

Public Affairs 854
**Macroeconomic Policy and
International Financial Regulation**

Lecture 14
3/10/2021

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Outline

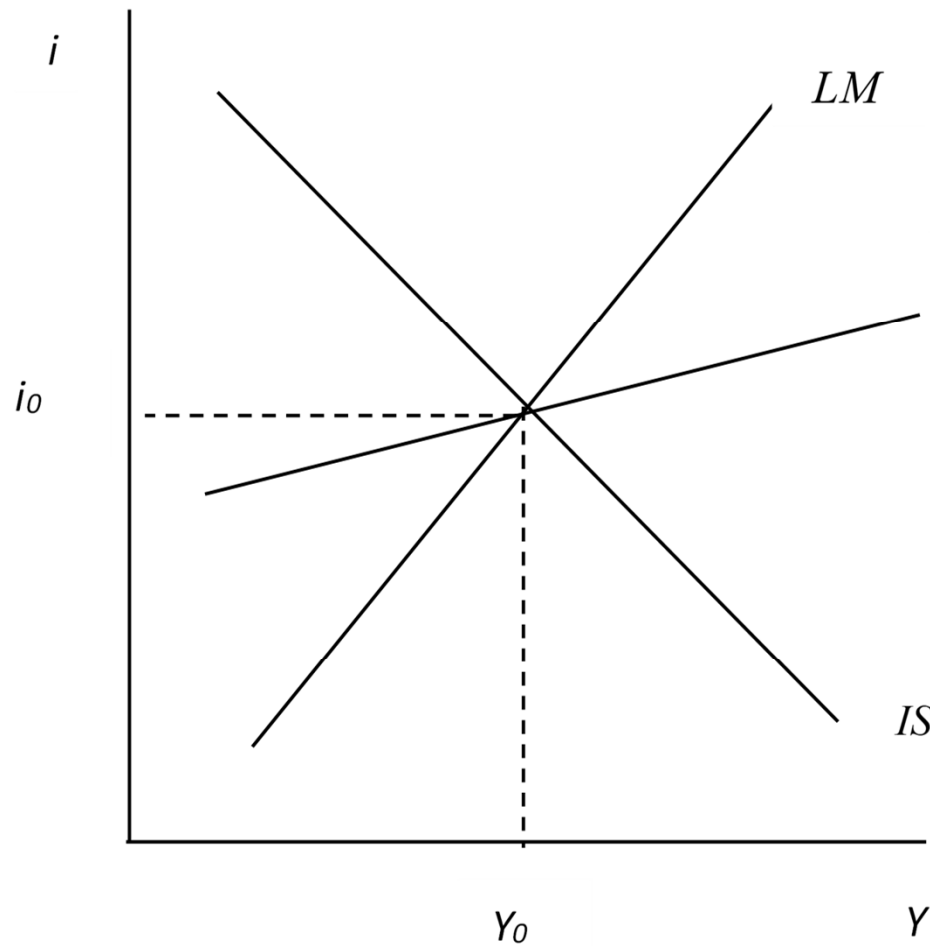
- Overview of Mundell-Fleming
- External Balance Condition ($BP=0$)
- Mundell-Fleming under Fixed Exchange Rates: Policy

Overview of Mundell-Fleming

Overview

- We build on IS-LM
- Adding in external balance condition, where $ORT=0$
- We assume we're not always at $ORT=0$ though
- Under fixed rates, money supply depends on whether $ORT=0$
- Under floating rates, $ORT=0$ always holds and exchange rate adjusts

Mundell-Fleming (or IS-LM-BP=0)



$BP = 0$

Along this line,
 $CA + FA = 0$,
Or $ORT = 0$

Interpreting BP=0 Curve

- The BP=0 essentially refers to financial account balancing off current account
- Since we'll assume financial flows respond to interest rates and imports respond to income, there's a relationship between the two

