiction. However, there are some general considerations to keep in mind when determining the periodicity and characteristics of these reports:

- *Regular reporting:* Personal insolvency data reports should be generated on a regular basis to track trends and changes over time. Common periodicities include quarterly semi-annual, and annual reports.
- *Timely updates:* The frequency should allow for timely updates that are relevant for policymakers, researchers, and stakeholders. For instance, quarterly reports may be appropriate if trends are fast-moving, while annual reports may suffice for slower-changing data.
- *Ad hoc reporting:* In addition to regular reports, there should be provisions for ad hoc or special reports when significant changes or events occur, including the preparation of impact assessments for personal insolvency reforms.

Reports should be accessible to the general public. Authorities may elaborate internal reports for specific purposes and on matters that are especially sensitive, but the general approach should promote accessibility and wide dissemination of reports. This also contributes

to the accountability of the authorities responsible for the operation of the personal insolvency regime, and in some cases legal provisions specify the duty of publishing reports. Dissemination through appropriate channels, such as government websites or public databases, contributes to the goals of data collection, and creates a “public good”.⁶³ The publication of reports will benefit all parties, and the authorities will be able to use the data and the statistical analysis for the assessment and for the design of personal insolvency reforms and of other policies that address problems related to personal debt. Using personal insolvency data to design or refine personal insolvency laws is a valuable approach to ensure that legislation addresses the real-world challenges faced by individuals in financial distress. The reports assist in the identification of the root causes of personal insolvency, analysis effectiveness and efficiency of procedural mechanisms to achieve debt discharge, among many other relevant points.

IV. Conclusion

Personal insolvency regimes require proper data collection systems. In the past decades, there has been a profound transformation in the approach to personal insolvency which has resulted in the adoption of modern personal insolvency laws in numerous countries around the world.⁶⁴ These reforms are based on the understanding that personal insolvency laws perform fundamental social and economic functions in credit-based economies.⁶⁵ However, it will not be possible to assess whether personal insolvency laws are achieving their objectives unless there are proper data collection mechanisms in place.

The data collected will offer also valuable insights about society and the economy. Since personal insolvency is a complex phenomenon, data collection allows the proper identification of causes contributing to insolvency and contributes to the understanding of the effects of over-indebtedness in the most affected parts of society. In turns, this allows the design of targeted support measures.

Data collection matters because it is essential for informed policy decisions. To address the challenges associated with personal insolvency, it is absolutely necessary to establish mechanisms to collect comprehensive personal insolvency data. Data-driven solutions and evidence-based policies need to rely on a proper understanding of the social and economic

⁶³ The information included in advanced personal insolvency data reports can be of great interest for financial institutions and it can have significant economic value. However, access to the data report should be public, in line with the objectives of a personal insolvency regime and the functions of the responsible authorities.

⁶⁴ See Efrat, 2002; Kilborn 2004, 2005, 2006a, 2006b, 2009, 2015, 2020, 2022, 2023a, 2023b, 2024 (on numerous countries in Europe, the Americas, and Asia); Ramsay, 2017 (on USA and Europe).

⁶⁵ See World Bank, 2013, at 19 ff.

reality, and on the qualities and shortcomings of the legal and institutional framework designed to treat the situations of personal insolvency.⁶⁶ Of course, data collection does not replace the need for careful study and analysis from the legal, social, and economic perspectives,⁶⁷ but it provides the necessary foundation for the design of better laws. Using data to design personal insolvency laws ensures that the legal framework is evidence-based and responsive to the evolving social and financial landscape. Regular data analysis and legislative updates are key to maintaining an effective insolvency system that supports individuals in financial distress while safeguarding the broader economy.

Countries should assess their existing data collection systems and design mechanisms that collect comprehensive data. Countries should allocate sufficient resources and invest in data infrastructure, possibly taking advantage of existing systems. The data collected should be aligned with the purposes of a personal insolvency regime and also with the specific objectives that the authorities may have in connection with social and economic policies. Collaboration with stakeholders and experts can help ensure that the personal insolvency data collection mechanisms are well-designed, unbiased, and capable of producing actionable insights.

The reports will contribute to the transparency of the personal insolvency regime and to the accountability of all responsible institutions. The information will shed light over the operation of the personal insolvency regime and will help other authorities and the public at large assess the usefulness and value brought by the personal insolvency regime.

The investment in developing a data collection system for personal insolvency is a necessary component of an advanced strategy for the treatment of personal insolvency. Legal reforms are critical, but they need to be assessed against the facts. Understanding the issues faced in the operation of the regime, and the challenges experienced by debtors who need debt relief, are indispensable elements of a policy to address personal insolvency, and this is only possible with the assistance of data collection. The cost of not developing these systems is far higher than the cost of creating them.⁶⁸

⁶⁶ See for instance, Weller, Morzuch and Logan, 2010, on the unintended consequences of legal changes in the personal bankruptcy framework and its policy implications.

