

## At a glance

- Current distributional analyses underestimate the level of income inequality in Germany as a result of under-reporting of top incomes in survey data. Recent studies show that this can lead to significant misjudgements of inequality trends.
- A realistic consideration of top incomes and, hence a more comprehensive coverage of capital incomes suggests that the supposed reversal in inequality trends in the mid-2000s is a statistical artefact. Moreover, at the current edge it is likely that a further increase in income inequality can be expected.
- Matching survey data with data from the administrative taxpayer panel or from the microcensus or the Federal Employment Agency, would reduce uncertainty about inequality trends and allow a more adequate assessment of distributional analysis in Germany.

## Factor shares, personal income distribution and top incomes in Germany

Income inequality – Quo Vadis?

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## Inequality as a megatrend in current research

In Germany and other countries, the debate about economic inequality has gained pace, partly as a result of publication of the French economist Thomas Piketty's international bestseller "Capital in the 21st Century". There now appears to be an increasing awareness of the issue, even amongst politicians. And rightly so – after all, the subject is politically explosive because it is strongly linked with issues of social justice and participation. In addition, the data available has also improved considerably in recent years, and this has further stimulated academic research. Issues of distribution are now regarded as much more important than just a few years ago. As well as the works of Nobel prize-winners Angus Deaton and Joseph Stiglitz, studies on the subject are being published by international organisations such as the OECD (2008, 2011, 2015) and the IMF (2014, 2015).

Nevertheless, there remain considerable doubts as to whether the data basis for analysing income distribution trends in Germany is adequate – indeed, there are indications that a full picture of the situation has not been presented for this reason.

Among researchers in the field of inequality, it is widely known that established distribution analyses based on the most commonly used survey data underestimate levels of income inequality in Germany due to under-reporting of top incomes (Bach et al. 2009). However, recent studies show that incomplete coverage of the upper end of the income scale can also lead to significant misjudgements of inequality trends (Rehm et al. 2014, Drechsel-Grau et al. 2015).

### Inequality debate in Germany

At the latest following publication of the Federal Government's fourth report on poverty and wealth in 2013, analyses of income inequality trends in Germany have attracted greater attention. What initially caught the interest of the wider public was the potential distribution effects of the labour market reforms of the mid-2000s, but the discussion continued with the onset of the global economic crisis.<sup>1</sup> Current academic debate on the issue in Germany focuses mainly on the supposed trend change towards greater equality in the mid-2000s

and evaluation of inequality trends at the current edge.<sup>2</sup>

The preparatory expert report for the fourth Federal Government report on poverty and wealth (IAW 2011) mainly identified labour market trends as the reason for inequality of net equivalised incomes, measured using data from the socio-economic panel (SOEP), remaining unchanged from 2006 onwards. Rising employment from 2006 onwards stabilized the distribution of earned incomes, which constitute the greatest proportion of market incomes. While the Gini coefficient of net equivalised income stagnated from 2006 to 2010, the Gini coefficient of market income fell in the same period. The sharp changes in the distribution of earned incomes thus stabilised income distribution at the lower end of the scale and consequently led to a fall in the Gini coefficient. Alternative explanations point out that changes in capital income distribution also influenced the development of income inequality in the second half of the 2000s (Rehm et al. 2014).

There is a general consensus that labour market developments and the stabilization within the distribution of labour incomes explain the stagnating level of inequality at the current edge of inequality research. Even during the economic crisis years 2009 and 2010, employment remained stable, thus supporting the persistent sideways trend of inequality measures (Adam 2014, Grabka et al. 2012, Grabka 2015, WSI 2013). However, in contrast with these findings, we can assume that after 2012 capital incomes once again made an increasing contribution to inequality, because of the sustained economic recovery in Germany (Horn et al. 2014). Such effects may lessen or overcompensate for the labour market's potential for reducing inequality.

### Factor distribution in personal inequality - a blind spot in distribution research

As described above, the inequality debate has so far focussed mainly on labour market trends and hence on the explanation of the distribution of earned incomes.<sup>3</sup> By contrast, the impact of changes in corpo-

<sup>1</sup> Corneo (2015) provides a summary of the central findings of recent inequality research in Germany. Biewen and Juhasz (2012) provide a causal analysis of distribution development prior to the financial and economic crisis.

<sup>2</sup> The term "trend change" describes the observation that after having reached its temporary peak in 2005, the Gini coefficient of net equivalised income had for the first time not risen further in 2006. The current edge of empirical analyses is determined by the latest available data. At the time this article was written, this was 2012 based on the available retrospectively surveyed annual incomes in the SOEP.

