



The True Levels of Government and Social Expenditures in Advanced Economies

Jacob Funk Kirkegaard

Jacob Funk Kirkegaard, senior fellow at the Peterson Institute for International Economics, has been associated with the Institute since 2002. Before joining the Institute, he worked with the Danish Ministry of Defense, the United Nations in Iraq, and in the private financial sector. An author/editor of several books, he currently focuses his research efforts on European economies and reform, foreign direct investment trends and estimations, pension systems, demographics, offshoring, high-skilled immigration, and the productivity impact of information technology.

Author's Note: This Policy Brief updates the analysis in Kirkegaard (2009) and builds extensively on the data presented by the Organization for Economic Cooperation and Development (OECD 2014a). It is part of the Institute's project on Inequality and Inclusive Capitalism supported by major grants from the ERANDA Foundation. I am greatly indebted to constructive comments from my colleagues Marcus Noland, Tomas Hellebrandt, Edwin M. Truman, and Jan Zilinsky during the writing process. Any remaining errors are solely my own responsibility.

© Peterson Institute for International Economics. All rights reserved.

One of the most contentious issues in contemporary politics revolves around the optimal size of the government in society, the services that government provides the public, and the revenue raised to finance these services. Advanced economies differ over the aggregate scope of general government spending. Parts of Scandinavia devote 60 percent of GDP to the public sector, whereas government spending accounts for only around a third of GDP in South Korea and Switzerland.¹ Such dispari-

1. Preliminary data for general government total outlays are from the OECD (2014b, annex table 25).

ties reflect differing societal preferences over whether particular services, such as education and health care, should be provided in the public or the private sector. Advanced economies' contrasting choices in the scope and organization of social safety nets add another dimension to cross-country divergences in spending levels and the extent of resource redistribution among income groups.

Despite the general understanding that these divergences exist, surprisingly little information is available providing accurate comparisons of various levels of governments' measures and spending. When evaluating countries' spending efficacy and outcomes, care must be taken to include all sources in society that account for resources devoted towards social purposes. The complexity of advanced economies' welfare states often masks the true costs of government activities. Excessive emphasis is

Taking the full effects of tax systems and social spending from both private and public sources into account, the United States is seen to be devoting more resources toward social purposes than is generally acknowledged.

typically devoted to information about direct government social expenditures that is readily available and politically controversial. Meanwhile, many widely publicized analyses overlook the various ways that modern tax systems and private spending affect the level of social spending in different societies. This omission is especially relevant to cross-country comparisons, which are used by political leaders to attempt to sway the public debate.

This Policy Brief provides evidence showing that much of the conventional wisdom concerning social spending is faulty, especially in the United States. Taking the full effects of tax systems and social spending from both private and public sources into account, the United States is seen to be devoting more resources toward social purposes than is gener-

ally acknowledged. In fact, only the French spend more than Americans, while the alleged welfare-addicted Scandinavians and Europeans spend less on average.

This Policy Brief argues further that the important issue in terms of social spending in the United States is not how many resources are devoted to these purposes but how and for whose benefit the money is spent. High aggregate social spending in the United States has a very low impact on overall income inequality and healthcare outcomes, whether measured in a broad or narrow fashion. Adopting some best practices from other countries in health care could thus lead to substantial efficiency gains, not to mention better health outcomes.

I THE RELATIVE SIZE OF GOVERNMENTAL SERVICES SECTORS

The relative size of governmental services sectors in advanced economies is one of the most scrutinized and ideologically potent economic policy parameters, particularly in any transatlantic discussion of economic policy differences. Here the size gap between the government sectors in the United States and Europe is real. Since the mid-1990s, total annual general government revenues have been roughly 13 percentage points higher in the euro area (45.7 percent of GDP) than in the United States (32.4 percent of GDP), though government expenditures

Spending levels on social services are generally comparable on both sides of the Atlantic.

have been slightly less divergent, averaging around 11 percent of GDP because of higher general government deficits in the United States.² The general government sector in Europe is hence about one third larger than in the United States.

This fact, however, is mostly relevant in ideologically-based debates in which the size of government a priori takes on an independent value proposition. As the United States and European countries have historically differed on whether some services should be predominantly offered by the government or not, the relative size of the general government alone reveals little about how many resources countries devote towards providing often similar types of services. This is especially true for education and health care, where services in Europe are overwhelmingly provided by the public sector, while in the United States these

services are split more evenly between the general government and private sectors. Consequently, when the public or private provision of a service is not relevant, including private education and healthcare expenditures with the public sector yields a better comparison of the relative scale of resources devoted to delivering the same services in different advanced economies.

Figure 1 uses 2010 data—the latest available—to rank countries by their relevant combined total spending (in parentheses).³ General government expenditures on all activities other than education and health care in the United States were just under 30 percent of GDP, noticeably lower than in the EU-18⁴ at 37.3 percent. The United States and EU-18 spent essentially the same amount on public education, just over 5 percent of GDP, a considerably smaller amount than the Scandinavian countries. At 2.2 percent of GDP, private education expenditures in the United States were considerably higher than in European countries, though lower than in Korea and only slightly higher than in Japan, Israel, Australia, and Canada. Public healthcare expenses at 8.1 percent of GDP were equal in the United States and the EU-18, though considerable variation exists among European countries. Korea, Israel, Estonia, and Poland stand out with substantially lower public healthcare expenses than other countries in the Organization for Economic Cooperation and Development (OECD). For private healthcare expenses, the United States is a clear outlier among advanced economies, spending fully 9 percent of GDP in 2010, almost three times that of the next big spenders Portugal, Korea, and Canada.

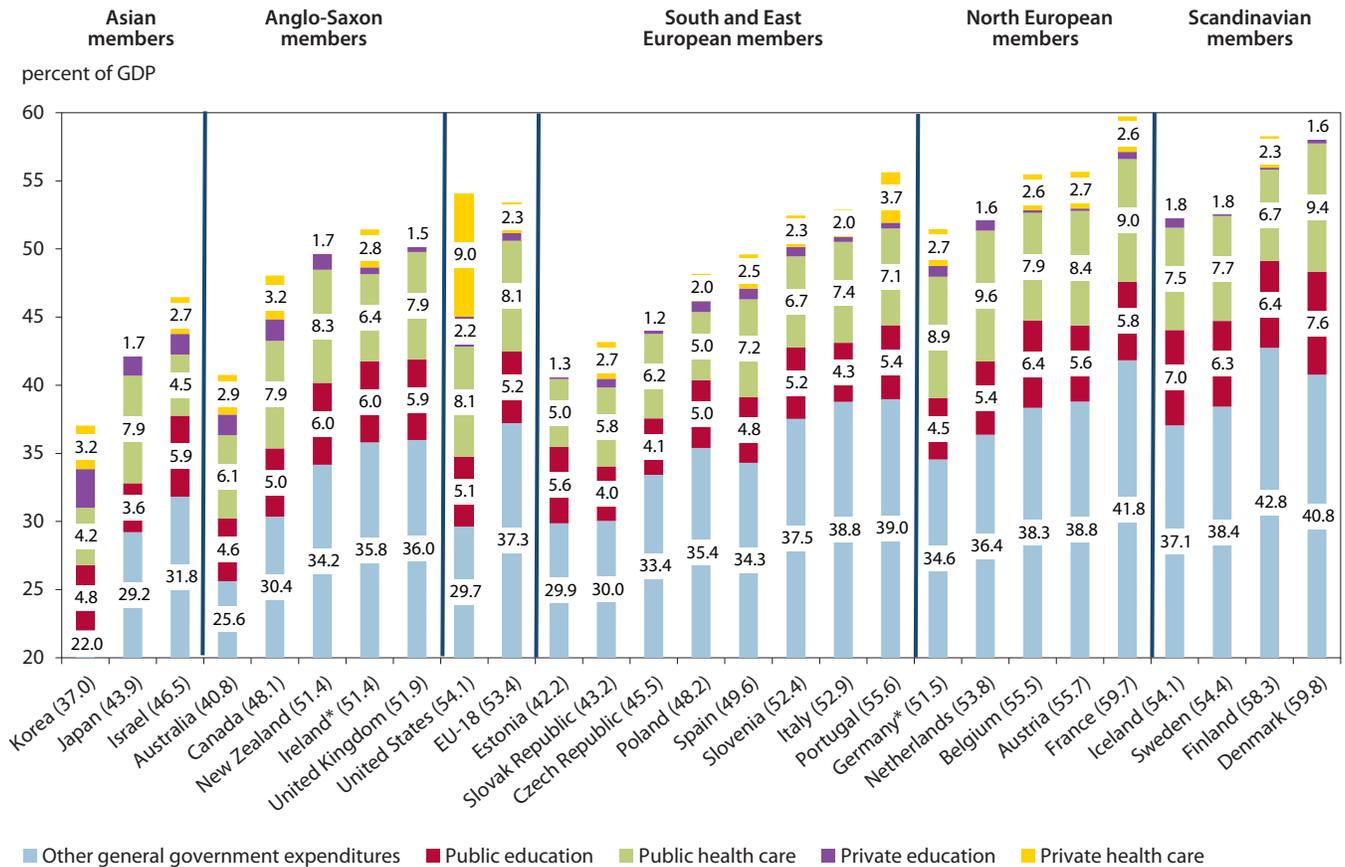
In sum figure 1 shows that when sectoral origin classifications of spending are ignored, the United States spent slightly more in the aggregate—54.1 percent of nominal GDP—on providing residents with the same services as did the EU-18 at 53.4 percent. The high levels of procyclical deficit spending by the US federal government likely inflates the general government expenditures somewhat, so what figure 1 illustrates is that spending levels on social services are generally comparable on both sides of the Atlantic. If one is looking for genuine small

2. Data from 1996–2015 (preliminary) for the general government sector (e.g. all government levels) and all tax and nontax revenues are from the OECD (2014b).

3. 2010 is the latest year for which all data series (except where noted) are available. This year is also the second year after the beginning of the Great Recession in 2008, during a period when countercyclical government deficit spending pushed overall general government outlays higher than the long-term average for virtually all OECD members. The general government total outlay data in figure 1 includes spending from both automatic stabilizers and discretionary fiscal stimulus. The smaller overall size of the general government in the United States, relative to Europe, means that the percentage increase in recession related expenditures is higher in the United States than in almost all European countries. This factor is amplified by the relatively large size of the fiscal stimulus under the American Recovery and Reinvestment Act of 2009 when compared to several European countries, such as Italy, which raised its total general government expenses less in response to the Great Recession.

4. EU-18 refers to the 18 members of the European Union in figure 1 for which data are available. EU-18 data values are GDP-weighted.

Figure 1 Public and private spending on similar services in OECD countries, 2010



EU-18 = All EU members in this figure; OECD = Organization for Economic Cooperation and Development
 * Private education expenditures for Germany and general government outlays for Ireland use 2009 data.
 Note: Parentheses indicate country rank by relevant combined total spending.
 Sources: OECD Education at a Glance (2013), OECD Economic Outlook Annex Tables (2014b), and OECD Health Statistics 2014—Frequently Requested Data (2014c).

government, Korea or Australia seem the obvious places to study instead—though with a rapidly aging population, government spending looks likely to rise in the former in the near future.

This should be comforting to those who believe economic pocketbook issues are more important than ideology. In many ways, roughly equally advanced economies with comparable cultures and aging populations spend approximately the same amount of resources on the same societal functions. Where they differ most is whether it is the public or the private sector that provides services. The distinction is arguably important, as it is likely that total US spending levels on typically governmental functions has been politically possible because the private sector has shouldered a relatively larger share. Whether such private sector provision of at least some typical governmental services—noticeably health care—is inherently more efficient than similar

public sector expenditures is, when looking at actual relevant sector outcomes, not empirically obvious.