External Balance Condition

Derivation

$$(14.9) \quad CA + FA + ORT \equiv 0$$


Simplify: no F, V

$$(14.10) \quad TB + FA = 0$$

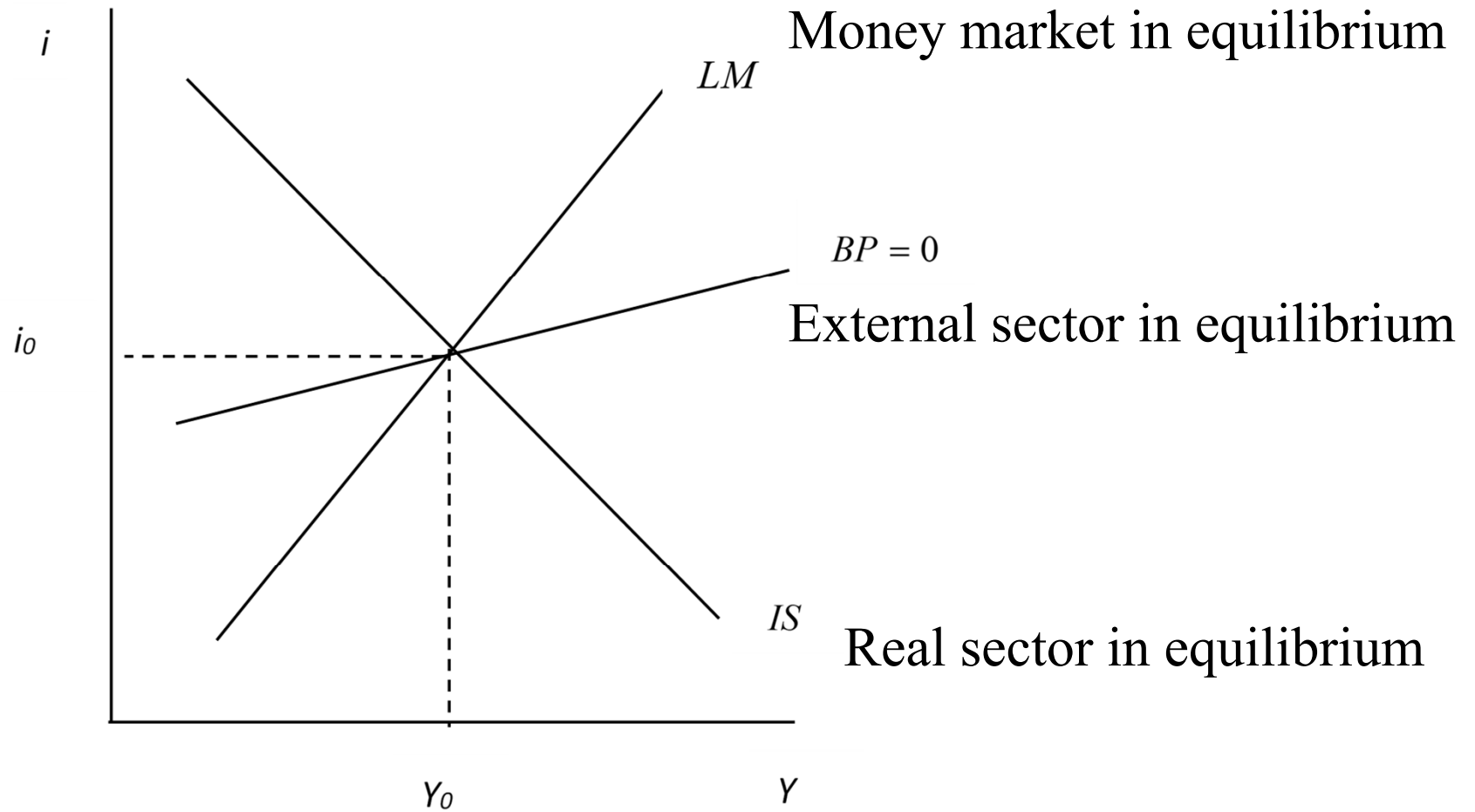
$$(14.11) \quad FA = \overline{FA} + \kappa(i - \bar{i}^*)$$

We can old q fixed, by putting a bar over it

Substitute into 14.10, solve for interest rate

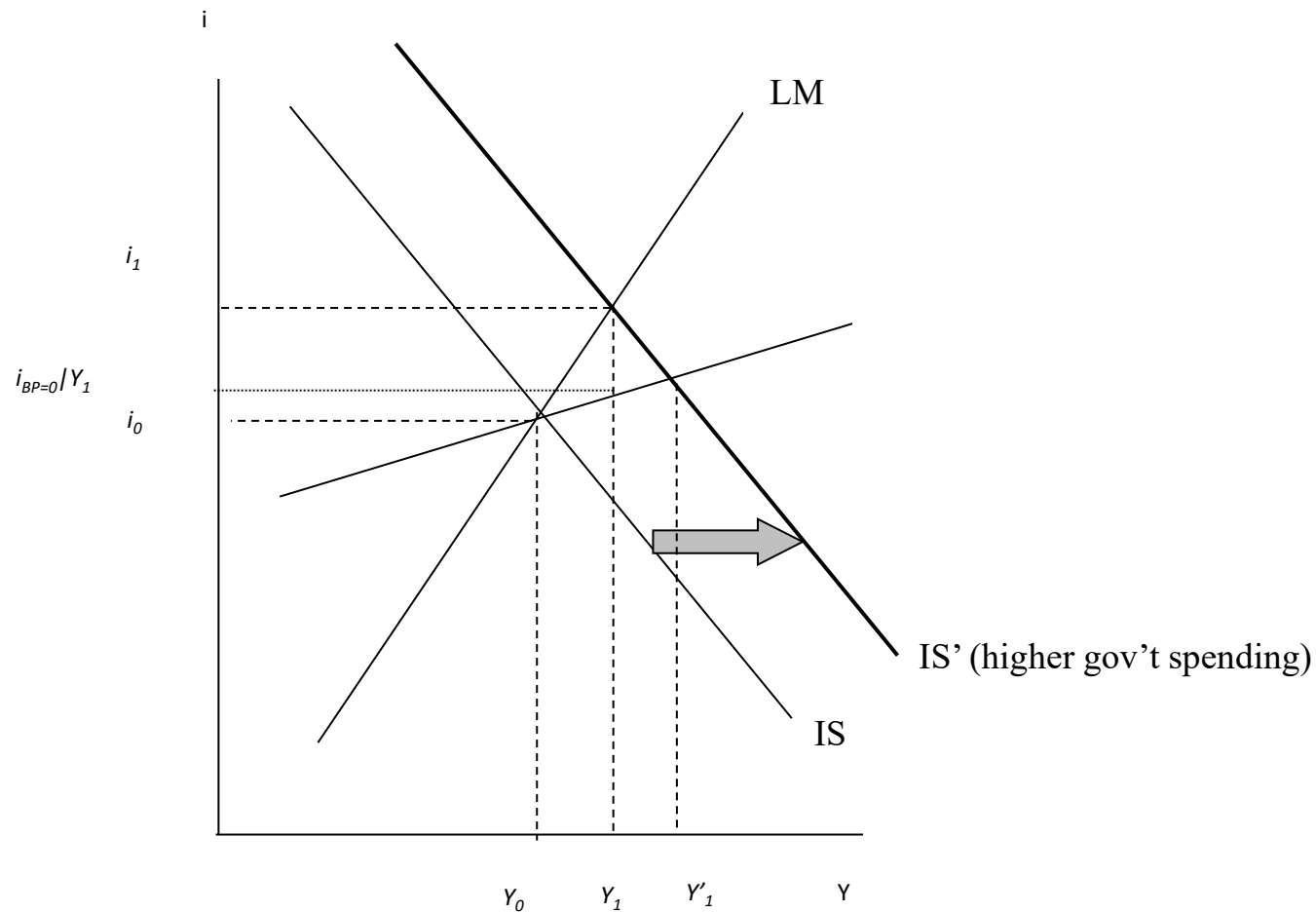
$$(14.12) \quad i = -\left(\frac{1}{\kappa}\right) [(\bar{X} - \overline{IM} + \overline{FA}) + (n + v)q] + \bar{i}^* + \left(\frac{m}{\kappa}\right) Y$$


