Fiscal Policy

Short-Run and Long-Run Consequences of Government Spending

Fiscal Policy

"**Fiscal**" comes to modern usage from the older term '**fisc**,' which meant the **[royal] treasury**.

In modern contexts, **fiscal** means pertaining to the activities of the **national (or state, or local) treasury**. These activities involve

1. Expenditure
2. Revenue

Expenditures, Some Distinctions

Let's make a few important distinctions when it comes to government expenditures:

1. Government **Spending** (G) is on salaries for government employees, as well as consumption and investment funded by the government

2. Government **Expenditures** include Spending (G) but also **transfer programs** like Social Security, Medicare, SNAP/TANF

Expenditures, More Distinctions

Expenditures can be either **Mandatory** or **Discretionary**

Mandatory spending comes from **previous promises** written into **law** by previous Congresses. These expenditures are hard to avoid, since they happen **"automatically"** and would require a **politically difficult process** to **revise** them. These are often called **entitlements**.
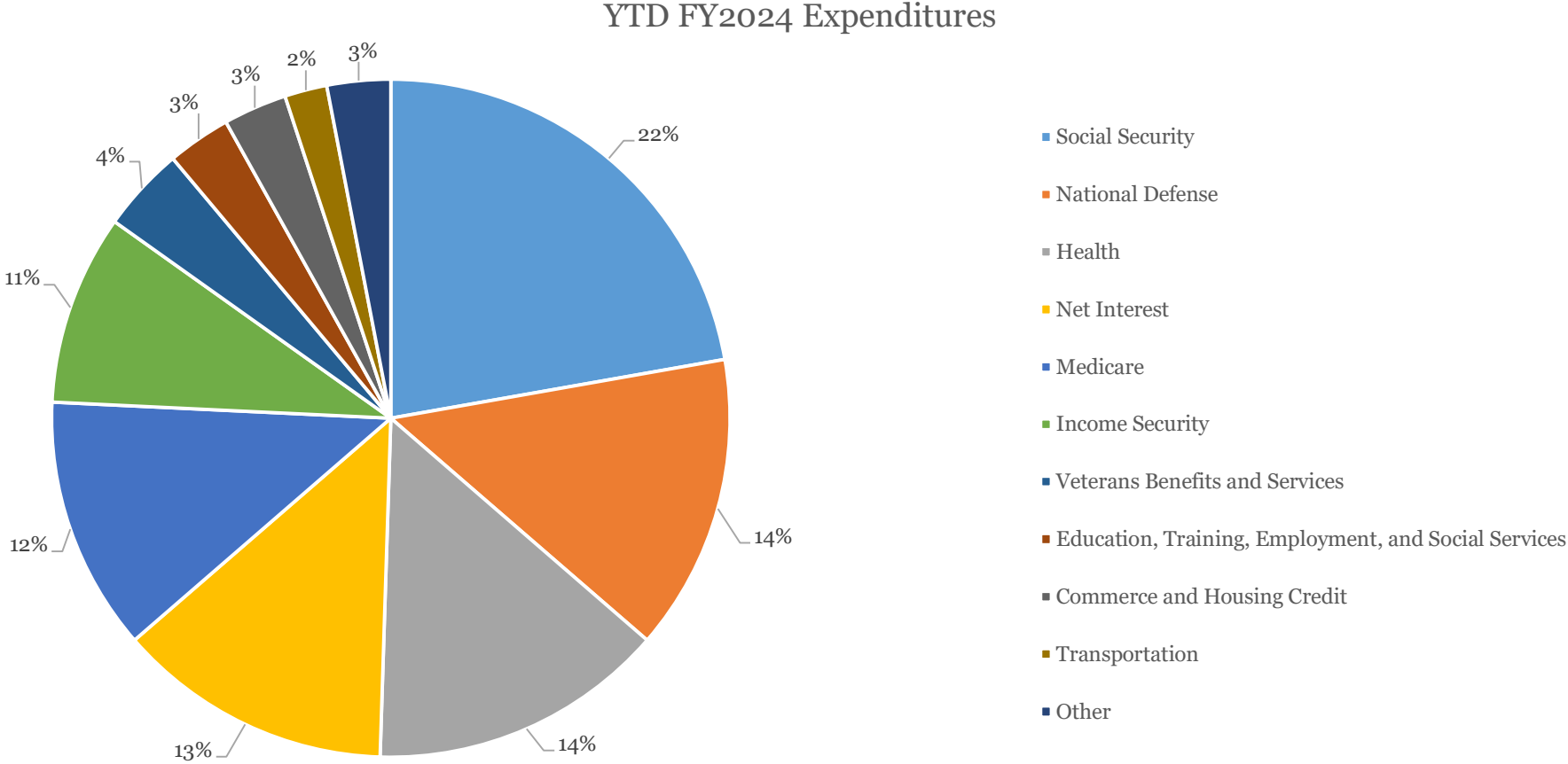
Social Security and Medicare are prime examples.

Expenditures, Discretionary

Discretionary expenditures, on the other hand, are decided each year in the process of negotiating annual **Appropriations** process.

