

The Share of Households' Property Capital Income in National Income Has Not Been Increasing Anymore in France since 1996 and The Share of Capital Income in National Income Has Been Decreasing since 2007 : an Update of Charts 6.7. and 6.8. of T. Piketty's "Capital in the Twenty-First Century"

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Abstract : latest data from French national accounts suggest that since 1996, **the share of households' housing capital income in national income has not been increasing anymore**, and that since 2007 **the share of total capital income has been decreasing**.

To French version: http://www.cgedd.developpement-durable.gouv.fr/IMG/pdf/piketty-actu_cle7d6f51.pdf.

In "Capital in the Twenty-First Century"², T. Piketty points that, based on national accounts, households' amount of capital and income from capital, relative to national income, have been decreasing from 1914, then increasing from the 1950's, and are now close to their early twentieth century level.

Insee, the French national institute of statistics, revises national accounts every five years. We thus have series in « basis 2000 », « basis 2005 » and, since 2014, in « basis 2010 ». T. Piketty used national accounts at 2008³ in basis 2000. Here we just update his results using national accounts at 2016 in bases 2005 and 2010⁴.

1. The share of households' property capital income in national income has been constant in France since 1996

We update here **chart 6.7.** of « Capital in the Twenty-First Century ». It shows the share of households' property capital income⁵ in national income in France since 1900. On the original chart it appears to have been going on growing in the 1990's and 2000's.

Instead, after update (chart 1), it appears stable from 1996, around 7.5%, its early twentieth century level⁶.

¹ The analyses and points of view expressed are the author's and, in particular, not necessarily CGEDD's or the government's. This paper may be downloaded at: http://www.cgedd.developpement-durable.gouv.fr/IMG/pdf/piketty-update_cle512cbf.pdf. It updates at 2016 two previous versions, dated January 4, 2016 and January 24, 2015, without changing their conclusions.

² Editions du Seuil, 2013.

³ He calculated the 2009 and 2010 values shown on the charts by extrapolation. In chart 6.7, he added 0.2% to the value of the preceding year, which was equivalent to assuming that the growth in the ratio observed on the 1980-2008 period was continuing at the same pace in 2009 and 2010. In chart 6.8., he calculated the 2009 value by subtracting 0,3% to the 2008 value, then he calculated the 2010 value by adding 0,6% to the 2009 value, which amounted to assume that the ratio was approximately constant from 2008.

⁴ National accounts published by Insee do not supply households' consumption of housing fixed capital prior to 1979, nor do they supply the total national consumption of fixed capital prior to 1978. Both aggregates are necessary to calculate the ratio shown on the chart. We estimated them (therefore the dotted line on the chart) using a method similar to T. Piketty's :

- we estimated households' consumption of housing fixed capital prior to 1979 by assuming, as in T. Piketty's data files, that it is equal to the same proportion of households' rents net of expenses as in 1979 ;

- we estimated the total national consumption of fixed capital prior to 1978 by assuming that it is equal, as a % of gross national income, to the same proportion of the value found in T. Piketty's data files as in 1978.

The formulas used can be found in the file which contains the detailed calculations. The results are mere approximations, but should impact little the general pattern of the curve, as pointed by T. Piketty ("Capital depreciation estimates are notoriously fragile, and some of the short-run variations [...] might partly be due to measurement limitations [...]. Given that we are mostly interested in long run evolutions, we feel that these data limitations are not really relevant for our purposes", page 10 of "On the Long-Run Evolution of Inheritance : France 1820-2050, Data Appendix, Part 1, September 3rd, 2010").

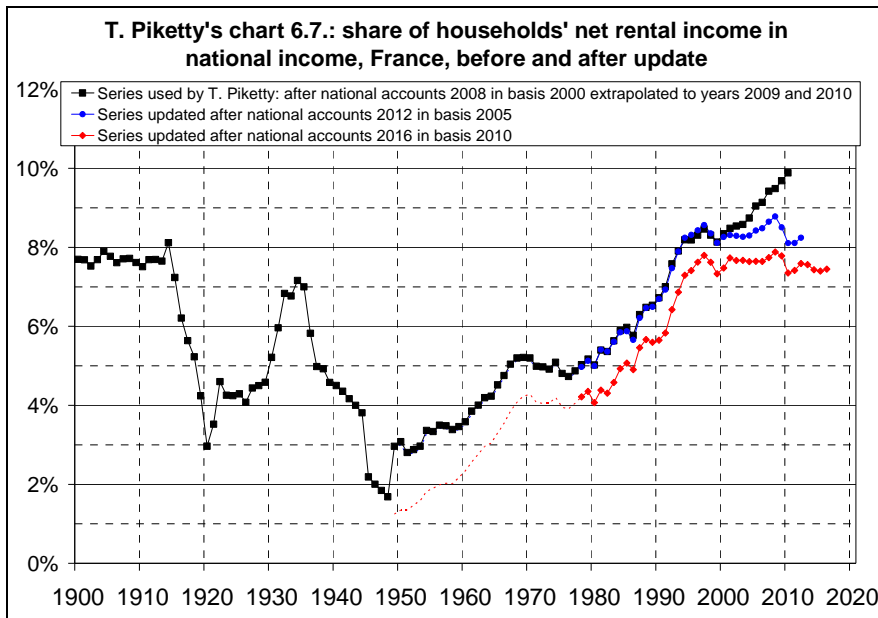
⁵ i.e. of households' rental income net of expenses and depreciation

