Introduction: the Challenges of Distributional Accounting

Background

The issues of income inequality and the redistribution that takes place by virtue of public policies is featuring more and more in the public debate, both in France and internationally. Fed into by both the academic world and official statistics systems, the findings are sometimes hotly debated and the "messages not always convergent"².

Therefore, when the work on this report was started, several recent studies on France and the United States presented apparently contradictory findings when it came to the comparison of redistribution within the two systems, with Causa and Hermansen (2017) and Guillaud, Olckers and Zemmour (2019) in particular concluding that the effects were more distributive in France than in the United States, while Bozio *et al.* (2018) found the opposite to be true³.

These discrepancies can, of course, be explained by differences in sources, scope, concepts or a differing emphasis on the various standard of living distribution bands. Going beyond the scientific exchanges brought about as a result of the richness and high importance of these works, the working group was born of the desire to bring these to their conclusion and to establish, in so far as is possible, shared conventions and practices to better inform and fuel the public debate (see mission statement annexed

² Mission statement from INSEE's Director-General, dated 19 March 2019, provided as an appendix on page 126.

³ INSEE, LIEPP and IPP study all age groups, whereas the WIL focuses on adults and the OECD focuses on 18 to 65-year-olds. The definition of income before redistribution includes pensions in the case of LIEPP and pensions and unemployment in the case of INSEE, the WIL and IPP; however, the OECD excludes these. The disposable income profile differs from study to study. The wealthiest 10% (T10) represent 24% in the OECD, LIEPP and INSEE studies, but 28.8% in the DINA study, a discrepancy of 4.6 points, which equates to 60 billion euros. INSEE estimates that the poorest 50% (B50) represent 20.6%; however, DINA's estimate of 26.4% presents a difference of 4.3 points, which equates to 55 billion euros. In addition, the usual T10/B50 indicator (see Section I.4) is therefore estimated at 3.9 and 5.5, respectively.

hereto on page 127).

The measurement of inequality and redistribution is a long-standing concern. It has found its way back into the spotlight over the last decade, most notably as a result of the Stiglitz-Sen-Fitoussi Commission on the Measurement of Economic Performance and Social Progress, which called for the distribution of national income to be documented in the same way as GDP in order to better guide public decisions. Early on, this translated into a commitment to go beyond the simple use of aggregates and averages and to establish detailed distributions, particularly at the extreme ends of the income scale.

In addition to the above-mentioned studies, many other studies have been produced by international institutions (UN, OECD, Eurostat), as well as in France by INSEE and the Ministerial Statistical Offices, and also by research laboratories such as the *World Inequality Lab* (WIL), the French Economic Observatory (OFCE), the Laboratory for Interdisciplinary Evaluation of Public Policy (LIEPP) and the Institute of Public Policies (IPP), and that is just the organisations involved in the working group that produced this report. The group is comprised of some forty experts in the field and it carried out its work between March 2019 and April 2020 in a collegial setting and in a spirit of consensus.

Objectives of the Working Group

In accordance with the objectives set out in the above-mentioned mission statement, by deepening the links between research and official statistics, the working group committed to:

- Examining the discrepancies between sources, scopes or concepts and explaining the differences seen in the work carried out by different teams.
- Bringing the concepts used for income in national accounting closer to those used in microeconomic approaches.
- Adopting common conventions and proposing a compatible approach for the survey data, the administrative sources and the national accounting work in order to establish pre- and post-transfer analyses.
- Proposing a methodology for breaking down national income in its entirety, which involves going beyond the components of disposable income and distributing expenditure in kind, as well as collective expenditure and taxes on consumption and production.
- Issuing recommendations with a view to establishing a recurrent distributional accounting publication and proposing a methodological guide for France that brings together shareable practices for the study of redistribution performed by means of distributed national accounts in particular.
- > Identifying study and research priorities in order to improve the study of

inequality and the impact of public transfers.

By seeking to identify best practices in the study of inequality where they exist, or by proposing best practices for new areas of redistribution that have thus far been little explored or completely unexplored, the report leads to a series of practical recommendations in the form of common conventions for terminology, practices and the documentation of assumptions. It does not aim to eliminate the differences in analysis; on the contrary, it seeks to remove the artificial discrepancies by reaching an agreement with regard to the technical aspects, in order to better concentrate on the fundamental discussions.