II PUBLIC SOCIAL SPENDING AND ACCOUNTING FOR THE FULL EFFECTS OF THE TAX SYSTEM

Social spending and the potential for income redistribution is more directly relevant to the discussion about the role of government in advanced economies than aggregate spending levels. Whatever can be measured with timely and reasonably accurate data tends to get disproportionate attention in the public debate. Consequently, the most frequently referenced data concerns gross public social expenditures from government budgets. However, as public social systems in advanced

economies differ greatly from one another in institutional and financing terms, cross-country comparisons of budgetary outlays are not straightforward. The OECD Social Expenditure Database (SOCX) is an attempt to overcome these national differences by providing the best available comprehensive dataset for detailed public social expenditure comparisons.⁵

To facilitate cross-border spending analysis, the OECD defines social spending as:

“...the provision by public (and private) institutions of benefits to, and financial contributions targeted at, households and individuals in order to provide support during circumstances which adversely affect their welfare, provided that the provision of the benefits and financial contributions constitutes neither a direct payment for a particular good or service nor an individual contract or transfer.”⁶

This definition includes all relevant public spending items consisting of cash and/or benefits in kind in nine different policy areas: old-age, survivor, and disability pensions; health care; family support; active labor market policies; unemployment; housing; and other social spending. The SOCX, thus somewhat simplified, demarcates social spending as resources that help people out in hard times that does not require a quid pro quo, and it does not account for any difference in the degree to which social spending items are privately appropriable. In other words, there is no requirement in the SOCX that social spending be for the public good or inherently redistributive in nature. For instance, some types of preventative healthcare spending, say to fight Ebola, will be entirely a public good, while receiving a new kidney is a private benefit. This issue of appropriation has important implications for whether particular social spending items are innately suitable for private sector provision or not.

Using the latest available data from the SOCX, figure 2 shows that the lowest public social expenditures are generally found in some of the poorest OECD countries in Asia and Latin America, while the United States at 19 percent of GDP is considerably below the OECD average of 21.5 percent and far below most European countries and the EU-21⁷ average of 26.3 percent. Three Scandinavian countries, Austria, Belgium,

Italy, and France—all with gross public expenditures above 27 percent of GDP—top the advanced economies’ gross public social spending rankings. All told, figure 2 likely conforms to most people’s preconception of relative spending on social issues in rich countries.

However, the gross public social spending data of the type in figure 2, readily available from annual government budgets, do not capture the full picture of a country’s total commitment of resources towards social issues. In particular, this type of data fails to account for the full effect of tax systems on public spending on social protections. Two types of taxation issues modify the true value of gross social spending:⁸

Direct Taxation of Cash Benefits Many OECD governments levy full income tax and social security contributions on cash transfers to beneficiaries, rendering the redistributive impact in some cases substantially lower than suggested by gross spending indicators. This is especially true in many high-tax jurisdictions.

Indirect Taxation of Consumption by Benefit Recipients All OECD countries have some form of indirect taxation of all consumption, including that arising from cash benefit recipients. Yet country levels of indirect taxation of consumption of goods and services vary greatly, and higher indirect taxation reduces the “after tax” consumption opportunities provided by a given level of gross benefits and hence also lower actual redistribution associated with it. Again, this is a particularly relevant issue in OECD countries with very high levels of sales and value-added taxation.

Figure 3 illustrates the effect of different direct and indirect taxation systems in OECD countries and computes the public net after-tax social expenditures in the OECD in 2011.

In most of the European countries with high spending, governments claw back a sizable share of gross social expenditures through direct and indirect taxes. Hence, part of high social spending in these countries is “self-financed,” and the variation among OECD countries in public net after-tax social spending is thus somewhat smaller than gross spending allocation data indicate. The country with the highest total tax burden in the OECD in 2011—Denmark at 46.6 percent of GDP⁹—clawed back the largest share of GDP from gross public social spending, 6.7 percentage points,¹⁰ reducing its public net after-

5. The SOCX’s comprehensive spending coverage of all relevant budget items overcomes many of the national differences in budget data; for instance, the SOCX includes spending data for 300 social programs in France but only about 50 in Canada, reflecting the far larger and more complex public social spending in France. See OECD (2011) for additional details.

6. See the OECD Glossary of Statistical Terms, available at <http://stats.oecd.org/glossary/detail.asp?ID=2485>.

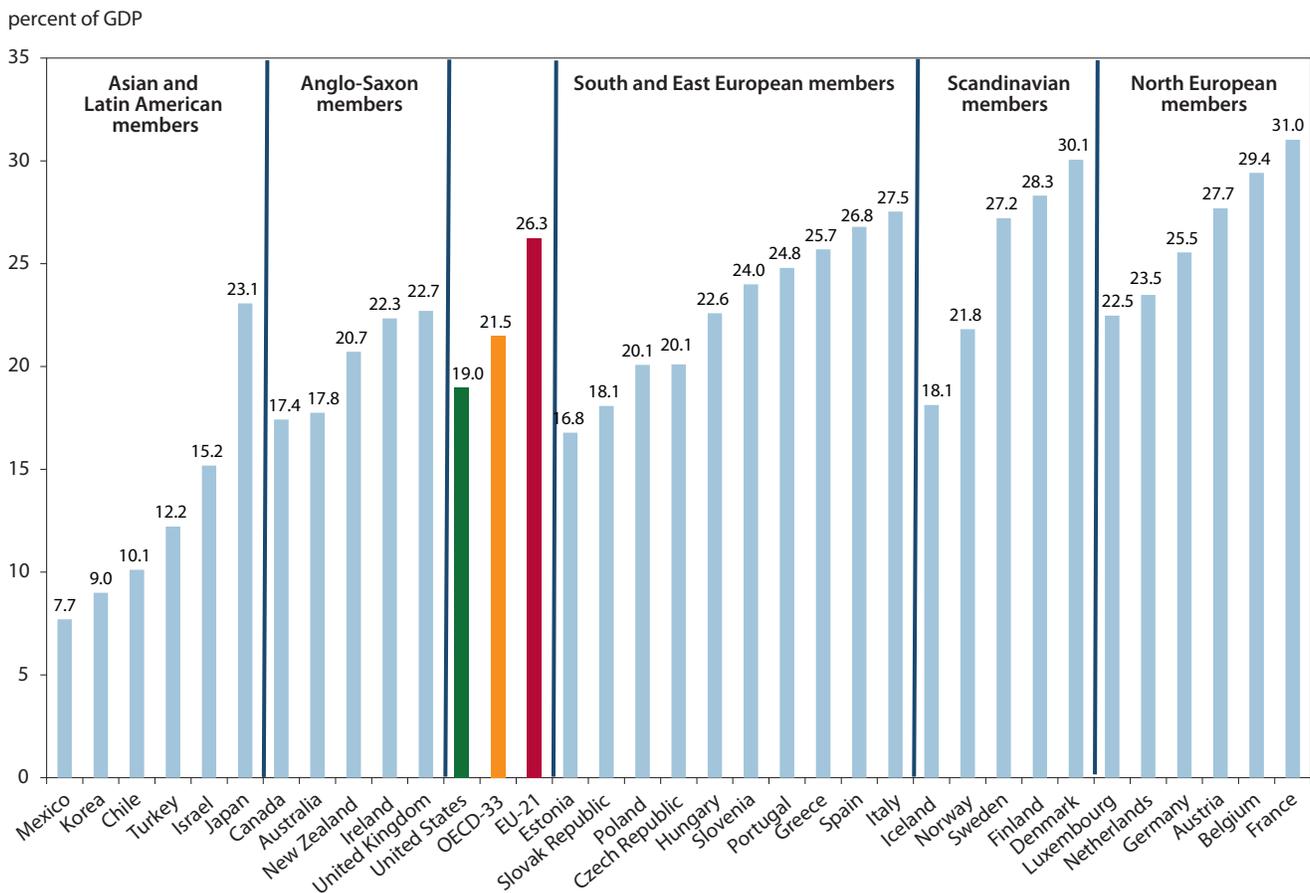
7. EU-21 countries include the 21 members of the European Union included in figure 2. EU-21 data values are GDP-weighted.

8. Fiscal adjustment measures included here consist only of “first round effects” related to the net value of benefits. Second order effects derived from social expenditures, like the direct taxation of the earnings of those who provide social services (e.g., staff in hospitals or childcare centers), are not included.

9. See OECD revenue statistics at <http://stats.oecd.org/index.aspx?DataSetCode=REV>.

10. The Danish government recouped 4.0 percent of GDP in direct taxation of cash benefits and 2.7 percent of GDP in indirect taxation of consumption by benefit recipients.

Figure 2 Gross public social expenditures in OECD countries, 2011



EU-21 = All EU members in this figure; OECD = Organization for Economic Cooperation and Development; OECD-33 = All OECD countries excluding the United States
 Source: OECD Social Expenditure Database (SOCX), 2014 update.

tax social expenditures to “just” 23.4 percent of GDP. Similar logic reduced 2011 public net after-tax spending levels by more than 5 percentage points of GDP in other high tax jurisdictions like Finland and Austria. On the other hand, relatively low tax countries like Mexico, Korea, Chile, Australia, and the United States,¹¹ where many cash benefits are not subject to any taxation, or full and indirect taxation is lower, recouped less than 1 percent of GDP from gross public social expenditures in 2011.

Accounting for the full effects of taxation in a number of OECD countries renders the implied “after-tax redistribution levels” arising from the cash benefit part of social expenditures significantly lower than suggested by gross expenditure levels. It can even be argued that such taxation of cash benefits ensures that everyone in society contributes to the financing of welfare states. That “everyone pays into the system” is probably of polit-

