



[Time-Consistent Consumption Taxation](#)

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The need to raise fiscal revenue has become a pressing issue as a result of increasing social insurance spending on health care and retirement over the past few decades. Further, interest in public finance issues, including the optimal (re)design of tax systems, has increased among policy-makers and economists following the recent financial crisis.

Most literature on optimal fiscal policy considers taxes on labour and capital only, and rules out consumption taxation, a policy instrument which is used in most industrialised economies. For example, as of January 1, 2015, the value-added tax on standard items ranges from 17 to 27 percent in European Union countries. In the full fiscal year 2014-15, consumption taxes account for the 31 percent of total tax revenues in the UK. Papers which consider consumption taxation generally find, under the assumption that the fiscal authority can fully commit to future policies, that replacing income taxes with consumption taxes would lead to large welfare gains in the United States.

This paper finds a new benefit of consumption taxation: discretionary policies and the resulting allocations are almost identical to those under commitment. This holds both for the short- and the long-run allocations, and with or without exogenous shocks. The result hinges on the current capital income tax causing some distortion, because capital utilization is endogenous. In the same framework, the previous literature, without consumption taxation, has found large welfare benefits from commitment. Our result means that the fiscal authority's ability to commit is of secondary importance as long as it has access to consumption taxation. In other words, the negative effects of policy-makers' lack of credibility, due to political business cycles, political disagreement, default on past promises, etc., can be overcome by taxing consumption optimally.

The intuition behind our results is the following. First, consider a scenario where the fiscal authority cannot tax consumption but can credibly commit to future policies. With only labour and income taxation, this policy-maker initially taxes capital at a high rate. Then the capital tax rate gradually approaches zero, while the labour income tax rate increases over time. The downward trend in the capital income tax induces households to continuously postpone their consumption, while labour-tax hikes reduces labour supply contemporaneously, but raises it in any previous period. If the government loses its credibility, it will not be able to internalise the effects of taxes on private sector decisions in earlier periods. This leads to dramatic differences of policies and allocations between commitment and discretion.

On the contrary, with access to consumption taxation, a downward trend in capital tax would require an upward trend in the consumption tax to satisfy the government's budget constraint. This



would counteract the saving incentive and lead to inefficiently low capital accumulation. As a result, the capital income tax rate is low from the start, and the consumption tax rate hardly varies over time or with the level of capital. Hence, the time-consistency features of policies under commitment are negligible. This is the key economic mechanism that drives the close similarity between commitment and discretionary policy equilibria when consumption is taxed optimally.