Luxembourg Consumption Study (LCS) Database – Beta Launch

Technical Documentation

September 2026

1. Introduction and Motivation

After four decades of harmonising income microdata through the *Luxembourg Income Study (LIS)* and two decades of harmonising wealth microdata through the *Luxembourg Wealth Study (LWS)*, LIS is now establishing a third pillar of its data infrastructure: the *Luxembourg Consumption Study (LCS)*. This initiative responds to a long-standing gap in comparative household research and is grounded in the landmark Stiglitz–Sen–Fitoussi Commission Report of 2009, which identified income, consumption, and wealth as three core, complementary dimensions of household economic well-being.

Over the past several decades, cross-national research on household living standards has relied predominantly on income as a proxy for welfare (e.g., Atkinson et al. (1995) and Smeeding et al. (1990)). Yet income captures only one dimension of a household's economic position. Consumption is argued by many scholars to be a more direct and stable measure of material well-being, particularly at the lower end of the distribution. The *Luxembourg Consumption Study (LCS)* addresses this gap directly, aiming to produce a harmonised, cross-national micro-database of household consumption. It draws on household budget survey data from countries at all income levels, using a consistent framework broadly aligned with the international Classification of Individual Consumption According to Purpose (COICOP) 2018, while accounting for both monetary and non-monetary components of consumption.

The ICW Framework and LCS Positioning

The concept of joint income–consumption–wealth (ICW) measurement provides the overarching intellectual framework within which the LCS is positioned. Prompted by the Stiglitz–Sen–Fitoussi Report, two major expert groups have shaped the methodological agenda: the OECD Expert Group on the Joint Distribution of Income, Consumption, and Wealth (EG ICW) and the OECD–Eurostat Expert Group on Disparities in National Accounts (EG DNA). These groups have worked to develop guidelines and experimental results for measuring household well-being in a coherent, multi-dimensional manner.

LIS extends this agenda at the micro level. Whereas the ICW framework as developed by the OECD focuses primarily on linking macro-level national accounts data with micro distributional information, the LCS provides a fully harmonised micro-database enabling direct household-level analysis. The LCS complements LIS and LWS by adding the missing consumption dimension, enabling researchers to study the joint distribution of income, consumption, and wealth for the first time in a harmonised cross-national setting, even though the three dimensions are in most countries not currently observed on the same households.

2. Research Motivation and Conceptual Background

The case for a harmonised consumption database rests on multiple complementary arguments. First, consumption provides a more direct measure of current living standards than income, particularly in contexts where income is volatile, underreported, or smoothed through savings and borrowing. Consumption expenditure is less sensitive to transitory income shocks and tends to track permanent income more closely. Second, in many lower-income countries, household budget surveys recording consumption are the primary instrument for measuring household welfare. Excluding these countries from comparative welfare databases creates a serious blind spot. Third, a rapidly expanding research agenda on inflation inequality, carbon footprints, distributional effects of indirect taxation, and energy poverty requires consumption microdata at the level of detail that LCS provides.

The literature has long recognised the limitations of relying exclusively on income for welfare analysis. Deaton and Zaidi (2002), Mancini and Vecchi (2022), and Garner et al. (2025) have laid out the methodological foundations for constructing comparable consumption aggregates across countries. The LCS draws directly on this body of work, operationalising its insights into a practical harmonisation framework.

Consumption vs. Expenditure vs. Welfare

A central conceptual distinction runs through the entire LCS framework: the difference between expenditure, consumption, and welfare. These three concepts, while related, are not interchangeable.

Expenditure refers to households' monetary spending on goods and services. It is the most readily available measure in survey data, but it is broader than consumption expenditure, and even consumption expenditure diverges from consumption itself in important ways. Expenditure includes not only goods and services acquired for the household's own use, but also those purchased to be given away as in-kind transfers or gifts to other households, or as donations to private organisations such as charities. **Consumption expenditure** narrows this down to spending on goods and services intended for the direct satisfaction of the household's own needs or wants (SNA 2025), excluding such transfers to others. Still non-monetary items, such as the own produced ones, in-kind interhousehold transfers or from private institutions, in-kind payments from the employer, or in-kind social benefits are missed entirely.

