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Fiscal Consolidation – When to Do it

Amihai Glazer
Department of Economics
University of California, Irvine

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www.economicsandpublicpolicy.uci.edu | 949.824.8496 | dneumark@uci.edu
3151 Social Science Plaza | Irvine, CA 92697-5100

Fiscal Consolidation – When to Do it

Fiscal consolidation – a policy aimed at reducing government deficits – can be viewed as an investment. A country's welfare declines in the period in which fiscal consolidation is financed (through increased taxes or reduced spending), and increases in future periods due to the consequent reduction in debt. If fiscal consolidation is an investment, the question then arises of when to make the investment. The main point of this paper is that, though a policy may be beneficial, under many conditions the decision of whether to adopt the policy should be delayed. Considerations for timing are:

- Changes in costs or benefits of the policy over time
- Obtaining information in the future that may change the decision
- Influencing beliefs of the public about the wisdom of the policy
- The effect of immediate or delayed decisions on reputation
- Bargaining about the distribution of benefits

Changes in costs over time

An investment is more attractive in periods when the costs of doing so are low. The cost of deficit reduction can consist of reduced output in the periods when taxes are increased or spending is reduced. Data suggest that increases in taxes or reductions in spending will cause larger drops in output when a country is in recession. Therefore, fiscal consolidation might be best delayed when a country is in a recession, and pursued with vigor when the country has high employment and growth.

Obtaining information in the future that may change the decision

Delaying the decision of whether to adopt a policy of fiscal consolidation may be advantageous when the following three conditions are satisfied:

- The costs incurred by adopting the policy cannot later be reversed.
- The decision maker is uncertain about future economic conditions, but will learn about them next period. For example, the government is unsure how financial markets will react to the size of the government debt next year.
- A policy not adopted now can be adopted later.

For illustration, consider a proposed policy, say a tax increase, that reduces the deficit. In the current period it costs \$100 and in the next period it will generate benefits of either \$80 or \$140, each with equal probability. If the policy is immediately adopted, there is a 50% chance that the net benefit will be -\$20 (a benefit of \$80 minus taxes of \$100) and a 50% chance that the net benefit will be \$40 (a benefit of \$140 minus taxes of \$100). The expected, or average, payoff is therefore $1/2(-100+80) + 1/2(-100+140) = 10$. If, however, the decision can be postponed for one period, the benefits become known with certainty. Therefore, if the benefits turn out to be only \$80, the policy will be rejected. If the benefits turn out to be \$140, the policy will be adopted for a net benefit of \$40. With postponement there is a 50% chance that the net benefit will be 0, and a 50% chance that the net benefit will be 40. The expected payoff is therefore 20. In this example (though not in all), a government should choose to postpone the decision.

Influencing beliefs of the public about the wisdom of the policy

The public's belief about the ability of an official, or the wisdom of the policies he adopts, can also affect the effectiveness of policy. For example, if the public believes that a policy of fiscal consolidation will reduce future debt, and so reduce future interest rates, then investors will be willing to lend money at lower interest rates, thereby reducing the government's costs in reducing the deficit. In addition, if the public believes that a quickly-adopted policy is obviously correct, the policy will in turn be successful.

The effect of immediate or delayed decisions on reputation

Policy makers who care not only about the country's welfare, but also about their own reputations, have different considerations about the timing of policy. Recall that delay could be warranted if the politician is not fully informed in the current period, but may learn about economic conditions later on. The public, however, may believe that some government officials are more capable than others, with a capable one not having to wait to learn about economic conditions. Under these circumstances an official may want to indicate that he is a capable type, and so take action immediately, even if he is not fully informed. In other words, an official may take an action too soon with the goal of increasing his reputation.

Bargaining about the distribution of benefits

Delay may also occur when different parties all favor fiscal consolidation, but disagree about who should bear the costs or reap the benefits. A political party may veto a beneficial policy today, in the hope that later it will have greater power, and so be able to adopt a policy that benefits it even more.

