Monetary and Fiscal Policies

Chapter 7

Economic Policies: Overview

- Expansionary and contractionary fiscal and monetary policies
- Under which conditions monetary policy is preferable
- Inside and outside lags of economic policies
- Transmission mechanisms and how they regulate the efficacy of economic policies
- Discretion versus rules in emerging and rich countries

The Austerity Debate

- After the Great Financial Crisis, countries like Ireland, Iceland, and Greece almost went bankrupt, while rising debt levels was a major concern in the United States
- Post 2008, economists have argued whether nations should be fiscally responsible or take action to spur economic growth

- What is the appropriate answer?

As with everything in this course, the answer is "it depends"

Expansionary

Monetary and/or Fiscal policy is used to spur economic growth

- When?
  - Usually when there is a growth gap

Contractionary

Monetary and/or Fiscal policy is used to reduce economic growth

- When?
  - Usually when there are fears over rising inflation rates

Chapter 7.1

Economic Policy and Time Lags

Inside Lags

- **The decision making process related to changing an economic policy**
- **E.g.**: for a new tax it is the time necessary for designing the tax, turning it into legislation, negotiation, voting, and its implementation.
- Some parts of fiscal policy, like discretionary spending, will have shorter inside lags.
- Monetary policy has a very short inside lag, because most central banks in the world have autonomy in arbitrating target interest rates.

Outside Lags

- **The amount of time that it takes for the change in policy to influence economic variables.**
- **E.g.:** Lowering taxes does not cause an immediate increase in spending by households and businesses.
- How long it takes for the agents to act on an economic policy depends on their expectations.
- If Ricardian equivalence holds, the outside lag is zero, as market agents' action immediately offsets changes in taxes or government spending.

Economic Policy and Time Lags

- Both types of policy, monetary and fiscal, have outside lags that depend on the situation of the economy at the time of policy change.
- Inside lag is much shorter for monetary policy, as central banks can choose and implement policies in a matter of hours, while fiscal decisions usually take much longer.

Economic Policy and Time Lags: The Great Financial Crisis

- As a response to the recession, President Obama implemented a large stimulus package.
- The federal government designed it in late 2008 and Congress voted on it in February 2009.
- It had a quick turnaround, but much slower than the reductions in the target interest rates by the Fed, already taken to zero by the end of 2008 through successive cuts.

Chapter 7.2

Monetary Policy

Monetary Policy

- Central banks change the nominal interest rate with the goal of changing the real decisions of market agents
- There are two types of Monetary Policy: Expansionary and Contractionary

Contractionary

- The use of monetary instruments to cool down economic activity to limit inflationary pressure.
- Involves increasing the target interest rate to raise the cost of capital for companies and curtail credit to businesses and consumers