Mundell-Fleming

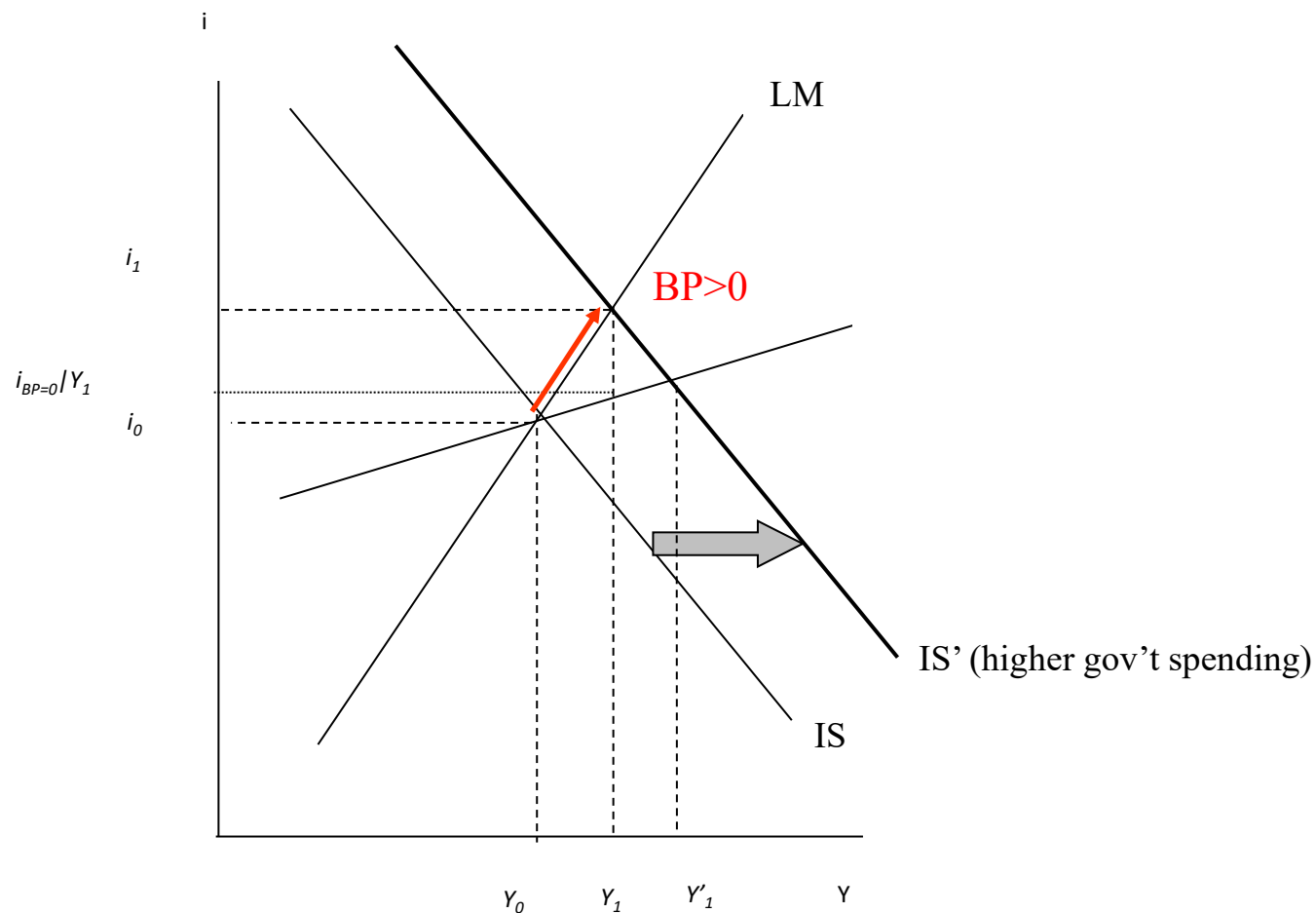


Mundell-Fleming under Fixed Exchange Rates: Fiscal Policy

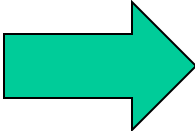
Fiscal Policy under Fixed Exchange Rates



