Test and update of regionalised ESIF payments 1989-2022

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Final report

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Test and update of regionalised ESIF payments 1989-2022

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1 Abstract

The payments incurred in the years 2018-2022 for the programming periods 2007-2013, and 2014-2020, are respectively updated for all the funding schemes. The algorithms for the regionalisation, i.e. the attribution at individual regional, NUTS2, level are also updated accordingly. The minor assumptions required for this update are outlined. Finally, the script of the estimate of the year of incurred expenditures from the timeliness of the reimbursement pattern observed from the European Commission is also updated accordingly. All the script and output data files are enclosed, and have also been uploaded on a publicly available repository on the GitHub repository for transparency and reproducibility.

2 Résumé

Ce rapport décrit les mises à jour apportées à la base de données des paiements et des dépenses de l'Union européenne (UE) pendant les années 2018-2022 pour les périodes de programmation 2007-2013 et 2014-2020. Les changements comprennent l'incorporation des paiements de clôture, la régionalisation des paiements et l'estimation des dépenses engagées sur la base des modèles de remboursement actualisés observés auprès de la Commission européenne. Le script mis à jour et les fichiers de données de sortie sont fournis pour la transparence et la reproductibilité.

3 Zusammenfassung

Dieser Bericht beschreibt die Aktualisierungen der Datenbank der EU-Zahlungen und -Ausgaben in den Jahren 2018-2022 für die Programmzeiträume 2007-2013 und 2014-2020. Die Änderungen umfassen die Einbeziehung von Schlusszahlungen, die Regionalisierung von Zahlungen und die Schätzung der angefallenen Ausgaben auf der Grundlage der aktualisierten Rückzahlungsmuster, die bei der Europäischen Kommission beobachtet wurden. Das aktualisierte Skript und die Ausgabedateien sind für Transparenz und Reproduzierbarkeit enthalten.

4 Task1 - Update of the existing historic EU payments - regionalised and modelled expenditure database

The operations carried out to update the data bases are detailed in the individual sub tasks as follow.

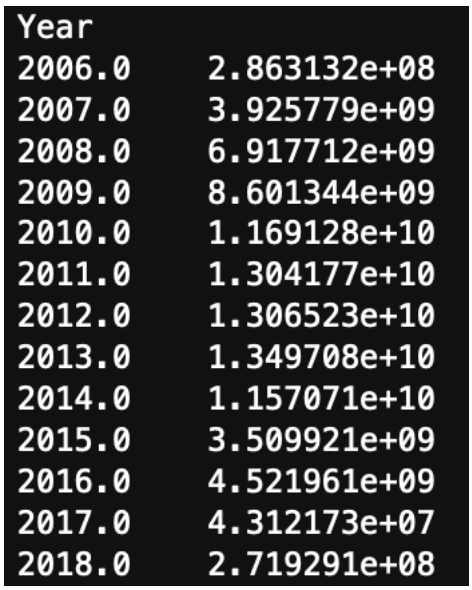
4.1 Task1.a - Update of the existing database of yearly EC payments at NUTS2 level by fund with the information of the closure payments of the 2007-2013 programming period (2019-2023).

Several data sets have been used to update the information on the payments remitted in the last years of the programming period 2007-2013. Extra efforts have been requested to ensure the consistency with the previous version of the data, updated to 1 August 2017, in bridging the figures and avoid double counting. The data bases used are as follows:

- *20200211 EU 2007 2013 Payment COHESION FINAL (2).xls*
- *OD 07 13 EU payments 31122018.xlsx*
- *OD 07 13 EU payments 31-12-2019.xlsx*
- *OD 07 13 EU payments 31-12-2020.xlsx*
- *OD 07 13 EU payments 31-12-2021.xlsx*
- *OD 07 13 EU payments 14 -07- 2023.csv*
- *20200123 EAFRD get all payments.xlsx*
- *170801 Old data detailed CLEAN.xlsx*

Two assumptions/adjustments were necessary to bridge the data and ensure a consistent treatment of the data with python:

- Attributing the mismatches between the previous version of the data and the new figures to 2015 for the agricultural funds. This is due to lower figures for 2015 in comparison for 2016 despite being extra years over the conclusion of the programming period, which makes unlikely the figures for actual payments are lower for 2015 than 2016 (two vs. three years from the closure of the programming period.) (Figure 1).
- Capping the names of the CCI programmes to thirty-two characters to avoid breaking the rows of the data sets, which would result in a different treatment of the information between *Stata* and *python* (or even other programming languages.)



