PIIE PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS

POLICY BRIEF

18-2 Earmarked Revenues: How the European Union Can Learn from US Budgeting Experience

Jacob Funk Kirkegaard

January 2018

Jacob Funk Kirkegaard is senior fellow at the Peterson Institute for International Economics. He thanks his colleagues Nicolas Véron, Joseph Gagnon, Adam Posen, and Steve Weisman for comments greatly improving this Policy Brief, which builds on earlier work in Kirkegaard (2018). The European Commission's financial support for this Policy Brief and Kirkegaard (2018) via Grant Tender ECFIN 004/A is gratefully acknowledged.

The European Union has weathered a host of storms in the last decade, but today several new challenges—from the need to address immigration pressures, to the need to decrease security dependence on an increasingly erratic United States, and the United Kingdom's exit from the European Union (Brexit)—are compelling EU leaders to consider overhauling the revenue side of the European Union's existing budget.

To address these problems in the future, and to fulfill the mandate put forward by French President Emmanuel Macron and German Chancellor Angela Merkel of more not less Europe, the European Union will need resources—at a time of skepticism among Europeans about the effectiveness of budget-making in Brussels.

This Policy Brief argues that European policymakers can help legitimize and expand genuine European-level fiscal resources by learning from, of all places, the United States.

More specifically, the long-standing US budgetary procedure of trust fund accounting (i.e., earmarking government revenue towards specific preidentified spending priorities) can provide a template for European practices in the future. Earmarking revenue for specific spending priorities would allow elected officials to overcome widespread hostility among residents of each member state. It would also allow EU leaders to identify policy areas best solved at the European level and then credibly, transparently, and legitimately provide the required resources.

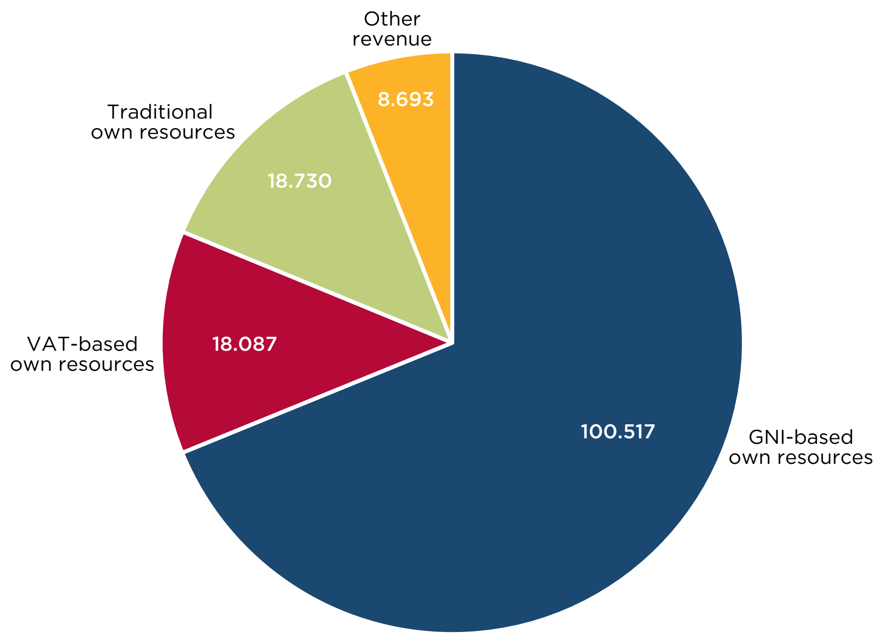
Drawing on the extensive US experience at both state and federal government levels, this approach can be carried out with the use of explicit user charges, such as fees for visas and travel permits and fuel taxes to finance road infrastructure investments. The European Union could also fund disaster relief paid for by a regionwide fee on relevant insurance policies, or more broad-based EU-level taxes earmarked for unemployment benefits in periods of severe economic downturns.

Shifting the EU budget towards more earmarked resources would reduce distrust among taxpayers by limiting Brussels' spending discretion while focusing expenditures on specific challenges facing the European project. The debate would then focus on which tasks would be best carried out at the European level, rather than the zero-sum debate about which member states pay how much. This shift of focus would enable Europe to grow based on its merits, rather than as a result of backroom haggling between EU leaders over money.

Earmarking large parts of the EU budget would not automatically require a massive shift in budget priorities. But a healthy debate over retaining, for instance, agricultural support would ensue if advocates of such support would have to justify the expenditure from specific fees in the court of public opinion and convince European publics to directly fund them.

The lesson from the United States is striking and derives from the history of US state and federal governments working together to expand the responsibilities placed upon government by a generally tax-averse American public. This Policy Brief reviews that history and recommends that European leaders embrace American earmarked revenue practices to ameliorate public—and therefore member state government—hostility towards raising more direct revenue for the EU budget. Reliable, transparent, and more flexible budget revenue from such a source would enable the European Union, or smaller subgroups of member states like the euro area or Schengen Area members, to respond in a timely manner to their economic, social, and political challenges.

Figure 1 EU budget resources by category, 2015 (billions of euros)



GNI = gross national income; VAT = value-added tax
Source: European Commission (2016).

COMPARING THE EU AND US FEDERAL BUDGETS

The budget is a great source of strength for the European Union and also one of its greatest sources of weakness. At €150 billion a year, or about 1 percent of EU-28 GDP,[1] it amounts to the largest annual operating budget for any multilateral institution in the world. Yet the EU budget's complexity makes it inaccessible to the public, inspiring mistrust. Its seven-year timeframe facilitates long-term planning, but it also eliminates budget flexibility and the ability to respond to emergencies. The crises of recent years and earlier gradual integration have seen the European Union acquire the contours of a state—legal identity, offering of citizenship, external representation, etc.—but with a budget too small to undertake countercyclical stabilization measures, or indeed most of the other functions typically associated with a "federal level" budget. Its resulting impotence feeds the public narrative of a distant unresponsive entity in Brussels.

The European Union's budget needs major revision no matter what, simply as a result of Brexit. But as the High-Level Group on Own Resources (2017), chaired by former Italian Prime Minister Mario Monti, has pointed out, Brexit also presents an opportunity by doing away with the UK budget rebate negotiated by British Prime Minister Margaret Thatcher in 1984 and since then paid for by other member states.

Four main revenue categories make up the EU budget (figure 1):

1. **Traditional Own Resources.** Consisting of customs duties and sugar levies and collected by member states, traditional own resources (TOR) accrue directly to the EU budget after a deduction of 20 percent to cover collection costs. In recent years, TOR has amounted to €18 billion to €19 billion, a little over 10 percent of total revenues.
2. **VAT Own Resources.** Collected from a 0.3 percent levy on member states' harmonized value-added tax (VAT) base,[2] this source has raised another €16 billion to €18 billion, or just over 10 percent, in recent years.
3. **GNI Own Resources.** This levy is imposed on each member state's gross national income (GNI) at a level sufficient to ensure that the annual EU budget is in balance, once all expenditure items and all other revenues

1. Under current regulations the EU-28 budget can reach up to about 1.2 percent of GDP, but member states do not currently permit the European Union to exploit the full extent of this legal option. For details, see EU Council (2014).

2. The harmonized VAT base is capped at 50 percent of member states' GNI, and some member states benefit from temporarily lower levies to maintain overall approximate balance in net national contributions. For details, see European Commission (2015).

are accounted for. This category accounts for the bulk of EU revenue, amounting to about €100 billion annually, or about 70 percent of the total. The EU Council has capped GNI resources at 1.23 percent of member states' GNI, but in recent years the actual level required to achieve a balanced EU budget has been around 0.7 percent of member states' GNI.[3]

4. **Other Revenue.** This "residual category" includes leftover surpluses/deficits from the previous year, taxes and other deductions from EU staff remunerations, interest earned on EU financial assets, contributions to EU programs from nonmember states, late fees, donations, competition area fines, repayments of unused EU financial support, and all other budget items. This category has amounted to €6 billion to €8 billion annually, or 5 to 6 percent of the total EU budget.