⁶⁷ See Garrido et al., 2019, at 4.

⁶⁸ Garrido et al., 2019, at 36.

Annex I. Information on Personal Insolvency in Selected Sources

Table 1. Access to the Personal Insolvency Regime

	Debtor vs creditor applications	Number of applications	Rejections (Reasons)	Number of accepted cases	Breakdown by procedures	Trends	Processing time for acceptance
Armenia	√	√	√ (no reasons)	√ (A)			
Australia				√ (M, Q, A)		√	
Canada				√ (Q, A)	√	√	
Chile				√ (M, Q)	√		
Colombia	√			√	√		
EU		√ (A)		√ (A)			
France				√ (M)	√	√ MoM yoy	
Germany				√ (A)			

Greece	√	√	√ (no reasons)	√ (M) / Information is accessible on real time, even day by day	√	√	√
Japan							
Kazakhstan		√	√ Implicit, no reasons	√			
Netherlands		√	√ Trends Also, by court and percentage	√ (A)	√	√ (A)	
New Zealand	√			√ (M, Q, A)	√		
Poland		√ (A)	√ w/ reasons	√	√		
Portugal				√			
Russia	√	√	√ no reasons	√ (Q, A)	√		√
Singapore		√ (A)		√ (A)			
South Africa				√	√		
Spain				√ (Q, A)	√		
UK (England and Wales)	√ (M)			√ (Q, A)	√	√	
USA	√			√ (M, Q, A)			

Legend: M= Monthly; Q=Quarterly; A=Annual

Green: official reports; Yellow: private sector reports; Blue: incomplete or implicit information; Orange: no information publicly available

Table 2. Performance of the Personal Insolvency Regime

	Cost	Time to complete (each phase)	Number of discharges	Denied discharges	No. of fraud cases	Repayment plans	Success repayment plans	Claim recovery (compared to total debt)
Armenia								
Australia								
Canada								
Chile	√	√ (global)				√ (number of accepted plans)		
Colombia		√ (global) (average length)	√ (concluded cases) (A) Also, number of new businesses	√ Info on outcome			√ Info on outcome	√ (average by creditor class)

EU			√ Concluded cases, and total amount of discharged debt			√ Only number concluded plans		
France			√ Concluded cases, and number of discharges (absolute and as a percentage of all cases)	√ incl. causes				√ Average recovery rate
Germany								
Greece		√ (average length)	√	√ [discharge is the rule by law – so; court decisions denying discharge]		√		
Japan			√ Concluded cases					
Kazakhstan	√ Fees	√ Problem completion discharge and restr. plans Average duration (A) Breakdown	√ Concluded cases and types of termination (number and percent)			√ Duration in years Termination rate success		

		per procedure	Number of closed cases (A)					
Netherlands								
New Zealand		√ total			√			
Poland								
Portugal		Number of cases √ Average duration		√ Number of fraud cases and exclusion of discharge.		√	√	
Russia			√ (A)			√ No. of restructuring cases, in progress, completed, failed (M)		
Singapore			√ (A)	√ (A), w/ causes		√ No of restructuring cases, in progress, completed, and failed (A)		
South Africa								
Spain								
UK (England and Wales)		√ Duration of cases by courts	√ (concluded cases) (A)			√ IVA repayment plans, termination/su ccess rate		
USA		√ Time to completion, by days mean and				√ incl. number of modifications	√	

		median, by proceeding						
--	--	--------------------------	--	--	--	--	--	--

Table 3 Institutional Framework

	Number of cases – start of period	Number of cases – end period	Number of judges	Number of insolvency representatives	Cases/judge	Cases/insolvency administrator
Armenia	√	√	√			
Australia				√		√
Canada						
Chile						
Colombia						
EU						
France						
Germany						
Greece	√	√	√	√	√	√
Japan						
Kazakhstan						
Netherlands	√	√		√		√
New Zealand						
Poland						
Portugal	√	√				
Russia	√	√				
Singapore						
South Africa						
Spain						

UK (England and Wales)						
USA	√	√	√		√	

Table 4. Information on Debtors

	Age	Gender	Family/marital status/ number of children	Race/Ethnicity	Income	Education	Residence	Activity (business/ non- business)	Repeat filing
Armenia									
Australia								√	
Canada							√	√	
Chile		√					√		
Colombia	√	√			√	√			
EU									
France	√				√ - owners and renters				
Germany								√	
Greece					√		√	√	√
Japan									
Kazakhstan									
Netherlands	√	√	√					√	
New Zealand		√		√	√ Median		√		
Poland									√
Portugal									
Russia								√	

Singapore									
South Africa									
Spain							√	√	
UK (England and Wales)	√	√					√	√	
USA							√		√

NB- An important issue connected to marital status is that of joint filings. In the USA, prior to 1980, joint filings were counted as two cases. Subsequently, these are counted as separate cases.