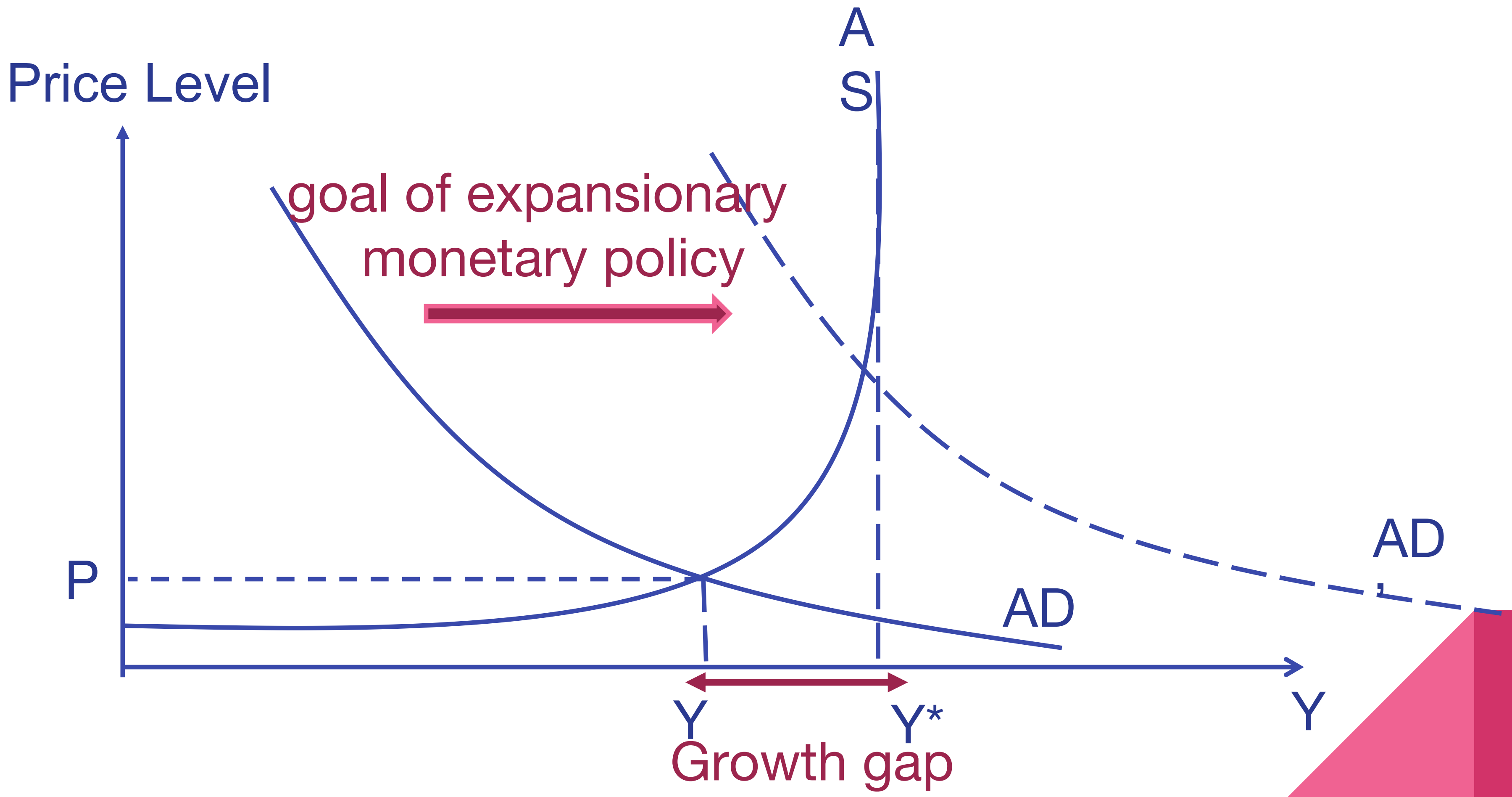
Expansionary

- Central banks perform expansionary monetary policy to stimulate economic activity
- Usually done through lowering interest rates to increase credit to companies and households

Expansionary Monetary Policy

- **If transmission mechanisms are functioning well**, lower interest rates should generate higher consumption, investment and ultimately economic growth, while simultaneously diminishing the costs of serving the public debt.
- Loose monetary policy may result in inflation and the creation of bubbles in asset prices.
- It takes time for any change in monetary aggregates to work through financial and real markets.
- If agents do not believe that the central bank can actually stimulate growth, then the only result will be inflation.
- Monetary policy is neutral in the long run.

Expansionary Monetary Policy



Expansionary Monetary Policy

Benefits	Costs
Higher Consumption	Higher Inflation
Higher Investment	Neutral in the Long Run
Higher Growth	Fuels Bubbles
Lower Service Debt	Outside Lag
Central Bank decides	Needs credibility

Contractionary Monetary Policy

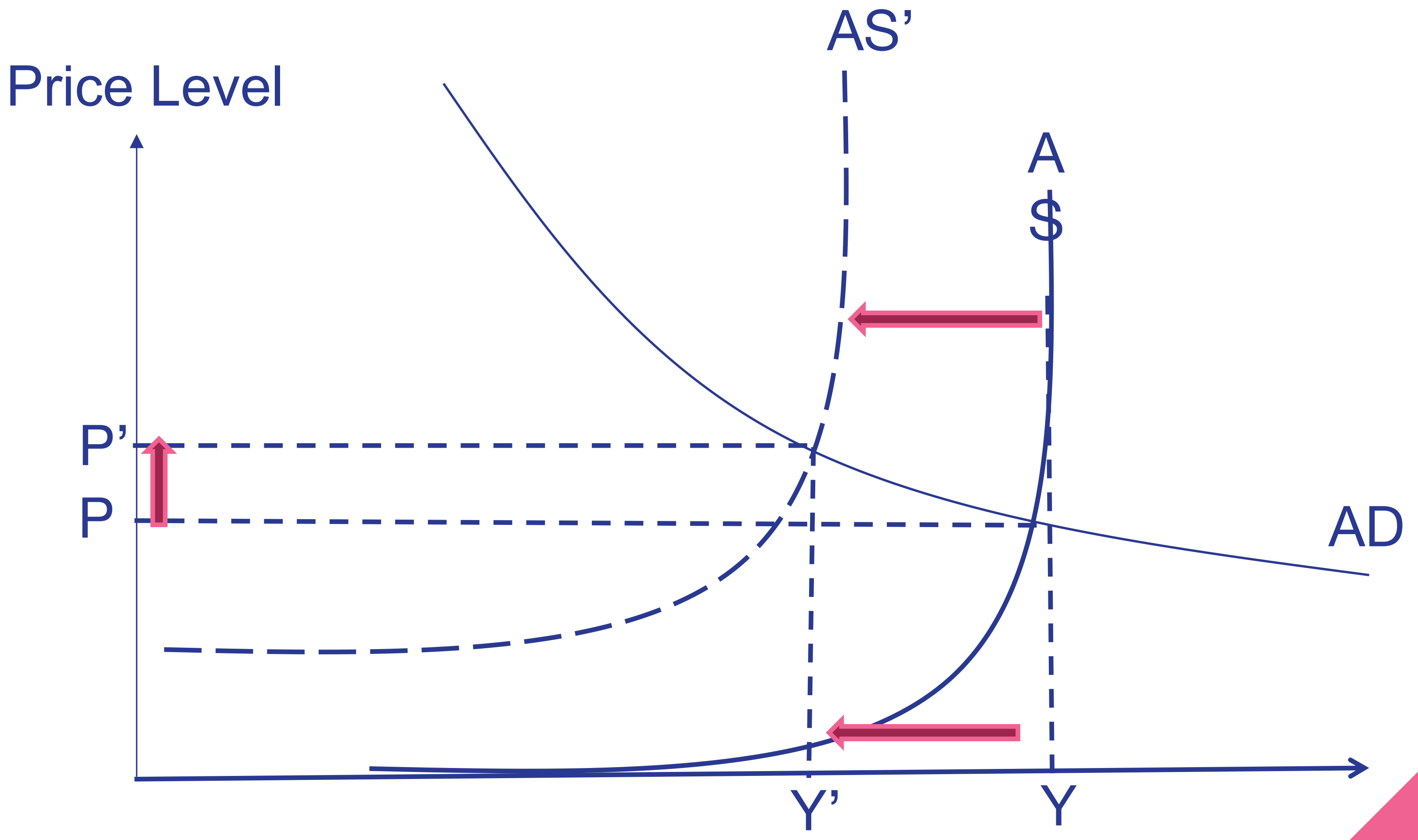
- For an overheating economy, at full employment, and with inflationary pressure.
- Increase in interest rates causes aggregate demand to shrink, with lower growth and consumption as a result, but also a decrease in inflation.
- Another disadvantage: higher interest payments on government debt.