On top of these complexities, national budget contributions to the European Union are adjusted by several "correction mechanisms" to reduce excessive contributions by some member states. This system, in place since the UK rebate agreement in 1984, lets the United Kingdom receive back 66 percent of the difference between its gross budget contribution and what it receives from the EU budget.[4] Other member states like Denmark, Sweden, Germany, and the Netherlands also benefit from specific budget contribution reductions in the 2014–20 period.

This awkward arrangement has put the European Union in a situation that is functionally similar to the US federal government before the adoption of the 16th Amendment to the Constitution in 1913, repealing its clause calling for "direct taxes" to be apportioned according to each state's population. Article I, Section 9 of the US Constitution, which had been adopted in 1789, declared: "No capitation, or other direct, tax shall be laid, unless in proportion to the census or enumeration herein before directed to be taken." (As in other parts of the Constitution, slaves were counted as three-fifths of free Americans, and Indians were excluded as members of the population.)

In other words, prior to 1913, the US federal government could levy taxes only on a state-by-state basis according to its resident population, and not according to an individual's wealth or property. This stipulation greatly restricted the federal government's ability to tax, limiting the federal government budget and forcing Washington to instead rely on revenue from import tariffs (i.e., taxing foreign products) and excise tax (indirectly taxing specific product categories like alcohol).

Eventually, however, centralizing economic trends and emerging national political clout of populists and progressives brought about the adoption of the 16th Amendment, ushering in individual income taxation according to the "ability to pay" principle at the continental level. American participation in World War I was partly financed through various individual and corporate income taxes.[5]

The lesson of the American experience is that wars make it politically possible to raise these taxes to high levels. By contrast, the European Union's inability to wage wars on its own means that the imperative of war funding will not drive its fiscal centralization in the same manner as it did in the United States. More important, the deeply rooted identity of Europeans in individual member states will make the implementation of any direct individual income taxation at the EU level very difficult for the foreseeable future. European Commission polling since the early 1990s has made it clear that 80 to 90 percent of EU residents identify themselves as citizens of their own countries (figures 2 and 3).

This identification dictates budget policies on a European level. If people feel overwhelmingly French or Dutch or German, they will accept being directly taxed only by the French or Dutch or German state, not by a continental-level entity like the European Union.[6] As a consequence, the European Union must rely on other types of pan-European indirect tax revenue linked to specific governmental tasks.

PUBLIC GOODS THAT A CENTRALIZED BUDGET COULD OR SHOULD FINANCE

Three major central government budgetary functions can be identified for financing by a future centralized EU budget authority: efforts to achieve economic convergence among

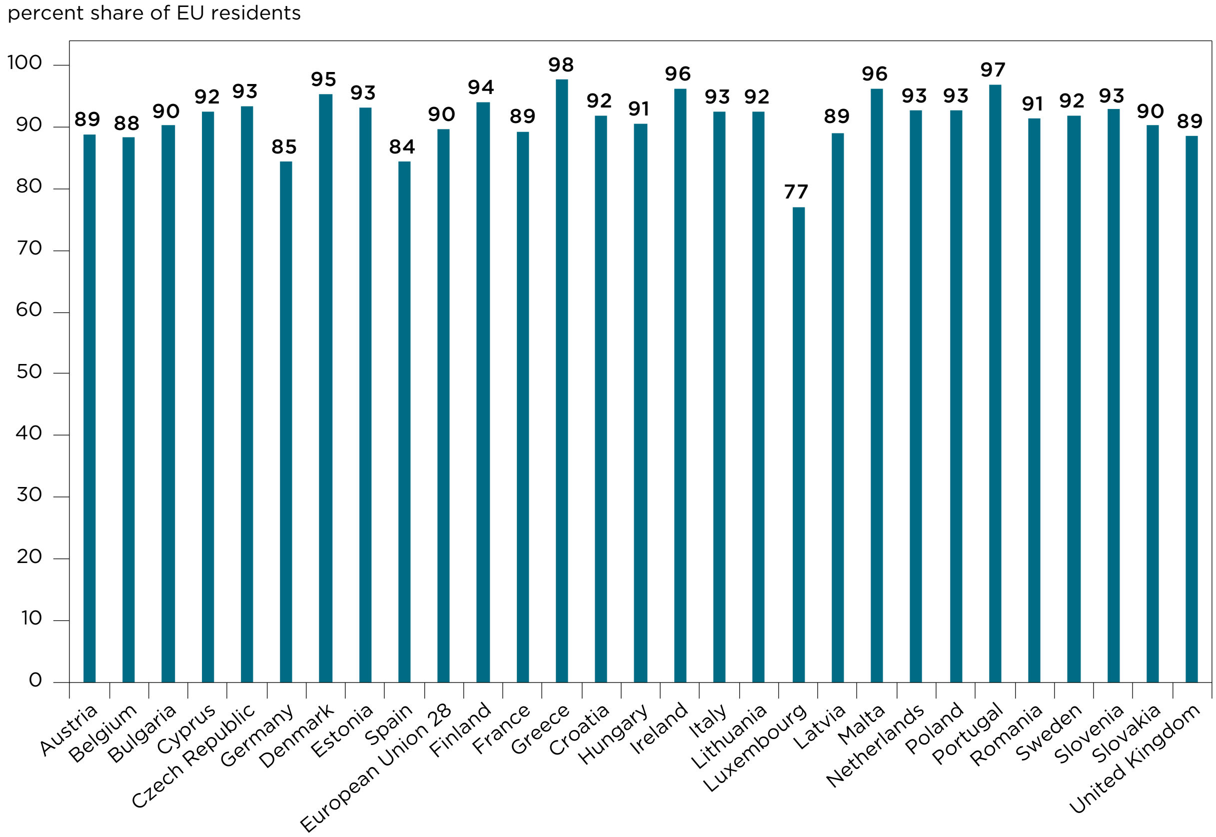
3. Today's EU budget has up to 0.5 percent of EU GNI in unused potential budget allocations, or approximately €60 billion to €65 billion in additional annual GNI resources potentially available under the current framework, based on EU-28 GNI of almost €13 trillion in 2015.

4. The cost of the UK rebate is paid by member states relative to their share of EU GNI, though Germany, Netherlands, Austria, and Sweden, due to perceptions of excessive budget contributions, pay only 25 percent of their regular share of the UK rebate bill.

5. The top marginal federal income tax rate in the United States rose from 15 to 67 percent during 1917, the year the United States entered World War I (Tax Foundation 2013).

6. To my knowledge, similar polling data at both state and federal levels of government do not exist for the United States, but Gallup polling of "How proud are you to be an American?" is perhaps indicative. The poll shows that consistently 80 to 90 percent of Americans are either extremely or very proud to be American, making it at least plausible that continental (federal)-level self-identity dominates respective state self-identities among the vast majority of Americans (Gallup News Service 2016).

Figure 2 Share of EU residents responding "national only" or "predominantly national" to the question "In the near future do you see yourself as…?" (fall 2016)



Source: European Commission (2017a).

geographic regions; countercyclical stimulus during economic downturns; and addressing regional economic needs.

Convergence. Through its investment focus (e.g., structural funds cofinancing of public infrastructure in poorer member states) the EU budget is already pursuing the medium-term goal of promoting economic convergence among some of Europe's disparate regions.

On the other hand, a major program to achieve income and wealth convergence through centralized budget transfers between geographic regions would be politically charged. The US experience of undertaking major social safety net expenditures, including income support, has effectively benefitted impoverished regions of the country but also been politically controversial. EU leaders would likely hesitate to pursue more than what is already embodied in the EU budget's long-term investment support.

