



Judicial Proceedings Must Be Weighted Instead of Just Counted

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ACADEMIC ARTICLE



ABSTRACT

Researching and quantifying the complexity level of different court cases is important to ensure that adequate judicial resources are available to resolve these cases in a just and fair manner, as well as within a reasonable timeframe.

The traditional way to measure and quantify the level of complexity of different court cases is by assigning a separate weight to each case-type or case-type-category. The research on 'case-weighting systems' (CWS) originated in the United States in the late 1970's, and has since been the subject of significant attention in Europe.

In this article, we undertake a detailed review of the European experience to provide new insights based on a comparative, in-depth and comprehensive examination of functioning European CWS. To this end, we have chosen to focus on five up and running European CWS in which the research body has formed into a cohesive system that can be studied, analyzed, and allow us to draw conclusions about the strengths, weaknesses, objectives and unique characteristics of each system. Bearing in mind that there is no 'one-size-fits-all' CWS, our aim is to assist readers to select their preferred method (or combination of methods), and identify any adjustments necessary to tailor it to the unique characteristics and specific needs of their court system.

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In principle, the concept of case weights (CW) is fairly simple, and relies on the basic understanding that a complex court case requires more work time to process than a simple court case. However, establishing a CWS is often not as simple, and may require significant time, financial and human resources, depending on the selected method of data collection to determine the final CW.

To gain a thorough understanding of the issue at hand, this article will open with a short review of the traditional formula to calculate CW that originated in the United States in the late 1970's and remains relevant as a source of comparison to this day. We will then list the objectives and possible uses of CWS. This will be followed by an overview of the main methods of data collection to establish the final CW (the Delphi method, the Time-study method and their combination). Further to this we will briefly mention two alternatives to the traditional approach. The core of this article will be devoted to an in-depth examination and analysis of functioning CWS in five European judiciaries. The choice to focus on these specific countries and their models stems from the fact that these models are used in practice and have accumulated a reliable body of information. This allowed us to analyze them in depth, and draw conclusions about the weaknesses and strengths of each model. These conclusions will seal this article in the final section.

THE TRADITIONAL CWS FORMULA

The mix of court cases includes many case-types that differ from each other both quantitatively and qualitatively. Each case-type has its own level of complexity and therefore demands a different amount of judicial worktime and attention to resolve. For example, it is common knowledge that, on average, a small claims case requires far less judicial work time to resolve than a bankruptcy case.

Accordingly, the element of time-demand is considered a clear, measurable and comparable indicator of the complexity level of different case-types, and is crucial to determine the number of judges required to meet the caseload¹ demands and to ensure that each case will be resolved within reasonable time.²

1 “Caseload” is used here to mean the number of proceedings a judge has to handle. According to the Glossary of the Commission for the Efficiency of Justice of the Council of Europe the “caseload” is the “Sum of the pending cases at a given time (e.g. 1st January 2019) plus the incoming cases in a given period (e.g. from 1st of January 2019 to 30th June 2019). It is an indicator of the stock of cases that a court or a judge requires to deal with”: CEPEJ(2020)Rev1 (3 February 2020) p.9 available at: <<https://rm.coe.int/cepej-2019-5final-glossaire-en-version-10-decembre-as/1680993c4c>> [accessed 10 May 2024].

2 E. Flango and B.J. Ostrom, *Assessing the Need for Judges and Court Support Staff*, National Center for State Courts, Williamsburg, VA, 1996, available at: <https://www.ncsc.org/__data/assets/pdf_file/0020/5258/assessingneed.pdf> [accessed 10 May 2024]; H. Gramckow, *Estimating Staffing Needs in the Justice Sector*, World Bank, Washington D.C., 2012, available at: <<https://openknowledge.worldbank.org/server/api/core/bitstreams/63a7fbd1-1aaa-51fd-9dcd-21ff026bc4aa/content>> [accessed 10 May 2024]; L. Hammergren, G. Harley and S. Petkova, *Case-Weighting Analyses a Tool to Promote Judicial Efficiency: Lesson, Substitutes and Guidance*, The World Bank Group, Kingdom of the Netherlands, Washington D.C., 2017, available at: <<https://openknowledge.worldbank.org/bitstream/handle/10986>> [accessed 10 May 2024]; Kleiman, M., et al, *Case Weighting a Common Yardstick: A Comparative Review of Current Uses and Future Direction*, *Onati Socio-Legal Series*, 2017, vol. 7, n. 4, pp. 640/660; A. Lienhard and D. Kettiger, *Research on the Caseload Management of Courts: Methodological Questions*, *Utrecht Law Review*, (2011) 7(1) pp. 66–73, available at: <<https://pdfs.semanticscholar.org/7bc2/47bd1e29718a75d9c4ee9b43c8438a5a3aa1.pdf>> [accessed 10 May 2024].; D. Winkler et al., *Combining a weighted caseload study with an organizational analysis in*

This is achieved by assigning each case-type a weight to represent the average time-demand required to complete all the judicial tasks entailed in the case from the date of filing to the date of resolution. Multiplying the number of incoming cases of each case-type by their assigned CW will then yield the aggregated weighted caseload in a given judicial system, as illustrated by the example in Table 1.

CASE TYPE	ASSIGNED WEIGHT IN MINUTES	* NUMBER OF INCOMING CASES IN THE PREVIOUS YEAR	= WEIGHTED CASELOAD PER CASE TYPE	WEIGHTED CASELOAD IN TOTAL
A	50	* 50	= 2,500	111,334
B	121	* 80	= 9,680	
C	676	* 60	= 40,560	
D	1279	* 22	= 28,138	
E	183	* 42	= 7,686	
F	414	* 55	= 22,770	

Table 1 Calculation example for the aggregated weighted caseload.

The aggregated weighted caseload can then be translated to the number of full-time judge positions that is required to meet the time-demand represented in the weighted caseload. For this purpose, it is imperative to first determine the “judge-day” and “judge year” values that represent the number of working hours (in minutes) a single judge has available for case-related-tasks in one year. Tables 2 give an example for the calculation of these values.

JUDGE DAY VALUE				
8.5 daily working hours	–	1 h for breaks and personal time	–	1 h for non-case-related tasks = 6.5 h = 390 minutes

JUDGE YEAR VALUE				
Number of annual workdays (201)	* Judge day value (390 m)	= A single judge year (8,190 m)	* Number of judge positions (11)	= 90,090 m

Table 2 Calculation example for the Judge day value and the Judge year value.

