Inter-American Development Bank

Department of Research and Chief Economist

TECHNICAL NOTES

No. IDB-TN-400

# Explaining European Patterns of Taxation:

## From the Introduction of the Euro to the Euro-Crisis

Mark Hallerberg

May 2012

# Explaining European Patterns of Taxation:

## From the Introduction of the Euro to the Euro-Crisis

Mark Hallerberg

Inter-American Development Bank

2012

http://www.iadb.org

The Inter-American Development Bank Technical Notes encompass a wide range of best practices, project evaluations, lessons learned, case studies, methodological notes, and other documents of a technical nature. The information and opinions presented in these publications are entirely those of the author(s), and no endorsement by the Inter-American Development Bank, its Board of Executive Directors, or the countries they represent is expressed or implied.

This paper may be freely reproduced.

**Abstract**[*]

This paper reviews developments in Europe from the eve of the introduction of the euro through the euro crisis. The paper begins with a discussion of the tax reform agenda. Although there are differences in the literature on specific taxes, and while European countries vary in their preferred levels of taxation, there is general consensus on the shape reforms should take. The paper then discusses the evolution of tax systems with the overall agenda in mind. It is found that overall revenue levels were broadly stable until just before the crisis, but marginal rates in corporate and top personal income declined almost continuously. During the crisis, however, this trend ended, with countries in the greatest fiscal difficulties raising tax rates and tax burdens. The last section provides a short analysis of why there were reforms in some countries but not others. Key variables include tax competition among member states, partisanship, underlying preferences in the population for redistribution, and the number of partisan veto players.

**JEL classifications:** H21, H22, H24
**Keywords:** Taxation, Sovereign debt, Europe

---

[*] The author is affiliated with the Hertie School of Governance. This note was written as part of the background research for the 2013 edition of the IDB's flagship report Development in the Americas.

## 1. Introduction

To understand the development of taxation systems in the European Union, it is useful to think about two distinct regions. In the "West," market economies existed for several decades if not longer, and tax systems have been evolving since 1945, in many cases within first a common market and then within a more developed European Union. Their political systems are also older, and most political parties that have any chance of entering government have similarly long lineages. The second region is composed of 10 former communist countries in Central and East European Europe. They have approximately two decades' experience with market-based economies. In some cases discussed below, governments essentially started from scratch with their tax systems. Moreover, their political systems are similarly young. Political parties are not as institutionalized as their counterparts in the West, and it is possible that a dominant party in a government loses most or even all of its seats in the following election and all but disappears from the political arena.

The countries in Western Europe generally have developed welfare states. To pay for the extensive transfer programs found under these systems, the share of tax revenue as a percent of the overall economy is higher than in Latin America—the average ratio in 2008 in the so-called EU-17 was about 40 percent of GDP, with Denmark collecting proportionately the most at 48 percent (European Commission, 2011).[1] At the same time, the tax mix does vary—Denmark gets more than half of its revenue from direct taxes, while France receives most of its revenue from indirect taxes and social security charges. Governments in most countries impose high levies on fossil fuels, with energy taxes amounting to a stable average of 2 percent of GDP since 1995 (European Commission Database, 2011). While one might think this is due to greater popularity of measures to protect the environment, the high fuel taxes have been in place for many years and are a common way for European governments to finance social transfers.

Central and East European countries, in contrast, which are those that joined the European Union either in 2004 or 2007, generally have lower tax burdens than their Western counterparts, with several countries having tax ratios below 30 percent of GDP.[2] These countries tend to rely more on indirect taxes, however, such as consumption and excise taxes.

[1] "Western Europe" here does not include the 10 Central and East European countries that joined the European Union either in 2004 or 2007. It also does not include Cyprus or Malta.

[2] The main exception is Hungary, with an overall tax-to-GDP ratio of 40 percent of GDP in 2008, the same as in Germany in that year (European Commission 2011).

This paper reviews developments in Europe from the eve of the introduction of the euro through the euro crisis, a period of almost 15 years. The paper begins with a discussion of the tax reform agenda. Although there are differences in the literature on specific taxes, and while European countries vary in their preferred levels of taxation, there is general consensus on the shape reforms should take. The paper then discusses the evolution of tax systems with the overall agenda in mind. It is found that overall revenue levels were broadly stable until just before the crisis, but marginal rates in corporate and top personal income declined almost continuously. During the crisis, however, this trend ended, with countries in the greatest fiscal difficulties raising tax rates and tax burdens. The last section provides a short analysis of why there were reforms in some countries but not others. Key variables include tax competition among member states, partisanship, underlying preferences in the population for redistribution, and the number of partisan veto players.

