

Beyond Costing Basic Needs: Comparative Foundations and a Mixed-Methods Framework for Policy-Relevant Reference Budgets in Bulgaria

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Abstract. *Reference budgets (RBs) have recently received increasing attention as a mechanism for informing income adequacy assessment and social policy design, though the methodological basis of these outlines is often dispersed through practices and guidelines with strong roots in Western European welfare contexts. This article presents a pragmatic approach based on an ex-ante methodological framework for development of reference budgets, which can be operationalized by comparison with common practice and mixed methods rationale.*

The paper conceptualizes a post transition economy as an analytical stress test, where Bulgaria serves as the application context to elicit design logic, epistemological positioning and validation mechanisms before empirical testing. Pathways are explored comparatively drawing on international literature and models of EU-level harmonisation through alternative methodological approaches which could be defined as purely normative or purely consensual. The framework leverages a hybrid mix-methods model-oriented design integrating normative reasoning, structured societal deliberation, expert calibration and market-based costing.

The analysis suggests that policy-relevant reference budgets must be validated from multiple, interconnected angles: they need to be internally coherent, externally benchmarked and legitimized by relevant social and institutional processes. It also further underscores the need to make a clear distinction between routine rebasement, which retains longitudinal consistency while allowing for normative change, and any full methodological reconstruction.

The article provides an empirically grounded and validation-oriented methodological framework that connects academic reference budget research with the practical policy design by offering transferable high-level principles of design rather than national implementation. Though the paper is focused on Bulgaria, its conceptual reflections are relevant to future empirical research and cross-country analysis that can improve measures of adequacy of income.

Keywords: Reference budgets, social policy, methodology, mixed-methods design, post-transition economies, Bulgaria.

Introduction

The adequacy of incomes to sustain an acceptable living standard has long been a key focus of social policy. Standard indicators - relative poverty lines or minimum available income targets -

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are crucial in tracking inequalities but provide little guidance on what income adequacy means concretely. They do not specifically identify what goods, services and social participation is needed in order to live with dignity given the prevailing conditions of actual societies - a shortcoming that has increasingly come into focus within policy debates.

This challenge has led to the emergence of Reference budgets. They make living standards more precise, transparent and contestable by translating normative notions of adequacy into priced baskets of goods and services. In the last twenty years, reference budgets have been produced in a number of countries throughout Europe (especially Belgium, the Netherlands and the UK), yet each country has used them differently - in debates about social assistance, in adequacy of wages and household financial capability. On the European level, the conceptual basis and political importance of reference budgets has been further bolstered through coordination via the European Reference Budgets Network (ERBN) as well as recent social policy initiatives such as, for example, the Council Recommendation on adequate minimum income (Council of the European Union 2023). While reference budget methodologies have been mostly harmonized now, some differences remain in terms of normative comprehensiveness and governance and validation arrangements. Despite the common set of principles, there remained significant context-specific operationalization. Consequently, methodological components are described over practices and guidelines rather than being put in a single design template, which may restrict the potential for direct interpretation of data in institutional settings distinct from those in which many reference budget models have been originally constructed.

Bulgaria presents an appropriate setting against which the specific methodology of reference budgets may be framed in more explicit terms for use under restrictive post-transition circumstances. The country in the past has taken part in European reference budget projects, but lacks a common integrated methodological framework. Instead of presenting a national case study of Bulgaria, this article uses it as the analytical stress test for adapting and consolidating established reference budget practices to countries with low levels of data granularity, fragmented institutional responsibilities and contested political ownership over adequacy indicators.

In line with this, the article derives an ex-ante methodological framework to design reference budgets informing public policy. It does not offer a new methodology, but combines normative reasoning, participatory norm articulation, expert calibration, transparent empirical costing and multi-dimensional validation in a coherent design architecture that promotes policy usability and sustainability. The article therefore seeks to make a methodological contribution to the literature on consistency standards through discussing how adequacy standards can be constructed and maintained in an institutional environment that has been constrained, while simultaneously linking academic reference budget research with applied social policy design.

The rest of the paper reviews literature and European methodological architectures, presents the framework proposed, and contemplates implications for implementation and policy use.

Literature review

Conceptual traditions in reference budget research

The reference budget literature has a long standing tradition of conceptualising household budgets as means of concretising income adequacy. The earlier examples represented more “illustrative household budgets which show what income is needed to live at a certain level” (Bradshaw, 2008) stressing highlighting their role as converting adequacy into concrete and observable benchmarks for policy makers and members of society alike. A well-known contemporary definition states that reference budgets are " priced baskets of goods and services considered necessary to achieve an

acceptable standard of living for a given household type within a specific geographical and social context " (Goedemé et al., 2015). While this provides a principle of guidance through the introduction of key central analytical dimensions - explicit pricing, household heterogeneity and context - there still retains the inherently normative character of assessments for “necessity” and “acceptability”.