Tables 1 and e illustrate a so-called “saturation point”, where the aggregated weighted caseload (111,334 min) indicates that the number of judge positions available is not sufficient (111,334 > 90,090). This in turn will create an excessive work overload on the judges, prolong the length of proceedings and create a backlog of

courts: first experiences with a new methodological approach in Switzerland. *International Journal for Court Administration*, (2015) 7(1) pp. 27–36, available at: <<https://www.ijcajournal.org/articles/abstract/10.18352/ijca.174/>> [accessed 10 May 2024]. The concept of “reasonable timeframes” has been developed within the Saturn Group for Judicial Time Management of the European Commission for the Efficiency of Justice of the Council of Europe, “Timeframe – it is a period of time within which a certain number or percentage of cases have to be resolved, taking into consideration the age of the pending cases. Timeframes are a managerial tool, which can be set by central authorities (e.g. Judicial Council, Supreme Court, Ministry of Justice, Parliament) and/or by courts. Timeframes should not be confused with procedural deadline or time limits, which refer to single cases. Procedural deadline or time limits are usually established by the procedural law and entail that an action must occur in a specific time or there will be legal consequences”, European Commission for the Efficiency of Justice of the Council of Europe, *Towards European Timeframes for Judicial Proceedings. Implementation Guide*, CEPEJ 2016/5, Strasbourg, Council of Europe, 2016 (‘CEPEJ 2016’), p. 2.

pending cases.³ However, a correct use of the same values will allow us to calculate exactly how many additional judge positions are required to balance the weighted caseload: 111,334–90,090 equals 21,244 minutes, which are the equivalent to 2.6 judge positions (21,244/8,190 min in a single judge year).

As is evidenced by this example, the traditional formula enables policy makers to adjust the number of judge positions to meet the demands of the weighted caseload, as well as enable court presidents and administrators to review and balance the allocation of cases among the judges in each court. These are just two of the main objectives of a well-designed CWS as the next section will show.

THE OBJECTIVES OF CWS

The principal objectives of CW include:

- Determining the required number of judges to meet the demand for justice within reasonable time. In some studies, the CW are also applied directly or indirectly to determine the number of prosecutors and court personnel. However, and as previously mentioned, the use of CW to determine the required number of judges (or non-judicial personnel) relies on CW that are presented in time-units and represent the average worktime required to process the case. In other words, Judiciaries that weigh cases using grades or relative values that do not convert to time-units will not be able to use the cumulative weighted caseload and compare it to the cumulative judge year value;
- Allocating and reallocating judges and court personnel efficiently;
- Reassigning cases within the court to balance the weighted caseload. In this matter, we should note that a prerequisite for the use of CW to balance the allocation of cases between judges at the national level and local level, is that the CW formula will apply to all cases and will allow a comparison between the different case-types. Application of a flexible CW formula with components that vary from one case-type to the other, or from one court to the other, negates the possibility of comparing CW to balance the allocation of cases between different courts, or between the different judges in the same court;
- Providing empirical evidence to allocate adequate financial resources to the functioning of the courts;
- Designing the geographic layout of the courts;
- Locating bottlenecks and addressing unique characteristics and specific needs of specific case-types or specific courts; and
- Identifying good practices for the management of proceedings.

However, while the traditional formulas used to calculate CW are fairly simple, they rely on what can be an extensive and demanding process of data collection and analysis. As we will show in the next sections, the study of CW in most judiciaries relies on the assessment or actual measurement of the worktime spent on each case type or case category, with the exception of countries that present the weight of the case in scores that do not convert to time-units.

3 A 'backlog' is: "the number or percentage of pending cases not resolved within an established Timeframe". CEPEJ 2016, p.1. For example, if the Timeframe has been set at 12 months for all the civil proceedings, the Backlog is the number of pending cases that are older than 12 months.

THE PROCESS AND METHODS OF DATA COLLECTION FOR THE PURPOSE OF WEIGHTING CASES

In principle, there are two main methods to collect the self-reports of judges on the complexity level of the case-types they normally handle. The first is the “Delphi method” and the second is the “Time-study” (or study of working times).

*The Delphi method*⁴ relies on a sample of judges specializing in different fields of law who convene in one or several group sessions to discuss and assess the complexity level of different case-types. These self-reports are provided, retrospectively, in the form of a calculated estimation, based on their personal experience. After each participant presents his or her estimations, the members are encouraged to reach a consensus on the final CW through a process of structured group deliberations. In the Delphi method, the CW can either be presented in the form of time-units, meaning minutes and hours, or in the form of relative numerical values or grades that do not rely on the worktime spent on the case as an indicator of the level of complexity.

By comparison, in the *Time-study method* the participating judges are asked to document their worktime in real-time (not retrospectively), using a time-log in which they record the start and end time of each judicial task they perform each day of the Time-study.⁵ The number of participants can encompass all of the judges in the judicial system or a representative sample, similar to the Delphi method. The duration of the data collection in a Time-study can last between several weeks to several months. At the end of the Time-study, the research team calculates the average worktime spent per each case-type to represent its final CW in time-units.

In both methods, it is possible to collect the worktime data (whether by estimation, or by measurement) in relation to the type of task performed in a case. For example, a high level of detail will collect the time data in a manner that distinguishes the worktime spent on conducting hearings in a case from that spent on writing an interim order/judgement or on writing the final judgment (three different task types). This allows a better and deeper understanding of the complexity level of each task in each case type. A lower level of detail will collect the worktime data without specifying the type of task performed in the case, resulting in a final CW presented as a “black box” that cannot be broken down into worktime for each individual task. However, a high level of detail may be considered burdensome and is only useful if

⁴ The Delphi method, which takes its name from the oracle, was created in the 1950s by the RAND Corporation, a research and consulting organization in the United States, as a tool to identify possible strategic targets for a possible nuclear attack by the Soviet Union: <<https://www.rand.org/topics/delphi-method.html>> [accessed 28 March 2023]; N.C. Dalkey, *The Delphi Method: An Experimental Study of Group Opinion*, Rand Corporation, Santa Monica, CA, 1969, available at: <https://www.rand.org/pubs/research_memoranda/RM5888.html> [accessed 10 May 2024]; N.C. Dalkey et. al, *The Delphi Method III: Use of Self Ratings to Improve Group Estimates*, Rand Corporation, Santa Monica, CA, 1969, available at: <https://www.rand.org/pubs/research_memoranda/RM6115.html> [accessed 10 May 2024]; T.J. Gordon, *The Delphi Method*, Futures Research Methodology, AC/UNU Millennium Project, 1994, available at: <https://eumed-agpol.iamm.fr/private/priv_docum/wp5_files/5-delphi.pdf> [accessed 10 May 2024]; H. Linstone and M. Turoff (eds.), *The Delphi Method: Techniques and Applications*, 2002, available at: <<https://web.njit.edu/~turoff/pubs/delphibook/delphibook.pdf>> [accessed 10 May 2024]; M. Mozuni and W. Jonas, An Introduction to the Morphological Delphi Method for Design: A Tool for Future-Oriented Design Research. *The Journal of Design, Economics, and Innovation* (2017) 3(4) pp. 303–318.

⁵ S. Flanders, 1979 *Federal District Court Time Study*, Federal Judicial Center, Washington D.C., 1980, available at: <<https://www.fjc.gov/sites/default/files/2012/1979Time.pdf>> [accessed 10 May 2024]; J. Shapard, *The 1987 District Court Case Time Study: A Brief Description*, Federal Judicial Center, Washington, D.C., 1990.

the research team knows the average frequency with which each task repeats itself in the life cycle of each case type (for example, the average number of hearings and judgments rendered in each case type). Therefore, the level of detail of the CW – either as the total sum of the tasks' weights in each case-type, or as a global sum that does not specify the weight/complexity of each task – should be based on the availability of frequency data. If such data exist and can be extracted in a simple manner, then this should be reflected in the design of the self-reports.