## 2. Tax Reform Agenda

In countries with large welfare states, the focus has been on shifting the burden to taxes that are less distortionary to the economy. As has been the case since at least the mid-1980s, there has been a professed goal to broaden the tax base, coupled with a reduction in rates (Bernardi, 2011). The reform in the United States in 1986 is certainly the most well-known, but several countries in Europe followed (Hallerberg and Basinger, 1998), while the United Kingdom had already made similar reforms in 1984. Prior to the crisis, the discussion in European Union circles to increase the "quality of public finances" included an emphasis on getting the countries with the largest welfare states to have more efficient tax systems (European Commission, 2008). Even after the crisis hit, the OECD suggested that tax increases could come through base broadening rather than through increases in rates (OECD, 2010). Such proposals are not restricted to Europe—in the American context both political parties envision some combination of decreases in marginal rates combined with a base broadening that, in aggregate, leads to higher revenue collections.

Two recent reports—the Mirrlees Review (2010 and 2011) and the Monti Report (2010)—reinforce this agenda.[3] While the former was written specifically for the United

[3] The Monti Report is formally known as Report to the President of the European Commission by Mario Monti, "A New Strategy for the Single Market at the Service of Europe's Economy and Society," 9 May 2010.

Kingdom, it discusses tax matters more generally in a developed economy at the beginning of the twenty-first century. It focused especially on broadening the base of the value-added tax, and on increasing the overall weight of consumption taxes more generally. It also called for reforms in corporate income tax so that the tax system did not favor debt over equity. The Monti Report, in contrast, focuses more on further measures needed to complete the Single Market. In terms of taxation issues, its most notable recommendation concerns a common corporate tax base across Europe. It also calls for further coordination of tax policies to stem a perceived shift of the burden of taxation from mobile factors like capital to immobile factors like labor. But these recommendations are broadly in line with a desire to see broad tax bases that increase the efficiency of the tax system.

As the Mirrlees Report demonstrates, the crisis has also led to a re-examination of whether tax systems made some countries more vulnerable than others. The large industrialized countries generally tax equity finance but allow deductions for debt finance. The tax systems therefore encouraged the build-up of debts in the private sector. They also were the target of financial innovation, with complex financial instruments attempting to combine the tax benefits of debt with the features of equity finance (Keen, Klemm and Perry 2010). The generous tax treatment of housing may have also encouraged real estate bubbles in some countries, not only in the obvious case of the United States but also in Ireland in particular. As suggested by the Keen, Klemm and Perry (2010) analysis of the growth of housing prices and the taxation of real estate, however, there did not seem to be a correlation between housing inflation and tax treatment—both high-taxation countries like Spain and low tax countries like Ireland experienced housing booms.

## 2. Tax Reforms from the Introduction of the Euro to the Eve of the Crisis

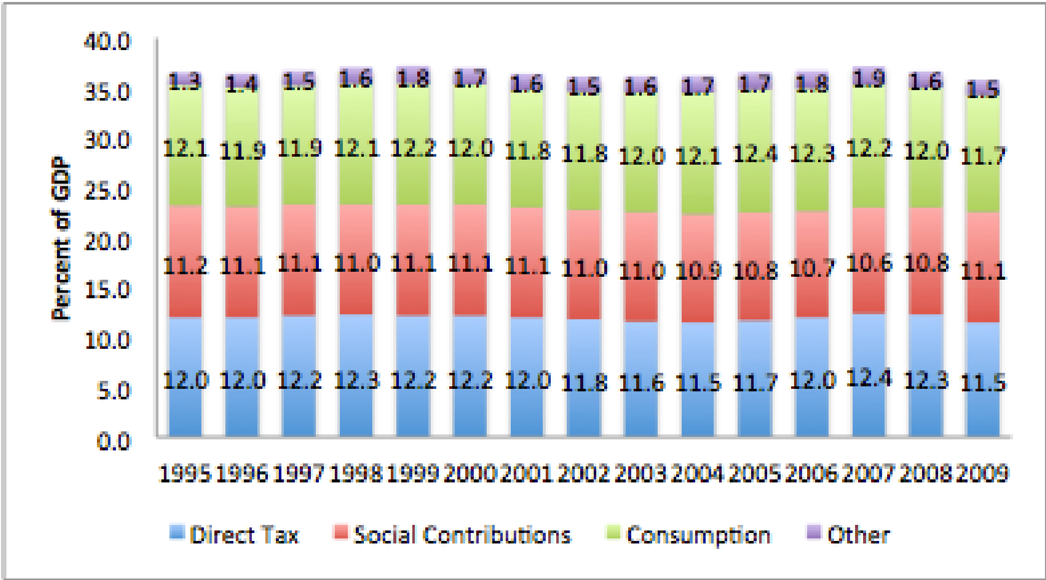
In terms of describing European tax systems, a useful comparison is to consider their state in 1998, or the year before the introduction of the euro, and 2007, which is the last full year where the financial crisis did not affect the tax systems of Europe.[4]

