



Methodology for Regulatory Impact Assessment: A Proposal for Quantifying Administrative Burdens on Citizens.

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Abstract

The quantification of compliance costs for regulations affecting citizens remains an underexplored area within Regulatory Impact Assessment (RIA). This document presents a methodological proposal to quantify the administrative burdens borne by citizens through the monetization of the time spent on fulfilling regulatory requirements, framed within the Standard Cost Model. The methodology outlined is cost-effective and proportionate in terms of effort versus benefit, sustainable over time, transferable to other analytical contexts, and ensures both transparency and traceability of the calculations.

After evaluating several scenarios, the most accurate approach for the population aged 16 and over is found to be a weighted model that includes three variables: average gross annual salary, average contributory pension, and the minimum interprofessional wage. Based on a standard annual workload of 1,826 hours, it is estimated that in 2022—the latest year with harmonized data for all variables—the average hourly cost was €14.42 in Spain, including overheads. Values were also calculated for each of the autonomous communities and actualized to 2024 via IPC.

A comparison with other international contexts where the value of citizens' time has been estimated suggests that the proposed methodology is both valid and consistent, pending empirical application.

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1. Introduction

In the contemporary world, the vast majority of public administrations operate under a bureaucratic model in which, with the development and expansion of the welfare state, public authorities are not only limited to regulation but also provide a substantial volume of public services. From this perspective, the rigidities of the Weberian rule-based bureaucratic apparatus appear to be poorly aligned with the need to stimulate economic growth or to deliver services to citizens in a flexible, effective, and efficient manner (Ramió, 2022).

In a context of accelerated social change, the issue of regulatory quality is particularly significant. Regulatory

quality is no longer conceived solely as the capacity to identify the correct, fair, and enduring solution; rather, part of its definition has evolved towards the ability to swiftly adapt to the mutability and multiplicity of social relationships. This evolution lends regulatory quality a dynamic and even cyclical character (Aymerich, 2023).

Concern for regulatory quality—regarding both legislative authority and the regulatory powers of public administrations—constitutes a matter of primary importance, as it is directly related to the sound functioning of the economy and the well-being of citizens. Moreover, it strengthens the legitimacy of public representatives and resonates with the culture of good governance, as well as the potential for improving public action and democracy itself (Sánchez Puente et al., 2019).

The principle of regulatory quality demands that approved regulations be necessary, effective in achieving their intended objectives, efficient in resource use, proportionate to their intended purposes, coherent with the broader legal framework, and targeted at the specific population they aim to affect. Additionally, from a formal standpoint, regulations should employ language that is accessible to citizens, avoiding excessive technical jargon or overly ornate expressions.

Regulatory quality is also closely linked to the concepts of governance and sound public administration. In this regard, it is worth noting that the working paper produced by FEDEA, *Los ciudadanos ante la administración: reflexiones críticas y recomendaciones* (Novalés, 2024), identifies, among other issues, two unsatisfactory aspects of the functioning and performance of public administrations: on the one hand, the low quality of regulation, the overproduction of norms, and their frequent modification; and on the other hand, the absence of an established system for the systematic evaluation of public policies, despite the existence of legal provisions mandating such evaluations.

In order to assess the quality of regulations, it is essential to evaluate them—that is, to measure their effects and impacts, whether prior to implementation, during their execution, or retrospectively. This new approach to regulation, which aims to rationalize decision-making—both in its formal and substantive dimensions—requires the use of a methodology that allows for the prior analysis of all possible options and the evaluation of each one's impact in terms of costs, benefits, and potential externalities or inherent risks. In this regard, regulatory impact assessment (RIA) has emerged as the key tool through which this drive to enhance public policy and improve regulatory quality has materialized (Dunlop & Radaelli, 2016).

1.1 Regulatory Impact Assessment (RIA)

Drawing on the work of Auby and Perroud (2013) and Naundorf and Radaelli (2017), regulatory impact assessment (RIA) can be characterized by the following key points:

- I. Regulatory impact assessment is applicable to any type of general normative act.
- II. It is conceived primarily as an ex ante process focused on the anticipated consequences of a proposed regulation. However, it may also be employed ex post to review existing policies or public regulations.
- III. The term RIA refers both to the procedural framework and to the analytical document in which all available policy options are assessed, compared, and evaluated. It is important to note that these assessments do not carry legal force; rather, they serve an informational and advisory function, supporting the decision-making process.
- IV. RIA must be understood as a scientific endeavor, grounded in methodological rigor for analyzing different regulatory alternatives. This includes tools such as cost-benefit analysis, multi-criteria analysis, and comparative risk assessment. In this respect, RIA promotes a structured framework for validating data and empirical evidence.
- V. The responsibility for conducting assessments is decentralized, resting with the administrative units that propose the measures and hold the authority to implement them.

VI. It is conceived as a transparent and accountable process, incorporating consultations with stakeholders and potentially affected parties.

Furthermore, regulatory impact assessment follows a logical framework within which several distinct phases can be identified:

Table 1: Regulatory Impact Assessment logical framework

1	Identification and definition of the problem (risk, needs, or opportunities to improve the status quo.
2	Definition of the objectives to be achieved.
3	Identification of the different applicable regulatory and non-regulatory options, including the possibility of taking no action. These measures may involve minimal intervention, soft-law instruments, voluntary agreements, or even traditional command-and-control approaches.
4	Quantitative and/or qualitative analysis of the impacts associated with the considered options.
5	Comparison of the various options analyzed.
6	Implementation of the chosen option, along with a commitment to ex post monitoring and regulatory review, if deemed necessary.

Source: Author's own elaboration based on Auby and Perroud (2013) and Naundorf and Radaelli (2017).

In the Catalan context, as noted by Ortí (2022), regulatory impact assessment has been institutionalized within both the legislative initiative and the regulatory authority of the Government, encompassing not only the procedural framework but also the corresponding administrative organization.

Thus, regulatory quality is primarily implemented through the following instruments: the evaluation of the impact of regulation both prior to and following their adoption (*ex ante* and *ex post*); the simplification of the legal framework, including administrative procedures and formalities; and the reduction of administrative burdens imposed on businesses and citizens. Furthermore, measurement within the framework of a regulatory impact assessment is carried out in accordance with the guidelines set out in the *Good practice guide for the preparation and revision of regulation affecting economic activity* (Generalitat de Catalunya, 2010).

Within the Government of Catalonia, the Better Regulation Area —attached to the Department of the Presidency and operating under the authority of the Government Secretariat — is entrusted, among other responsibilities, with the development and dissemination of guidelines, protocols, and methodological frameworks aimed at enhancing regulatory quality—particularly with regard to regulatory impact analysis, as well as the simplification and reduction of administrative burdens. It also provides technical assistance and consultancy to the departments of the Administration of the Government of Catalonia in carrying out regulatory quality assessments, especially those concerning the impact of draft general provisions and existing regulations. Furthermore, it is tasked with ensuring the quality of preliminary assessments and regulatory impact analyses of draft general provisions submitted to the Technical Council and the Government, and with promoting and implementing activities related to analysis, training, and advisory services for the continuous improvement of regulatory quality¹.

This article is part of a broader set of methodological studies and discussions undertaken by this unit. As we shall see

¹Article 40 of Decree 105/2025 (Decret 105/2025), of 27 May, on the restructuring of the Department of the Presidency.

in the following sections, the aim of our study is to develop a quantitative methodology for this fourth phase, thereby enabling a comparative analysis of the options outlined in the fifth stage.

1.2 Reducing Administrative Burdens

One of the areas where the idea of improving regulatory quality and regulatory impact assessment is applied is in the realm of administrative simplification and the reduction of administrative burdens. In comparative law, according to Gamero Casado (2014), the term administrative simplification is associated with regulatory quality instruments aimed at reducing burdens, within the context of regulatory improvement policies.

As Tornos Mas (2000) points out, the debate on administrative simplification in Spain is not foreign to the reflections made in neighboring countries; in all of them, several common elements can be identified, such as the growing regulatory intervention of public authorities, the general principle of administrative action serving citizens, European integration and globalization, and the opportunities provided by (new) information and communication technologies as tools to simplify interactions between citizens and administrations.