Both methods complete each other, and each can serve as a means to validate the findings of the other. For example, a Time-study based CW can be reviewed and validated by focus groups of expert judges. Similarly, the traditional Delphi method can include a preliminary stage, prior to the group meetings, in which the expert judges will be asked to experiment and fill out a time-log for several days to form an informed opinion, based to a certain extent, on real-time-measurements and not only on retrospective estimations. A perfect example of a method that combines Time-study elements with Delphi estimations is the *Multi-Moment-Analysis* (MMA) which we discuss in detail later in this paper.

Before collecting the judges' self-reports (in either method), the research team must complete a preliminary phase and define the number of case-types that will be assigned an independent CW at the end of the study. It is recommended to limit the list of case-types that will be weighted to a number that is manageable, both for the judges and the research team.

After collecting the self-reports and analyzing the data, the research team will then have to decide whether to use the average value or the median value of the worktime to formulate the weight of the case (this applies to both methods). This decision is made redundant when the data are distributed symmetrically (average = median). However, when the database includes extreme values of worktime (max and min worktime) then these values will affect the average worktime and require the research team to choose one of the following: include the extreme data and stick with the average value, include the extreme data and use the median value instead of the average value or exclude the extreme data and stick with the average value.

With this in mind, we now turn to review the Delphi and the Time-study methods in more detail.

THE DELPHI METHOD

The Delphi method seeks to solve a problem by bringing together experts who, through a more or less structured procedure, must reach a progressive consensus on the operational proposal by an educated guess. This method is optimal in situations in which: a) there is no data available for the problem to be tackled, b) it is believed that any data available is unreliable, or c) the data available is particularly difficult and costly to obtain.⁶

The reliability of the Delphi estimations is significantly influenced by the composition of the experts' group, both in terms of the number of participants (sufficient sample) and in terms of the characteristics of each participant (representation of the various fields of specialization, geographic jurisdiction, gender, seniority, etc.). For example, Delphi groups made up of expert judges who have gained professional experience in various fields of law allow for a better comparison between the various

⁶ Gordon, *supra* note 5.

categories of proceedings to which weights will be assigned. However, the worktime estimate provided by experienced judges will reflect their own worktime and may underestimate the worktime that a new or less experienced judge will spend on the same type of case. Accordingly, a well-balanced and mixed composition would seem to be the most suitable, bearing in mind that an increase in the number of experts and a greater diversity of experiences of individuals obviously tends to produce a certain unevenness within the group, and therefore, predictably, greater difficulties in reaching a consensus.

There may be more than one group of experts subdivided by legal fields (civil, criminal, family etc.). With that said, it is recommended to avoid excessive subdivisions to too many experts' groups to ease the coordination and liaison between the various groups as well as to enable a proper comparison between the various case categories.⁷

There are two basic criticisms of the Delphi method. The first is that it relies on self-estimations provided retrospectively and is therefore subjected to biases such as an over or underestimation. Consequently, the possible influence of such biases may harm the reliability and validity of the resulting CW.

The second criticism is applicable to both the Delphi and the Time-study method. Both methods collect data on the actual worktime spent on each case. This criticism claims that the actual worktime should only serve as a starting point for discussion to develop a weight that reflects the "ideal" working time to spend on each case to ensure an efficient, fair and just dispute resolution.

Both criticisms are well-founded, and certainly point to the limitations of these methods, but both can be countered by the fact that the values used to determine the weights are averages, and, so, discount the extremes, providing sufficiently reliable values for the type of objective being pursued. Moreover, in order to dilute situations that may be very diverse over the region, the most extreme values can also be excluded from the calculation of the average in the studies, and the data collection should cover a large and diverse number of judges.

STUDY OF WORKING TIME (TIME-STUDY)

As mentioned above, a Time-study relies on real-time documentation of the actual working time judges spend on the processing of each case from start to finish. The preliminary steps when planning a Time-study include decisions on the number of participants asked to record their workday in the study (i.e., all of the judges or a representative sample), the duration of data collection, and the level of detail required of the participants' records.

Deciding the number of participants is based on the available resources, the size of the judiciary, the homogeneity of litigation and the variety of practices between the different courts. If there are sufficient resources, the preferable option would be to include all of the judges to ensure the highest level of reliability of the results. However, if this is not possible then a representative sample of the judge population should be used, taking into account the age, gender, professional specialization, place of work etc.

As for the duration of data collection, the length of time that the judges are required to record their worktimes should allow for continuous documentation that will provide a

⁷ McDonald, H.G. and C.P. Kirsch, Use of the Delphi Method as a Means of Assessing Judicial Manpower Needs. *The Justice System Journal* (1978) 3(3) pp. 314–321.

reliable data base sufficiently reflecting most if not all case-types in all procedural stages (pre-trial, trial, summaries and so on). Based on the research experience accumulated in countries that have applied this method, time studies usually require continuous documentation over a period of 4–8 weeks (and, in some studies, several months). This depends mainly on the desired level of detail considering the number of participants and the willingness of judges to engage in this demanding effort of data collection.

The collection techniques are multiple. The most common way to document the worktime is by filling out a paper time-log on a daily basis (similar to a diet plan journal) in which the judge records the amount of time he or she devoted to each single case handled or each judicial activity performed during each workday. The worktime data is then logged into a computerized database via a computer or a smartphone application, either at the end of each workday or in real time. The design and layout of the time-log (the paper sheet and the computerized time-log in the app) have a direct impact on the level of detail and reliability of the recorded data, as well as the ease of use of the time-log. For example, a simple time-log will only record the total number of minutes per case type (civil case1 = 13 minutes; civil case2 = 21 minutes; and so on). A more detailed time-log will record the time sequence of all the documented tasks to include the start and end time of each individual task (for example, case-related-tasks like conducting a hearing, writing a decision, reading case materials or non-case related tasks like attending work meetings, managing the judge's staff and so on).

ALTERNATIVE APPROACHES AIMED AT SIMPLIFYING THE PROCESS OF SETTING UP A CWS

Reviewing the research literature from the last decade shows constant and worthy attempts to find alternatives to simplify the process of setting up a CWS, mainly due to the demanding effort of collecting self-reports from the judges as a main source of information. Another motivation for novelties in this field is the desire to maximize the use of computerized data that are already available in the case management systems (CMS) and can serve as valid indicators of complexity.

One example is the regression model carried out in Hungary that succeeded in isolating six complexity indicators that can predict the expected work-time demand in criminal cases with sufficient certainty.⁸ However, it is important to note that the regression model still relied on primary data based on professional estimates⁹ in the Delphi method. Additionally, the study is based on a sample of only 371 criminal cases and, at the end of the day, four out of the six complexity indicators are not yet accessible in the Hungarian CMS. This approach, while very promising, is not yet applicable in the Hungarian judiciary.