We would like to emphasise one of the recommendations made here, as it is so important to the approach that the working group took to the issue of measuring redistribution. The report calls for the establishment of distributed national accounts as an extension to national accounting; these break down national income in its entirety, together with all its various components, by income group. The underlying logic is that studies looking at redistribution present an additional requirement when compared with studies looking at inequality: the need for comprehensiveness. It is possible and useful to study inequality in health, income, wages, gender, etc. Conversely, evaluating the extent of redistribution linked to public policies means that all income and all transfers need to be taken into account.

Deductions are made and, in the vast majority of cases, are not earmarked for specific policies. They are used to finance both cash benefits and benefits in kind, as well as non-individualizable public services (see Section I.2 for definitions). Even the Social Security schemes, which benefit from deductions, no longer present an exception: their financing, which was originally based on social security contributions and deductions, has diversified and they now receive fractions of deductions that finance other public expenditure (e.g. VAT or the Generalised Social Contribution (CSG)). It is therefore not strictly possible to study all of the redistribution operations separately by looking at the various transfers (education, health, pension, etc.) in isolation.

Likewise, examining the transfers received separately from the transfers paid out would only deliver a partial result. Indeed, in order to judge the redistributive nature of a public policy, it is important to include the nature of the deductions made in order to finance it in view of the profile of the benefits provided. For example, an income-based benefit funded by a proportional deduction is not redistributive; however, it is considered to be redistributive if the deduction is more progressive than income; a flatrate benefit financed by a proportional tax (flat tax) is redistributive; however, if it is financed by a flat-rate deduction, it is not redistributive.

Without going into detail here, pursuing such an objective of exhaustiveness means that the final beneficiaries of income and transfers must be sought, going beyond the mere aggregates assigned to households in the national accounts. As a result, the income and savings of companies, financial and non-financial businesses and individual entrepreneurs are assigned to the households that receive them, including retained earnings since, as we will discuss in the second part of the report, these constitute capitalised household savings. The revenues and expenditures of public bodies and nonprofit institutions are also distributed to households. Finally, accounting transactions with the rest of the world and transactions involving product taxes and subsidies are taken into account under certain assumptions (see below).

With this principle in mind, the distributed national accounts are based on the table of integrated economic accounts (TIEA), assigning all of the income and transfers that constitute national income across the entire standard of living scale. Once the primary incomes have been identified, the application of public transfers (deductions and benefits) makes it possible to redistribute the national income in the form of a table of integrated distributional accounts (TIDA), which breaks down the effect of these market income based transfers (Income Before Transfers, IBT) on a step-by-step basis. The various transfers then result in redistribution towards a broader disposable income known as Income After Transfers (IAT), see Figure 1 below and Section III.1.f).

	All	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	P100	M1000
IBT: Income Before Transfers	1881	39	66	94	115	140	161	- 187	224	280	576	406	183
IBD: IBT + Deferred Incomes	1881	46	72	100	123	141	160	182	217	274	576	389	174
TCP: Tax on Cons&Prod	-300.1	-17.3	-19.5	-22.1	-24.2	-26.9	-28.7	-30.9	-34.2	-40.9	-55.3	-35.2	-13.0
TIW: Tax on Inc. and Wealth	-276.6	-2.3	-3.9	-6.6	-9.6	-12.4	-15.5	-19.9	-27.4	-40.4	-138.5	-109.1	-60.7
TSC: Social Security Contributions	-471.2	-5.4	-15.4	-22.6	-30.0	-38.1	-45.1	-53.8	-64.4	-77.6	-118.8	-74.6	-22.3
BCA: Social Security Benefits in Cash	486.4	25.2	35.4	40.6	45.6	45.3	46.8	50.4	54.4	62.9	79.9	41.4	8.5
IDI: Disposable Income	1320	40	64	83	97	108	119	132	152	184	341	231	97
BKI: Social Security Benefits in Kind	394.3	54.5	52.0	45.4	41.5	37.0	36.0	31.9	33.1	32.3	30.6	15.3	3.1
BCO: Collective Consumption	182.9	23.0	20.9	18.6	18.1	17.2	16.4	17.2	16.9	17.4	17.2	8.6	1.7
MBT: Balance of Transfers	-15.9	1.0	0.5	0.2	-0.1	-0.4	-0.7	-1.1	-1.9	-3.0	-8.7	-4.3	-0.9
ATI: After Transfer Income	1881	118	137	148	157	161	170	180	200	230	380	251	100
NWE: Net wealth	10,783	120	232	308	398	520	662	837	1,074	1,526	5,106		
	All	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	P100	M1000

Figure 1: Simplified table of distributed national accounts in 2016 (France, in billion euros)

Sources: prototype distributed national accounts for 2016, authors' calculations.