While many of these **programs** or **areas of expenditure** are a **given**—i.e. Congress almost certainly going to fund them—the **amount** they get varies and is **decided on a yearly basis**.

Defense, Education, Transportation/Infrastructure, and other areas are Discretionary.

Am Expenditures Pie Chart

YTD FY2024 Expenditures

22%
14%
14%
13%
12%
11%
4%
3%
3%
2%
3%

- Social Security
- National Defense
- Health
- Net Interest
- Medicare
- Income Security
- Veterans Benefits and Services
- Education, Training, Employment, and Social Services
- Commerce and Housing Credit
- Transportation
- Other

Mandatory and Discretionary

Over the last 50 years or so, the **share** of Discretionary and Mandatory spending (as a share of the total budget or expenditures) has been shifting.

The split has reversed from 60/40 Discretionary/Mandatory in the 1970s to 30/70 in 2019.

This change **reflects** and **obscures** a few important trends.

Discretionary and Mandatory Spending

The **share** of the budget on Discretionary has fallen, but **total Discretionary expenditure has not**. Discretionary spending reflects a smaller percentage of larger budgets. FY2020 was a notable exception, when Discretionary spending exploded.

Mandatory spending has been growing at an **unprecedented rate** because of built-in increases due to entitlements like Social Security, Medicare, and other HHS programs.

Yearly Expenditures

Expenditures, adjusted for inflation
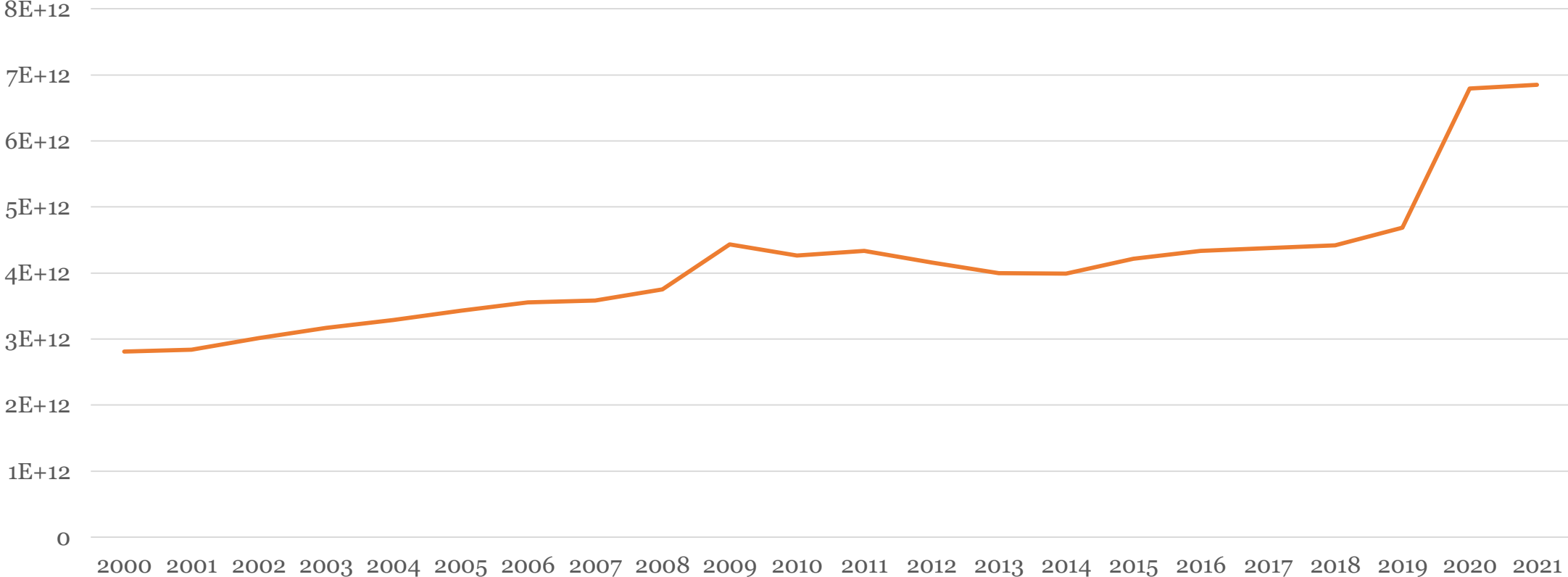
COVID and its Consequences

Federal expenditures grew **1%** from FY2020 to FY2021, but federal expenditures grew **45%** from FY2019 to FY2020, largely because of an unprecedented expansion in response to COVID19.

To put this in perspective, TARP and ARRA (the fiscal responses to the Great Recession of '08/'09) constituted an **18.25%** increase from 3.749T in 2008 to 4.434T in 2009.

Fiscal Policy, more distinctions

Since **fiscal** means everything having to do with the **treasury**, and the treasury both **receives payments** and **spends money** on things, fiscal policy can be very broad.

We will start with the broadest of the broad approach. How does what the federal government spends money on or how it raises revenue affect the *SRAS* or *LRAS*?

