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A U.S. FISCAL CRISIS?

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ABSTRACT

Recent tax cuts and the relaxation of spending caps on much of discretionary spending have added massively to the federal debt. Neither political party is showing much interest in controlling deficits and unless there are large changes in fiscal policies we are firmly on a road to a fiscal crisis. Fiscal crises are extremely painful and all ideologies should try very hard to avoid one. Liberals will be forced to give up some of their favorite spending programs while conservatives will be faced with large tax increases. This paper examines the effects of fiscal crises on Ireland and Greece and asks what their experiences might mean for the United States. Their austerity programs were especially hard on civil servants and pensions and both were forced into significant tax increases. Their problems had only minor impacts on the world economy. A U.S. crisis would additionally create financial turmoil throughout international financial markets.

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Recently, U. S. lawmakers have not shown much interest in controlling the budget deficit. At the beginning of fiscal 2018 they were confronted by 10-year projections of rapidly growing budget deficits and soaring public debt. They responded by passing a major tax cut and by raising spending above previously legislated spending caps. As a result, the Congressional Budget Office (CBO) projects that the deficit will rise from \$665 billion in fiscal year 2017 to \$804 billion in 2018 and then to over one trillion dollars in 2019. From there it will rise steadily through 2028. The debt is expected to grow from 77 percent of GDP in 2017 to 96 percent in 2028 (CBO 2018). These projections assume that various temporary provisions of the new tax and spending laws will end as scheduled, which is unlikely, and that there will be no serious recessions in the next 10 years.

The perilous state of our fiscal future is not in doubt (Penner 2016). Our problems are driven by the aging of the population and the rate of aging is easy to forecast. Gross spending on Social Security, Medicare, and Medicaid constitutes slightly more than one-half of total spending and these programs will be under intense pressure as large numbers of baby boomers enroll in coming years. Even after the baby boomers pass from the scene, increases in life expectancy are expected to pressure spending upward. Medicare and Medicaid face the added problem that health spending per capita would be growing faster than income per capita even if the population was not aging. If nothing is done, aging and growing health costs are almost certain to cause total spending to grow faster than the economy and tax revenues. As a result, deficit and debt will grow and interest will become a major part of the overall budget problem.

The casualness with which the Congress enacted large deficit increases in the face of a worsening budget outlook suggests there is very little interest in pursuing a disciplined, responsible fiscal policy. Unless policies are changed a fiscal crisis is inevitable. The debt-GDP ratio cannot rise indefinitely.

Crises are extremely painful and tend to shatter the dreams of those at both ends of the ideological spectrum. A crisis is likely to force conservatives to accept large and arbitrary tax increases while liberals will have to tolerate draconian cuts in social programs that they hold dear.

There are many who think it foolish to worry about a fiscal crisis. If one comes, they think that it will not be for many decades and before it happens lawmakers will surely put fiscal policy on a sustainable course. It may be true that it is improbable that the United States will experience a fiscal crisis any time soon, but the probability is not zero. Not worrying about it is like ignoring the symptoms of a disease that has a low, but positive probability of causing severe suffering.

Reinhardt and Rogoff (2011) have pointed out that sovereign debt crises are much more common historically than generally believed. That makes it worthwhile to speculate on how a U. S. crisis might evolve. Burman et al (2010). are among the few that have discussed the domestic and international macro developments that may follow from a crisis. This paper will elaborate on their discussion of macro developments

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and also look at possible micro changes in spending and tax policies. But before doing that it is useful to explore the following questions:

- How is a fiscal crisis defined?
- When might one occur in the United States?
- What would be the immediate response?

DEFINITION

A fiscal crisis occurs when financial markets first recognize that a country may no longer be able repay its debts. At that point financial markets become extremely unstable and interest rates rise quickly by substantial amounts. If that happens in the United States, the turmoil is likely to spread around the world because of the relative importance of American financial markets.