8 L. Orkényi, Duration of Courts Events for Litigation – An Empirical Study to Provide a Theoretical Basis for an Objective Measurement System for Judicial Workload. *International Journal of Court Administration* (2022) 13(1), DOI: <https://doi.org.10.36745/ijca>; please also see L. Orkényi, A New Method for an Objective Measurement of the Judicial Workload – the Application of a Prediction Model Based on an Algorithm Formed by Multiple Linear Regression in Court Administration. *International Journal of Court Administration* (2021) 12 (1), DOI: <https://doi.org.10.36745/ijca.407>.

9 Orkényi (2022) *ibid.* p.19.

Another example is the “benefit of the doubt” approach (BOD), that is based on partial information about the actual weights of cases (uncertain weights).¹⁰ The potential impact of this approach as an alternative to the traditional approach of fixed CW was tested in Denmark with district court data from 2004. In essence, this test compared the Danish fixed CW with three alternatives that present the CW in uncertain values: a weight that ranges within 10% above or below the fixed weight; a weight within a range of 25% above and below the fixed weight, and an ordinal weight that ranks the cases from the most complexed to the list complexed. This test showed that the first alternative predicted 81% of the transfers of judges necessary according to the Danish CWS; the second alternative predicted about 76% of these transfers, and the third alternative predicted about 62% of the transfers. It seems that this approach does provide an alternative to the traditional one that relies on fixed and certain CW. However, as the authors themselves point out, the testing of this approach resulted in findings that can, on the one hand, strengthen the leading position of the traditional approach, and on the other hand, side with a conservative view that questions the certainty of the traditional fixed weights, and prefers the flexible alternative that may yield a lower number of judge transfers.

Based on our brief review of these alternatives, we note with due caution that at this stage the impressive research innovations still remain at the theoretical level, and those tested in practice were applied on a small scale and therefore have not yet formed into an independent alternative to the traditional methods that are at the heart of the practical consensus.

With this in mind, we will now turn to examine the five European CWS that have crossed the theoretical lines and constitute functioning CWS in use.

REVIEW OF THE CWS IN SELECTED EUROPEAN JUDICIARIES

This section is based on an in-depth study we conducted in our capacity as scientific experts of the Saturn Group of the Commission for the Efficiency of Justice (CEPEJ) of the Council of Europe. Our research focused on European CWS and was later published as a CEPEJ study.¹¹ Initially, the study included a preliminary questionnaire administered to 47 national representatives. An analysis of the findings revealed that 24 of the 36 countries that responded claimed to use some sort of a CMS, taking into account that some of these CMS did not correspond with the definition of the term in the literature. The following table breaks down the answers of the participating countries on the objectives of the CWS in each country.

As shown in Table 3, the main objective of CW in most countries is to determine the number of judges needed to meet the demand for justice within a reasonable timeframe and to allocate cases within the courts and among the judges; to a lesser extent it is used to allocate only new judges to the various judicial offices, to assess the productivity of the office, to support budget requests and to evaluate the performance of individual judges.

¹⁰ Bogetoft, P. and J. Wittrup, Benefit of the Doubt Approach to Workload indicators: Simplifying the use of Case Weights in Court Evaluations. *Omega* (2021) 13 102375, pp. 1–14 DOI: <https://doi.org/10.1016/j.omega.2020.102375>.

¹¹ European Commission for the Efficiency of Justice, *Case weighting in judicial systems*. CEPEJ Studies n.28, CEPEJ 2020(9), <available at <https://rm.coe.int/study-28-case-weighting-report-en/16809ede97>> [accessed 11 May 2024].

COUNTRY	ESTIMATE OF THE NUMBER OF JUDGES NEEDED	ASSIGNMENT OF PROCEEDINGS WITHIN THE OFFICE	DISTRIBUTION OF JUDGES IN THE VARIOUS OFFICES	DISTRIBUTION OF NEW (ONLY) JUDGES IN VARIOUS OFFICES	VALUATION OF OFFICE PRODUCTI- VITY	OTHER OBJECT- IVES	VALUAT- ION OF THE INDIVI- DUAL JUDGES
Total	15	14	9	8	9	7	6
Austria	☐						
Azerbaijan	☐	☐	☐	☐	☐		☐
Belgium	☐		☐				
Bosnia- Herzegovina	☐	☐	☐		☐		☐
Bulgaria						☐	
Croatia		☐			☐		☐
Czech Republic	☐			☐	☐		
Denmark	☐			☐	☐	☐	
Estonia	☐	☐					
Finland	☐		☐	☐	☐		
Germany				☐		☐	
Hungary		☐					
Iceland		☐					
Italy		☐				☐	
Lithuania	☐	☐					☐
Malta		☐					
Moldova	☐	☐	☐	☐	☐		
Netherlands	☐				☐	☐	
North Macedonia	☐						☐
Romania	☐	☐	☐	☐	☐		☐
Serbia	☐	☐	☐			☐	
Sweden			☐			☐	
Turkey		☐					
Ukraine	☐	☐	☐	☐			

The replies to the questionnaire also indicated that both the Delphi and Time-study methods were applied in the countries with CWS. The questionnaire was then followed by telephone interviews with experts from the Ministry of Justice, or the Council of the Judiciary and similar bodies from Austria, the Czech Republic, Denmark, Estonia, Finland, Germany, Lithuania, Romania, the Netherlands, and Sweden. Representatives of some of these countries also attended a seminar to discuss their CWS in-depth.¹³

After analyzing the replies to the questionnaire, processing the telephone interviews, and conducting an in-depth analysis of the research bodies and the data that were presented to us following the seminar, we singled out five European countries that have formulated a structured CWS that is up and running, and serves some or all of the purposes we mentioned. These countries are: Austria, Germany, the Netherlands, Denmark, and Romania and we will now analyze them in detail.

Table 3 Objectives of the case weighting systems.¹²

¹² Adapted from *ibid.* p.8.

¹³ The seminar, held in Paris on 24 January 2020, was attended by experts from Austria, Denmark, Estonia, Germany, Romania, in addition to the researchers and some members of the Saturn-Cepej group. The Dutch representative was unable to attend, but a further in-depth interview was subsequently conducted, which investigated the system currently used in that country.

In **Austria**, the first study on the worktime of judges and prosecutors was carried out in 2008 and 2009, and subsequently amended from 2017 to 2019. The weights were assigned to categories of proceedings within the competence of the courts of first instance, the courts of appeal, and the related prosecutor's offices.

The Austrian CWS is used both to calculate the number of judges and prosecutors needed and to rationally allocate judges and prosecutors to the various judicial offices, in strict compliance with the principle of immovability.¹⁴ The 2008 Time-study was conducted by the Ministry of Justice, also on the instigation of the Association of Austrian Judges, assisted by an external consultancy company. It included a large number of judges and prosecutors who documented the time they spent on the various case types/categories in a time-log. Data collection lasted six months and subsequent processing made it possible to determine the average time in minutes (weights) for handling the various case types/categories, which were then used to calculate the number of judges needed and their distribution throughout the country.