Year	
2006.0	2.863132e+08
2007.0	3.925779e+09
2008.0	6.917712e+09
2009.0	8.601344e+09
2010.0	1.169128e+10
2011.0	1.304177e+10
2012.0	1.306523e+10
2013.0	1.349708e+10
2014.0	1.157071e+10
2015.0	3.509921e+09
2016.0	4.521961e+09
2017.0	4.312173e+07
2018.0	2.719291e+08

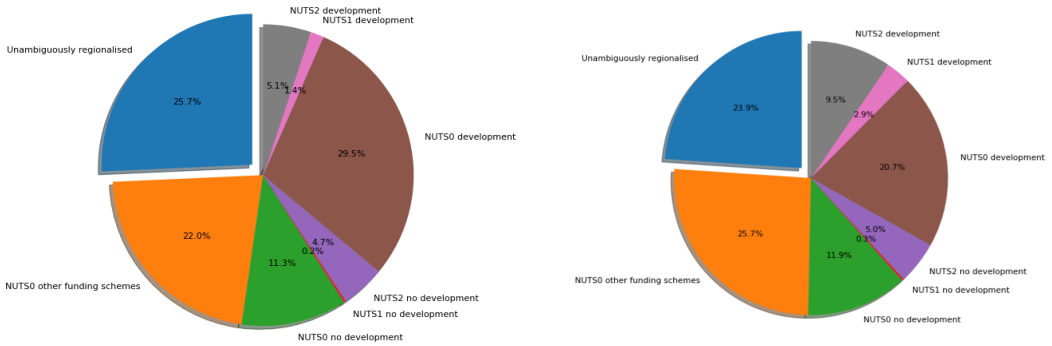
Figure 1: Yearly figures for the Agri fund (EAGGF) payments over the programming period 2007-2013 before adjustment. Figures for 2015 are lower than 2016.

4.2 Task1.b - Regionalisation at NUTS2 level of the payments related to the 2014-2020 Operational Programmes.

The script produced in the context of the tender contract 2018CE16BAT115 is updated to handle the payments remitted from 2019 onward under the programming period 2014-2020. A comprehensive list of adjustments/assumptions is as follows.

- UK population data: Upon Brexit, updated population figures for the UK NUTS2 are no longer available after 2019. Hence, figures are being inputed by using the last yearly population available. These figures can be easily readjusted upon availability of more recent figures from the UK statistical office.
- Introduction of the new "Category of region": Upon the Covid-19 pandemic, the European Union resorted to new funding mechanisms to contrast the social challenges dictated by these special circumstances. The funds were recorded under the category *React-EU* (as a short for Recovery assistance for cohesion and the territories of Europe). This extraordinary category is not tied to any specific development category, hence it has been considered as "void" when acknowledging the development state of the interested regions.
- Look-up tables are used for the mapping of CCI codes onto NUTS areas as per the 2010 nomenclature. Conversely, population figures are presented according to the NUTS-2016 nomenclature. This requires a double mapping of this latter onto the corresponding NUTS-2013 scheme, which is in turn mapped onto the NUTS-2010 . Similarly, the individual NUTS2 regions development categories are listed as per the NUTS-2006 format, which needs to be updated to NUTS-2010.
- For the pro-rata attribution of fundings yearly population figures updated to January 1 were used.
- A couple of funding schemes were used for regions (NUTS2 areas or below) showing a development level different from those reported in the look-up table for the mapping of the *CCI* payments code onto the specific NUTS2areas used in the previous tender contract. That is the case, for the *2014PT05SFOP001* and *2014IT16M2OP003* payments, which required uploading the look up table accordingly by including also the member-state regions excluded from the original mapping.
- The code for the German region *Saarland* was not consistent across data sets, with the versions *Dec-00* and *DEC* equally used. To ensure a full mapping, edits have been performed for consistency.

The figures for the original breakdown of the payments as per geographical area and development level are shown below against the output of the previous tender contract (Figure 2).



(a) New

(b) Old

Figure 2: Comparison of the break down between the previous and the updated figures for 2014-2020.

Figures are overall similar across geographical and economic-development levels, with some minor changes in favour of the funds unambiguously regionalised (about 25% of the total) and the funds remitted at the NUTS0, member-state, level as per the economic-development criterion (about 30%).

4.3 Task1.c - Update of Expenditures estimates from the updated ESIF payments related to the 2007-2013 and 2014-2020 Operational Programmes.

The updated figures for the payments incurred in the years 2007-2013, and 2014-2020 are finally fed into the script for the estimation of the incurred expenditures. The only fund requiring special treatment is the fisheries fund (EMFF) over the programming period 2007-2013. The observed reimbursement pattern is the same across NUTS0 areas (member state), which prevents the creation of a ranking of the observed payment timeliness across countries. In these circumstances, a model to estimate yearly expenditures cannot be applied. Hence, expenditures are broken down in equal yearly shares over the eligible years of the programming period under a conservative assumption.

5 Supplementary Material

The script produced to perform the operations listed are enclosed in a .zip folder. Additionally, they are available from the tenderer's GitHub repository for reference and future update.

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