

EUROPEAN INTEGRATION, TAX BASE MOBILITY, AND FISCAL STRAIN*

Richard W. England, University of New Hampshire

INTRODUCTION

DURING THE PAST HALF CENTURY, EUROPE HAS evolved in remarkable ways. The European Union (EU) now extends from Ireland and Portugal in the west to the Baltic states and Bulgaria in the east. Citizens of the EU enjoy a common passport and many use a common currency. Shipments of merchandise flow freely across national borders, as do real and financial investments. Representatives to the European Parliament are freely elected every five years. Although there are restrictions on emigration from the newer to the older EU member states, the degree of labor mobility within Europe is unprecedented.

It is noteworthy, then, that fiscal policy in Europe is still dominated by decisions taken by the individual governments of the member states. Although monetary union has placed ceilings on budget deficits and although coordination of national tax systems has been discussed at length, the European Union still permits individual members to collect tax revenues, for the most part, as they see fit.

This paper argues that increased mobility of products, residents, jobs, and assets within the EU poses a fundamental challenge to the fiscal policies of its member states. In recent decades, a number of European governments have financed high levels of public expenditure by taxing personal and corporate incomes, value added and retail sales, and payrolls relatively heavily. Those sources of revenue have been eroding because of growing mobility of capital, labor, and products within the EU itself and among the regions of the world. An unintended consequence of European integration, then, is that the EU nations may need to search for new sources of tax revenue if they are to avoid politically unacceptable budget deficits or socially painful expenditure cuts. Taxation of land values could help to mitigate this emerging

tension between the revenue and expenditure sides of national budgets within the European Union.

EUROPEAN INTEGRATION AND FACTOR MOBILITY

The European Union of today is the result of an evolutionary process spanning more than half a century. The Treaty of Paris (1951) began this historic process by coordinating the steel and coal industries of six Continental economies. The Treaty of Rome (1957) then created the European Economic Community, a customs union among the six founding member states. It should be noted that those original members had economies at very similar levels of development.

Since 1951, Europe has witnessed six geographic expansions of this community, the most recent in January 2007. This growth from 6 to 27 member states has been accompanied by greater economic diversity within the community. In 2004, for example, GDP per capita in Ireland was 36 percent higher than the EU-25 average, whereas income levels in Poland and Bulgaria were 49 and 32 percent of that average, respectively (Eurostat, 2007).

During the past half century, EU territorial expansion has been accompanied by growing integration of goods and financial markets. As a consequence, European corporations have begun to invest, produce, and market on a continental scale, no longer impeded by tariff barriers and a multiplicity of currencies. As early as 1996, enterprises based in Germany and Britain had accumulated foreign direct investment positions in other EU-15 nations totalling 198 and 114 billion euros, respectively. Over a decade ago, the FDI positions of French, German, and British firms in the Netherlands alone had already exceeded 88 billion euros (Gorter and Parikh, 2003).

Expansion of the EU from 15 to 27 members during recent years has been accompanied by more rapid GDP and industrial growth for the union as a whole. All 10 of the former communist nations that joined the EU in 2004 and 2007 had higher GDP and industrial growth rates during 2003-04 than the EU-25 region (European Commission, 2006a).

*The author would like to thank the Department of Valuation and Taxation, Lincoln Institute of Land Policy, for financial support. Many thanks also go to Leah Brooks, Gregory Ingram, Robert Mohr, Udo Schlenrich, and David Wildasin for their helpful comments and suggestions.

Clearly, industrial production in Europe is shifting from traditional centers near the Atlantic to sites in Central and Eastern Europe.

No doubt there are numerous factors attracting industrial production to the newer member states. Two that deserve mention are the relatively high educational levels of the populations of the recent EU entrants and the widespread familiarity with information technology in several of those nations. EU expansion from 15 to 27 members actually increased the proportion of working-age adults who had completed at least a secondary education from 66.2 to 69.3 percent. In 2006, the percentages of households in Slovenia, Estonia, and Poland connected to the Internet exceeded the proportions in Portugal and Greece (Eurostat, 2007).

This recent shift in the geographic center of gravity of European productive activity is reflected in the relatively rapid growth of air passenger traffic and seaport container traffic at facilities in the new member states. Although London Heathrow and Rotterdam still dominate the EU as air and sea transport nodes, traffic in passengers and containers has grown far more rapidly in Budapest and Gdynia during recent years (European Commission, 2006a).