Together, these perspectives describe reference budgets as empirical instruments that can be expressed as actual and price-specific baskets of items, but also as normative tools rooted in social understandings about what is adequate. This raises a fundamental analytical question: What justifies judgments of “necessity” and hence, “acceptability”? And this issue is what makes reference budgets different than related tools. In contrast to relative poverty standards that derive ex post standards from distributions of income, and living wages primarily operating as an individual-level benchmark in the labor market, reference budgets describe ex-ante adequacy standards based on household characteristics. Thus, they need a clear conceptual basis instead of statistical benchmarks that rely on implicit.

The requirement of justification for these foundations has led to a range of unique conceptual intellectual currents, offering a diverse interpretation of what is considered an adequate quality of life. Table 1 summarizes these traditions based on the outlines of their ideas and the adequacy dimensions they emphasize. It records two major shifts in the literature: 1) a move from survival-oriented thresholds to multidimensional conceptions of adequacy - including dignity, participation and social rights; and 2) a move from implicitly positivist understandings of ‘need’ to perspectives treating adequacy as socially situated and normatively defined.

Aside from these broad shifts, Table 1 also highlights a structural finding that is at the forefront of reference budget research: each conceptual tradition centers around one aspect of adequacy while neglecting others. Basic needs, capability and social rights approaches, for example, are normatively orientated but while specifying what it is to live adequately they provide scant orientation for social validation and contextualization of adequacy. In contrast, consensual and deliberative traditions emphasize how adequacy is defined (by whom) and with what legitimacy - exhibiting their own challenges of stability and coherence across contexts. The human needs and social participation approach directly link these perspectives by ensuring that adequacy is based on universal needs while still permitting contextual validation through participatory processes, including expert input (Storms et al., 2014). Thus the literature suggests complementarity among traditions, not convergence to some single dominant paradigm, as a practical solution to adequacy's multi-dimensional nature.

Table 1. Conceptual traditions in the definition of reference budgets

Tradition	Core idea of adequacy	Key authors / institutions	What this tradition foregrounds
Basic Needs	Adequacy defined in terms of essential physiological and material requirements (e.g. food, shelter, clothing).	Rowntree (1901)	A clear and widely intelligible minimum standard; comparability and standardization.
Capability Approach	Adequacy understood as the resources required to achieve valued “functionings” and exercise agency.	Sen (1992)	Human development, autonomy, and well-being beyond subsistence.
Social Rights	Adequacy framed as part of the universal right to a decent life and welfare guarantees.	Esping-Andersen (1990); European Pillar of Social Rights (2017)	Normative alignment with welfare regimes and EU social objectives.

Tradition	Core idea of adequacy	Key authors / institutions	What this tradition foregrounds
Consensual / Deliberative	Adequacy defined through structured public deliberation on socially acceptable living standards.	Townsend (1979); Davis et al. (2021)	Democratic legitimacy and sensitivity to contemporary social norms.
Human Needs & Social Participation	Adequacy structured around universal human needs, contextualized through participation and expert input.	Doyal & Gough (1991); Storms et al. (2014)	Explicit normative foundations combined with social validation and empirical grounding.

Source: Authors' own research.

Taking an epistemological approach, current reference budget research can be described as pragmatically situated. It does not consider adequacy as directly discernible from income or consumption distributions, nor it considers social agreement alone as the basis for derivation. Instead, it draws legitimacy from a mix of normative judgement, empirical data, expertise and formal social validation. Such positioning has been explicitly articulated in comparative reference budget research, which states that adequacy standards need to be normatively justified, empirically evidenced and socially supported if they are to serve as credible policy tools (Bradshaw et al., 2008; Goedemé et al., 2015; Frazer and Marlier, 2016; Storms et al., 2014).

This epistemological ground has direct consequences on the methodology. Since adequacy is defined both normatively and socioeconomically, any single approach to constructing a reference budget will never suffice. Consequently, there has emerged a greater reliance on mixed-methods approaches that integrate qualitative with quantitative types of evidence in reference budget research. Conventional mixed-methods designs primarily serve, at best, as a function of explanation or inference; whereas in reference budget research, mixed methods play a constitutive role i.e., they are employed to develop, justify and stabilize normative standards of adequacy by bringing normative reasoning together with empirical data (in part from structured qualitative research), expert judgement and structured social validation within a single analytical framework (Bradshaw et al., 2008; Goedemé et al., 2015; Storms et al., 2014).

Consequently, this understanding highlights that reference budgets exist not simply as technical measurement tools but in fact as normative policy-relevant instruments. They are not merely about articulating the status-quo standards of living - they seek to implement broad and often abstract percepts, such as adequacy, participation, and dignity into practical criteria upon which policies can be based and examined.