Notes: the amounts are expressed as a percentage of NNI (see below).

Reading note: the income before transfers (IBT) of the households in D10 amounts to 576 billion euros and the after transfer income (ATI) 380 billion. The deductions that they pay amount to 55.3 billion for taxes on consumption and production (TCP), 138.5 billion for taxes on income and wealth (TIW) and 118.8 billion for social security contributions (TSC). Those same households receive 79.9 billion in social security benefits in cash (BCA), 30.6 billion in benefits in kind and 17.2 billion in collective consumption expenditure (BCO).

Taking such a comprehensive approach to accounting offers a view of redistribution that differs from and complements the traditional approach, as is illustrated by the graph in Figure 2. In particular, when viewed from a broader angle that includes a monetary valuation of benefits in kind and collective expenditure on the one hand and the allocation of taxes on products and production on the other hand, the amounts resulting from the redistribution that takes place via public transfers are larger. Indeed, the wealthiest third of households belong to standard of living categories that are net contributors under expanded redistribution, whereas this proportion is 60% under the usual approach to redistribution.

This initial exploration, at this experimental stage, illustrates the potential of

distributional accounting for a rigorous evaluation of our redistributive system. The report also stresses the need for distributional accounting that is not only based on precise statistical conventions, but also shared by experts, for the purposes of international comparison. This is why the working group felt it necessary to integrate such distributional accounting into the international conventions that govern the establishment of public accounting (*System of National Accounts*, SNA – the set of accounting rules defined by *UNStats*), for which a new revision process has just begun.



Figure 2: Breakdown showing the redistribution of national income in 2016 (in euros per CU)

Sources: prototype distributed national accounts for 2016, authors' calculations.

This is not a question of proposing a completely new way of measuring inequality, but of developing a methodical approach in order to study all of the various dimensions of redistribution and its impact on inequality. Distributed national accounts are the instrument that will allow the two usual approaches to be brought into line with one another: the macroeconomic approach, which is based on national accounts, aims to describe how income and production are divided; and the microeconomic approach, which is based on data regarding individuals or households and details the specific effect of the transfers at the individual level in the greatest possible detail. Far from replacing one or the other, the challenge is to ensure that they reinforce one another and therefore provide new and more robust knowledge on redistribution in France and across the globe.

Links with Previous Studies

As we have already touched upon, the studies carried out in connection with this report can be linked to several other initiatives, both from the academic world and from national and international statistical institutes. There are three objectives related to these approaches. The first is to establish a set of common and precise statistical conventions with a view to harmonising definitions and concepts of income and to enabling improved comparability over time and between countries. The second seeks to bring the microeconomic data on the distribution of income into line with the concepts and estimates made through national accounting. The third concerns improvements in the quality of the measurement of income and wealth distribution, particularly at the top and bottom ends of distribution.

The *Luxembourg Income Study* (LIS) was the first large-scale initiative aimed at harmonising micro-data on income. The project was launched in 1983 at the initiative of several researchers in the fields of sociology and economics.⁴ It aimed to collect and harmonise survey data from as many countries as possible and to make them available to researchers *via* a shared interface.

Today, the project includes some 300 surveys covering around 50 countries and spanning five decades. It has also been expanded to cover the distribution of wealth in addition to that of income. As part of this harmonisation work, the LIS has created a set of variables used to define and break down income in a consistent manner across countries.⁵

The LIS performs *ex post* harmonisation work, which results in the availability of data being dependent on the level of detail present in the source survey. The *Canberra Group*, established in 1996 at the initiative of the Australian Bureau of Statistics, aims

⁴ Lee Rainwater, Robert Erikson, Tim Smeeding, Serge Allegrezza, Marc Cigrang, Gaston Schaber, and John Coder.

⁵ See https://www.lisdatacenter.org/wp-content/uploads/files/data-lis-variables.pdf.

to ensure the *ex ante* harmonisation of data gathered by the statistical institutes. In 2001, the working group produced the initial version of its recommendations in the form of *The Canberra Group Handbook* (2001). Those recommendations were most notably adopted by the International Labour Organization in 2003 (ILO, 2003). A second version of the handbook was published in 2011 under the auspices of the Conference of European Statisticians and the United Nations Economic Commission for Europe (Canberra Group, 2011). The recommendations issued by the *Canberra Group* primarily relate to household surveys. They define basic rules (use of annual income, use of purchasing power parities for comparisons between countries) and a definition of income components that have been widely adopted by EU-SILC, the official source for harmonised income statistics at European level.