Contractionary Monetary Policy

Benefits	Costs and Risks
Lower Inflation	Lower Consumption
Neutral in the Long Run	Lower Investment
Prevents formation of bubbles	Lower Growth
Builds credibility	Higher Service Debt
Central Bank decides	Outside Lag

Monetary Policy during Stagflation: The case of the US during the 1980’s

The oil crises of 1973 and 1979 shrunk aggregate supply in the US



Monetary Policy during Stagflation: The case of the US during the 1980’s

- Paul Volcker, then chairperson of the Federal Reserve, aimed to end stagflation by combating inflation.
- The federal target rate reached 20% and the prime rate 21.5% in 1981.
- While this strict approach did end stagflation, it came at a cost: the public debt to GDP ratio increased by 10% and the two recessions generated such losses that there were widespread protests against the Federal Reserve.
- Economic policies always bring (significant) costs.

Expectations and Monetary Policy: Fed Dilemma in 2017

- In 2017, similar to the ECB in 2011, the Fed, under Janet Yellen was unsure as to whether the economy was healthy or not.
- Data showed that GDP and wage growth were moderate, but unemployment and inflation had set record lows.
- Should the Fed increase the interest rate or not? It could either derail a substantial recovery or prevent future inflation.
- The case reflects the difficult and sensitive nature of economic policy, and how public authorities rarely, if ever, possess a clear solution.

Chapter 7.3

Fiscal Policy

Fiscal Policy

- Governments can try to stimulate or contract demand by lowering or increasing taxes or public spending
- Spending can be either direct, when different spheres of government commission new infrastructure, for instance, or indirect, like subsidies that have a clear impact on the decisions made by households and companies

Expansionary Fiscal Policy vs Expansionary Monetary Policy

- Increases the deficit and hence the public debt, either because of lower taxes of higher government expenditure or transfer subsidies