Fiscal Policy and Aggregate Supply

There isn't much that **fiscal policy** can do to shift *SRAS*. But what about *LRAS*?

Recall the three major categories of things that influence *LRAS*:

1. Resources – not much fiscal policy can do directly, maybe tax incentives

2. Technology – R&D, infrastructure, education policy

3. Institutions – deregulation and property rights

Discretionary Fiscal Policy: *AD*

We will now speak of discretionary fiscal policy, which means altering Government Spending (G), Taxation (T), or transfer payments (unemployment insurance, Social Security, etc.) to influence AD.

Discretionary fiscal policy can be either **expansionary** or **contractionary**.

Discretionary Fiscal Policy: *AD*

Expansionary fiscal policy: **increasing** G, **decreasing** T, **increasing transfer payments**, or any combination of the three.
These all **move *AD* to the right**.

Contractionary fiscal policy: **decreasing** G, **increasing** T, **decreasing transfer payments**, or any combination of the three.
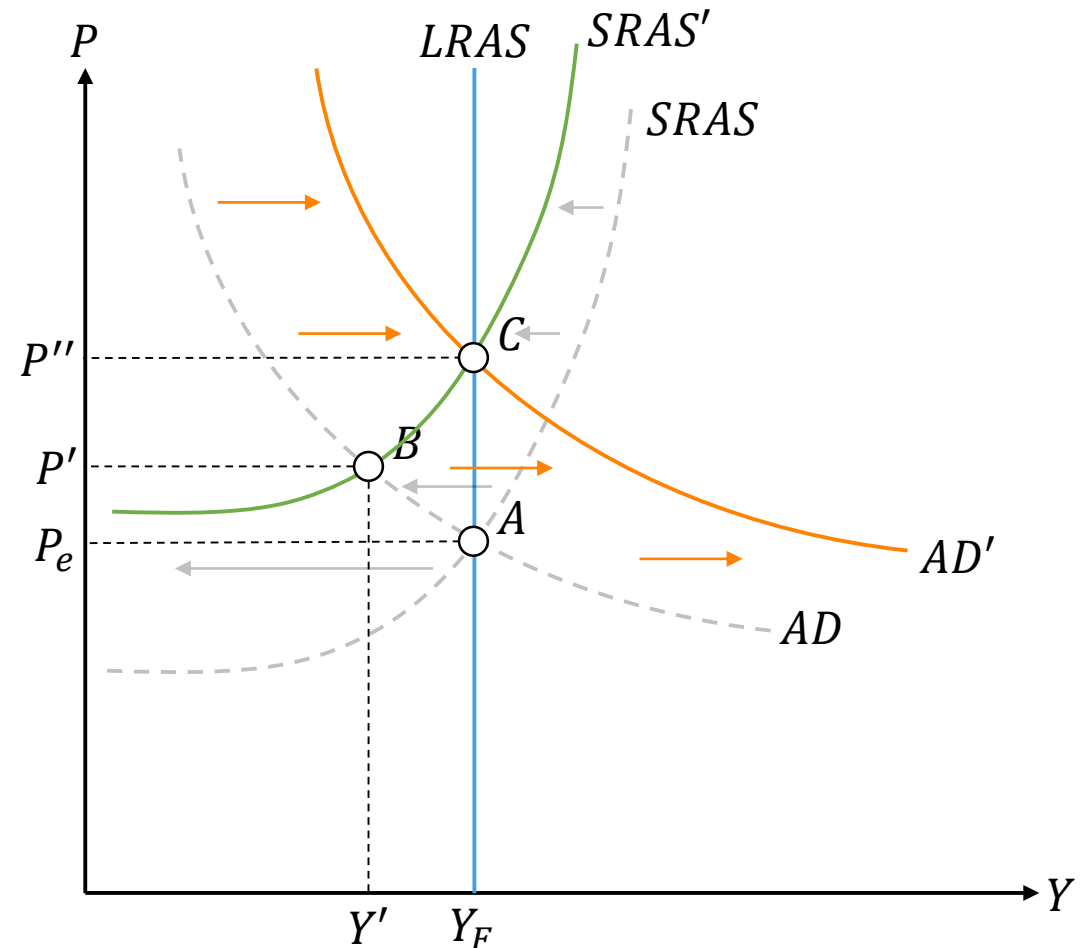These all **move *AD* to the left**.

Expansionary Fiscal Policy: Example 1

We have looked at a situation where the $SRAS$ had shifted to the left ($SRAS \rightarrow SRAS'$). If $SRAS$ does not shift back on its own, the economy might be **stuck in an unemployment equilibrium** ($Y' < Y_F$).

Increasing $AD \rightarrow AD'$ can return to economy to Y_F at the cost of a higher price level ($P'' > P' > P_e$)

$$A \rightarrow B \rightarrow C$$

Expansionary Fiscal Policy: Example 2

If AD falls for some reason, the economy will again get stuck in an unemployment equilibrium where $Y' < Y_F$. $SRAS$ shifting to the right would restore full employment, but this is **unlikely** because of **sticky** output and factor **prices**.