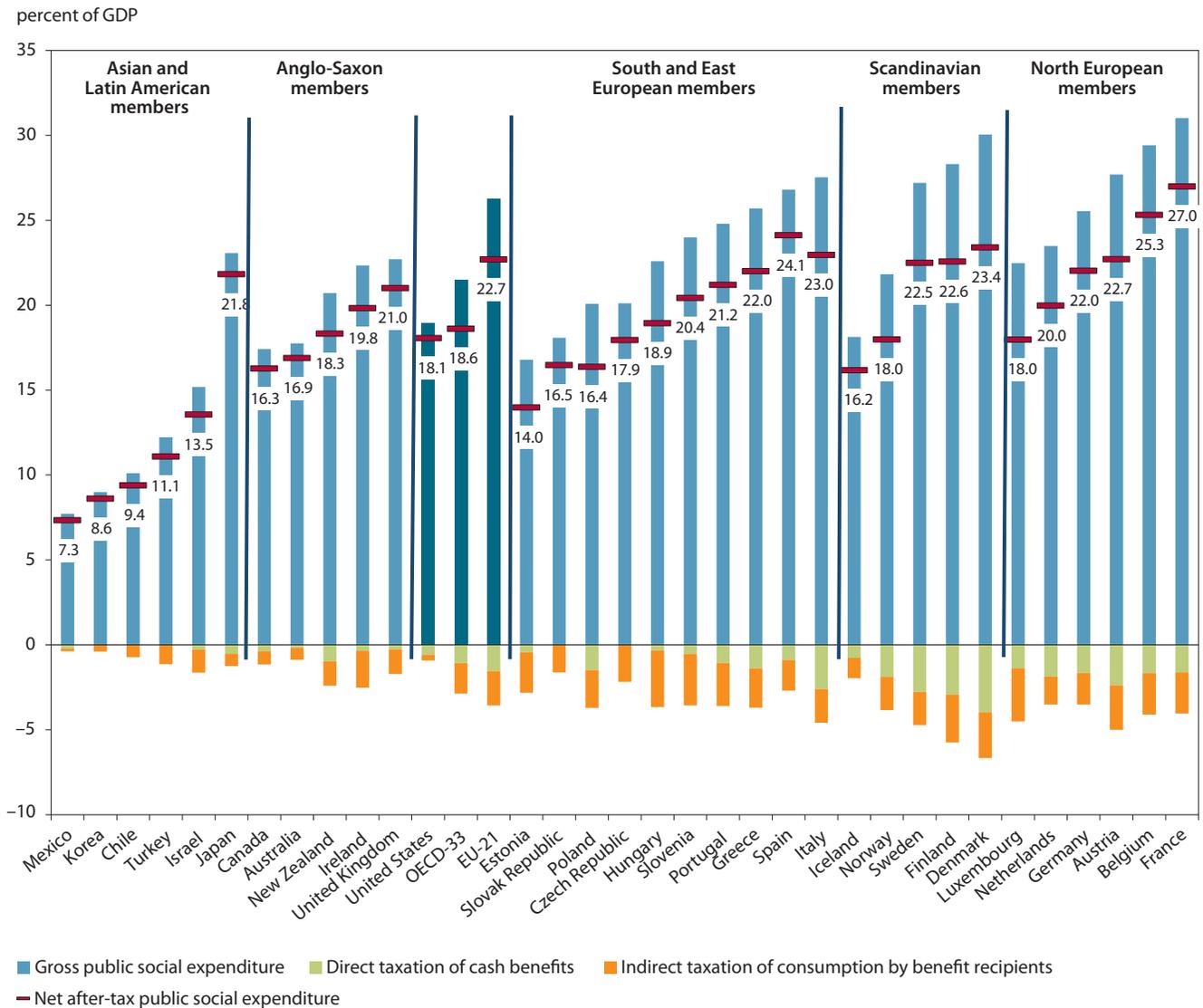
ical significance in OECD countries with high social expenditures and helps retain political support for such redistributive policies.

OECD government tax systems, however, also affect the true level of social spending in another important manner, namely in the form of foregone tax revenues, or tax expenditures, through so-called “tax breaks for social purposes,” or TBSPs. The OECD (2011) defines TBSPs as “those reductions, exemptions, deductions or postponements of taxes, which: a) perform the same policy function as transfer payments which, if they existed, would be classified as social expenditures; or b) are aimed at stimulating private provision of current benefits.”

TBSPs can take several forms. They can be similar to cash benefits and include expenses related to measures like the earned income tax credit (EITC) in the United States, or the sizable family support (*quotient familial*) tax break in France. TBSPs can also aim to stimulate private provision of current transfers and include uses of the tax system to promote the

11. The United States at 3.9 percent had the lowest indirect taxation levels in the OECD in 2011 (OECD 2014a).

Figure 3 Gross public social expenditure and the effects of taxation in OECD countries, 2011



EU-21 = All EU members in this figure; OECD = Organization for Economic Cooperation and Development; OECD-33 = All OECD countries excluding the United States
 Source: OECD Social Expenditure Database (SOEX), 2014 update.

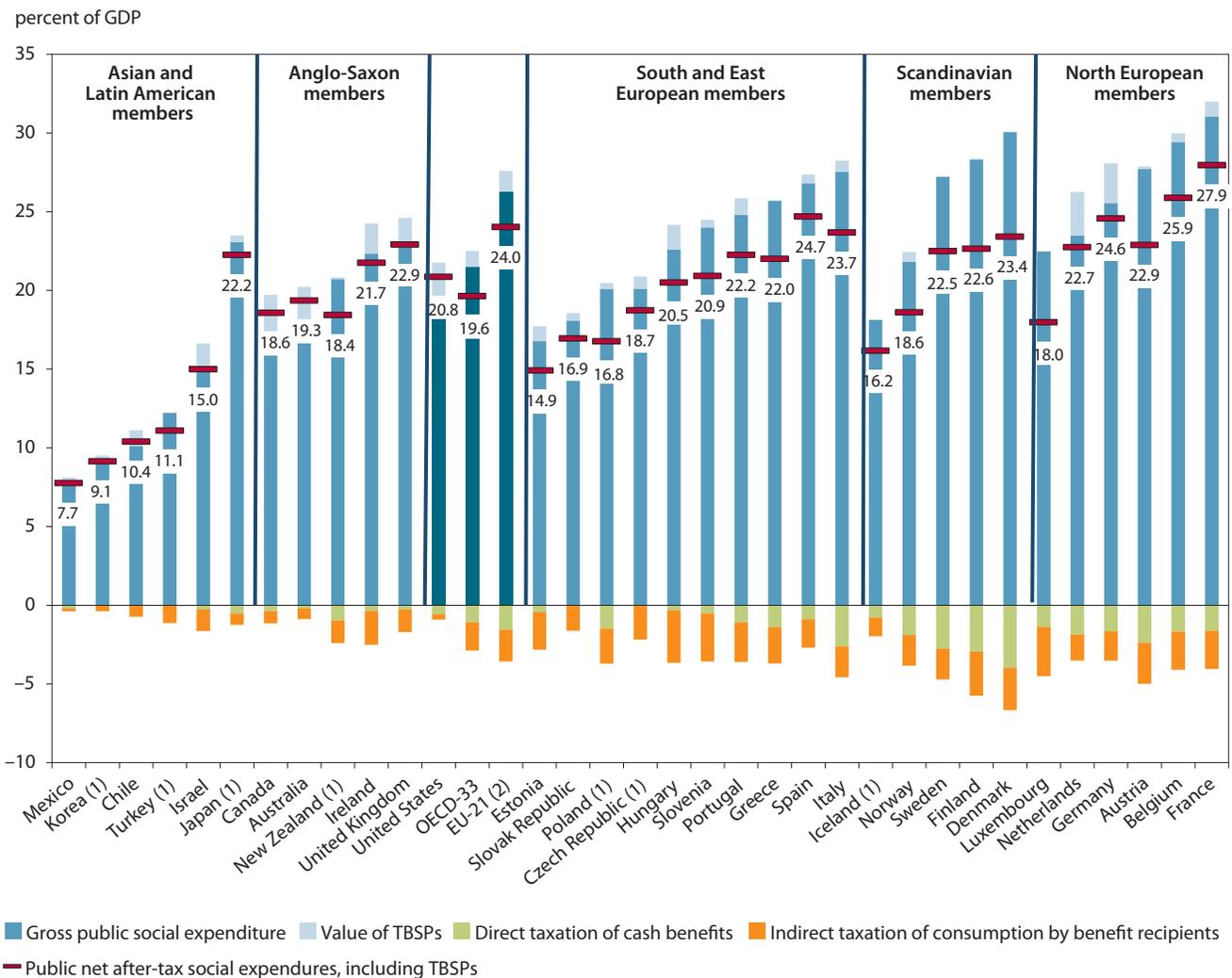
take-up of private social insurance coverage by individuals and/or employer-based plans in the current year, most often private unemployment or health insurance. The latter “health insurance type TBSP” in particular is very large in some OECD countries with sizable populations covered by private health insurance schemes. In the United States for instance, the Office of Management and Budget (OMB 2014) estimates that the TBSP allowing employers and individuals to write off medical expenses and insurance premiums amounted to a tax expense of \$196 billion in fiscal year 2014 alone, or more than 1 percent of US GDP. Lastly, many OECD countries use a TBSP to stimu-

late long-term private pension savings, e.g. to facilitate private social benefit provision beyond the current year.¹²

Figure 4 illustrates what happens when the unrecorded budget costs of TBSPs in the OECD countries are added to public net after-tax social expenditures. OECD countries differ substantially in their reliance on TBSPs for social outcome purposes. The United States, the Netherlands, and Germany

12. Significant methodological challenges exist for constructing comparable cost data for all OECD countries for TBSPs aimed at spurring long-term pension savings. Consequently, they are included only as a memorandum item in OECD (2014a), and no data exist for Korea, New Zealand, or Denmark.

Figure 4 Gross public social expenditure and tax effects in OECD countries, 2011



EU-21 = All EU members in this figure; OECD = Organization for Economic Cooperation and Development; OECD-33 = All OECD countries excluding the United States; TBSP = tax breaks for social purposes
 1. Does not include data for TBSPs aimed at spurring long-term private pension provision.
 2. Aggregate does not include data for TBSPs aimed at spurring long-term private pension provision for the Czech Republic and Poland.
 Source: OECD Social Expenditure Database (SOCX), 2014 update.

implicitly spend around 2.5 to 3.0 percent of GDP on TBSPs, while Australia, Canada, Hungary, Ireland, and the United Kingdom spend between 1.5 and 2.5 percent of GDP. Several OECD countries devote about 1 percent of GDP towards TBSPs, while others spend a trivial amount.

The full effect of the tax system, as shown in figure 4, clearly has an equalizing effect on true public social expenditures in OECD countries, as public net after-tax expenditure levels are often substantially below gross expenditure levels. By accounting for the full effect of the tax system, we can see that

American public social expenditures, at 20.8 percent of GDP, are just 3.2 percent of GDP lower than average expenses in the EU-21 and higher than expenses in Canada and Norway. The United States general government in fact spends only a few percentage points of GDP less on social affairs than most of the Scandinavian welfare states.

Taxes in other words matter a lot—not least for measuring how much governments really spend on social issues.

III THE FULL PICTURE OF COUNTRIES' SOCIAL SPENDING INCLUDES PRIVATE SPENDING

To get the true picture of the amount of resources a country devotes towards social expenditure and hence make meaningful outcome comparisons, it is necessary to include spending by both the public and the private sector. Inherent in the SOCX is the idea that from the perspective of an individual or household, or when comparing the ultimate societal outcomes of social spending, it does not matter whether the public or the private sector provides the resources for a specific social expense. When the distinction matters, for instance when hospitalization is required, the individual or household's ability to access resources to alleviate a given social problem is not dependent

Private social spending, where individuals and households pay for their own social expenses, is often outright regressive by design.

on the source of funding. On the other hand, as it is the individual or household that is almost invariably the ultimate source of funding for private social expenditure, the scope for resource redistribution between different income groups in society from private social spending is limited. The distinction between public and private social spending therefore matters for the implied degree of redistribution associated with the social spending in question.

Specific public social spending items may be more or less redistributive, depending on whether they are means-tested or based on self-insurance and prior contributions (like private systems). Yet public social spending, which in advanced economies is at least partly financed by progressive taxation systems and generally targeted towards lower income groups, retains a degree of progressive impact.

Private social spending, on the other hand, where individuals and households pay for their own (future) social expenses, is often outright regressive by design. This situation occurs when private social spending is incentivized through the implicit general government budget costs of TBSPs. In progressive tax systems, the individual/household tax benefit derived from a TBSP is always greater for higher income groups with a higher marginal tax rate. Because the lowest income groups pay very little or no income tax, they are essentially prevented from benefitting from a TBSP, even if they are able to pay for a private social expense; consequently by definition a TBSP over-

whelmingly profits higher income groups.¹³ The Congressional Budget Office (CBO 2014) estimates that the average tax rate for the lowest income quintile in the United States (which has a highly progressive set of marginal income tax brackets) in 2011 was just 1.9 percent, whereas it was 23.4 percent for the top income quintile. In other words, the financial benefit derived from the same TBSP in 2011 was 12 times greater for a top income quintile earner in the United States when compared to the lowest income quintile. It would seem straightforward to assume that advanced economies in which higher income groups possess a lopsided political influence would prioritize tax incentivized private social spending over the public kind.