Many of the public policies of the welfare state involve citizen interaction with public bodies, whether in person or through digital platforms. This interaction between citizens and public administrations was defined by Kahn, Katz, and Gutek (1976) as bureaucratic encounters.

As can be seen in the table reproduced below, based on the axes of position relative to the organization (member or external person) and the promoter or recipient role, four categories of transactions can be defined:

Table 2: Categories of transactions

		Recipient	
Promoter	Member of the organization	Member of the organization	External to the organization
		(A) Organizational Behavior <i>(leadership, peer relationships, etc.)</i>	(B) Bureaucratic Encounters <i>(law enforcement, taxes, social assistance, police, military service, etc.)</i>
	External to the organization	(C) Bureaucratic Encounters <i>(service provision, client relationships, admissions, etc.)</i>	(D) Informal Relationships <i>(friendship, neighborhood relationships, etc.)</i>

Source: Author's own elaboration based on Kahn, Katz, and Gutek (1976).

The first cell (A) represents the type of relationships that occur between members within the same organization, such

as hierarchical relationships, leadership, or peer relationships among colleagues. On the opposite side, in the fourth cell (D), we find relationships that occur outside organizational or formal settings, such as family, friendship, or even interactions between strangers in public spaces.

The shaded cells represent the focus of our study: bureaucratic encounters. The distinction between them lies in who initiates the interaction. In the first cell (B), a member of the organization initiates an action directed at someone external; in the context of public administration, this could include unilateral decisions such as the enforcement of the law, public safety services, vaccination or health prevention campaigns, tax collection, etc. Actions in cell (C) are characterized by being initiated by someone external to the organization; this would be the case, for instance, when a citizen, a company, or a third-sector entity contacts the administration to request a subsidy, participate in a training program, or register for a service.

These bureaucratic encounters result from the existence of regulations that identify, standardize, and regulate them. And all regulation inherently carries compliance costs. A portion of these costs are referred to as administrative burdens.

The literature on public administration has made a distinction between administrative burdens in the strict sense, which may be necessary or beneficial—and which serve a legitimate purpose, even though they may not be popular with citizens who must comply with them—and what Anglo-Saxon doctrine refers to as "red tape" (Bozeman, 2000). This refers to those administrative procedures and formalities that add no value, are entirely superfluous, and do not contribute to achieving the intended objectives, nor to accountability or public responsibility.

In the field of regulatory impact analysis, administrative burdens are defined as the administrative activities that businesses and citizens must carry out in order to comply with the obligations derived from regulations, according to the definition provided in the Methodological Guide for the Preparation of the Regulatory Impact Analysis Report (Ministry of Economy, Trade and Business, 2017). These obligations stemming from regulations must be understood as the duty to provide information or documentation, and include both compliance with obligations and the exercise of rights (Van den Hurk, 2008). This does not mean that information must necessarily be communicated, as it may be limited to the duty to prepare, maintain, and submit it upon request.

In the context of citizen-state interaction, the articles by Burden et al. (2012) and Moynihan, Herd, and Harvey (2015) were among the first to identify citizens' experiences in the implementation of public policies as onerous, that is, heavy, bothersome, and burdensome. Or, in colloquial terms, what we might define as a "nightmare."

Based on that definition, the concept of administrative burden can also be operationalized in terms of costs. Thus, the specialized literature (Moynihan et al., 2015; Herd and Moynihan, 2018) identifies three types of costs associated with administrative burdens: learning costs, compliance costs, and psychological costs. It should be understood that these costs do not occur autonomously and independently, but in practice, they are highly interconnected (Baekgaard and Tankink, 2022).

- 1. Learning Costs:** Learning costs refer to the time and effort spent familiarizing oneself with the public policy, program, or service one wishes to access or the obligation that must be fulfilled. For example, this includes actions such as searching for information, understanding eligibility criteria, what types of benefits are provided, or what conditions must be met, understanding procedures or forms, etc. (Moynihan et al., 2015). Barnes and Riel (2022) note how these costs prevented potential beneficiaries of post-pandemic COVID aid from accessing them; similarly, Aravena et al. (2023) explain how many disability claimants in the Chilean Biobío region require assistance or need to be redirected to access benefits.
- 2. Compliance Costs:** Compliance costs involve providing the required information and documentation, financial costs to access certain services, payments to third parties or representatives to handle paperwork, submitting to inspections by the administration, participating in training courses, waiting times, etc. Examples of these can be found in the works of Baekgaard et al. (2021), Barnes and Petry (2021), or Madsen et al. (2022); the first two studies show that a reduction in compliance costs leads to an increase in the psychological well-being of individuals applying for benefits.

3. Psychological Costs: Psychological costs encompass a wide range of situations such as stigmatization, the loss of autonomy due to excessively intrusive administrative supervision, frustration when battling with compliance costs or unintelligible procedures, stress and uncertainty caused by waiting and processing, anxiety over electronic procedures, fear of possible coercion by public authorities, the externalization of the locus of control, etc. (Cecchini, 2024; Cook, 2021; Cook, 2022; Hattke et al., 2020; Madsen and Mikkelsen, 2021; Martinelli and Parker, 2009).

Similarly, the impact of administrative burdens is not evenly distributed across all sectors of the population. As noted by Masood and Nisar (2021) or Döring and Madsen (2022), social, economic, and administrative capital influences how citizens cope with these administrative burdens. Furthermore, as Tolmo García (2019) highlights, in certain cases, we may even speak of administrative exclusion faced by individuals at risk of social exclusion or those with experience of poverty in Spain.

The same applies to the transfer of many administrative processes to the digital realm (Peeters and Widlack, 2023) or, ultimately, to the biases that may arise in the implementation of algorithms or automated decision-making systems (Alon-Barkat and Busuioc, 2023).

The objective of this paper is not to reflect on the legitimacy of administrative burdens (Nisar and Masood, 2022), nor on the planning of their design (Peeters, 2020), nor on their inevitability (Herd and Moynihan, 2018). In this project, administrative burdens are understood as identifiable, measurable units, and therefore quantifiable in monetary terms, an aspect that will be addressed in the following section.

1.3 Quantification as an Instrument in Regulatory Impact Assessment: The Standard Cost Model

As Voermans (2015) points out, the quantification of the effects of a given regulation enables political agents to make decisions based on the comparison of various alternatives in monetary terms. From this perspective, expressing burdens and their associated costs in monetary terms becomes a tool that allows for the assessment of the impact of legislative and administrative intervention measures, both on economic activity and on citizens' relationships with the Administration. It facilitates the identification and evaluation of options that involve lower costs and the design of more efficient regulation.

Administrative burden reduction techniques rely on measurement tools that support comparison and decision-making in ex ante regulatory impact assessments and guide ex post evaluations regarding the achievement of set objectives. The European Commission, in the Better Regulation Toolbox (2021), specifies that all decisions must be evidence-based, a broad concept that includes data, information, and knowledge from multiple sources, both quantitative and qualitative, as well as relying on scientific knowledge or expert advice. Furthermore, this evidence must adhere to the FAIR principles (findable, accessible, interoperable, and reusable). Therefore, administrative burden reduction should align with this analytical framework.

In practice, however, measuring the costs of learning, compliance, or psychological burdens incurred by citizens is conceptually challenging, especially when these burdens are not uniformly distributed. In the absence of resources to design, implement, and analyze surveys, in-depth interviews, or experiments, public administrations need to methodologically approach the issue using simple and easy-to-implement tools that may not seek precision but rather establish a homogeneous methodological foundation for comparison.

Among the available analytical tools (Alabanos and Theodoropoulos, 2016), the Standard Cost Model (SCM) is the one that, to date, has achieved the highest level of adoption and use among European Union countries, as well as being recommended at the institutional level by the European Commission and the OECD. As we will see below, a central element of the calculations in this methodological tool is the ability to monetize the time that businesses or individuals may dedicate to fulfilling administrative burdens. While this methodology is primarily geared towards businesses, a manual was published in the Netherlands to extend this calculation method to citizens' administrative burdens as well (Van den Hurk, 2008).