Once again, **fiscal policy** could shift $AD' \rightarrow AD''$ and return the economy back to **full employment and the old price level**.

$$A \rightarrow B \rightarrow A$$
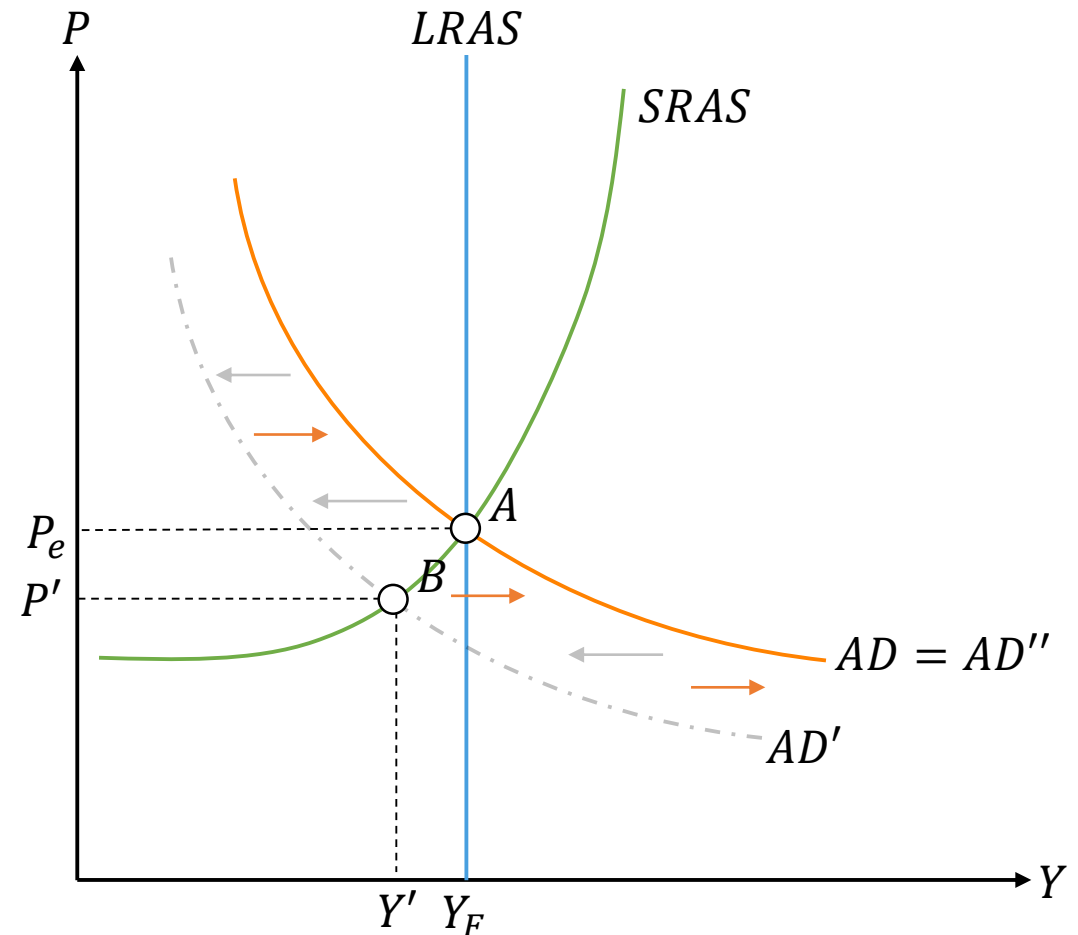
Expansionary (Discretionary) Fiscal Policy

Temporary but "damaging" shifts in the **short run aggregate supply curve** and a **decrease in the aggregate demand curve** are the **best-case scenarios** for the use of expansionary fiscal policy.

