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The importance of property income flows and their underlying sources from a macro- and microeconomic perspective

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Abstract

The present paper uses non-financial (and financial) transactions from sector accounts data to analyze property incomes from a macroeconomic perspective for 12 EU countries. We show the extent of redistribution between institutional sectors via property income flows as well as their composition by type. We also discuss developments in financial assets and liabilities in order to get an insight into which sectors act as holders and which as issuers of specific types of financial instruments. Finally, we disaggregate the macro data to examine which household groups benefit from those property income flows. The results show differences concerning the importance of property income flows and the evolution of financial assets and liabilities between countries but also for the comparison of the pre-crisis with the post-crisis period. Concerning property income of households, the results show that generally only the top 5% of households receive significant property incomes.

1 Introduction

The aim of the paper is to examine the topic of property income from a macroeconomic perspective for 12 member countries of the European Union. It should contribute to the literature by providing an insight into the sectoral redistribution of income which is based on financial assets and liabilities. The paper should also combine those macro results with a distributional dimension to show which individuals or households ultimately benefit from these capital flows.

The paper is structured as follows. Section 2 deals with the redistribution via property income in the considered countries by taking a look on the total dimension of property income flows as well as their composition by sector and income type. Section 3 then deals with a distributional demension. The final section concludes.

2 Property incomes

The issue of property income is discussed in the economic literature mainly in a microeconomic perspective. A more macro oriented perspective on property income is also of utmost interest to get a more in-depth insight into the sources of this income category of private households. Property income contributes also to disposable income of private households which can be used for consumption or investment. Before we look deeper into the development of property income, we will briefly discuss macroeconomic developments in European countries related to these income and expenditure dynamics.

The development of net lending/borrowing, which basically reflects the difference between income and expenditures of economic sectors as well as the total economy is shown in Figure 1. The latter basically shows the current account position of the total economy. The strong pre-crisis dynamics in household demand in the southern part of the euro area led to a decrease in the financial balance of households. In Germany or Austria, non-financial companies show a steady improvement in their net lending. During the crisis years, private sectors in many countries started a process of deleveraging, while the government increased its deficit. If we leave out net property income, which reflects property income flows between the domestic economy and non-residents, we can see that this type of income has contributed positively to the development of net lending for the total economy for instance in Germany or the Netherlands. A further interesting finding is that almost all countries currently run a current account surplus, which indicates that the former imbalances within Europe have been corrected. However, this also implies that non-European countries act as net-importers.

We will start the discussion about property income with a look at the magnitude of total property income received as well as paid in an economy. This will provide a first indication of the dimension of redistribution via property income flows. Figure 2 shows that the pre-crisis redistribution via property income was on a level between about 30% and 50% of GDP for most of the analyzed countries. Eastern European countries had a lower level while in the Netherlands, the respective number increased to about 100%. The Netherlands also shows the most intense interactions with non-residents. Generally, the outbreak of the

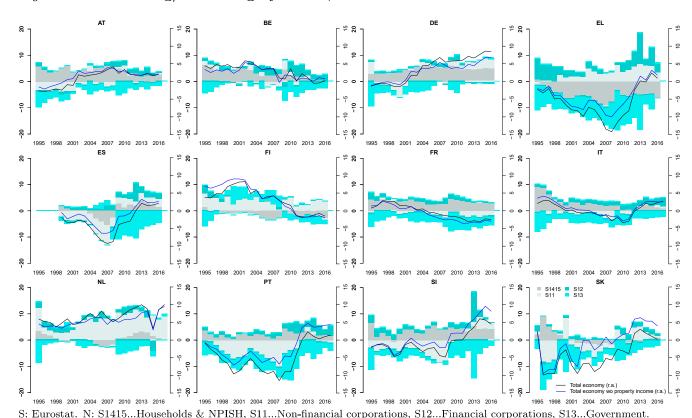


Figure 1 Net lending/borrowing by sector, in % of GDP

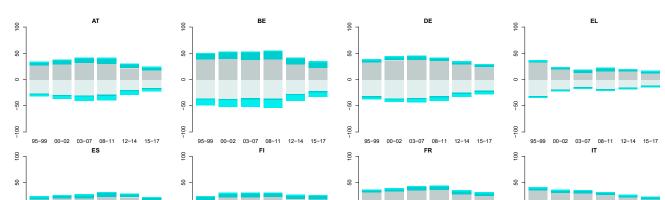
recent financial and economic crisis has led to a decline in the importance of flows in the form of property income.