Table 5. Economic analysis of data in personal insolvency proceedings

	Debtor assets	Debtors' income	Debtors' expenses	Debtors' debts	Creditors	Reasons for insolvency
Armenia						
Australia				√ Levels of debt	√	√
Canada						
Chile						
Colombia					√	
EU						
France		√ Average and median		√ Types of debt (mortgage, consumer, tax, etc.)		√ Reasons for over-indebtedness
Germany				√ Total debt		
Greece	√	√		√	√	
Japan						
Kazakhstan						

Netherlands		√ Median		√ Median		√
New Zealand						
Poland						
Portugal						
Russia				√ numbers per debt brackets		
Singapore						
South Africa						
Spain						
UK (England and Wales)						√
USA	√ (real estate, personal property) (totals)	√ Total, average and median	√ Total, average and median	√ Classes of claims (totals)	√ Identify classes of creditors	

Table 6 Entities publishing personal insolvency data reports

	Entity	Description
Armenia	Ministry of Justice	Government, in cooperation with the judiciary
Australia	AFSA	Securities regulator, IP regulator
Canada	Office of the Superintendent of Bankruptcy of Canada	Insolvency regulator
Chile	Superintendency of Insolvency	Insolvency regulator
Colombia	SICAAC	Personal insolvency ADR system under the Ministry of Justice

EU	Eurostat European Commission	Statistical Office Monitor compliance with EU law, set secondary rules for member states
France	Banque de France	Central Bank
Germany	Destatis	Statistics agency
Greece	General Secretariat for Financial Sector and Private Debt Management	Official Agency, MoF
Japan	Judicial Council	Judiciary
Kazakhstan	Ministry of Finance's Committee on Government Revenue	Responsible for personal insolvency legislation – data reporting is prepared by a private entity
Netherlands	Legal Aid Board; CBS	Legal Aid entity ascribed to Ministry of Security and Justice, and Statistics Agency
New Zealand	Insolvency and Trustee Service	Insolvency regulator
Poland	Ministry of Justice	Government
Portugal	Ministry of Justice	Government
Russia	Judicial Department of the Supreme Court Unified Federal Register of Legally Significant Information on the Facts of Activities of Legal Entities, Individual Entrepreneurs, and Other Economic	Judiciary Commercial Registry

	Entities (Fedresurs)	
Singapore	Insolvency Office	Department of Ministry of Law, Government
South Africa	Statistics South Africa NCR	Statistical agency Personal credit regulator
Spain	Commercial Registry	Receives information from the courts. Has replaced the statistical agency
UK (England and Wales)	Insolvency Service	Insolvency Regulator
USA	Administrative Office of the U.S. Courts	Judiciary.

Annex II. Examples of data reporting on personal insolvency regimes

The following examples are representative of diverse institutional arrangements and data coverage for personal insolvency regimes:

Australia: the Australian Financial Security Authority (AFSA) publishes monthly, quarterly and annual statistics and regular analysis on personal insolvency (see <https://www.afsa.gov.au/about-us/statistics>). The reports include the number of commenced insolvency cases, and an analysis of the trends of personal insolvencies and their link to the overall economic circumstances, the levels of debt of persons who file for personal insolvency, and a breakdown of business and nonbusiness-related personal insolvencies. Some reports also provide information about the causes of insolvency. AFSA also provides information about creditors in personal insolvencies and given its role as regulator of the insolvency profession, it also publishes information on the distribution of personal insolvency cases among insolvency professionals.⁶⁹

Canada: the Office of the Superintendent of Bankruptcy of Canada publishes quarterly and annual reports on insolvency statistics in Canada (see <https://ised-isde.canada.ca/site/office-superintendent-bankruptcy/en/statistics-and-research>). These reports include information both on consumer and on business insolvencies, organized according to the various existing proceedings. For consumer insolvencies, there is a table that includes the number of commenced cases, with a breakdown by territory. The data distinguishes between class of proceedings (bankruptcies and proposals) and shows the year-to-year comparison, including the variation in percentage.

Chile: The Superintendency of Insolvency publishes monthly and quarterly statistical reports on personal insolvency (see <https://www.superir.gob.cl/informacion-y-estadisticas/>, in Spanish). The information is presented succinctly and simply, with the number of cases broken down by type of personal insolvency proceeding (liquidation or composition), and by geographical location and the debtor's gender.

