RESEARCH BRIEF

The Effect of Unconventional Fiscal Policy on Consumption Expenditure

Based on "The Effect of Unconventional Fiscal Policy on Consumption Expenditure," by Michael Weber, assistant professor of finance at the Booth School of Business, Francesco D'Acunto of the University of Maryland, and Daniel Hoang of the Karlsruhe Institute of Technology

KEY TAKEAWAYS

- ✓ Governments often look to monetary policy to address economic crises
- ✓ Monetary policy, though, is limited in its effectiveness, especially as interest rates near zero
- Conventional fiscal policy has limited positive impact and adds to budgetary deficits
- ✓ Unconventional fiscal policy, with its emphasis on intertemporal substitution rather than income effects, is a more effective method of igniting economic growth

In the wake of the Financial Crisis of 2007-08, central banks quickly lowered interest rates to zero or near-zero in an effort to counterbalance the recessionary effects of the following economic downturn. When those policies did not have the desired effect, they engaged in unconventional monetary policies, such as quantitative easing, in an attempt to stimulate economic activity, increase inflation, and spur job growth.

These extraordinary measures were not without positive effects, but the limitations of the zero lower bound on interest rates, and the controversy over quantitative easing (both on its benefits and on the challenges in unwinding such policies), suggest that policymakers should consider unconventional fiscal policies in times of economic stress. That's the conclusion from Michael Weber, assistant professor of finance at the Booth School of Business, Francesco D'Acunto of the University of Maryland, and Daniel Hoang of the Karlsruhe Institute of Technology . In their recent working paper, "The Effect of Unconventional Fiscal Policy on Consumption Expenditure," the economists describe the advantages of employing unconventional fiscal tools in times of economic downturns.



Figure 1 · Expected Increase in Inflation: Germany and European Union



This figure plots average monthly inflation expectation over time. Please see the Working Paper for description of data sources.

Weber and his colleagues propose a policy of preannounced increases in a value-added tax (VAT) to prod consumer spending. The idea, in effect, is to encourage consumers to spend earlier than they may have planned -- an intertemporal substitution, as it's known to economists. For example, if a household was considering the purchase of a new refrigerator, it might accelerate its purchase knowing that a forthcoming tax would increase the price of the product in the following year. Aggregated among all consumers, such intertemporal substitutions would boost economic activity and help revive economic growth.

As opposed to more conventional fiscal policy tools like tax rebates—which rely on income effects, meaning some people choose to save rather than spend the extra income—VATs do not increase budget deficits. Indeed, given increased tax revenues, VATs would offer policymakers an option to refund lower-income households that would be more affected by a tax increase.

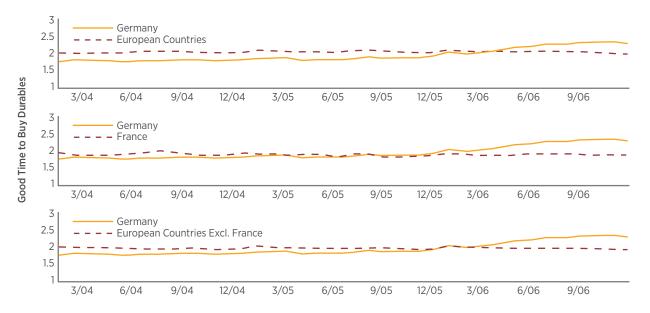
Germany as VAT laboratory

The authors' advocacy of unconventional fiscal policy is not just a theoretical exercise; they employ field data to test the hypothesis that such policies will increase households' near-term expenditures. Running such a natural experiment would be nearly impossible, given the need to observe households' expectations of future economic conditions and also the impact of a shock resembling something akin to an unexpected VAT.

Luckily for the authors, though, Germany provided just such a laboratory. In November 2005, the newly formed German government announced a 3-percentage-point increase in the VAT, effective January 2007. This increase was unexpected and, given Germany's membership in the European Monetary Union, the country did have the monetary sovereignty to raise nominal interest rates and counteract the price pressures from the higher tax.