The definition of a crisis used in this paper includes instances in which no default occurs, but in which countries experience sudden major increases in interest rates and/or plunging exchange rates because financial markets expect a default to be imminent. The resulting financial instability may induce a country to undertake dramatic budget reforms quickly to stave off actual default. Since World War II, actual defaults have been frequent in emerging markets, but developed countries on the verge of default have typically been able to enact reforms that enabled them to step back from the brink. Sweden in the early 1990s, Canada in the mid-1990s, and Ireland early this century are examples where defaults were prevented just in time.

A fiscal crisis does not have to be combined with an actual default to be extremely painful. Severe cuts in programs and tax increases are likely to be necessary whenever a country has been fiscally irresponsible.

Reinhardt and Rogoff note that the decision to default is a political decision. It generally occurs at debt-GDP ratios considerably lower than now experienced in the United States. Politicians recognize that the shock resulting from an actual default grows with the size of the debt. Moreover, every day's delay means that corrective actions become ever more painful.

Auerbach, Gale, and Krupkin (2018) have made an estimate of something called the fiscal gap for the United States. It is the size of the tax increase or noninterest spending cut relative to GDP necessary to ensure that the debt-GDP ratio at some future date hits some prudent target. In one scenario, they estimated the immediate change in spending or tax burdens necessary to achieve a debt-GDP ratio in 2048 equal to today's. The estimated fiscal gap is 4 percent of GDP. That is equivalent to a 21 percent cut in noninterest spending or a

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24 percent increase in tax burdens. If the adjustment is put off to 2021 the fiscal gap rises to almost 4-1/2 percent and if the adjustment is delayed to 2025 the gap becomes 5.2 percent.

TIMING

Fiscal crises are impossible to forecast. It was just noted that they often occur at debt-GDP ratios considerably lower than we have today, but that is not inevitable. In fact, they have occurred with a wide range of debt-GDP ratios and at various levels of deficits and rates of economic growth. Oddly enough, financial markets often stay calm even as fiscal policy is becoming more and more irresponsible. Then one day all hell breaks loose and interest rates soar. Niall Ferguson (2013) has quipped that the collapse of bond markets can be set off by a bit of bad budget news on an otherwise dull news day. Suddenly many people decide all at once that there is doubt that a country can repay its debt. The rise in interest rates can be several hundred basis points in a very few days or weeks as financial markets panic.

It is quite reasonable to believe that the United States might not face a fiscal crisis for at least 40 years, but that it could also happen in 40 weeks. It is sometimes the case that it is not widely recognized that a country is in a precarious fiscal position until some other crisis, like a financial market's collapse or a housing bust, exposes a country's fiscal weakness for all to see. That happened as the result of a banking crisis in Sweden in the 1990s and a housing crisis in Ireland after the turn of the century.

The American financial crisis of 2007 to 2009 certainly exposed our fiscal weakness as the federal deficit went from \$161 billion or 1.1 percent of GDP in 2007 to \$1,413 or 9.8 percent of GDP in 2009. But this did not inspire any effort to fix up fiscal policy, probably because interest rates fell dramatically. As a result, the interest bill on the debt fell in absolute terms from \$237 billion in 2007 to \$187 in 2009 while budget deficits and public debt were soaring. It looked as though deficits were free.

RESPONSE

There are several approaches to default and the choice among them is clearly political. A country can simply refuse to repay debt that is maturing. Since that is likely to end a country's ability to borrow on domestic and international markets, it inevitably forces fiscal reforms that eliminate the deficit.

A less dramatic default occurs when countries bargain with creditors to restructure their debt by lowering the interest rate or lengthening the debt's maturity. That gives the country more time to reform fiscal policy. Creditors are unlikely to agree to restructuring without demanding fiscal reforms. However, the debtor country can probably negotiate a more gradual implementation of reforms than in the case of an outright default.

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A very mild form of default occurs when a government forces financial institutions in a country to buy debt, often at artificially low interest rates.