Consumption refers to the flow of goods and services actually available to and used by the household. This includes purchased goods and services, items produced at home (notably own-produced food and owner-occupied housing services), items received in kind from employers, the state, private organisations or other households, and ideally the service flow from durables rather than their acquisition price. Durable goods are purchased at a point in time but consumed over many years, so acquisition prices overstate consumption in the purchase year and understate it in subsequent years. Health and education expenditure may reflect public provision differences and only weakly relate to actual welfare, and remain the most debated choices in consumption-based measures.

Welfare reflects a broader set of living standards and capabilities than any single metric can capture, with consumption serving as an informative but partial approximation. The LCS Expert Workshop in January 2026 emphasized that no single indicator fully represents welfare, noting that consumption is especially useful for poverty analysis but less suited to measuring top-end inequality.

The LCS adopts a modular approach: rather than defining a single definitive measure, it provides clearly labelled building blocks from which users can construct the aggregate most appropriate to their research purpose.

3. The LCS Project: From Feasibility Studies to Beta Launch

The development of the LCS has followed a staged, evidence-based trajectory spanning several years. Each phase has contributed substantively to the methodological design and operational framework now reflected in the September 2026 beta launch variable list.

Feasibility Studies

Two foundational feasibility studies have shaped the LCS framework:

Mancini and Vecchi (2023) – The first LCS feasibility study confirmed the viability and value of developing a comparable consumption micro-database. The study recommended a specific definition of the consumption aggregate comparable across countries, operationalised the conceptual framework into a LCS-specific technical harmonisation template, and conducted pilot harmonisation across four countries. Key findings included that the impact of including or excluding durable flows was less pronounced than expected, but that imputed rent plays a critical role in cross-country comparability.

Garner et al. (2025) – The second feasibility study extended the analysis across nine countries (Mali, Laos, Palestine, Peru, Georgia, Italy, France, the United Kingdom, and the United States), covering the full spectrum from low- to high-income contexts. The study established the COICOP 2018 classification as the structural backbone for the LCS variable list, further refining the LCS consumption aggregate. The study documented equivalence scale sensitivity, analysed the drivers of consumption inequality by income level, and demonstrated the critical importance of housing and imputed rent for cross-country comparability. The study confirmed that treating the LCS as a flexible system rather than a rigid single-measure approach is the path forward.

Both studies are published as Working Papers in the LIS WP Series and are publicly available: Mancini and Vecchi (2023) The Luxembourg Consumption Study (LCS): Feasibility and First Steps (LIS WP No. 911) and Garner et al. (2025) Building a Comparable Measure of Consumption: Concepts and Measurement Challenges Faced by Emerging and Advanced Economies (LIS WP No. 912).

Expert Workshop, January 2026

A two-day LCS Expert Workshop held on 14–15 January 2026 in Belval, Luxembourg, brought together leading scholars and institutional partners, including representatives from the OECD and the World Bank to review the methodological priorities and research agenda for the LCS. The workshop generated a rich body of substantive discussion, the key conclusions of which are summarised here.

Emerging Consensus

Across both days, several strong areas of consensus emerged:

- No single consumption aggregate is appropriate for all research purposes. The LCS should provide components and let users construct the aggregate most suited to their question.
- Modularity is the defining design principle: a core consumption aggregate should be complemented by clearly flagged optional extensions (imputed rent and non-monetary consumption, durable flows, health and education, social transfers in kind).
- Social transfers in kind (STiK) cannot be excluded from the overall theoretical framework, even if imperfect imputation is required. Their omission biases welfare state comparisons.
- Comparability should be operational rather than doctrinal. Respecting national survey practices while documenting differences is more valuable than forcing standardisation.
- Consumption is purpose-dependent. Poverty analysis, inequality measurement, environmental research, and fiscal incidence studies require different lenses and different aggregate definitions.

Health and Education

Health and education were the most extensively debated components. The workshop reaffirmed the tentative LCS position on health: out-of-pocket health expenses are excluded from the core well-being measure because they are often involuntary and do not straightforwardly increase welfare, and because the absence of data on freely provided health services prevents meaningful cross-country comparison. Following the exchange of the expert discussions out-of-pocket education expenses are thus excluded from the core LCS well-being measure (*hc_lcs*) in the beta launch variable list, despite some participants arguing for its retention as current consumption. Both categories remain available as separate variables (*hc06_t/_p/_n* and *hc10_t/_p/_n*) and are included in the COICOP expenditure aggregates (*hc_coicop_t/_p/_n*).

