Ethical Principles for the European Economist.

These principles act as a guide to researchers and their employers, yet they reflect a general consensus in the profession and actions that violate these principles are likely to require very serious attention including an intensive external validation. This document complements the EEA Code of Professional Conduct, which establishes the core principles the EEA expects its members to adhere in their professional behavior.

Basic ethical principles for economic scientists

Researcher's responsibility. The researcher is responsible for her ethical conduct.

Employer's responsibility. The researcher's employer (university or research institution) should provide an environment facilitating the exercise of the researcher's ethical duties. In particular, it should provide their researchers with information on legislation and procedures (in particular for the resolution of any potential conflict). The researcher's employer must also have set-up the relevant committees necessary for exercising its responsibility as well as that of its researchers.

Nemo censetur ignorare legem. No one can invoke its absence of knowledge of the law (or of regulations) as a valid justification for failing to comply with these laws or regulations. Ensuring compliance is the researcher's responsibility. Ensuring the knowledge of laws governing data production and usage as well as rules, including within her own institution, for production and usage, is the first task of the researcher when they start a project involving data collection or analysis.

Laws, Rules, and Regulations. Any action should be in full agreement with the legal environment of the country where the data are produced and (or) used, and the local regulations/rules prevailing in the institutions that employ the researcher as well as those institutions that produce and (or) grant access to the data sources and those where the data are collected.¹ Means to the resolution of conflicts between these regulations, institutions, and laws must be explicitly specified in advance (see below on the resolution of conflicts).

Replicability. The materials necessary to replicate the study findings should be fully available, or in the case that the authors do not have permission to distribute the primary data then the steps that can to be taken to obtain the data and replicate the study findings should be clearly set out. Replicability implies honesty in the integral presentation of findings as well as prior research that led to the research as formulated in its latest incarnation.

Appropriate credit. All those for whom credit is due should be acknowledged. This might include funders of research, all those involved in the research activity (whether as co-authors, RAs or in any other capacity), any who have given formative comments or reviews, and also any authors whose research is being built on.

Truthfulness. Beyond the honesty and replicability principles stated above, researchers should be truthful in their statements to the individuals they study. Studies that involve lying as part of the research or data collection design require special attention, with the help from the ethical institutions of reference.

Conflicts of Interest. All conflicts of interest, whether financial or otherwise, should be disclosed.

¹ In difficult legal or institutional environments, external solutions should be envisaged.

Data production

Legal context. Full compliance with data protection laws and directives in the producer's jurisdiction must be ensured.

Local context, beyond the Law. Full compliance with the institutions producing the data or employing the producer in terms of ethical approval through the relevant committee (Internal Review Board, IRB hereafter, for instance). Let us reiterate that ensuring compliance is the researcher's responsibility. Ensuring the knowledge of laws and rules, including her own institution's, is the first task of the researcher (see above). For potential conflicts of jurisdiction, see below.

Changes in the production design. Modifications to the study design subsequent to initial approval should be submitted to the relevant committees and institutions.

Respondents' consent. All respondents should have given consent, when necessary, to be included in the data production process. To obtain consent, full information about the usage of the data should be provided to the respondents. The possibility of withdrawal at any moment of the process, and in particular at a later stage, should be provided. This includes previous data collected for that respondent. In the case where individual data are being collected through a third party (e.g. data on individual employees within a firm that has consented to be part of a research study), it is the responsibility of the researcher to ensure that the consent is appropriate.

No-harm principle. The "no-harm" principle can be viewed as a direct consequence of the respondents' consent and the truthfulness principles. Because being truthful and obtaining consent are basic ethical principles in producing data for research, any harm done should prevent consent in data collection, hence making data collection infeasible or invalidating the research question. Whenever the researcher is unsure that this principle is satisfied, she must look for the support of the institutions in charge of implementing ethical principles (see below in this note). In general, any doubt should induce the researcher to seek appropriate advice and approval before, during, or after data collection (including data collection by third-parties) to the relevant committees and institutions.

Vulnerable Populations. Some groups may not be able to give a fully informed consent because they might need special protection and therefore special ethical consideration. These include individuals with mental or physical impediments, minors, but also individuals in financial distress.