The most painful response occurs when a country relies on inflation to erode the real value of their debt and to fix their budgets. This often occurs when a country has developed a reputation for being irresponsible and has long lost the ability to borrow at reasonable interest rates. They then may resort to printing money to finance their budget deficit. A country can, of course, only inflate away debt denominated in domestic currency. Inflation will cause its currency to devalue and will so increase the domestic currency value of any debt denominated in foreign currencies.

Reinhardt and Rogoff say that any inflation rate higher than 20 percent per year indicates an effort to inflate a country's way out of a problem. However, an inflation rate as low as 20 percent may not work. Investors may believe that a rate this high portends even higher future rates and they then become reluctant to buy long-term bonds denominated in domestic currencies. A country will then have to rely on short-term financing to finance its deficits. Price indexing the long-term debt does not provide an answer, because lags in the indexing process are inevitable and they create much uncertainty.

Once public debt is dominated by short-run securities, interest rate increases that accompany inflation rate increases will rapidly increase a country's interest bill. That makes it very difficult to inflate away debt. In order to reduce the real value of the debt, a country will have to surprise markets with ever higher rates of inflation. An inflation rate of thousands of percent per year will probably follow.

Hyper-inflation this high allows a country to capture a significant supply of economic resources. The printing of money is enormously profitable. The value of a piece of currency depends on the number printed on its face even though it costs only a few cents to produce. The resulting profit is known as seignorage. Moreover, inflation acts as a tax on any asset whose value is denominated in currency and that tax releases economic resources that can be used by government.

Inflation also has a direct effect on a country's budget. It erodes the real value of benefits like pensions even if they are indexed to inflation. No indexing process can keep up with an inflation of many thousands of percent per year. The real value of civil servant salaries is also likely to shrink. A legislature is likely to respond by providing frequent increases in money compensation, but it is very difficult to keep up with rapidly rising prices.

I happened to be in Bulgaria when a hyperinflation suddenly gripped the country. A Bulgarian colleague's wife had an excellent government job. She was head of national parks in the country. She showed me her monthly pay stub. Her monthly salary was worth less than \$2 in American money. Former communist countries did not tend to use indexing for government benefits and consequently the value of things like Social Security pensions sank to similar levels. Although the money value of salaries and pensions will be raised once the

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inflation subsides they may not be restored fully to the real level that existed before the hyperinflation. Thus, after suffering much pain, a country may emerge with an improved fiscal outlook.

Luckily, hyperinflations do not typically last very long. In hyperinflations people stop using money as quickly as possible and resort to barter. The government can then no longer use the printing press to capture resources.

In thinking about whether hyperinflation would be used as a response to a fiscal crisis in the United States I take some comfort from the fact that no economically developed democracy has resorted to it since World War II. That is partly because many of the developed countries facing severe fiscal problems have been part of the Euro area and they cannot engineer an inflation by themselves. But other countries outside the Euro, such as Sweden and Canada, have also undertaken severe fiscal reforms without resorting to the creation of money. Only former Communist countries and emerging markets have used hyperinflation during budget crises.

I shall pretend that it is highly improbable that the United States will resort to hyperinflation and hope that it is not wishful thinking. I shall go on to discuss micro spending and tax policies that might be used to consolidate budgets and to return to a sustainable fiscal future.

I shall use the fiscal consolidations of Ireland and Greece as examples. I chose these two countries because of a preconceived notion that they are very different and may have chosen very different approaches to fixing their fiscal situations. Further research showed that although many aspects of their response to their fiscal crises were quite different, there were also some similarities and that may be an indication that there are limitations on the choices available during a crisis and that the United States might have to resort to some of the same cures.

Superficially, it appears that Ireland was more skillful in implementing reforms in that they have returned to healthy economic growth whereas Greece has not yet come close to regaining standards of living existing before the crisis.

Both Ireland and Greece undertook painful fiscal measures, but budget consolidation in Greece was a particularly long drawn out affair. The last scheduled wave of austerity will not end until August of 2018. Indeed, Zettelmeyer et al. (2018) predict that Greece will require another restructuring of their debt as they replace their borrowing from official lenders at artificially low interest rates with private loans bearing higher market interest rates.