In simple terms, the formula to calculate the required number of judge positions in Austria relies on three components:

- The weighted caseload which is the result of multiplying the number of pending cases of each case-type in the weight assigned to that case-type, added up over all case types. The weighted caseload, therefore, represents the required number of working hours to process all of the pending cases in a single year;
- The number of annual working hours required to handle non-case related work such as: attending conferences, work meetings, managing the judge's staff and so on; and
- The "judge year" value (which can also be referred to as the equivalent to a full-time judge position¹⁵) – this value is the total number of available working hours a single judge has in a single work year. Austria has set the judge year value at 1720 annual working hours based on the following calculation: 365 calendar days minus weekends and holidays (i.e., 215 working days), multiplied by an 8-hour work day.

These three components are combined in the following formula to calculate the required number of judge positions:

$$\frac{\text{The weighted caseload} + \text{Hours of extra activities}}{1720 \text{ hours (judge year value)}}$$

The Austrian CWS was used for about ten years and then revised from 2017 to 2019, to reflect a significant reform of the criminal process and the consolidation of different offices over the years.

The revised CWS sought to use a method that was even more transparent, shared by the judges and therefore widely accepted nationally. Considering the costs of a renewed Time-study, and the time demanding process of the analysis, this time

¹⁴ As known, to guarantee judges' impartiality and independence, in principle, judges cannot be removed from their office without their consent or as provide for by the law (i.e. for disciplinary reasons).

¹⁵ *Full time equivalent* is commonly used to indicate a standard for the calculation of human resources. It indicates the "full time equivalent" of one or more personnel units in the event that the various units do not work the same amount of time. For example, two part-timers at 50% of their ordinary hourly commitment correspond to 1 *Full time equivalent* (FTE).

the Ministry of Justice opted for the Delphi method. To this end, expert groups were established with judges who specialize in different areas of law and come from different jurisdictions.

The starting point was the massive amount of data on the Time-study carried out ten years earlier, which was followed by more qualitative work linked to the experience of the judges in the various working groups. The group of experts, using the Delphi method, sought a progressive consensus on the processing times of the proceedings, as a sum of the estimated processing times per procedural phase, to make the estimate more precise and updated. Building a consensus on the average worktime was not an easy task and required a fair number of meetings that yielded multiple results of worktime. As a result, about half of the weights assigned by the previous study were changed. The re-evaluation procedure also identified certain complexity factors which increase the weight originally assigned to certain case-types. These factors include for example: the involvement of a court interpreter during the proceedings, the need for expert witnesses, questions of international jurisdiction, the involvement of a child in criminal proceedings, a defendant in custody etc.

The results of the Delphi method, based on the solid foundations of the previous Time-study, have been widely accepted by judges who consider them to be a satisfactory snapshot of the average time taken to deal with proceedings in order to calculate the necessary resources to meet the demand for justice within a reasonable time.

In Austria, one of the criticisms levelled at this method of determining resources, especially by other sectors of the public administration, is that the current CWS is based entirely on a self-assessment of worktime carried out by judges themselves, and therefore subjected to bias such as an overestimation of the time required which can lead to an increase in the resources indicated as necessary to meet the demand for justice. Another criticism is that the system only weighs incoming cases and does not take into account the number of resolved and pending cases. These aspects are currently being studied by the Austrian Ministry of Justice.

Germany was among the first European countries to develop a CWS. It is particularly interesting that although Germany is a Federal Republic and that each federal state (*landers*) has considerable autonomy in the administration of justice, the German CWS named: “Pebbsy,”¹⁶ is the result of a study that included the entire nation and is used by all *landers*.

The first Time-study in Germany was conducted in 2002 by an external consultancy company. It was updated in 2014, encompassing over 16,000 participants including over 5,000 judges, 8,000 clerical staff, and about 3,000 prosecutors from 70 judicial offices in 14 different states. Participants documented their worktime for six months on a time log attached to each file they handled. The study ensured the anonymity of the participants, putting to rest any concerns that it would serve as a performance evaluation and pose a possible threat to the autonomy and independence of judges.

Processing of this large amount of data made it possible to identify case-types belonging to different fields of law (e.g. medical liability, constructive errors, antitrust, etc.) that required a similar amount of worktime to process, and could therefore be grouped into a category that was assigned the same weight.

¹⁶ “Personalbedarfsberechnungssystem”, meaning: Personnel Requirements Calculation System.

To simplify the system, and limit as much as possible the number of categories of proceedings with separate weights, an “ABC” analysis was carried out.¹⁷ The analysis classified the categories of proceedings into three “ABC” classes on the basis of the number of contingencies and the time necessary for their treatment, in order to identify the most demanding ones, the “masses of proceedings,” that absorb the greatest number of judicial working-hours. Only the case-categories classified as A and B were actually assigned a weight, since they represented the vast majority of proceedings that impact on the work-time of judges.

The formula used for the calculation of the necessary personnel units is very similar to that used in Austria:

$$\frac{\text{Number of incoming cases} \times \text{relevant assigned CW (pebbsy-basic numbers)}}{\text{Annual judicial work-time available to handle cases}} \quad 18$$

The German CWS is used to determine the number of judges needed at the district of the Court of Appeals level. Within the district itself, the President allocates the judges with the help of the collegiate governing body of the office (*Personal Senate*; in short, a sort of local judicial council composed only of judges).¹⁹ In this respect, the principle of immovability in force in Germany prohibits the transfer of judges without their consent. Therefore, except in special circumstances, the practical solution for excess weighted caseload is to allocate newly appointed judges.

The German CWS is reviewed periodically for minor adjustments by a special federal commission, taking into account that future legislative changes and structural or technological changes in the offices will require an update of the CWS every ten years.

The **Netherlands** also use a Time-study to assign weights to proceedings. However, the Dutch system differs from those described above in two main aspects: a) the way in which the data are collected; and b) the purposes for which the weighted system is used.

In the past, the Dutch applied a “shadow observer” technique in which participating judges were accompanied by law students who recorded the judicial tasks and worktime per each task. This technique was later abandoned for a more advanced research method that was also perceived as less intrusive to the judges, named the *Multi-Moment-Analysis* (MMA). The MMA was applied in the Netherlands in 2014 and later updated in 2017.

MMA is a statistical technique to sample the workday of the participants in order to determine the proportion of worktime spent on each individual work task/case type. The Dutch MMA study combined the element of self-reporting drawn from the Time-study method, with the element of informed assessments made by expert judges in

¹⁷ A statistical technique used in particular in the business field that allows a set to be classified into three subsets (A, B, C) by considering their relative “weight” in the composition of the set. It is based on the Pareto principle, according to which about 80% of a given situation or event can be explained by about 20% causes: F.Y. Partovi and J. Burton, Using the analytic hierarchy process for ABC analysis. *International Journal of Operations & Production Management* (1993) 13(9) pp. 29–44.