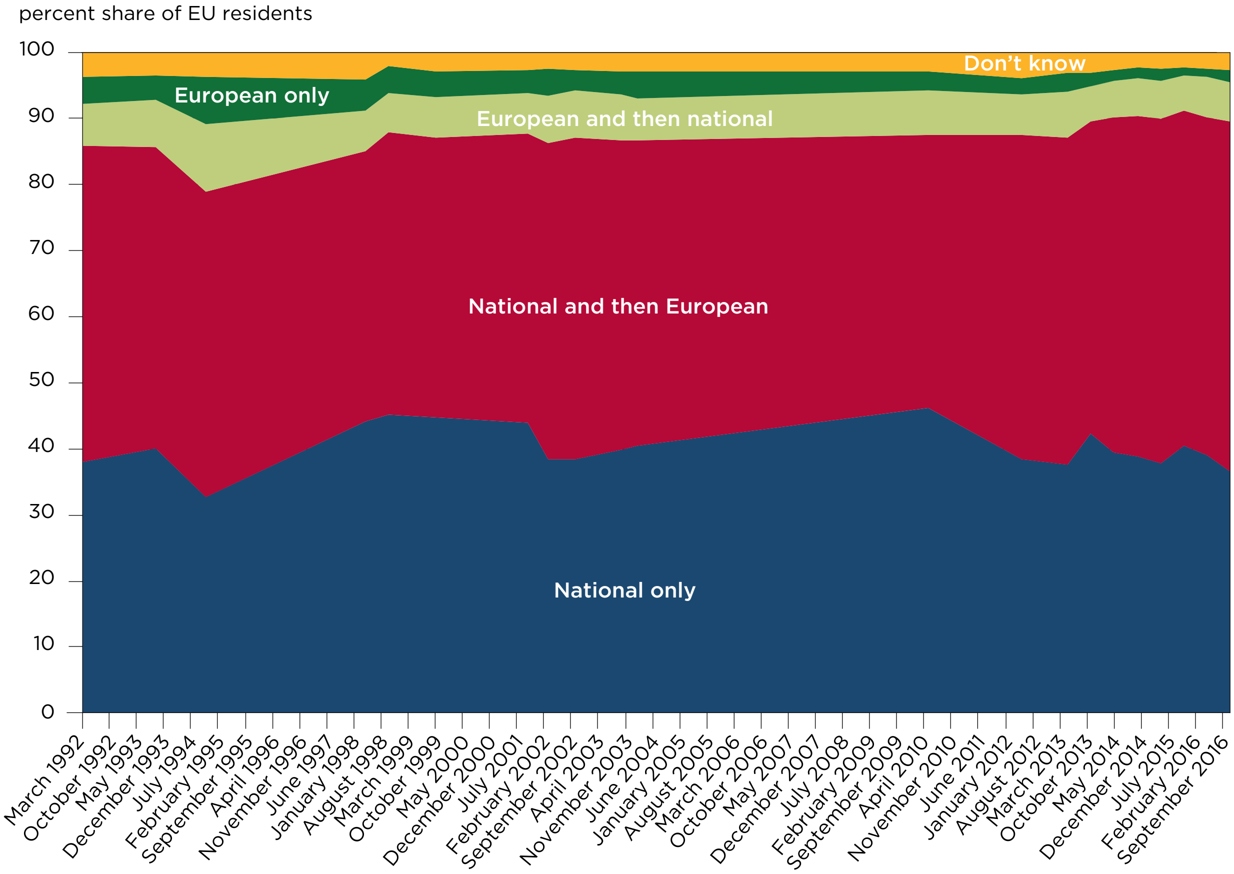
Compared with the United States' federal government budget of approximately 20 percent of GDP, current fiscal redistribution among EU member states is generally lower than among many US states. At the same time, however, material fiscal redistribution towards smaller poorer EU member states of up to 3 to 4 percent of their national GDPs annually is possible within the existing EU budget. This percentage is not small but still insufficient to ensure a poorer member state's economic convergence towards the EU average. Figure 4 shows the most recent data for US and EU geographic fiscal redistribution for 2013.[7]

Intended or not, all government budgets have redistributive effects. The EU budget's historical focus on agricultural support delivers a significant resource stream to France, for example. The distributive effects of US federal revenues deriving from income taxes, and spending focused on direct payments to individual Americans through Social Security, Medicare and Medicaid, are on a scale that exceeds the levels similar spending in the EU budget.

With its reliance on income taxes, the US government gets more revenue from wealthier and more prosperous states. Poor states like West Virginia and Mississippi contribute relatively less. They are in fact net *recipients* of federal government resources, despite the fact that lawmakers from these

7. Figure 4 is estimated, on the expenditure side, by assuming that the federal fiscal deficit is distributed among US states along their current relative contributions to US federal government revenue.

Figure 3 Response of EU residents to the question "In the near future do you see yourself as...?" (1992–2016)



Source: European Commission (2017a).

states generally vote against federal spending programs. On spending, states with large numbers of elderly residents, such as Florida, benefit from federal spending on retirement benefits. At the same time, the biggest geographic impact of federal spending is through the location of federal facilities, especially military bases and institutions.[8] Among these states are the District of Columbia, New Mexico, Hawaii, Virginia, Maryland, and Alaska. US fiscal history proves that when increases in government spending are big enough, the (perhaps) unintended long-term geographic redistributive consequences can be dramatic. For instance, President Franklin D. Roosevelt's New Deal to fight the Great Depression of the 1930s, focused on new federal government social insurance, rural development and public infrastructure investments and financed from taxes out of the industrial northern states in the United States, laid the foundation for southern and western "Sun Belt prosperity" in the United States after World War II.

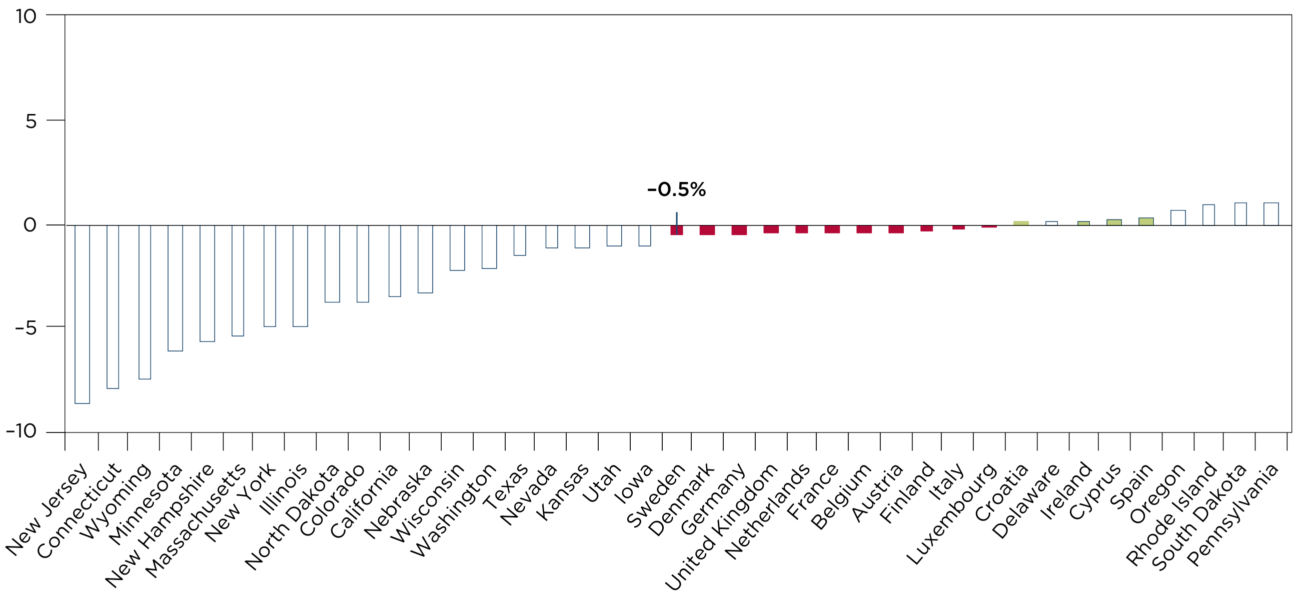
EU spending on these sorts of structural programs is likely to be more limited than it has been in the United States.