Colombia: the SICAAC (ADR system under the Ministry of Justice) compiles personal insolvency statistics and makes available the results online.⁷⁰ The information includes the annual personal insolvency

⁶⁹ For instance, in the report published in January 2023, it was apparent that 9 insolvency practitioners administer 80 percent of all active personal insolvencies (see <https://www.afsa.gov.au/sites/default/files/2023-02/AFSA%20State%20of%20Personal%20Insolvency%20System.pdf>, accessed on Oct 20, 2023).

⁷⁰ See <https://www.sicaac.gov.co/Informacion/EstadisticaSolvenscia> (in Spanish).

filings, a breakdown of cases involving the state or private creditors (since there are separate applications for insolvency caused by debts to the state and for debts with private creditors). Following the idea of measuring the performance of the system, the reports include information about the duration of the proceedings and the cost, distinguishing between free applications and applications that are charged a fee. The reports also provide information on the outcomes of the personal insolvency proceedings (especially, whether an agreement with the creditors is achieved or not). The statistics include useful information on the demographics of debtors, such as gender, class,⁷¹ age and educational background.

European Union: general information on the trends and number of insolvency proceedings is published by Eurostat, but it is not clear whether the figures incorporate personal insolvencies of debtors who are traders. In fact, the first development of EU requirements for statistics in the insolvency area corresponds to the mandate of art. 29 the EU restructuring and insolvency Directive.⁷² This provision sets minimum requirements for the collection of data relative to insolvency proceedings and affects personal insolvency to the extent that “debt discharge” procedures for entrepreneurs are included within its scope. The Directive requires annual data on the number of debt discharge procedures applied for, opened, pending, or closed; (ii) the average length of procedures from submission/opening to closure; and information on the outcome of procedures. The collection of some additional data categories is left to the discretion of member states: this includes the average cost of procedures; the average recovery rates for secured, unsecured and other types of creditors; and the number of entrepreneurs launching a new business after a debt discharge. The EC is working on secondary legislation that will specify the scope methodology for data collection. EU states may consider this as an opportunity to upgrade their data collection systems and include additional information, including information related to personal insolvencies in general (and not just the insolvency of individual entrepreneurs).

France: the best source of information is found in the reports produced by the central bank (*Banque de France*) who has been traditionally very active in this area and is responsible for the administrative procedures designed to resolve the over-indebtedness of individuals (see <https://www.banque-france.fr/fr/publications-et-statistiques/statistiques/enquete-typologique-sur-le-surendettement-des-menages-en-2023>, in French). The statistical analysis of the Bank of France offers insights on contributing factors to over-indebtedness such as divorce, illness and unemployment. The reports also include information on the age of debtors, the proportion of owners versus renters, and information on the income-generating capacity of debtors. Reports also analyze the average and median debt amount in the procedures, and the nature of debt (mortgage debt, consumer credit, revolving loans, utilities, taxes). Finally, the reports focus on the types of procedures and their outcome, reflecting the number of discharged individuals and the total amount of discharged debt.

Germany: The German Federal Statistical Office (*Destatis*) is in charge of producing statistics for both corporate and personal insolvencies (<https://www.destatis.de/EN/Themes/Economy/Short-Term-Indicators/Long-Term-Series/Insolvencies/Irins01j.html>) Destatis produces series showing the number of insolvency cases, information of the number of cases closed for lack of assets, and information on

⁷¹ It is noted, however, that most of the Colombian debtors refuse to self-identify with a social class.

⁷² See Garrido et al., 2021, at 32-34.

the number of cases where repayment plans have been concluded. Apart from the statistical series, Destatis publishes, on an occasional basis, other data on personal insolvencies, including economic data such as the global value of claims, the recovery rates and the losses to creditors, and data on the outcomes of insolvency proceedings showing the number of discharges granted, refusal of discharge, and other decisions.

Greece: during the crisis period, Greece implemented a platform for the negotiation of restructuring agreements between debtors and creditors, including both enterprises and individuals. The platform is managed by the General Secretariat for Financial Sector and Private Debt Management and uses advanced IT infrastructure and is connected to the databases of the credit bureau and the Greek administration. As negotiations are conducted through the platform, the authorities are collecting a considerable volume of data, and are starting to publish reports that focus mostly on the usage of the system and its performance (see at <https://minfin.gov.gr/diacheirisi-idiotikou-xreous/ektheseis-proodou-exodikastikou-michanismou/>, in Greek). The authorities are considering increasing the amount of information that is compiled and published, and the coordination with the judicial procedures, to offer a wider picture of the situation of insolvent debtors in the country.⁷³

Japan: The Japanese judiciary includes information on the number of personal insolvencies in its annual report on judicial statistics. The information provided is minimal and focused only on the level of activity of the courts. Economic actors supplement this information with data collected by credit bureaus and other private enterprises that offer insights on the nature of debt problems faced by Japanese individuals.