The Standard Cost Model is based on identifying a series of administrative burdens whose amount is standardized by establishing a table of unit costs, in order to measure the economic impact of introducing or removing a given requirement. In turn, the model enables standardized analyses across all operators, thereby allowing for comparative studies.

The calculations are approximate—neither fully accurate nor entirely reliable—but they serve as a guide to estimate the effects of imposing or eliminating specific administrative burdens. The Standard Cost Model can be applied to both ex ante and ex post evaluations.

In this regard, the Standard Cost Model offers an approach to estimating the compliance cost of each activity based on three parameters:

- **Price:** the base monetary unit for measurement, typically representing a time-based rate. In general, time is associated with the salary of the individuals responsible for managing the administrative burden; in cases where external services are contracted, the price reflects the hourly cost of the service.
- **Time:** the amount of time required to complete the relevant administrative activity.
- **Quantity:** the number of affected individuals or businesses, as well as the frequency with which the activity must be performed each year.

The combination of these three elements yields the basic formula of the Standard Cost Model:

$$\text{Total Cost} = \text{Price} \times \text{Time} \times \text{Quantity},$$

where Quantity = Population $\times$ Frequency.

This formula makes it possible to estimate the average cost of compliance with regulations for both businesses and citizens and, from an evaluation perspective, to identify areas of opportunity for regulatory improvement. The measurement of costs—and of benefits, where applicable—is not in itself an automatic response or a constraint on legislators, as noted by Ponce (2009), but rather provides information to support discretionary normative decisions. These may include simplifying administrative processes, enacting new regulations, or reformulating existing ones—whether through full or partial repeal. However, the application of the Standard Cost Model has some weaknesses, partly due to the complexity and heterogeneity of data on administrative burdens (Torriti, 2012).

The European Commission and the majority of EU Member States have adopted the Standard Cost Model as the method for measuring the impact of administrative burdens and their reduction. This is also the reference methodology within the Government of Catalonia (Generalitat).

With the aim of promoting the analysis of the impact of administrative burdens, the Better Regulation Area of the Government of Catalonia has developed, over the course of more than fifteen years, a comprehensive set of tools and methodologies. These include the Standard Unit Cost System (which standardizes the compliance time required for businesses to fulfil a set of defined information obligations), a database for collecting information on administrative burdens (SICAD), the adoption of the SME Test, the drafting of Recommendations on the content of impact assessment reports, as well as methodologies for calculating hourly costs in both the business sector and public administrations².

² Part of this documentation is available on the website of the Department of the Presidency, under the section Areas of Activity – Better Regulation. https://presidencia.gencat.cat/ca/ambits_d_actuacio/millora-de-la-regulacio-normativa/
In any case, this documentation may be requested via email: milloraregulacio.presidencia@gencat.cat

As it was said, this article is part of this broad set of methodological studies and discussions undertaken by this unit.

2. Methodology

There is a methodological gap in estimating the hourly cost for citizens—understood as natural persons—of complying with the burdens imposed by a given regulation. A review of the literature and international benchmarks has revealed this gap. The few identified examples are discussed below:

- **Federal Statistical Office of Germany:** In the guide prepared by the Federal Statistical Office of Germany (2025) on identifying and presenting compliance costs in legislative initiatives of the Federal Government, the chapter devoted to citizens does not include any methodology that would allow for estimating the value under discussion in this study. Costs are expressed solely in terms of time savings.
- **Belgium – Kafka Model:** The implementation of the Standard Cost Model by the Belgian Government through its Kafka Model provides an estimate of a standard hourly rate for various groups, economic agents, or administrative personnel (BOSA, 2024). In the case of citizens, the standard hourly rate for 2024 is set at €32.64. Unfortunately, the quantitative methodology used to determine this hourly rate is not disclosed.
- **Australian Government Office of Impact Analysis:** A working note published by the Australian Government’s Office of Impact Analysis in February of this year (OIA, 2024) follows a similar approach to the Belgian model. It estimates the hourly cost of citizen interactions with public administrations at 37 Australian dollars (approximately €22.50 at the current exchange rate). However, the mathematical rationale behind this estimate is not presented.
- **HM Revenue and Customs:** In contrast, the work of Hill and Noti (2009) for HM Revenue and Customs in the UK is of particular interest. Aimed at improving the citizen experience, their study outlines a methodology for estimating the cost of citizens’ interactions related to paying taxes, yielding a value of £14.20 in 2008.

In this case, the calculation methodology is clearly presented. The population is divided into employed and unemployed individuals; the former are assigned the average wage, while the latter are assigned a “proxy” wage based on the Annual Survey of Hours and Earnings (ASHE). This division of the population into categories to which a wage-based value is attributed forms the foundation of our proposed methodology, which is detailed in the following section.

2.1 Formulation

To address this issue, we define the annual hourly cost of compliance with an administrative burden by citizens through the following formula:

$$P_t = (1 + \Omega_t) \sum_{i=1}^n \frac{\Theta_{it} s_{it}}{h_{it}}$$

P_t : the cost per hour associated with compliance due to an administrative burden in year t .

Θ_{it} : the proportion represented by a given individual or group in year t relative to the total population under study.
By definition: $0 \leq \Theta_{it} \leq 1$ and $\sum_{i=1}^n \Theta_{it} = 1$

s_{it} : the annual remuneration of the individual or collective in year t .

h_{it} : the total number of annual hours worked by individual or group i in year t .

Ω_t : the estimation of general costs (overhead), should they be included. By definition, $0 \leq \Omega_t \leq 1$.

2.2 Parameters

The implementation of the formula outlined above requires determining the values of the considered parameters:

1. The population base on which we will apply our calculations and, ultimately, for which the hourly price parameter will be representative.
2. Economic magnitudes that allow us to approximate and calculate the price variable.
3. An approximation of the time factor, which enables us to standardize our calculations into an hourly price.

Population base

The reference population base for calculating the hourly price will consist of individuals residing in Spain who are over 16 years of age; this age corresponds to the minimum working age in Spain, as established by Article 6 of Royal Legislative Decree 2/2015, approving the consolidated text of the Workers' Statute.

Although Law 39/2015, in article 3.b, establishes that minors shall have the capacity to act for the exercise and defense of those rights and interests whose exercise is permitted by the legal system without the assistance of the person exercising parental authority, guardianship, or curatorship, it is considered that, below the age of 16, there are few administrative procedures that a minor can carry out independently, and they are not representative from a statistical perspective.

Economic magnitudes

One of the fundamental assumptions of economic theory is that, in an ideal scenario where individuals control their time and are paid by the hour of work, they engage in exchange until the marginal value of one hour of leisure equals the marginal value of an additional hour of work. This approach is useful in that it highlights that leisure time has significant value for individuals and must be considered when conducting a rigorous analysis of the costs of complying with a regulation. Moreover, we can assume that most people will carry out these tasks during their leisure hours and not during their working hours. Therefore, the most appropriate variable would be the net wage, i.e., after taxes have been deducted.

Thus, to assess the time spent by citizens in compliance-related activities, we will use the wage variable or a similar approximation.

The chosen population base is not homogeneous in its composition, as, from the age of 16 onwards, individuals may experience various life situations. This raises the issue of how to approximate the economic magnitudes that give value to the time parameter:

1. A first solution could be to assume a homogeneous and general economic parameter for the entire population under study.
2. The second solution, which we consider more realistic, is to subdivide this population into different categories based on their employment situation, and from there, find a variable that fits this reality.

In this sense, based on data cross-referencing between the Active Population Survey and Social Security data, seven analytical categories are formed:

- Employed individuals.
- Unemployed individuals.
- Pensioners.
- Inactive individuals in other situations.

Employed individuals

The best way to approximate the concept of salary for employed individuals is through the Salary Structure Survey, which provides the variable of average gross annual salary (AGAS), which will serve as the basis for our calculations.