After a half century of growth and development, the EU has become a huge single market for intermediate and final products. In 2005, imports by EU-25 economies from other member states exceeded two thousand billion euros. During the same year, imports by EU-25 members from non-EU nations totaled less than 1200 billion euros (Table 1). Deepening of economic ties between the older and newer member states could be retarded, however, by inadequate transport infrastructure in the eastern reaches of the union. Although some road construction has taken place during recent years, there is not yet a modern road network serving the entire EU region (European Commis-

sion, 2006a). Because transmission of data can sometimes substitute for transportation of people or physical objects, the widespread availability of broadband access for business purposes throughout the EU-27 helps to create a single continental market (Eurostat, 2007).

Compared to unification of goods and financial markets, integration of European labor markets has proceeded more slowly. However, labor mobility among the EU member states has become quite substantial. The 1985 Schengen agreement, implemented a decade later, laid the foundation for free movement of people within the EU (Carrera, 2005). Even before the union expanded to 25 nations, large numbers of EU citizens had migrated to other member states, many of them seeking employment opportunities. In 2002, for example, 949 thousand citizens of other EU countries resided in the United Kingdom. By 1999, almost 1.2 million people from other parts of the EU lived in France (OECD, 2003).

Ireland offers an interesting example of labor mobility between European countries. Because of rapid economic growth during the 1990s, the Irish job market began to experience labor shortages, particularly of skilled manual and service workers. During a 5-year period, the Irish government issued nearly 107 thousand work permits to non-EU nationals, many of them Polish. As of May 2004, nationals of Poland and nine other EU entrant states have enjoyed free access to the Irish job market. Similar labor policies were adopted by Sweden and the United Kingdom (Grabowska, 2005).

The 2003 Treaty of Accession allowed the EU-15 member states to restrict immigration from the eight central and eastern European nations that joined the EU in 2004. Germany, France, and 10 other member states exercised that treaty right, thereby limiting labor mobility. It should be noted, however, that these immigration restrictions are “transitional arrangements” due to expire by 2009 (Carrera, 2005). Hence, legal barriers to labor migration within the EU region will continue to fall.

Of course, immigration laws and regulations are not the only barriers to international migration. Another impediment to labor mobility is a worker’s inability to speak the native language(s) of a potential country of employment. At first glance, it might seem that absence of foreign language skills is a serious labor mobility barrier in Europe. In the EU-25 region as a whole, 44 percent of the population can speak only their native tongues.

Table 1
Imports by EU-25 Members, 2005

	<i>Extra EU-25</i>	<i>Intra EU-25</i>
Value (billions of euros)	1178.5	2076.0
Weight (millions of tonnes)	1698.5	1494.1

Source: European Commission (2006a, Part 3, Table 3.1.12).

In Spain, Portugal, Hungary, and Italy, more than half cannot speak a foreign language (European Commission, 2006b).

Upon closer inspection, however, one finds that foreign language competencies are widespread among the nationalities of the EU, especially among the young. There are more than 200 million speakers of English, only 62 million of whom are native speakers. There are also 128 million speakers of French, only 65 million of whom are native speakers (Ginsburgh and Weber, 2005). Knowledge of English has become especially extensive among the young, with only 27 percent of those in the EU-15 region under age 40 years unable to speak English (Table 2). Because of foreign language instruction, large numbers of Europeans are now multilingual (Ginsburgh, Ortuno-Ortin, and Weber, 2005).

One conclusion supported by this historical sketch is that political and economic integration during the past half century have already achieved a high degree of international mobility of tradable goods, financial and real capital, corporate enterprises, and human talent within Europe. A second conclusion is that this mobility of goods, assets, and people is likely to continue increasing in the coming years. Elimination of “transitional” barriers to immigration, acquisition of foreign language skills by young Europeans, and investment in transportation infrastructure throughout Europe, for example, would favor even greater mobility of factors and products. As we shall see, however, higher mobility would also pose fundamental challenges for government budgets of the member states.