A similar initiative, the OECD Expert Group on Micro Statistics on Income, Consumption and Wealth (EG ICW), published two guides in 2013, which served as a basis for the publication of the Income Distribution Database – an OECD database on income distribution. The EG ICW has expanded upon the work carried out by the Canberra Group, particularly that involving the distribution of wealth. The EG ICW primarily focuses on the microeconomic coherence of data, but also works in conjunction with the Expert Group on Disparities in National Accounts (EG DNA), another OECD initiative that focuses on the microeconomic and macroeconomic coherence of distributional statistics. A new report is currently being finalised by the EG DNA. Several statistical institutes produce experimental statistics on this subject (Statistics Netherlands, 2014; Eurostat, 2018; Statistics Canada, 2018; Australian Bureau of Statistics, 2019). At this stage, the majority of these statistics are based on surveys and only cover a part of national income.

As regards the social statistics calculated at INSEE, the main concept used to calculate the poverty rate and measure inequality is standard of living. In France, it is usually estimated on the basis of the Tax and Social Incomes survey (ERFS). Many studies carried out within official statistics have sought to complement the microeconomic approach to monetary redistribution by breaking down the national accounts; Accardo (2019) and Accardo (2020) provide a historical overview of these. Between 1980 and 1985, INSEE published an annual income account for several dozen types of households in order to paint a picture of the budget of a household based on its socio-demographic characteristics. During the 1990s, work was carried out in the National Accounts Department with a view to establishing a complete household account broken down by socio-professional category. This work, which was the subject of a study that took place from 1995 to 1997, covering income, consumption and wealth, was ceased in order to give priority to the implementation of the Base 95 system for national accounts. Only the income account part, which was in line with those produced until 1985, was published in Fall (1997).

More recently, Accardo *et al.* (2009) proposed that household accounts be broken down by category for the year 2003 by combining the national accounting approach with the microeconomic statistics on inequality. This is linked to the working document by Bellamy *et al.* (2009) and breaks down disposable income and consumption in the national accounts according to four socio-economic criteria: standard of living, household composition, age or socio-professional category of the reference person. This makes it possible to infer the saving rate for each of these various characteristics. This was the approach taken by Le Laidier (2009) and, more recently, by Billot and Bourgeois (2019), with a view in particular to comparing the annual changes in the accounts for each household category and specifying the various concepts relating to the perception of household income. A breakdown of the wealth account by household category was also proposed for the year 2003 by Durier, Richet-Mastain, and Vanderschelden (2012). Accardo, Billot et Buron (2017) suggest breaking down the household accounts for 2011 according to standard of living, age, the socio-professional category of the reference person and household composition on the basis of 2010 accounting standards.

In parallel, several studies that chose to adopt a microeconomic approach, i.e. based on household data, have broadened the concept of disposable income by including different types of public transfers. Amar *et al.* (2008) therefore add the public services of health, education and housing to the scope of monetary redistribution. This study was continued in the annual redistribution report produced by the INSEE and DREES teams working on the INES microsimulation model by Bonnefoy *et al.* (2010) This extension of the analytical framework for the redistribution of adjusted disposable income was a recent development at the time of its publication, although some studies had explored certain aspects of it previously. Hugounenq (1998) and the French Council for Employment, Income and Social Cohesion (CERC)⁶ (2003) chose to concentrate on education.

Other studies focused more specifically on the redistributive effects of the public health system, following on from Caussat *et al.* (2005) and Marical (2007). The *Omar* model developed by DREES (Lardellier *et al.*) (2011)therefore not only allows for the study of the distribution of the cost burden according to standard of living, but also the redistributive effects of the health system. Several DREES studies document these effects in particular: Caussat *et al.*, (2005)Duval and Lardellier (2012), Jusot *et al.* (2016)

Studies have also been conducted into the ERFS production process in order to bring the measurement of disposable income into line with the concept used in national accounting, with the integration of non-imputed financial income from 2005 onwards and the backcasting of this to 1996; the calculation of an income variant with imputed rent from 2007 onwards and the change to the tax data in 2013 as a result of switching from the tax paid in N+1 on income from year N to the tax paid in year N.

