

## Research Interests – Prof. Michèle Tertilt Ph.D.

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Tertilt's research covers several fields in economics. A common thread is the use and further development of economic theory to shed light on very applied questions of high policy relevance. Her work is also well-grounded by data – she analyses many different data sets from countries around the world. Her work largely centres around two themes: family macroeconomics and consumer finance.

### Family Macro

One of the central areas of her work is the role of gender and family in macroeconomics. Her work builds on the insight that labour and productivity (two of the key drivers of macroeconomic activity), and thus ultimately growth and welfare, are strongly influenced by gender and the division of labour within and across families. With this new focus, she has broadened the research agenda of classical macroeconomics and has opened new research avenues in development economics and economic growth theory, by addressing the role of families and social structures in the developmental processes. Starting from the key observation that family structure varies widely across countries and can be systematically linked to the level of macroeconomic development, Tertilt's research has provided answers to a number of crucial questions that, at first sight, appear unrelated: Is polygyny an obstacle to economic development? What economic motives drove the evolution of women's rights in the 19th century? Can policies that affect fertility be analysed in terms of efficiency and if yes, what can policy makers learn from it? Are there economic mechanisms that can help curb the spread of AIDS/HIV in sub-Saharan Africa? The common theme underlying all these questions is the relationship between family or gender-related institutions (e.g. whether polygyny is allowed or whether women have economic rights) and economic development. Through her work on the role of families, Tertilt has uncovered the salient implications of gender roles for macroeconomics, development, and fertility.

In her widely recognised paper "Polygyny, Fertility, and Savings" Tertilt shows that the institution of polygyny may have a substantial negative impact on the gross domestic product (GDP) and welfare of a country. This research made an important contribution

by pointing towards polygyny as a previously ignored factor in the continuing underdevelopment in Sub-Saharan Africa. Specifically, polygyny allows men to save for old age by “producing” sufficiently many daughters and thus deters investment in physical capital. The resulting low aggregate capital stock leads to low GDP per capita compared to a world where men are restricted to marry one wife only.

A second important contribution is her paper “Women’s Rights – What’s in it for Men?”. As is well known, the nineteenth century witnessed dramatic improvements in the legal rights of married women, long before women gained the right to vote. To address this apparent paradox, Tertilt investigates men's incentives for voluntarily sharing power with women. She shows that men face a tradeoff between the rights they want for their own wives and the rights of other women in the economy. Men prefer other men's wives to have rights because men care about their own daughters and because women are typically in charge of the education of children. Thus, sharing power with women can increase educational investments in children. Once technological change increases the importance of education in society, men will then voluntarily agree to relinquish some of their power. This will then lead to more human capital and ultimately economic growth in the country.

She has also pushed the frontier of how to model and evaluate fertility decision-making. A key issue that many governments are concerned with today are low birth rates. Can fertility rates be too low? What is even a useful criterion to assess this question? And why would a situation arise in which parents choose a birth rate that is below the optimal level from a society’s point of view? In her research, Tertilt has combined insights from philosophy and ethics with mainstream economic modelling to develop new efficiency concepts to answer these questions. In a series of applications, she shows in what situations fertility may be sub-optimally low and hence provides a rationale for pro-natalist policies. One reason is that typically parents bear the child-rearing costs while children themselves are the beneficiaries of being born. Another reason is an obsession with status that can lead to over-investment in education, which in turn can make children very costly, and thus lead to too low birth rates. However, her work also points to reasons for why fertility may be higher than socially optimal – such as pollution or lack of access (or knowledge) to birth control. Overly high birth rates appear more relevant in developing countries while rich European and Asian countries are grappling with low birth rates.

## Consumer Finance

A second important focus of Tertilt's research agenda has advanced our understanding of consumer finance, in particular consumer bankruptcy. This research has been motivated by the observation that bankruptcies of private households have risen dramatically since the 1980s. It is often thought that declaring bankruptcy is harmful for the household in question, and that the observed rise in bankruptcies over the last few decades therefore is a cause for concern that may require policy action. However, Tertilt has demonstrated in a series of theoretical and quantitative analyses that the observed rise in bankruptcies has been accompanied by a strong rise in consumer credit in the first place, which has most likely been caused by technological changes in monitoring and scoring instruments that have opened credit markets to larger parts of the population. While leading to more debt and defaults, this "democratisation" of credit was most likely beneficial to society since previously excluded households gained access to credit. An important conclusion of this analysis has been that a lenient personal bankruptcy law can be, in contrast to commercial bankruptcy, beneficial for society. This finding is particularly relevant for Germany, which, despite a legal reform in 1999, still has relatively strict personal bankruptcy regulations.

In ongoing work, Tertilt expands the analysis to gain a deeper understanding of optimal regulation when parts of the population are not fully informed. Policy-makers often argue that some consumers need special protection to prevent them from over-borrowing and being exploited by the credit industry. An open question is whether in such a scenario special provisions are needed to either prevent consumers from borrowing too much or restrict the industry, say, through interest rate caps. In recent work, Tertilt shows that the answer to such a question is far from trivial. For example, people who are over-optimistic about the future may borrow more than they should, at the same time they will end up defaulting more than the rest of the population. If they pay the same interest rate on the loans as everyone else, they will get a better price than they should and the rest of the population will end up covering the resulting losses. In such a scenario, financial literacy education might hurt the over-optimistic consumers (who no longer gain from the cross-subsidisation) and benefit instead the rest of the population. Similarly, interest rate caps would also disproportionately affect the over-optimists and hence not necessarily be a desirable policy.

## **Summing Up**

Tertilt uses creative theory together with data from many different sources to answer important policy questions. Much of her work connects mainstream economics with family topics and thereby develops novel insights – about women's rights, domestic violence, polygyny, fertility, but also consumer debt and bankruptcy.