Private social spending can take two principal forms:

Mandatory Private Social Spending This includes private social spending mandated by law by either individuals or employers on things like incapacity-related cash benefits, occupational accidents, sickness, or participation in some old-age pension plans.

Voluntary Private Social Spending Depending on the OECD country, this can include many of the same things that are mandatory private social spending in advanced economies but may also cover items such as employer-provided childcare support, supplementary wage insurance, or additional leave provisions. Healthcare expenses in the United States typically fall under this category.

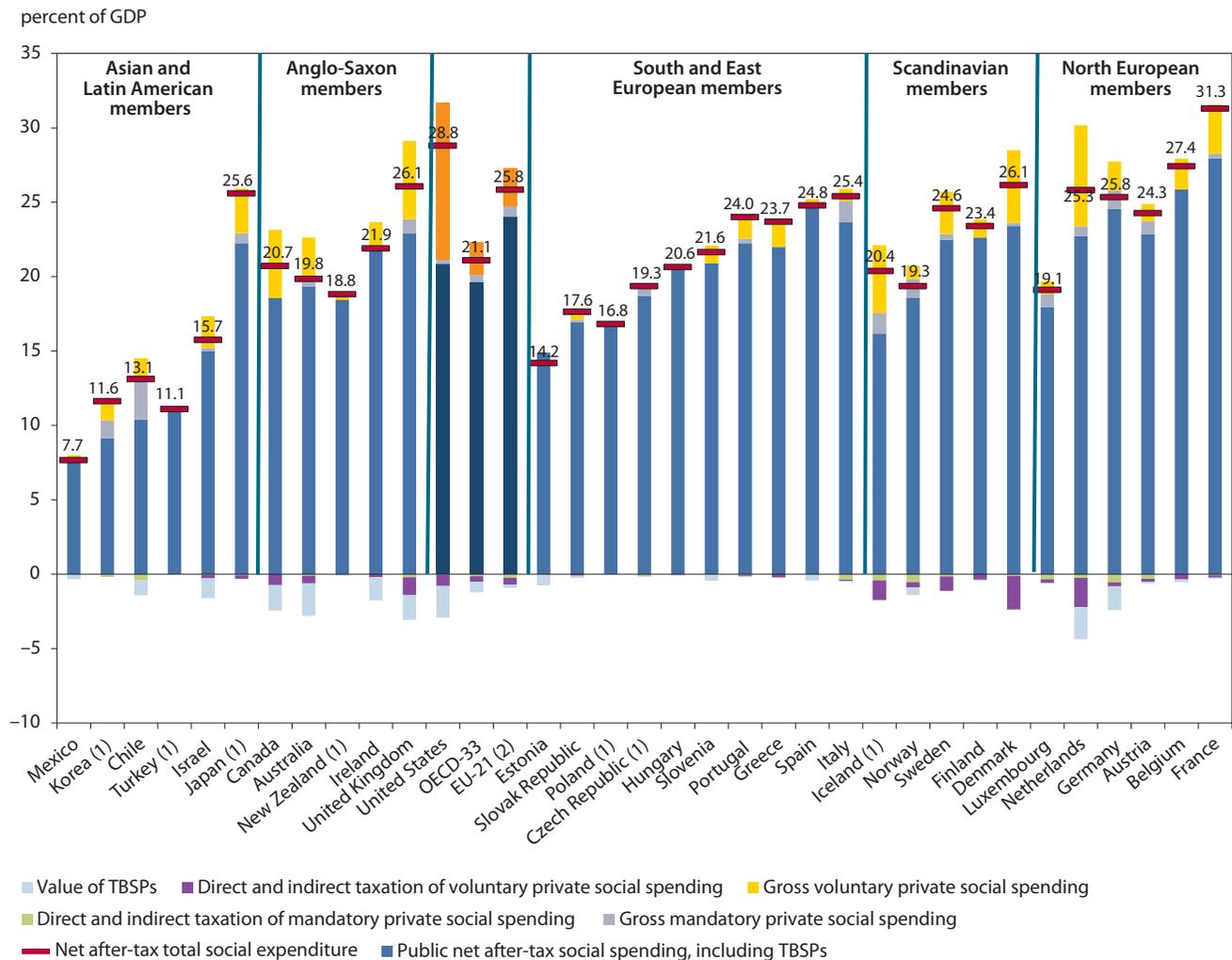
Often private social expenditures will benefit from the TBSPs discussed in the previous section, and the gross value of TBSPs going towards such private social spending (grey bars in figure 4) must therefore be subtracted from the value of gross private expenses, just as the direct and indirect taxation effects must be accounted for in public social spending.

Figure 5 starts with the net public after-tax social expenditure from the red horizontal bars in figure 4 (blue vertical bars in figure 5) and adds to them mandatory (grey bar) and voluntary (yellow bar) private social spending, while subtracting direct and indirect taxation income for the government from private social spending, as well as the government cost of TBSPs towards their provision.

Figure 5 shows there are very large country differences in the OECD in spending levels, especially for voluntary private social spending. In gross terms, this category accounts for more than 10 percent of GDP in the United States (overwhelmingly private social spending on health care), and 5 to 6 percent of

13. Many of the lowest income groups in society though are often elderly, people with severe disabilities, or students, who therefore earn no regular taxable wage income.

Figure 5 Net after-tax public and private social expenditure in OECD countries, 2011



EU-21 = All EU members in this figure; OECD = Organization for Economic Cooperation and Development; OECD-33 = All OECD countries excluding the United States; TBSP = tax breaks for social purposes
 1. Does not include data for TBSPs aimed at spurring long-term private pension provision.
 2. Aggregate does not include data for TBSPs aimed at spurring long-term private pension provision for the Czech Republic and Poland.
 Source: OECD Social Expenditure Database (SOCX), 2014 update.

GDP in the Netherlands and the United Kingdom. In most other OECD countries, total private social spending accounts for no more than 2 percent of GDP.

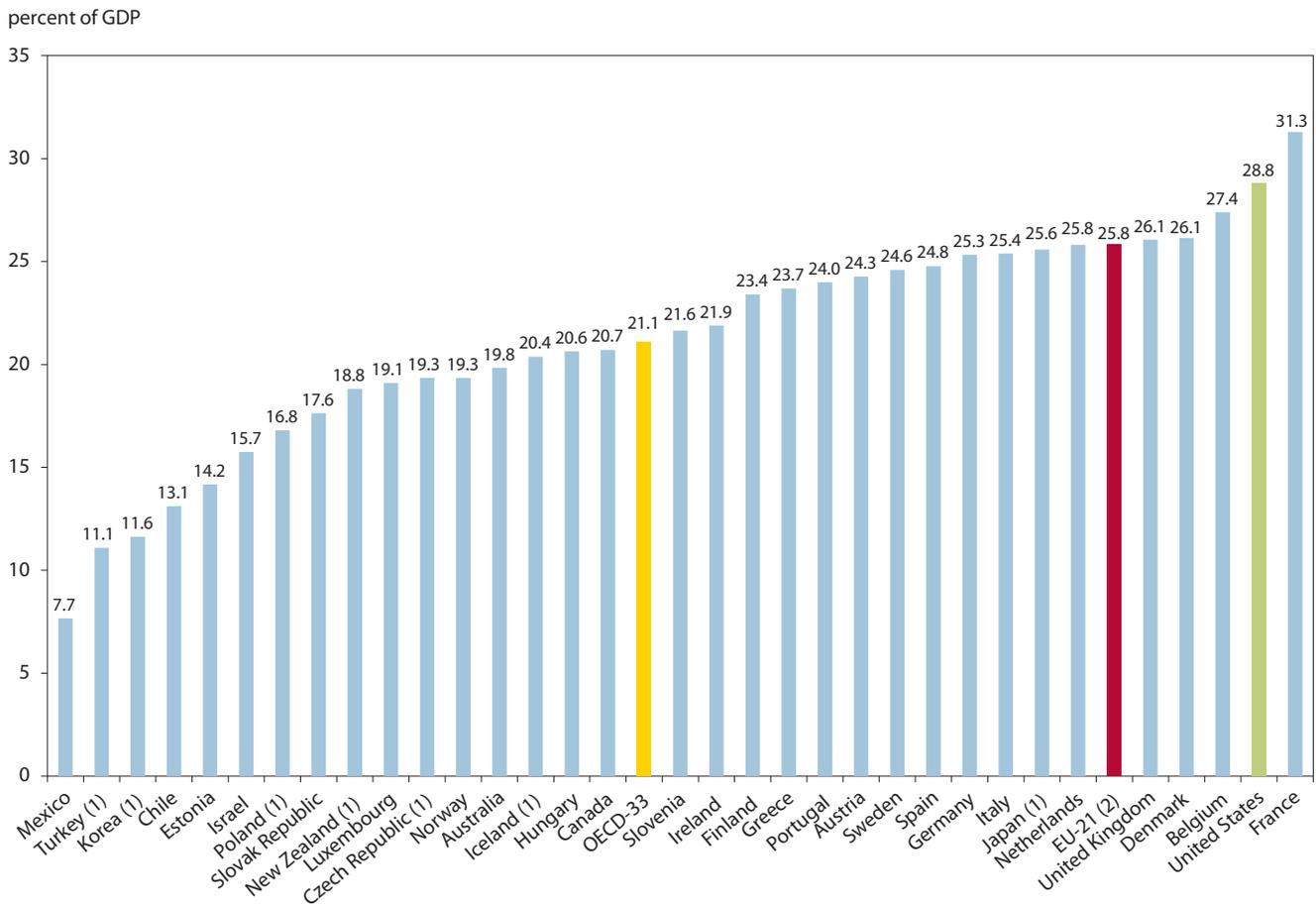
Adding the net additional private social spending to net after-tax public social spending dramatically changes the OECD country ranking for the total level of resources devoted to social expenditures. Figure 6 presents the true ranked picture for OECD countries' net after-tax total social expenditures.

Figure 6 shows how France, at 31.3 percent of GDP, tops the OECD in total social expenditure by a substantial margin, as it does in figure 2 for gross public social expenditure. However,

in second place and ahead of the traditionally assumed “big social spenders” in Europe is the United States, catapulted to this position by its high levels of private social spending.

Total net after-tax social spending in the United States is consequently 3 percentage points of GDP higher than the EU-21 average and 7 to 8 percentage points of (a relatively larger US) GDP higher than the non-US OECD average. The US “welfare state” might be relatively small, but that doesn't mean that total social spending is low in the United States, just that it takes the form of nonredistributive private social spending relatively more than in other advanced economies.

Figure 6 Net after-tax total social expenditures in OECD countries, 2011



EU-21 = All EU members in this figure; OECD = Organization for Economic Cooperation and Development; OECD-33 = All OECD countries excluding the United States; TBSP = tax breaks for social purposes

1. Does not include data for TBSPs aimed at spurring long-term private pension provision.

2. Aggregate does not include data for TBSPs aimed at spurring long-term private pension provision for the Czech Republic and Poland.

Source: OECD Social Expenditure Database (SOCX), 2014 update.

Truly “bare-boned” social welfare systems with low levels of total net after-tax social spending at below 20 percent of GDP are found among some of the poorer members of the OECD (Mexico, Korea, Turkey, Israel, parts of Eastern Europe, Australia, and New Zealand) and among some of the richest OECD countries (Luxembourg and Norway). Figure 6 also makes it clear that the often assumed “gold standard” among welfare systems in Scandinavia is if anything slightly cheaper to run than the European average, and certainly Scandinavians spend less in total on social purposes overall than Americans do.