Policy Implications

The main point in this study is that, though a policy of fiscal consolidation may be good, it should not necessarily be immediately adopted. Considerations for the timing of adoption can be broadly divided into two groups: those which a benevolent government might do, and those which arise from selfish or political motives. The first group consists of the first three points discussed in this study: accounting for differences in costs now and in the future, considering the value from obtaining information in the future, and influencing beliefs of the public about the wisdom of the policy.

The second group consists of the last two points discussed in this study: the effect of timing on reputation, and political bargaining about the distribution of benefits. Decisions motivated by these considerations can hurt the country.

The first group of arguments, in particular, makes the point that even when it is clear that fiscal consolidation will be necessary, delays in implementing the consolidation are not necessarily a sign of "dysfunctional" or "paralyzed" government. Economic analysis points to reasons why, in some circumstances, "kicking the can down the road" can be better policy.

Fiscal Consolidation—When to Do it

1 Introduction

When considering fiscal consolidation, questions that should be raised include not only whether such a policy is good or bad, or how best to reduce the deficit, or what would be the distributional effects of the policy. Government officials should also consider when to adopt whatever policy they have decided to adopt, and they should consider whether to postpone deciding whether to adopt the policy. These issues of timing (both of adoption and of decision making) are the topic of this paper. Some of the issues considered have to do with what a benevolent government should do. But the paper will also discuss political considerations that may bias the decisions of government officials in undesirable ways.

2 Best time to engage in fiscal consolidation

Fiscal consolidation, which requires increasing taxes or reducing spending for the purpose of reducing the deficit, can be viewed as an investment—the reduced deficit in the current period reduces current welfare, and the consequent reduced debt in the future increases welfare in future periods. The question then arises of when to make the investment. One criterion is to make the investment in periods when the costs are low. The cost of deficit reduction can consist of reduced output in the periods when taxes are increased or spending is reduced. The effect of the taxes or spending on aggregate output can be summarized with the fiscal multiplier.

When fiscal multipliers are large, government spending cuts and tax increases reduce output in the short run more strongly than when fiscal multipliers are small. So if fiscal multipliers are larger now than later, the adjustment is more attractive later: Less pain now, less pain later. Data indeed suggest that fiscal multipliers are larger when a country is in recession, so fiscal consolidation might be best delayed when a country is in a recession, and pursued with vigor when the country has high employment and growth.

3 Option value

Continuing to view fiscal consolidation as an investment, consideration of uncertainty, and the resolution of uncertainty, suggest that delay in deciding whether to adopt a policy or action may be advantageous when the following three conditions are satisfied:¹

- The costs incurred by adopting the policy cannot later be reversed. For example, lost output in some year cannot later be regained.
- The decision maker is uncertain about future economic conditions, but will learn about them next period. For example, government is unsure whether next year the fiscal multiplier will be large or small (that would affect the costs of the policy), or is unsure about how financial markets will react to a large debt (that can affect the benefits of the policy).
- A policy not adopted now can be adopted later.

For illustration, consider a policy, say a tax increase that reduces the deficit. In the current period it costs 100 and in the next period it generates benefits of either 80 or 140. Let these two outcomes be equally likely. For simplicity, let the intertemporal rate of time preference be zero. If the policy is immediately adopted, the expected net benefit is $1/2(-100 + 80) + 1/2(-100 + 140) = 10$. If the decision is postponed for one period the benefits become known with certainty.

Therefore, if the benefits turn out to be 80, the policy will be rejected. If the benefits turn out to be 140 the policy will be adopted, for a net benefit of $-100 + 140 = 40$. The expected payoff when the decision is postponed is $(1/2)0 + (1/2)40 = 20$. This expected payoff exceeds the expected payoff of 10 obtainable when the policy is adopted immediately. So a risk-neutral government should postpone the decision.

An important feature of this example is that postponing a decision is good though adopting the policy immediately has benefits exceed costs. The gain from postponement arises because it allows government to reject the policy when it turns out to have negative net benefits. More generally, postponing a decision can be worthwhile if new information could induce government to change its decision. In contrast, were government to adopt the policy

¹See Dixit 1992.

regardless of the information it later got, then it could not benefit from postponement. What drives the result is that by postponing the decision the decision maker gives himself the option of making different decisions depending on what happens tomorrow.