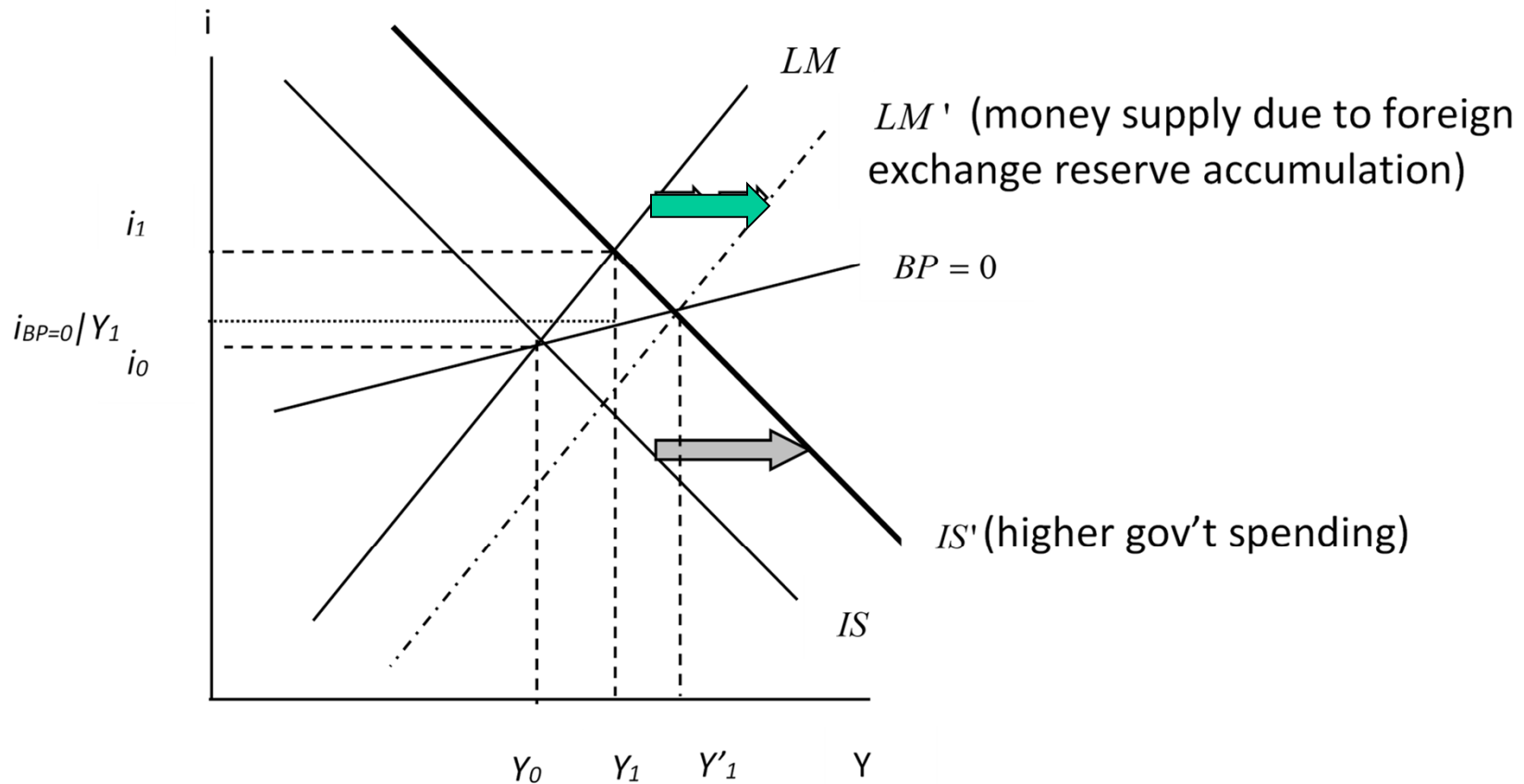
Fiscal Policy under Fixed Exchange Rates



Central Bank Balance Sheet (under $BP > 0$, No Sterilization)

Central Bank Balance Sheet			Central Bank Balance Sheet	
Assets	Liabilities		Assets	Liabilities
Domestic Assets (DA)	Currency (CU)			+1 CNY (CU)
Foreign exchange reserves (FXRes)	Bank reserves (Res)		+1 CNY (FXRes)	

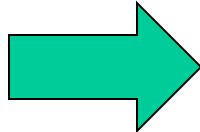
Fiscal Policy: No Sterilization



What If Sterilization?

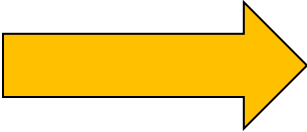
- Sterilization is central bank offsetting the impact of financial inflows affecting money supply
- Can be done by Open Market Operations – central bank sells government bonds from its assets, brings in money (which then disappears)

Central Bank Balance Sheet (under $BP > 0$, No Sterilization)

