Introduction I am grateful to the commentators for their thoughts which bring out important aspects of a developing research agenda in which the costs and benefits of different approaches are still being explored. As well as addressing some of the specifics, this reply will reflect on a few wider issues raised by the comments some of which will be discussed at greater length in Besley and Persson (2020) whose aim is to look at the interplay of values, policy and institutional change in a variety of contexts. It is only by studying concrete applications in economics and political economy that we will be able to access the utility of different approaches. This also provides the best hope of blending theoretical and empirical insights.

Besley (in press) examines just one aspect of why a number of states grew in strength (particularly increased their fiscal capacity) in the 20th century building on the insights of Levi (1988). Besley and Persson (2011) had developed a canonical approach to explore the role of economics and politics in building state capacity which neglected the role of civic culture. Most economic models of tax compliance tend to assume a fixed amount of enforcement capacity and a given level of “tax morale”; they do not address the important question of how and why these have changed over time and what lead to the expanded scope and effectiveness of the state. The dynamic frameworks that are now being developed to understand this have added impetus to conversations between economists and economic historians. Apart from their granular knowledge of specific contexts, historians are helping to identify untapped sources of data.

Bowles (this issue) discusses how territorial conquest leading to state consolidation played a role in building state capacity, something which has not yet been brought into the formal frameworks that are used. Further progress on this requires building a micro-founded model of territorial conquest and
its motives.

**Heterogeneity or Homogeneity**  Bisin (in press) hits the nail on the head when he identifies complementarity between culture and spending on public goods as lying at the heart of the results; once you have that much else follows. But it is not a universal feature of models of cultural dynamics and policy. Figuring out whether or not a particular application generates such complementarities is an important step in understanding the forces at work. Finding that there are complements is tantamount to saying that is advantageous to be in a larger cultural group. The converse is a case of substitutes where there is some kind of “crowding externality” which makes being part of a larger group disadvantageous. Having a specific model is useful in giving an insight into the forces shaping this.

Bowles (in press) sketches a promising approach based on group selection but he does not integrate this with some of the structure that is needed to apply it to tax compliance, e.g. a role for politics in making decisions about tax rates and/or spending decisions. But this is something that could be developed in future work. Enhancing the influence of approaches incorporating culture dynamics into policy requires frameworks with recognizable features that mirror the context. Much of the early work on cultural evolution focused on stylized interactions in simple games which have limited applicability to concrete policy-settings.

**State Fragility**  Papaioannou (in press) homes in on how the framework speaks to wider debates about state fragility and the relevance of the analysis to this. Interlocking governmental and market failures trap citizens in poverty and in some cases endemic violence. Better frameworks for understanding this do not provide a solution in and of themselves. But it is striking how international organizations who are charged with responding to these challenges have failed so far to develop distinctive conceptual approaches for understanding fragility.

Admiring the achievements of countries like Denmark and Sweden offers little direct insight into how policy can help to chart a path towards creating a state that effectively supports economic development and enhances its citizens’ well-being. However, it is becoming increasingly acknowledged that there is a role for changing values alongside institutional reform (see, for example, Acemoglu and Robinson, 2019). More generally, the “scaffold-
ing” needed to support effective states has multiple dimensions which need studying (see Collier, 2019). Papaioannou (in press) is correct to focus on the role of state legitimacy, a concept that is still imperfectly understood in political economy models but shapes the “soft” power of the state.

An Eye to the Future  Bisin (in press) offers a rich set of issues to be explored in future and his own research program, particularly with Thierry Verdier has been exploring this (Bisin and Verdier, 2017). Making the choice of institutions and other aspects of the environment means integrating the framework of this paper into a more dynamic strategic model of decision making. For example, enforcement capacity in Besley (in press) could be made endogenous alongside civic culture.

When looking at dynamic decision making in such contexts, commitment assumptions become important. Also important is the capacity of the state to behave strategically understanding that culture will be affected by today’s policy and institutional choices. This brings in forces that are familiar from the literature in dynamic political economy models such as Persson and Svensson (1989). It is even possible to consider policies whose main (even sole) purpose is to change citizens’ values.

Empirical Insights?  Papaioannou (in press) rightly raises the question of how to better link theory and empirics, discussing the rise of populist politics in many places around the world in recent years. As Besley and Persson (2019b) emphasizes, it is hard not to bring in value dynamics to understand the changes that have been taking place alongside developments in political organization. Inglehart and Norris (2019) have characterized this as a “cultural backlash” against liberal values, basing their account on extensive analysis of the World Values Survey and the changes that it documents.

Bowles (in press) draws attention to he need to study intergenerational dynamics to get a handle on the speed at which cultural change takes place. Figure 1 shows that there is significant cross-country heterogeneity in attitudes towards tax compliance in the WVS/EVS described in Besley (in press) even after controlling for individual characteristics. There also appear to be stable patterns across generations which can be seen from Figure 2 which looks at variation across cohorts and countries by looking at those born before 1950 and after 1970.\(^1\) This is suggestive of high levels of inter-\(^1\) Regressing the values of the younger generation on those of the older generation in
generational persistence in attitudes across generations.

Figures 1 and 2 about here

Moreover, such patterns in the data are typical across a range of attitudes; for example, Besley and Persson (2019a) find similar stability in cross-country attitudes towards the importance of protecting the environment.

References


the same country yields a coefficient of 0.85 which is highly significant.


Figure 1: Distribution of Taxpaying Attitudes Across Countries

Notes: The dependent variable is based on question "Is it justifiable to cheat on your taxes if you have a chance?" from the World Values Survey and European Values Survey (various waves) with the scale reversed so that the highest score is associated with cheating not being justified. All specifications include wave and country dummies with standard errors clustered at the country level. The data cover 104 countries. The histogram is based on residuals based on a regression of this variable on gender, age, education and income dummies (as specified in Besley (2019) averaged at the country level.
Figure 2: Cohort comparisons of Attitudes to Paying Taxes Across Countries

Notes: The dependent variable is based on question “Is it justifiable to cheat on your taxes if you have a chance?” from the World Values Survey and European Values Survey (various waves) with the scale reversed so that the highest score is associated with cheating not being justified. All specifications include wave and country dummies with standard errors clustered at the country level. The data cover 104 countries. The histogram is based on residuals based on a regression of this variable on gender, age, education and income dummies (as specified in Besley (2019) averaged at the country-cohort level. The youngest cohort is those respondents in the data born after 1970 and the older cohort is those born before 1950.