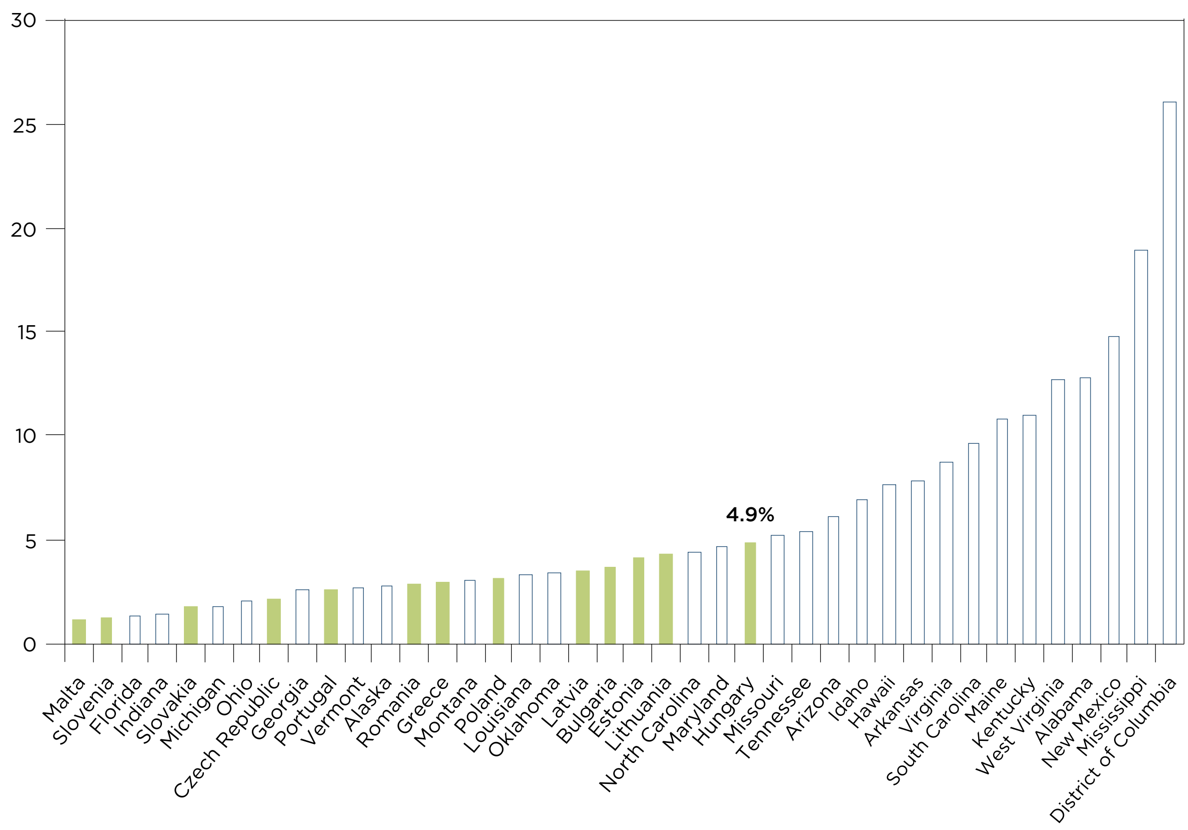
Countercyclical Budget Buffer. Federal spending to cushion the impact of business downturns and geographically isolated asymmetric shocks is another important budgetary function, as the American response to the 2008–09 global economic crisis illustrated. By contrast, the European Union's lack of such budget capacity hampered its ability to address the crisis, to the detriment of several member states.

Cyclical redistribution through regular budget allocations is, however, inherently difficult as no one knows where or when the next economic downturn will hit. This uncertainty surprisingly limits the immediate overlap between a centralized budget's semipermanent geographic redistribu-

8. Recognizing the economic and political importance of the locations of US military installations, Congress and the Department of Defense have since the end of the Cold War—which precipitated the closure of many such facilities—governed the process through the establishment of an independent Base Closure and Realignment Commission (BRAC). The BRAC, made up of retired general-rank military personnel, diplomats, and policymakers, is charged with issuing a report to the president on how best to achieve the optimal US military base structure, given the tasks and challenges facing the Department of Defense. There have been six BRAC processes since the late 1980s.

Figure 4 Implied fiscal redistribution in EU and (balanced) US federal government budgets, 2013





Note: The red and green bars indicate net contributors and net beneficiaries, respectively, in the European Union.
Sources: New York State Comptroller (2015); European Commission (2016).

tional effects and its ability to act as a countercyclical buffer. The latter budgetary function is nearly always accompanied by greater government borrowing during a downturn, when government revenues decline, making it even harder for the European Union to act to stabilize crises.

But European discussions about centralized debt issuance to cover cyclically targeted stabilization programs are gaining momentum.[9] These discussions are part of the debate about future EU budget reforms and the role of the European Stability Mechanism (ESM) established in 2012 to assist crisis-ridden member states. It is important to distinguish between the pooling of existing sovereign government (legacy) debts and the establishment of new authority to issue debt jointly. Establishment of eurobonds—i.e., pooling of existing member state national debt into fully joint debt—remains highly unlikely for now. But prospects are better for new common debt instruments in the euro area. The ESM already issues centralized (but not fully mutualized) debt conditionally available to member states in financial rescue programs. Discussions have commenced at the European Systemic Risk Board (ESRB) about the creation of a new European safe asset.[10]

In addition, centralized cyclical stabilization functions are carried out already by institutions other than the central budget, such as the fee-based financing of central rescue/resolution funds for failing banks. This function is undertaken in the United States by the Federal Deposit Insurance Corporation (FDIC), which has an explicit legislated access[11] to up to $100 billion from the US Treasury, raised to $500 billion during the crisis in 2009–10. In time, an EU banking union is expected to replicate the FDIC capability. This kind of fiscal backstop for bank rescue/resolution funds in the EU/euro area institutional framework will soon be provided by the ESM, which already plays a role as funder of national or sector-specific financial sector rescues.

Policy Challenges Best Solved at the Regional Level. Determining which problems are best solved at the regional level is inherently a political process. Priorities also change over time as the European Union strives toward greater integration. Indeed, traditional neofunctional spillover theory of EU integration stipulates that more such policy areas will be created as a result of previous integration effects on adjacent subjects. The gradual historical development of first the EU customs union (e.g., elimination of internal EU tariffs), then the EU internal market (e.g., harmonization of product standards), and finally, in parts of the European Union, the common currency is one such example. Addressing climate change and strengthening border controls are more recent examples of new challenges requiring regional solutions.

The EU High-Level Group on Own Resources (2017) made clear that the value of an EU intervention going beyond actions of individual member states should be considered when future EU budgets are determined. The group's view counters the perception that the EU budget is simply about achieving the politically acceptable range of net balances among member states.

OVERCOMING THE CHALLENGES TO A BIGGER AND BETTER EU BUDGET

The principal challenge to expanding EU budget revenue, and/or making it "more European" and less dependent on direct transfers from naturally hesitant member state governments, is the political impossibility of levying European-level taxes directly on the individual EU residents. This situation is unlikely to change for the foreseeable future. Yet, the similar, if inverse, political reality in the United States—where the national (e.g., federal) level commands the majority of Americans' self-identity and the federal government is hence fiscally dominant—has not prevented state and local governments in the United States from receiving a very large share of US general government receipts. Figure 5 shows the relative developments of federal and state/local government receipts from 1929 to 2016.

State and local receipts in the United States rose after World War II, leveling off in the mid-1970s. At present they account for about 13 percent of US GDP, or 40 percent of US general government revenue. Given that each state has reason to not raise taxes above levels of neighboring regions, these are impressive numbers.

Figure 6 shows the breakdown of state government funding sources since 1987. General fund revenue is made up of broad-based state taxes on personal income, general sales, property, and corporate income.[12] Of these, direct personal income taxes account for only approximately 20 percent, general sales and property taxes about one-third each, and corporate taxes a much smaller share. US state tax revenue