Earlier, we established that, as a hypothesis, it was assumed that individuals carry out their administrative tasks during their free or leisure time; therefore, the net salary should be considered. However, approaching this from this perspective complicates the calculations, particularly due to the fact that the Personal Income Tax (IRPF), the main tax for individuals, operates through a system of tax brackets.

It is also important to note that this study presents an initial methodological approach in the field of monetary costs for citizens. In this regard, and in the absence of better information, in the short term we will work under the assumption that the tax burden is the same for all individuals. We acknowledge that this is an unlikely assumption, but once this methodology is applied in specific cases, the corresponding adjustments could be made.

Finally, it should be remembered that the ultimate goal of calculating a reference hourly price is not to obtain an exact and unique figure, but an approximate value that allows for the quantification and, ultimately, the ability to assess monetized alternatives, all of which are analyzed using a homogeneous methodology.

This same reasoning is applied to pensioners and inactive individuals or those in other situations, as addressed in the following paragraphs.

Pensioners

In the case of pensioners, whether due to retirement or disability, and regardless of whether they have contributed to the system or not, the best variable to approximate the concept of salary is the average gross annual pension amount.

The eSTADISS system: Pension Statistics, managed by the Ministry of Inclusion, Social Security, and Migration, provides detailed data on the number of contributory pensioners in our country, their temporal evolution, their distribution by regimes and types of pensions, or territorial distribution, among many other segmentation variables. Similarly, it offers the value of the average monthly pension by type of pension in euros. This variable will be used as the basis for our calculations.

The Institute for Older Adults and Social Services (IMSERSO) provides the same information for non-contributory pensions.

Unemployed individuals and inactive individuals in other situations

Although these two groups stem from completely different life situations, we have decided to group them together in terms of salary assignment for the sake of simplifying calculations in the quantification of their administrative procedures.

For these two groups, the minimum interprofessional wage (SMI) will be used, which is the minimum remuneration corresponding to the legal working day that the worker receives. It is regulated by the Government annually, after consultation with the most representative trade unions and business associations. The minimum wage only accounts for monetary remuneration. This wage is understood as referring to the legal working day in each activity. If a shorter working day is performed, the wage will be paid pro-rata. The statutory minimum wage for 2022 was set at €14,000 per year.

Time

The hours worked refer to the number of hours corresponding to the annual working day per worker.

Royal Legislative Decree 2/2015, of October 23, which approves the revised text of the Workers' Statute, establishes in Article 34 that the maximum duration of the ordinary working day shall be forty hours of effective work per week, averaged over the course of a year.

Judgment 00396/2017 of the Social Chamber of the High Court of Justice of Castilla y León, through a detailed calculation, establishes that the maximum legal annual working day would amount to 1,826 hours. This will be the reference parameter in our calculations, both for active workers and for inactive individuals.

2.3 Inclusion of overhead costs

General costs, according to the OECD definition (2014), include rental costs, office equipment, supplies, and other inputs used by personnel engaged in managing regulatory compliance activities, as well as general corporate expenses, such as management tasks related to fulfilling information requirements. In the case of citizens, it is unclear whether these costs should be included in the calculation of the value of time.

Initially, the hypothesis was that individuals comply with regulatory obligations during their leisure time: therefore, the valuation would be based on the net wage, excluding taxes. The advantage of this approach is that it represents how individuals value their own time and is consistent with alternative methodologies. However, as previously mentioned, we would ultimately opt for the gross salary for calculation efficiency reasons. The problem is that, as pointed out by Hill and Noti (2009) or the OIA (2024), this creates an inconsistency between the way in which the burdens on citizens and public workers who manage them are measured, where not only the salary is included, but also the overhead costs.

The OECD recommends adopting a reference figure or percentage because this significantly simplifies the calculation of overhead costs. The Standard Costing Manual presents previous studies and experiences and places these percentages around 25-30%; the *Guia de Bones Pràctiques per a l'elaboració i la revisió de normativa amb incidència en l'activitat econòmica* (Generalitat de Catalunya, 2010) places them at 25%. With this methodology, the result is progressive, meaning that the overhead costs will be higher as labor costs – or, in our case, salaries – increase.

As a methodological decision, an estimation of the overhead costs equal to 25% of the salary factor is established.

2.4 Estimation scenarios

Once the variables and data sources to be included in the initial formulation of our problem have been defined, the next step is to propose different estimation scenarios that will allow us to determine the best approximation to the value of citizens' time in their interactions with the Administration:

Table 3: Estimation scenarios

Scenarios	Groups of population	Wage variables	Advantages	Disadvantages
SCN1	Entire population	AGAS	Efficiency in calculations, as it uses a single parameter. The search for information is minimized.	It overestimates the overall hourly rate, as well as the rate for certain groups.
SCN2	Employed population Rest of population	AGAS SMI	Efficiency in both information search and calculation. It captures the wage difference between the employed group and the rest of the population, who are assumed to have lower income, thus providing a better-adjusted hourly rate.	The group outside the employed category is quite diverse, as it can include unemployed individuals seeking work as well as retirees with a stable income.
SCN3	Employed population Contributory pensioners Rest of population	AGAS ACP SMI	The segmentation of the population allows for a much more accurate hourly rate aligned with social reality.	The model increases the time needed for information search and calculations.
SCN4	Employed population Contributory pensioners Noncontributory pensioners Rest of population	GAS ACP ANCP SMI	As in the previous case, the segmentation of the population provides a much more accurate hourly rate aligned with social reality.	The model increases the time required for information search and calculations. It remains to be seen whether the inclusion of non-contributory pensioners significantly modifies the final hourly rate compared to Option 3.

All scenarios are based on:

- Population aged 16 and over.
- The time base used is 1,826 annual working hours.
- The calculations were carried out using data from 2022—the most recent year for which homogeneous data are available.

AGAS: Average Gross Annual Salary; SMI: Minimum Interprofessional Salary; ACP: Average Contributory Pension; ANCP: Average Noncontributory Pension

Source: Author's own elaboration.

3. Results and discussion

Based on the information presented in the table in the final annex, the following hourly price estimates were obtained for each of the four analytical scenarios considered. Additionally, the hourly price including general overhead costs of 25% is also provided.

Table 4: Results

	Hourly price	Hourly price (including 25% overhead costs)
SCN1	14,76 €	18,45 €
SCN2	11,28 €	14,10 €
SCN3	11,58 €	14,47 €
SCN4	11,53 €	14,42 €

Source: Author's own elaboration.

With regard to the analytical scenarios considered, a clear distinction can be observed between Option 1 and the remaining alternatives. As previously noted in the methodological section, estimating the hourly price by imputing the average salary to the entire population leads to an economic overvaluation of time for those individuals who are inactive or whose income falls below this global average. In this respect, the difference in the estimated hourly price between adopting Scenario 1 and any of the others is approximately €3.

If one accepts the existence of a certain degree of bias and overestimation, and Option 1 is thus ruled out, the question arises as to which of the remaining options best estimates the hourly price parameter.

Individuals receiving a non-contributory retirement pension account for just over 1% of the population aged 16 and over; moreover, the annual amount of this type of benefit is relatively low. As a result, the distinction between Option 3 and Option 4 has a negligible impact on the calculations: the difference amounts to barely 5 cents, a statistically insignificant value. Therefore, Option 4 can be clearly ruled out.

The numerical differences between Options 2 and 3 are not particularly pronounced. However, two key elements lead us to favour the third calculation formula:

- Option 3 aligns more closely with the demographic reality of our country compared to Option 2, as it includes pensioners—a group representing 18–20% of the total population and expected to increase in the coming years, according to projections by statistical and demographic institutes.
- In Option 2, this group was assigned, by default, the statutory minimum wage. However, the average contributory pension, whether for retirement or disability, is higher, and it is expected that this figure will continue to rise in the future.

From the standpoint of both sustainability and the long-term validity of the model, Option 3 is therefore considered the most appropriate approximation of the hourly price parameter for citizens. This approach is based on a combination of the average gross annual salary, the average annual contributory pension (retirement or disability), and the statutory minimum wage.