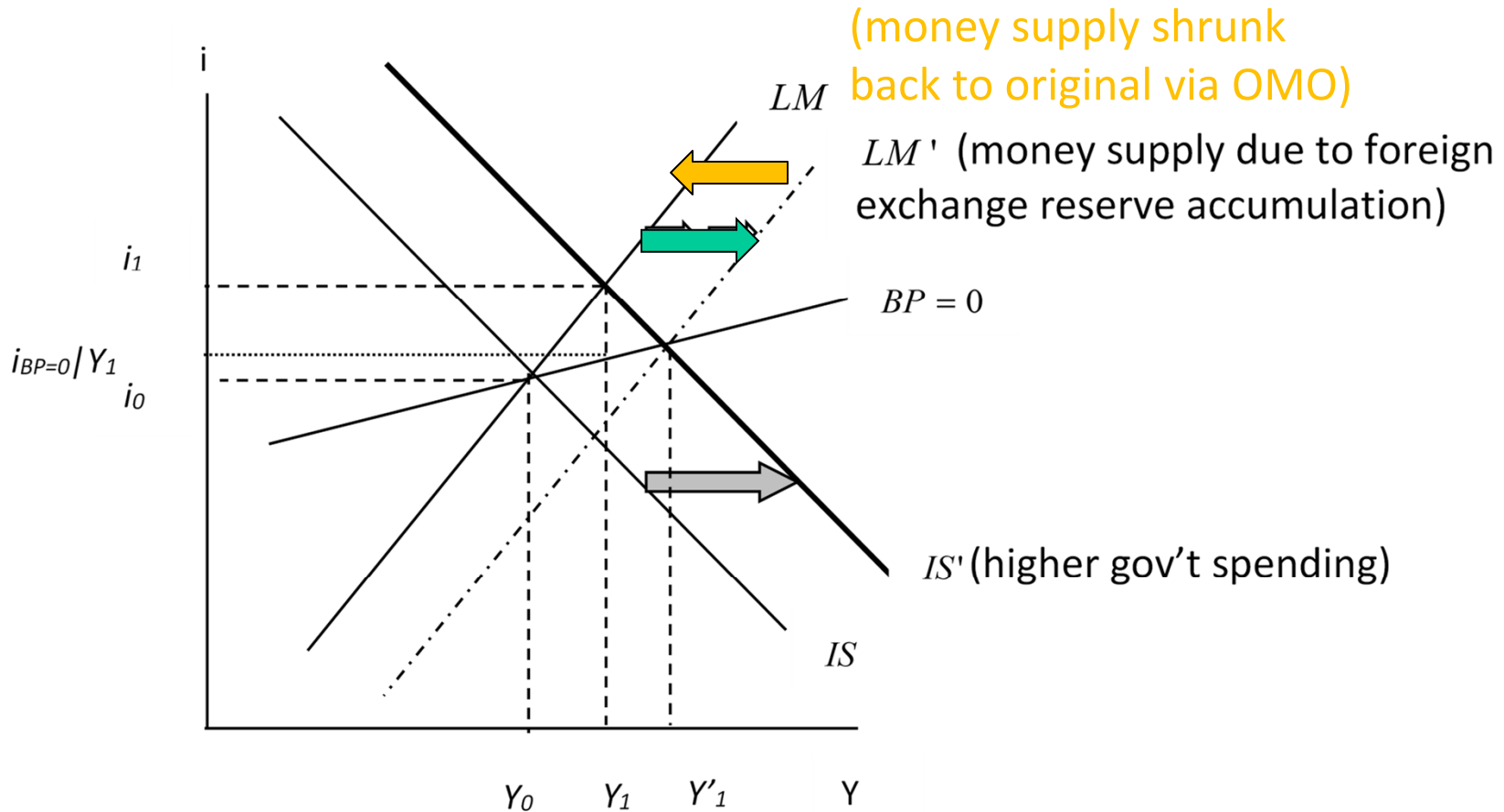
Central Bank Balance Sheet			Central Bank Balance Sheet	
Assets	Liabilities		Assets	Liabilities
Domestic Assets (DA)	Currency (CU)			+1 CNY (CU)
Foreign exchange reserves (FXRes)	Bank reserves (Res)		+1 CNY (FXRes)	

Sterilization of Inflow

Central Bank Sells Gov't Bond

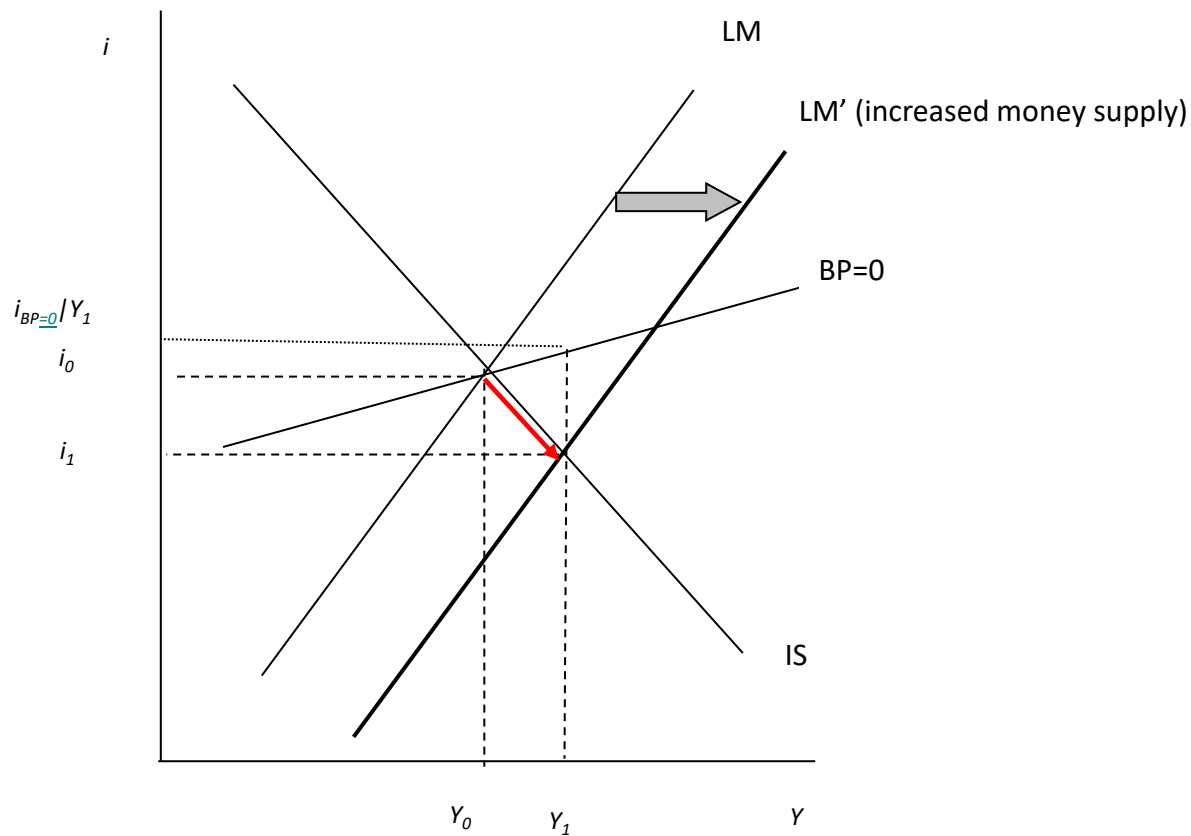
Central Bank Balance Sheet			Central Bank Balance Sheet	
Assets	Liabilities		Assets	Liabilities
	+1 CNY (CU)		-1 CNY (DA)	+1 CNY
+1 CNY (FXRes)				-1 CNY (CU)
			+1 CNY (FXRes)	