<sup>3</sup> The impact of labour market changes on income distribution is discussed for example by Brenke and Grabka (2011), Fuchs et al. (2012), IAW (2011) or Kalina and Weinkopf (2012).

rate profits and unearned incomes on the distribution of capital income between households (and thus for the personal distribution of income as a whole) has largely been ignored. Factor distribution among households refers to the transmission of changes in the functional distribution of income between earned and capital income into personal distribution (Atkinson 2009). Ignoring factor distribution hinders the analysis of personal income inequality in the context of cyclical economic development and ignores a potentially significant aspect.<sup>4</sup>

Consideration of factor shares within the framework of the analysis of personal income inequality is complicated by two factors:

Firstly, it is hard to identify any close correlation between aggregated inequality measures – calculated on the basis of survey data and thus referring mainly to earned incomes – and the development of corporate and unearned incomes at the macroeconomic level (Drechsel-Grau et al. 2015).<sup>5</sup> Macroeconomic shocks often affect personal distribution at both ends simultaneously. During recessions, rising unemployment, for example, increases the inequality of primary incomes, while a fall in capital incomes tends to reduce inequality. The overall effect on the level of income inequality is therefore difficult to identify on the basis of aggregated inequality measures. Disaggregated analyses, on the other hand, which focus on changes in the distribution of various income sources, are more suited to tracking the effects of macroeconomic fluctuations on personal distribution.

Secondly, the implications of the under-reporting of top earnings and capital income in the survey data used for measuring the development of

actual income inequality have not been emphasised clearly enough.<sup>6</sup>

This paper concentrates first on the question of how the development of income inequality since the early 2000s should be judged if the influence of macroeconomic development is analysed against a background of under-reporting of top earnings and capital income. Secondly, it considers the question of the conclusions we can draw from this for the development of income inequality at the current edge.

## Capital income and economic cycle in the SOEP

Although there is, as described above, only a loose correlation between the development of aggregated inequality measures of the SOEP and the development of corporate and unearned incomes at macroeconomic level, the distribution of capital incomes between households does change noticeably over the economic cycle.

For example, Rehm et al. (2014) use factor decomposition methods based on SOEP data to illustrate how the contribution of capital incomes to inequality in household market incomes has been driven by changes in the distribution of capital incomes caused by macroeconomic fluctuations.<sup>7</sup> Figure 1 depicts the decline of the contributions of interest and dividend income to inequality – i.e. their effect on the Gini coefficient – during the two economic crises.

Such a disaggregated analysis of capital incomes also documents the close link between the distribution of capital incomes and macroeconomic development. Figure 2 illustrates the development of the contributions to inequality made by total capital income, interest and dividend income, the development of a real DAX30 performance index and the development of real macroeconomic corporate and unearned income.

If we examine the relationships using a dynamic time-series model, we see that the development of

<sup>4</sup> A first comparison between the capital income share of the households in the SOEP population and the macroeconomic profit share is presented by Adler and Schmid (2013). The role of capital income in personal inequality in connection with the economic cycle is discussed in greater detail by Horn et al. (2014). Most recently, the DIW has also addressed the link between the development of employee earnings and corporate and unearned income (Goebel et al. 2015). What is remarkable, on the other hand, is the position of the German Council of Economic Experts which – despite explicit reference to relevant studies – declares the relevance of changes in factor shares to be irrelevant (SVR 2012) or (therefore) ignores it (SVR 2014) when discussing personal distribution.