⁶ It has no reason to be exactly the same :

- the method used to calculate it is probably not totally identical for the early twentieth century and for the recent period ; the huge revisions caused by mere changes in the basis of the national accounts attest to the sensitivity of the result to the method used ;

- the proportion of the housing stock which is owned by households may have changed (development of social housing, divestment by private firms).

Chart 1 : update of chart 6.7. of « Capital in the Twenty-First Century »



Detailed calculations : http://www.cgedd.developpement-durable.gouv.fr/IMG/xls/piketty-actu-6-7_cle12a5b9.xls.

The change in the shape of the curve occurred mostly when national accounts shifted from basis 2000 to basis 2005 : the results of the 2006 housing survey induced Insee to revise the growth in rents⁷ from 1998 to 2005⁸ sharply downwards.

(In addition, when national accounts shifted from basis 2005 to basis 2010, Insee revised sharply upwards households' consumption of housing fixed capital⁹, which shifts the curve downwards, and, for years 1949-1969, the growth in households' rents net of expenses¹⁰, which increases the slope of the curve prior to 1969. These two revisions erase, or rather invert slightly,¹¹ the ratio's jump from year 1948 to year 1949 visible on T. Piketty's chart 6.7.).

These results remain to be confirmed based on the next issues of the national accounts.

Subject thereto, the stabilization observed from 1996 signals a break from the brisk growth of years 1948-1996. The ratio might have recovered a sort of "equilibrium level" after the disturbances¹² caused by the two world wars and their consequences.

⁷ Effective rents (paid by tenants) plus imputed rents (which owner-occupiers would pay if they were tenants in the same dwelling). Computing imputed rents requires rich databases and complex calculations.

⁸ The consequences of the insufficient knowledge of rents by the French government far exceed the chart we consider here, and their cost amounts to much more than the few million euros which might remedy it; this attests to inefficiencies in public spending. For instance, since effective and imputed rents constitute 11% of gross domestic product (GDP), their revision downwards reduced economic growth, as measured by the change in GDP, by 0.1 point per year from 1998 to 2005, and reduced the level of GDP by 13 billion euros, say 0.6%, for year 2009 (see « report on the organization of the statistical service in the field of housing », IGINsee & CGEDD, June 2014, § 1.4.3. B. page 32, <http://cgedd.documentation.developpement-durable.gouv.fr/document.xsp?id=Cgpc-CGEOUV00217833>). As well, the data about rent increases used during the recent public debate about rent controls were highly debatable (see § 1.3.1. page 26 of the same report).

⁹ By 53% to 89% depending on the year. The reason pointed by Insee is that, in conformity with new international standards, transaction costs (stamp duty, notary's fee, estate agent's fee, etc.) are now depreciated over the duration of ownership instead of the whole life of the property.

¹⁰ Their level in 1949 was reduced by half. This revision corrected an inconsistency present in national accounts in bases 2000 and 2005: in the 1950's and 1960's, households' gross operating income was abnormally high compared to their production of housing services, and was even higher than the latter the 1950's.

¹¹ Subject to the caveat that the method used to calculate the ratio depends on the year considered, as mentioned above; in particular, it is different for years 1948 and 1949.

¹² Disturbances channelled mostly, as far as housing in France is concerned, by rent controls implemented from 1914 in a context of high consumer price inflation, then exited from 1948.

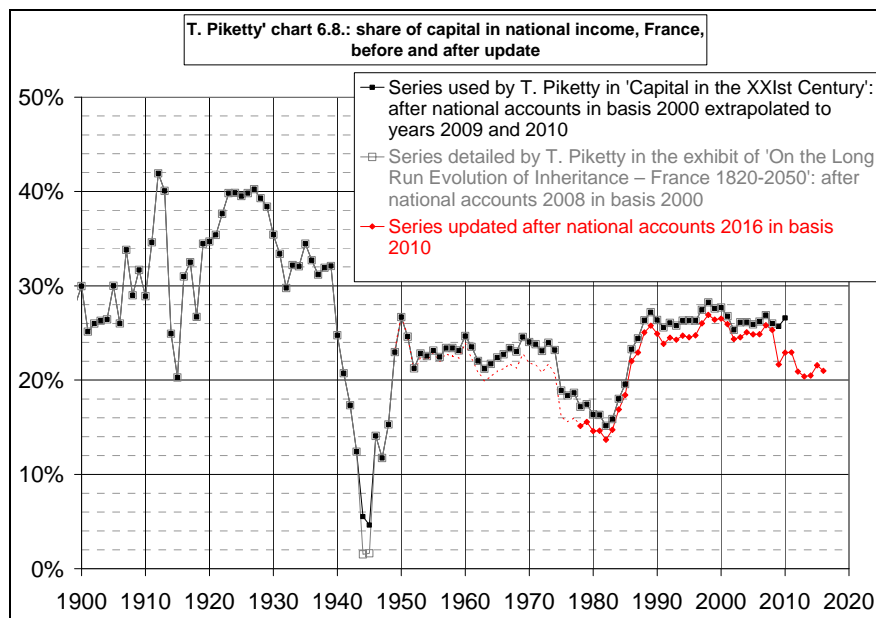
2. The share of capital income in national income has been decreasing since 2007