FISCAL STRAINS WITHIN THE EU

In an era of globalization, several facts about the fiscal policies of the EU member states are both salient and also significant. First, by the late 20th century, the EU – 15 nations had become a decidedly high-tax region within the OECD world. By

Table 2
Percent of EU-15 Population Unable to Speak Language, 2000

	<i>English</i>	<i>French</i>	<i>German</i>
Total population	45	66	69
Population < 40 years	27	63	67

Source: Ginsburgh and Weber (2005, pp. 279-80).

Table 3
Social Benefit Payments as Percent of GDP

	<i>1979</i>	<i>1989</i>	<i>1999</i>
EU-15 members			
• Maximum	• 20.85	• 21.09	• 23.55
• Minimum	• 7.03	• 8.25	• 12.50
• Mean	• 13.75	• 15.53	• 16.91
Japan	9.84	10.94	14.51
United States	10.72	11.33	13.75

Source: Cornelisse and Goudswaard (2002, p. 10).

2002, the tax revenue-to-GDP ratio for the older EU members had reached 40.6 percent, far higher than the one-quarter ratio in Japan and the United States (Boss, 2005). That average, however, disguises substantial differences among the EU-15 countries. In 2002, the tax revenue-to-GDP ratio exceeded 43 percent in both France and Italy, but it was less than 30 percent in Ireland (OECD, 2005).

One obvious reason for heavier taxation within the EU-15 region as a whole is that some Western European nations have historically offered relatively generous social benefit programs to their citizens, Sweden for example (Wildasin, 2000). A less obvious reason is that economic and political integration in Western Europe during the past several decades has apparently resulted in convergence of social benefit levels, with the less generous nations raising their social benefit levels relatively rapidly (Table 3).

Accession of 10 new member states in 2004 resulted in additional fiscal diversity within the EU. In 2003, the unweighted average of tax revenue-to-GDP ratios for the EU-15 was more than 7 percentage points higher than the average ratio for the 10 prospective members. In that same year, the implicit tax rates levied on consumption and labor were both 2.3 percentage points higher in the EU-15 region than in the NMS-10 region (European Commission, 2005).

Economic theory suggests that international factor mobility and national choices about tax and public expenditure levels are likely to result in tax competition among nations. As Wildasin (2003, p. 172) has observed,

[Parallels] emerge in the study of open economies on different geographical scales. Towns and cities must compete ... for investment and for human

resources; so must countries. Fiscal policies that impose heavy burdens or offer generous advantages to mobile resources are bound to affect economic development ... not only in small jurisdictions or regions but [also] in large ones.

With geographic expansion of the EU and deepening integration of its increasingly diverse national economies, do we see emerging signs of tax competition in Europe? Undoubtedly yes. Gorter and Parikh (2003) have found that the FDI positions of France, Germany, and the United Kingdom in another EU-15 economy increase by 4 percent after the host country decreases its effective corporate income tax rate by 1 percentage point relative to the EU-15 mean. In a survey of 25 empirical studies for various OECD nations, de Mooij and Ederveen (2003) reach a similar conclusion. Devereux and Griffith (2003) have found evidence that relative corporate tax rates of EU countries influence the location decisions of U.S. multinationals that have already decided to invest in Europe for other reasons. Büttner and Ruf (2007) have found that German multinationals respond to corporate tax rates in deciding whether to invest at home, elsewhere in the EU or in North America. Winner (2005) finds that capital mobility among the OECD countries has risen sharply since the late 1980s.

The erosion of corporate income taxation within the EU is clear. Statutory tax rates on corporate income plunged in both the newer and older member states from 1995 through 2005 (European Commission, 2005). The continuing decline in the Dutch tax rate on profits has prompted one observer to ask whether the corporate income tax can survive in the Netherlands (de Mooij, 2005). According to Winner (2005), the erosion of capital taxation in the OECD nations during the past two decades has resulted in a systematic shift from capital taxes to labor taxes. By 2003, the EU-15 member states had come to rely heavily on social security charges and

payroll taxes as revenue sources. Nearly 30 percent of EU-15 tax revenue in that year came from direct taxation of employee compensation (Table 4).