In earlier sections, we discussed the implications of including or excluding overhead costs in the model, noting that their inclusion is subject to the discretion of the promoting and/or evaluating unit of any initiative that imposes administrative burdens on citizens.

From a methodological perspective, this study opts to include these costs, as we believe doing so enables a more accurate comparison of citizens' time with that of other actors—such as employers or public administrations—for whom these costs are typically considered. As such, including overhead allows for a more comprehensive evaluation of the social costs or benefits should this methodology be applied in a regulatory impact assessment.

In conclusion, for the year 2022, the hourly cost of complying with administrative burdens for citizens was €14.42 across Spain. The values for all the Autonomous Communities are displayed, as well as the actualization of hourly prices for 2024, according to the IPC.

TABLE 5: Hourly price including overhead cost. Spain and Autonomous Communities

	P ₂₀₂₂	P ₂₀₂₄
Spain	14.42 €	15.79 €
Andalusia	12.83 €	14.16 €
Aragón	14.46 €	15.78 €
Asturias	14.34 €	15.71 €
Balearic Islands	14.89 €	16.27 €
Canary Islands	12.66 €	13.99 €
Cantabria	13.91 €	15.25 €
Castile and León	13.39 €	14.76 €
Casile - La Mancha	13.06 €	14.49 €
Catalonia	15.57 €	16.96 €
Valencian Community	13.39 €	14.66 €
Extremadura	12.00 €	13.18 €
Galicia	12.88 €	14.22 €
Madrid	16.80 €	18.18 €
Region of Murcia	13.11 €	14.45 €
Navarra	15.78 €	17.27 €
Basque Country	17.05 €	18.64 €
La Rioja	13.91 €	15.29 €

Source: Author's own elaboration. The actualization of values for 2024 is based on the variation of the General Index by Autonomous Communities according to the CPI system (base year 2021) from January 2022 to January 2024.

<https://www.ine.es/varipc/verVariaciones.do?idmesini=1&anyoini=2022&idmesfin=1&anyofin=2024&ntipo=2&enviar=Calcular>

3.1 Validity and consistency of the results

An issue of particular interest is whether the results obtained are valid and consistent with other existing values in our immediate socio-economic context.

To this end, the results presented in the previous section are compared with reference values identified in the review of different approaches to the hourly price parameter, for which approximate figures are available: travel time (despite having been excluded earlier due to the potential inclusion of other subjective valuations), caregiving time, and the hourly price in Belgium, Australia, and the United Kingdom. Official pricing benchmarks are excluded from the comparison.

The following section outlines the calculations and updates used to establish the basis for this comparison.

- **Kafka Method (Belgium):** The Belgian guide for measuring administrative burdens estimated an hourly price for citizens of €32.64 for 2024. The average gross salary in Belgium for 2022 was €52,248³, which is 1.94 times higher than in Spain. Assuming that this ratio remains stable, the equivalent price in Spain for 2024 would be approximately €16.84.

Table 6: Calculus for Belgium

Average Annual Gross Salary	52,248 €
Wage Ratio Factor	$\frac{52,248\text{€}}{26,948.87\text{€}} = 1.94$
Conversion of the Belgian price	$\frac{32,64\text{€/h}}{1.94} = 16.84\text{€/h}$

- **Australia's Impact Analysis Office:** The Australian guide established an hourly price for citizens of 37 Australian dollars for the year 2024 (approximately €22.50 at the exchange rate). In Australia, the minimum gross salary for that same year is set at 24.10 Australian dollars (approximately €14.59 at the exchange rate)⁴. In Spain, Royal Decree 145/2024 establishes the statutory minimum wage at €15,876; based on a working year of 1,826 hours, the hourly rate amounts to €8.69. The ratio between hourly prices is 1.68. Therefore, the 22.50 Australian dollars would be equivalent to approximately €13.39 under the Spanish macroeconomic conditions.

TABLE 7: Calculus for Australia

Minimum Gross Wage	24,10 \$/h (14,59 €/h)
Average Annual Gross Salary in Spain (2024)	$\frac{15,876\text{€}}{1,826\text{hours}} = 8.69\text{€/h}$
Wage Ratio Factor	$\frac{14.59\text{€/h}}{8.69\text{€/h}} = 1.68$
Conversion of the Australian price	$\frac{22.50\text{€/h}}{1.68} = 13.39\text{€/h}$

- **HM Revenue and Customs:** The study by Hill and Noti (2009) estimated the hourly price for citizens interacting with the UK Customs and Revenue Agency at £14.20 in 2008; this amount, updated to 2024, is equivalent to £22.03 (approximately €26.27)⁵. The UK's Office for National Statistics does not use the variable of average gross annual salary in its analyses, but rather the median gross annual salary, which is the value that splits the distribution into two equal parts. Since the calculations presented here aim solely to contextualize the values obtained for Spain, we will use the value of £33,061 (approximately €39,416.30) for 2022, despite it not being methodologically equivalent.

³ SEPE. Mercado de trabajo en Bélgica en 2022. https://www.sepe.es/SiteSepe/contenidos/personas/encontrar_empleo/encontrar_empleo_europa/paises/belgica/pdf_belgica/2022/2022_MT_Blgica.pdf

⁴ Australian Government. Fair Work Ombudsman. Minimum wages. <https://www.fairwork.gov.au/pay-and-wages/minimum-wages>

⁵ Inflation claculator. Bank of England. <https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator>

TABLE 8: Calculus for the UK

Median Annual Gross Salary (2022)	24,10 \$/h (14,59 €/h)
Wage Ratio Factor (2022)	$\frac{39,416.30\text{€}}{26,948.87\text{€}} = 1.46$
Conversion of the English price	$\frac{39,416.30\text{€}}{26,948.87\text{€}} = 1.46$

Since the methodology used in the calculations by the Belgian and Australian offices is unknown, and given that the other values are updates based on the Consumer Price Index (IPC), we believe that in order to ensure the verification of the validity and consistency of our results, a much more detailed and in-depth study would be required.

That being said, despite the statistical noise generated by combining different approximation methodologies, the summarized data in Graph 1 allow us to assert that the hourly prices obtained with our formulation appear to fall within a quite plausible range.

Graph 1. Comparison of hourly prices. 2024.



Source: Author's own elaboration.

4. Conclusions

This work was undertaken with the aim of establishing a calculation methodology that would allow estimating, in monetary terms, the time that citizens spend complying with the administrative burdens arising from a given regulation.

The parameter obtained, expressed in terms of euros per hour, enables the application of the basic framework of the Standard Cost Model and adheres to the principles of efficiency and proportionality, sustainability and comparability, and applicability to other contexts, while ensuring transparency and traceability of the calculations.

This work, due to its practical nature, addresses an existing methodological need not only within the Better Regulation Area of the Government of Catalonia but also across other public administrations conducting Regulatory Impact Analysis and quantifying administrative burdens in the context of ex-ante or ex-post evaluations.

The proposed methodology is characterized by offering the most efficient alternative in terms of calculation and approximation to the parameter of the hourly price of citizens in their interactions with public administrations among all the options considered.

Of the four calculation scenarios addressed, the one that estimated the price based on the extrapolation of the average gross annual salary for the entire population led to an overvaluation of the object of study. In the fourth scenario, the inclusion of the population receiving non-contributory benefits — just over 1% of the population aged 16 and over — did not significantly modify the results compared to the chosen calculation option.

In contrast to a second scenario where the population was divided into two major groups and the gross salary and Minimum Interprofessional Salary parameters were used, the third approach chosen, which includes the population receiving contributory benefits — a sector expected to grow both in number of individuals and the value of the average benefit — proves to be the most suitable model based on the available information.

It is important to recall that the approach to valuing the time spent by citizens in fulfilling certain requirements and calculating costs does not seek scientific precision, but rather aims to provide a general framework for reflection based on comparing different alternatives in the implementation or subsequent evaluation of a given regulatory proposal. What matters is not so much the specific figure generated by the calculations, but that the methodology is transparent in its formulation, facilitates the use of existing information, minimizes calculations, and remains homogeneous across all scenarios, enabling a better assessment of whether intervention is necessary and, if so, in a way that minimizes the burdens on citizens.