Due to the lack of comparable data, this Policy Brief does not include relevant information about countries’ level of (formal) private charitable donations, or (informal) family support; however, box 1 provides an assessment as to whether

low levels of public social spending are associated with increased charity.

IV “VALUE FOR MONEY” FROM SOCIAL, HEALTHCARE, AND EDUCATION SPENDING

Evaluating the outcomes from overall social spending, or from total sector spending in particular areas like health care, is invariably shaped by competing democratic political interests. Some may wish to limit resource redistribution out of fear of inducing moral hazard or a dependency culture, while others strive to reduce income inequality from a fairness perspective. Some see an advantage in allowing prices to ration what they see as otherwise insatiable demand for health care, while others

Box 1 Public social spending and private charitable donations

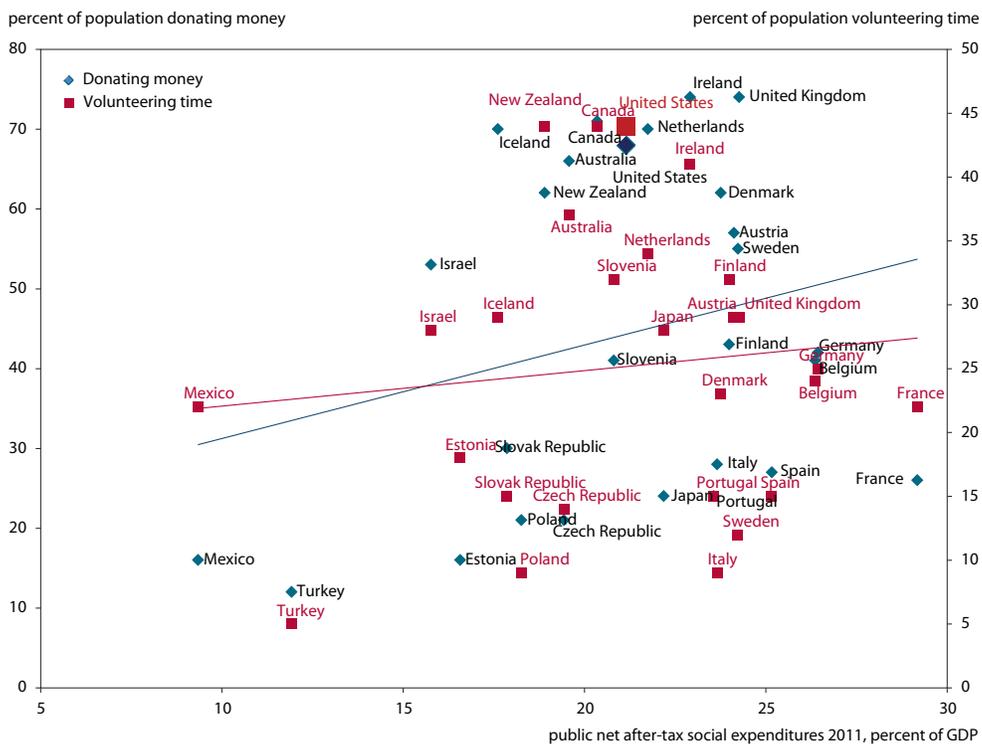
It might seem reasonable that low levels of total public social spending would be countered by high levels of private generosity in society, as residents make up for their low tax payments through plentiful private donations. Several issues, however, combine to undermine such notions.

First, average levels of public after-tax social expenditures (see figure 4) in the OECD at just under 20 percent of GDP is about an order of magnitude higher than the approximately 2 percent of GDP (\$335.17 billion in 2013) that American individuals, foundations, estates, and corporations have given annually to charitable causes since 2009 (Giving USA 2014). As America is generally considered to have the highest total level of charitable donations among advanced nations,¹ it is clear that adding such donations to public after-tax social expenditures will not materially change the total resource rankings presented in this Policy Brief. The levels of private charitable giving are simply too small to make up for differences in much higher public spending levels.

Second, private charitable giving is a mixed bag of causes and collateral, many of which may not contain any apparent “social spending element.” Included in Giving USA’s total American charitable givings are various large pledges of artwork to museums, such as the recent \$500 million pledge of artwork made by media magnate Jerry Perenchio to the Los Angeles County Museum of Arts.² Similarly, one can argue that many donations to medical research or universities may be “good giving causes,” but they embody only limited social spending character. This is especially the case with donations to elite universities with large existing endowments.

And third, there is no inverse relationship between countries’ public net after-tax social spending and several measures of broad private propensity to donate money and time to charitable causes. Box figure 1 combines data for populations’ propensity to donate money and time from the latest World Giving Index (CAF 2014) and countries’ public net after-tax social expenditures.

Box Figure 1 Net public social expenditure, private donating, and volunteering, 2013



Sources: OECD Social Expenditure Database (SOCX), 2014 update; author’s calculations; and Charities Aid Foundation (CAF 2014).

(continued)

1. CAF (2006, figure 1) presents data that shows total US charitable giving levels in 2005 to be more than twice as high in percentage terms of GDP than the second-ranked advanced economy (the United Kingdom).

2. Soraya Nadia McDonald, “Jerry Perenchio, a very private man, just publicly bequeathed the L.A. County Museum half a billion dollars worth of art,” *Washington Post*, November 7, 2014, <http://www.washingtonpost.com/news/morning-mix/wp/2014/11/07/meet-jerry-perenchio-the-man-who-just-bequeathed-the-l-a-museum-half-a-billion-dollars-worth-of-art/> (accessed on February 10, 2015).

Box 1 Public social spending and private charitable donations (*continued*)

Box figure 1 shows that there is only a marginal relationship between public social spending and peoples' private willingness to donate time and money to charitable causes and that this correlation is only weakly positive. Advanced economies with higher public net after-tax social spending hold populations that are somewhat more likely to donate time and money to charitable causes.³

Box figure 1 also illustrates how the United States scores quite high on both residents' willingness to donate money (68 percent) and volunteer time (44 percent). At the same time, the United States is only one of several advanced economies with this approximate propensity of public willingness to give time and money to charity. Substantially higher levels of overall US generosity indicated when charitable giving levels are measured as a share of GDP consequently reflect the much larger size of some American donations, rather than a stand-out big-heartedness among a much larger share of the population than elsewhere.

3. When the poorest OECD countries in Mexico and Turkey are excluded from box figure 1, this relationship turns marginally negative but similarly has almost no predictive power.

worry that access to lifesaving procedures is potentially unequal and therefore unethical. Yet it is necessary to try to assess very large cross-country spending differences in these categories in conjunction with data series capturing cross-country differences in relevant outcomes. This is particularly informative in the evaluation of whether a specific government-private sector spending breakdown yields better results in specific areas.

It is important to distinguish between outcome effectiveness and economic efficiency. Outcome effectiveness in public policy means elected officials set a policy goal and achieve it (effectiveness) or not (ineffectiveness). A hypothetical health-care example would be a policy decision (following an election pledge) to cut the mortality rate of breast cancer in half, followed by an increase in earmarked resources towards this purpose to be spent on improved preventative measures and timely treatment options. Deciding whether these measures were effective or not would be straightforward.

Yet, effectiveness is a purely goal-oriented notion—e.g. whether the policy goal was achieved or not—and is separate from the concept of economic efficiency. Efficiency can only be evaluated by considering the resources spent towards achieving the policy goal. Returning to the pledge of halving breast cancer mortality, a measure like mandatory annual mammograms freely provided to all women over 18 may well prove effective at achieving the goal. Yet it would not be efficient if it required the transfer of resources away from other effective healthcare policies also aimed at achieving the goal of reducing breast cancer mortality (or even mortality in general). Throwing money at a given social problem may often be effective, but it is very rarely efficient.

Numerous such policy intentions underlie the diverse public and private social spending analyzed earlier, rendering concise evaluations difficult. At the same time, what is clear is

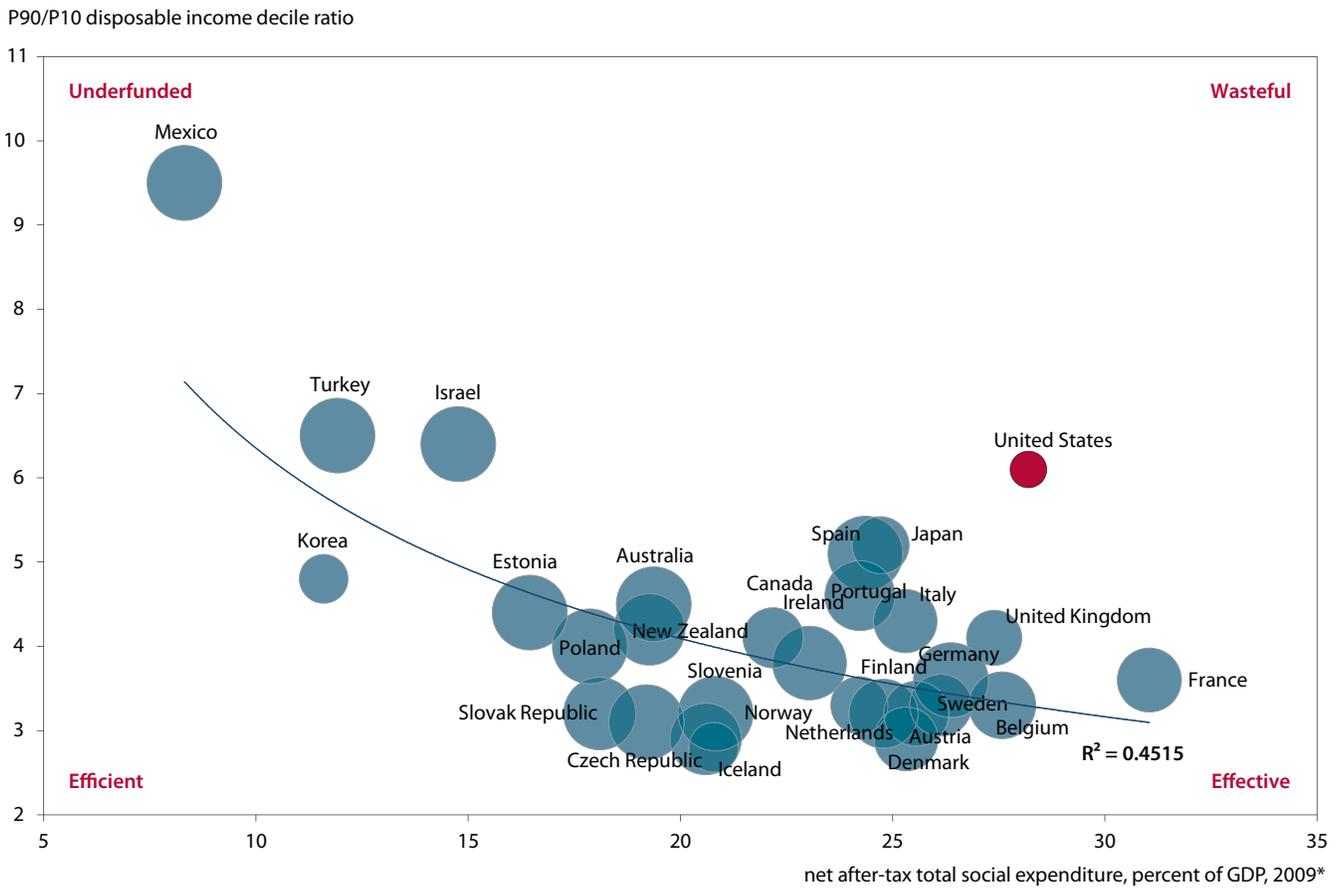
that much of social spending is at least rhetorically intended to alleviate the effects of poverty and broad income inequality. Figure 7 illustrates whether advanced economies' net after-tax total social expenditures bear any resemblance to their broad after-tax income inequality, proxied here by comparing the disposable income of the highest decile of the population to that of the lowest—the P90/P10 disposable income decile ratio.