Health insurance contributions are treated slightly different: they are excluded from the core LCS well-being measure (*hc_lcs*) because the distinction between supplementary private voluntary insurance and other insurance types could not be drawn consistently across surveys, and because insurance premiums correspond only weakly to actual health consumption. They are also excluded from the COICOP expenditure aggregates (*hc_coicop_t/_p/_n*) and reported among the block of non-consumption expenditure (*hx* variables, *hxvconth*).

Durables and Service Flows

The workshop confirmed broad support for the LCS conceptual treatment of durables. Durable goods are defined as goods used repeatedly over a period longer than one year and purchased at a higher price, following COICOP 2018 and SNA 2025. A consumption-based welfare aggregate should include only the flow from the yearly period. The beta launch version makes this treatment explicit with creating a National Accounts oriented consumption block COICOP aggregates (*hc_coicop_t/_p/_n*) and the separate section on well-being (*hc_lcs*). Expenditure on durables is recorded in the COICOP aggregates, but excluded from the core LCS well-being measure. In addition, durable expenses are reported by the major and detailed 3-digit COICOP groups: variables *hd05-hd1321*). Service flow estimates, where available from national data providers, are collected in a separate module (*hf05–hf09*, aggregated to *hc_dflow*) and can be added to form the extended consumption aggregate (*hc_lcs_ext*). It needs to be acknowledged that at the moment, none of the data providers provided the service flows for durables, hence these sections are not populated in the microdata at this stage.

Imputed Rent – flow of services from shelter

Imputed rent was identified as a high-priority investment area. Its unavailability in some countries (notably Poland, Switzerland and the United Kingdom) represents a major limitation for cross-country comparability, particularly for comparisons involving homeowners.

Housing consumption is typically valued using the rental-equivalence approach: what a dwelling would rent for at current market prices. This applies not just to owner-occupiers but also to subsidized and rent-free households, on the assumption that market-rate renters' actual rents already capture this value. For owners, the value can come from self-assessment (respondents estimating what their home would rent for), hedonic imputation/modelling, or administrative valuations (e.g., tax authorities).

Both self-assessed and imputed values share the same underlying weakness: they only work where a genuinely comparable rental market exists. Self-assessment fails where respondents have no real rental market to reference. Imputation via hedonic modelling has the same problem at a finer geographic level: if owned housing clusters in rural areas and rentals in urban ones, the two stocks aren't comparable enough for a model fit on one to value the other reliably.

Deflation

The workshop also prioritised temporal deflation. LIS has already mapped annual World Bank price indices for this purpose. Further investigations about detailed information for consumption items are underway. Spatial deflation was considered valuable but more context-dependent, given that spatial price differences may partly reflect amenities rather than cost differentials.