Netherlands: *Statistics Netherlands* produces a monthly time series that includes the number of personal insolvencies (separated in the categories of entrepreneurs and non-entrepreneurs) (<https://www.cbs.nl/en-gb/figures/detail/82242ENG>). Most importantly, the Netherlands produces an annual report, commissioned by the Ministry of Justice, which is devoted to the analysis of the effectiveness of natural person's insolvency (*Monitor Wsnp* (after the law for the restructuring of natural persons' debt, or Wsnp): see <https://www.bureauwsnp.nl/bibliotheek/monitor/>). This report includes a detailed analysis of restructuring cases, along the lines suggested in this paper, including the number of restructuring agreements concluded, their success rate, data on all the available procedural modalities, and on the effectiveness of support programs for debtors. Data collection is integrated with legislative reforms and, in turn, amendments to the law are evaluated through the collection of fresh data.

New Zealand: the Insolvency and Trustee Service provides monthly, quarterly and annual reports on personal insolvency statistics, offering insights into the New Zealand insolvency landscape (see <https://www.insolvency.govt.nz/about/statistics>). The reports include separate information on the number of filings for each of the personal insolvency proceedings (bankruptcy, DRO, no-asset procedures) and distinguishes between debtor and creditor applications. The Insolvency and Trustee Service also analyzes the demographics of insolvent debtors, and produces a user-friendly infographic

⁷³ See José M. Garrido, Annex VI. *Data Reporting on Private Debt Restructuring, Greece Art. IV Report*, IMF Country Report No. 24/23, at 55 ff.

that pictures the insolvent population of New Zealand as if it were a village of a hundred people, offering easily interpretable information about factors such as gender, ethnicity, regional origin,

Portugal: Portugal has made substantial progress in data collection, although the main focus is business/corporate insolvency proceedings. The Ministry of Justice publishes statistical reports that include the number of personal insolvency cases (<https://estatisticas.justica.gov.pt/sites/siej/en-us>). The economic data of insolvency cases appears to consolidate information from both corporate and personal insolvencies.

Russia: Statistics on personal insolvency are collected by the statistical service of the Supreme Court, as part of the bi-annual reports on the insolvency activity at the Russian courts, and on annual basis. The data collection reports are detailed, including information on number of cases, admitted cases and rejections, and reasons for the rejection of cases. Information includes a breakdown of the various stages of insolvency proceedings, as well as the conclusion of the proceedings with a breakdown of the possible outcomes. The reports include information on cases concluded with or without a discharge and distinguish between individual entrepreneurs and other individuals. There is also a breakdown of fraud cases, and cases in which debtors act illegally by providing false information or violating their obligations. Reports detail appeals and other ancillary litigation within personal insolvency proceedings. Information distinguishes debtor and creditor applications, all appeals and ancillary litigation, and their outcome. Information on personal insolvency cases is also collected by the Commercial Registry (Unified Federal Register of Legally Significant Information on the Facts of Activities of Legal Entities, Individual Entrepreneurs, and Other Economic Entities (Fedresurs)) on a quarterly basis.

South Africa: Statistics South Africa produces reports that include the number and trends of personal insolvencies (see <http://www.statssa.gov.za/>) The National Credit Regulator (NCR) and the National Treasury collect information on over-indebtedness and debt counseling, but they have not regularly published statistics on these matters.

Spain: Since 2020, insolvency statistics have been transferred from the national statistics agency to the commercial registry (see <https://www.registradores.org/actualidad/portal-estadistico-registral/estadisticas-concursales>, in Spanish). The commercial registry has an impressive track record in research and analysis of insolvency information, including by merging the data from judicial insolvency proceedings with the financial statements of enterprises deposited at the registry. In the area of personal insolvency, the commercial registry is still defining the approach to be followed. So far, the statistical reports include information about number of filings and trends of insolvency cases involving natural persons, including the geographical distribution of cases. In the period 2022Q2-2023Q3, the distinction between insolvency cases of individual entrepreneurs and consumer cases was not clear,⁷⁴ but since 2023Q4 the official statistics again provide the breakdown by business activity (i.e., consumers vs. entrepreneurs).

⁷⁴ This has created some misunderstandings, particularly in the context of the EU. The EU excluded the data of Spanish insolvencies from the European average in June 2023 to avoid providing a distorted view of the trends of insolvency cases in the EU. The underlying reason was that merged data including both individual entrepreneurs and other natural persons were interpreted as data referring to business insolvencies.