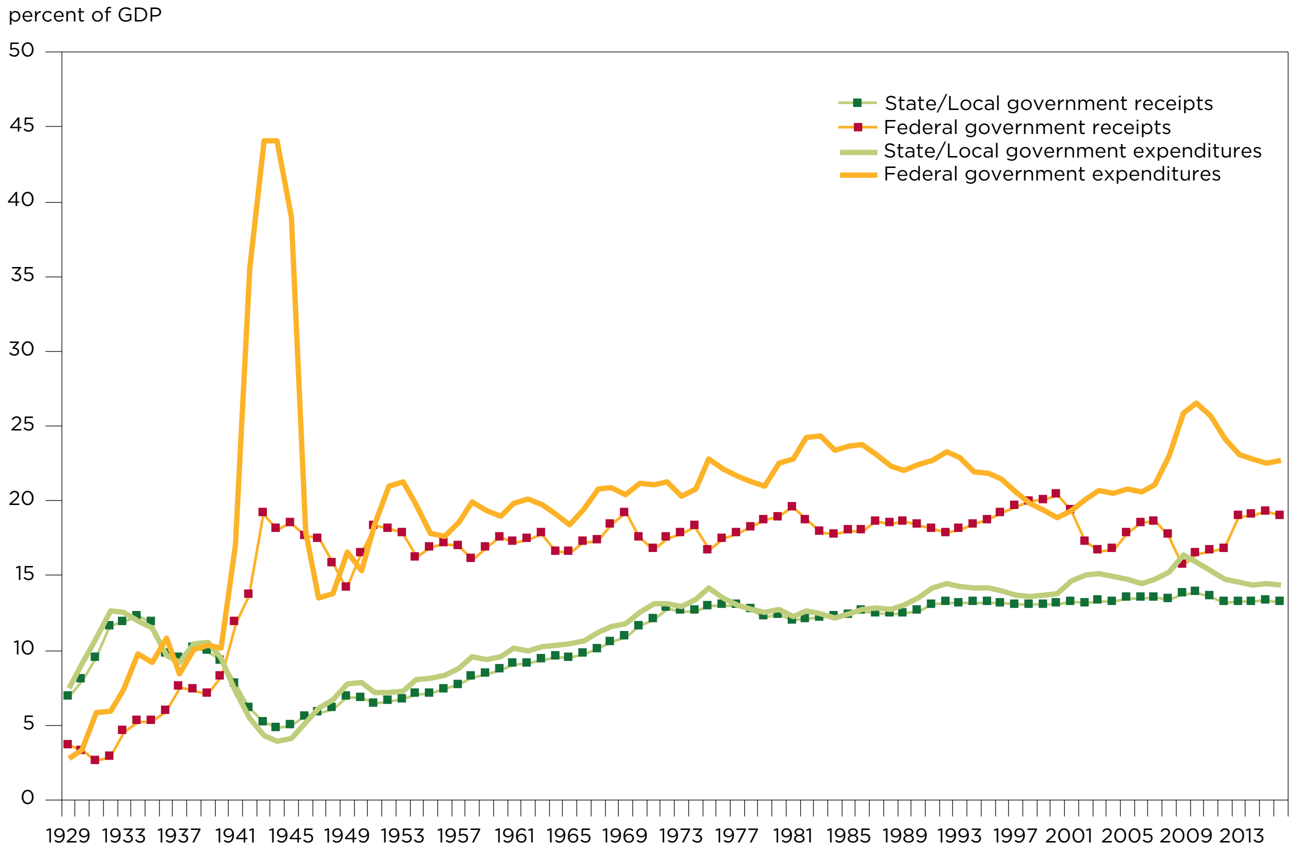
9. See, for instance, European Commission (2017b).

10. The ESRB has created a High-Level Task Force on Safe Assets with the mandate to investigate the potential creation of sovereign bond–backed securities (SBSs), which could comprise senior and junior claims on a diversified portfolio of sovereign bonds. See www.esrb.europa.eu/news/pr/date/2016/html/pr160929.en.html.

11. FDIC Laws, Regulations, Related Acts, www.fdic.gov/regulations/laws/rules/1000-1600.html.

12. According to NASBO (2016), some individual states also transfer gaming taxes from casinos and lottery funds and severance taxes from oil and gas exploration to the general fund.

Figure 5 Total US general government receipts and expenditures, by level of government, 1929–2016



Source: US Bureau of Economic Analysis, National Income and Product Accounts (NIPA) Tables.

is, in other words, heavily skewed towards less individually intrusive indirect taxation of commerce and property.

General fund revenue, derived from taxes, has been declining as a share of total revenues. In 2015, revenues from these sources constituted 40 percent of total state revenue of $1.85 trillion, down from more than half of the total in the late 1980s. Federal grants to states, including cofinancing of social insurance programs, have been rising in recent decades. They now account for approximately 30 percent of state revenue. Earmarked revenues, i.e., from revenue sources restricted by law to particular governmental functions or activities, have also risen and account for 27 percent of state revenues in recent years.[13] Bond financing for capital projects make up the remaining 2 percent of revenues.

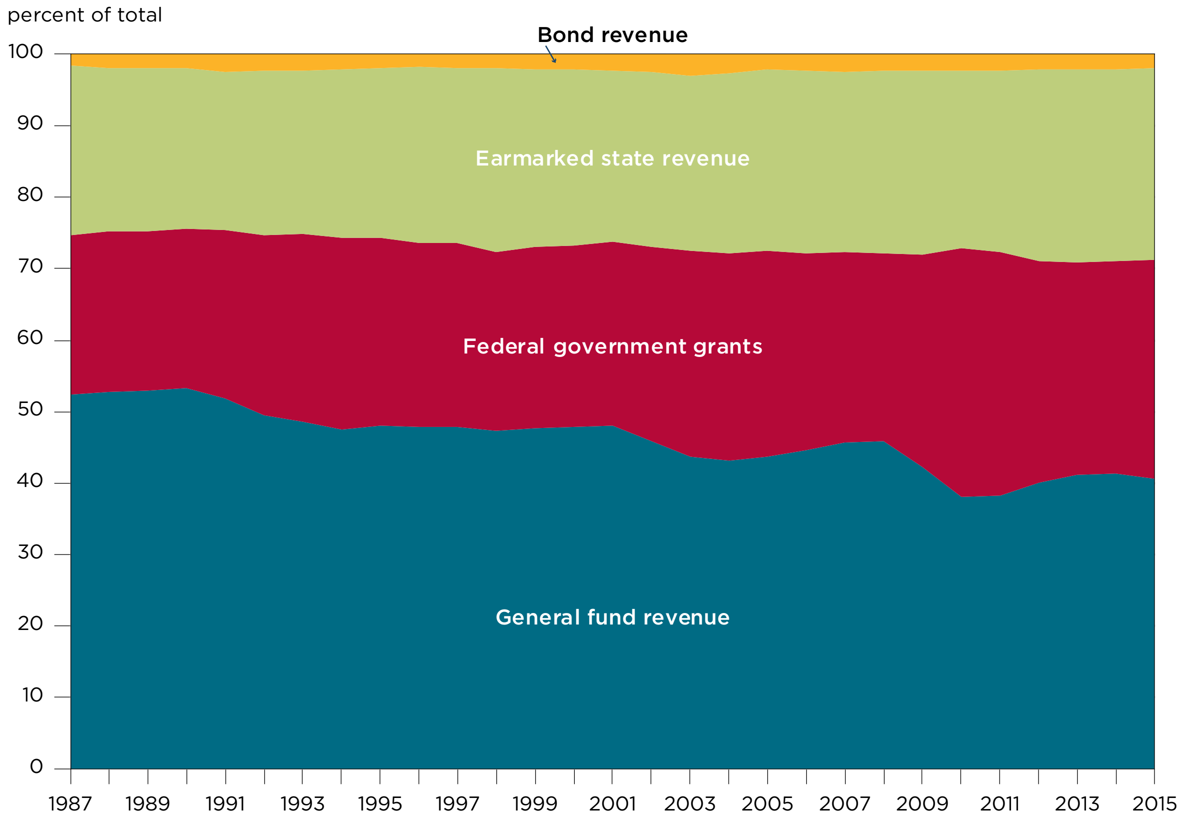
This breakdown indicates that states employ regular tax receipts for purposes their elected leaders determine, whereas other sources of revenue come with strings attached (see also box 1). Importantly, general fund revenue over which state lawmakers can exert discretion accounts for less than half of all revenues. The proceeds from federal government grants, earmarked state government revenue, and proceeds from bond sales must be used in strictly limited ways, often dictated by detailed federal regulations.[14] Similarly, state governments have limited or no discretion concerning the use of earmarked or so-called trust fund revenue,[15] often

13. The economic and public finance literature on earmarked revenues vs. general fund revenue is significant and goes back at least to the seminal article by James M. Buchanan (1963), as well as Tax Foundation (1955), Rolph and Break (1961), and Burkhead (1956).

14. State lawmakers, however, probably give as good as they receive in this regard, as their hands might be tied on how to spend the more than $500 billion in annual grants from the federal government. Yet, they themselves get to impose conditions on the almost similarly sized grants from states to local governments ($484 billion in 2014, according to US Census 2015).