Expansionary fiscal policy puts **upward pressure on *Y* and *P***, so using it at full employment will not increase *Y* much and will only push inflation higher and higher. For this reason, expansionary fiscal policy is not advised if *LRAS* has also shifted.
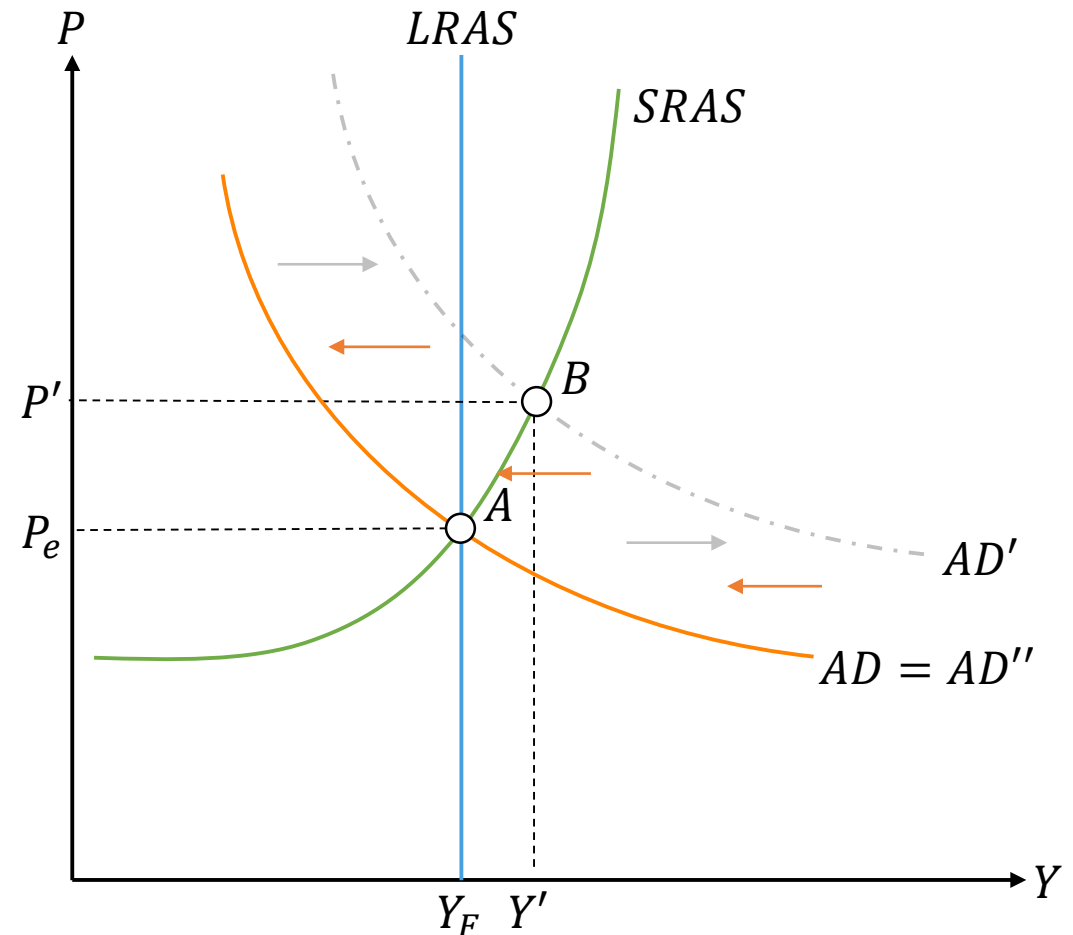
Contractionary (Discretionary) Fiscal Policy

Likewise, **contractionary** fiscal policy puts **downward pressure on both *Y* and *P***. This drop in output will likely also lead to higher unemployment. For this reason, policy-makers are very careful when to use contractionary fiscal policy.

For **temporary increases in *SRAS***, it is likely better to let the temporary **good times pass**, rather than pulling them back by contractionary fiscal policy. In response to a **sudden increase in *AD***, however, **pulling the *AD* curve back** with contractionary fiscal policy might help "cool off" the economy. It is risky, however.

Contractionary Fiscal Policy: An Example

If the AD curve is currently above $LRAS$, causing unwanted and unexpected inflation ($P' > P_e$), we can use fiscal policy to shift the AD curve back to the long-run equilibrium on $LRAS$.

$$A \rightarrow B \rightarrow A$$

Implementing Fiscal Policy

We can think of **discretionary policy** as **counter-cyclical** (that is, working against cyclical variation in output, Y). Sometimes, this happens automatically.

So-called **automatic stabilizers**, namely taxes and transfer payments, move in the opposite direction of cyclical output. High output means higher taxes and lower transfers; low output means lower taxes and higher transfer payments.

Another Issue: "Long and variable lags"

But **engaging in fiscal policy** is prone to a number of **lags**:

1. Recognition lag – gathering and analyzing information, recognizing a problem, and considering possible remedies

2. Implementation lag – deciding what to do among the possible remedies

3. Outside lag – the time it takes for remedies to work through the economy

Doing the Right Thing

Implicit in the presentation of expansionary and contractionary fiscal policy is the idea that fiscal policy can "**balance the economy**:" recessions can be reversed and 'overheating' economies can be 'cooled down'

But fiscal policy is based on the actions of **elected government officials and bureaucrats**. What are **their incentives**?

Democracy in Deficit

During a **recession**, Congress acts to **cut taxes** and **raise spending** (both expansionary steps). Despite the many lags, the fiscal policy accomplishes its task and the recession ends within a quarter or two of being recognized. **Cutting taxes** and **raising spending**, however, created a large deficit.

To **remove this deficit**, Congress must now raise taxes, **cut spending**, or **some combination** of the two. Will they do it?

Crowding Out

Taxes also take money from **consumers** who might otherwise **spend it**. So **every tax-financed dollar** of Government Spending means **one less dollar** of private-sector Consumption. Who is better equipped to spend money wisely?