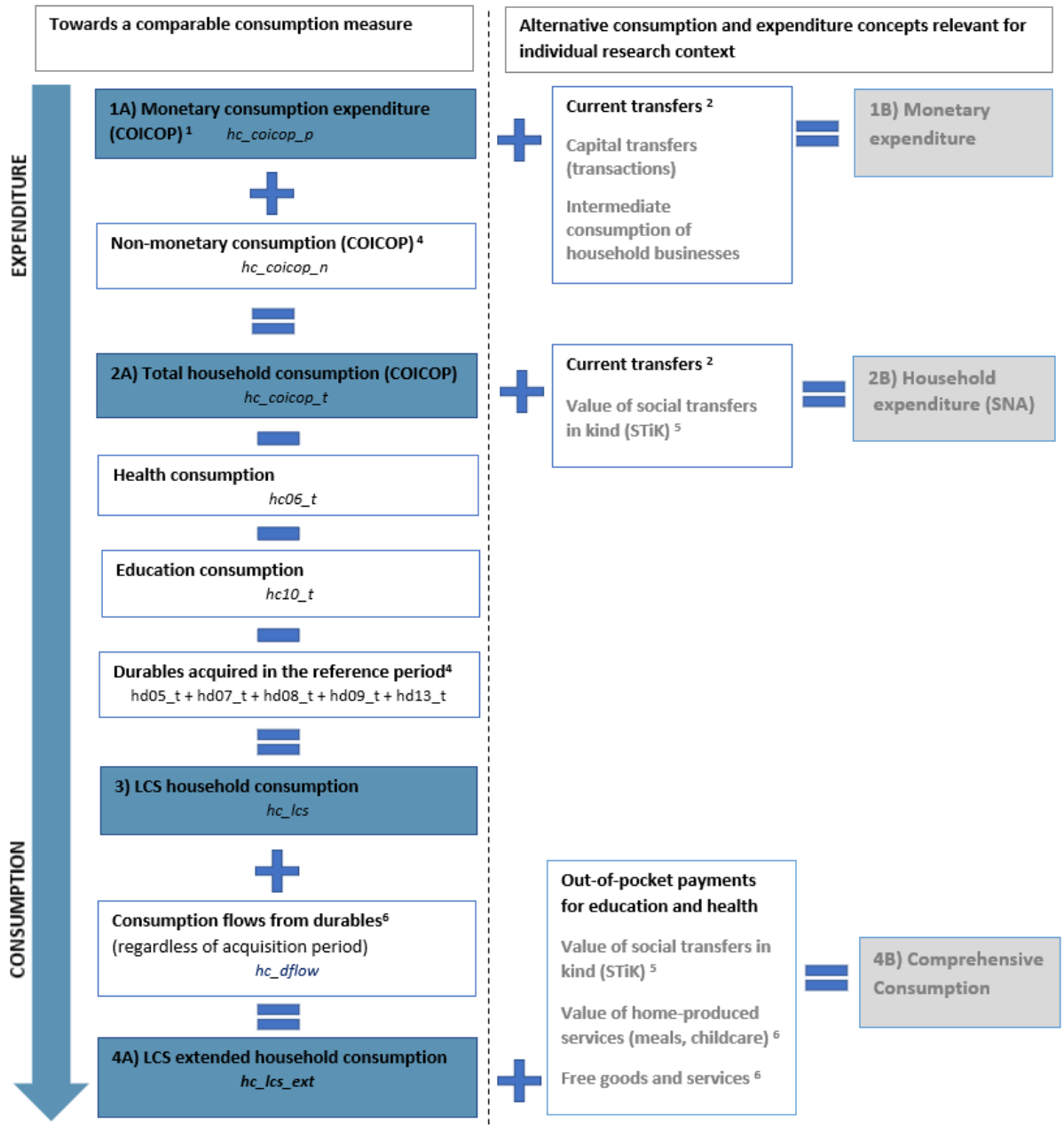
Internal Discussions and Variable List Development

Alongside the formal feasibility studies and the expert workshop, the LIS team engaged in various internal discussions and shaped the variable list and harmonisation priorities. Key decisions reached through this process include:

- Adoption of the COICOP 2018 revision as the structural framework for consumption categories, operating at 2-digit level;
- The deliberate distinction between the LCS well-being measure and the COICOP expenditure aggregate, reflecting different research purposes and user communities;
- The decision to exclude durable goods from the core consumption aggregates (except COICOP consumption aggregate), tracking them separately through a parallel durable goods module and, where available, service flow estimates.
- The design of a suffix convention (_*t* for total, _*p* for purchased, _*n* for non-monetary)
- The decision to exclude out-of-pocket health and education expenditure from the core LCS well-being measure while retaining it in the COICOP expenditure aggregate.
- The treatment of imputed rent as a mandatory component of the LCS well-being measure, reflecting the primacy of housing as the largest consumption category in many countries.
- The design of non-core country-specific files for durable goods ownership details, enabling future modelling of service flows as data availability improves.

4. The LCS Conceptual Schema: LCS vs. COICOP

The Schema Structure



* Components marked in grey fall outside the current LCS operational framework because they rely on modelling and simulation and cannot be constructed consistently from the available microdata.

[1] Monetary consumption expenditure include: purchased goods (including durables) & services, including out-of-pocket expenses for health and education.

[2] Current transfers include taxes on income and wealth, other direct taxes, and social contributions paid, interhousehold transfers (remittances, alimony payments, child support, etc.), interest payments on loans, net insurance premiums for health insurance, unemployment insurance, and life insurance; donations and contributions to charitable organisations.

[3] Non-monetary consumption expenditure include: value of goods & services own produced (including owner equivalent rent), in-kind payments from employers, in-kind benefits from the State, in-kind donations from private institutions, and gifts and in-kind transfers from other households.