We now update chart 6.8. of the same work (chart 2). It shows the share of total capital income in national income. We also update the shares of the various types of capital income and labor income in national income (charts 3).

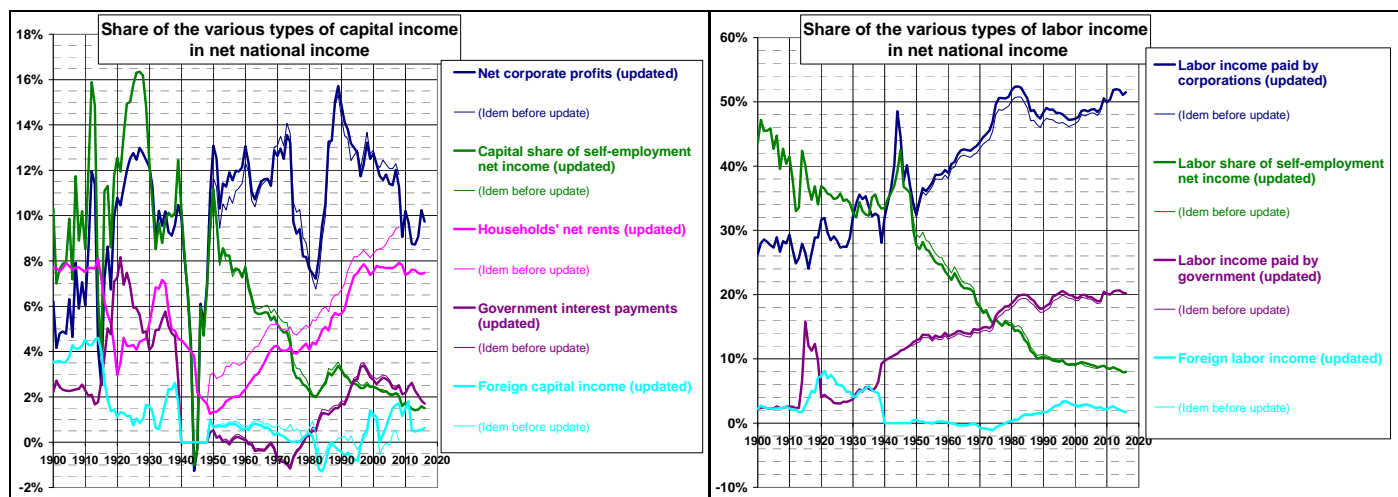
This update barely impacts the shape of the curves before 2009, with the exception of households' net rental income, sharply revised by the National Institute of Statistics.

Nevertheless, it shows that from 2008, year of the latest financial crisis, the share of capital income in national income has been decreasing significantly, from 26% in 2007 to 21% in 2016. This is caused partly by a fall in the share of corporate profits, from 12% in 2007 to 10% in 2016. Meanwhile, the share of salaries paid by corporations increased, from 48% in 2007 to 51% in 2016.

Chart 2 : update of chart 6.8. of « Capital in the Twenty-First Century »



Charts 3 : share of the various types of capital income and labor income in national income in France



Detailed calculations : http://www.cgedd.developpement-durable.gouv.fr/IMG/xls/piketty-actu-6-8_cle19d19a.xls

These results, as the previous ones, remain to be confirmed based on the next issues of the national accounts.

T. Piketty shows that since capital ownership is more unequally distributed among households than income, a growth higher in capital income than in labor income increases total income inequality.

Conversely, it seems that since 2008, since capital income has been growing at a slower pace than labor income, the same mechanism has tended to reduce total income inequality. Of course, this does not preclude a higher inequality of total income, since labor income inequality may have increased in the meantime.

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In the UK, in 2016, the Office for National Statistics revised sharply downwards the growth in imputed rents from 1985. This should have reduced the growth in the share of households' property capital income, as well as of capital income in general, in national income for the past 30 years, to an extent which remains to be investigated.

More generally, it would be interesting if all the charts of « Capital in the Twenty-First Century » could be updated.