One response to this decline of corporate income taxation has been a call for coordination or harmonization of national tax systems within the EU (Winner 2005, van der Hoek 2003, de Mooij 2005). As noted by van der Hoek (2003), one area of taxation in which a degree of EU harmonization has been achieved is indirect taxation, in particular the value added tax (VAT). A minimum standard rate of 15 percent has been established throughout the EU and consequently the range of national VAT rates is now somewhat lower. To date, however, little progress has been made in coordinating direct taxation in Europe. Inaction on tax harmonization by the European Commission might reflect more pressing policy issues, immigration and terrorism for example. A more likely reason is that implementation of a single monetary policy for the EU as a whole has made retention of fiscal autonomy more valuable to the individual member states from a macroeconomic policy perspective.

In the future, erosion of the ability to collect personal income taxes from high-income households is also likely to confront the EU member states. Top marginal tax rates approach or exceed 50 percent in the EU-15 nations. The average top rate applied to taxable personal income is almost 15 percentage points higher in the EU-15 than in the NMS-10 group of member states (European Commission, 2005). Increased mobility of affluent European executives and professionals is likely to exert downward pressure on top personal income tax rates in years to come.

Even greater reliance on the VAT and retail excise taxes as a revenue source would be problematic for several reasons. One is that this form of taxation tends to be regressive. Another is that higher VAT and excise tax rates would induce even more tax evasion by "carousel" fraud and other schemes. At a recent meeting of the International

Table 4
Tax Revenue Sources As Percent of Total Taxation, 2003

	<i>OECD America</i>	<i>OECD Pacific</i>	<i>EU-15 Members</i>
Income & profits	38.6	43.3	33.2
Social security & Payrolls	20.9	16.0	29.8
Goods & services	32.3	30.6	30.4
Property	7.9	9.2	5.2

Source: OECD (2005, Table 1).

Table 5
**General Government Financial Balance
as Percent of GDP**

	1999	2007
Euro area (total)	-1.3	-1.5
• France	-1.7	-2.5
• Germany	-1.5	-1.4
• Italy	-1.8	-3.2
• Netherlands	+0.4	-0.2

Source: OECD (2006, Annex Table 27).

VAT Association, one speaker estimated that the EU revenue loss has reached \$120 billion annually and continues to grow (Woolfe, 2006).

Still another constraint on indirect taxation is the rapid growth of Internet-related market transactions in several of the EU-15 nations. By 2006, over a third of adults in Germany, the Netherlands, Sweden, and the United Kingdom had made recent online purchases. For the EU-25 as a whole, more than one in five Europeans had shopped on the Internet (Eurostat, 2007). These percentages will grow rapidly in just a few years because so many EU-25 households are already connectable to the Internet via high-speed links. As Wang (2006) has pointed out, international law has not yet sorted out how national governments will manage to tax Internet-based transactions.

In the face of a diminished capacity to collect traditional sources of tax revenue, the EU member states could turn to deficit financing, at least temporarily, in an effort to maintain public expenditure levels. However, this fiscal strategy would immediately run afoul of EU monetary integration. Since the introduction of the euro in 1999, the Stability and Growth Pact (SGP) has capped national budget deficits at 3 percent of GDP. As Table 5 demonstrates, budget deficits are already common in the euro area. Borrowing by the German federal government, for example, finally satisfied the SGP cap in 2006 after failing to do so for four years. One has to conclude that deficit financing of public spending is not a viable option if monetary union in Europe is to be preserved and even expanded.

LAND TAXATION AS A FISCAL REMEDY?

If traditional sources of tax revenue and borrowing cannot finance public expenditure programs in years to come, is there an alternative that EU member states could turn to? As already noted in Table

4, property taxation is currently a minor source of revenue for the EU-15 members compared to North America or Japan. Dependence on property taxation is particularly low in Austria, Finland, and Germany (OECD, 2005).

Several authors have recently mentioned that taxation of real estate values (i.e., the property tax) could play a larger role in European tax systems. Joumard (2002) has proposed that heavier taxation of real property could help to shift the tax burden from labor in Europe. Van der Hoek (2003) has argued that real estate is an immobile factor and therefore less susceptible to international tax competition than labor or capital.

The argument that real property is an immobile factor is only partially correct, however. In fact, developed parcels of real estate are a combination of land with capital improvements. Hence, the annual property tax is actually a combination of two distinct taxes, that imposed on assessed land values and that levied on assessed building values. Thus, the property tax is actually a pair of taxes with a common percentage tax rate. One is levied on a totally immobile factor, land, and the other on a factor that displays substantial mobility in the long term, buildings and other capital improvements situated on the land.