- Reduces the amount of net interest paid by the government on its bonds

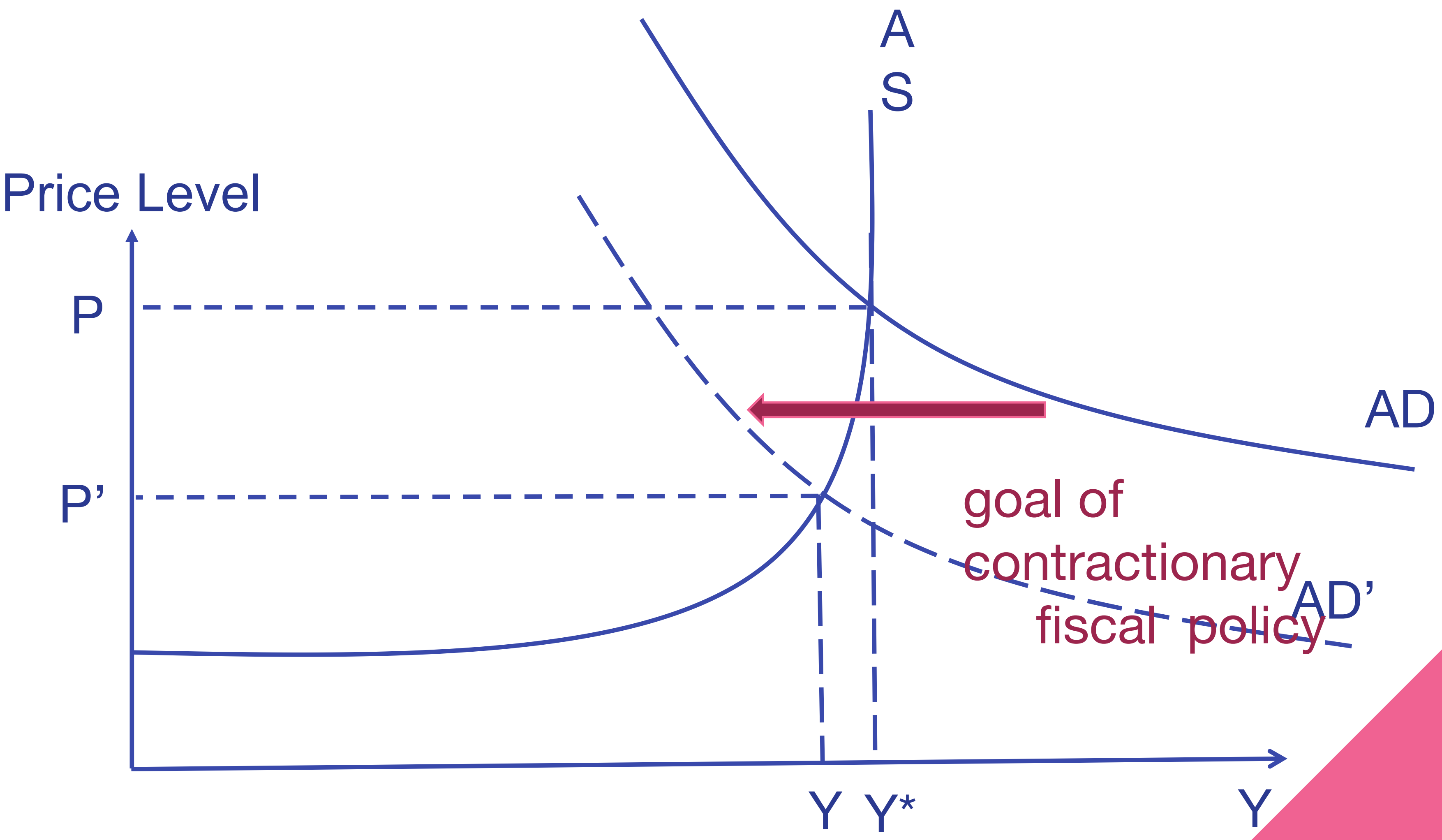
Expansionary Fiscal Policy

Benefits	Costs
Higher Consumption	Higher Inflation
Higher Investment	Higher Deficit
Higher Growth	Inside and Outside Lag

Contractionary Fiscal Policy

- Also known as Austerity.
- Policymakers use higher taxes and less spending.
- Main benefits of contractionary fiscal policy include:
  - Inflation should go down and with it the public debt.
  - Deficit should go down.
  - Helps build credibility.

Contractionary Fiscal Policy



Contractionary Fiscal Policy

Benefits	Costs
Lower Inflation	Lower Consumption
Builds credibility	Lower Investment
Lower Deficit	Lower Growth
Lower Future Debt	Political Process is pro-spending

Discretion versus rules —inflation targeting and balanced budgets

- Because of weak institutions and time inconsistency, fiscal and monetary authorities may be constrained.
- One way for countries to develop credibility is to implement rules.
- Examples include inflation targeting and balanced budgets.

Inflation Targeting

What is it?

- The Central Bank pursues a predetermined value for inflation that is socially acceptable, and it pursues it automatically with monetary policy.
- If the expected increase in price levels is above the inflation target, then interest rates should rise until it is brought back down to that required level.

Inflation Targeting

A report by the Bank of England: "inflation targeting is a framework rather than a rigid set of rules for monetary policy. Essential elements of an inflation-targeting regime:

1. Price stability is explicitly recognized as the main goal of monetary policy.
2. There is a public announcement of a quantitative target for inflation.
3. Monetary policy is based on a wide set of information, including an inflation forecast.
4. Transparency.
5. Accountability mechanisms".

Inflation Targeting

Country	Inflation targeting adoption date	Inflation rate at adoption date (%)	Target inflation rate (interval)
New Zealand	1989	3.3	1/3
Canada	1991	6.9	2 +/- 1
United Kingdom	1992	4	2
Australia	1993	2	1-3
Sweden	1993	1.8	2
Czech Republic	1997	6.8	3 +/- 1
Israel	1997	8.1	2 +/- 1
Poland	1998	10.6	2.5 +/- 1
Brazil	1999	3.3	4.5 +/- 2
Chile	1999	3.2	3 +/- 1
Colombia	1999	9.3	2-4

Inflation Targeting

Country	Inflation targeting adoption date	Inflation rate at adoption date (%)	Target inflation rate (interval)
Peru	2002	–0.10	2 +/- 1
Philippines	2002	4.5	4 +/- 1
Guatemala	2005	9.2	5 +/- 1
Indonesia	2005	7.4	5 +/- 1
Romania	2005	9.3	3 +/- 1
Serbia	2006	10.8	4-8
Turkey	2006	7.7	5.5 +/- 2
Armenia	2006	5.2	4.5 +/- 1.5
Ghana	2007	10.5	8.5 +/- 2
Albania	2009	3.7	3 +/- 1

Balanced Budget

What is it?

- It follows the same principle of constrained discretion.
- Public authorities implement rules for primary deficits and follow them.
- Balanced budget rules can be strict or can follow the business cycles.

Structural (Cyclically Adjusted) Balanced Budget

Usually preferred, because it takes into account the business cycle.

For example, if a recession hits the economy, tax receipts fall or increase at a lower rate of growth, and there is an incentive for expansionary fiscal policy.

A structural balanced budget would not allow public authorities to increase expenditure because of temporary growth in tax revenue.

But open to fidgeting (overestimation of future growth common).

Examples of Balanced Budgets around the World

- Chile passed a structural balanced budget rule in 2001 that was first modified in 2009 because of the great financial crisis
- Colombia legislated its own version of a cyclically adjusted balanced budget, in 2011
- Russia used to have a long-term non-oil deficit target of 4.7 percent of GDP, which was suspended in April 2009 because of the crisis, and formally abolished in 2012
- Italy passed a constitutional amendment that introduced the principles of a structural balanced budget

Balanced Budgets and Policy Making

Balance budget laws that became institutionally entrenched are rare, because they reduce fiscal discretion, and politicians have a strong incentive to maintain control over the instruments of fiscal policy, especially the discretionary spending power.

The Maastricht Treaty and the European Unraveling

The Maastricht Treaty was the cornerstone for the creation of the European Union which took effect on November 1, 1993.

Part of the treaty deals with budget rules: aim of a primary deficit of 3% of GDP and public debt of 60% of GDP. Later, European authorities defined that the 3% limit was based on a cyclically adjusted balanced budget.

The Maastricht Treaty and the European Unraveling

Despite the definition of the balanced budget limit, European governments did not actually follow it after the late 1990s.

In the early 2000s both Germany and France spent more than 5% of GDP and eroded the stability and growth pact, the part of the Maastricht Treaty that dealt with budget rules.

The Maastricht Treaty and the European Unraveling

Because of this softening of the balanced budget rules, many European Union member countries had high deficits in 2008.