Figure 3 shows the sectoral disaggregation of property income flows.¹ Before the recent crisis, private households in countries like Austria or Germany have received a rising fraction of their income in the form of property income. Contrarily in other countries occurred a steady decline, like for instance Italy. However, the outbreak of the crisis led to a reduction in the relative importance of property income for private households in all European countries.

Another finding is that the importance of both paid and received property income for the non-financial sector has increased until the outbreak of the crisis. Since the data are on a non-consolidated basis, this could depict an increasing interconnectedness between non-financial companies within the countries but also with the domestic financial sector. Such a development is discussed in the literature under the term financialization.

The property income flows to or from the domestic corporate sector (non-financial and financial) could also be connected with an increasing link to non-residents, which would next to financialization also capture the effect of globalization. The figure also shows that Southern and Eastern European countries are those where net property income has been negative throughout the whole period, which may indicate profit withdrawals from foreign direct investment. Overall, the figure reveals pronounced patterns for the

¹The financial sector and the foreign sector are shown on a net-basis in the bars due to their relatively large receipts and payments of property income.



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Figure 2 Total property income received and paid, in % of GDP

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S: Eurostat.

development of property income, particularly for the household and non-financial sector.

One factor driving the development of property income has been the evolution of interest income. Figure 4 shows interest income and payments for institutional sectors. Particularly for the crisis period, we can observe a decreasing share of interest income (received and paid), which results from the low interest environment prevailing in Europe.

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Interest income flows are related mainly to deposits, debt securities, and loans. Deposits (sight and savings) are mainly held by private households and issued by the financial sector (Figure 9 in Appendix). There are also strong interactions with the foreign sector showing that residents are holding deposits abroad and non-residents in the domestic country. There is no clear trend visible in the evolution of deposits. One striking example is the case of Greece, which shows that after the outbreak of the crisis, private households have been withdrawing their deposits which on the other hand led to a decrease in the liabilities of the financial sector.

Another financial instrument that is connected to interest income and payments are debt securities. Figure 10 (Appendix) shows that the primary issuer of debt securities are the government and the financial sector. The latter acts also as an issuer of securities, but in general the net changes are positive for this sector. There also seems to be a strong interaction between domestic sectors (government and financial corporations) and non-residents. In particular, the Netherlands shows a pronounced link with the foreign sector, which goes along with net changes in securities held by the financial sector.

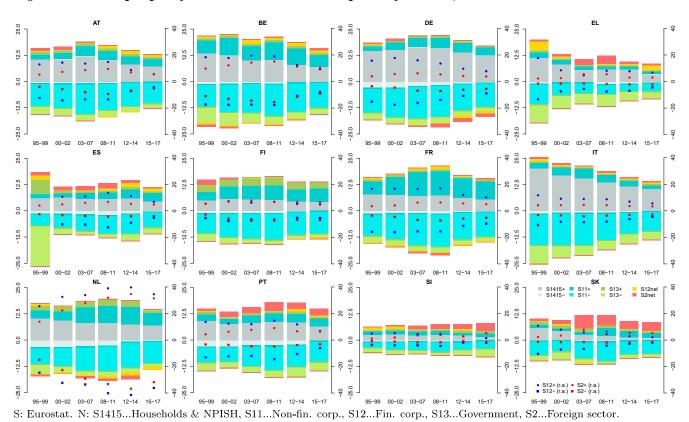


Figure 3 Total property income received and paid by sector, in % of GDP

The third interest-related financial asset/liability is loans. The changes in loans for the pre-crisis period show that mainly the domestic financial sector granted credits to private households and non-financial companies (Figure 11 in Appendix). The figure also shows the already mentioned reliance of pre-crisis growth models on household debt in South European countries, like Spain or Portugal. A strong interaction between the government and the foreign sector, for instance, foreign loans for the Greek government, can be seen for the periods after the outbreak of the crisis. The effects from the expansion of Western European banks to Eastern Europe can also be detected in the figure from a possible interaction between the domestic financial sector and the foreign (financial) sector.