The theoretical and empirical case for unbundling the property tax and taxing land values at a higher rate than building values is a strong one. Brueckner (1986) and Anderson (1999), for example, have identified the theoretical conditions under which land value taxation would induce higher urban density, thereby helping to preserve rural lands from development. In an econometric study of cities in the U.S. state of Pennsylvania, Plassman and Tideman (2000) detected more construction activity in those localities that had actually implemented 2-rate property taxation. Tax policy simulations using computable general equilibrium models suggest that revenue-neutral shifts from distortionary taxes to a land value tax would stimulate income and employment in other U.S. cities as well (England 2002, Haughwout 2004).

Needless to say, U.S. cities are quite different from EU nations as objects of tax policy analysis. Hence, the studies just surveyed may not provide relevant lessons for Europe. Because some U.S. states have economies comparable in size to those of European nations, it seems more appropriate to glean policy suggestions from state-level studies in the United States. England (2003) has found

that a revenue-neutral shift from property taxation to land value taxation in one small U.S. state would stimulate construction, final output, and employment.

Using a tax simulation model calibrated to each of the 50 U.S. states, Nechyba (2001) discerned that a revenue-neutral shift by any state government from taxation of sales, personal income, corporate profit, or property values to a land value tax would attract capital investment and thereby stimulate employment and income levels. Under some elasticity assumptions and in some states, a higher tax rate on land values would even raise land prices, the reason being that the higher gross rents associated with a higher level of productive activity following tax cuts on capital and labor would more than offset any tax capitalization effects. For the European reader, the key point is that adoption of land value taxation by an individual EU member state is a possible alternative to negotiating tax harmonization agreements among 27 member states so that traditional taxes can be preserved from tax competition.

Of course, implementation of land value taxation in one or more EU nations would pose its own set of administrative and political challenges. One task would be to accurately assess the site values of all properties, developed and undeveloped alike. Another challenge would be the need to estimate how much annual revenue could be derived from land value taxation. Because of the population density and affluence of many European cities, urban land prices are high and thus the revenue potential of an urban land tax would seem to be quite substantial (Table 6). Although taxation of agricultural land would certainly provoke controversy and opposition within the European Union, levies on either agricultural land values or rents could serve

to supplement urban land tax revenues in France, Germany, Greece, and the United Kingdom.

CONCLUSION

The nations of Europe have achieved a great deal during the past half a century. A degree of economic, financial, and even social integration now exists within the European Union that would have seemed unattainable in 1945. This very success, however, threatens to undermine the tax systems of the member states. From the perspective of an economist on the other side of the Atlantic, land value taxation seems like a worthy candidate as a source of public revenue during the coming decades.

References

Anderson, John E. Two-Rate Property Tax Effects on Land Development. *Journal of Real Estate Finance and Economics* 18 (March 1999): 181-190.

Boss, Alfred. Tax Competition and Tax Revenues. Kiel, Germany: Kiel Institute for World Economics, 2005. Working Paper 1256.

Breckner, Jan K. A Modern Analysis of the Effects of Site Value Taxation. *National Tax Journal* 39 (March 1986): 49-58.

Büttner, Thiess, and Martin Ruf. Tax Incentives and the Location of FDI: Evidence from a Panel of German Multinationals. *International Tax and Public Finance* 14 (April 2007): 151-164.

Carrera, Sergio. What Does Free Movement Mean in Theory and Practice in an Enlarged EU? *European Law Journal* 11 (November 2005): 699-721.

Cornelisse, Peter A. and Kees P. Goudswaard. On the Convergence of Social Protection Systems in the European Union. *International Social Security Review* 55 (July 2002): 3-17.

de Mooij, Ruud A. Will Corporate Income Taxation Survive? *De Economist* 153 (September 2005): 277-301.

de Mooij, Ruud A. and Sjeff Ederveen. Taxation and Foreign Direct Investment: A Synthesis of Empirical Research. *International Tax and Public Finance* 10 (November 2003): 673-693.

Devereux, Michael P. and Rachel Griffith. The Impact of Corporate Taxation on the Location of Capital: A Review. *Economic Analysis and Policy* 33 (September 2003): 275-292.