The previous section illustrates the use and justification of the idea of adequacy in reference budget research. However, these conceptual traditions do not solely determine how reference budgets are constructed and applied in practice. Once a normative foundation transitions into being an actual performing methodological system, the sequencing, distribution of authority, validation and revision over time must be determined. The following section describes a more design-oriented perspective.

Methodology

Conceptual and ex-ante research design

This paper adopts a conceptual and ex-ante research design. From this angle, it thus refrains from the empirical exploration of reference budget development and instead lays down a solid methodological process for producing reference budgets even in constrained institutional settings.

Thus, this study is at a higher level of abstraction of the design logic, governance structure and procedural integration than its empirical realisation.

The overall strategy for examination is that of three analytically separable steps.

Most importantly, it clarifies the hybrid and validation nature of the epistemological positioning of this study: adequacy is seen as a semiotic construct that requires concrete procedural justification.

Secondly, it conducts a systematic comparative analysis of existing reference budget frameworks in Europe to identify transferable implementation principles and fundamental tensions.

Third, uses these analytical inputs to establish a structured response framework encompassing an identified role and sequence (with validation) as well as maintenance protocols in time.

Since this is ex ante and design-oriented research, it is premature to test the robustness through empirical evidence of outcomes at this level - instead, robustness can be assessed in terms of internal coherence, clarification of methodological choices and consistency with established European principles. Empirical implementation is treated as a phase that follows after the research.

European methodological architectures and the ERBN framework

This section runs a structured comparative analysis of the existing European reference budget architectures, following the research design presented above. This not is an exercise in re-thinking the nation poverty results but one of understanding how different systems rank authority, methodological stages and specification norms, participation and expert calibration with empirical costing and revision procedures. Rather than substantive levels of adequacy, the analysis focuses on architectural design, thus allowing us to identify principles and structural tensions that may transfer across in a framework which we will describe later in the paper.

The Netherlands, Belgium and the UK are three leading European cases where adequacy has been incorporated into a wide variety of distinct but internally coherent architectures. The characteristics that define these bodies are summarised and compared in Table 2, which also places the ERBN study alongside them.

Table 2. Methodological architectures of European reference budget models

Dimension	Netherlands (NIBUD)	Belgium (CEBUD)	United Kingdom (MIS)	ERBN Framework
Primary driver of adequacy definition	Experts	Normative theory (human needs)	Citizens	Structured combination of all
Role of social participation	Limited and indirect	Structured validation	Central and defining	Mandatory but bounded
Role of experts	Dominant across stages	Strong but normatively constrained	Supportive and corrective	Explicitly delimited
Role of empirical data and prices	Costing and updating	Costing and calibration	Costing and feasibility checks	Anchoring and comparability
Authority and process for revising adequacy standards	Expert-led revision	Periodic, theory-guided review	Renewed citizen deliberation	Recognized; procedures defined at national level

Source: Authors' own research.

The data for the Dutch reference budget model of the National Institute for Family Finance Information (NIBUD) are primarily expert-led. NIBUD has specified explicit consumption baskets, indicating what households need to live decently in today's society; building on a basic-needs orientation but also including items relevant for participation (Warnaar & Luten 2009). Experts are the definers of adequacy, possessing control over specification, costing and technical change standards; all these aspects can be seen in Table 2. The model is highly-technically rigorous, regularly estimating prices and extremely powerful in terms of policy integration (across poverty measurement, housing affordability objectives, debt counselling and financial advice). However, in this RB architecture normative assumptions are primarily caught up in expert practices that may be masked in comparative and cross-national applications, whereas technical specification and updating are very largely buttressed by various kinds of mixed methods.

The hybrid architecture of Belgium, elaborated by the Centre for Budget and Financial Well-being (CEBUD), is an illustration of a theoretically explicit hybrid architecture. Normative theory, based on the Theory of Human Need (Doyal & Gough, 1991), serves an organizing function globally and scope is determined *ex ante* and protected through expert calibration and organisational participatory validation that allow for contextual relevance and social legitimacy (Storms et al., 2014; 2019).. Table 2 outlines mixed methods featuring a normative core that delineates complementarity and boundedness for participation and expertise (and empirical validation), as well as specification of periodic reviews of the procedures by which adequacy standards are upheld. The strength of the design is in the normative transparency and policy embedding, notably through the use of REMI digital tool - widely adopted by Public Centers for Social Welfare since 2015 - and its dependence on political commitment and functional institutional capacity.

A third type of architecture is represented by the Minimum Income Standard (MIS) of the UK, reflecting a largely consensual and deliberative position. MIS is based on iterative citizen panels using relative deprivation theory (Townsend, 1979) to help define the level of socially acceptable living standards. It has the citizens at its core defining and redefining adequacy whereas experts simply check real-world feasibility and calibrate it for technical purposes (Davis et al., 2021). In this case, legitimacy derives primarily from democratic involvement which is accompanied by highly significant policy leverage via its inclusion in the Real Living Wage. Simultaneously, dependence upon social consensus introduces a series of challenges in relation to norm stability, household diversity and cross-national uniformity.