[4] In order to enhance cross-country comparability, the LCS consumption framework excludes out-of-pocket expenditures on education (e.g., tutoring and fees for public and private schooling) and health services. This adjustment effectively normalizes differences in public provision across countries but, in doing so, abstracts from potentially substantial household expenditures that are directly linked to well-being and inequality.

[5] STiK stands for **S**ocial **T**ransfers in **K**ind, which are *"goods and services provided by government and non-profit institutions that benefit individuals but are provided free or at subsidised prices"* (Canberra Group Handbook, 2011). The value of STiK, home-produced services (e.g. meals and childcare), and free goods and services is not readily available in the LCS data and requires modelling by researchers.

[6] A consumption flow from a durable (or its service flow) represents the economic utility or benefit that a consumer derives from using a long-lasting good over the reference period. Modelling the service flow of durables is not feasible for all countries in the LCS Database. The necessary information on durables ownership, purchase prices, and year of acquisition is available only for a subset of countries and, within those countries, only for selected durable items.

The schema contrasts four families of aggregates along two dimensions: the scope of what is included (from narrow monetary expenditure to extended consumption including non-monetary items and STiK) and the purpose served (expenditure accounting vs. welfare measurement).

Aggregate	Label	Key Components	Research Use
1A	**Monetary consumption expenditure**	**Purchased goods & services (including durables) + out-of-pocket health and education expenditure**	**Expenditure accounting**
2A	**Total household consumption (COICOP)**	**Aggregate 1A + non-monetary consumption (own-produced and received in-kind)**	**SNA-aligned micro-macro linking**
3	**LCS household consumption**	**Aggregate 2A – durables - health consumption - education consumption**	**Cross-country welfare comparison**
4A	**LCS extended household consumption**	**Aggregate 3 + service flows from durables**	**Preferred welfare measure when data permit**
4B	Comprehensive consumption*	**Aggregate 4A +** value of social transfers in kind (STiK)	**Welfare state comparison; fiscal incidence**

* Components marked in grey fall outside the current LCS operational framework because they rely on modelling and simulation and cannot be constructed consistently from the available microdata.

Key Definitional Choices

Exclusion of Durable Goods from the Core Aggregate

The annualised expenditure on durable is recorded in a parallel module and included in the COICOP-aligned aggregates (1A and2A), but excluded from the LCS well-being measures (3 and 4A). The rationale is that including annualised expenditure on durable overstates consumption for the households in the year of purchase and understates it in all subsequent years. Ideally, an annualised service flow would enter the consumption measure (extended household consumption *hc_lcs_ext)*, but this is not available for any of the harmonised countries so far.

Housing: The Centrality of Imputed Rent

Housing is the largest single consumption category in most high-income countries and a major component in many middle-income contexts. The LCS framework requires imputed rent – the rental equivalent value of owner-occupied housing as part of the LCS well-being measure. Ideally LCS housing includes also the housing services provided in kind, including subsidised housing by the state or provided (partially) in kind by other households, private organisations or as payments from the employer. In case only the latter components are not provided, but rental equivalent values for owner-occupiers are available, *hchous* and *hc_lcs* are still constructed. A note in the documentation will warn users about limitations in comparability.

Where owner occupied imputed rent is missing, the LCS does not construct (*hchous_o/_n* and *hc042_n*) by summing the available component with an assumed zero for imputed rent. Instead, these variables are left unconstructed (set to 0). Consequently, all upper-level aggregates built from these categories are also not constructed (*hc042_t, hc04_t/_n, hchous_t/_n, hchous, hc_o, hc_lcs, hc_coicop_t/_n*). The only aggregates available remain the purchased-only variables (*hc04_p, hchous_p, hc_coicop_p*).

Health and Education

Health out-of-pocket expenses often represent an involuntary response to illness rather than a welfare-enhancing consumption choice, and they are systematically incomparable across countries with different regimes of public health provision. Thus, they are excluded from the core LCS well-being

measure (*hc_lcs).* Education out-of-pocket expenses, though conceptually debatable (education can be viewed as investment in human capital or as current consumption), are also excluded from the LCS well-being aggregate for similar reasons related to cross-country heterogeneity in public provision.