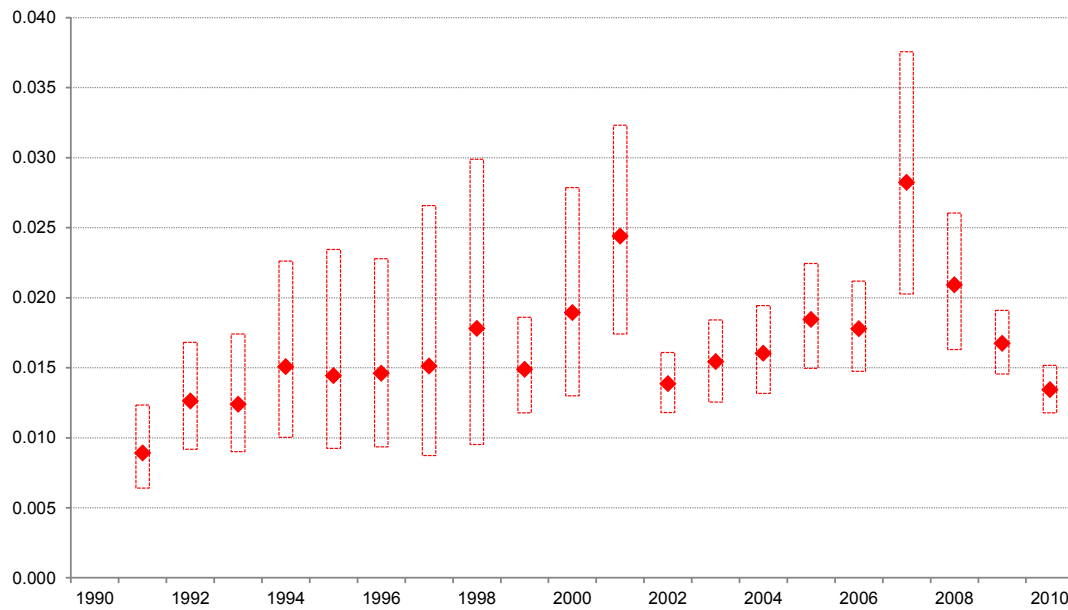
<sup>5</sup> Empirical multi-country studies, on the other hand – despite undoubted challenges with regard to adequately accounting for heterogeneity between the countries – provide clear evidence of a positive correlation between the macroeconomic profit share and the level of personal income inequality (see for example Schlenker and Schmid 2015 and the literature referred to there).

<sup>6</sup> Specific evidence of the extent of this under-reporting is provided, however, by Bach et al. (2009). Amongst the reasons for this are the fact that very rich households did not participate in the surveys upon which the data are based, and people understated their incomes. As a result, not just very high incomes, but also a significant proportion of capital income, are not taken into consideration when inequality indicators are calculated on the basis of the SOEP.

<sup>7</sup> On the basis of this breakdown it is possible to separately calculate changes in distribution of earned and capital income and their respective contributions to income inequality as a whole. This analysis provides insights into the potential influence of different macroeconomic inequality drivers on the distribution of various types of income.

FIGURE 1

### Contributions to inequality by interest and dividend income in the SOEP

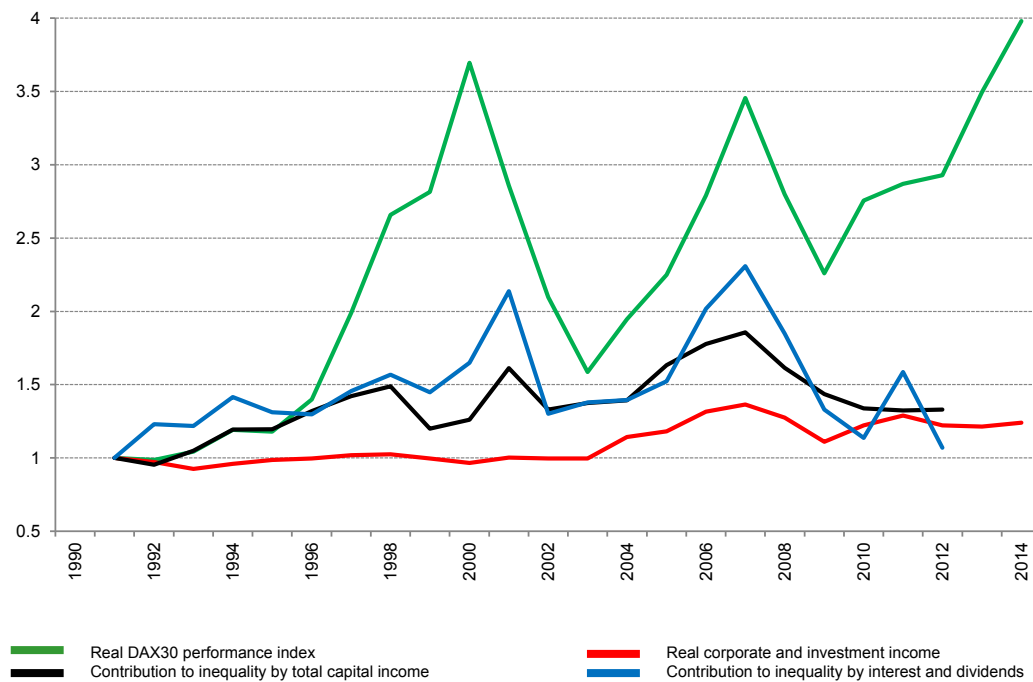


Source: Rehm et al. (2014), basic data SOEPv28l.