Figure 1 indicates that there was remarkably little change as a whole across the EU-27 if one looks at the total tax take or at the shares of various tax types as a percent of GDP. In 1998,

[4] The crisis hit Ireland and the United Kingdom earlier than the rest of the European Union countries; revenues from taxes on corporations, for example, dropped precipitously (or 0.5 percent of GDP) in both countries from 2007 to 2008 (European Commission, 2011).

the EU-27 collected an average of 37.1 percent of GDP in tax, while in 2007 the percent was trivially higher at 37.2 percent. In terms of specific taxes, taxes on consumption represented an average of 12.1 percent of GDP in the former period and 12.2 percent in the latter. While Figure 1 displays total direct taxes only, the European Commission also reports information on tax burdens for different factors of production. Expressed in these terms, taxes on capital showed greater change, with an increase of almost a full percentage point from a low base, or from 7.8 percent of GDP in 1998 to 8.7 percent of GDP in 2007. At the same time, taxes on labor dropped from 16.6 percent to 15.7 percent (European Commission 2011 database).

**Figure 1. Comparison of Average Tax Burdens, EU-27**

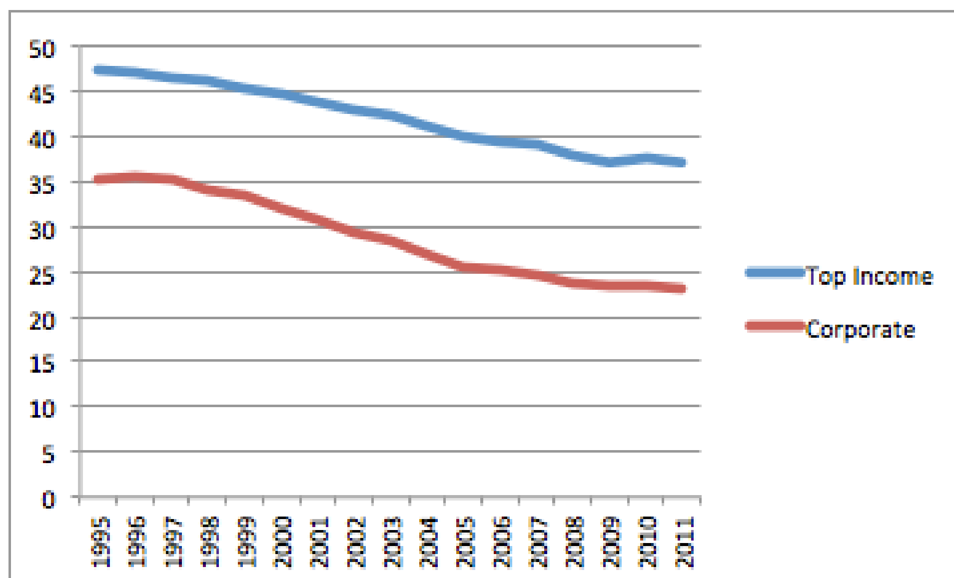



*Source:* European Commission Database, 2011.

While these aggregate figures for the taxes collected show little change, they mask big changes in statutory rates. The average statutory top income tax rate in 1998 was 46.1 percent, but it declined to 39.1 percent by 2007. The drop in the average marginal corporate tax rate was somewhat greater in absolute terms, or from 35.2 percent to 24.5 percent.[5] If one combines stable revenue with declining marginal rates, one has a collective picture that is consistent with the overall reform agenda, namely that there have been successful efforts at base-broadening coupled with reductions in marginal tax rates.

[5] The rates compared here include any surcharges and additional taxes levied on tax bases that are similar but not the same as the corporate income tax. See European Commission (2011: p. 27, footnote 7) for further details.

**Figure 2. Comparison of Average Top Marginal Income and Corporate Tax Rates, EU-27**




*Source:* European Commission (2011: pp. 32-3).

A closer look at differences across countries suggests a divide between Western Europe and member states in the Center and East. In 1995, Germany had a corporate income tax rate of almost 57 percent, while even Ireland, which cut its corporate rate to 12.5 percent in 2003, had a rate of 40 percent in 1995. Some Central and East European countries such as the Czech Republic and Poland also had rates around 40 percent. But if one looks at Central and Eastern Europe separately from Western Europe, as Figure 2 does, then it is clear that the tax rates decline in the former region first at about the same time most of the countries learned they would be joining the European Union in 2004.[6] The average rate declines with some lag in Western Europe, and it also declines more slowly: while the difference in the two averages was about six percentage points in 1995, it widened to almost 11 percentage points by 2005. Nevertheless, the downward trend is clear in both regions.