¹⁸ The value of the annual judicial work-time available to handle cases is determined per each federal state, separately. This value ranges around 1700 hours per year.

¹⁹ The principle of “legal judge” refers to the civil right that a case can only be assigned to the court indicated by statutory rules of jurisdiction, or pre-established criteria set by the court. Fabri, M. and P. Langbroek, Is There a Right Judge for Each Case? A Comparative Study of Case Assignment in Six European Countries. *European Journal of Legal Studies* (2007) Vol 1(2) pp. 292–315, available at: <https://ejls.eui.eu/wp-content/uploads/sites/32/pdfs/Autumn_Winter2007/Full_Autumn_Winter2007.pdf> [accessed 11 May 2024] p.295.

the Delphi method. The period of data collection was 61 work weeks spread over one year. However, for each individual participating judge, the duration of data collection lasted a single work week. During that week, at twelve random points during each workday, the judge was asked via an app what task they were performing. The data revealed that judges devoted 70–78% of their worktime to case-related tasks and the rest (22–30%) to non-case-related tasks. These time proportions were then translated to specific weights by ten experts' groups (in accordance with the number of the different legal fields) that provided a calculated assessment on the worktime per each case-type and set the final weight of 70 different case-types.

The Dutch system is distinctive compared to the Austrian and German systems for two reasons: it relies on the unique *Multi-Moment* technique, and in addition to the purpose of determining the number of judge positions, this system is also used to determine the cost per case and the allocation of the corresponding budget to each court. The allocation of the budget to individual judicial offices, which enjoy significant spending autonomy, is made by the Judicial Council (*De Rechtspraak*), on the basis of a number of factors, including the cost of each proceeding, which is also calculated on the basis of the time needed to process it.

By contrast, Denmark and Romania used the Delphi method as a basis for their case weighting systems.

In **Denmark**, the judicial administration has been using a CWS in all 24 district courts and two appellate courts since 2005. The system was updated in 2011, in an attempt to have greater involvement of the whole judging community for wider acceptance. The update reduced the number of case categories that were weighted, from 32 to 7, and abandoned the method of defining the legal cause of action in the case as a complexity factor.

The Danish CWS compiles the weight of a case by use of Delphi groups that assign each case-type an initial weight, which is then multiplied by complexity coefficients, to yield the final case weight. These coefficients, much like in the Austrian CWS, include the use of translator services, a hearing lasting more than one day, etc.

Such coefficients are only used after the case was resolved and it was established that these complexity indicators indeed existed in the case. This will accomplish the goal of assessing the productivity of the court and allocating resources also based on the number of resolved cases while considering their complexity level. As in the Netherlands, Danish courts enjoy a wide discretion in spending once the budget has been allocated, therefore its allocation on the basis of pre-defined, verifiable, and shared criteria is of great importance.

Because the initial weight in the Danish CWS is based on Delphi estimates the Danish courts administration does not consider the initial weight as particularly accurate. However, since its application is homogeneous throughout the country, and the goal is to allocate the budget to the courts in a coherent and balanced way, it is considered a suitable tool for this purpose, considering the additional excessive costs involved in the more detailed analysis of an in-depth Time-study.

40% of the courts' budget is based on the aggregated weight of resolved cases, while the remaining 60% is associated to number of incoming cases. These proportions seek to incentivize the productivity of the courts while taking into account the complexity level of the cases, so as to not penalize a court with a significant number of incoming cases in a given year.

Romania has also attempted to weigh proceedings and put in place a system that will allow for a fair and more efficient distribution of cases between the different courts.

The Romanian system grades the complexity level of cases based on the legal causes of action in each case in conjunction with complexity factors. This system assigns a score to the main legal cause of action in the case (main score) and a separate score to the secondary causes of action in the case (aggregated secondary score). The main and secondary scores are then multiplied by a complexity coefficient which is influenced by three factors: the number of parties in the case (up to 4 parties or 5 parties and above), whether the number of expert witnesses involved in the case exceeds 10, and the number of folders that the case consists of.

To illustrate, the weight of a case involving 5 parties and above is calculated as follows:

$$\begin{aligned} &[(\text{the main score})] \\ &+ \\ &[(\text{aggregated secondary}) \times 10\%] \\ &+ \\ &[(\text{the main score}) \times (\text{number of volumes}) \times 20\%] \\ &+ \\ &[(\text{the main score}) \times (\text{number of parties}) \times 5\%] \end{aligned}$$

As evident by the formula above, the final weight of a case is dynamic, and may change throughout the course of the case according to the complexity factors that eventuate. In this way, the allocation of new cases is done in consideration of the actual weighted caseload of each judge at that particular moment.

The Romanian CWS was first tested in four pilot courts in 2003 and then integrated into the computerized CMS (*ECRIS case management system*) in all courts. Initially, the courts were able to modify the assigned weights by themselves, locally, in order to contextualize the weights to their specific needs and characteristics. While this adaptation ensured a system which was calibrated and shared by the judges of each court, it did not allow for comparative assessments at a national level or for the calculation of the number of judges needed to deal with the demand for justice.

To address this issue, in 2005 the Superior Council of the Judiciary set up a working group of judges with varying professional backgrounds and levels of experience. This group analyzed the various case-types and came up with a classification of 50 different proceedings with a plurality of complexity factors, allowing the weight to be calculated homogeneously across the country. The calculation algorithm was then inserted into the *ECRIS CMS* which automatically and dynamically provides the weights of the cases and assigns them to the judges, trying to balance the weighted caseloads between the individual judges.

COMPARATIVE SUMMARY

The above review shows that all five countries have already completed two rounds of research on the subject of CWS. In the first round, each country established its own CWS and devoted significant resources of time, manpower, and money to ensure, to a feasible extent, that this important effort would result in a well-functioning, valid, reliable and efficient CWS. The second round of research in all five countries renewed and updated the system out of a commitment to continuously improve and optimize it in the service of the judiciary.

As evident in this review, all five judiciaries relied on the self-reports of judges as the main input and source of data. In this respect, Austria, Germany and the Netherlands established their CWS by collecting these self-reports in a Time-study, and used the Delphi method only to update the existing CW, years later. However, Denmark and Romania opted for the Delphi method from the very first round of research. Interestingly enough, Austria and Germany did not repeat the strenuous study until 8 and 12 years after the first round (respectively), while Romania, the Netherlands and Denmark repeated the research in shorter intervals of 2, 3 and 6 years (respectively). This finding may imply that the Time-study method, despite its demanding nature, yields durable results that may postpone the deadline for revisiting and updating the previous CW.

In respect of the objectives of the CWS, we found that all countries use it for the purpose of deciding the number of judges required to meet the demand for justice within a reasonable timeframe. Additionally, in the Netherlands and Denmark the CWS serves also as a mechanism to support budgetary decisions. Romania is the only one to use it for the purpose of allocating cases.

When compared to the traditional CWS formula, it seems that Austria and Germany use similar formula components that include the value of the 'judge year' and the 'aggregated weight' of the cases. However, we found that Austria, the Netherlands, Denmark and Romania added complexity coefficients to their formula such as: the need for a court interpreter, the participation of expert witnesses, the legal cause of action in the case etc.