United Kingdom (England and Wales): the Insolvency Service (England and Wales) releases quarterly and annual reports containing information on personal insolvencies, and also includes supplements with information on personal insolvencies in Scotland and Northern Ireland (see <https://www.gov.uk/government/collections/individual-insolvency-statistics-releases>) . These include overall figures of applications and also the breakdown according to the various personal insolvency proceedings available. These reports provide data on the causes of insolvency, regional variations, and trends over time. To measure the frequency of personal insolvency, the reports adopt the metrics of number of insolvent individuals per 10,000 people. The information is often accompanied by infographics.

United States: The Administrative Office of the U.S. Courts publishes annual reports on bankruptcy filings, which include data on the number of bankruptcy cases filed and concluded, and type of personal insolvency proceedings (see <https://www.uscourts.gov/>). The reports produced after BAPCPA (Bankruptcy Abuse Prevention and Consumer Protection Act – 2005) include a wealth of information about personal bankruptcy proceedings, including information on cases of creditors' and lawyers' misconduct. Private sector providers, such as Epiq analytics (<https://www.epiqglobal.com/en-us/technologies/bankruptcy/epiq-bankruptcy-analytics>), offer a wide range of information, including duration of cases in specific courts, customized scope of analysis and granular details of insolvency cases in an interactive platform.

Annex III. Sample of simplified proposal for data collection system

This sample corresponds to a proposal formulated to a Central Asian country in 2022, for the set-up of a data collection system in connection with a brand-new personal insolvency regime.

1. *Economic variables to monitor (before and after the entry into force of the law)*

These data can be collected by the central bank.

a) Access to credit

- Volume of loans to consumers,
- Volume of mortgage loans
- Volume of loans to individual entrepreneurs

b) Interest rates

- Interest rate for consumer loans
- Interest rates for mortgage loans
- Interest rates for loans to individual entrepreneurs

c) Non-performing loans

- NPLs for consumer loans
- NPLs for mortgage loans
- NPLs for loans to individual entrepreneurs

- If there is any quantification or survey on *over-indebted households*, monitor any changes.
- *Control for economic context*: evolution of general interest rates, GDP, and unemployment.

2. Data from the personal insolvency system

The collection of data should be done by the courts and the administration in charge of operating the system.

a) Relative use

- Total number of cases, and number of cases per month/year. Number of cases per type of procedure (out of court bankruptcy, judicial bankruptcy, restoration of solvency procedure) (per month and per year).
- Number of cases per 100.000 inhabitants (per procedure, and total)
- Number of applications per type of procedure (out of court bankruptcy, judicial bankruptcy, restoration of solvency procedure) (per month and per year).
- Number of applications by debtors, by creditors (of which by banks and other credit institutions) and by government agencies (esp. tax authorities)
- Number of dismissed petitions (per type of procedure, and per month/year)

b) Efficiency of the system

	Number of discharged individuals	Time (total, and time spent in each phase of the process)	Costs of the procedure (average, median)	Amount of claims involved in procedures (total, average, median)	Amount recovered by creditors in each process (total, average, median)
Out of court bankruptcy					
Judicial bankruptcy					
Restoration of solvency procedure					

c) Termination

Grounds for termination of procedures (per procedure, on annual basis)

1. restoration of solvency (spontaneously—this is not an explicit goal of the Russian law)
2. settlement agreement
3. all unpaid claims deemed unfounded
4. all creditors abandoned claims or their demand for declaration of bankruptcy
5. all claims paid
6. absence of resources to cover administrative costs
7. failure to nominate a trustee candidate
8. other.

d) Discharge policy

- Number of discharged individuals (total, and for each procedure) (total, and annual data)
- Average time from start of the procedure until discharge, for each procedure
- Number of persons starting an insolvency procedure who have also completed an insolvency procedure in the past (i.e., repeat applicants).
- Number of debtors excluded from discharge
- Reasons for denial of discharge:
 - criminal/admin conviction for bankruptcy crime
 - failure to cooperate with trustee/court
 - unlawful behavior by debtor in connection with claims

e) Debtors' data

- Gender, profession, age, region (total, and for each procedure) (total, and annual data)
- Reason for insolvency