Borrowing is **no better**! Bond sales **bid up the interest rate** (since selling a bond is the same thing as demanding access to present resources, i.e. demanding loanable funds). **Higher interest rates discourage** some types of Consumption (durables) and **Investment.**
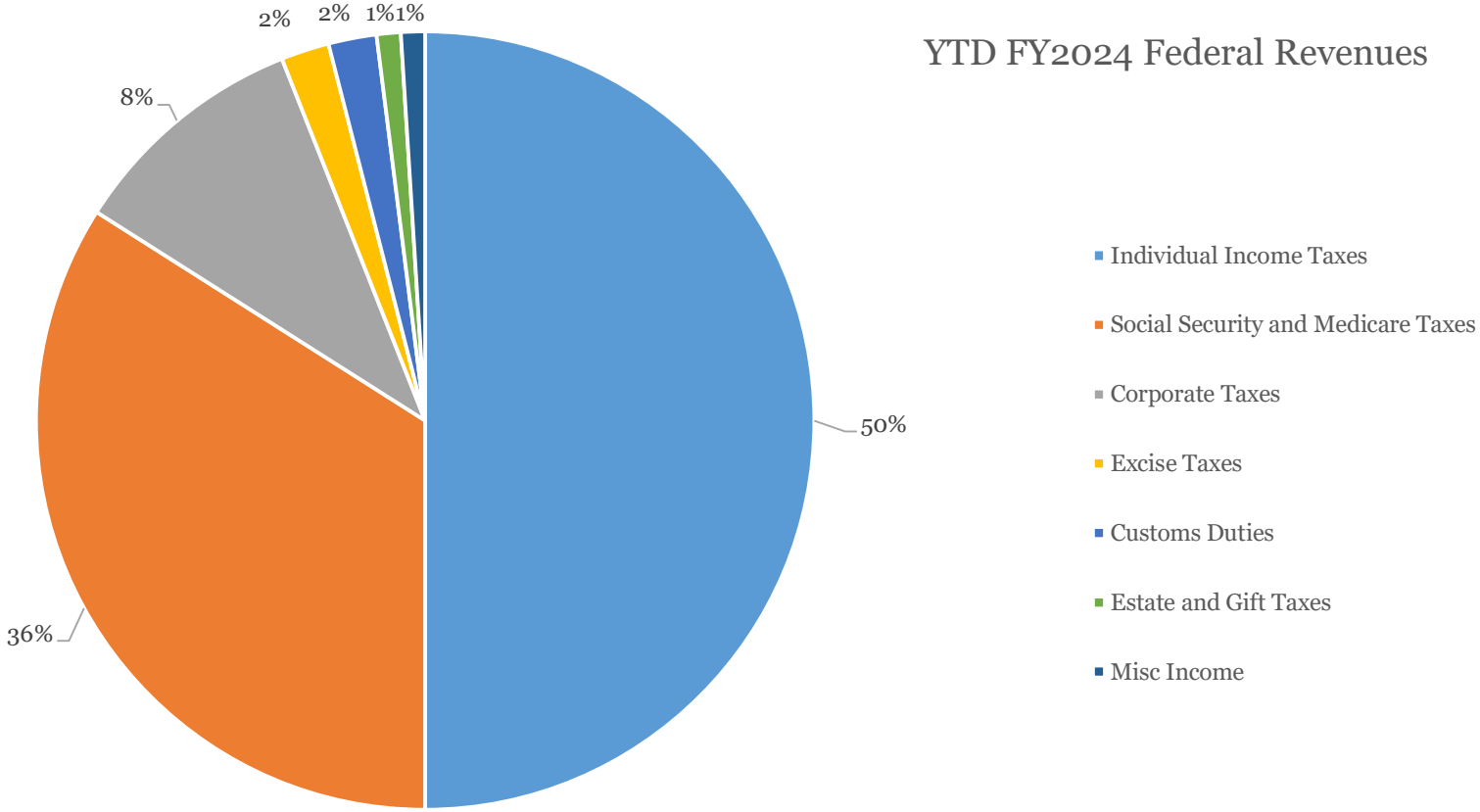
Public Finance