Figure 7 shows a relatively strong relationship between net after-tax total social spending in advanced economies and their broad income inequality. Countries that spend more tend to have lower levels of inequality, but the effect of spending declines and becomes marginal at higher levels of spending. A simple declining power function¹⁴ explains almost half of the variation between OECD countries, if the United States is excluded from the sample. At the same time, however, if the four OECD members with the smallest net after-tax total social expenditures are excluded from the dataset, there is no longer any relationship between broad income inequality and spending. This highlights the rapidly declining marginal effects on income inequality of additional social spending above the 15 percent of GDP threshold in the OECD.

Yet at the same time, the four corners in figure 7 (efficient—low spending/low inequality; underfunded—low spending/high inequality; wasteful—high spending/high inequality; and effective—high spending/low inequality) indicate that similar levels of spending can result in very different inequality outcomes. Substantially lower spending levels in Slovakia and the Czech Republic thus result in inequality levels very close to that of higher-spending Denmark. While this similarity in

14. This type of function is written as $y = x^z$ (where z is a negative constant) and is chosen here to capture the presumption that the marginal impact additional social spending has on inequality declines.

Figure 7 Net after-tax total social expenditure and broad income inequality, 2009–10



OECD = Organization for Economic Cooperation and Development; P90/P10 = ratio of the income of the highest decile of the population to the income of the lowest decile
 * Disposable income decile data for Japan and New Zealand use 2010 data.
 Note: Size of bubbles indicates the relative share of public social spending; to facilitate reading, the percentage share of public spending in total spending has been raised to the fifth power to exaggerate differences.
 Source: OECD Income Distribution Database, <http://www.oecd.org/els/soc/income-distribution-database.htm>.

outcomes is likely related to the former two countries’ communist legacy, it also suggests that Denmark has relatively more self-insurance-based and universal public social spending and is hence less redistributive at the margin.

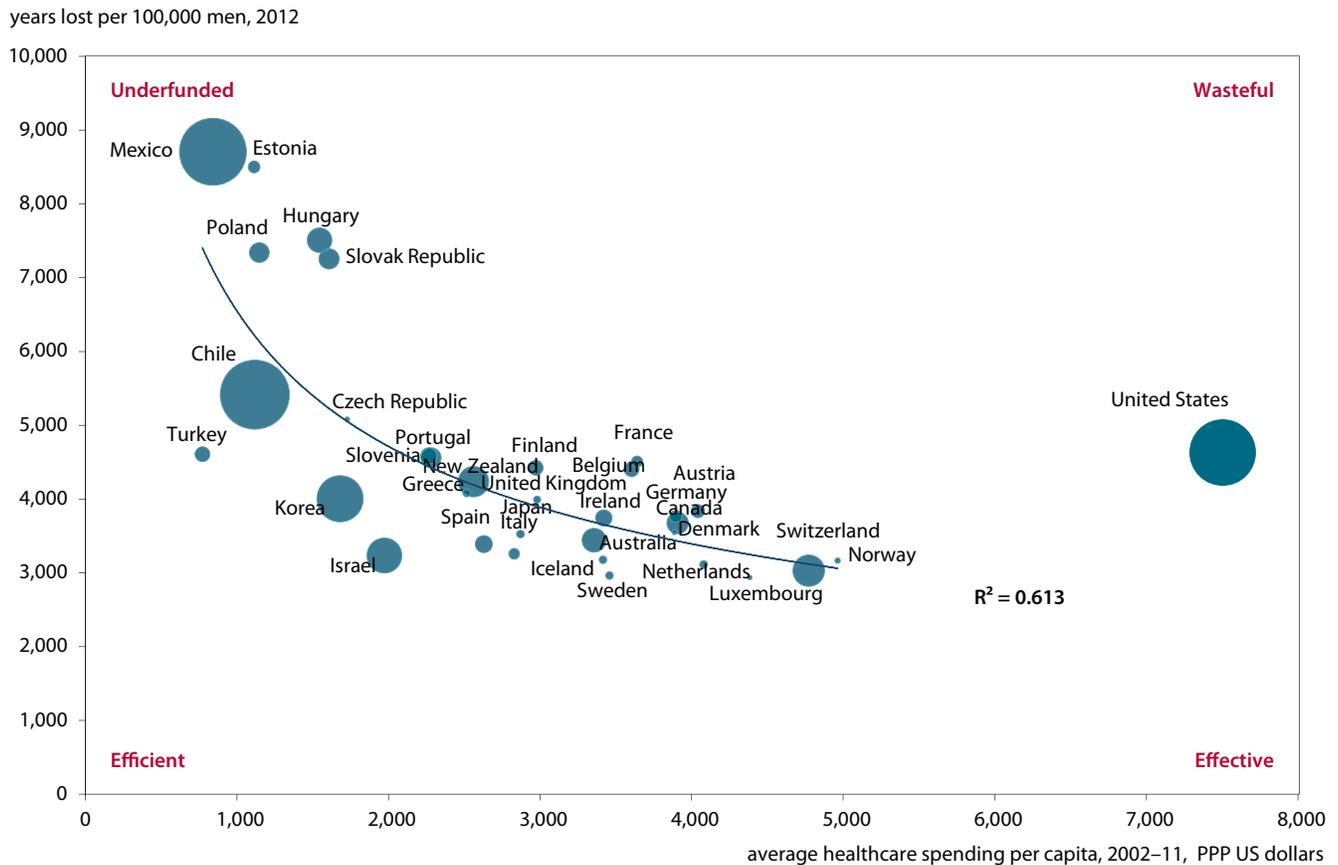
Meanwhile the United States stands out with arguably the least efficient net after-tax total social spending in terms of inequality, with both spending and inequality levels higher than all other advanced economies except France (higher spending), Israel, Turkey, and Mexico (higher inequality). The fact that the United States has the highest share of after-tax private social spending (the difference between the red bars in figures 4 and 5) at around 25 percent likely explains some of this outcome. The relative shares of public spending in total after-tax social spending is indicated by the size of the bubbles in figure 7; as the smallest bubble in the figure, the United States has the highest private share of spending. Yet other advanced economies like

Korea, Iceland, and the United Kingdom also have substantial shares of 10 to 15 percent of after-tax private social spending but far better inequality outcomes than in the United States. This comparison suggests that a higher private social spending share cannot entirely explain the low efficiency of US aggregate social spending.

Inferences about the efficiency of resources used towards specific policy goals are more straightforward when using the same type of methodology on individual subcategories of social spending. As healthcare spending accounts for the single largest subcategory of aggregate social spending by far, this sector by sheer aggregate economic importance is the obvious candidate for analysis.

Figures 8a, 8b, and 8c illustrate the efficiency of total health-care spending per capita in advanced economies using both a broad and narrow indicator of health outcomes. Potential years

Figure 8a Healthcare spending and health outcomes: Potential years of life lost for men, ages 0–69



OECD = Organization for Economic Cooperation and Development; PPP = purchasing power parity
 Note: Size of bubbles indicates relative share of total spending that is private.
 Source: OECD Healthcare Database 2014.

of life lost (PYLL) is the broadest available summary indicator of premature mortality, providing an explicit way of measuring deaths occurring at younger ages (below 70 years), which are, a priori, preventable.¹⁵ Figure 8a refers to PYLL for men and figure 8b PYLL for women.

Figures 8a and 8b show a strong relationship between per capita healthcare expenditure and PYLL levels for almost all OECD economies. Countries such as Mexico that spend less

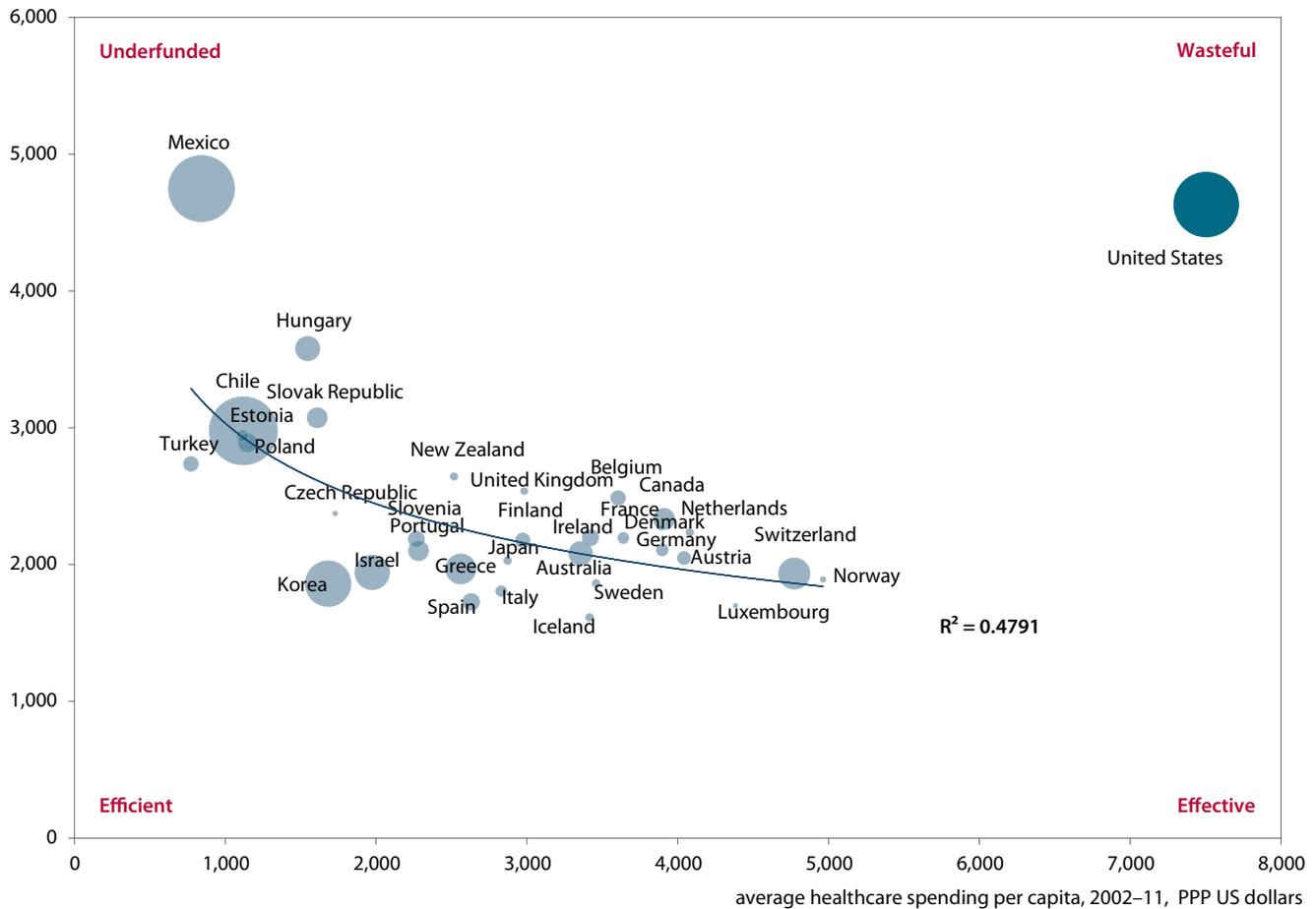
have higher PYLL levels, while Norway and Switzerland at around \$5,000 per capita in healthcare spending have much lower PYLL levels. Furthermore, the decline in PYLL levels becomes more gradual at higher levels of healthcare spending. The large difference in male and female PYLL levels across advanced economies—male PYLL is on average 87 percent higher than for women—is related to the large gender differences in preventable mortality due to external causes, including accidents and violence.