The pre-crisis increase in property income of private households in Austria or Germany resulted from a rise in dividend income and/or from withdrawals from the income of quasi-corporations (Figure 5). The importance of this income category also increased for the non-financial sector, and it was mainly this sector that has been the source of these income flows. The figure for the Netherlands shows that the net-value for this income category has been relatively high for the financial sector, which could be connected to the large surplus against non-residents.

The evolution of dividends and withdrawals is connected to the development of assets in form of equity (listed and unlisted shares and other types of equity). The changes in equity held by private households show that this sector holds only a relatively low fraction of total issued equity (Figure 12 in Appendix). The non-consolidated data shows that the significant dynamics are generally related to interactions within the non-financial sector. There are also strong relations between domestic corporations (non-financial and

15.0 20 7.5 0.0 -20 08-11 15.0 20 20 20 7.5 0.0 -7.5 -10 -15.0 -50 15.0 15.0 20 20 7.5 10 0.0 -10 08-11 12-14 03-07 08-11 12-14 15-17 95-99 00-02 03-07 08-11 12-14 15-17 00-02 03-07 08-11 S: Eurostat. N: S1415...Households & NPISH, S11...Non-fin. corp., S12...Fin. corp., S13...Government, S2...Foreign sector.

Figure 4 Interest (D41) received and paid by sector, in % of GDP

financial) and the foreign sector.

A further category of property income is investment income attributable to insurance policy holders, which is related to indirect investments like insurances, pension funds, and investment funds. Figure 6 shows that such incomes are attributed mainly to private households while the domestic financial sector represents the primary counterpart sector. In general, investment income is lower than interest or dividends/withdrawals, and it has been declining in comparison to disposable income in some countries after the outbreak of the recent crisis.

Figure 13 (Appendix) shows the changes in investment fund shares, which are one source for investment income. Investment funds are mainly held by private households. The data show that in the period 2008-2011, households reduced their holdings of investment fund shares in many countries. Investment fund shares are issued by the domestic as well as the foreign financial sector. The case of Finland is also compelling since a significant part of changes in investment fund shares is related to purchases by the government.

Another form of indirect investment of private households are insurance and pension entitlements. Figure 14 (Appendix) shows that changes in assets are mainly related to domestic private households, while the domestic financial sector is the counterpart. The evolution over time shows that in many countries has occurred a decrease in the importance of these instruments during the crisis years. Country-specific differences can also be detected from the figure reflecting the relative importance of the insurance or private pension system.