In summary, it is widely accepted that weighting court cases is a necessary technique to gain a better and deeper understanding of the task load each judge and each court has to deal with. CW allow judicial systems to assess their capacity to meet the demand for justice within a reasonable timeframe, considering the available resources they have at their disposal, and to distribute these resources fairly and efficiently at a national and local level (across the country and in each court). CW are even more important in judicial administrations that suffer from an excessive length of proceedings and a very unbalanced distribution of resources among the courts. At the level of the individual court, CWS can ensure a balanced distribution of cases among judges based on CW and not only on simple case counts. Above all, CW strive to fulfil the ultimate goal of processing and resolving cases in a timely manner.

As we have shown, CW studies can be carried out with various methods, all of which have already been tried and tested by various European justice administrations and are well established in courts in the United States. As mentioned before, no method can be considered as "one size fits all" and as a general guideline, we recommend that the choice of research method should take into account the following considerations among others:²⁰

- A.** the purposes for which the CW are used;
- B.** the financial and human resources available;
- C.** the unique characteristics of the judiciary including: the population size, the geographical layout of the courts, the availability and reliability of the data in the case management system, the consistency of the caseload, varieties of practices, staff culture, etc.

²⁰ For a list of recommendations about how to proceed with the development of a case weighting system see: CEPEJ Studies n.28, supra note 12.

With this in mind, there are specific aspects that distinguish the main methods and may help decide which is more suitable to the circumstances of a given judiciary. In short, Time-study requires a more strenuous and prolonged research effort, a considerable financial investment, and a higher degree of willingness on the part of the participating judges. With that said, the time-study provides a research product based on a large-scale and valid empirical database, which is not exposed to the same biases as its counterpart and enjoys a significantly high level of reliability and credibility among judges and policy makers. Based on this brief description, the Time-study will only suit judiciaries with:

- resources to withstand the lengthy process of data collection and the additional time needed to analyze and validate the database;
- resources to finance the costs of the study including external research services; and
- the ability to shape the willingness of judges to fully cooperate with the study out of a shared understanding of the crucial importance of a widely accepted and reliable CW that will balance the task load of the judiciary and fulfil the goal of justice within reasonable time.

Accordingly, if these aspects do not apply to the judiciary in question, then the alternative would be to opt for the Delphi method.

In light of this, we now present a scale that was first introduced in the thesis work of one of the authors of this article, and can serve as a tool to assess the degree of accuracy and detail of the research design that was chosen.²¹

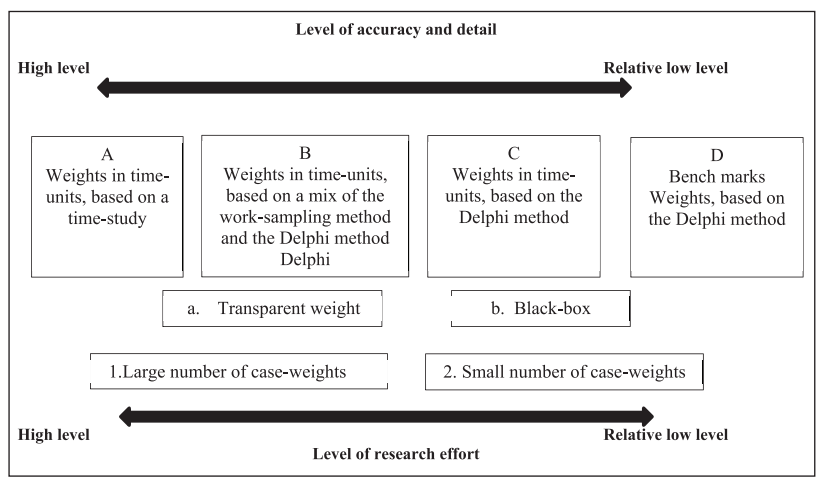


Figure 1 A scale to assess CW models based on their level of accuracy, detail and research effort.

Figure 1 research design classified as B + a + 1 is considered to be more accurate and detailed and at the same time more strenuous (in terms of time, money and manpower) than a model classified as C + b + 1, for example. Another possible example will scale model C + a + 1 at a higher level of both accuracy and research-effort demand in comparison to model D + b + 1. These are just two examples of the numerous comparisons that this scale enables between models that rely on different combinations of methodological choices.

21 S. Benkin, *Comparative examination of mathematical models for calculating the judicial workload*, Master’s thesis (2020), Hebrew University of Jerusalem, Israel.

To illustrate, applying the aforementioned scale to the German model would classify it as $A + b + 2$. That is to say, the German CWS is based on a Time-study which represents the CW in time-units (A). The German CW cannot be broken down to understand the weight of each individual task in the case (the weight is presented as a black box thus classified as 'b' in the scale); and the final number of case-types that were awarded separate weights was relatively small (classified as 2 in the scale). Seemingly, the primary classification based on the research method positions the German CWS at the high end of the scale both in the level of research effort it entails as well as in the level of detail and accuracy that the Time-study is credited for. However, the choice to group different types of cases under the same weight, and the fact that the unique complexities of each case-type cannot be fully understood, pulls down the scaling of the German system towards a lower level of accuracy and detail. This result is consistent with the fact that the German weight system is not used for allocating cases.

This scaling of the well-established and noteworthy German model reinforces the conclusion that the process of determining the unique complexity of each case-type is a complex task in itself. Therefore, as we have reiterated throughout this article, the task of planning the research design must rely on an extensive and in-depth preliminary work to suit the unique characteristics and needs of each judicial system.

CONCLUDING REMARKS

There is a broad consensus on the justified need to assign weights to different case-types to account for the differences in their level of complexity. Such case weights are used by many judicial systems for a variety of purposes including: determining the required number of judge positions, serving as a mechanism to support budgetary decisions, as well as a mathematical tool for a just and balanced distribution of court cases and other resources.

As we have shown in this paper, the traditional approach to CWS, founded in the late seventies of the last century, still serves as a source of inspiration and comparison to this day. Further to this, we briefly discussed the ongoing attempts to challenge elements of the traditional approach, but noted with due caution that these attempts, at this stage, remain at the theoretical level only and the traditional approach still holds its relatively leading status.

The main novelty of our paper lies in the in-depth review of CWS used in European judiciaries in the last decades. To this end, we focused on five European judiciaries that established a CWS that has been up and running for some time and can be examined for its unique components and characteristics. The main findings of our review indicate that all judiciaries rely on judges' self-reports as a primary source of data and use the CW to determine the required number of judges. At the same time, we pointed out differences in the methods of data-collection, the number of participants, the duration of the study, the number of case-types that were awarded weights, the frequency with which the weights are updated, and the nature of their use.

To complete the picture, we presented a tool to assess the degree of accuracy and detail of the research design of any CWS, in the form of a scale. This scale reinforces the enormous importance of the careful planning of the research design to accommodate the unique needs and characteristics of each judiciary.