FIGURE 2

### Contribution to inequality by capital income in the SOEP, share development and corporate and investment income in Germany (1991=1)



Adjusted in line with consumer price index.

Sources: SOEPv30l; DESTATIS; Deutsche Börse; IMK calculations.



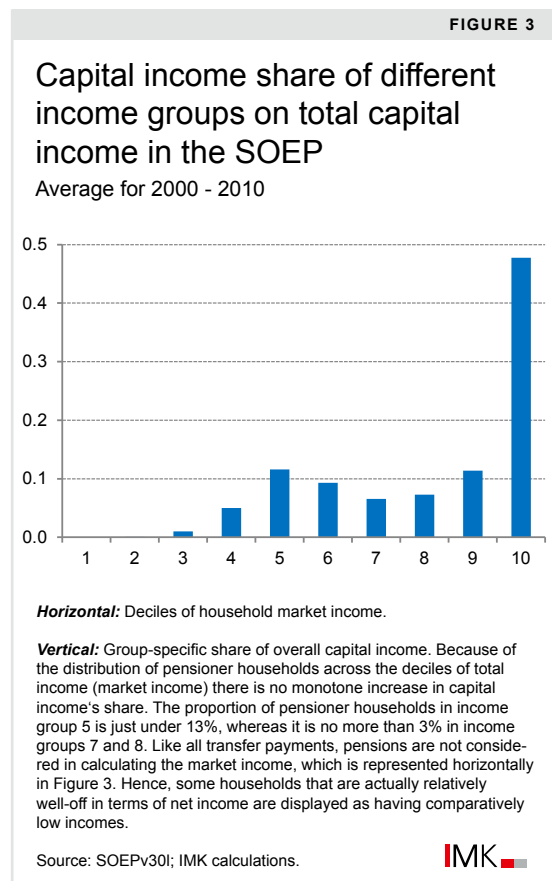
the DAX index correlates significantly with interest and dividend income. The contribution of total capital income to inequality is also linked comparatively closely with the development of real corporate and unearned incomes.<sup>8</sup>

The impact of changes in the distribution of capital incomes on inequality as a whole can be observed at several points in time and is due to the strong concentration of capital incomes at the top of the income distribution scale. Figure 3 illustrates this by showing the capital income share of different income groups in relation to total capital income. The upper decile of income earners accounts for slightly less than half of total capital income. Sharp changes in capital income thus particularly affect the upper part of the income distribution and therefore have an impact on inequality as a whole. Changes in the distribution of capital incomes are therefore highly relevant for any analysis of income inequality in Germany.

What becomes apparent from these figures is that the development of capital income distribution following the financial crisis had the effect of reducing inequality. Reduced corporate profits at the time were accompanied by massive share price losses on financial markets. Thus we cannot attribute the temporary pause in the rise in inequality in the second half of the 2000s solely to the upwards trend in employment (Horn et al. 2014) – it is also the result of the lower contribution to inequality on the part of capital incomes.

In view of recent macroeconomic developments there seems to be little doubt that the contribution of capital incomes to income inequality will rise again throughout the years 2013-2015 (which represent the current edge of inequality research). Corporate and unearned incomes at the macroeconomic level have increasingly stabilised since the crisis, and this trend will continue throughout 2015. Moreover there are no indications to the contrary from the development of share prices and profits.

<sup>8</sup> The model corresponds to a regression of the inequality contributions on the real development of the DAX index and real corporate and unearned incomes respectively. The estimates are based on log-transformed variables. They contain an endogenous dependent variable and consider a linear time trend. According to the resulting coefficients, a rise of 1 per cent in the real DAX30 Performance Index is accompanied by an increase of 0.5 per cent in the inequality contribution of interest and dividend income. A rise of 1 per cent in real corporate and unearned incomes corresponds to an increase of slightly less than 0.4 per cent in the inequality contribution of capital income. No tests were run explicitly for trend stationarity, but an estimate with first differences provides comparable results.



Share prices rose sharply between the second half of 2014 and the first half of 2015, and any corrections that followed have been considerably smaller (Theobald et al. 2015).

### Top incomes in the taxpayer panel

A more precise assessment of the impact of capital income on changes in inequality can be made using tax return data from official statistics. This provides a more comprehensive insight into the changes in income inequality in the upper part of income distribution and the connection between macroeconomics and personal income inequality. As mentioned above, Bach et al. (2009) have already used this kind of data to show that top incomes and capital income are significantly under-reported in the SOEP.