15. The US government defines the term "trust fund" differently from private entities. In the standard private common usage, a trust fund is a private fund with a beneficiary that legally owns income streams and most likely also underlying assets. A custodian, or trustee, manages the assets (generating income) on behalf of the beneficiary according to the terms of a preestablished trust agreement guaranteed by a trustor, the only entity that can make changes to the

Figure 6 Total US state spending by revenue source, 1987–2015



Source: NASBO (2016).

imposed by statute. Over the years numerous states have by law earmarked revenues from property tax increases to spend on state education, for instance. Revenue from state bond sales goes overwhelmingly to capital investment rather than deficit financing, dictated by the bond's covenants.

It would be hard to imagine any Congress or president authorizing aid to states without imposing restrictions on how to spend the money, although there was a period of unrestricted federal aid to the states in the 1970s and 1980s called "Revenue Sharing." More recently, some states have refused federal aid rather than be required to spend on specific purposes—for example, for health care under the Affordable Care Act (Obamacare) of 2010.

At the same time, it would be a mistake to regard the lack of budgetary discretion available to US state governments as just a restriction on their freedom of action. The direct benefit for state government lawmakers and bureaucrats of having their hands tied on large parts of their budget is that the size of the budget is much bigger, and as a result they administer far larger resources than they otherwise would have been able to do.

And by choosing to earmark so much of their revenue and place it outside their own discretionary powers, state lawmakers are helping grow the size of their own budgets, albeit by agreeing to tie their own hands and concentrate on areas where the public supports spending.

EU policymakers contemplating how to raise more traditional own resources (TOR)-like funding for a reformed EU budget could take inspiration from US state budget practices in several ways. Since member states are the fiscally dominant (actually only) actor in the European Union and already contributing the vast majority of the existing EU budget in the form of direct VAT and GNI-linked transfers (figure 1), there is nothing to gain by trying to implement any additional "US grant-like funding features" in the EU budget. Indeed, in some ways the existing direct VAT and GNI-based transfers from member states are preferable to

terms of the agreement. In contrast, the US federal or state government is sovereign and owns and manages the assets and income/revenue/earnings of almost all general government trust funds. It can unilaterally change the law to raise or lower future trust fund payments or collections, as well as change the purpose for which trust fund resources are dedicated. See OMB (2016, 381f).

Box 1 Trust fund revenue in the US federal budget

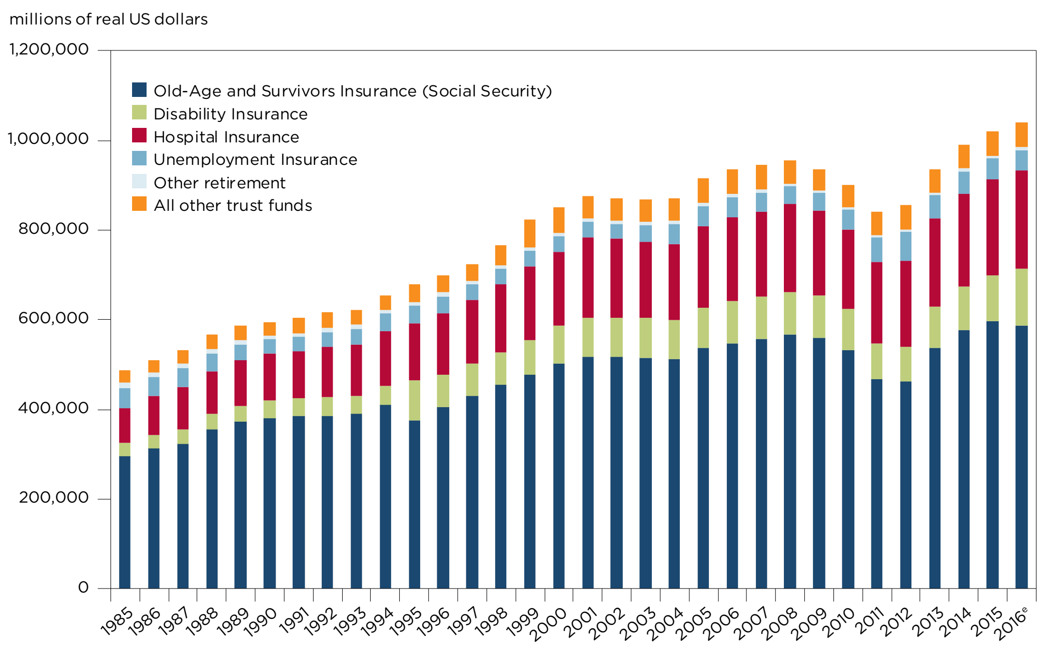
Like state budgets, the US federal government budget operates through many trust funds. The US general fund is still the largest single budget item, however. It funds all federal government activities and programs not funded by earmarked trust (or special[1] or revolving[2]) funds.

These funds may spend their income immediately or accrue surplus income, as the main Social Security trust fund has done over the years. The Old-Age and Survivors Insurance (OASI) Trust Fund is scheduled to continue to accumulate surplus revenue until 2020, when it reaches $2.9 trillion, but be exhausted by 2033. Some trust funds like the Supplementary Medical Insurance (SMI) Trust Fund covering Medicare Part B and D are permanently underfunded and require significant and rising annual transfers ($263.5 billion in FY2015 alone) from the Treasury. Others, like the Unemployment Insurance Trust Fund, are temporarily permitted to borrow from the Treasury general fund.

To remain solvent, earmarked trust funds often require recurring changes to the parameters of their revenue collection and expenditures. Trust funds with fixed revenue accumulation, such as the US Unemployment Benefit Fund, often need fiscal backstopping to remain operational over the business cycle.

Total federal government unified budget receipts (net of intragovernmental transfers between the general fund and trust funds) in 2015 were $3.249.9 trillion, or 18.1 percent of GDP. Of this $1.129 trillion, or 35 percent, was trust fund revenue, while $2.121 trillion went to the Treasury general fund. Figure B.1 shows the distribution of trust fund revenues across the main categories from 1985[3] to 2016, while table B.1 shows estimated trust fund revenue details for all federal government trust funds in FY2016.

Figure B.1 Breakdown of trust fund revenues across main US federal budget categories, 1985–2016[e]



e = estimate
Source: OMB (2017).

(box continues)

1. Special funds are generally associated with earmarked revenue from government imposition of fines, sale of government land or assets, or fees for usage of federal government property. Special funds include the Crime Victims Fund, receipts from the sale of timber cut from federal land, and royalties from oil and gas exploration on federal land. Importantly, special fund revenue must be regularly (re)appropriated by Congress before it can be spent on its earmarked purpose.

2. Revolving funds are used to continue business activities involving the ongoing provision of goods and services from federal government assets. In contrast to special funds, proceeds into revolving funds do not require congressional appropriation and are available immediately for their identified expenditure purpose.

3. 1984–85 was the year when new staggered increases in Social Security contribution rates were beginning to be phased in.

Box 1 Trust fund revenue in the US federal budget *(continued)*

Figure B.1 illustrates the increase in trust fund revenues in the US federal budget following the reforms of the OASI, Disability Insurance (DI), and Hospital Insurance (HI) program funds in the early 1980s. Prior to the 1983 Social Security reform, the OASI, DI, and HI programs operated much like a regular PAYGO (pay-as-you-go) system. Contribution levels were low and the respective trust funds were small, requiring frequent regulatory and contributory changes to remain solvent. The 1983 reform established a level of contributions,[4] coverage, and future retirement ages commensurate with prefunding federal old-age pension liabilities. All surplus trust fund revenue is required by law to be invested in US Treasury bonds. This requirement has widened the difference between total outstanding US federal government debt and "debt held by the public," which excludes surplus earmarked trust fund revenues. The difference between total outstanding US federal government debt and "debt held by the public" will gradually decline (as the US Treasury must sell new debt to the public to redeem the bonds held by the trust fund when it pays out benefits) with the predicted exhaustion of the OASI Trust Fund by 2033 under current law.[5]

Table B.1 also makes clear that the earmarked revenue trust fund model is used in a variety of policy areas in the federal budget. The US federal government trust fund structure finances areas such as sea, land, and air infrastructure, environmental concerns, and disease and medical research. This feature illustrates the versatility of the funding model and how it could be utilized in many different ways to also finance parts of a future EU budget.