When the great financial crisis hit Europe, deficit in those countries ballooned, both because of the need for bailing out the ailing banks, and because deep recession devastated the tax base across the continent.

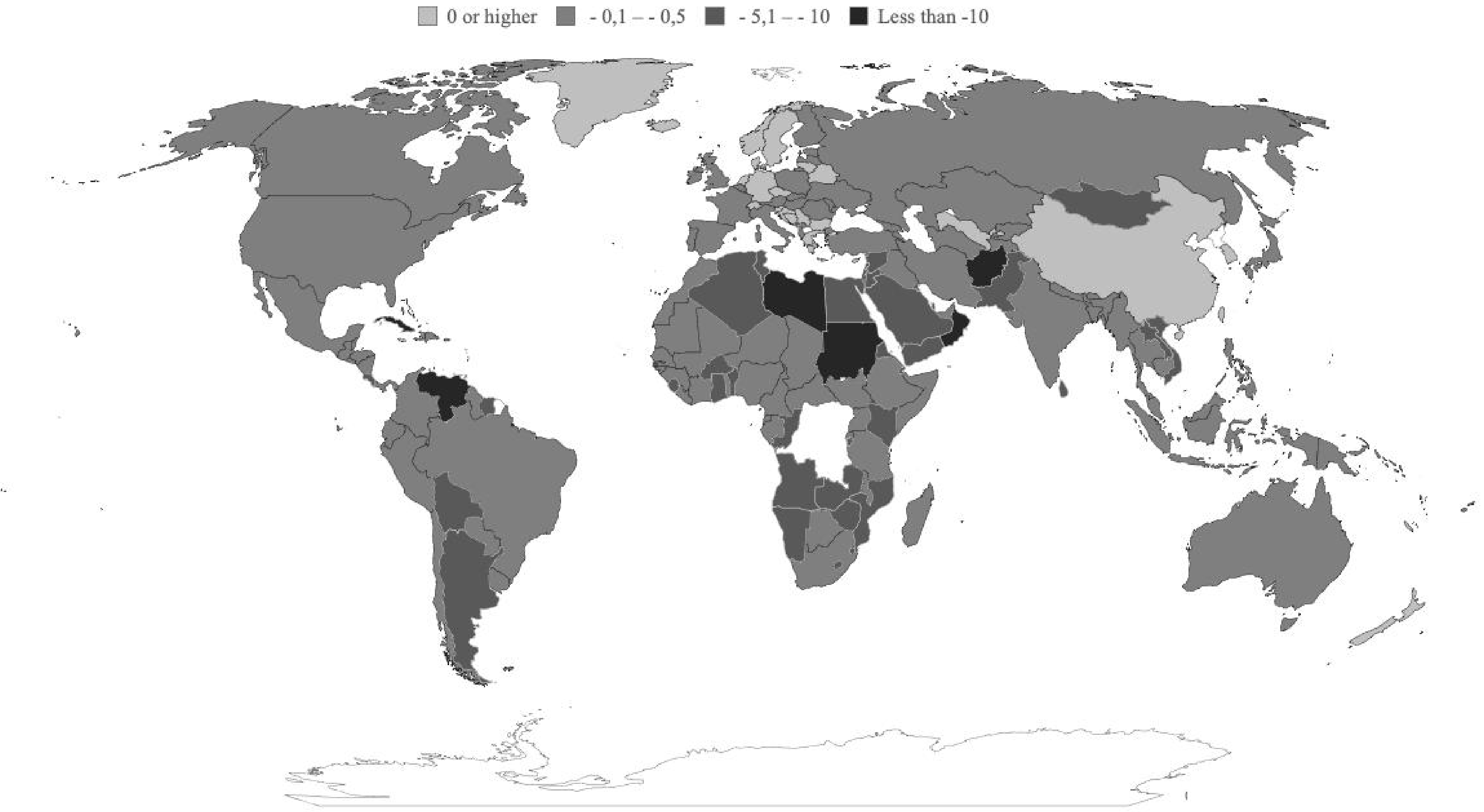
Governments also tried some stimulus packages, as countercyclical measures against the fall in economic activity.

The Maastricht Treaty and the European Unraveling

From 2010–2015, countries in the EU suffered from debt crises. Five countries were especially affected because they combined deficits with local financial crises that required a bailing out of the financial system: Portugal, Ireland, Spain, Cyprus, and Greece, with the last one being the worst case.

The 3% limit was supposed to build credibility in the European Union in general and the euro in particular. European policymakers are anything but credible when it comes to reining in public spending

Public deficit as % of GDP (2017)



Chapter 7.4

Which policy is better, fiscal or monetary?

Which Policy Should Governments Use?

If the government wishes to act counter-cyclically, then it has two options:

- During a recession, the government should use monetary policy
- To control inflation, the government should use fiscal policy

Why?

The Case of a Recession

Both expansionary monetary and fiscal policies should increase aggregate demand.

However, monetary policy is the wiser option because of its effect on the debt trajectory –lower interest rates will reduce the interest paid by the government, while more spending/less taxes increase the deficit.

The Case of Inflation

Contractionary monetary policy comes from higher interest rates, while tight fiscal policy comes from less spending and/or more taxes.

Tight fiscal policy is preferred because it results in a lower deficit, while contractionary monetary policy leads to a higher total deficit.

What Happens in the Real World?

In most cases, monetary policy is the default choice due to a shorter inside lag and because it is at the discretion of the monetary authority.

Also, enacting austerity is difficult due to the social pressure that accompanies lower government spending and/or higher taxes. E.g. Greek policymakers announcing a new tax on pensioners or salary reductions for public employees.