Non-Monetary Consumption

A defining feature of the LCS well-being measure is its systematic treatment of non-monetary consumption. Every consumption category is broken down by source of acquisition: purchased (*_p*), own-produced (*_o*), and received in kind (*_i*), with the latter further disaggregated by source (employer, state, private institution, other household). This disaggregation is especially important for lower-income country contexts where non-market consumption constitutes a significant share of household welfare. Whereas the three major building blocks of the LCS aggregate (*hcfood*, *hcnfnd*, and *hchous*) foresee a distinction in own-produced (*_o*), and received in kind (*_i*), the more detailed variables in LCS and COICOP combine *_o* and *_i* to consumption expenditure not paid for (*_n*).

5. The LCS Variable List (Beta Launch – September 2026)

The LCS variable list, consolidated in its September 2026 version, operationalises the conceptual schema into a concrete harmonisation template. It presents the two parallel measurement frameworks COICOP and LCS side by side, enabling users to work with either or both depending on their research purpose.

5.1 Structure of the Variable List

The variable list is organised into the following major sections:

- LCS Well-Being Measure – Breakdown by Source of Consumption: *hc_p* (purchased), *hc_o* (own-produced), *hc_i* (received in-kind, with sources), and *hc_m* (unknown type).
- LCS Well-Being Measure – Breakdown by Major Consumption Category: food (*hcfood*), housing (*hchous*), and other non-durables and services (*hcnfnd*).
- LCS Well-Being Measure – Breakdown by Detailed Category: for all non-durable goods and services consumption (except education and health): *hcalcto, hccloth, hcequip, hctrans, hcinco, hcrsc, hcrest, hcaccs, hcins, hcpers, hcsoc, hcmisc*, each with *_t/_p/_n* suffixes.
- Consumption Flows from Durables: *hf05–hf09* covering furniture and appliances, health assistive products, vehicles, ICT equipment, and recreational durables. Populated where national data permit.
- COICOP Consumption Aggregates – Major Categories: *hc_coicop* and *hc01–hc13* plus *hc99* (miscellaneous consumption expenditure n.e.c.), including health (*hc06*) and education (*hc10*) and durables (*hd05–hd13*), each with *_t/_p/_n* suffixes.
- COICOP Consumption – Detailed Categories: 2-digit sub-categories for all COICOP 2018 divisions.
- Durables Excluded from LCS Core: *hd05–hd13* (furniture, health assistive products, vehicles, ICT, recreation, jewellery), with *_t/_p/_n* suffixes.
- Non-Consumption Expenditure: taxes and social security contributions (p/*hxitax*, p/*hxscont*, *hxotax* and sub-items), voluntary contributions (p/*hxvcont* and sub-items), loans and mortgage instalments (*hxmort*, *hxloan*), inter-household transfers (*hxiht* and sub-items), donations to charitable organisations and contributions to other institutions (*hxdon* and sub-items), penalties / fines (*hxopf*), third party compensation paid (*hxothird*), major repairs and improvements to owned dwelling (*xmrep*), extraordinary expenditure (*xinfreq*), and other non-consumption expenditure (*hxother*).
- Geography and Housing Characteristics: region, locality size, area type, dwelling type, tenure status, number of rooms, dwelling value, construction materials, utilities and amenities (water, electricity, sewage, heating, air conditioning, garbage collection, toilet facility, energy sources), and accessibility and connectivity (access to water, transport, schooling, health facilities, and internet and TV subscription).
- Subjective Well-Being and Economic Vulnerability: adequacy of / satisfaction with consumption of housing, food, and clothing and footwear, quality of residential area, financial satisfaction and expectations, ability to save, dissaving behaviour, exposure to unexpected expenses, poverty ranking, and exposure to shocks.
- Health Module: country-specific health variables.

Additionally, all the variables from LIS data base are also created in LCS (see LIS variable list).