Note, however, that delay is not always justified. With different numbers, different conclusions will be reached. And the more the decision maker cares about the future, the greater the payoff from taking action earlier rather than later. Note also that the idea of option value applies broadly, explaining pricing of financial assets, investment decisions of firms, and the benefits of environmental protection.

A disadvantage of delay is that it can increase uncertainty, and thereby reduce economic growth. A firm concerned that policy will be changed may avoid investing now, but rather wait until the uncertainty about future policy is resolved (for a model illustrating the result, see Rodrik 1991). Or, as Bernanke (1983), the Chairman of the Federal Reserve Board, points out, when investment projects are expensive to cancel or workers are costly to hire and fire, high uncertainty induces firms to delay investment and employment decisions. Moreover, if many firms delay investing or hiring, the economy contracts, generating a recession. Data support these theories. For example, the program of trade liberalization undertaken by Mexico after 1985 was undermined by lack of credibility (Ibarra 1995). Similarly, in sub-Saharan Africa, trade, fiscal, savings, and financial policy reversals reduced investment and economic growth: fiscal policy reversals reduced private investment by about 1% of GDP, and trade policy reversals reduced private investment by about 2% of GDP (Yago and Morgan 2008). In the United States, uncertainty about taxes, government spending and other policy matters deepened the recession of 2007-2009 and slowed the recovery (Baker, Bloom, and Davis 2012). In a study of firm-level data for 48 countries from 1980 to 2005, Julio and Yook (2010) find that corporate investment falls by an average of nearly 5 percent in the year leading up to national elections. Dumev (2010) finds that the sensitivity of corporate investment to the firm's own stock price is 40 percent lower in election years than in other years.

4 Reputation

The discussion so far ignored political concerns, considering what a benevolent government might do. But a decision maker, say a politician, may also

care about his reputation, which is affected by the public's observations of what actions he takes, rather than only by the outcomes of his decisions. That is particularly so if the next election occurs before the outcome of the decision becomes known. Recall that delay could be warranted if the decision maker is not fully informed in the current period, but may learn about economic conditions later on. The public may believe that some government officials are more capable than others, with a capable one not having to wait to learn about economic conditions. Under these circumstances an official may want to indicate that he is a capable type, and so takes action immediately, even if he is not fully informed. In other words, officials may be rash, taking action too soon.

Historical precedents may strengthen this bias for early action. Ever since President Roosevelt had his famous legislative successes in the first one hundred days of his presidency, the reputation of presidents can be strongly affected by their performance in their first hundred days. For example, many journalists saw President Carter as a failure because he achieved little in his first hundred days compared to President Roosevelt's achievements. Recognizing the importance of a strong start, President Clinton pledged to have the most productive 100-day period in modern history.

Voters too care about the timing of action. Thus votes for president in the United States were best predicted by per capita change in GNP in the second quarter of the election year (Fair 1978). Conditions in the rest of a president's term are mostly irrelevant, with economic conditions in quarter 13 of a president's term having half the effect of economic conditions in quarter 14 on the presidential election, and economic conditions in quarters 9-12 having about a sixth of the effect (Bartels 2012).

One explanation for the importance of timing may lie with the reputational benefits of handicaps. Suppose an incumbent aims to signal his ability in controlling the economy. Voters may attribute good performance of the economy in an arbitrary period to luck, or to a good state of nature. But if the incumbent says he will stimulate the economy in December of each year, or in an election year, or in some other constrained period, then he sets up a test and can demonstrate his ability. So if voters expect a stimulus in an election year, the incumbent should provide it, and voters are rational using that to measure ability.