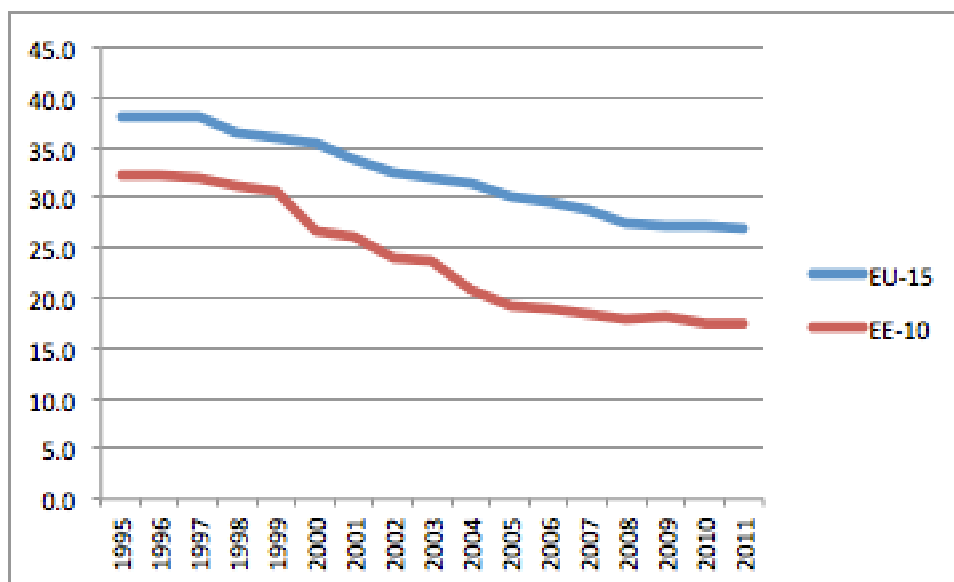
Corporate income tax rates were not the only change in Central and Eastern Europe; the most notable development was the introduction of flat taxes. Under such systems, after a basic minimum income where there is no tax, all remaining income is taxed at the same rate. While other countries have essentially flat corporate rates, the main innovation is the extension of the

[6] The exceptions were Bulgaria and Romania, which joined in 2007.

flat schedule to personal income taxes. Eight of the 10 countries that acceded to the EU from this part of Europe had a flat tax in place by 2011.

To sum up, the overall amounts of revenue collected from various taxes over the period were stable, but tax rates for both the top personal and corporate income taxes declined steadily until the outbreak of the crisis in 2008-09. The decline then leveled out.

**Figure 2. Comparison of Average Corporate Tax Rates, Western Europe vs. Central/Eastern Europe**




*Source:* European Commission (2011: p. 33).

## 3. Crisis Taxation

Governments set two contradictory goals for their tax systems during the crisis. The first was to stimulate the economy. There was a broader European and international effort to coordinate a fiscal stimulus at the beginning of the crisis. The European Commission in November 2008 called for a Europe-wide stimulus package of 1.5 percent of GDP,[7] while the G-20 promised to inject $1.1 trillion into the world economy in April 2009.[8] Tax cuts were one of the instruments at the disposal of governments, and both the size of stimulus packages as well as the use of taxation varied. While Germany and the United Kingdom had initial packages of about 1.5

[7] RAPID Press Release, "The Commission Launches a Major Recovery Plan for Growth and Jobs, to Boost Demand and Restore Confidence in the European Economy." 26 November 2008.
[8] *The Guardian*, April 3, 2009.

percent of GDP each and used tax cuts for at least two-thirds of this amount, France had a smaller stimulus package (0.7 percent of GDP), and almost all of it was on the spending side (about 94 percent).[9] These cuts particularly targeted labor, both to reduce labor costs to business to hire or maintain workers and to give especially lower-income workers more money that they would then hopefully spend to boost the economy (Bernardi, 2011).

At the same time, however, even during the beginning of the crisis this trend towards lower taxes was by no means uniform, and there was more emphasis on automatic stabilizers, especially on the expenditure side. Examining a cross-section of the 27 member states shows that every country but Malta increased expenditures as a percent of GDP in 2009, but 12 countries raised taxes instead of cutting them in 2009 (European Commission, 2011). Moreover, the countries experiencing the greatest economic "troughs" were the ones most likely to increase taxes; countries like Ireland and Latvia needed additional revenue to prevent a complete meltdown of their public finances. The causation, of course, certainly runs both ways, with tax hikes increasing the extent of the economic decline.