These three models (provided in a summary table 2) show how methodological architectures could deal alternatively with main challenges to build reference budgets. Every strategy attaches a greater emphasis to particular dimensions - for example, on technical correctness, normative openness or democratic authority - while controlling other components through auxiliary mechanisms. These differences across models therefore manifest gradients of authority between experts, citizens, normative frameworks and empirical data rather than the distinct failure of any given model. Mixed methods are not just a buttress of an analysis - they are the architecture itself.

These design priorities are the motivations for the establishment of the European Reference Budgets Network (ERBN). ERBN, which was initiated in 2014 under a European Commission pilot project and coordinated by the University of Antwerp, was designed not to enforce standardized baskets or outcomes but rather to render transparent and comparable rules how different sources of knowledge are combined, prioritized, and governed within reference budget methodologies. Its main contribution is to describe a common hybrid architecture where normative

reasoning, empirical data, expertise and participation are given clear and synergistic tasks. As such, ERBN promotes comparability at the level of principles and recommendation for methods to use while leaving substantive adaptation for national contexts. Other than the somewhat sterile distinction between updating prices on a routine basis and revisions of substantive norms over time, it contains only minimal policy guidance for operationalizing long-term sustainability (especially as to who has authority to update what normative standards across time).

Notably political relevance of this method is currently underpinned by the Council of the EU Recommendation on adequate minimum income ensuring active inclusion (2023/C 41/01) (Council of the European Union, 2023), which calls for transparent methodological approaches based on baskets of goods and services reflecting cost-of-living.

Bulgaria represents a relevant and relatively neglected case within the European methodological milieu. It has been part of the original ERBN pilot, however, reference budgets have taken a different direction in this country. This section thus reviews the relevant Bulgarian literature and documented practices, placing these within the context of wider methodological debates in Europe as sketched out earlier in the section.

The Bulgarian case as a methodological stress test

From a methodological perspective, the Bulgarian case operates as a stress test of reference budget methods when considered through European methodological architectures. Rather than reflecting delayed uptake, it demonstrates what happens when hybrid reference budget approaches - designed in institutionally dense welfare states - are implemented within contexts in which major facilitating conditions are frail. In this sense, Bulgaria is analytically interesting not for what it lacks, but for the unformalized critical institutional, data and governance preconditions of European best-practice models.

To date, the ERBN pilot study, in which Vasileva (2017) established a food reference basket for Sofia is still the most systematic application. In terms of methodology, she mainly aligned this study to European standards combining national dietary guidelines plus participatory assessment. The limitations of the exercise were thus not technical, they were structural. It was limited to one consumption domain and an urban environment, and most importantly not embedded in a system for updating, upscaling or institutional setting. Consequently, a divide between methodological rigor and institutional sustainability have remained in the Bulgarian reference budget landscape.

This pilot has not become a fully-fledged system in subsequent research. Core domains like housing, health care, transport, education and social participation were not covered by reference budgets and no common infrastructure exists to integrate sectoral evidence into a joint adequacy standard. Reference budget logic, instead, appears only indirectly - in minimum income debates (Paci 2018, cited in Mitev 2025) or local isolated practices (Zdravkov et al., 2020; also cited in Mitev 2025) but without cumulative systemic effect. As comparative research indicates, this partial and fragmented uptake limits the effectiveness of needs-based instruments in shaping policy development and adequacy over time (Frazer & Marlier, 2016).

Mitev (2025) gives a systematic explanation for this outcome, which includes three interdependent structural constraints common in post-transition contexts that led to limited institutionalization of reference budgets in Bulgaria. Specifically, weak data limitations reduce the evidence base on which budgets can be built, fragmented institutions inhibit the development of a collective adequacy baseline and weak political commitment limits long-term integration into policy frameworks. This diagnosis is significant because it takes the focus of explanation away

from just methodological knowledge to what broader conditions are necessary for methodological sustainability.

This insight lends the Bulgarian case a wider significance. The study illustrates that the success of European hybrid reference budget models depends not only on methodological design, but also supporting infrastructures that are often assumed to exist rather than specified. Thus, Bulgaria does not function as an exception but a test for hybrid architectures to gauge their resilience and dynamic capacity in unfavorable structural conditions.

A pilot project, initiated in 2025 and led by University of Economics - Varna, is launched as a response to this challenge and represents a qualitative change. Instead of isolated applications, reference budgets are approached as an ex-ante methodological system designed with these constraints in mind. The following section analyzes the design logic of this framework.