Table B.1 US federal government trust fund revenue, FY2016[e]

Trust fund	Revenue (millions of US dollars)
Old-Age and Survivors Insurance (OASI)	655,145
Disability Insurance	142,512
Hospital Insurance	243,546
Rail Road Retirement and Pension Trust Fund	3,380
Unemployment Insurance Trust Fund	49,874
Transportation (Highway Trust Fund)	41,323
Airport and Airway Trust Fund	14,352
Black Lung Disability Trust Fund	525
Inland Waterway Trust Fund	107
Oil Spill Liability Trust Fund	530
Aquatic Resources Trust Fund	542
Leaking Underground Storage Tank Trust Fund	212
Vaccine Injury Compensation Trust Fund	311
Supplementary Medical Insurance Trust Fund	2,969
Patient-Centered Outcome Research Trust Fund	322

e = estimate
Source: OMB (2017).

4. Social Security contribution levels were originally agreed in the 1977 amendments; see www.ssa.gov/history/briefhistory3.html.

5. It is frequently asserted that Social Security goes bankrupt when the trust fund is exhausted. This assertion is somewhat misleading, because—if there is no reform of any kind—Social Security merely reverts to a standard earmarked PAYGO system, which can pay out only the amounts in benefits that it collects in contributions. This scenario is estimated to lead to an approximately 22 percent immediate reduction in Social Security benefits after 2033. Politically and economically, the main beneficiaries of such a "no reform scenario" will be American retirees who die shortly before the exhaustion of the trust funds, as they will bear none of the costs of restoring the Social Security program to balance.

highly regulated US federal government grants, as central "European level" discretion over the EU budget is arguably bigger once member states sign off on another seven-year EU budget cycle. The focus must instead be on how to replicate the extent of US state (and federal government) reliance on earmarked funding for their budgets.

Earmarked Revenue Flowing Directly to the EU Budget. European public resistance to paying more taxes directly into the EU budget could be overcome by earmarking the revenue from such taxes or fees for specific purposes. EU budgets could establish "trust fund structures" to address specific tasks at the regional level. As highlighted in box 1, such trust funds could include a diverse set of policy areas, including transportation infrastructure, disaster relief, or specific types of social insurance.

European leaders should emulate the record in US fiscal history and identify the tasks to be carried out centrally and then find the money to finance them. A debate over spending priorities can help move Europe forward. Several options for budget trust funds could be easily imagined.

1. **Explicit User Fees.** The principle that the "polluter pays" is already embodied in taxes on banks financing EU financial supervision. Fees levied on the EU banking sector will gradually finance the entire Single Resolution Fund (SRF) to cover the costs of future resolutions of EU banks.[16] The European Securities and Markets Authority (ESMA) similarly gets funding from fees charged to credit ratings agencies[17] and trade repositories,[18] which it supervises. There is no reason this model cannot be expanded to cover other tasks, such as a pan-European deposit insurance program financed by user fees paid by European banks covered by this insurance. This step has already been proposed by the European Commission in 2015.[19] As previously discussed in Kirkegaard (2015b), European external border control measures could be at least partly funded by user fees on EU/member state visas for visit, work, study, or other activities. The political advantage would derive from taxing foreigners rather than voters. As analyzed in Kandel (2015), in the United States, the US Citizenship and Immigration Services, which issues visas, is 95 percent funded by user application fees.
2. **Fees on Related Use Items.**[20] Financing of EU infrastructure could also be charged indirectly to users, in a manner similar to the US Highway Trust Fund, which is funded in part by gasoline taxes. A small ticket fee on travelers using EU air and seaports could help pay for EU infrastructure investment and cofinance external border control. A small levy on electricity or natural gas usage would finance cross-border energy transmission capacity. Renewable energy and smart grid infrastructure could be funded by proceeds from the European Union's carbon emissions trading system (ETS). In addition, an EU-level fee on all types of insurance policies could be charged, and the proceeds would contribute to a new EU Disaster Relief Trust Fund that would finance an EU Civil Protection Force, as proposed by French President Emmanuel Macron.[21] (See box 2 for a history of funding for US federal government disaster efforts.)
3. **Broad-Based Taxes Earmarked for Particular Tasks**. A more far-reaching budget invention would be the establishment of trust funds deriving resources from income, payroll, consumption, or other direct taxes. Such a fund could function similarly to the US Social Security Trust Fund(s), which are funded through federal payroll taxes. European tasks financed this way could include region-wide social insurance provisions, overlapping with or replacing member state functions and institutions. Such a step would require additional political integration to support it. Assuming new funding structures are agreed in conjunction with adding new policy areas to the EU budget, a gradual shift away from the current funding structure and towards more trust fund budgeting could be envisioned. This shift would also allow for implementing more EU-level initiatives without reworking the entire existing (and politically set in stone) seven-year budget agreement. At the same time, provided there is political will, one could also imagine converting large existing EU budget expense categories on an earmarked trust fund basis. The funding of EU agricultural support,[22] accounting for 40 percent (€58 billion in 2015) of the current EU budget, might be easier to sustain at current funding levels in the future if it were funded through, say, an earmarked VAT on food sold in the European Union.

16. See SRB (2015) for details.

17. European Securities and Markets Authorities, Credit Rating Agencies, www.esma.europa.eu/supervision/credit-rating-agencies/supervision.

18. European Securities and Markets Authorities, "ESMA advises Commission on fees for trade repositories," April 21, 2017, www.esma.europa.eu/press-news/esma-news/esma-advises-commission-fees-trade-repositories.

19. See proposal at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52015PC0586.

20. The recent proposal to levy an EU-level plastic tax does not fit under this category of budget vehicles. The plastic levy is (very sensibly) intended to curb usage of plastic in Europe, but the revenues generated will not be earmarked for this or related tasks. Details of the proposal are available at www.euractiv.com/section/future-eu/news/plastic-tax-and-ets-tinkering-could-plug-brexit-hole-suggests-eu-budget-chief/.

21. Sorbonne speech of Emmanuel Macron, September 26, 2017, http://international.blogs.ouest-france.fr/archive/2017/09/29/macron-sorbonne-verbatim-europe-18583.html.

22. This item is termed "Sustainable Growth: Natural Resources" in the current EU budget.

Box 2 Growing federal role in disaster relief in the United States

The first known instance of congressionally sanctioned federal domestic disaster relief is the use of customhouse bonds backed by customhouse revenue for survivors of a fire in Portsmouth, New Hampshire, in 1803.[1] In the 19th century, the Congressional Record lists nearly 50 federal disbursements in response to flooding, fire, drought, earthquakes, hurricanes, and other calamities.[2] These sporadic expenditures occurred at a time of limited federal government, leaving most disaster expenditures to private charities. The generally laissez-faire view was reflected in President Grover Cleveland's 1887 veto of proposed drought relief to drought-stricken farmers in Texas, accompanied by his declaration that it was the duty of private charity, not government, to relieve "individual suffering."[3]

The 1906 San Francisco earthquake, which killed 3,000 people and left 400,000 homeless, ushered in a new era of institutionalizing federal disaster relief. While nearby army troops were dispatched to assist survivors and ensure law and order, Congress appropriated $2.5 million for the relief effort, an unprecedented sum. President Theodore Roosevelt rallied Americans to donate to the newly reorganized American Red Cross. Private donations exceeded $7 million, transforming the Red Cross into a quasi-government institution that went on to carry most of the financial burden of natural disasters in the early 20th century.

More disasters increased the federal role, notably in the 1927 Mississippi River floods, which prompted President Calvin Coolidge, as honorary head of the Red Cross, to call on Americans to donate to the organization to alleviate the suffering of flood victims (American National Red Cross 1929). Still, the $10 million for flood victims was outpaced by the $17.5 million raised by the Red Cross (Moss 1999, 313). But the flood was forcing a change in the role of the federal government as Congress adopted $300 million for flood control measures in 1928, inevitably turning Washington into a regionally redistributive funding agent. The Flood Control Acts of 1936 and 1938 during the New Deal gave the federal government full control over flood control, assuming 100 percent financial responsibility for the financing of US dams and reservoirs, the best known of which was the Tennessee Valley Authority. These expansions show how disaster relief efforts can expand central government responsibilities.