The trend towards more tax increases then became dominant in 2010 and 1011 as the financial crisis moved on to a sovereign debt crisis in more countries. The main tax instrument governments increased was the value-added tax. From 2002 to 2008 there was no real change at all in VAT rates, but beginning in 2009 they rose distinctly, with the mean increasing from about 19.5 percent in 2008 to about 20.7 percent in 2011. Moreover, while only one country changed its VAT in 2008, as Portugal cut its rate by 1 percent, there were 14 changes in 2010 and 2011, and all but one (Ireland's 0.5 percent cut in 2010) represented increases in rates (European Commission, 2011). There were also some increases in the top marginal income tax rate, with exactly one third of member states raising the top rate and only one state (Hungary) lowering it. This trend did not extend to corporate taxes, however. Only in small open economies with weak corporate sectors that experienced severe fiscal stress—i.e., Hungary, Latvia, and Portugal—did governments increase the corporate income tax statutory rate, and in the first two cases the increase was temporary, lasting three years and one year, respectively. The sovereign debt crisis in Europe is far from over, and tax increases are certain in three countries under EU-IMF

[9] Data from Prasad and Sorkin (2009), downloaded at: http://www.brookings.edu/~/media/Files/rc/articles/2009/03_g20_stimulus_prasad/%2003_g20_stimulus_prasad_table.pdf .

programs (Greece, Ireland, and Portugal) as well as in countries facing high bond rates (e.g., Italy and Spain).

## 4. Political Economy Factors

There are several factors seemingly at work to explain these developments. First, tax competition played a role in explaining the decline of corporate tax rates. To a great extent, a "race to the bottom" has been one of those predictions from the literature (e.g., Sinn, 1990; see Genschel and Schwarz, 2011, for a review) that did not seem to be born out in the actual tax rates despite the absence of any international coordination (Dehejia and Genschel, 1999). This then led to a series of articles (e.g., Mendoza and Tesar 2005; Basinger and Hallerberg, 2004) intent on explaining why there is no such race to the bottom. Something changed, however, in the late 1990s. The direction of the competition was often from the East; countries like Slovakia had corporate tax rates of 19 percent in 2003. Austria then lowered its rate from 34 percent in 2004 to 25 percent in 2005. This then put pressure on economies further to the west, such as Germany, which lowered its national corporate income tax rate from 25 percent in 2007 to 15 percent in 2008.[10] But the East was not the only source of pressure; judging by the public comments French leaders among others made when Ireland received an effective bailout at the end of 2010, Ireland's 12.5 percent rate raised consternation in several capitals. Ireland refused to raise its rate despite French President Sarkozy's insistence that Ireland would not receive an interest rate reduction on the money it owed the European Union without a change in its corporate income tax rate (RTE News, "Kenny and Sarkozy Exchange 'Strong Words,'" 11 March 2011).

The academic literature finds some support for the effects of tax competition among Member States as an explanation for the decline in marginal corporate income tax rates. Heinemann, Overesch, and Rincke (2010) find that European countries are more likely to cut their corporate rate if their immediate geographical neighbors reduce rates and their own rates are high. Devereux, Lockwood, and Redoano (2008), in a piece looking at tax competition in OECD countries more generally over an earlier period (and at competition both for effective marginal tax rates and for statutory rates, they find clear evidence for competition in statutory once capital controls end (see also Ganghof, 2006). Genschel, Kemerling, and Seils (2011) find

[10] While this number sounds low, the effective rate of corporate taxation reported in the figures above is higher because of local taxes and the "solidarity charge."

that tax competition has increased especially in the European Union relative to the rest of the developed world.

The overall story therefore may seem to be that "market pressure" is forcing countries to lower their corporate rates so that they do not lose firms and their investments and jobs. But this logic clearly depends upon whether a country is facing a possible fiscal crisis; in crisis, governments increase taxes in an attempt to maintain or even lower the interest they have to pay on their debt. This appears to be another effect of markets that put pressure on governments to increase rather than decrease rates.

The spread of the flat tax in Central and Eastern Europe illustrates the importance of additional variables. The rationale for a flat tax is that it enhances economic efficiency. It also taxes higher incomes the same as lower incomes, which means that it is less redistributive than if higher incomes face higher rates. For these reasons, parties of the political right are more likely to favor such taxes than parties of the political left. One would expect their adoption therefore under right-wing governments, which would stress economic efficiency arguments, and not in left-wing governments, which would care more about redistribution.

Looking at the data, eight of 10 Central and East European countries had adopted a flat tax by the beginning of 2012, with the latest adoption in Hungary in 2011.[11] The adoption happened in waves. The three Baltic states introduced flat taxes in 1994 (Estonia) and 1995 (Latvia and Lithuania), while a second wave began in Slovakia in 2004 and covered most of Central Europe by the time Hungary introduced its version of the tax.