Results and Discussion

An ex-ante hybrid reference budget framework

Directly building on the analytical insights from the previous sections, this article presents an ex-ante framework for the organization, sequencing and governance of policy-relevant reference budget construction under structurally constrained conditions. Bulgaria functions as both an application context and analytical stress test while the framework is built to have analytical commonalities, but not empirical generalizability across post-transition and institutionally constrained EU contexts. The framework does not invent new pathways but instead provides a structure about how mixed methods should be organized, sequenced and governed in settings where trust in institutions, data quality, or policy coherence between levels of government cannot be assumed.

Table 2 offers a summary of the key analytical starting points for this framework by outlining how existing European reference budget models productively structure authority, participation, validation and updating among discretely organized methodological architectures. Based on the experiences of Belgium, the Netherlands and the UK, and the harmonization logic used by ERBN, authors set a reference point for the methodological choices made, rather than utilizing them as a set of models to copy. In this sense, the present framework is consistent with ERBN's hybrid epistemological stance and seeks to make explicit the roles assigned to different methodological components. The normative framing, participation, expert judgement, empirical costing and validation are considered as analytically separable components of a coherent architecture with clear roles for each part in reference budget building.

Under this architecture comparability is pursued through common design principles rather than by identical substantive outcomes. The elements of the procedure - including scope-setting, sequencing rules and validation logic - tend to be consistent with European standards whilst the content-related assumptions remain open for national adaptation. This relevant design choice is based on the Bulgarian case: as it allows reference budgets to preserve cultural and institutional legitimacy in relatively contexts particularly with constrained capacity for coordination without loss of analytical coherence or relevance to EU-level processes.

Household typologies are a core element of the analysis framework. Household types are not an attempt to represent fixed personas or sum up all the possible shapes of a population; they operate instead as analytical constructs, revealing deep assumptions and comparison (e.g. single adult, single adult with one child, couple without children, couple with one child). The framework emphasizes policy relevant and institutionally recognisable typologies but also provides scope for modular extension as data availability and administrative capacity improve. It is a careful balance between avoiding false precision, but also being sensitive to heterogeneity in needs and living arrangements.

The hybrid logic of the framework is operationalised by means of principled temporal sequencing of methods. It contains a theory-based definition of adequacy and its content- and cost-neutral indicators of a socially acceptable minimum in the first instance. That ex-ante definition provides a stabilizing anchor where normative baselines are in debate. Validation is not a one-off associated step before rollout, it is woven throughout the process where new standards can be put in context and then tested against lived experience via participatory methods. Expert calibration consolidates results across components, while statistical analysis and empirical price gathering ensure transparency and ease of updating.

This framework also has temporal maintenance as an explicit methodological element. Routine rebasement - largely through price updating - is done regularly and full methodological revision is reserved for times of meaningful normative or institutional change. This suggests that adequacy is viewed as a structured but amendable construct; stable enough to use for policy purpose, yet flexible and responsive to social and economic change.

The proposed framework answers the methodological stress test internalized into the Bulgarian case by formalizing areal distribution of epistemic authority, sequencing of methods and procedures for maintenance and revision. It seeks to facilitate the construction of reference budgets in adverse structural contexts and contribute to broader methodological discussions on how hybrid reference budget architectures may be designed where institutional capacity and normative consensus are contested. The subsequent sections operationalise this framework in more specific terms.

Methodological components and sequencing

The components of the methodology described below operationalize the hybrid structure logic introduced in the last section. They have been purposefully sequenced to respond to the conditions evident in Bulgaria, rather than simply mimicking existing European models in a mechanical fashion. Because they take place in a policy environment of weak reliance on formal indicators, dispersed institutional powers, heterogeneous data quality and vulnerability to economic shocks, legitimacy needs to be achieved ahead of technical consolidation and empirical costing. It follows a cumulative sequence - normative articulation, expert calibration, empirical costing, and multi-dimensional validation - whilst routine updating and substantive normative change are clearly distinguished. This sequencing re-casts reference budget construction from a primarily technical exercise to one of governance in contexts where transition has occurred.

Hybrid mixed-methods reference budget system adapted to post-transition economies

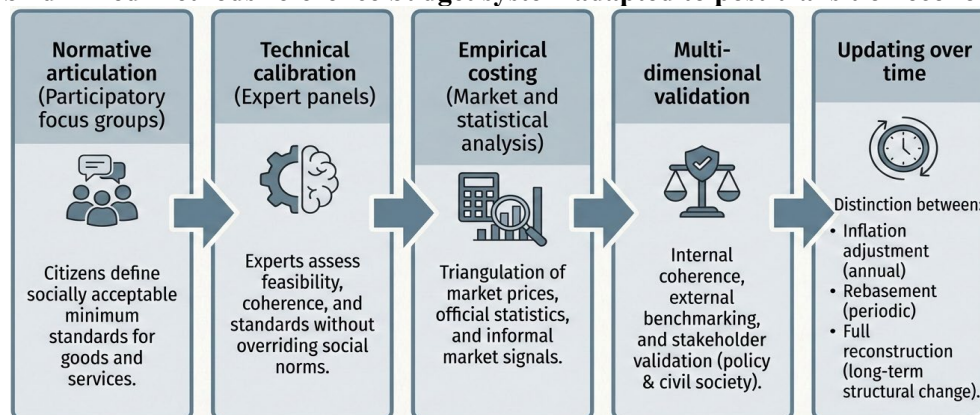


Figure 1. Hybrid mixed-methods reference budget system adapted to a post-transition economy such as Bulgaria