To observe the impact of the VAT, the authors constructed a novel dataset that included household activity across the European Union (EU) as a counterfactual to German behavior. To ensure that the EU data would give a fair approximation of German behavior absent the VAT, the authors matched German and foreign households based on observables that ensured there were no systematic differences between them that could affect results. The authors show that before the VAT announcement there were no differences between the behavior of German and foreign households in the EU.

Figure 2 · Readiness to Spend on Durables: Germany and European Union



This figure plots the average monthly readiness to purchase durables over time. Please see the Working Paper for description of data sources.

So, what happened in Germany? The VAT announcement resulted in an increase in inflation expectations and German households' willingness to purchase durable goods throughout 2006 (see Figures 1 and 2). That willingness to consumer peaked at 34 percent for durable goods (like home appliances and furniture, for example) compared to before the VAT announcement and to other EU households.

The authors calculate that the announcement resulted in 10.3 percent higher real durable consumption growth throughout 2006, before the actual increase in VAT.

The authors test whether the increase in purchases was due to heightened inflation expectations or other factors, and their results show a positive and statistically significant correlation across countries between households' inflation expectations and their willingness to purchase durable goods.

As the recent Fiscal Crisis and Great Recession revealed, monetary policy's effectiveness is limited, especially when interest rates reach the zero lower bound. This correlation, while strong at the country level, varies among different demographics, which makes the authors' cross-sectional, micro-level data valuable when testing for the effects of such policies.

For such a policy to work it must be time consistent, that is, policymakers must announce a plan and stick to it. For example, with unconventional monetary policy, central bankers may announce that they are going to keep their loose-money policy in place for an extended period, even after it is no longer constrained by a liquidity trap. This policy, known as forward guidance, would suggest to people that the central bank is serious about raising inflation and should induce them to consume. However, what central banks often do is start to raise interest rates when the economy recovers; importantly, people expect this to happen, which negates the hoped-for benefits of forward guidance.

With unconventional fiscal policy, on the other hand, the government has no incentive to change its policy midstream. Increased consumption, higher tax revenues, and the ability to offset negative effects on lower-income households would ensure that governments keep the policy in place. This does not mean, though, that the government can't rescind the tax increase at some time, but it would do so only after the VAT had run its announced course.

Conclusion

Macroeconomists and policymakers often prefer monetary policy to fiscal policy as a tool to stabilize business cycles. When economies begin to slow or enter into a recession, attention immediately turns to the central banking authority and what it can do to stimulate economic activity. However, as the recent financial crisis and recessions that followed around the world revealed, monetary policy's effectiveness is limited, especially when interest rates reach the zero lower bound. As for conventional fiscal policy, it is typically only effective with a lag, and results in deficits with higher nominal interest rates and distortionary taxes.

The German VAT experience, plus the credible counterfactuals provided by foreign households, provide a strong empirical basis for the authors' conclusions about the benefits of unconventional fiscal policy to stimulate an economy in crisis. Their results suggest that unconventional fiscal policies are viable alternatives to other monetary and fiscal policies meant to stimulate aggregate demand.

Of course, it's one thing to propose using higher taxes to address economic crises, it's another to make them happen—especially in the United States, where tax policy is often more political than economic. As the authors note, understanding the pros and cons of introducing a federal sales tax in countries like the United States on the macroeconomic and political economy side is crucial to assess the viability of unconventional fiscal policy. One feature of a VAT that could make it more politically palatable would be the option to refund lower-income households from the higher tax revenues that governments would accrue.

The authors suggest avenues for further study, including on how sales taxes at the local, state, and federal levels interact and how competition across different taxing entities varies over the business cycle. In addition, theoretical researchers might investigate the interplay between conventional and unconventional measures of fiscal and monetary policy at both regular and crisis times.

CLOSING TAKEAWAY

Unconventional fiscal policies, which rely on consumption substitution rather than income effects and are budget neutral, are viable alternatives to other monetary and fiscal policies meant to stimulate aggregate demand.

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