Ultimately, CWS are very much context dependent. For example, in several judiciaries, particularly those in Southern Europe, it seems more difficult to achieve acceptance of the use of even basic organizational or managerial techniques. However, by the

nature of things, times change and so do limiting or preconceived beliefs give way to the developments and innovations in this field, thus encouraging additional judiciaries to join in and establish their own CWS. Our hope is that this article will contribute to the dissemination of knowledge in this field, and provide practical tools for those who are considering setting up their own system as well as for those who wish to update an existing one.

COMPETING INTERESTS

The authors have no competing interests to declare.

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REFERENCES

- Benkin, S. *Comparative examination of mathematical models for calculating the judicial workload*, Master's thesis (2020), Hebrew University of Jerusalem, Israel.
- Bogetoft, P. and J. Wittrup, Benefit of the Doubt Approach to Workload indicators: Simplifying the use of Case Weights in Court Evaluations. *Omega* (2021) 13 102375, pp. 1–14. DOI: <https://doi.org/10.1016/j.omega.2020.102375>
- Dalkey N. C., *The Delphi Method: An Experimental Study of Group Opinion*, Rand Corporation, Santa Monica, CA, 1969a, available at: https://www.rand.org/pubs/research_memoranda/RM5888.html [accessed 10 May 2024].
- Dalkey, N.C., Brown, B. and S. Cochran, *The Delphi Method III: Use of Self Ratings to Improve Group Estimates*, Rand Corporation, Santa Monica, CA, 1969b, available at: https://www.rand.org/pubs/research_memoranda/RM6115.html [accessed 10 May 2024].
- European Commission for the Efficiency of Justice, *Case weighting in judicial systems*. CEPEJ Studies n. 28, CEPEJ 2020(9), available at <https://rm.coe.int/study-28-case-weighting-report-en/16809ede97> <https://rm.coe.int/study-28-case-weighting-report-en/16809ede97> [accessed 11 May 2024].
- European Commission for the Efficiency of Justice, *CEPEJ Glossary*, CEPEJ(2020)Rev1, (3 February 2020) available at: <https://rm.coe.int/cepej-2019-5final-glossaire-en-version-10-decembre-as/1680993c4c> [accessed 10 May 2024].
- European Commission for the Efficiency of Justice of the Council of Europe, *Towards European Timeframes for Judicial Proceedings. Implementation Guide*, CEPEJ 2016/5, Strasbourg, Council of Europe, 2016.
- Fabri, M. and P. Langbroek, Is There a Right Judge for Each Case? A Comparative Study of Case Assignment in Six European Countries. *European Journal of Legal Studies* (2007) Vol 1(2) pp. 292–315, available at: https://ejls.eu.eu/wp-content/uploads/sites/32/pdfs/Autumn_Winter2007/Full_Autumn_Winter2007.pdf [accessed 11 May 2024].
- Flanders, S., *1979 Federal District Court Time Study*, Federal Judicial Center, Washington D.C., 1980, available at: <https://www.fjc.gov/sites/default/files/2012/1979Time.pdf> [accessed 10 May 2024].
- Flango, E. and B.J. Ostrom, *Assessing the Need for Judges and Court Support Staff*, National Center for State Courts, Williamsburg, VA, 1996, available at: https://www.ncsc.org/_data/assets/pdf_file/0020/5258/assessingneed.pdf [accessed 10 May 2024].

- Gordon, T.J., *The Delphi Method*, Futures Research Methodology, AC/UNU Millennium Project, 1994, available at: <https://eumed-agpol.iamm.fr/private/priv_docum/wp5_files/5-delphi.pdf> [accessed 10 May 2024].
- Gramckow, H., *Estimating Staffing Needs in the Justice Sector*, World Bank, Washington D.C., 2012, available at: <<https://openknowledge.worldbank.org/server/api/core/bitstreams/63a7fbd5-1aaa-51fd-9dcd-21ff026bc4aa/content>> [accessed 10 May 2024].
- Hammergren L., Harley G. and S. Petkova, *Case-Weighting Analyses a Tool to Promote Judicial Efficiency: Lesson, Substitutes and Guidance*, The World Bank Group, Kingdom of the Netherlands, Washington D.C., 2017, available at: <<https://openknowledge.worldbank.org/bitstream/handle/10986>> [accessed 10 May 2024].
- Kleiman, M., et al, *Case Weighting a Common Yardstick: A Comparative Review of Current Uses and Future Direction*, *Onati Socio-Legal Series*, 2017, vol. 7, n. 4, pp. 640/660, available at: <http://opo.iisj.net>
- Lienhard, A. and D. Kettiger, Research on the Caseload Management of Courts: Methodological Questions. *Utrecht Law Review* (2011) 7 (1) pp. 66–73, available at: <<https://pdfs.semanticscholar.org/7bc2/47bd1e29718a75d9c4ee9b43c8438a5a3aa1.pdf>> [accessed 10 May 2024].
- Linstone, H. and M. Turoff (eds.), *The Delphi Method: Techniques and Applications*, 2002, available at: <<https://web.njit.edu/~turoff/pubs/delphibook/delphibook.pdf>> [accessed 10 May 2024].
- McDonald, H.G. and C.P. Kirsch, Use of the Delphi Method as a Means of Assessing Judicial Manpower Needs. *The Justice System Journal* (1978) 3(3) pp. 314–321.
- Mozuni, M. and W. Jonas, An Introduction to the Morphological Delphi Method for Design: A Tool for Future-Oriented Design Research. *The Journal of Design, Economics, and Innovation* (2017) 3(4) pp. 303–318. DOI: <https://doi.org/10.1016/j.sheji.2018.02.004>
- Orkényi, L., A New Method for an Objective Measurement of the Judicial Workload – the Application of a Prediction Model Based on an Algorithm Formed by Multiple Linear Regression in Court Administration. *International Journal of Court Administration* (2021) 12(1). DOI: <https://doi.org/10.36745/ijca.407>
- Orkényi, L., Duration of Courts Events for Litigation – An Empirical Study to Provide a Theoretical Basis for an Objective Measurement System for Judicial Workload. *International Journal of Court Administration* (2022) 13(1). DOI: <https://doi.org/10.36745/ijca.370>
- Partovi, F. Y. and J. Burton, Using the analytic hierarchy process for ABC analysis. *International Journal of Operations & Production Management* (1993) 13(9) pp. 29–44. DOI: <https://doi.org/10.1108/01443579310043619>
- Rand Corporation, 'The Delphi Method' <<https://www.rand.org/topics/delphi-method.html>> [accessed 28 March 2023].
- Shapard, J., *The 1987 District Court Case Time Study: A Brief Description*, Federal Judicial Center, Washington, D.C., 1990.
- Winkler D. et al., Combining a weighted caseload study with an organizational analysis in courts: first experiences with a new methodological approach in Switzerland. *International Journal for Court Administration*, (2015) 7(1) pp. 27–36, available at: <<https://www.iacajournal.org/articles/abstract/10.18352/ijca.174/>> [accessed 10 May 2024].

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