5.2 The Suffix Convention

A defining technical feature of the LCS variable list is its systematic use of suffixes to track the mode of acquisition across all consumption categories. The convention is consistent across both the LCS well-being measure and the COICOP aggregate:

Suffix	Meaning	Examples
_t	total (all sources combined)	hcfood_t, hc01_t
_p	purchased (market transactions)	hcfood_p, hc03_p
_n	non-monetary (own-produced + received in-kind)	hcfood_n, hchous_n
_o	own-produced	hcfood_o, hchous_o
_i	received in-kind (all sources)	hcfood_i, hcnfnd_i
_ie	in-kind from employer	hcfood_ie, hchous_ie
_is	in-kind from state	hcfood_is, hcnfnd_is
_ip	in-kind from private institution	hcfood_ip, hcnfnd_ip
_ih	in-kind from other households	hcfood_ih, hcnfnd_ih

5.3 What is Excluded from Both Frameworks

The variable list makes explicit a set of expenditures that fall outside both the LCS well-being measure and the COICOP consumption aggregate. These are non-consumption expenditures in the strict sense: income taxes and social contributions, voluntary pension contributions and health, unemployment and other voluntary insurance contributions, mortgage instalments and loan repayments, inter-household transfers (alimony, remittances, other transfers and gifts), donations to charitable institutions, fines and penalties, third party compensations , major home repairs and improvements by owner-occupiers, extraordinary expenditures such as those for weddings or funerals, and other non-consumption expenditure. These items are provided as separate variables to support fiscal and distributional research but are not part of any consumption aggregate.

6. General Structure and Harmonisation Practices

These rules mirror, and in several places directly reuse, the practices set out in Part I of the LIS User Guide (2024 Template) — "Overall Structure and Generic Rules and Practices." Rather than restate that material, each subsection below states only the LCS-specific implementation or deviation and points back to the relevant LIS User Guide section for the general rule.

6.1 Dataset Naming and Reference Period

See LIS User Guide (2024 Template), "Naming of the datasets," for the general rule.

LCS datasets follow the same naming convention as LIS: a 2-character ISO-3166 country code plus the reference year (e.g., IT21-23, PL21-23), as already used in the country-coverage table in Section 9.2. Because household budget surveys and income surveys are frequently fielded independently, the LCS reference year is the consumption/expenditure collection period of the underlying household budget survey, which does not necessarily coincide with the LIS income reference year for a nominally matching country-wave. Where the two differ, this is documented at the dataset level in METIS rather than assumed from the LIS wave label.

6.2 Sample and File Structure

See LIS User Guide (2024 Template), "Structure of the datasets and sample selection," for the general rule (H-file / P-file, household definition, sample selection).

Consumption is inherently a household-level concept, so the LCS well-being and COICOP-aligned variables (hc-, hd-, hf-, hx-prefixed) are constructed at the household level, in the LCS H-file. As already noted in Section 5.1, all LIS variables are also carried into the LCS files, so an LCS dataset extends the corresponding LIS H-file (and, for the subset of variables defined at that level, the P-file). Because the LCS sample is not always drawn from the same survey — or even the same households — as the co-located LIS dataset, the general LIS sample-selection and household-membership rules apply to the LCS sample independently, and any divergence in sample or reference period between the LIS and LCS datasets for the same country-wave is documented in METIS.

6.3 Variable Standardisation

See LIS User Guide (2024 Template), "Variable standardisation," for the general distinction between standardised and country-specific (_c) variables.

The core hc-/hd-/hf- flow variables are standardised continuous variables in the LIS sense: annual amounts in national current currency, conceptually comparable across datasets. Geography, housing and other variables carried over from the LIS template (Section 5.1) retain whatever standardised/country-specific (_c) split they already have in LIS. The one genuinely new standardisation layer introduced by LCS is the acquisition-mode suffix convention (_t/_p/_n/_o/_i/_ie/_is/_ip/_ih — Section 5.2), which has no LIS counterpart and should be documented as such wherever this guide is read alongside the LIS User Guide.

6.4 Missing Values Policy

See LIS User Guide (2024 Template), "Generic missing values policy," for the general rule.

The LIS missing-values policy for income and consumption variables applies unchanged to the LCS hc-, hd-, and hf-prefixed flow variables: a value of 0 is used both where the information was not collected and where it was collected at a level of detail insufficient for the variable in question, while a missing value ('.') is reserved for genuine refusals or 'don't know' responses. Section 4 (Housing: The Centrality of Imputed Rent) and Section 6.7 (Aggregation Rules) describe the specific case where an LCS aggregate

is deliberately left unconstructed — coded 0 — rather than built with a missing sub-component assumed to be zero; that is an aggregation rule layered on top of this missing-values policy.

6.5 Weighting

See LIS User Guide (2024 Template), "Weighting," for the general rule and the normalisation formulas for hpopwgt/ppopwgt and hwgt/pwgt.