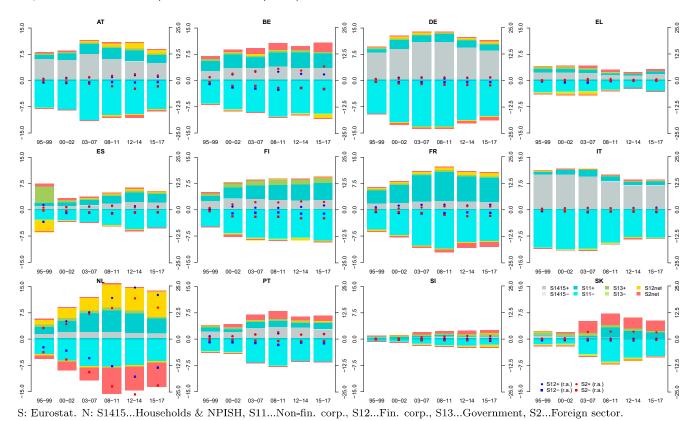


Figure 5 Dividends/withdrawals (D42) received and paid by sector, in % of GDP

3 Distribution

After discussing property income form a sectoral perspective we now turn to the relationship between this income category and income distribution. First we take a look on the structure of GDP (Figure 7), which shows the main trends in functional income distribution. In some countries, like Austria or Germany, compensation of employees shows a slightly decreasing trend in relation to GDP until the outbreak of the crisis. Afterwards the ratio remained rather stable. By contrast, gross operating surplus and mixed income of the non-financial corporate sector has increased until 2008. This development is in line with the well-known pre-crisis decrease in the wage share in these economies.

The results change slightly if we take into account the redistributive effect of net property incomes by sectors. The decrease in the income of the household sector in Germany and Austria continues until 2017, while profits of non-financial firms incraesed during the whole period. The latter increased also in some other countries between 1995 and 2017, while income of households decreased during the shown time period.

Finally, distributional patterns on a household level are shown in Figure $8.^2$ The main finding from the graph is that in most of the countries only the top 5% of the population receive significant property

²The data is based on so-called Distributional National Accounts (DINA), which attempt to disaggregate income and its constituting components from national accounts to add a distributional dimension (For more information about DINA see for example Alvaredo et al. (2016)). For the disaggregation we use EU-SILC data.

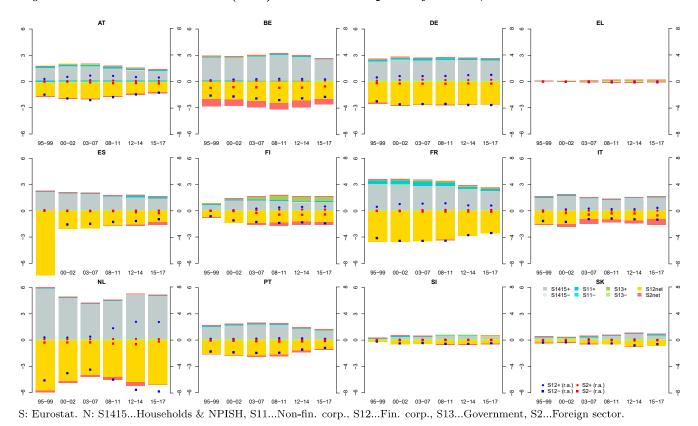


Figure 6 Investment income (D44) received and paid by sector, in % of GDP

incomes.

4 Conclusion

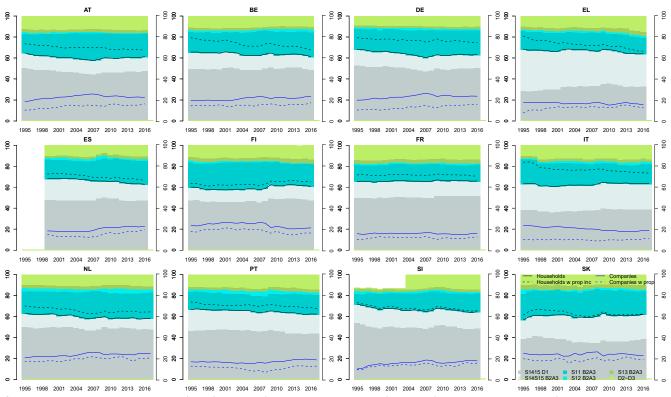
The results show differences concerning the importance of property income flows and the evolution of financial assets and liabilities between countries but also for the comparison of the pre-crisis with the post-crisis period. However, what is common to all countries is that more or less only the top 5% of individuals or households benefit from these property incomes.

Based on the above results, one policy measure which could target the inequality in property income is to include property income into progressive income taxation since in most countries it is now taxed with a fat rate. Another measure could be to follow an income policy which holds the wage share stable since this would increase wages which are more equally distributed than capital incomes.