Recent studies by Liepp, Guillaud, Olckers and Zemmour (2019) and Amoureux, Guillaud and Zemmour (2019) contribute to this field of literature by proposing an analytical table to study the reduction of inequality brought about by socio-fiscal systems. Based on the breakdown of household disposable income according to data from the LIS survey, which was conducted in 22 OECD countries between 1999 and 2016, these analyses measure the extent to which mandatory deductions and benefits in kind reduce inequality. By processing 80% of mandatory deductions and all of the cash transfers together, they highlight in particular the fact that the structure and level of taxation, as well as the form and volume of social security benefits, do not contribute to reducing inequality in the same way. Guillaud, Olckers et Zemmour (2019) demonstrate

⁶ This report was updated in 2011 in note no. 2497/DG75-F120 by Fabrice Langumier "La répartition des dépenses publiques de l'enseignement supérieur et des aides associées" [The distribution of public expenditure on higher education and associated assistance].

that the degree of social redistribution is overdetermined by the average rate of benefits, with the degree to which they are targeted at the poorest being of little importance. As regards tax redistribution, this depends on a combination of the rate and progressiveness of the deductions: several countries achieve identical redistributions with very different configurations.

Amoureux, Guillaud and Zemmour (2018), and Ben Jelloul *et al.* (2019) reveal that social security contributions are responsible for the squeezing of income at the bottom end of the distribution, while income tax is responsible for squeezing income in the top half of the distribution. Rather than progressive taxes and anti-redistributive social deductions, the authors observed complementarity between the two types of deductions.

In parallel to all of these studies, academic literature has made increasing use of comprehensive administrative data to complement survey data. This development began with the work of Piketty (2003) in France, and Piketty and Saez (2003) in the United States, which provided an update to the work by (1953) and Atkinson and Harrison (1978) in order to analyse the development of high incomes over the very long term. Their methodology has been extended to many countries by several researchers, whose studies have been collated in two works, edited by Atkinson and Piketty (2007; 2010). Those estimates were used as the basis for the *World Top Income Database* (WTID) in 2011.

The WTID provided two key advantages over the existing sources. The first is its historical depth, made possible by the existence of tax sources dating back more than a hundred years in many countries, unlike surveys, which only cover recent decades. The second benefit is the ability to cover very high incomes, which surveys have difficulty in capturing. In contrast, the WTID was limited to the use of raw tax data, with no adjustment to take account of differences in statistical units or differences in taxable income. In addition, this project was limited to the distribution of income and did not provide any information regarding the dynamic of the concentrations of wealth. In order to overcome these limitations, the World Inequality Lab launched the DINA (Distributional National Accounts) project. The WTID was renamed the World Inequality Database (WID) to indicate the extended scope of the database, and the first DINA handbook was published in Alvaredo et al. (2016) That handbook stressed the need to combine the various sources in order to obtain satisfactory estimates. Indeed, relying solely on administrative data does not allow certain socio-economic characteristics of households to be gathered, particularly with regard to their structure, since these form part of the survey data (see Section I.5.c.). Conversely, the sample size for the survey data presents limitations for studies carried out at a fine level of granularity or those looking into geographical heterogeneity or the economic sector, for example. In September 2020, the most recent guide by Alvaredo et al. (2020) updated the recommendations regarding the DINA project methodology.

Unlike the former WTID, the DINA project aims to measure the distribution of national income in its entirety, making use of income (before and after transfers) and wealth concepts that are harmonised and coherent with national accounting, while maintaining the focus on the top end of the distribution with the use of tax sources in addition to surveys and national accounts. Two DINA "pilot" projects have been launched in France (Bozio *et al.*, 2018; Garbinti *et al.*, 2018) and in the United States

(Piketty, Saez and Zuman (2018)). Similar studies are being carried out in several other countries in both the developed world and in emerging economies. The *World Inequality Lab* also produces inequality estimates for major regions (Europe, Asia, Latin America, Africa, etc.) by drawing upon the various existing sources (which can sometimes be sparse) in order to apply the principles of the DINA methodology to the world as a whole. The recent publication by Alvaredo *et al.*, (2020) which appeared in the special edition of *Économie et Statistiques* dedicated to national accounting provides a description of the method and summarises the empirical findings.

In France, the TAXIPP model developed by the Institute of Public Policies (IPP) is also seeking to combine a range of complementary sources (Ben Jelloul *et al.*, (2019)Bach *et al.*). (2019) This model pairs administrative income tax data with survey data in order to have both a good representation of high incomes and all of the information necessary in order to simulate the socio-fiscal system. This model has been used in particular for the *ex ante* and *ex post* analyses of capital tax reforms (Bach *et al.*, (2019)) and of the structure of social security benefits (Ben Jelloul *et al.*, (2018)). The long-term objective is to gather the greatest possible amount of administrative data regarding redistribution.