References

- Agarwal, Sumit; He, Jia; Sing, Tien Foo; and Zhang, Jian, 2018, “Gender Gap in Personal Bankruptcy Risks: Empirical Evidence from Singapore”, *Review of Finance*, 813.
- Argyle, Bronson; Indarte, Sasha; Iverson, Benjamin; and Palmer, Christopher, 2023, “Explaining Racial Disparities in Personal Bankruptcy Outcomes”, Working paper, October 2023, available at <http://web.mit.edu/cjpalmer/www/AIIP-Bankruptcy-Bias.pdf>
- Bermant, Gordon; Lombard, Patricia A.; Wiggings, Elizabeth C., 1991, “A Day in the Life: The Federal Judicial Center’s 1988-1989 Bankruptcy Court Time”, *Am. Bankr. L. J.*, 491
- Efrat, Rafael, 2002. “Global Trends in Personal Bankruptcy.” *American Bankruptcy Law Journal*, 76(1), 81.
- Fisher, Jonathan D., 2019, “Who Files for Personal Bankruptcy in the United States?”, *Journal of Consumer Affairs*, 53(4), 2003.
- Foohy, Pamela, Lawless, Robert M., and Thorne, Deborah, 2020. “Driven to bankruptcy.” *Wake Forest Law Review*, 55(2), 287.
- Foohy, Pamela, Lawless, Robert M., and Thorne, Deborah, 2022, “Portraits of Bankruptcy Filers”. *Georgia Law Review*, 56(2), 573.
- Frade, Catarina, and de Jesus, Ruben, 2020, “NINA/LILA Debtors under the Portuguese Insolvency Act: Hidden Problem in Plain Sight?”. *International Insolvency Review*, 29(Special 1), S77.
- Garrido, José M., Bergthaler, W., DeLong, C. M.; Johnson, J.; Rasekh, A.; Rosha, A.; and Stetsenko, N. 2019, “The Use of Data in Assessing and Designing Insolvency Systems”, IMF Working Paper 19/27, Washington DC.
- Garrido, José M., DeLong, C. M.; Rasekh, A.; and Rosha, A. 2021, “Restructuring and Insolvency in Europe: Policy Options in the Implementation of the EU Directive”, IMF Working Paper 21/152, Washington DC.
- Garrido, José M., Annex VI. *Data Reporting on Private Debt Restructuring, Greece Art. IV Report*, IMF Country Report No. 24/23, at 55 ff.

- Gerhardt, Maria, 2009, "Consumer Bankruptcy Regimes and Credit Default in the US and Europe. A comparative study," CEPS Working Document No. 318, July 2009, 139-158.
- Golmant, John, and Ulrich, Tom, 2006. "Bankruptcy repeat filings," American Bankruptcy Institute L. Rev., 14(1), 169.
- Goodman, Joshua, and Levitin, Adam, 2014, "Bankruptcy Law and the Cost of Credit: The Impact of Cramdown on Mortgage Interest Rates", *Journal of Law and Economics*, Volume 57, Number 1, 139.
- Gropp, Reint, Scholz, John Karl, and White, Michelle J., 1997, "Personal Bankruptcy and Credit Supply and Demand". *Quarterly Journal of Economics*, vol. 112, issue 1, 217-251.
- Gross, Tal; Kluender, Raymond; Liu, Feng; Notowidigdo, Matthew J.; and Wang, Jialan, 2019, "The Economic Consequences of Bankruptcy Reform", NBER Working Paper 26254, available at <https://www.nber.org/papers/w26254>.
- Hall, Viv B.; and McDermott, C. John. 2021. "Changes in New Zealand's business insolvency rates after the GFC", *New Zealand Economic Papers*, 55:2, 173.
- IMF, 2017, Selected Issues, Cyprus, IMF Country Report No. 17/376.
- INSOL, 2001, *Consumer Debt Report: Report of Findings and Recommendations*, available at <http://www.insol.org/pdf/consdebt.pdf>.
- INSOL, 2011, *Consumer Debt Report: Report of Findings and Recommendations*, available at <http://www.insol.org/pdf/consdebt.pdf>.
- Isa, Ahmad Mahir; Ahmad, Nor Havati; and Zainol, Zairy. 2022. "Personal Bankruptcy in Malaysia and Singapore: An Empirical Analysis". *Journal of Economics and Sustainability*, 4(1), 33.
- Iverson, Benjamin; Ellias, Jared A.; Roe, Mark, 2020-2021, "Estimating the Need for Additional Bankruptcy Judges in Light of the COVID-19 Pandemic," *Harvard Business L. Rev. Online*, 11.
- Kilborn, Jason J., 2004, "The Innovative German Approach to Consumer Debt Relief: Revolutionary Changes in German Law, and Surprising Lessons for the United States," 24 *Northwestern J. Int'l L. & Business* 257
- Kilborn, Jason J., 2005, "La Responsabilisation de l'Economie: What the United States Can Learn from the New French Law on Consumer Overindebtedness," 26 *Michigan J. Int'l L.* 619.
- Kilborn, Jason J., 2006a, "The Hidden Life of Consumer Bankruptcy Reform: Danger Signs for the New U.S. Law From Unexpected Parallels in the Netherlands," 39 *Vanderbilt J. Transnational L.* 77
- Kilborn, Jason J., 2006b, "Continuity, Change, and Innovation in Emerging Consumer Bankruptcy Systems: Belgium and Luxembourg," 14 *American Bankruptcy Institute L. Rev.* 69
- Kilborn, Jason J., 2009, "Twenty-Five Years of Consumer Bankruptcy in Continental Europe: Internalizing Negative Externalities and Humanizing Justice in Denmark," 18 *Int'l. Insolvency Rev.* 155
- Kilborn, Jason J., 2011, *Expert Recommendations and the Evolution of European Best Practices for the Treatment of Overindebtedness, 1984–2010* (Deventer: Kluwer)