The calculations derived from the proposed formula and the available information show that, for a Spanish citizen required to comply with the administrative burdens imposed by the administration for a given procedure, each hour would cost approximately €14.42 based on 2022 data, or €15.79 if this price were updated to 2024.

I invite the reader to reflect on what they could do with €14-16 in one hour. Or to multiply that price by all the time they spent the last time they had to interact with the administration to carry out a procedure that required them to submit documents.

However, at this price, let us not forget that we would need to incorporate other costs, especially psychological ones. The confusion, the inability to understand what is being asked of us, why the electronic identification key doesn't work, the frustration of thinking that the administration is asking for a document already in its possession, the waiting times on the phone... All these issues are not captured in the mathematical model developed and would be the subject of future research using quantitative or qualitative techniques.

The truth is, from a mathematical and statistical standpoint, the model is quite simple, but the availability of data and the way of working in the internal evaluation units sometimes demands this simplicity. Perhaps, over time, if this methodology is implemented, it could be refined and integrated into more complex models of global analysis.

The results of this work are only the first step toward a much more complex formulation to be developed in the medium term. It would be desirable to adjust to the population's reality in a much more precise manner, either through surveys, behavioral experiments, or studies prior to the implementation of a given procedure, as is already done in many citizen participation spaces.

It is also worth mentioning that while this work has not delved too deeply into it, it has taken into account the gender perspective and highlighted the differences that arise when valuing the time of men and women based on a parameter as inherently unequal as salary. Does the time of women count for less simply because they earn less? The answer to this question is obvious: no. In this context, it would be beneficial to recover the idea that not all work is paid and to assign economic value to domestic and care tasks in estimation models. This is an element to improve in future revisions of this methodology.

Indeed, the mathematical model proposed here must primarily be useful. It must respond to the primary users of the evaluation. A methodology will only be useful under two conditions: first, if it is capable of projecting values that closely match reality, and second, if the technicians responsible for implementing it understand, internalize, and are able to apply it. For this reason, it was considered essential to show a practical example of application. If one criticism

can be made of many existing guides developed by high-level European or international bodies, it is the lack of detail in calculations or the presentation of practical assumptions of some complexity or significance.

The fact that an evaluation — or a methodological proposal within this context — is technically "perfect" does not ensure (nor is it equivalent to) that its results will be of interest or usable. In this sense, if this formula is not useful to the departmental units driving and promoting regulatory initiatives and does not help them assess and weigh different options, as well as estimate the impact on the citizen, the exercise will have been pointless.

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Conflict of interests

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Author contributions

Sergio Mosteiro: Conceptualization, Methodology, Formal analysis, Writing - Original Draft, Writing - Review & Editing, Supervision, Project administration.

REFERENCES

- Alabanos, N., & Theodoropoulos, S. (2016). A key-point comparison & the new challenges for the existent Administrative Burden Models (A.B.M's). *Journal of Economics and Business*, 66, 32-45. <https://www.econstor.eu/bitstream/10419/169177/1/862395976.pdf>
- Alon-Barkat, S., & Busuioc, M. (2023). Human–AI Interactions in Public Sector Decision Making: “Automation Bias” and “Selective Adherence” to Algorithmic Advice. *Journal of Public Administration Research and Theory*, 33, 153-169. <https://doi.org/10.1093/jopart/muac007>
- Aravena, W; Riquelme, S, & Santibáñez, M. (2023). El trámite para calificar la discapacidad en Chile. Las cargas administrativas que deben asumir las personas con discapacidad en la región del Biobío. *Revista Mexicana de Análisis Político y Administración Pública*, 12, 37-66. <https://dialnet.unirioja.es/servlet/articulo?codigo=9540137>
- Auby, J-B., & Perroud, T. (Eds.) (2013). *La evaluación de impacto regulatorio*. Instituto Nacional de Administración Pública.
- Aymerich Ojea, I. (2023). La Administración como generadora de evidencias para la calidad normativa. *Documentación Administrativa*, (10), 24-39. <https://doi.org/10.24965/da.11213>
- Baekgaard, M., Mikkelsen, K. S., Madsen, J. K., & Christensen, J. (2021). Reducing compliance demands in government benefit programs improves the psychological wellbeing of target group members. *Journal of Public Administration Research and Theory*, 31(4), 806–821. <https://doi.org/10.1093/jopart/muab011>
- Baekgaard, M., & Tankink, T. (2022). Administrative Burden: Untangling a Bowl of Conceptual Spaghetti. *Perspectives on Public Management and Governance*, 5(1), 16-21. <https://doi.org/10.1093/ppmgov/gvab027>
- Barnes, C., & Riel, V. (2022). ‘I don’t know nothing about that’: How “learning costs” undermine COVID-related efforts to make SNAP and WIC more accessible. *Administration & Society*, 54, 1902-1930. <https://doi.org/10.1177/00953997211073948>
- Barnes, C., & Petry, S. (2021). “It was actually pretty easy”: COVID-19 compliance cost reductions in the WIC program. *Public Administration Review*, 81(6), 1147–1156. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8447008/>
- Bosa. (2024). Guide pratique pour la mesure des charges administratives et des coûts de gestion. Modèle de mesure Kafka Méthode des Coûts Standard au niveau fédéral. [https://bosa.belgium.be/sites/default/files/content/documents/DTdocs/Simplification/MANUAL%20DAV_2024_\(FR\).pdf](https://bosa.belgium.be/sites/default/files/content/documents/DTdocs/Simplification/MANUAL%20DAV_2024_(FR).pdf)
- Bozeman, B. (2000). *Bureaucracy and Red Tape*. Prentice-Hall.
- Burden, B., Canon, D., Mayer, K., & Moynihan, D. (2012). The Effect of Administrative Burden on Bureaucratic Perception of Policies: Evidence from Election Administration. *Public Administration Review*, 72(5), 741-751. <https://doi.org/10.1111/j.1540-6210.2012.02600.x>
- Cecchini, M. (2024). Into the Unknown: Conceptualizing the Experience of Uncertainty in Citizen–State Interactions. *Perspectives on Public Management and Governance*, 7(1-2), 47–59. <https://doi.org/10.1093/ppmgov/gvae002>
- Cook, K. (2021). Gender, malice, obligation and the state: Separated mothers’ experiences of administrative burdens with Australia's child support program. *Australian Journal of Public Administration*, 80(4), 912–932. <https://doi.org/10.1111/1467-8500.12522>