The American Recovery and Reinvestment Act (ARRA)

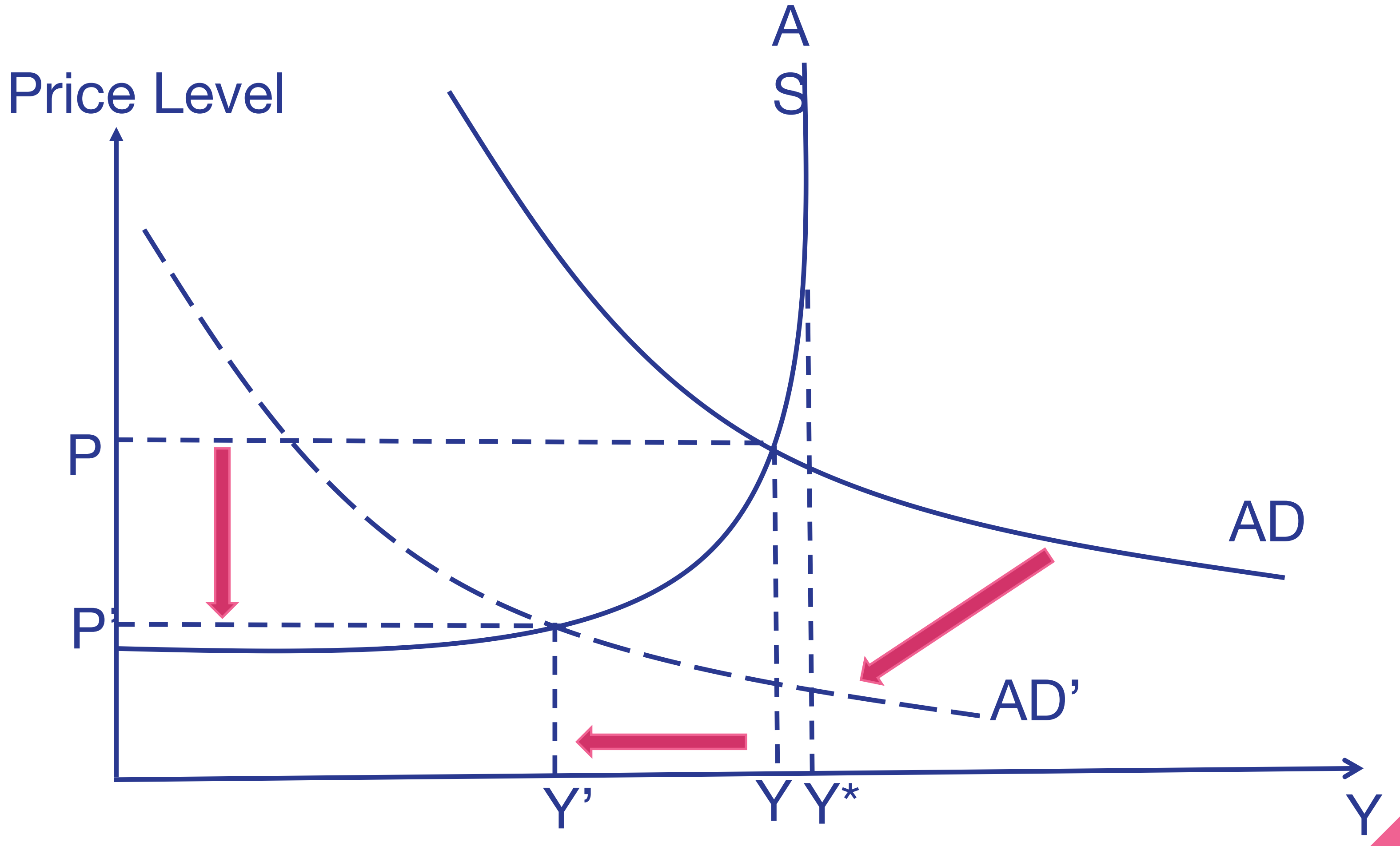
- A USD 787 Billion fiscal stimulus package introduced by President Barack Obama in 2009 following the Financial Crisis.
- Consisted of individual and corporate tax cuts, expansion of unemployment benefits and other safety net provisions, coupled with federal spending on education, health, physical infrastructure and health.
- Highlighted the tradeoff between growth and deficit – the act increase budget deficits by about USD 830 Billion over the 2009-2019 period.
- Estimated to have had an effect on economic growth trajectory, with its effect on output having peaked in 2010 and diminished since then.

Managing fiscal policy during a deep recession: austerity in Europe

The situation in Europe after the Great Financial Crisis exemplifies the limits of economic policy when public debt and credibility constrain the behavior of policymakers.

The European Central Bank reduced interest rates close to zero, but its effect on output was negligible because the transmission mechanisms of monetary policy were not working. That left Europe with pursuing expansionary fiscal policy.