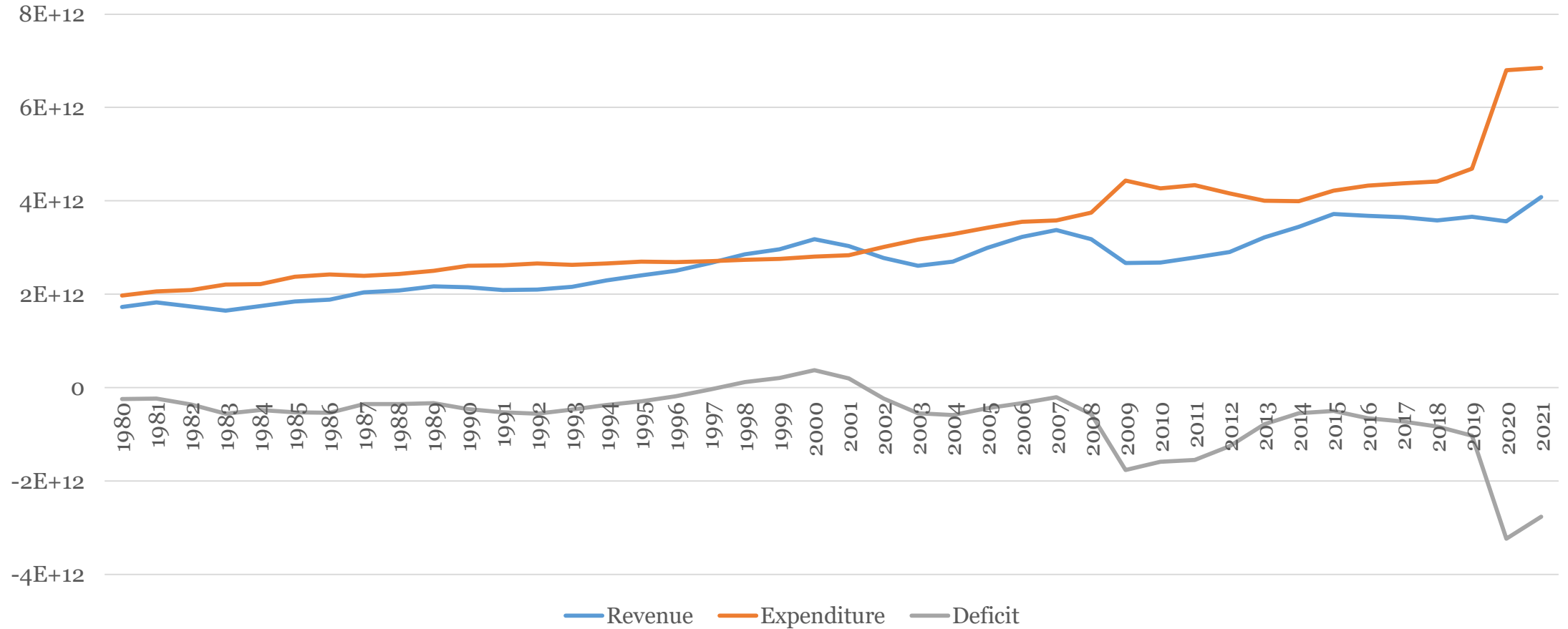We've mostly **avoided** the question of **paying for things**.

Taxes are commonly the way this is done. **Tax revenues** routinely **fall below total expenditure** by the government.

How does the government **make up the difference** to finance their **deficit spending**?

A Revenue Pie Chart

YTD FY2024 Federal Revenues

50%
36%
8%
2%
2%
1%
1%

- Individual Income Taxes
- Social Security and Medicare Taxes
- Corporate Taxes
- Excise Taxes
- Customs Duties
- Estate and Gift Taxes
- Misc Income

The Problem of Taxing

From 2015 to 2023, **federal tax revenue** in the United States fluctuated between 19% (2022) and 16% (2009) of annual GDP.

These data are in accordance with **longer historical trends**. Since the invention of the income tax (overwhelmingly the largest source of tax revenue) **total revenues** have not exceeded 20%.

Why is this?

A Vocabulary of Taxation, part 1

Marginal tax rate – the amount taxed on an **additional** dollar earned (direct tax) or spent (indirect tax)

Average tax rate – the total amount of taxes paid (for a particular tax) divided by the total taxable base (usually income)

$$Average\ Tax\ Rate = \frac{Taxes\ paid}{Taxable\ Income}$$

A Vocabulary of Taxation, part 2

Progressive tax – a tax for which *average tax rates rise* as income rises, or falls as income falls