What explains the spread of the flat tax? First, there seems to be a partisan effect; as Table 1 indicates, six of the eight governments were center-right in partisanship when they adopted the flat tax. In a country that has not adopted one, namely Poland, the right-wing PO (or Civic Platform) has been the main supporter of a flat tax, although it has not pushed the issue since it entered government in 2007. Ellis (2010) argues in his detailed study of five Central and East European countries that right-wing parties as well as key players at finance ministries and central banks were needed at the domestic level to support the idea of a flat tax. There was, however, a diffusion of the tax at the international level, which would explain the "waves" of adoption described above. This diffusion effect may provide an explanation for why the two

[11] Prime Minister Viktor Orban had the flat tax enshrined in Hungary's constitution, so that any change in the tax would require a two-thirds majority in parliament.

center-right governments in Bulgaria and Latvia respectively adopted the tax—they were in the same region and were some of the last countries in their region to introduce it.[12]

**Table 1. Adoption of the Flat Tax in Central and Eastern Europe**

| Country | Year of adoption of flat tax | Personal tax rate/ Corporate tax rate | Partisanship of government/ Government coalition |
|---|---|---|---|
| Bulgaria | 2008 | 10/10 | Center-left |
| Czech Republic | 2008 | 15/21 | Center-right |
| Estonia | 1994 | 21/21 | Center-right |
| Latvia | 1995 | 25/15 | Center-right |
| Lithuania | 1995 | 24/15 | Center-left |
| Romania | 2006 | 16/16 | Center-right |
| Slovakia | 2004 | 19/19 | Center-right |
| Hungary | 2011 | 16/10 | Center-right |

*Source:* Author's compilation from government websites, Antalova (2010), and Ellis (2011).

At the same time, the flat tax has not spread to any of the countries in the original EU-15, so partisanship alone cannot be the deciding factor. Fuerst, Peichl and Schaefer (2008) suggest that the preferences of populations explain why countries like Germany have not adopted such a tax. Germans want some level of redistribution, and they are not alone; this is true more generally for populations in the developed welfare states of Western Europe, and the effects of these population preferences extend beyond the issue of the flat tax. The authors suggest that these norms are weaker in Central and Eastern Europe. Plümper, Troeger, and Winner (2009), in their empirical consideration of the extent of capital tax competition, find that countries with stronger equity norms have somewhat higher tax rates.[13]

[12] While there is the expected partisan trend on the tax side, Tavits and Letki (2009) provide persuasive evidence that the Left and Right exchange places when it comes to spending trends: the Right consistently spends more than the Left in Central and Eastern Europe.

[13] This discussion leads to another important variable in the European context, namely the role of voters. In Ireland, agreement on maintaining the low corporate tax rate spans the political spectrum, and no political party would

A more institutional factor to consider is the role of veto players. Veto players are actors who alone can block a move from the status quo. Taxation would seem to be a good policy area in which to consider their role; as the Mirrlees Review volume *Tax by Design* notes in its opening chapter (2011, 18), “tax is one area of public policy where the ‘tyranny of the status quo’ is strongest.” A scholar like Tsebelis (2002) would therefore suggest that veto players are especially prominent.

A comparison of the passage of tax reforms in Germany and the United Kingdom would seem to provide some anecdotal evidence that veto players have an important effect. Germany’s major tax reform occurred in 2007, when there was a grand coalition government in place composed of the two largest party blocks, the CDU/CSU and the SPD. Their ideological positions on tax matters were not that different. Moreover, anything that affects the Land governments at the sub-national level requires that the upper house, or Bundesrat, also approve the legislation. Most taxes are shared between different levels of government, so tax legislation generally requires Bundesrat approval. The government under Chancellor Merkel was able to command a majority in both chambers. The reform included changes to the corporate income as well as restrictions on some types of interest deductions. This government was also able to push through tax cuts at the beginning of the crisis in 2009, which included somewhat lower rates for individuals, cuts in health insurance contributions, and some adjustments to depreciation and the like for firms (Carare, Mody and Ohnsorge, 2009).

After elections in 2009, there was a new coalition government composed of the CDU/CSU and FDP. The latter party had promised a big tax reform, which was to include cuts in marginal rates as well as a simplification of the tax system. There was a small window to make changes when the new government came to power in Fall 2009, and there were some minor modifications,[14] but the sense was that the government needed to wait until elections at the state level the following spring before introducing a major reform. These parties lost the elections in the largest state, in Northrhine-Westfalia, in Spring 2010, as well as its majority in the upper house. Although tax reform had been the ruling parties’ highest-profile issue, reform proposals have simply been shelved.

consider raising the rate. In contrast, in France, where progressivity norms are stronger, even a conservative government believes that it faces significant issues reducing the top personal income tax rate.

[14] The most notable development was the reduction of the value-added tax for hotels from 19 percent to 7 percent. This change was widely seen as a concession to one of the interest groups that backed the FDP in the elections.