Nevertheless, it must be recognized that Greece has made enormous progress in fixing their budget. They have achieved a primary surplus and their economy is growing again, albeit at a slow rate. There was much turmoil along the way and some false starts. They caused the problem in the first place with reckless policies

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and they lied about their budget figures. I have often heard it said the United States is no Greece. It is assumed that our policy makers are more responsible. I wish that we had more evidence of that.

Of course, neither Ireland nor Greece is very significant in the world economy. Consequently, their crises and subsequent budget reforms had only minor international impacts, as when Greece threatened to withdraw from the Euro in 2015. The fact that their budget problems did not cause severe international turmoil makes them very different from the United States.

Ireland

Ireland enjoyed an economic boom from 2002 to 2007, mainly propelled by very low tax rates on companies. The boom led to huge gains in the price of housing and encouraged the country to believe that it could afford a large increase in government spending.

The boom in housing prices was a classic bubble and it collapsed in 2008. That led to an economy-wide crisis that exposed Ireland's perilous fiscal situation. By the second quarter of 2009, GDP fell over 13 percent from its previous peak. Irish 10-year government bonds that had traded at the same rate as German bonds in January 2007 saw their rates rise to 25 basis points above comparable German securities by mid-2008 and to almost 250 basis points higher by January 2009.

Ireland acted quickly to improve the budget outlook. Efficiency measures were introduced in the budget of 2008, but more important budget consolidations began in 2009. At first the focus was on the revenue side of the budget as a variety of tax increases were approved (Government of Ireland 2009). But in 2010 the focus shifted to the spending side and over the whole period of consolidation from 2008 to 2014, two thirds of the consolidation was in the form of reduced spending and one-third in the form of tax increases. On the spending side capital spending was hit disproportionately (Robert Scott and Jacopo Bedogni 2017).

The emphasis on cutting spending was partly the result of negotiations with the European Union and the IMF. Both provided budgetary assistance.

The budget consolidation was heavily front loaded. Of the €19.8 billion deficit cut between 2008 and 2014, 70 percent occurred before 2012. It was probably wise politically to get the pain over with as quickly as possible.

Irish GDP suffered large declines in 2008 and 2009 largely because of the housing and banking crisis and then was essentially stagnant from 2010 through 2013. Alesina et al. (2017) have argued that the depressing impact of a fiscal consolidation is likely to be smaller than implied by traditional Keynesian economics, especially if most of the consolidation takes place on the expenditure side of the budget. However, the largest

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consolidation occurred in the period 2009- 2011 and it is hard to believe that that did not have something to do with the economic decline in the period, 2009-2013.

Because fiscal consolidation largely occurred while the economy was declining, it was difficult to counter the increase in the deficit caused by automatic increases in welfare spending and unemployment insurance. At the same time revenues were declining rapidly. Although policy makers engineered almost €20B of expenditure cuts during the consolidation, actual spending fell by only €9B.

Program cuts were particularly hard on civil servants. Planned pay increases were withheld; they had to pay more toward their pensions; and voluntary retirements were encouraged. During the boom years, 2001-2007, civil servant employment had grown at 3 percent per year. By 2014, it had fallen by 10 percent. Various payments for children were curtailed and student-teacher ratios rose. Other welfare payments were curbed and unemployment benefits per recipient were cut. However, total spending on the latter rose considerably because of rising unemployment.

Although there was an attempt to limit the pain imposed on lower income groups, that proved difficult. Total benefit cuts and tax increases were closer to being proportional across all income groups.

Tax increases initially focused on the income tax, VAT, and certain excises. Later property taxes were increased and a new carbon tax was imposed.

Despite the pain imposed, it has to be said that the Irish consolidation was highly successful. An economic recovery started in 2013; the growth rate accelerated to 8.5 percent in 2014; and by 2015 reached the astonishing rate of 26.3 per cent as the result of an extraordinary investment boom. By 2016 the growth rate settled into a more manageable rate of 5.2 percent. The primary structural budget balance improved from a deficit of 9.5 percent of GDP in 2009 to a surplus of 0.4 percent in 2014. The debt-GDP ratio fell from 120 percent in 2012 to 75.4 percent in 2016.