Proportional (Flat) tax – a tax for which *average tax rates* stay the same regardless of income
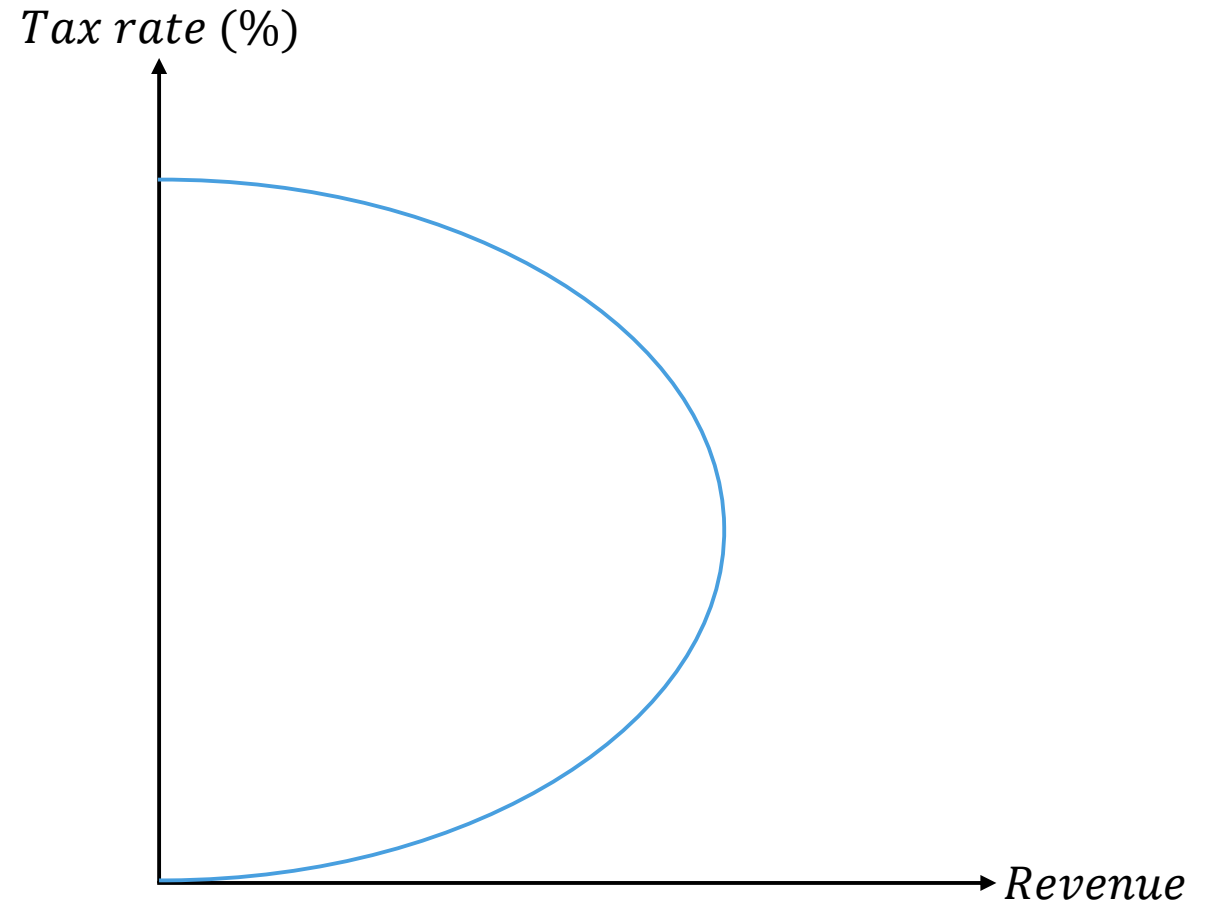
Regressive tax – a tax for which *average tax rates* fall as income rises, or rises as income falls

The Laffer Curve

Starts from two simple observations:

a. If the marginal tax rate is 0%, there is 0 revenue

b. If the marginal tax rate is 100%, there is 0 revenue

Therefore, somewhere in between...

Laughing with Laffer

Laffer's claim is founded on the **only truly unambiguous thing** in all of economics: the **direction of a substitution effect**

If you raise **tax marginal rates**, people will substitute **away from the activity** that causes them to bear those higher tax rates. Lowering marginal tax rates, then, might cause people to do more of the activity.

Laffer's insight is that **a lower tax rate on a larger base** might earn more than **a higher tax rate on a smaller base**.

Laughing at Laffer

That core insight is **correct** and **nearly irrefutable**. But it doesn't follow from that insight that **lowering tax marginal rates** will raise revenue.

From any given point on the curve, higher revenue might be found with either higher rates or lower rates.

In fact, if the curve is not smooth but bumpy, it could be with both higher AND lower rates.

Persistent Deficits

Tax **revenues** do not cover the total federal outlays in a given year.

How does government pay for the deficit each year?
1. Selling **bonds**
    a. To the general public (grandmothers and commercial banks)
    b. To financial institutions that sell them to the Federal Reserve
2. Selling federally-owned **assets**

Deficits and Debts

A **deficit** is a **flow variable**. Deficits **accumulate** into a **stock** called **debt**.

If one runs a deficit year after year, **debts grow larger**. Surpluses are necessary to reduce debts. The US government hasn't run a surplus in 20 (or more) years.

There has only been **the accumulation of debt**.

Debtor's Prison

13% of the expenditure pie chart was **interest payments on the debt**. That is an **increase** over recent years because of (a) **more debt** being issued and (b) **comparatively-high present interest rates**.

New deficits are being financed at (relatively) **high interest rates**.

The current debt-to-GDP ratio is 1.23:1. That's 123%.

Debt to Whom?

A sizeable portion of the debt (about $7.1T of $34.5T) is held by **agencies of the federal government**. The other $27.38T is held by "the public."

Who is "**the public**?" "...[A]ny person or entity that is not a U.S. federal government agency. This includes individuals, corporations, state or local governments, Federal Reserve Banks, foreign investors, foreign governments, and other entities outside the United States Government."

The End in Sight?

The reason **federal budgets are growing** year after year (excluding COVID19) is **the growth in Mandatory Outlays** for **transfer programs**. It's an **expenditure problem** first and foremost. It is hard to see how **revenue** could solve this problem.

Social Security, **Medicare**, and **other programs** see their **expenditures growing** at an **increasing rate** every single year.

This growth will increase **deficits** and the **national debt**.

The End in Sight?

What can **functionally** be done about all of this?

Is a **massive overhaul** of Mandatory spending political possible?

Is the future one of **massive monetization** and **inflation**?

Is **repudiation** on the horizon? **Whose** debt will survive?