England, Richard W. Land Value Taxation and Local Economic Development: Results of a Simulation Study. *State Tax Notes* 24 (April 2002): 323-327.

Table 6

Land Prices for Downtown Office Buildings, 2005

(millions of dollars per buildable hectare)

Bucharest	2.39 – 2.86
Copenhagen	4.00 – 8.00
Dublin	14.32 – 29.83
Frankfurt	65.62 – 137.20
Prague	3.58 – 11.93
Stockholm	12.63 – 18.95

Source: “Market Research,” 2006.

- State and Local Impacts of a Revenue-Neutral Shift from a Uniform Property to a Land Value Tax: Results of a Simulation Study. *Land Economics* 79 (February 2003): 38-43.
- European Commission.
 Structure of the Taxation Systems in the European Union: Data 1995 – 2003. Brussels, Directorate-General for Taxation and Customs Union, 2005.
 Energy & Transport in Figures 2006. Brussels, Directorate-General for Energy and Transport in cooperation with Eurostat, 2006a.
 Europeans and their Languages. Special Eurobarometer 243. Brussels, 2006b.
- Eurostat. Luxembourg, 2007. <http://epp.eurostat.ec.europa.eu>
- Ginsburgh, Victor, Ignacio Ortuno-Ortin, and Shlomo Weber. Disenfranchisement in Linguistically Diverse Societies: The Case of the European Union. *Journal of European Economic Association* 3 (June 2005): 946-965.
- Ginsburgh, Victor and Shlomo Weber. Language Disenfranchisement in the European Union. *Journal of Common Market Studies* 43 (June 2005): 273-286.
- Gorter, Joeri and Ashok Parikh. How Sensitive Is FDI to Differences in Corporate Income Taxation within the EU? *De Economist* 151 (June 2003): 193-204.
- Grabowska, Izabela. Changes in the International Mobility of Labour: Job Migration of Polish Nationals to Ireland. *Irish Journal of Sociology* 14 (June 2005): 27-44.
- Haughwout, Andrew F. Land Taxation in New York City: A General Equilibrium Analysis. In Amy Ellen Schwartz, ed. *City Taxes, City Spending: Essays in Honor of Dick Netzer*. Cheltenham: Edward Elgar, 2004. pp. 73-94.
- Joumard, Isabelle. Tax Systems in European Union Countries. *OECD Economic Studies* 34 (2002): 92-151.
- “Market Research.” Princeton, NJ, 2006. <http://www.naiglobal.com>
- Nechyba, Thomas. Prospects for Land Rent Taxes in State and Local Tax Reforms. Cambridge, MA: Lincoln Institute of Land Policy, 2001. Working Paper WP01TN1.
- OECD.
 Trends in International Migration. Statistical Annex. Paris, 2003.
 Tax policies Vary Widely from Country to Country, OECD Study Shows. Press Release, December 10, 2005.
 OECD Economic Outlook No. 80 – Statistical Annex Tables. Preliminary Version, November, 2006.
- Plassmann, Florenz, and T. Nicolaus Tideman. A Markov Chain Monte Carlo Analysis of the Effect of Two-Rate Property Taxes on Construction. *Journal of Urban Economics* 47 (March 2000): 216-247.
- van der Hoek, M. Peter. Tax Harmonization and Competition in the European Union. *eJournal of Tax Research* 1(2003): 19-36.
- Wang, Minyan. Tax Jurisdiction in Electronic Commerce from the Perspective of Public International Law – A Particular Examination of Income Tax. *Intertax* 34 (November 2006): 530-551.
- Wildasin, David E.
 Factor Mobility and Fiscal Policy in the EU: Policy Issues and Analytical Responses. *Economic Policy* 15 (October 2000): 339-378.
 Fiscal Competition: An Introduction. *Journal of Public Economic Theory* 5 (April 2003): 169-176.
- Winner, Hannes. Has Tax Competition Emerged in OECD Countries? Evidence from Panel Data. *International Tax and Public Finance* 12 (September 2005): 667-687.
- Woolfe, Jeremy. No Solution in Sight for EU’s Sales Tax Hemorrhage. *Accounting Today* 20 (June 2006): 3-44.