To be more specific, let f be the probability that the state of nature makes a Low-quality agent succeed in a given period. Let h be the probability the agent is High-quality, who always succeeds. The probability the agent is a

High-quality one, given that timing is flexible and that the agent succeeded in both periods, is

$$\frac{h}{h + ((1 - (1 - f)^2)f)(1 - h)}. \quad (1)$$

The probability that the agent is a High-quality one given that he succeeded on both tasks and that the timing is constrained is

$$\frac{h}{h + f^2(1 - h)}. \quad (2)$$

The second probability is greater than the first, so a High-quality agent would prefer constrained timing.

I spoke so far of an official caring about reputation for selfish reasons. But the public's beliefs about the ability of an official, or the wisdom of the policies he adopts, can also affect the effectiveness of policy. For example, if the public believes that a policy of fiscal consolidation will reduce future debt, and so reduce future interest rates, then investors will be willing to lend money at lower interest rates, thereby reducing the government's costs in funding the debt and reducing the deficit. To return to the discussion of quick action, if policy is adopted quickly, the public may believe that it is obviously correct, and so the policy will be effective. Or, in contrast, they may think policy was adopted rashly.

5 Delay when political power may shift

Delay may also occur when different parties all favor fiscal consolidation, but disagree about who should bear the costs or reap the benefits. Following Alesina and Drazen (1991), consider two periods. Think of deciding who bears costs or gets benefits from policy as the problem of dividing a cake—a policy of fiscal consolidation generates aggregate benefits in the form of a cake, but two political parties must agree on how to divide the cake before fiscal consolidation can be adopted. In the current period one party can propose a division of a cake; the other party can veto it. One can think of one party as being able to hold nationwide strikes to stop a policy, of super-majority rules required to pass a policy, or of divided government (with one party controlling the presidency, and the other the parliament). The probability that the proposer will gain full power next period is π ; with probability $1 - \pi$ the other party will gain full power. The vetoer in period 1 has a discount

rate of $r > 0$ with probability d ; with probability $(1 - d)$ its discount rate is 0. The proposer does not know which type of vetoer he faces.

In period 1 the proposer offers a fraction f of the cake to himself, and a fraction $1 - f$ to the vetoer. The proposer in period 1 is willing to offer any $f > \pi$. The vetoer in period 1 with either $r > 0$ or $r = 0$ in period 1, is willing to accept any $1 - f > 1 - \pi$. So the proposal that will be accepted for sure in period 1 is $f = \pi$.

But the proposer may do better, on average, by making a proposal that gives more to himself, and that only a vetoer with $r > 0$ would accept. The proposer must offer $(1 - f) > \frac{1-\pi}{1+r}$: the highest f (or the lowest $1 - f$) he can offer is $\frac{\pi+r}{1+r} > \pi$.

The proposer prefers offering $f = \frac{\pi+r}{1+r} > \pi$ over offering $f = \pi$ if the probability that his proposal will be accepted is sufficiently high; that is, if $d \frac{\pi+r}{1+r} > \pi$, or if $d > \frac{\pi}{(\pi+r)(1+r)}$. For example, if $\pi = 0.5$ and $r = 0.1$, then the proposer offers $f = 0.54$, if $d > 0.76$. So with some probability the offer is rejected. And the rejection can occur even if the cake is larger in period 1 than in period 2.

Such delay arising from divided government has occurred. When stabilization occurs it coincides with a political consolidation. Often, one side becomes politically dominant. The successful stabilizations in France (1926) and Italy (1922-24) coincided with a clear consolidation of power by the right. The German stabilization of November 1923 followed a new Enabling Act giving the new Stresemann government power to cut through legislative deadlocks and quickly adopt fiscal measures by decree.

On the other side, the failure of Argentina to stabilize in the face of endemic inflation has gone hand in hand with continued political polarization and instability and the failure of any group to consolidate its power effectively.

6 Summary

Though adopting a policy immediately can generate large benefits, sometimes it may be worthwhile to delay adoption, or to postpone the decision; political considerations may also lead to delay. Considerations for timing are

- Differences in costs now and in the future
- Option value from obtaining information in the future that will change decision

- The effect of immediate or delayed decisions on reputation
- Influencing beliefs of the public about the wisdom of the policy
- Bargaining about distribution of benefits

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