Where an LCS dataset is built as a direct extension of an existing LIS dataset sharing the same sample, the same household- and person-level weights (hpopwgt/ppopwgt, and the normalised hwgt/pwgt) apply unchanged to the added hc-/hd-/hf- variables. Where the LCS dataset instead draws on a standalone household budget survey with no matching LIS sample (see Section 6.2), the survey's own household weight is adopted and normalised following the same two-step procedure described in the LIS User Guide (population inflation, then scaling to sum to approximately 10,000 for cross-country pooling). Which of the two situations applies for a given country-wave is documented at the dataset level in METIS.

6.6 Annualisation and Reference-Period Adjustment

See LIS User Guide (2024 Template), "Annualisation," for the general rule.

As in LIS, all LCS flow variables report annual amounts; where the source household budget survey collects at a shorter reference period (commonly a week, month, or quarter — a more frequent occurrence for consumption diaries than for income surveys), the reported amount is scaled up assuming the same pattern held throughout the year. Annualisation of all expenditures is carried out, since reference periods often differ by consumption category even within the same survey (for example, frequently purchased food items may be diarised weekly while durables are recalled over a full year). Further seasonal diagnostics — to check whether the annualisation assumption holds for categories with seasonal patterns — are advised (Section 7.1).

6.7 Aggregation Rules

See LIS User Guide (2024 Template), "Aggregation rules," for the general rule (categorical nesting; income aggregation; the hcexp rule for LIS consumption expenditure).

The LCS aggregation logic follows the same principle already established for LIS: a sub-category is summed into its parent aggregate only when there is sufficient information across all required components; otherwise, the aggregate is left unconstructed (coded 0) rather than built with the missing piece silently treated as zero. Section 4.2 gives the concrete LCS example: when owner-occupied imputed rent is missing, hchous and every aggregate built from it (up to hc_lcs and hc_coicop_t/_n) are left unconstructed, and only the purchased-only variables (hc04_p, hchous_p, hc_coicop_p) remain available. The same logic applies wherever another mandatory component of hc_lcs (imputed rent being the main current example) is missing for a given dataset.

6.8 Data Editing and Imputation

See LIS User Guide (2024 Template), "Data editing and imputation," for the general rule (no outlier editing; use of data-provider imputations; rare in-house imputation).

LCS follows the same general position as LIS: outliers are not edited out of the microdata, and imputations performed by the data provider are used as delivered (and are not separately flagged in the LCS data). LIS-side imputation for LCS is, at the beta-launch stage, not implemented: durable service flows are currently not imputed by LIS where a provider does not supply them (Section 3.2); the corresponding hf05–hf09 and hc_dflow variables are simply left unpopulated. Estimation models for imputed rent, where source data lack a rental equivalent, are a stated high-priority investment (Section 7.1) rather than a rule already in force.

7. Documentation, Access, and Research Infrastructure

7.1 Metadata and Documentation Tools

The LCS is fully integrated into two LIS documentation tools:

- METIS: the LIS online documentation platform, which provides comparability remarks, survey-level metadata, and variable definitions for all LIS, LWS, and now LCS datasets. LCS datasets are accompanied by comprehensive documentation covering reference periods, valuation methods, treatment of durables, imputed rent availability, and survey design characteristics.
- Compare.It: the LIS comparability explorer, enabling users to identify which countries and years are comparable on specific variables or concepts before conducting analysis. The tool is particularly useful for comparisons over time in long country series.

In addition, annual CPIs, PPPs are provided in accompanying documentation pages.

7.2 Data Access

As with LIS and LWS, access to LCS microdata is provided through the LISSY remote-access system, which enables researchers worldwide to run analyses on confidential microdata without accessing the underlying files.

7.3 Feedback – LCS beta version

Looking for an additional non-harmonised variable?

Our documentation lists the source variables underlying each harmonised consumption flow. If a variable relevant to your research is not currently included — whether related to consumption or any other national-specific detail — let us know. We are glad to explore adding it.

With the beta release of LCS, we more broadly encourage users to explore the data and work with it for their research. If you have any other feedback ahead of the official LCS launch in 2027, please contact Jörg Neugschwender (neugschwender@lisdatacenter.org) or send an email to the LIS user support (usersupport@lisdatacenter.org).

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