Fiscal Policy: **with** Sterilization

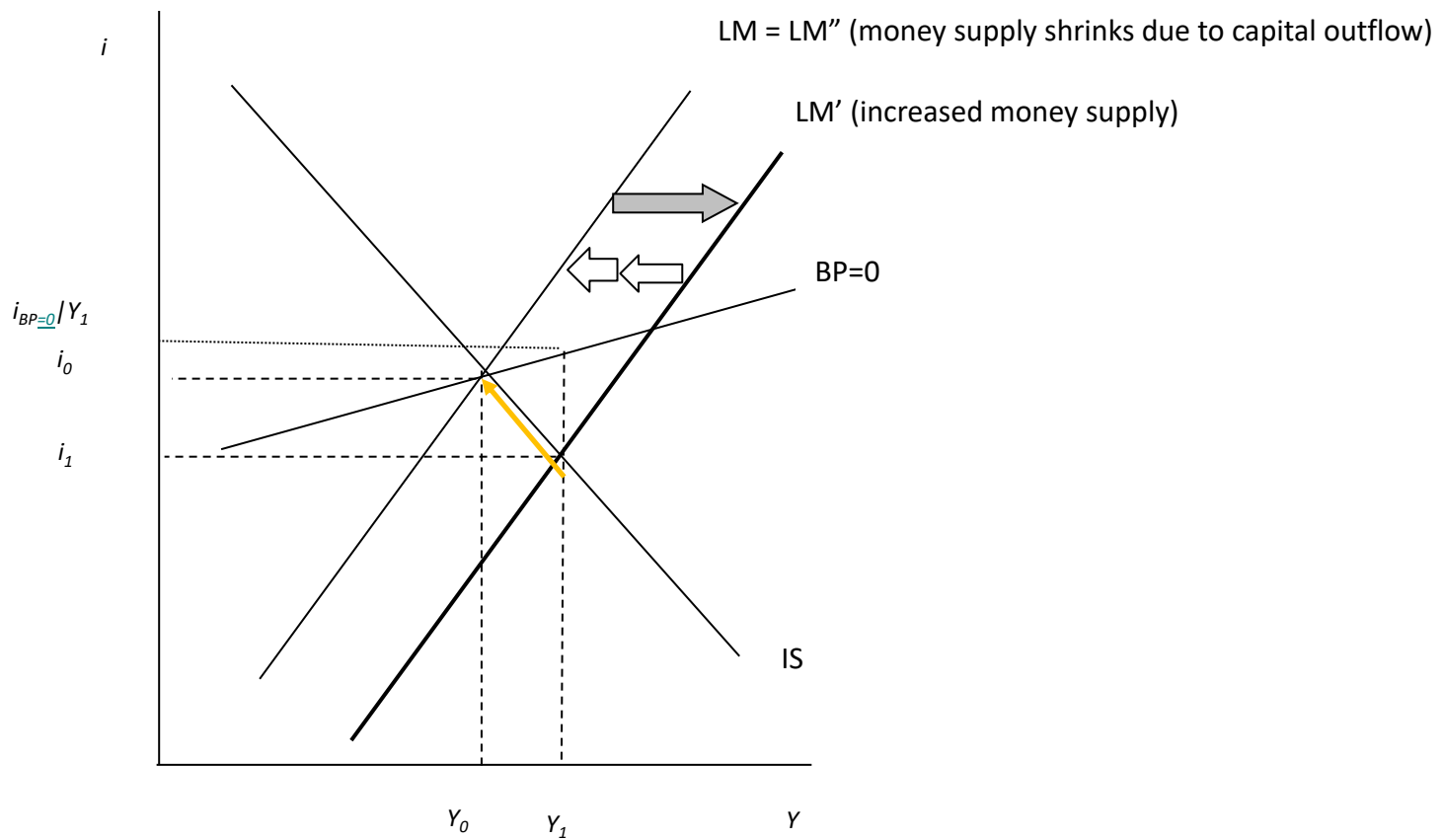


Mundell-Fleming under Fixed Exchange Rates: Monetary Policy

Monetary Policy under Fixed Exchange Rates (w/ sterilization)