In the United Kingdom, in contrast, tax policies have been easier to change. From 1997 through 2010, the Labour Party had a majority in Parliament, which meant that there was only one veto player. In its 2008 stimulus package, it cut the value-added tax as well as income taxes for the lowest tax bracket. It also increased the marginal income tax rate for those making over 150,000 pounds from 40 percent to 50 percent. A new government, this time composed of a coalition between the Conservative and the Liberal Democratic Parties, formed in May 2010. The Conservatives had wanted to lower the top marginal tax rate while the Liberal Democrats insisted on increasing significantly the cut-off point below which one paid no tax to 10,000 pounds. Now that they were in coalition, neither party could get exactly what it wanted, with each making compromises.[15]

One clear difference between Germany and the United Kingdom, moreover, is the speed with which tax policy can be implemented. While passage in the Bundestag means that the bill then goes to the upper house for further deliberation, in the United Kingdom there is no such second institutional veto player. The time delay between when the Chancellor of the Exchequer announces a tax change and when Parliament approves it can be a matter of days, and changes in policy can occur within two weeks.

In sum, in both countries there were significant changes in tax policy at the beginning of the crisis, but also in a period where the veto player configurations were favorable for change. Elections then increased the number of relevant veto players, forestalling change. The institutional differences, however, still affect how quickly policies are implemented and how easily a government's proposals can be blocked.

Finally, the European Union itself appears to be taking a growing role in the setting of tax policy in member states. Genschel and Jachtenfuchs (2011) document the use of secondary legislation as well as European Court of Justice (ECJ) rulings, which have been especially important in the design and execution of the value-added tax. While the ECJ considered four cases in the first 10 years of its existence (or 1958-67), it heard 417 such cases in the last decade up to 2007 (p. 301). The European Union does not explain the broad trends traced in this paper, but as the European Union takes a more active role in monitoring and even in steering national

[15] By 2013 the minimum income level at which one pays income tax will be 9,205 pounds rather than the 10,000 pounds the Liberal Democrats wanted. See Joyce (2012). Similarly, the 50 percent top rate is to be cut to 45 percent by April 2013. While this has been a Conservative aim, it does not return the top marginal rate to the level of 40 percent that prevailed before the 2008 stimulus package.

budgets through the "six pack" legislation and the proposed "two pack," it will become a more influential actor in the future.[16]

## 5. Conclusion

This paper reviewed the main developments in European taxation since the adoption of the euro to the present. Overall levels of taxes as a percent of GDP have been broadly stable, but there has been a real decline in both the corporate income and top personal income tax rates. During the beginning of the crisis, about two-thirds of member states cut taxes in an attempt to stimulate the economy, but member states in the most economic trouble raised rates in an attempt to stabilize their budgets.

This paper also reviewed political economy reasons for the observed patterns. Multiple factors are relevant. There is some tax competition among member states that intensified around the time that the 10 Central and East European countries joined the Union. Given that governments changed after almost every election in that part of Europe but center-right governments generally introduced flat taxes, partisanship patterns also played a role. The degree of exposure of a given government's debt burden to market pressure affected whether countries increased or decreased taxes during first the financial crisis and then the sovereign debt crisis that followed. There also anecdotal evidence that increasing the number of veto players reduced the scope for further tax changes.

[16] The "six pack" is named after six reform proposals the European Commission first made in May 2010 that passed through the EU legislative process and entered into full force by the end of 2011. Together they tightened European Union-level monitoring of domestic budgets. The "two pack," which is expected to be voted on by the European Parliament by Summer 2012, requires member state governments to submit their draft budgets to the European Commission each fall before they are submitted to national parliaments. It also specifies that governments use independent macro-economic forecasts in their planning, and it calls for independent fiscal councils at the national level. Finally, this legislation provides procedures for the European Commission to administer countries that are receiving international financial assistance to prevent them from going into bankruptcy.

## Bibliography


Adam, S. et al., editors. 2010. *Dimensions of Tax Design: The Mirrlees Review*. Oxford, United Kingdom: Oxford University Press.

Alt, J., I. Preston and L. Sibieta. 2010. "The Political Economy of Tax Policy." In: S. Adam et al., editors. *Dimensions of Tax Design: The Mirrlees Review*. Oxford, United Kingdom: Oxford University Press.

Antalova, L. 2010. "Contemporary Flat-Tax Reforms in Eastern Europe: Causes of Diverse Approaches: A Comparison of Slovakia, Czech Republic and Germany." Discussion Papers SFB International Tax Coordination 34. Vienna, Austria, WU, WU Vienna University of Economics and Business, SFB International Tax Coordination.

Basinger, S., and M. Hallerberg. 2004. "Remodeling the Competition for Capital: How Domestic Politics Erases the Race-to-the-Bottom." *American Political Science Review* 98(2): 261-276.