Pay to participants. Production may require to pay individuals for participation, or provide monetary incentives for particular actions. This is considered an appropriate research methodology as long as it involves payments for uncontroversial activities or non-vulnerable populations and adheres to all laws including tax laws. For all other payments, the researcher should seek appropriate advice and approval to the relevant committees and institutions.

Data access and usage

Legal context. Full compliance with data protection laws and directives in the user's jurisdiction must be ensured. This implies that access to data sources in breach of the law or regulations falls under the researcher's personal responsibility.

Compliance with access and usage laws and agreements. The precise sets of conditions, and the stringency of any requirements, will typically depend on the type of data being used as well as the

legal environment of country in which it is used and produced, but at the least, these are likely to include:

- Respondents (persons, firms...) should not be identifiable or re-identifiable. In most cases, this will be ensured by the laws in place. If not, this is of the researcher's responsibility.
- All output should be published in the agreed manner, including the appropriate credit principle.
- All published outputs should be made in compliance with the data protection legislation in the agreed manner²
- The data should only be used for the specific purpose(s) covered in the access and usage agreement
- The data should be stored in compliance with the agreed access conditions, and only distributed to others researchers in a way that complies with the agreement

Implementation of the replicability principle. All programs and exact versions of the data sources used must be fully accessible and, as importantly, described in a publicly available location. Any outside researcher, being granted access to the same data sources, must be able to fully replicate the researcher's results. The date at which such access must be granted has to be specified in advance if the data producers have stipulated, in agreement with the existing regulations, that this access is not immediate.

Data storage

Legal context. Full compliance with data protection laws and directives in the user's jurisdiction must be ensured.

Practical solutions. The practical storage solutions will depend on the laws and regulations that govern the data production process and the data usage environment. In particular, the duration of data access, for replicability purposes, must be in agreement with the data storage requirements.³

Resolution of problems and conflicts

When faced with **an ethical** conflict the researcher should always consider alternative routes to attain her research goal. Why such alternatives are not feasible should be part of the material presented for ethical approval in case of conflict. It should list the efforts that were taken to reduce these conflicts as well as the potential benefits to society of the chosen approach. This list should serve as an input when the relevant institutions review the case.

General resolution of conflicts. Institutions and their IRBs should propose procedures (see above). In case these procedures are absent, the researcher must ensure that her institution be informed of this absence. Conflicts may arise to apply the *appropriate credit* principle of general scientific method stated above. Other conflicts may arise within the data production process (between respondents and the researcher, between researchers, between the researcher's institution and the researcher,

² Some countries have more stringent protection for individuals others for firms.

³ We recommend that solutions such as secure enclaves or, better, secure remote access systems be promoted and adopted widely. One such example is the CASD (www.casd.eu) from which all researchers belonging to European research institutions can access a trove of French data sources, administrative or not. The CASD also provides training about French legislation. More generally, research institutions are encouraged to offer appropriate training to their staff; researchers involved in these activities should seek such training either internally or externally. If uncertain, the researcher should seek appropriate approval from within or - if necessary for objectivity - from outside her unit.

between the researcher and some organization with which the researcher in involved in data production). Conflicts may also arise because of potential direct or indirect payments to the researcher. Again, procedures should be in place in the researcher's institution or it is of the researcher's responsibility to have them implemented there. Once implemented, it is the researcher's responsibility to have them enforced, including to her own detriment. In particular, these procedures can be enforced ex-ante, to prevent future conflicts, or ex-post when a conflict has arisen.

Reporting of scientific misconduct. Procedures for such reporting should be clear. The laws normally stipulate the way to respond to such misconduct. For local regulations (breach of IRB recommendations or rules), the researcher must report such misconduct to the IRB or its equivalent (ombudsman...).

Appropriate jurisdiction. Because research may involve different countries laws or researchers from different nationalities, the relevant legal environment should be that of producing institution in case of conflicts in the production process, of the using institution in case of conflicts in the analysis process, and of the employing institution in any other situation.

Acknowledgement of ethical conflicts: All publications should mention how the ethical dimensions have been considered. A web appendix to the publications should be included to explain the steps leading to ethical approval.