Consideration of inequality indicators on the basis of the Taxpayer Panel (TPP) not only reveals the relevance of factor shares and unearned incomes for personal income distribution in the macroeconomic context, but also enables us to assess potential discrepancies between the development of measured and actual income inequality in Germany arising from the under-reporting of top incomes and capital income in survey data. In the TPP the development of income inequality shows a correlation with macroeconomic developments

that is considerably closer than that shown in previous studies on the SOEP data, such as IAW (2011) or Horn et al. (2014).

At the core of the following analysis – which uses figures based on evaluations by Drechsel-Grau et al. (2015) – is a comparison of inequality indicators generated on the basis of the TPP and the SOEP with two macroeconomic drivers of inequality, i.e. the unemployment rate and corporate and unearned income at macroeconomic level.

In some cases, the analysis finds significant differences between the two data sources in terms of the development of inequality indicators. These are mainly caused by differences in the coverage of the population living in Germany. The TPP reproduces a representative sample of those filing a tax declaration with the tax authorities and mainly covers the middle and upper part of the income distribution scale in Germany (Kriete-Dodds and Vorgrimler 2007), whereas the SOEP, although intended to cover the entire German population, does not cover incomes at the very top of the scale.

Figure 4 shows the differences between principal (primary) income types in the two data sources for the year 2010. While a good third of the households in the SOEP population (shown on the right) have neither earned nor unearned income, due to the proportion of households receiving state benefits (such as pensioners or unemployed), the TPP only includes very few households that mainly rely on transfer payments/benefits.

Because of these different income concepts, it is not possible to make an exact comparison of the data sources here. However, two things are fairly certain: On the one hand, the (primary) income level within the population covered by the TPP is significantly higher than that of the SOEP. On the other hand, TPP households receive a significantly lower proportion of their total income from earned income. In each case, both phenomena are disproportionately identifiable in the highest income group.

In accordance with the different composition of the two populations, the data set-specific inequality measures differ in their sensitivity to macroeconomic shocks. The TPP, for example, displays much stronger correlation with corporate and unearned income than the SOEP. The latter, on the other hand, clearly reflects changes in unemployment, whereas these are not relevant in the TPP.<sup>9</sup>

<sup>9</sup> A presentation of the correlations between the aggregated inequality measures of the two data sources and macroeconomic inequality drivers can be found in Drechsel-Grau et al. (2015), Table 1.

As a consequence of these structural differences, depending on how the macroeconomic inequality drivers develop, we can observe different data set-specific inequality trends.

A striking example of this phenomenon is the development of inequality measures in the mid-2000s the very time when the supposed trend change in inequality development took place. While the movement of the inequality indicators in both data sources is largely in alignment in the years 2003–2005, a significant decoupling can be observed in 2006 (Figure 5). Unlike in the SOEP, both the Gini coefficient and the income share of the top decile in the TPP continued to rise steadily up to the onset of the economic crisis in 2009.

Contrary to the much-discussed signs of an interruption in the rise of inequality in the middle of the last decade deduced on the basis of the SOEP measures, the changes in the upper part of the income scale present a drastically different picture. In fact, these data sources suggest that the widespread assumption of a decline in income inequality in Germany after 2005 is not plausible.

For data protection reasons it is currently not possible to calculate the precise aggregated inequality measures comprising both sub-populations, as it is forbidden to combine the TPP data with microdata from other sources. So we cannot make any direct quantitative comparison of the development of the population-specific indicators with the precise values of these figures. We can, however, determine the differences in the development of the actual indicators compared to the SOEP indicators with some certainty. Decoupling of the data source-specific distribution measures after 2005, as described above, shows that the SOEP indicators exaggerate the decline in inequality of market incomes. As a result, it is more likely that there was a sideways movement, or even an increase in inequality of net incomes.

Given that corporate and unearned income at the macroeconomic level stabilised after the crisis, it can be assumed, on the basis of tax return data, that there has been a further increase in income inequality at the current end point of inequality research, i.e. from 2013 onwards.