Meanwhile it is quite evident that the United States is the outlier among advanced economies in terms of healthcare spending and outcomes. America’s far higher healthcare spending at around \$7,500 per capita does not translate into fewer preventable deaths. Especially for American women the return on healthcare spending is appalling, as PYLL levels are 45 percent above the OECD average and on par with Mexico, which spends just \$858 on health care per capita. The situation

15. The calculation of PYLL involves summing up deaths occurring at each age and multiplying this sum with the number of remaining years to live up to a selected age limit. According to the OECD (2003, 16) premature mortality measured in terms of potential years of life lost focuses on deaths among the younger age groups of the population. Values are by definition heavily influenced by infant mortality and deaths from diseases and injuries affecting children and younger adults. A full list of causes of deaths included by the OECD is available for download as an Excel file at <http://stats.oecd.org/wbos/fileview2.aspx?IDFile=9506bbe9-c549-4951-8410-757676477e2c> (accessed February 10, 2015).

Figure 8b Healthcare spending and health outcomes: Potential years of life lost for women, ages 0–69

years lost per 100,000 women, 2012



OECD = Organization for Economic Cooperation and Development; PPP = purchasing power parity
 Note: Size of bubbles indicates relative share of total spending that is private.
 Source: OECD Healthcare Database 2014.

for US men is relatively better at PYLL levels just 31 percent above the OECD average.¹⁶ Yet this does not change the fact that the United States has far poorer healthcare outcomes relative to its spending than other advanced economies. The size of the bubbles in figures 8a and 8b moreover makes it clear that greater spending in the private sector provides no obvious efficiency gains in health care.

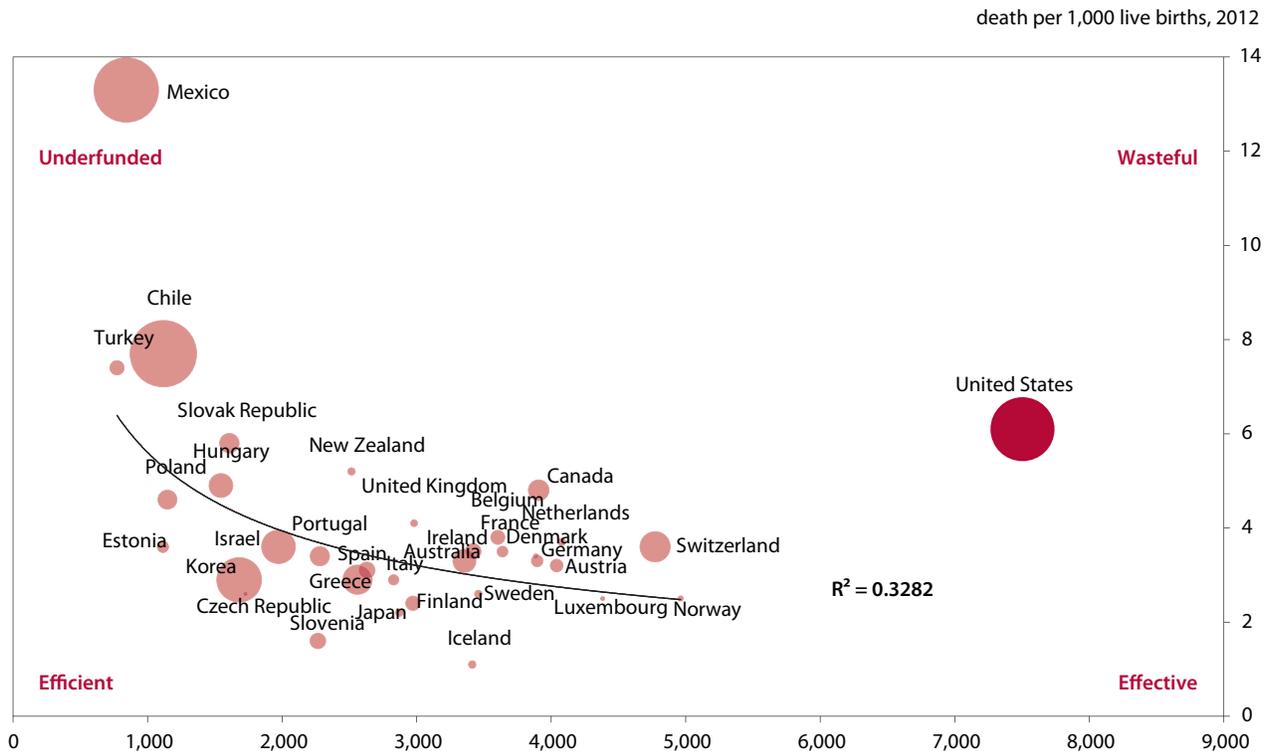
Figure 8c shows the picture is essentially the same if one chooses a narrow indicator of healthcare outcomes—infant mortality—which captures the quality of a ubiquitous health-care service that usually requires hospitalization, namely child-

birth. Again, there is a strong relationship between per capita healthcare spending and infant mortality (with impact declining as spending increases), and the United States is the noticeable outlier with outcomes more than 50 percent worse than the OECD average despite far higher spending levels.

In other words, whether a broad or narrow measure is chosen, a reasonably clear tradeoff exists in non-US advanced economies between expenditures and outcomes in health care, and relative value for money is reasonably comparable: A given level of per capita expenditure produces a given level of life years saved and infant mortality. The relationship between health-care spending and avoiding preventable deaths and reducing infant mortality found among other advanced economies is far better than in the United States. The higher share of private spending in the United States (at least when compared to the

16. The fact that US female PYLL levels are worse than male PYLL levels relative to the OECD average moreover suggests that the poor US PYLL scores are not influenced by the comparatively higher levels of deadly violence in US society.

Figure 8c Healthcare spending and health outcomes: Infant mortality



OECD = Organization for Economic Cooperation and Development; PPP = purchasing power parity
 Note: Size of bubbles indicates relative share of total spending that is private.
 Source: OECD Healthcare Database 2014.

more advanced OECD countries outside Latin America, as low-spending Mexico and Chile also have substantial shares of private healthcare spending) patently fails to produce better healthcare outcomes for Americans.

Moving outside traditional social spending and applying the same methodology to education spending in advanced economies provides a more nuanced picture of the relative situation in the United States. Figures 9a and 9b plot total spending levels¹⁷ and graduation rates¹⁸ for the upper secondary and tertiary levels of education, respectively.

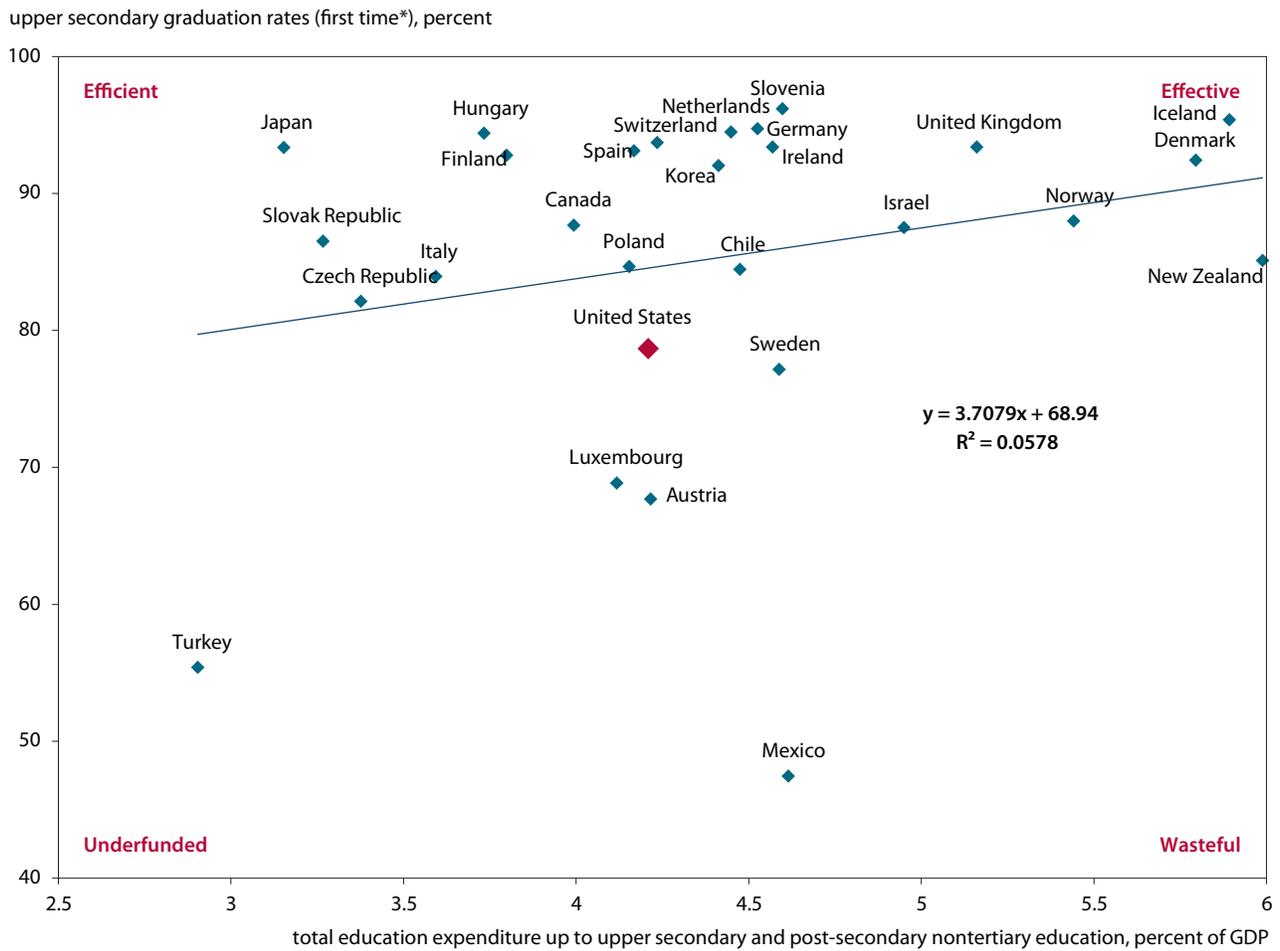
17. Because of the data available, figure 9a includes all educational spending up to upper and post-secondary levels and hence also primary level education spending. As the overwhelming majority of educational spending at these levels in the OECD is in the public sector, no distinction is made between public and private spending. Figure 9b, also for data availability reasons, includes all educational spending for tertiary types A and B and advanced research programs.

18. The data refer to “first-time graduates,” which includes students who have graduated for the first time at a given level of education in the reference period. Thus, if a student has graduated multiple times over the years, he or she is counted as a graduate each year but as a first-time graduate only once. For tertiary graduation rates, foreign students have been subtracted out in coun-

tries where they are a significant population. This concerns Australia, Austria, Canada, Chile, the Czech Republic, Denmark, Japan, the Netherlands, New Zealand, Slovenia, and the United States.

19. For simplicity, figures 9a and 9b are depicted with a linear relationship line, but the same weak relationship is present if other common functional forms are chosen.