References

Alvaredo, F., Atkinson, A. B., Chancel, L., Piketty, T., Saez, E., & Zucman, G. (2016). Distributional National Accounts (DINA) Guidelines: Concepts and Methods used in WID.world (Working Paper). World Income and Wealth Database.

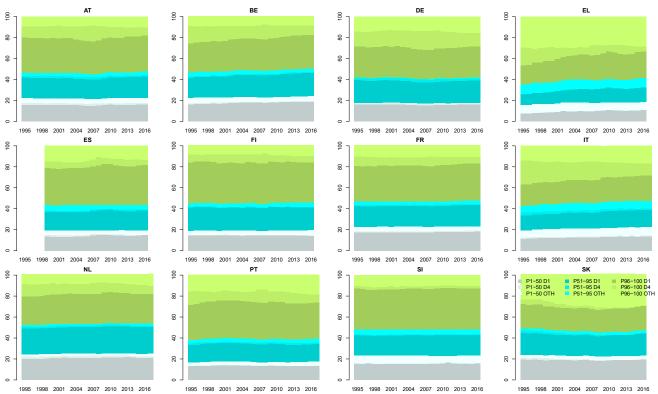
Figure 7 Structure of gross domestic product, in %



S: Eurostat. N: D1...compensation of employees, B2A3...gross operating surplus mixed income, D2-D3...net indirect taxes

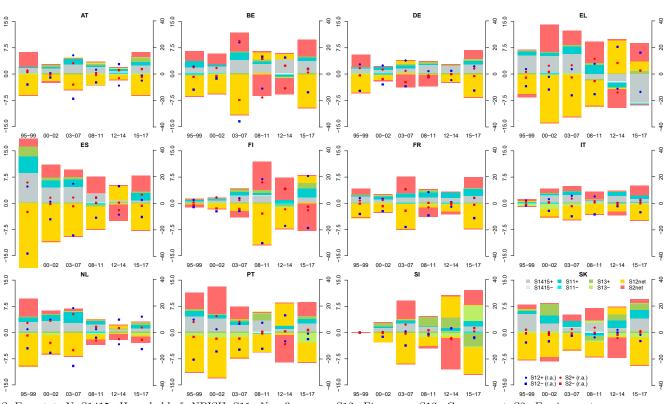
Appendix

Figure 8 Primary income of private households based on DINA, in %



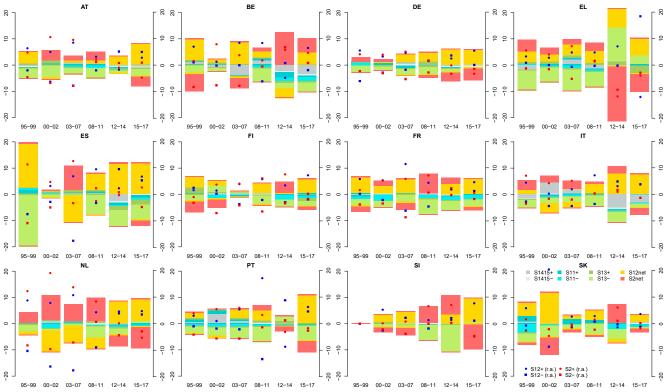
S: Eurostat, EU-SILC. N: D1...compensation of employees, D4...property income received, OTH...other (net), P1-50...Bottom 50, P51-96...51st to 96th percentile, P96-100...Top 5.

Figure 9 Changes in deposits by sector, in % of GDP



 $S: Eurostat. \ N: S1415... Households \ \& \ NPISH, S11... Non-fin. \ corp., S12... Fin. \ corp., S13... Government, S2... Foreign sector.$

Figure 10 Changes in debt securities by sector, in % of GDP



S: Eurostat. N: S1415...Households & NPISH, S11...Non-fin. corp., S12...Fin. corp., S13...Government, S2...Foreign sector.