Source: Authors' own research.

The process begins with structured **focus groups**, which are used to articulate socially shared norms of adequacy rather than to aggregate individual preferences or reproduce representative consumption patterns. Their purpose is to elicit negotiated judgements about what constitutes a socially acceptable minimum for analytically defined household types, consistent with deliberative traditions underpinning the UK MIS and ERBN practice (Davis et al., 2021; Goedemé et al., 2015). Group composition follows a purposive logic designed to maximize normative diversity while preserving deliberative coherence. Moderation techniques explicitly address dominance effects, social desirability bias, and normative drift by requiring justification of claims, rotating participation, and revisiting contested items. The outputs of this stage consist of provisional, socially validated inventories of needs, which remain open to refinement and do not yet constitute operational consumption baskets.

Expert panels are introduced at a subsequent stage and serve a calibrating rather than corrective function. Drawing on interdisciplinary expertise, panels assess the feasibility, internal coherence, and regulatory alignment of socially articulated needs, referencing relevant legal, technical, and health standards at national and European level. This role follows established practice in the Belgian CEBUD model and ERBN guidelines (Goedemé et al., 2015). Crucially, normative authority remains with citizens: experts do not redefine adequacy standards, but ensure that socially articulated norms meet or exceed prescribed minima and are applied consistently across domains and household types. Divergence among expert assessments is treated as analytically informative and transparently documented, rather than resolved through forced consensus, thereby avoiding technocratic override of socially defined standards.

Empirical costing constitutes the next step, translating calibrated baskets into monetary values through transparent and replicable price-selection strategies grounded in actual consumption environments. Prices are collected from outlets identified as realistic points of consumption and triangulated with official statistical sources, including household expenditure surveys and consumer price indices. Given the prevalence of informal markets and mixed provisioning strategies - particularly outside major urban centers - the framework explicitly combines observed prices with statistical benchmarks. Temporal price volatility is addressed through averaging procedures and rolling reference periods, ensuring that short-term fluctuations do not distort adequacy assessments or drive normative conclusions.

Validation is treated as a central and continuous methodological component, rather than as a final checkpoint. Internal validation assesses coherence across domains and household types, while external benchmarking situates reference budgets relative to established indicators such as EU-SILC income distributions, minimum wages, and CPI/HICP indices, without collapsing them into relative poverty thresholds. Stakeholder validation - conducted through structured consultations with municipalities, social partners, and civil society organizations - is analytically distinguished from academic validation, which focuses on methodological consistency, transparency, and replicability. Validation is cumulative and iterative, reinforcing legitimacy, robustness, and policy usability at each stage of the process.

To ensure longitudinal usability, the framework clearly distinguishes between **inflation adjustment, normative rebasement, and full methodological reconstruction**, drawing on good practice from the MIS and Belgian experiences (Storms et al., 2015; Davis et al., 2021). Inflation adjustment updates prices while holding basket content constant; normative rebasement allows for incremental change within a stable architectural framework; full reconstruction is reserved for periods of substantive social, economic, or institutional transformation. Explicit documentation of

each type of update prevents the conflation of price change with normative change and safeguards comparability over time.

Overall, the sequence of methods is deliberately designed to reverse expert-first approaches, ensuring that social agreement and legitimacy precede technical calculation. In a post-transition policy context, this ordering is critical for building trust, clarifying normative assumptions, and strengthening internal coherence before reference budgets are mobilized for analytical or policy purposes.

Applied outputs and sustainability

The methodological framework presented in this article aims not only to provide some guidance for constructing reference budgets but also to make clear the types of applied products that follow logically from such a design. These outputs ought to be interpreted as products of the methodological structure and sequencing rather than as fully realized policy instruments at this stage.

The most immediately applied output includes validated reference baskets that are differentiated by analytically defined household type. These baskets are based on the sequenced process of participatory norm articulation, expert calibration and empirical costing which is laid out in Methodological framework, hence they serve as concrete and social anchors for evaluating what constitutes a socially acceptable level of income adequacy as well as an equal comparison between wages/social transfers needed to cover a socially accepted cost of living. They do not prescribe what level of benefit or wages should be provided, but instead make the normative assumptions visible and contestable.