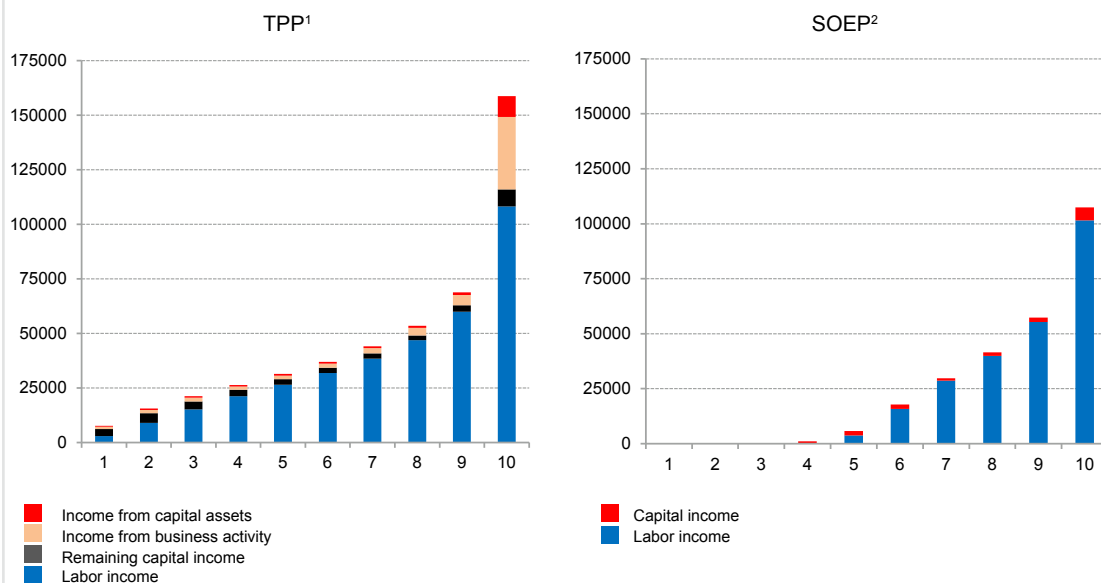
### Conclusion: improve the data basis for distribution measurement

The inequality debate in Germany primarily considers the impact of labour market changes on the distribution of earned incomes. Too little recognition is given to the impact of changes in macroe-

FIGURE 4

### Averages for various income types according to deciles of total income

2010



<sup>1</sup> Capital income in the TPP includes income from agriculture and forestry, business activity, capital assets, insurances and other capital income. Capital income as a proportion of total income is about 22% in 2010. The relative shares of capital income accounted for by income from business activities and capital assets are 51% and 16% respectively. Self-employment income is regarded as labor income. In 2010 it accounted for a good 9% of overall earned income.

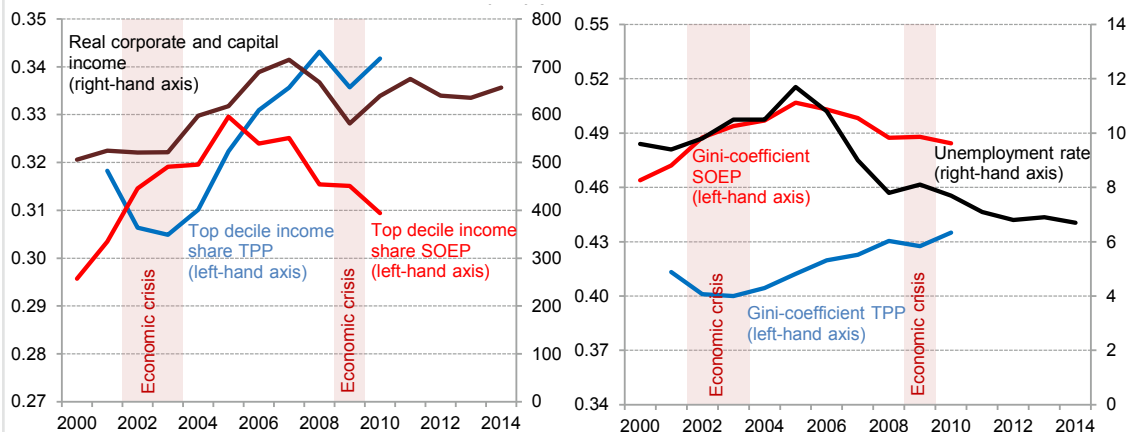
<sup>2</sup> For the SOEP evaluation, market income at household level was used (see Rehm et al. 2014). Market income includes earned income from employment and self-employment as well as capital income. When using market equalized income, the concentration is considerably less dramatic and income groups 3 and 4 demonstrate substantial average income levels.

Sources: Drechsel-Grau et al. (2015); SOEPv28l; IMK calculations.



FIGURE 5

### Macroeconomic inequality drivers and inequality indicators in the SOEP and TPP



'Economic crisis' refers to years with negative or zero GDP growth.

Adjusted in line with consumer price index.