In 1947, Congress passed the first permanent and general disaster relief act, authorizing surplus federal government property to be turned over to state and local governments for disaster relief. The Disaster Relief Act of 1950 established a permanent federal government relief fund and granted the president discretion to declare disasters and make the federal government responsible for the repair and restoration of stricken areas.

By 1965, federal disaster spending exceeded that of privately financed (tax-deductible) Red Cross spending almost 8 to 1.[4] The Act was expanded the next year to include longer-term disaster recovery and prevention efforts, authorize aid to individual Americans, and create federal government flood and crop insurance programs. In 1978, Congress created the present-day Federal Emergency Management Agency (FEMA).

US federal government disaster relief efforts thus started with specific events but expanded into a broader federal government risk-management role in conjunction with its role on national defense, law and order, and, in modern times, undertaking financial bailouts, Keynesian stabilization policies, and occupational and environmental regulation.[5]

European policymakers contemplating how to expand public support for a more integrated European Union and a larger EU role in helping troubled parts of the region should be cognizant of the lasting political appeal of doing so through disaster relief. It was noteworthy, for example, Wolfgang Schäuble, former finance minister of Germany, recently suggested that euro area members should be able to draw upon the European Stability Mechanism to also respond to natural disasters.[6] In an era of climate change and extreme weather events, unfortunately, such calamities are likely to frequently befall Europe in the years ahead.

1. Moss (1999), citing the 1950 Congressional Record in GPO (1950).

2. Man-made disasters, such as explosions at ammunition factories during the Civil War, also received congressional attention during this period, as did several international disasters like the 1812 Venezuela earthquake.

3. "Veto of Texas Seed Bill," Mises Institute Daily Article, https://mises.org/library/veto-texas-seed-bill.

4. Moss (1999), citing data from Dacy and Kunreuther (1969).

5. See Moss (1996) for a detailed discussion of government risk-management in the United States.

6. "Schaeuble plan cd help south Europe," Ansa World, August 23, 2017, www.ansa.it/english/news/world/2017/08/23/schaeuble-plan-cd-help-south-europe-3_5b294a6c-2c09-4a7a-839a-62e10674c0bd.html.

CONCLUSION

The European Union faces a range of challenges calling for more expenditures authorized by Brussels. Longstanding budgetary procedures of trust fund accounting and earmarking government revenue towards specific priorities point the way for policymakers to address these problems without unsettling a public wary of funding more centralized government in Europe.

In the 19th and 20th centuries, the US state and federal governments gradually needed more resources to solve expanding responsibilities placed upon it by the American public and turned to earmarked funding to legitimately find the money. The European Union can do the same in the 21st century.

REFERENCES

American National Red Cross. 1929. *The Mississippi Valley Flood Disaster of 1927: Official Report of the Relief Operations.* Washington.

Buchanan, James M. 1963. The Economics of Earmarked Taxes. *Journal of Political Economy* 71, no. 5 (October): 457–69.

Burkhead, Jesse. 1956. *Government Budgeting.* New York: John Wiley & Sons.

Dacy, Douglas, and Howard Kunreuther. 1969. *The Economics of Natural Disasters: Implications for Federal Policy.* New York: Free Press.

EU Council. 2014. Council Decision of 26 May 2014 on the system of own resources of the European Union. *Official Journal of the European Union*. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014D0335&from=EN.

European Commission. 2015. *EU Budget 2014: Financial Report.* Luxembourg: Publications Office of the European Union. Available at http://ec.europa.eu/budget/financialreport/2014/lib/financial_report_2014_en.pdf.

European Commission. 2016. DG Budget EU Expenditure and Revenue Data, 2000–2015. Available at http://ec.europa.eu/budget/library/biblio/documents/2015/internet-tables-2000-2015.xls.

European Commission. 2017a. Public Opinion Data, 1992–2016. Available at http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Chart/getChart/themeKy/41/groupKy/206.

European Commission. 2017b. *New Budgetary Instruments for a Stable Euro Area within the Union Framework.* Brussels. Available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0822&from=EN.

Gallup News Service. 2016. June Wave 2: Final Topline. Available at www.gallup.com/file/poll/193406/160701Proud.pdf.

GPO (Government Printing Office). 1950. *Congressional Record: 81st Congress Second Session*. Volume 96, Part 9. Available at www.gpo.gov/fdsys/pkg/GPO-CRECB-1950-pt9/pdf/GPO-CRECB-1950-pt9.pdf.

High-Level Group on Own Resources. 2017. *Future Financing of the EU.* Final report and recommendations of the High-Level Group on Own Resources (December). Available at http://ec.europa.eu/budget/mff/hlgor/library/reports-communication/hlgor-report_20170104.pdf.

Kandel, William A. 2015. *US Citizenship and Immigration Services (USCIS) Functions and Funding* (May 15). Washington: Congressional Research Service. Available at www.fas.org/sgp/crs/homesec/R44038.pdf.

Kirkegaard, Jacob Funk. 2015a. *Economic Governance Structures in the United States*. Study provided for the attention of the Economic and Monetary Affairs Committee (October). Available at www.europarl.europa.eu/RegData/etudes/STUD/2015/542668/IPOL_STU(2015)542668_EN.pdf.

Kirkegaard, Jacob Funk. 2015b. *Toward a European Migration and Mobility Union.* PIIE Policy Brief 15-23. Washington: Peterson Institute for International Economics. Available at https://piie.com/publications/policy-briefs/toward-european-migration-and-mobility-union.

Kirkegaard, Jacob Funk. 2018 (forthcoming). Towards a More Perfect (Fiscal) Union. In *Lessons for EU Integration from US History*, ed. Jacob Funk Kirkegaard and Adam S. Posen. Report for the European Commission. Washington: Peterson Institute for International Economics.

Moss, David A. 1996. *Government, Markets, and Uncertainty: An Historical Approach to Public Risk Management in the United States.* Working Paper no. 97-025 (September). Harvard Business School.

Moss, David A. 1999. Courting Disaster? The Transformation of Federal Disaster Policy Since 1803. In *The Financing of Catastrophe Risk*, ed. Kenneth A. Froot. University of Chicago Press for the National Bureau of Economic Research. Available at www.nber.org/chapters/c7954.pdf.

NASBO (National Association of State Budget Officers). 2016. *State Expenditure Report: Examining Fiscal 2014-2016 State Spending.* Washington. Available at https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/SER%20Archive/State%20Expenditure%20Report%20(Fiscal%202014-2016)%20-%20S.pdf.

New York State Comptroller. 2015. *New York's Balance of Payments in the Federal Budget, Federal Fiscal Year 2013* (October). New York. Available at https://osc.state.ny.us/reports/budget/2015/fed_budget_fy2013.pdf.

OMB (Office of Management and Budget). 2016. Trust Funds and Federal Funds. Chapter 26 in *Budget Analytical Perspectives.* Available at www.gpo.gov/fdsys/pkg/BUDGET-2017-PER/pdf/BUDGET-2017-PER-7-2.pdf.

OMB (Office of Management and Budget). 2017. Composition of Social Insurance and Retirement Receipts and of Excise Taxes, 1940-2021. Available at www.gpo.gov/fdsys/pkg/BUDGET-2017-TAB/xls/BUDGET-2017-TAB-3-4.xls.

Rolph, Earl, and George Break. 1961. *Public Finance.* New York: Ronald Press Co.

SRB (Single Resolution Board). 2015. *The Single Resolution Fund.* Brussels. Available at https://srb.europa.eu/sites/srbsite/files/_def_srb_fund-web.pdf.

Tax Foundation. 1955. *Earmarked State Taxes.* New York. Available at https://catalog.hathitrust.org/Record/000963585.

Tax Foundation. 2013. U.S. Federal Individual Income Tax Rates History, 1862-2013 (Nominal and Inflation Adjusted Brackets), October 17. New York. Available at https://taxfoundation.org/us-federal-individual-income-tax-rates-history-1913-2013-nominal-and-inflation-adjusted-brackets/.

US Census. 2015. 2014 *State and Local Government Summary Financial Tables by Level of Government and State.* Washington. Available at https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SLF_2014_00A1&prodType=table.