The other key output is systematic pricing decisions and assumptions documentation. Because empirical models of costing rely on the triangulation of market observation, statistical sources, and contextual judgement, records (transparent in their method) of price sources, selection criteria, averaging and treatment of variation should all be maintained systematically and reproducibly. Such documentation is important to allow for continuous improvement, methodological reflection and the maintenance of credibility over time, particularly in price volatile and mixed provision contexts.

Which brings us to the need for procedural documentation. The guidance deepens promises of usability by outlining the recommended contours of participatory deliberation, expert calibration costing, validation and updating that will promote long-term use of explicit roles, sequencing and cumulative validation evidenced in a framework. This type of documentation provides continuity across research teams and institutional settings, encourages replication of design logic but not baskets or cost levels (consistent with the framework's emphasis on methodological rather than substantive uniformity).

Digital tools and data infrastructure are not inherent components, but enablers (or potential enablers) in our framework. In places where the institutional capacity exists digitalization can also support scenario analysis and regional differentiation, while embedding household typologies, validated baskets and price information in an interoperable system enables a more agile update process. Other evidence from different settings in Europe indicates that they increase transparency and improve tool usability for public policy, but only when governance capacity and data availability are sufficient. The framework accepts and acknowledges explicitly that the individual elements are not easy to implement, require coordination, data collection and routine maintenance.

From a sustainability perspective, the concept of reference budgets operates as an intermediate analysis tool that fits within preexisting policy and administrative frameworks rather

than a frontier that automatically determines expenditure levels. The evidence from similar developments suggests that, alongside methodological robustness, the degree to which new tools take root in institutions will depend on their fit (or lack of fit) with existing budget processes and bureaucratic routines/administrative processes. This is an important way to position them, as it allows fiscal constraints, predictability concerns and institutional responsibilities to be addressed in properly defined governing frameworks rather than displacing by the reference budget instrument itself.

The alignment with European policy frameworks - including the European Pillar of Social Rights and also the Council Recommendation on adequate minimum income (2023/C 41/01) (Council of the European Union, 2023) - can provide an additional legitimacy while safeguarding national discretion over implementation pathways. The relevance and credibility of reference budgets as useful benchmarks for informing policy is further reinforced by active engagement with stakeholders that facilitate a shared understanding of the purpose, and limits, of reference budgets.

When considered as a whole, the applied outputs suggested in the framework suggest a resilient methodological ecosystem, not simply an ad-hoc analytical activity. Although it uses the illustrative context of Bulgaria, this framework seeks to tackle the structural conditions discovered in the Bulgarian case - limited institutional coordination, constraints surrounding data accessibility and contested normative baselines - but without presuming anything around empirical transferability. Sustainability is thus defined in terms of whether the institutional framework can persist as transparent, flexible and policy-relevant despite changes in patterns of economic or social conditions.

Conclusion

This article has a constructed ex-ante methodological framework for the construction of policy-relevant reference budgets, employing Bulgaria as an application context and captive analytical stress test rather than a standalone national case. The framework draws on international experience - in particular from Belgium, the Netherlands, the UK and the European Reference Budgets Network (ERBN) - but re-appropriates existing reference budget practices for a post-transition environment of limited cost-of-living data detail, divided institutional responsibilities and confused political ownership of income adequacy measures. In this process, it effectively broadens the generalizability of existing methods to institutional contexts other than those in which most benchmark budgeting models were developed.

The article presents methodological and integrative contributions. Rather than proposing a new technique, it assembles existing components of reference budget practice - normative grounding, participatory norm articulation, expert calibration, transparent empirical costing and multi-dimensional validation - into an explicit methodological architecture. It fuses and codifies design choices commonly scattered between practices, such as allocating epistemic authority amongst methods, sequential treatment of components, the distinction between routine updating of prices versus substantive normative change; and cumulative validation. Such explicitness is especially relevant in settings where legitimacy and use of a policy depend on clarity, transparency and institutional coherence.

At a high level of abstraction, the framework conceptualizes reference budgets as hybrid policy tools that are (1) both normatively-structured and empirically informed, and (2) lie in between the poles of technocratic and deliberative approaches. Anchored in an orientation towards legitimacy, coherence, transparency, and maintainability as design criteria the paper casts adequacy

assessment not only as a measurement but rather governance process that aligns social norms with empirical evidence and institutional constraints.

Although Bulgaria is the immediate context for which the framework is developed, the analysis does not stake a claim of empirical generalization. Its wider relevance beyond Bulgaria consists in the translatability of methodological architecture and sequencing logic rather than replication of specific baskets, prices or adequacy levels. Thus, transferability is asserted at the level of design principles and validation methods, enabling informed adaptation in similar contexts while not claiming substantive similarity.