- Cook, K. (2022). State tactics of welfare benefit minimisation: The power of governing documents. *Critical Social Policy*, 42(2), 241–264. <https://doi.org/10.1177/02610183211003474>
- Döring, M., & Madsen, J.k. (2022). Mitigating Psychological Costs—The Role of Citizens' Administrative Literacy and Social Capital. *Public Administration Review*, 82(4), 671–681. <https://doi.org/10.1111/puar.13472>
- Dunlop, C., & Radaelli, C. (Eds.) (2016). Handbook of regulatory impact assessment. *Edward Elgar Publishing*.
- European Commission. (2021). *Better regulation toolbox*. https://commission.europa.eu/law/law-making-process/planning-and-proposing-law/better-regulation/better-regulation-guidelines-and-toolbox_en
- Federal Statistical Office of Germany. (2025). *Leitfaden zur Ermittlung und Darstellung des Erfüllungsaufwands in Regelungsvorhaben der Bundesregierung*. Federal Statistical Office on behalf of the German Federal Government and the National Regulatory Control Council. <https://www.destatis.de/DE/Themen/Staat/Buerokratiekosten/Publikationen/Downloads-Buerokratiekosten/erfuellungsaufwand-handbuch.html>
- Gamero Casado, E. (2014). Hacia la simplificación de los procedimientos administrativos: El procedimiento administrativo adecuado. *Actas del IX Congreso de la Asociación Española de Profesores de Derecho Administrativo*.
- Generalitat de Catalunya (2008). *Manual internacional del model de costos estàndard*. Departament de la Presidència. Direcció de Qualitat Normativa. <https://hdl.handle.net/20.500.14623/214>
- Generalitat De Catalunya (2010). *Good practice guide for the preparation and revision of regulatory affecting economic activity*. Departament de la Presidència. Direcció de Qualitat Normativa. <https://hdl.handle.net/20.500.14623/865>
- Hattke, F., Hensel, D., & Kalucza, J. (2020). Emotional Responses To Bureaucratic Red Tape. *Public Administration Review*, 80(1), 53–63. <https://doi.org/10.1111/puar.13116>
- Herd, P., & Moynihan, D. (2018). *Administrative Burden: Policymaking by Other Means*. Sage Foundation.
- Hill, A., & Noti, J. (2009). Costing Customer Time. Research Paper. Revenue and Customs. <https://assets.publishing.service.gov.uk/media/5a75674c40f0b6360e473d8f/cost-of-time.pdf>
- Judgment 00396/2017 of the Social Chamber of the High Court of Justice of Castile and León. Tribunal Superior de Justicia. Sala de lo Social. <https://www.poderjudicial.es/search/AN/openDocument/655a19e14800529d/20170412>
- Kahn, R.; Katz, D., & Gutek, B. (1976). Bureaucratic Encounters—An Evaluation of Government Services. *The Journal of Applied Behavioral Science*, 12(2), 178–198. <http://dx.doi.org/10.1177/002188637601200203>
- Law 39/2015, of 1 October, on the Common Administrative Procedure of Public Administrations. *Boletín Oficial del Estado*. <https://www.boe.es/eli/es/l/2015/10/01/39/con>
- Madsen, J., & Mikkelsen, K. (2021). How salient administrative burden affects job seekers' locus of control and responsibility attribution: Evidence from a survey experiment. *International Public Management Journal*, 25(2), 241–260. <https://doi.org/10.1080/10967494.2021.1951905>
- Madsen, J., Mikkelsen, K., & Moynihan, D. (2022). Burdens, sludge, ordeals, red tape, oh my! A user's guide to the study of frictions. *Public Administration*, 100(2), 375–393. <https://doi.org/10.1111/padm.12717>
- Martinelli, C., & Parker, S. (2009). Deception and Misreporting in a Social Program. *Journal of the European Economic Association*, 7(4), 886–908. <https://doi.org/10.1162/JEEA.2009.7.4.886>

- Masood, A., & Nisar, M. (2021). Administrative Capital and Citizens' Responses to Administrative Burden. *Journal of Public Administration Research and Theory*, 31(1), 56-72. <https://doi.org/10.1093/jopart/muaa031>
- Ministry of Economy, Trade and Business. (2017). *Guía Metodológica para la elaboración de la Memoria del Análisis de Impacto normativo*. https://funcionpublica.digital.gob.es/dam/es/portalsefp/gobernanza-publica/simplificacion/impacto-normativo/guia-metodologica_ain.pdf#page=1
- Moynihan, D.; Herd, P., & Harvey, H. (2015). Administrative Burden: Learning, Psychological, and Compliance Costs in Citizen-State Interactions. *Journal of Public Administration Research and Theory*, 25(1), 43-69. <https://doi.org/10.1093/jopart/muu009>
- Naundorf, S., & Radaelli, C. (2017). Regulatory Evaluation Ex Ante and Ex Post: Best Practice, Guidance and Methods. In U. Karpen & H. Xanthaki (Eds.), *Legislation in Europe: A Comprehensive Guide for Scholars and Practitioners*. Hart Publishing.
- Nisar, M., & Masood, A. (2022). Are all burdens bad? Disentangling illegitimate administrative burdens through public value accounting. *Asia Pacific Journal of Public Administration*, 45(4), 385-403. <https://doi.org/10.1080/23276665.2022.2088581>
- Novales, A. (Coordinador) (2024). *Los ciudadanos ante la administración: reflexiones críticas y recomendaciones. Informes y papeles del Grupo de Trabajo Mixto COVID-19*. FEDEA. <https://documentos.fedea.net/pubs/dt/2024/dt2024-05.pdf>
- OECD. (2014). *OECD Regulatory Compliance Cost Assessment Guidance*. OECD Publishing. <https://doi.org/10.1787/9789264209657-en>
- OIA. (2024). *Regulatory Burden Measurement Framework*. Department of the Prime Minister and Cabinet. <https://oia.pmc.gov.au/sites/default/files/2024-02/regulatory-burden-measurement-framework.pdf>
- Peeters, R. (2020). The Political Economy of Administrative Burdens: A Theoretical Framework for Analyzing the Organizational Origins of Administrative Burdens. *Administration & Society*, 52(4), 566-592. <https://doi.org/10.1177/0095399719854367>
- Peeters, R., & Widlak, A. (2023). Administrative Exclusion in the Infrastructure-Level Bureaucracy: The Case of the Dutch Daycare Benefit Scandal. *Public Administration Review*, 83(4), 863-877. <https://doi.org/10.1111/puar.13615>
- Ponce, J. (2009). ¿Mejores normas? Directiva 2006/123/CE, relativa a los servicios en el mercado interior, calidad reglamentaria y control judicial. *Revista de Administración Pública*, (180), 201-243. <https://www.cepc.gob.es/sites/default/files/2021-12/27608juliponcesolerap180.pdf>
- Ramío, C. (2022). *Burocracia inteligente. Guía para transformar la Administración pública*. Los Libros de la Catarata.
- Royal Legislative Decree 2/2015, of 23 October, approving the revised text of the Workers' Statute Act. *Boletín Oficial del Estado*. <https://www.boe.es/eli/es/rdlg/2015/10/23/2/con>
- Sánchez Puente, R.; Bueno Rodríguez, F., & García Vidal, A. (2019). La evaluación ex-ante. Una visión de la Oficina de Coordinación y Calidad Normativa. ICE, *Revista de Economía*, (907), 23-36. <https://doi.org/10.32796/ice.2019.907.6807>
- Tolmo García, J. (2019). *Sobre la simplificación administrativa en procedimientos destinados a personas en riesgo de exclusión social en la Región de Murcia: análisis y propuestas*. EAPN Murcia y Consejería de Mujer, Igualdad, LGTBI, Familias y Política Social. https://conocimientoabierto.carm.es/jspui/bitstream/20.500.11914/6444/1/2022_Simplificacion_administrativa.pdf
- Tornos Mas, J. (2000). La simplificación procedimental en el ordenamiento español. *Revista de administración pública*, (151), 39-76. <https://recyt.fecyt.es/index.php/RAP/article/view/46226/27721>

Torriti, J. (2012). Standard Cost Model: Three different paths and their common problems. *Journal of Contemporary European Research*, 8(1), 90-108. <https://doi.org/10.30950/jcer.v8i1.322>

Van Den Hurk, J. (2008). *Standard Cost Model for Citizens. User's guide for measuring administrative burdens for Citizens*. Ministry of the Interior and Kingdom Relations.

Voermans, W. (2015). To measure is to know: The quantification of regulation. *The Theory and Practice of Legislation*, 3(1), 91-111. <https://doi.org/10.1080/20508840.2015.1041706>

Population

Spanish National Statistics Institute. [Population Figures. Final data as of 01/01/2022 and provisional data as of 01/07/2022](#).

Average Annual Gross Salary.

Spanish National Statistics Institute. [Encuesta de estructura salarial 2022](#).

Contributory Pensions.

Ministry of Inclusion, Social Security and Migration. [eSTADISS: Estadísticas de pensiones](#). Data have been multiplied by 14 to obtain the annual total.

Non Contributory Pensions.

Instituto de Mayores y Servicios Sociales (IMSERSO). [Pensiones no contributivas de jubilación e invalidez](#). Data have been multiplied by 14 to obtain the annual total.