Effect of the crisis on the market for goods and services



The Conflict

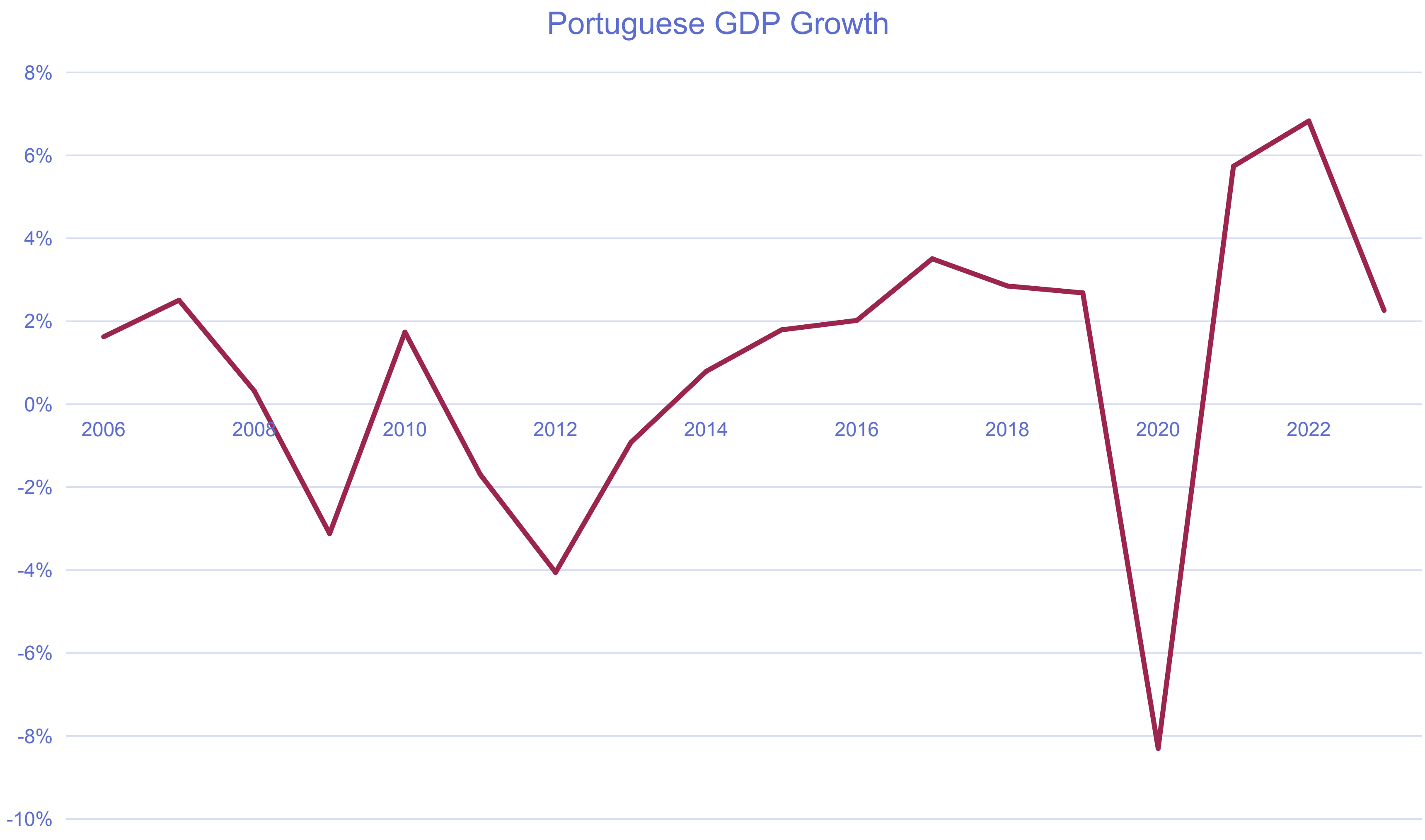
Due to the trajectory of public debt, pursuing expansionary fiscal policy would have been costly. The situation created a divide amongst policymakers in Europe, with many calling for greater austerity.

The rationale behind this was that curbing fiscal spending would help authorities restore credibility after the crisis, even if it came at the expense of reducing growth in the short run.

The situation once again highlights the contextual nature of policymaking.

The case of Portugal

- November 19, 2009: Portugal raised its 2009 forecast for the deficit to 8% of GDP from 5.9%.
- In January, revised data showed that the deficit for 2009 was actually 9.4%.
- In 2010, the country's deficit was again supposed around 9%.
- In March 2010, authorities announced salary freezes, new budget cuts, a privatization program and new taxes.
- Portuguese authorities then negotiated a EUR 78 Billion package with the IMF and EU, and the country ended up leaving the bailout program in 2014.



Source: World Bank and IMF (2024).

Effect of Austerity on growth

- After the bailout was approved in 2011, growth turned negative and reached –4% in 2012
- Inflation also went down from 3.65% in 2011 to 2.77% in 2012, almost 0% in 2013 and a deflation of -0.3% in 2014

The results were consistent with the AD/AS framework we had established, in which a contractionary fiscal policy would lead to lower growth and deflationary pressures.

Did policymakers make the right decision?

Even though the economy suffered from a severe contraction, inaction may have led to a confidence crisis. However, several economists, such as Paul Krugman and Joseph Stiglitz, called for a European-wide stimulus package to combat the recession.

Given the complexity of the situation, it is difficult to come to a definite conclusion about whether austerity was the best option or not. The situation does, however, give us insight into the tradeoffs public authorities face when implementing certain economic policies.

A Caveat

It may well be that in certain situations, the best economic policy is to do nothing. For example, let the market forces bring the economy to full employment.

However, it is next to impossible to test this. **Why?**

Governments and authorities almost always try to affect both financial markets and the market for goods and services. They have strong political incentives for for pursuing active policies which meet society's demands.