Figure 9a Total educational expenditure and upper secondary graduation rates, 2011–12



OECD = Organization for Economic Cooperation and Development
 * Refers to students who have graduated for the first time at a given level of education in the reference period.
 Source: OECD Education at a Glance (2013).

midrange graduation level of around 50 percent. Furthermore, there is no apparent relationship between a country’s graduation rate and the share of private spending on tertiary education.²⁰ Overall, there is no strong relationship between spending and broad-based educational achievement among advanced economies, while the United States’ generally quite high devotion of resources towards education seems only modestly successful.

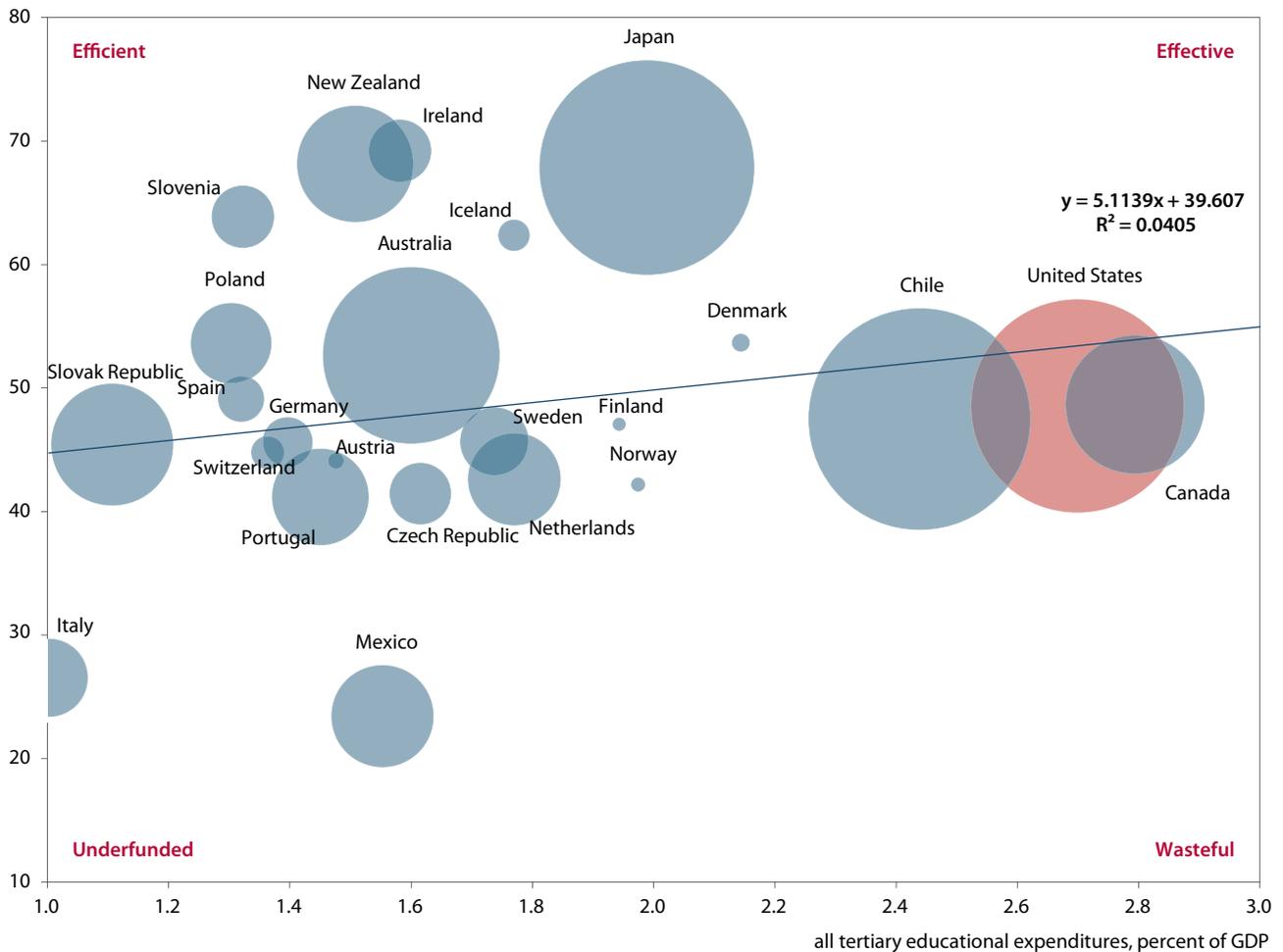
20. Graduation rates are a broad measure of the value of educational spending, and this analysis does not attempt to adjust for the quality of the education. This may penalize countries like the United States where the best private universities are often very expensive.

V CONCLUDING REMARKS

By including the full effect of tax systems and how countries allocate social spending differently between the private and public sector, cross-country differences in total spending for social purposes generally drops—and the often perceived transatlantic divide virtually disappears. This is comforting for believers in the importance of pocketbook issues in politics, as relatively similar populations on both sides of the Atlantic ought to spend about the same share of their incomes and resources on similar social tasks and services. It seems clear though that the French government has ample scope to reduce its record-high total social spending levels.

Figure 9b Tertiary graduation rates and educational expenditures, 2011–12

graduation rates, tertiary types A and B (first time),* percent



* Refers to students who have graduated for the first time at a given level of education in the reference period.
 OECD = Organization for Economic Cooperation and Development
 Note: Size of bubbles indicates relative share of total spending that is private.
 Source: OECD Education at a Glance (2013).

The finding that the true level of US social expenditures is fully comparable to European spending but seemingly yields worse outcomes than in Europe suggests several implications.

First, any debate in the United States about whether present social protections and services are sustainable should not focus on the possible need to substantially increase spending. Instead, the political battle must be about how and to whose benefit the United States allocates its current level of social spending—which, if European levels are any guide for adequacy, is already sufficiently high.

Second, it seems evident that even macroeconomically relevant cost savings can be achieved in the US healthcare sector by

adopting more “best practices” from other advanced economies. Americans can get access to both better and cheaper healthcare services by learning how to manage health care from other advanced economies.

Third, tax subsidization of private sector spending towards social purposes (as well as grossly inefficient healthcare spending) masks the true (higher) spending level in the United States. Tax breaks for social purposes are political expedient: They inherently result in lower taxes and no new recorded government spending. Hence they present US policymakers with the opportunity to take positive new government social policy action to alter the economic incentives faced by private actors and in the

process achieve a smaller measured size of government. TBSPs, however, disproportionately benefit higher income Americans,²¹ and their “government handouts” are shielded from the same public scrutiny legislatively demanded of alternative social policy proposals that result in actual government social services provision and spending.

21. See GAO (2005) and CBO (2013).

REFERENCES

- CAF (Charities Aid Foundation). 2006. International Comparisons of Charitable Giving, November 2006. Kings Hill, United Kingdom. Available at <https://www.cafonline.org/PDF/International%20Comparisons%20of%20Charitable%20Giving.pdf> (accessed on February 10, 2015).
- CAF (Charities Aid Foundation). 2014. World Giving Index 2014. Kings Hill, United Kingdom. Available at https://www.cafonline.org/pdf/CAF_WGI2014_Report_1555AWEbFinal.pdf (accessed on February 10, 2015).
- CBO (Congressional Budget Office). 2013. *The Distribution of Major Tax Expenditures in the Individual Income Tax System*. Washington. Available at http://www.cbo.gov/sites/default/files/43768_DistributionTaxExpenditures.pdf (accessed on February 10, 2015).
- CBO (Congressional Budget Office). 2014. *The Distribution of Household Income and Federal Taxes, 2011*. Washington. Available at <http://www.cbo.gov/sites/default/files/cbofiles/attachments/49440-Distribution-of-Income-and-Taxes.pdf> (accessed on February 10, 2015).
- GAO (Government Accountability Office). 2005. *Tax Expenditures Represent a Substantial Federal Commitment and Need to Be Reexamined*. GAO-05-690. Washington.
- Giving USA. 2014. *Giving USA 2014 Highlights*. Available at <http://www.dfwonline.org/userdata/userfiles/file/WI%20Gives/Giving%20USA%202014%20Highlights.pdf> (accessed on February 10, 2015).
- Kirkegaard, Jacob Funk. 2009. *Did Reagan Rule in Vain? A Closer Look at True Expenditure Levels in the United States and Europe*. Policy Brief 9-1 (January). Washington: Peterson Institute for International Economics. Available at <http://www.piie.com/publications/pb/pb09-01.pdf> (accessed on February 10, 2015).
- OECD (Organization for Economic Cooperation and Development). 2003. *Health at a Glance—OECD Indicators 2003*. Paris. Available at <http://www.oecd-ilibrary.org/docserver/download/8103131e.pdf?expires=1418328002&id=id&accname=guest&checksum=0280F96CF03FC14A0572E3ED6F3DA46E> (accessed on February 10, 2015).
- OECD (Organization for Economic Cooperation and Development). 2011. *Is the European Welfare State Really More Expensive? Indicators on Social Spending, 1980—2012; and a Manual to the OECD Social Expenditure Database (SOCX)*. Paris. Available at http://www.oecd-ilibrary.org/social-issues-migration-health/is-the-european-welfare-state-really-more-expensive_5kg2d2d4pbf0-en (accessed on February 10, 2015).
- OECD (Organization for Economic Cooperation and Development). 2013. *Education at a Glance 2013*. Paris. Available at [http://www.oecd.org/edu/eag2013%20\(eng\)--post-B%C3%A0T%2013%2009%202013%20\(eBook\)-XIX.pdf](http://www.oecd.org/edu/eag2013%20(eng)--post-B%C3%A0T%2013%2009%202013%20(eBook)-XIX.pdf) (accessed on February 10, 2015).
- OECD (Organization for Economic Cooperation and Development). 2014a. *Social Expenditure Update, November 2014*. Paris. Available at <http://www.oecd.org/els/soc/OECD2014-Social-Expenditure-Update-Nov2014-8pages.pdf> (accessed on February 10, 2015).
- OECD (Organization for Economic Cooperation and Development). 2014b. *Economic Outlook Annex Tables*. Paris. Available at <http://www.oecd.org/eco/outlook/economicoutlookannextables.htm> (accessed on February 10, 2015).
- OECD (Organization for Economic Cooperation and Development). 2014c. *OECD Health Statistics 2014—Frequently Requested Data*. Available at <http://www.oecd.org/els/health-systems/oecd-health-statistics-2014-frequently-requested-data.htm> (accessed on February 10, 2015).
- OMB (Office of Management and Budget). 2014. Analytical Perspectives, Chapter 14: Tax Expenditures. Washington. Available at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2016/assets/ap_14_expenditures.pdf (accessed on February 25, 2015).

This publication has been subjected to a prepublication peer review intended to ensure analytical quality. The views expressed are those of the author. This publication is part of the overall program of the Peterson Institute for International Economics, as endorsed by its Board of Directors, but it does not necessarily reflect the views of individual members of the Board or of the Institute’s staff or management. The Institute is a private, nonprofit institution for rigorous, intellectually open, and indepth study and discussion of international economic policy. Its purpose is to identify and analyze important issues to make globalization beneficial and sustainable for the people of the United States and the world, and then to develop and communicate practical new approaches for dealing with them. The Institute is widely viewed as nonpartisan. Its work is funded by a highly diverse group of philanthropic foundations, private corporations, and interested individuals, as well as income on its capital fund. About 35 percent of the Institute’s resources in its latest fiscal year were provided by contributors from outside the United States. A list of all financial supporters for the preceding four years is posted at <http://piie.com/supporters.cfm>.