Bernardi, L. 2011. "Economic Crisis and Taxation in Europe." Società Italiana di Economia Pubblica Working Paper 652. Pavia, Italy: Società Italiana di Economia Pubblica.

Carare, A., A. Mody and F. Ohnsorge. 2009. "The German Fiscal Stimulus Package in Perspective." VOX, 23 January 2009. Available at: http://www.voxeu.org/index.php?q=node/2835

Dehejia, V.H., and P. Genschel. 1999. "Tax Competition in the European Union." *Politics & Society* 27: 403–430.

Devereux, M., B. Lockwood and M. Redoano. 2008. "Do Countries Compete over Corporate Tax Rates?" *Journal of Public Economics* 92(5-6): 1210–1235.

Ellis, J.M. 2010. "Flat Tax Revolution?: Policy Change and Policy Diffusion in Eastern Europe." Philadelphia, United States: Temple University. Doctoral dissertation.

European Commission. 2008. *Public Finance in EMU—2008.* Brussels, Belgium: European Commission.

European Commission. 2011. *Tax Trends in the European Union. Focus on the Crisis: The Main Impacts of EU Tax Systems.* Brussels, Belgium: European: European Commission.

Fuerst, C., A. Peichl and T. Schaefer. 2008. "Is a Flat Tax Reform Feasible in a Grown-up Democracy of Western Europe? A Simulation Study for Germany." *International Tax and Public Finance* 15(5): 620-636.

Ganghof, S. 2006. *The Politics of Income Taxation: A Comparative Analysis*. Colchester, United Kingdom: European Consortium for Political Research (ECPR) Press.

Genschel, P., and M. Jachtenfuchs. 2011. "How the European Union Constrains the State: Multilevel Governance of Taxation." *European Journal of Political Research* 50(3): 293-314.

Genschel, P., A. Kemmerling and E. Seils. 2011. "Accelerating Downhill: How the EU Shapes Corporate Taxation in the Single Market." *Journal of Common Market Studies* 49(3): 585-606.

Genschel, P., and P. Schwarz. 2011. "Tax Competition: A Literature Review."*Socioeconomic Review* 9(2): 339-370.

Hallerberg, M., and S. Basinger. 1998. "Internationalization and Changes in Tax Policy in OECD Countries: The Importance of Domestic Veto Players." *Comparative Political Studies* 31(3): 321-353.

Hays, J.C. 2009. *Globalization and the New Politics of Embedded Liberalism*. Oxford, United Kingdom: Oxford University Press.

Heinemann, F., M. Overesch, and J. Rincke. 2010. "Rate Cutting Tax Reforms and Corporate Tax Competition in Europe." *Economics & Politics* 22(3): 498-518.

Institute for Fiscal Studies. 2011. *Taxation by Design.* London, United Kingdom: Institute for Fiscal Studies.

Joyce, R. 2012. "Tax and Benefit Changes, Excluding the Very Rich." Institute for Fiscal Studies. Presentation available at: http://www.ifs.org.uk/budgets/budget2012/budget2012robjoyce.pdf.

Keen, M., A. Klemm, and V. Perry. 2010. "Tax and the Crisis." *Fiscal Studies*. 31(1): 43-79.

Mendoza, E.G., and L.L. Tesar. 2005. "Why Hasn't Tax Competition Triggered a Race to the Bottom? Some Quantitative Lessons from the EU." *Journal of Monetary Economics* 52: 163-204.

Organisation for Economic Co-operation and Development (OECD). 2011. *Tax Reform Trends in OECD Countries*. Paris, France: OECD.

---- . 2010. *Choosing a Broad Base-Low Rate Approach to Taxation*. *OECD Tax Policy Studies* 19. Paris, France: OECD.

Plümper, T., V. Troeger and H. Winner. 2009. "Why Is There No Race to the Bottom in Capital Taxation?" *International Studies Quarterly* 53: 761–786.

Prasad, E., and I. Sorkin. 2009. "Assessing the G-20 Economic Stimular Plans: A Deeper Look." Brookings. Available at http://www.brookings.edu/~/media/Files/rc/articles/2009/03_g20_stimulus_prasad/%2003_g20_stimulus_prasad_table.pdf

Ruding, O. et al. 1992. *Report of the Committee of Independent Experts on Company Taxation*. Brussels, Belgium: Commission of the European Communities.

Sinn, H-W. 1990. "Tax Harmonization and Tax Competition in Europe." *European Economic Review* 34: 489-504.

Tavits, M., and N. Letki. 2009. "When Left is Right: Party Ideology and Policy in Post-Communist Europe." *American Political Science Review* 103(4): 555-569.

Tsebelis, G. 2002. *Veto Players: How Political Institutions Work*. Princeton, United States: Princeton University Press.