Obviously, the Irish created their budget problems in the first place by being extremely careless with public spending during the economic boom of the early 21st century. But once they recognized their fiscal problems, they reacted skillfully. They took much of the pain early while they were getting their fiscal house in order. They concentrated their deficit reduction efforts on the spending side of the budget where they were likely to be longer lasting. They tried to protect lower income groups and although this effort was not completely successful, at least the poor were not hurt disproportionately. If the United States gets into fiscal trouble, the Irish provide a good example of how to get out of it.

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Greece

The Greek fiscal crisis was very different from that experienced by Ireland. The Greeks went through 14 different austerity packages in 6 years. Some caused rioting in the street. Negotiations with the institutions providing financial assistance were often acrimonious and always painful. One government fell and its replacement, led by the radical Syriza party, promised to end austerity. This was impossible unless the Greeks wanted to leave the Euro zone.

The Greeks defaulted by negotiating a restructuring of their debt. Its maturity was lengthened and interest rates lowered. Sometimes they did not deliver the reforms promised by their austerity packages. For example, they were very slow to deliver promised privatizations of state owned firms.

In both Ireland and Greece there was some tendency to reform particular types of spending and taxes in small steps. This prolonged the pain and must have created much uncertainty. An extreme example of this tendency occurred in the Greek approach to pensions. All but two of the 14 austerity packages cut back on their generosity (International Monetary Fund 2011; Becatoros 2012; European Trade Union Institute 2017). The retirement age was increased in steps from 60 for women and 65 for men to 67 for everybody (*The Economist* 2015). Along the way the retirement age was indexed to life expectancy. Pension payments were also reduced in steps. The largest cuts were applied to those with the highest pensions.

Tax increases also occurred in small steps. The three rates of the VAT were increased from 4.5, 9, and 21 percent to 5, 10, and 23 percent in March of 2010 (European Commission 2010). In May of 2010 they were increased further to 5.5, 11, and 23 percent (Thomas and Kitsantonis 2010). In October 2011 they were pushed up to 6.5, 13, and 23 percent (*BBC News* 2011). In July of 2015 numerous products were moved to the highest rate of 23 percent and discounts aimed at tourists were eliminated (*BBC News* 2015). In May 2016 the highest rate was raised from 23 to 24 percent (Smith 2016). The income tax free threshold and tax rates were raised in the 4th austerity package (2011) and again in the 5th (2012). Farmers were hit with increased income taxes in 2015 (*Kathimerini* 2015). Property taxes were also increased in 2011. Excise tax rates and coverage were also increased in steps in 2010, 2015, and 2016.

As in Ireland, civil service employment, wages and bonuses were cut significantly (Nikas 2012). As part of labor force reform the minimum wage was cut from 750 euros per month to 585 (*ABC News*, 2012).

Clearly the pain was unrelenting as the Greeks reformed their budget and the economy as a whole. The euro amounts of cuts and tax increases were front loaded because Greece's creditors insisted that they should be. But the many tax increases and expenditure cuts exerted a powerful depressing effect on the economy and that made progress against the deficit extremely difficult.

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In the period 2010-2013 poverty soared and the inequality of incomes increased as the budget reforms reduced economic activity. But by 2014 the economy stabilized. It took time, however, for the government's financial situation to improve as measured by the debt-GDP ratio. The ratio was 110 percent in 2011 and rose to 190 percent by 2016. It declined slightly in 2017 (Maltezou and Papadimas 2017).

Today Greece has finally started to grow and its budget has a primary surplus. Although the surplus is somewhat exaggerated temporarily by privatizations, it appears that Greece is well on the way to an economic and fiscal recovery. However, it suffered enormous pain along the way. No country, including the United States, should want to go through a similar fiscal crisis.