Inequality indicators were calculated in the SOEP on the basis of individual market income, and in the TPP on the basis of pre-tax income of tax units. The figures for the top decile income share for the years 2009 and 2010 are not precise as they are based on the flat rate of taxation introduced for interest and dividend income in the year 2009. Estimated corrections can be found in Bartels and Jenderny (2014).

Source: Drechsel-Grau et al. (2015).



conomic corporate and unearned incomes on the distribution of capital income between households.

Using the SOEP survey data, however, it is possible to show that changes in the distribution of capital income have a recognisable macroeconomic correlation, and that these changes help to explain the development of income inequality since the early 2000s.

However, for a more precise and comprehensive assessment of the development of income inequality in Germany, we would need to consider several data sources simultaneously. Neither the widely-used SOEP nor the administrative data from tax statistics cover the entire population adequately, and therefore do not offer the relevant information to explain the distributional consequences of different macroeconomic shocks.

In accordance with the different populations, inequality measures based on the TPP are more closely related to corporate and unearned income than indicators calculated using the SOEP. The SOEP, on the other hand, clearly reflects changes in unemployment. Thus we can observe different data-specific inequality trends depending on the respective development of profit income and unemployment. Depending on the data used, distributional assessment may therefore turn out to be quite different at certain times – as it did during the supposed change in inequality trends in the mid-2000s.

Although this does not automatically permit the conclusion that market income inequality increased

further after 2005, the claim that the rise in inequality in net income distribution slowed down, mainly because of a decline in market income inequality, would certainly appear questionable. The indications are, in fact, that the actual distribution of net incomes in Germany stagnated at best or became even more unequal during the second half of the 2000s.

To be able to make more valid statements about inequality development in Germany in the future, it would be necessary to improve the quality of the data and access to it for academic purposes. A first step would be to link the administrative tax return data of the TPP with data from the microcensus or from the Federal Employment Agency (social insurance, benefit recipients), so that a picture of overall distribution could be obtained from a standardised data set (ZEW 2015). In addition, the return from withholding tax to a synthetic income tax and a wealth tax (even at a low rate, close or equal to zero) would make it possible to obtain direct information on the distribution of capital income (Behringer et al. 2014). This would significantly improve reporting on inequality in Germany.



## References

**Adam, H. (2014):** Die politische Ökonomie wachsender Ungleichverteilung der Einkommen. In: *Wirtschaftsdienst*, Vol. 94, No. 2, p. 104-111.

**Adler, M. / Schmid, K. (2013):** Factor Shares and Income Inequality. Evidence from Germany, 2002-2008. In: *Journal of Applied Social Science Studies*, Vol. 133, No. 2, p. 121-132.

**Atkinson, A. (2009):** Factor Shares: The Principal Problem of Political Economy? In: *Oxford Review of Economic Policy*, Vol. 25, No. 1, p. 3-16.

**Bach, S. / Corneo, G. / Steiner, V. (2009):** From Bottom to Top: The Entire Income Distribution in Germany, 1992-2003. *Review of Income and Wealth*, Vol. 55, No. 2, p. 303-330.

**Bartels, C. / Jenderny, K. (2014):** The role of capital income for top incomes shares in Germany. *Free University Berlin Discussion Papers*, No. 32.

**Behringer, J. / Theobald, T. / van Treeck, T. (2014):** Income and wealth distribution in Germany: a macroeconomic perspective. *IMK Report No. 99*, October.

**Biewen, M. / Juhasz, A. (2012):** Understanding rising inequality in Germany, 1999/2000–2005/06. *Review of Income and Wealth*, Vol. 58, No. 4, p. 622-647.

**Brenke, K. / Grabka, M. (2011):** Schwache Lohnentwicklung im letzten Jahrzehnt. In: *DIW Weekly Report*, Vol. 78, No. 45, p. 3-15.

**Corneo, G. (2015):** Kreuz und quer durch die deutsche Einkommensverteilung. In: *Perspektiven der Wirtschaftspolitik*, Vol. 16, No. 2, p. 109-126.

**Drechsel-Grau, M. / Peichl, A. / Schmid, K. (2015):** Einkommensverteilung und gesamtwirtschaftliche Entwicklung in Deutschland: Spitzeneinkommen – ein Missing-Link. In: *Wirtschaftsdienst*, Vol. 95, No. 10, p. 684-688.

**Fuchs, J. / Hummel, M. / Hutter, C. / Klinger, S. / Vallé, J. / Weber, E. / Zapf, I. / Zika, G. (2012):**

**Neue Herausforderungen für den deutschen Arbeitsmarkt.** In: *IAB-Kurzbericht*, No. 14.

**Goebel, J. / Grabka, M. / Schröder, C. (2015):** Einkommensungleichheit in Deutschland bleibt weiterhin hoch: junge Alleinlebende und Berufseinsteiger sind zunehmend von Armut bedroht. In: *DIW Weekly Report*, Vol. 82, No. 25, p. 571-586.