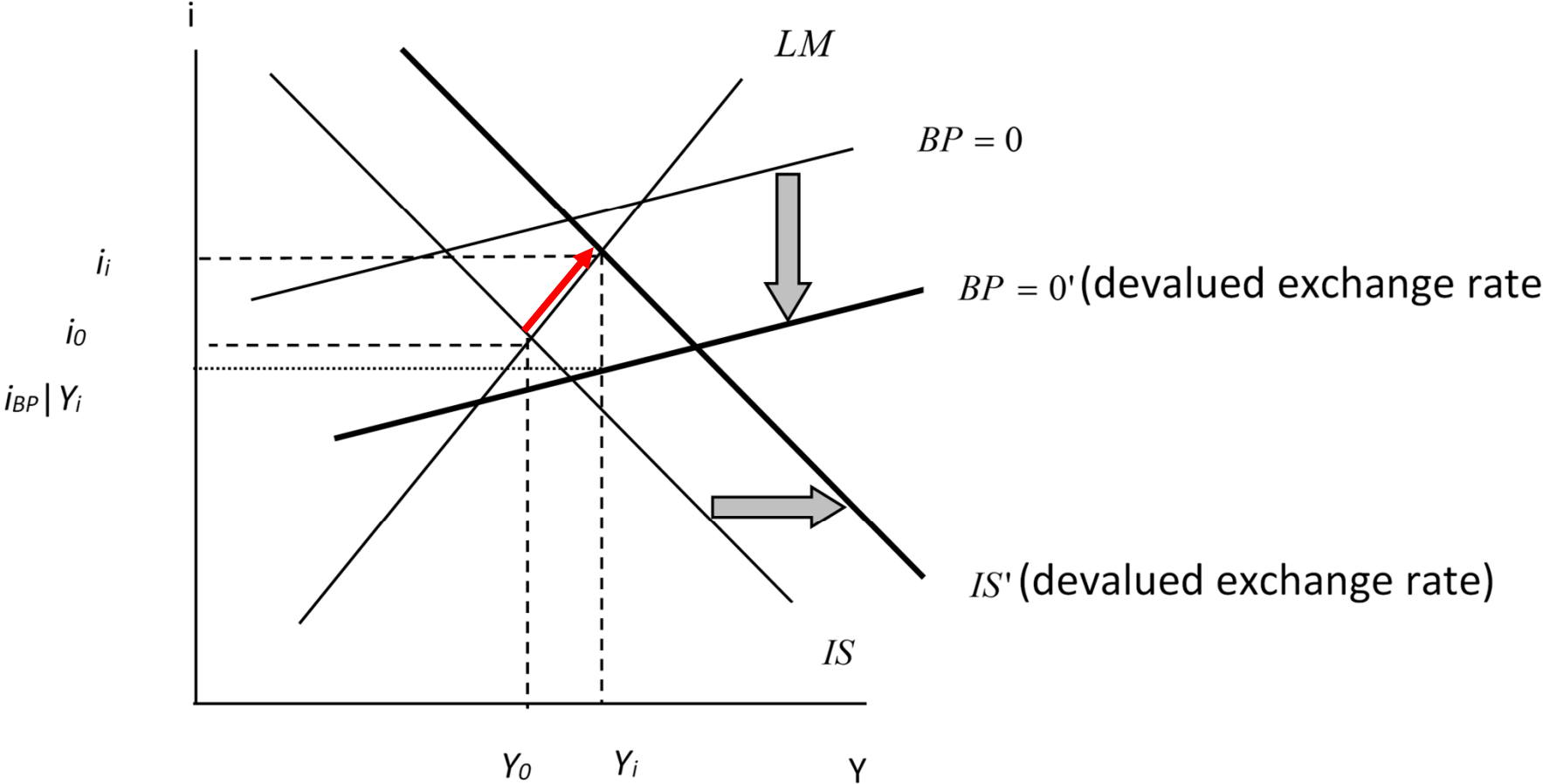


Monetary Policy under Fixed Exchange Rates (no sterilization)



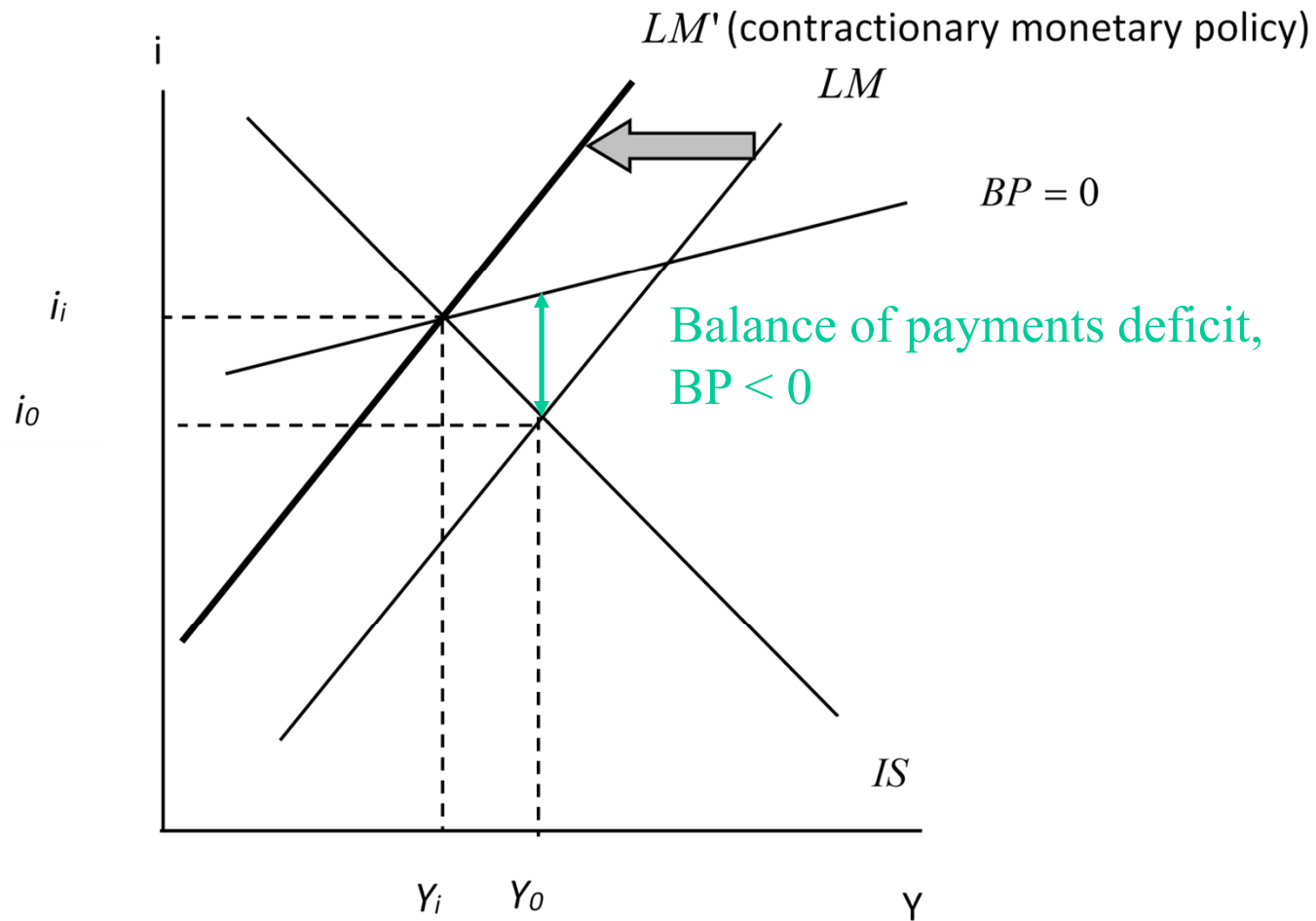
Mundell-Fleming under Fixed Exchange Rates: Exchange Rate Policy