Empirical implementation is the next logical step. This framework should be tested and refined by applying it to different household types, territorial settings, and policy domains; which will further specify the design logic underlying it. Future work, using the framework developed in this paper, could explore how reference budgets compare to alternative indicators (minimum income thresholds, living wage thresholds and relative poverty lines) and how they are interpreted and appropriated by policy actors over time.

The study is analytically circumscribed by the simple fact that it is given a design-oriented and ex-ante nature. This positioning, however, associates with a few limitations. The final formulation support through the proposed framework has not been applied at scale across all types of households settings or policy domains. Instead of being validated by output, its internal coherence and solid conceptual grounding in methodological principles that are already well founded in Europe are assessed.

Second, Bulgaria is an analytical stress test for testing the institutional constraints but how far it can be explored as an empirical transferability this needs to be looked into beyond. As such, applicability claims refer to methodological architecture and design logic not reaching substantive adequacy levels or cost estimates. Third, the minimum amount of institutional coordination and stakeholder involvement that the framework is designed for may vary across governance environments and their practical uptake. Further research performing applied testing, iterative revision and analysis of interaction with policy will be needed to assess the framework in the context of real-world implementation.

Despite these limitations, this article contributes to reference budget research by developing a systematic and validation-oriented methodological framework for contextually constrained settings. This study enhances transparency and clarity in governance within adequacy assessment by explicitly articulating: (1) the allocation of epistemic authority among actors, (2) the sequencing of methodological components, and (3) the distinction between procedural updates versus substantive normative revision. Bulgaria gives the immediate application environment, but the relevance of the framework is not in copying specific baskets or cost levels but in structured design logic. This paper belongs to the ongoing European debates regarding the governance of income adequacy standards: it shows how hybrid reference budget systems may retain their internal coherence, flexibility and policy relevance in changing social and institutional contexts.

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References

- Bradshaw, J., Middleton, S., Davis, A., Oldfield, N., Smith, N., Cusworth, L., & Williams, J. (2008). *A minimum income standard for Britain: What people think*. York, UK: Joseph Rowntree Foundation.
- Council of the European Union. (2023, February 3). *Council Recommendation of 30 January 2023 on adequate minimum income ensuring active inclusion* (2023/C 41/01). *Official Journal of the European Union*, C 41, 1–12. Brussels, Belgium: Council of the European Union.
- Davis, A., Hirsch, D. and Padley, M. (2021). *A minimum income standard for the United Kingdom in 2021*. Loughborough, UK: Centre for Research in Social Policy, Loughborough University.
- Doyal, L. and Gough, I. (1991). *A theory of human need*. London, England: Macmillan.
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Cambridge, England: Polity Press.
- European Commission (2017). *European pillar of social rights*. Brussels, Belgium: European Commission.
- Frazer, H. and Marlier, E. (2016). *Minimum income schemes in Europe: a study of national policies*. Brussels: European Commission.
- Goedemé, T., Storms, B., Stockman, S., Penne, T., & Van den Bosch, K. (2015). Towards cross-country comparable reference budgets in Europe: First results of a concerted effort. *European Journal of Social Security*, 17(1), 3–30. <https://doi.org/10.1177/138826271501700101>
- Mitev, B. (2025). *The concept of reference budgets and its application in the social policy of Bulgaria*. In B. Vassileva (Ed.), *International Conference on Economics, Business & Management (ICEBM): Digital transformation, entrepreneurship, business innovations: Conference proceedings* (pp. 135–143). Varna, Bulgaria: Publishing House “Science and Economics”, University of Economics – Varna. <https://doi.org/10.56065/ICEBM2024.135>
- Rowntree, B. S. (1901). *Poverty: a study of town life*. London, England: Macmillan.
- Sen, A. (1992). *Inequality reexamined*. Cambridge, MA: Harvard University Press.
- Storms, B., Goedemé, T., Van den Bosch, K., Penne, T., Schuerman, N., & Stockman, S. (2014). Review of current state of play on reference budget practices at national, regional, and local level (Pilot project for the development of a common methodology on reference budgets in Europe, Contract No. VC/2013/0554). Brussels, Belgium: European Commission, Directorate-General for Employment, Social Affairs and Inclusion.
- Townsend, P. (1979). *Poverty in the United Kingdom: a survey of household resources and standards of living*. Harmondsworth, England: Penguin.
- Vasileva, B. (2017). Reference Budgets: A Case of the Bulgarian Food Basket. *Evropa Regionum*, 30, 77–97.
- Warnaar, M., & Luten, A. (Eds.). (2009). *Handbook of reference budgets: On the design, construction and application of reference budgets*. Nationaal Instituut voor Budgetvoorlichting (Nibud). <https://d11.icdst.org/pdfs/files/f0ef0fa2296c6e0e2ff7c9f808041b9a.pdf>