The United States

It is a paradox that while countries with extremely generous welfare systems, pensions and a bloated civil service may be more likely to suffer a fiscal crisis, when one comes, it is less painful to cut back spending if programs were extremely generous in the first place. That was true to some extent in Greece, but as we just saw, the long drawn out adjustment with its many steps nevertheless created much suffering.

It will not be easy to identify programs that can be easily cut in the United States. The U. S. budget problem is caused by a very few rapidly growing programs that are propelled by the aging of the population. They are Social Security, Medicare, and Medicaid. The first two are extremely popular politically and together with Medicaid, they make up almost one-half of total spending. The U.S. budget problem cannot be cured without slowing them down and that is very likely to happen in a crisis. We saw that in both Ireland and Greece, pensions were hit very hard.

Major Social Security reforms occurred in both Canada and Sweden shortly after their fiscal consolidations. Both countries like to think of their pension reforms as being separate from their budget reforms, but it is difficult to avoid thinking of them as being linked.

The U.S. is unusual in that defense spending constitutes a significant share of its budget at 15 percent. That amounts to 3.1 % of GDP as opposed to a NATO target of 2% for its members. If a fiscal crisis comes, it is difficult to predict what may happen to the U. S. defense budget. It will very probably be cut, but the size of the cuts are likely to depend on international risks at the time.

One can, of course, find waste in defense and nondefense discretionary spending and in entitlements dominated by the non-aged population, but such programs have been squeezed for decades by the inexorable growth of Social Security and health programs. Nevertheless, I would expect discretionary programs to bear some of the pain.

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In Ireland and Greece, the civil service made a disproportionate sacrifice. Their employment, their pay, and their pensions suffered. I would expect similar reforms in the United States, because civil servants are a convenient target politically. However, the civil service reforms will probably not be as dramatic as in Ireland and Greece.

It will be impossible to dig ourselves out of our fiscal hole without some tax increases. Solving the entire budget problem on the spending side would require politically implausible restraints on the growth of benefits for the elderly. On the other side, solving the entire budget problem with tax increases is equally implausible. It would take frequent, substantial tax increases to keep up with the financial demands of the elderly programs.

In 2018, 49 percent of total revenues are expected to come from the individual income tax and 34 percent from the payroll tax. The left often proposes increasing tax burdens on upper income groups by raising marginal rates toward the top of the personal income tax rate schedule and by raising the payroll tax base, now at \$128,400. But there is a real question as to how much revenue this could raise without significantly increasing tax avoidance, evasion and reducing incentives to work and to save.

It is my judgement that if we face a fiscal crisis we shall have to resort to a new broad-based tax such as a VAT or a carbon tax. In Ireland and in Greece the budget crisis was partially solved with the help of numerous increases in VAT tax rates and in Ireland with a new carbon tax.

All this assumes that the United States does not resort to hyperinflation to solve its budget problems. That option was not available to Ireland and Greece because they very much wanted to keep using the Euro.

It would, of course, be wonderful to cure our fiscal problems without waiting for a crisis. However, the fiscal outlook has already deteriorated to the point that there will be considerable pain even if we begin reforms immediately. But if we can act before a crisis, reforms can be more thoughtful and imposed more gradually. More important, if we act before a crisis, it is very much less likely that our budget problems will cause an international financial crisis.

CONCLUSION

The United States is firmly on a path toward a fiscal crisis, although we have no idea when it might emerge. It may be that we can proceed along our current path for a very long time and that future lawmakers will have plenty of opportunities to reform the budget outlook. But because it is so difficult to forecast fiscal crises, we do not know how much time we have before reform becomes a necessity. The purpose of this paper is to describe the nature of the pain that will have to be endured if we guess wrong about how much more irresponsible behavior will be permitted by financial markets.

Budget crises are not pretty. I tried to illustrate that by describing the pain imposed on Ireland and Greece once they were forced to reform. Similar stories could have been told about numerous countries facing crises.

The pain intensifies every day that a country puts off reform. This is true even if a country acts in advance of the economic turmoil that eventually forces reform. But it is certainly preferable to act in advance instead of being forced into it by financial markets.

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