Minimum Interprofessional Wage

The [Real Decreto 152/2022](#), of 22 February, which established the minimum interprofessional wage for 2022, stipulated in Article 1 that, for any activities in agriculture, industry, and services, regardless of the sex or age of the workers, the minimum interprofessional wage was set at €33.33 per day or €1,000 per month, depending on whether the wage was calculated on a daily or monthly basis. Therefore, on an annual basis, this would amount to €14,000.

The [Real Decreto 145/2024](#), of 6 February, which sets the minimum interprofessional wage for 2024, updates it to €15,876.

ANNEX

Table A1. Population aged 16 and over. Autonomous communities and categories. 2022.

	Population aged 16 and over (thousands)	Employed	Unemployed	Pensioners (disability, contributive)	Pensioners (retirement, contributive)	Pensioners (retirement, non contributive)	Pensioners (disability, non contributive)	Inactive individuals in other situations.
Spain	40.367,30	20.547,50	3.079,20	6.130,49	945,48	267,09	177,44	9.220,11
Andalusia	7.151,30	3.275,75	774,15	927,84	204,44	53,63	39,45	1.875,94
Aragón	1.130,20	599,85	63,88	196,50	21,82	4,75	2,38	241,14
Asturias	887,60	383,83	54,95	181,13	26,74	5,07	3,44	232,63
Balearic Islands	1.006,70	575,98	68,43	130,37	17,72	5,40	2,58	206,39
Canary Islands	1.898,70	925,20	198,08	194,58	49,18	24,60	17,79	489,31
Cantabria	503,70	249,15	26,38	87,47	12,96	4,04	3,12	120,61
Castile and León	2.065,50	1.010,05	111,38	388,90	45,80	12,56	8,42	488,41
Casile - La Mancha	1.738,90	871,55	149,50	221,73	44,09	10,54	8,49	432,93
Catalonia	6.550,10	3.593,53	398,00	1.118,40	157,48	36,21	25,94	1.220,49
Valencian Community	4.353,40	2.216,10	339,80	621,80	94,98	31,85	16,61	1.032,32
Extremadura	903,00	409,53	85,75	132,67	27,40	7,18	5,05	235,39
Galicia	2.349,00	1.103,55	136,90	478,74	70,83	24,01	12,98	522,07
Madrid	5.726,80	3.218,50	406,60	791,47	84,80	26,89	13,70	1.184,92
Region of Murcia	1.264,20	650,68	102,25	146,91	29,90	8,01	7,37	319,11
Navarra	557,50	295,55	31,88	93,94	10,34	1,95	1,02	122,91
Basque Country	1.880,50	967,28	94,25	362,37	40,25	6,96	5,96	403,21
La Rioja	270,70	145,78	15,38	47,37	4,51	1,28	0,73	55,66

TABLE A2. Population aged 16 and over. Autonomous communities and categories. Proportion.

	Employed	Unemployed	Pensioners (disability, contributive)	Pensioners (retirement, contributive)	Pensioners (retirement, non contributive)	Pensioners (disability, non contributive)	Inactive individuals in other situations.
	$\Theta_{1t=2022}$	$\Theta_{2t=2022}$	$\Theta_{3t=2022}$	$\Theta_{4t=2022}$	$\Theta_{5t=2022}$	$\Theta_{6t=2022}$	$\Theta_{7t=2022}$
Spain	0,51	0,08	0,15	0,02	0,01	0,00	0,23
Andalusia	0,46	0,11	0,13	0,03	0,01	0,01	0,26
Aragón	0,53	0,06	0,17	0,02	0,00	0,00	0,21
Asturias	0,43	0,06	0,20	0,03	0,01	0,00	0,26
Balearic Islands	0,57	0,07	0,13	0,02	0,01	0,00	0,21
Canary Islands	0,49	0,10	0,10	0,03	0,01	0,01	0,26
Cantabria	0,49	0,05	0,17	0,03	0,01	0,01	0,24
Castile and León	0,49	0,05	0,19	0,02	0,01	0,00	0,24
Casile - La Mancha	0,50	0,09	0,13	0,03	0,01	0,00	0,25
Catalonia	0,55	0,06	0,17	0,02	0,01	0,00	0,19
Valencian Community	0,51	0,08	0,14	0,02	0,01	0,00	0,24
Extremadura	0,45	0,09	0,15	0,03	0,01	0,01	0,26
Galicia	0,47	0,06	0,20	0,03	0,01	0,01	0,22
Madrid	0,56	0,07	0,14	0,01	0,00	0,00	0,21
Region of Murcia	0,51	0,08	0,12	0,02	0,01	0,01	0,25
Navarra	0,53	0,06	0,17	0,02	0,00	0,00	0,22
Basque Country	0,51	0,05	0,19	0,02	0,00	0,00	0,21
La Rioja	0,54	0,06	0,17	0,02	0,00	0,00	0,21

TABLE A3. Economic magnitudes. Autonomous communities and categories.

	Employed	Unemployed	Pensioners (disability, contributive)	Pensioners (retirement, contributive)	Pensioners (retirement, non contributive)	Pensioners (disability, non contributive)	Inactive individuals in other situations.
	$S_{1t=2022}$	$S_{2t=2022}$	$S_{3t=2022}$	$S_{4t=2022}$	$S_{5t=2022}$	$S_{6t=2022}$	$S_{7t=2022}$
Spain	26.948,87 €	14.000,00 €	17.557,96 €	14.488,04 €	6.248,27 €	6.913,80 €	14.000,00 €
Andalusia	24.094,32 €	14.000,00 €	15.843,10 €	13.343,54 €	6.476,82 €	6.899,48 €	14.000,00 €
Aragón	26.012,71 €	14.000,00 €	18.417,00 €	15.348,76 €	6.176,94 €	6.866,16 €	14.000,00 €
Asturias	26.745,93 €	14.000,00 €	21.022,26 €	16.513,98 €	6.342,98 €	6.863,92 €	14.000,00 €
Balearic Islands	27.145,79 €	14.000,00 €	16.227,96 €	13.550,32 €	6.221,18 €	7.051,94 €	14.000,00 €
Canary Islands	23.096,92 €	14.000,00 €	16.245,46 €	13.720,00 €	6.672,01 €	6.995,80 €	14.000,00 €
Cantabria	25.291,14 €	14.000,00 €	18.679,64 €	15.125,46 €	6.070,40 €	7.044,38 €	14.000,00 €
Castile and León	24.186,89 €	14.000,00 €	17.432,10 €	14.467,74 €	6.219,78 €	6.918,24 €	14.000,00 €
Casile - La Mancha	23.751,71 €	14.000,00 €	16.308,88 €	13.314,28 €	6.172,46 €	6.908,44 €	14.000,00 €
Catalonia	28.774,55 €	14.000,00 €	17.910,76 €	15.898,40 €	6.501,60 €	6.841,24 €	14.000,00 €
Valencian Community	24.510,34 €	14.000,00 €	16.074,38 €	13.776,70 €	6.397,44 €	6.910,12 €	14.000,00 €
Extremadura	21.922,73 €	14.000,00 €	14.611,80 €	12.302,08 €	6.222,16 €	6.864,90 €	14.000,00 €
Galicia	24.169,68 €	14.000,00 €	14.871,22 €	13.157,06 €	6.187,30 €	6.807,08 €	14.000,00 €
Madrid	31.230,73 €	14.000,00 €	20.391,42 €	15.673,00 €	6.270,74 €	7.046,76 €	14.000,00 €
Region of Murcia	23.851,69 €	14.000,00 €	15.682,66 €	13.096,30 €	6.234,76 €	6.986,14 €	14.000,00 €
Navarra	29.189,52 €	14.000,00 €	19.780,32 €	17.107,86 €	6.011,88 €	6.841,38 €	14.000,00 €
Basque Country	32.313,73 €	14.000,00 €	21.517,30 €	18.570,02 €	6.172,88 €	6.887,72 €	14.000,00 €
La Rioja	24.903,38 €	14.000,00 €	16.834,72 €	14.880,88 €	6.167,70 €	6.991,46 €	14.000,00 €