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Wealth Distributions, Taxation and Redistribution
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1 Some background

Properties of the distributions of income, consumption or wealth for a certain country have always received a lot of public interest. This is equally true for research in labour economics, public economics and macroeconomics. While the rise in wage inequality has been a very much studied topic at least since the 1990s, understanding the distribution of wealth and consumption has interested macroeconomists also for a very long time. A proof of the importance the public attaches to this topic can be seen in the enormous success of the book by Thomas Piketty (2014) – see also Milanovic (2014), Piketty (2015), Piketty and Zucman (2015) and the discussions by Krusell and Smith (2015) and Blume and Durlauf (2015).

When thinking about taxation and redistribution, one needs to first understand why there are distributions in the first place. Afterwards, one needs to understand how economic policy affects these distributions. While some papers try to work both with endogenous distributions and then study the effects of redistributive policies, this is rarely the case. Most papers in the literature treat one or the other issue. The following references therefore mostly refer to either the first or the second of these points. The references are not comprehensive and students are welcome to add papers they find of interest.

2 Topics for the seminar

The following broad areas of interest can be identified. It would be useful for an informative seminar if each of these areas could be covered by at least one student.

1. Perceived, desired and true wealth distribution in US – There is a surprising discrepancy between what people in the US would like the wealth distribution to look like, what they believe that it looks like and what it actually looks like. This finding is based on a study by Norton and Ariely (2011) that is featured in a video. Students should present this study, discuss its merit and relate it to more "standard" analyses of wealth distributions like e.g. Rodriguez et al. (2002).

2. Bewley-Huggett-Aiyagari models – This literature is inspired by a mimeo by Bewley entitled "Interest Bearing Money and the Equilibrium Stock of Capital", by Huggett (1993) and Aiyagari (1994). It allows for idiosyncratic shocks to earnings (as opposed

to aggregate shocks) and studies the optimal response of risk-averse individuals. In the absence of insurance schemes against these earnings shocks, individuals self-insure by accumulating savings. This self-insurance is characterised by precautionary savings which allows to smoothen consumption more than in their absence. Depending on the history of good and bad luck in earnings shocks, individuals endogenously differ in their wealth level. The models therefore predict a distribution of wealth.

(a) Analyses in this tradition include Dávila et al. (2012), Castaneda et al. (2003), Diaz et al. (2003) and Castaneda et al. (1998). More descriptive papers include Quadrini and Rios Rull (1997), Rodriguez et al. (2002) and Diaz-Gimenez et al. (2007).

(b) See Ljungqvist and Sargent (2004, ch. 17) for a textbook treatment and Heathcote et al. (2009) for an excellent survey explaining the background and the various strands of this literature. A paper that looks at how well these models describe the wealth distribution (mostly of the US) is by Cagetti and De Nardi (2008).

(c) One of the many questions that can be analysed with models of this type is how much wealth inequality is due to luck and how much it is due to inborn characteristics of a person. Huggett et al. (2011) use such a framework to estimate the importance of endowment (inborn abilities) vs luck for determining life-time inequality.

3. Wealth distributions with aggregate shocks – Going beyond frameworks with pure idiosyncratic risk, one can study the effect of aggregate shocks and their interaction with idiosyncratic shocks. A very influential paper in this literature is by Krusell and Smith (1998). They show that tiny differences in impatience are sufficient to obtain a wealth distribution in the model that corresponds to real world wealth distributions according to measures based on Gini coefficients.

4. Wealth distributions and taxation – One can go beyond idiosyncratic labour income risk as a source of uncertainty and allow for idiosyncratic risk in capital income. This might result from differences in returns to investment e.g. in the housing market or in entrepreneurial activity. Some of these papers then analyse the origin of wealth distributions and how taxation can affect it. Papers include Benhabib, Bisin and Zhu (2011, 2014, 2015). With a more quantitative perspective, the role of taxes and transfers is studied by Kaymak and Poschke (2015).

5. Wealth distributions in search and matching models – Search and matching models are extremely popular to understand labour market issues. An integration of labour market analysis with precautionary savings has been started by Andolfatto (1996) and Merz (1995). More recent analyses include Krusell, Mukoyama and Sahin (2010) and Lise (2013).

6. The dynamics of wealth distribution – Most studies up to 2015 focus on understand a wealth distribution at a certain point in time. Given the theoretical background in Bayer and Wälde (2010 a, b), Wälde (2016) studies how wealth distributions change over time. See Gabaix, Lasry, Lions and Moll (2015) for related work.

7. Principles of redistribution – Redistribution has always been a characteristic of any real-world state system. One can take a positive view and ask what the distributional effects of existing tax systems are. Or one can take a normative view and try to understand how redistribution can optimally be implemented, given a certain criterion for optimality.

(a) Optimal taxation in the Ramsey tradition often asks how a given path for government expenditure is optimally financed. Lump-sum taxation is routinely excluded to make the analysis non-trivial. See Ljungqvist and Sargent (2004, ch. 11 and 15) as a starting point.

(b) The analysis by Mirrlees (1971) has raised the question, which types of tax instrument can be used by the government given incomplete information on the side of the government about characteristics of tax payers. This literature produces interesting results compared to the Ramsey tradition (like e.g. the optimality of taxing capital income). These basic findings and general features of the "new dynamic public finance" is surveyed inter alia in Golosev et al (2007) and in Kocherlakota (2010). As Michau (2014) puts it, however, the main focus of this literature is not redistribution per se. For a textbook treatment, see Salanié (2003).

(c) Optimal redistribution is explicitly analysed by Saez (2002), Michau (2014) and the papers cited therein. See Diamond and Saez (2011) for an overview. Golosov et al. (forthcoming) study how taxation can redistribute residual income inequality (as opposed to total inequality). Labour market policies that reduce unemployment while *not* reducing net income of the unemployed are studied by Lingens and Wälde (2009).

8. Various topics in redistribution – The effect of tax progressivity on income inequality is studied by Slemrod (1994). An extensive survey on taxes and labour supply is provided by Keane (2011). Piketty et al (2014) study the association between changes in tax rates and changes in wealth inequality across various OECD countries. The effect of the earned income tax credit on inequality is studied by Chetty et al. (2013) or Mofitt (2003). A comparison to the German "Aufstocker" or wage-subisidy system is provided by Berthold and Coban (2014).

Other areas of interest can of course be identified and can be worked on by students.

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