The Nature of Economic Policy

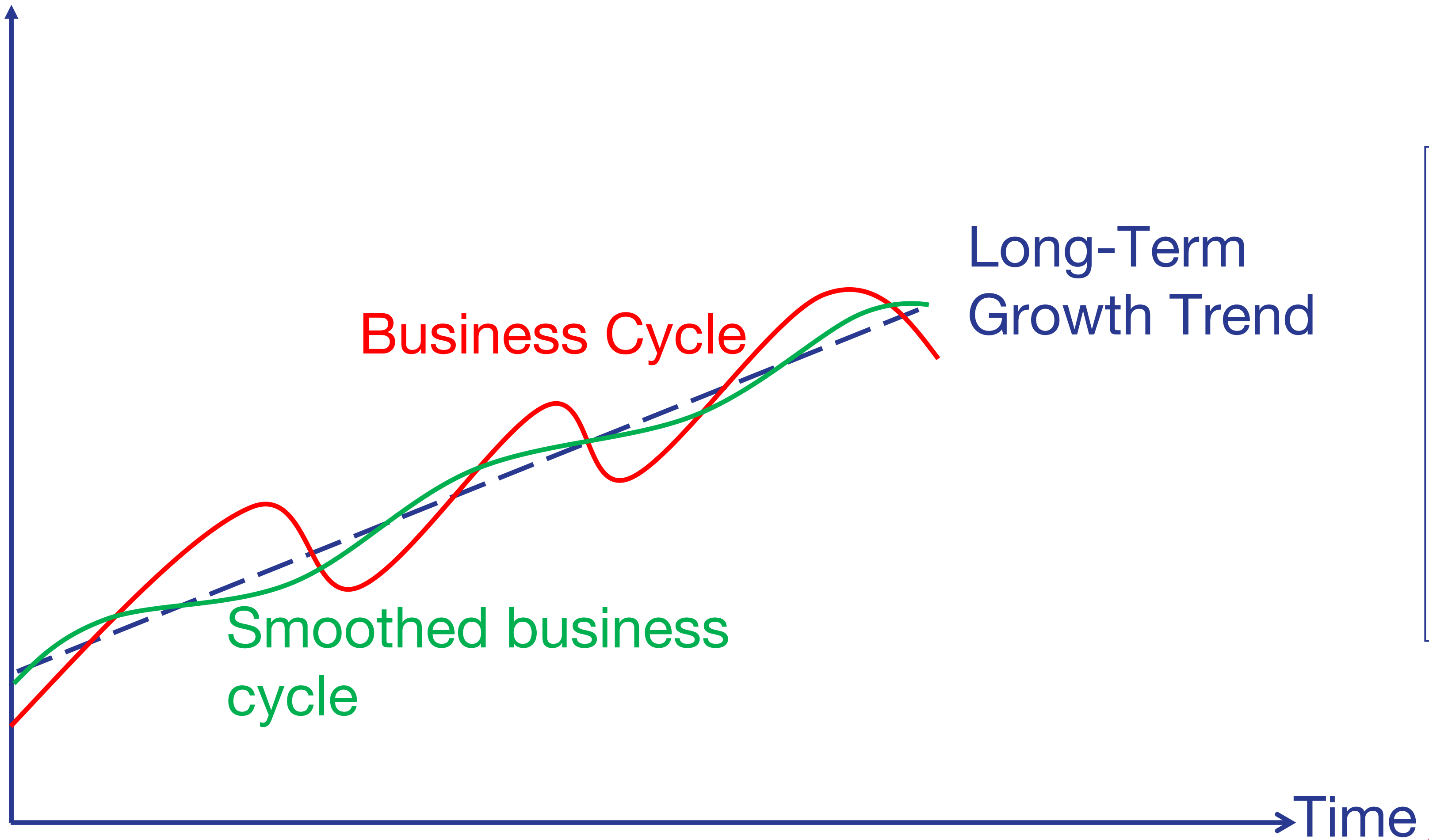
Economic Policies should be countercyclical

In the long run, growth in productivity determines the rate of increase of potential output.

In the short run there could be a space for active policy, and it follows from the dynamics of business cycles.

For example: Under recessions, the growth gap widens until prices and wages fall and prospects change so businesses restart capital expenditure. During an expansion, there are inflationary pressures, and unemployment decreases until the labor market is squeezed and businesses start cutting jobs.

Remember



Direct goals of economic policy - smoothing of the business cycle and increasing long-term trend

Chapter 7.5

Income inequality and the distributive effects of monetary and fiscal policies

What about Income Inequality?

Income inequality is a massive problem in many countries around the world. In the early 2010's, the 99% movement spawned many protests in the United States.

So far, we have built monetary and fiscal policies which are unconcerned with the distribution of wealth and income. Policies which are meant to reduce inequality are not designed in tandem with the regular macroeconomic management of the economy.

Bolivia and the tradeoffs between growth, income inequality and basic human rights

- In 2018, the country's GDP per capita was barely above USD 3,000.
- The 10% richest Bolivians held over a third of the nation's income, while 12% of the population lived on less than USD 2 per day.

This was AFTER a strong period of economic growth and improvement in inequality. The reduction in inequality was driven mainly by labor income growth at the bottom end of the income distribution, and was concentrated in the informal, low‑skilled service and manufacturing sectors. (Vargas and Garriga, 2015)

Bolivian government dilemma in 2017

Public authorities intended to revive a project of a superhighway link between the Andes with the Amazon, with the aim of delivering perennial economic growth.

The distributive effects were centered on two groups: indigenous people and cocoa growers.

Indigenous people would be negatively affected and the cocoa growers would benefit from the better infrastructure. While both groups are “poor”, the indigenous people are poorer in relative terms. The project also has serious environmental impacts.

Bolivian government dilemma in 2017: The Main Takeaway

This situation illustrates the difficulty of modern policymaking. In the past, such a project would have faced very little opposition, because the promise of economic growth would be the main driver for poor countries.

However, today, we know that growth comes at a price, both to certain groups and the environment. The project can generate more development, but only if it its deleterious effects on the indigenous groups and nature are mitigated.