Figure 11 Change in loans by sector, in % of GDP

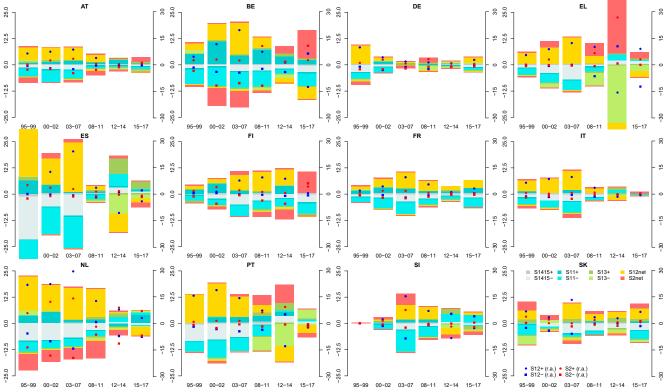
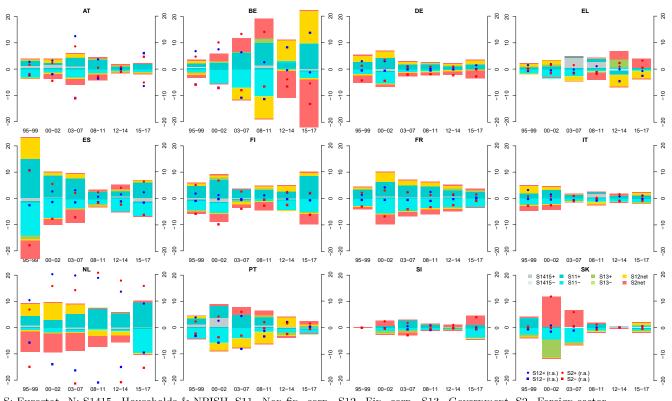


Figure 12 Changes in equity by sector, in % of GDP



 $S: Eurostat. \ N: S1415... Households \ \& \ NPISH, S11... Non-fin. \ corp., S12... Fin. \ corp., S13... Government, S2... Foreign sector.$

Figure 13 Changes in investment fund shares by sector, in % of GDP

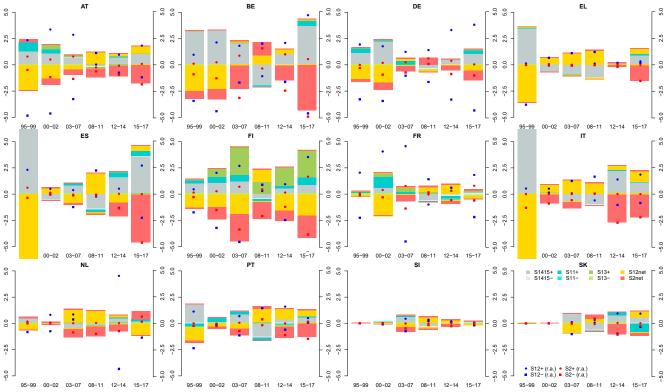
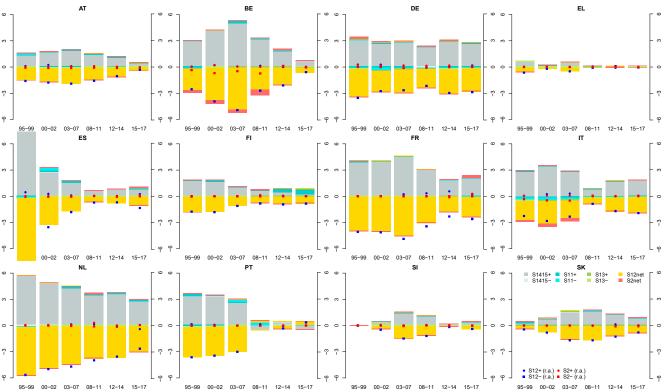


Figure 14 Changes in life insurance/pension entitlements by sector, in % of GDP



 $S:\ Eurostat.\ N:\ S1415... Households\ \&\ NPISH,\ S11... Non-fin.\ corp.,\ S12... Fin.\ corp.,\ S13... Government,\ S2... Foreign\ sector.$