Devaluation from Initial BP Deficit

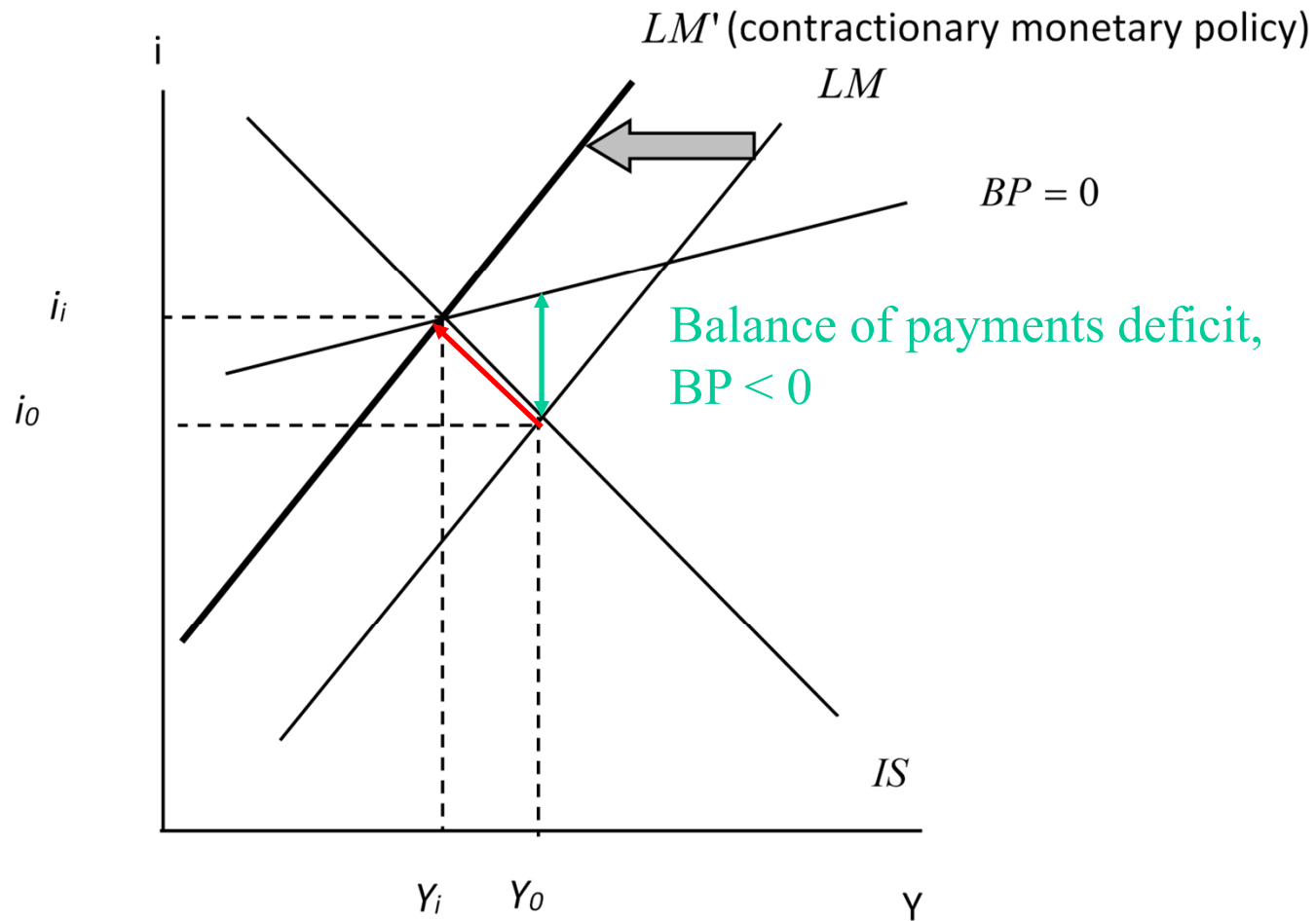


Corrected arrow 3/15

Interest Rate Defense



Interest Rate Defense



Conclusions

- Develop model of entire economy for short run
- Real, money, external sectors
- Under fixed exchange rates
- Fiscal policy is effective
- Monetary policy is undone over longer term
- Devaluation can fix balance of payments problem

Next Lecture

- China's Balance of Payments in 2000's
- Mundell-Fleming or IS-LM-BP=0 under Floating Exchange Rates
- The Trilemma