**Grabka, M. (2015):** Income and wealth inequality after the financial crisis: the case of Germany. In: *Empirica*, Vol. 42, No. 2, p. 371-390.

**Grabka, M. / Goebel, J. / Schupp, J. (2012):** Höhepunkt der Einkommensungleichheit in Deutschland überschritten? In: *DIW Weekly Report*, Vol. 79, No. 43, p. 3-15.

**Horn, G. A. / Gechert, S. / Rehm, M. / Schmid, K. (2014):** Wirtschaftskrise unterbricht Anstieg der Einkommensungleichheit. *IMK Report No. 97*, May.

**IAW (2011):** Aktualisierung der Berichterstattung über die Verteilung von Einkommen und Vermögen in Deutschland für den 4. Armuts- und Reichtumsbericht der Bundesregierung. Gutachten für das Bundesministerium für Arbeit und Soziales. Institut für Angewandte Wirtschaftsforschung (IAW), Tübingen.

**IMF (2014):** Redistribution, Inequality, and Growth. *International Monetary Fund (IMF)*, Washington, *IMF Staff Discussion Notes*, No. 14/02.

**IMF (2015):** Causes and Consequences of Income Inequality: A Global Perspective. *International Monetary Fund (IMF)*, Washington, *IMF Staff Discussion Notes*, No. 15/13.

**Kalina, T. / Weinkopf, C. (2012):** Niedriglohnbeschäftigung 2010: Fast jede/r Vierte arbeitet für Niedriglohn. *IAQ Report*, No. 1.

**Kriete-Dodds, S. / Vorgrimler, D. (2007):** The German Taxpayer-Panel. In: *Journal of Applied Social Science Studies*, Vol. 127, H. 3, S. 497-509.

**OECD (2015):** In It Together: Why Less Inequality Benefits All. *OECD Publishing*, Paris. URL: <http://www.oecd.org/els/soc/OECD2015-In-It-Together-Chapter1-Overview-Inequality.pdf>, downloaded on 21.10.2015.

**OECD (2011):** Divided We Stand: Why Inequality Keeps Rising. *OECD Publishing*. URL: <http://www.rrojasdatabank.info/dividedwestand2011.pdf>, downloaded on 21.10.2015.

OECD (2008): Growing Unequal? Income Distribution and Poverty in OECD Countries – Country Note Germany. OECD Publishing. URL: [https://www.mzv.sk/App/wcm/media.nsf/vw\\_ByID/ID\\_CBD2FABFAB495B52C1257648003959F2\\_SK/\\$File/Growing%20Unequal.pdf](https://www.mzv.sk/App/wcm/media.nsf/vw_ByID/ID_CBD2FABFAB495B52C1257648003959F2_SK/$File/Growing%20Unequal.pdf), downloaded on 21.10.2015.

Piketty, T. (2014): Capital in the twenty-first century. The Belknap Press of Harvard University Press, Cambridge, Massachusetts, London.

Rehm, M. / Schmid, K. / Wang, D. (2014): Why Has Inequality in Germany not Risen Further After 2005? ECINEQ Working Paper, No. 333.

Schlenker, E. / Schmid, K. (2015): Capital income shares and income inequality in 16 EU member countries. In: Empirica, Vol. 42, H. 2, p. 241-268.

Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, SVR (2012): Arbeitsmarkt: Erfolge sichern und ausbauen. In: Jahresgutachten 2012/13: Stabile Architektur für Europa – Handlungsbedarf im Inland. Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, Wiesbaden.

Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, SVR (2014): Einkommens- und Vermögensverteilung in Deutschland. In: Jahresgutachten 2014/15: Mehr Vertrauen in Marktprozesse. Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, Wiesbaden.

Theobald, T. / Tober, S. / List, E. (2015): Financial market stability in times of unconventional monetary policy. IMK Report No. 107, October.

WSI (2013): Verteilungsbericht 2013 - Trendwende noch nicht erreicht. WSI-Report, No. 10.

ZEW (2015): Möglichkeiten zur Verbesserung der statistischen Datengrundlage zur Beschreibung höchster Einkommen und Vermögen. Gutachten für das Bundesministerium für Arbeit und Soziales. Zentrum für Europäische Wirtschaftsforschung (ZEW), Mannheim.

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