While there are similarities between the two approaches, there are also significant conceptual differences that must be highlighted. As a result, the notion of pre-tax income may or may not include pensions or unemployment benefits, imputed rents or retained earnings. Depending on whether those income components are included in the analysis (see Section III.1.e. for a discussion regarding pension schemes), the conclusions regarding the level of inequality, the trend or the level of redistribution for a given country may vary widely. It is therefore necessary to produce a general framework and to formalise a common language for distributional analyses. The table in Figure 41 annexed hereto shows different income concepts used by international databases that allow for the measurement of inequality and redistribution.

More generally, the annual publication of a series of distributional national accounts requires extensive international collaboration with both the academic world and official statistics offices. The methodological principles put forward will be revised as and when new data and issues emerge. This report also aims to contribute to this long-term collaborative process.

One of the objectives of the work carried out by the WIL, or other similar work, is to produce analyses, proposals and rules that can feed into the process of revising the System of National Accounts. The revision of the System of National Accounts standards, which is planned for 2022-2024, follows a complex process, the result of which must be validated by the United Nations Statistical Commission (StatCom), founded in 1947 and composed of representatives from the statistical institutes of all UN member countries. StatCom has, for many years, tasked a working group (*Intersecretariat Working Group on National Accounts*, ISWGNA) with leading the said revision. The ISWGNA is therefore responsible for establishing methodological and conceptual recommendations with regard to distributional national accounting, which will then be submitted for approval to all countries sitting on StatCom⁷.

⁷ The mandate of the ISWGNA is based around four elements: "(a) to provide strategic vision, direction and

Since the 1980s, the ISWGNA has been headed up by five institutional members (the United Nations Statistics Division – UNSD, the OECD, Eurostat, the World Bank and the IMF) and several other entities, as defined in Figure 3. The ISWGNA secretariat is provided by the UNSD, which is leading the revision process in conjunction with the institutional members, national accountants and technical experts involved in the revision.



Sources: ISWGNA

In order to prepare for the revision, the ISWGA secretariat and the UNSD have commissioned an <u>Advisory Expert Group (AEG)</u> for national accounts. This expert group is itself made up of thematic sub-groups, one of which (the Sub-Group on Wellbeing and Sustainability) is tasked in particular with establishing precise recommendations with regard to distributional accounting. The OECD provides the secretariat for this group. In parallel with this process, the UNSD is also organising a series of regional consultations with national accountants. These are known as the Friends of the Chair meetings, and they aim to provide information to and hold discussions with national statistical institutes on the upcoming revision of the System of National Accounts. Two have been organised so far, covering Asia and Latin America.

coordination for the methodological development and implementation of the System of National Accounts (SNA) in national, regional and international statistical systems; (b) to revise and update the SNA and develop supporting normative international statistical standards and other methodological documents on national accounts and supporting statistics; (c) to promote the development of databases at international, regional and national level on national accounts statistics; (d) to promote the implementation of the SNA and supporting statistics in policy formulation".

Content of the Report

The remainder of this report is structured as follows.

The first part examines the conceptual framework for measuring redistribution. It presents the concepts and vocabulary used and discusses the conventions for allocating income between households by income level and for measuring the redistribution performed by means of public transfers. It proposes an analysis of inequality indicators and their use in measuring redistribution. It then goes on to discuss the scope and limitations of the exercise carried out within the adopted framework of an accounting-based approach to direct or indirect transfers.

The second part aims to reconcile the micro and macroeconomic studies on redistribution. Since it is essential that transfers are fully taken into account in order to provide a coherent vision of redistribution, it describes in detail a micro-founded methodology for the distribution of all income and transfers that make up the national income. Having presented the general framework, it goes on to review sources of income and transfer categories, formulating methodological recommendations for each of them for distribution along the income scale and discusses the underlying assumptions.

The third part proposes a coherent analytical framework for measuring broad redistribution in the form of methodological principles for establishing a distributional economic table as a counterpart to the table of integrated economic accounts (TIEA). The selected conventions are applied experimentally to France and the United States to illustrate, on the basis of this prototype, the potential offered by distributed national accounts, to allow for a better understanding of the nature of inequality and redistribution mechanisms.

The conclusion summarises the main recommendations and identifies courses of action and studies aimed at extending and sustaining this work, for the benefit of the scientific community.