- Kilborn, Jason J., 2015 “Reflections of the World Bank’s Report on the Treatment of the Insolvency of Natural Persons in the Newest Consumer Bankruptcy Laws: Colombia, Italy, Ireland”, 27 Pace Int’l L. Rev. 306.
- Kilborn, Jason J., 2018, “The Rise and Fall of Fear of Abuse in Consumer Bankruptcy: Most Recent Comparative Evidence from Europe and Beyond,” 96 Texas L. Rev. 1327
- Kilborn, Jason J., 2020, “Fatal Flaws in Financing Personal Bankruptcy: The Curious Case of Russia in Comparative Context,” 94 American Bankr. L.J. 419
- Kilborn, Jason J., 2022, “Building Bridges in China for a More Harmonious Society: Origins and Evolution of Personal Insolvency in Taiwan⁷⁵ and Shenzhen,” 31 Int’l Insolvency Rev. 183
- Kilborn, Jason J., 2023a, “Tightening Up Loose Credit and Loosening Up Tight Bankruptcy in Singapore: An Asian Paradigm for Personal Debt and Insolvency Reform,” 58 Texas Int’l L.J. 135
- Kilborn, Jason J., 2023b, “(Not) Following the Leader in the Newest Personal Insolvency Laws in Uzbekistan and Kazakhstan,” 10 J. Int’l & Comp. L. 243
- Kilborn, Jason J., 2024, “Law in Books Versus Law in Action in the Landmark Shenzhen, China, Personal Bankruptcy Regime,” 40 Emory Bankr. Dev. J. 35
- Klingwort, Jonas; Bocker, Sven Alexander; and Borgs, Christian, 2023. “Spatial and Demographic Distributions of Personal Insolvency: An Opportunity for Official Statistics,” Statistical Journal of the IAOS, 39(4), 921.
- Miller, Michelle M., 2015, “Social networks and personal bankruptcy”. Journal of Empirical Legal Studies, 12(2), 289.
- Morrison, Edward R.; Pang, Belisa; and Uettwiller, Antoine, 2020, “Race and Bankruptcy: Explaining Racial Disparities in Consumer Bankruptcy”, 63 J. L. & ECON. 269.
- Ramsay, Iain, 2017. *Personal Insolvency in the 21st Century. A Comparative Analysis of the US and Europe*. Hart Publishing, Oxford.
- Shuchman, Philip. 1983. “The Average Bankrupt: Description and Analysis of 753 Personal Bankruptcy Filings in Nine States”. Commercial Law Journal, 88(6), 288.
- Spooner, Joseph, 2019, *Bankruptcy. The case for relief in an economy of debt*. Cambridge, CUP.
- Sullivan, Teresa A., Warren, Elizabeth, and Westbrook, Jay Lawrence, 1987, “The Use of Empirical Data in Formulating Bankruptcy Policy”, 50 Law & Contemp. Probs., 195.
- Sullivan, Teresa A.; Warren, Elizabeth; and Westbrook, Jay Lawrence. 1989. *As We Forgive Our Debtors: Bankruptcy and Consumer Credit in America*. New York: Oxford University Press.

⁷⁵ Taiwan refers to Taiwan Province of China.

Weller, Christian, E.; Morzuch, Bernard J.; and Logan, Amanda, 2010, "Estimating the Effect of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 on the Bankruptcy Rate," 84(3) American Bankruptcy Law Journal 327.

White, Michelle J., 1987, "Personal Bankruptcy under the 1978 Bankruptcy Code: An Economic Analysis". Indiana Law Journal, 63(1), 1.

World Bank, 2013, Report on the Treatment of the Insolvency of Natural Persons, Washington DC.

World Bank, 2018, Saving Entrepreneurs, Saving Enterprises: Proposals on the Treatment of MSME Insolvency, Washington DC.



PUBLICATIONS