Macroeconomics, Endogenous Money and the Contemporaneous Crisis: A Teaching Model

By

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Outline

- Introduction: A Research-driven Approach to Macroeconomic Teaching
- Endogenous Money and the Conduct of Macroeconomic Policy
- Deriving the Aggregate Demand Curve
- Completing the Model: Pricing, Production, and the Labour Market
- The Contemporaneous Crisis and Some Policy Markers' Responses

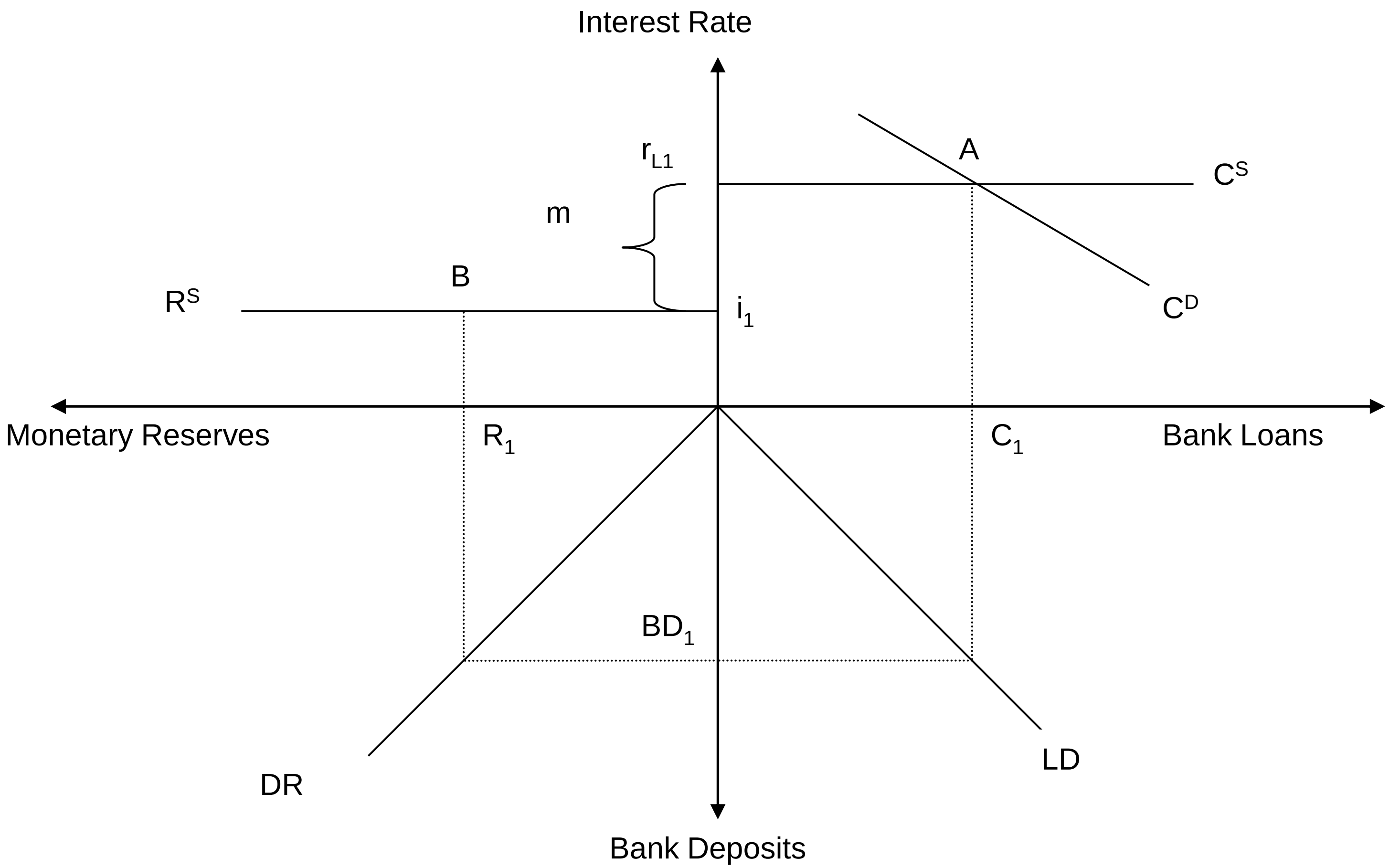
Introduction

- A Research-driven Approach to Macroeconomic Teaching
  - Revolutions and Counter-revolution in Macroeconomics
  - Moving beyond the old IS-LM model
  - Transcending the current New Consensus Macroeconomics (NCM) model

Endogenous Money and the Conduct of Macroeconomic Policy

- Endogenous Money versus Exogenous Money
- The Main Tenets of Endogenous Money Theory:
  - Loans create deposits
  - Deposits make monetary reserves
- A Graphical Illustration: Figure 1

The Endogenous Money Supply Process (Fig. 1)



Deriving the Aggregate Demand (AD) Curve

– A simple set of equations

– No Pigou effect (M is endogenous)!

– The shape of the *AD* curve is a policy construct

– A Graphical Illustration: Figure 2

$$\uparrow P \Rightarrow \uparrow i \ (\text{Equ. } 3) \Rightarrow \uparrow r_L \ (\text{Equ. } 1; \text{with fixed } m) \Rightarrow \downarrow D \Rightarrow$$
$$\Rightarrow \downarrow cD \ (\text{with fixed } c) \Rightarrow \downarrow Y \ (\text{Equ. } 2)$$

Deriving the Aggregate Demand (AD) Curve

- Basic Glossary

  ND = Components of Aggregate Demand that are not debt-financed by loans from banks

  D = Planned or desired debt-financed (by loans from banks) spending

  c = Proportion of creditworthy households and business loans

  r_L = bank loans rate (set as a mark-up *m* over the central bank's short-run interest rate *i*)

$$AD = ND + cD$$

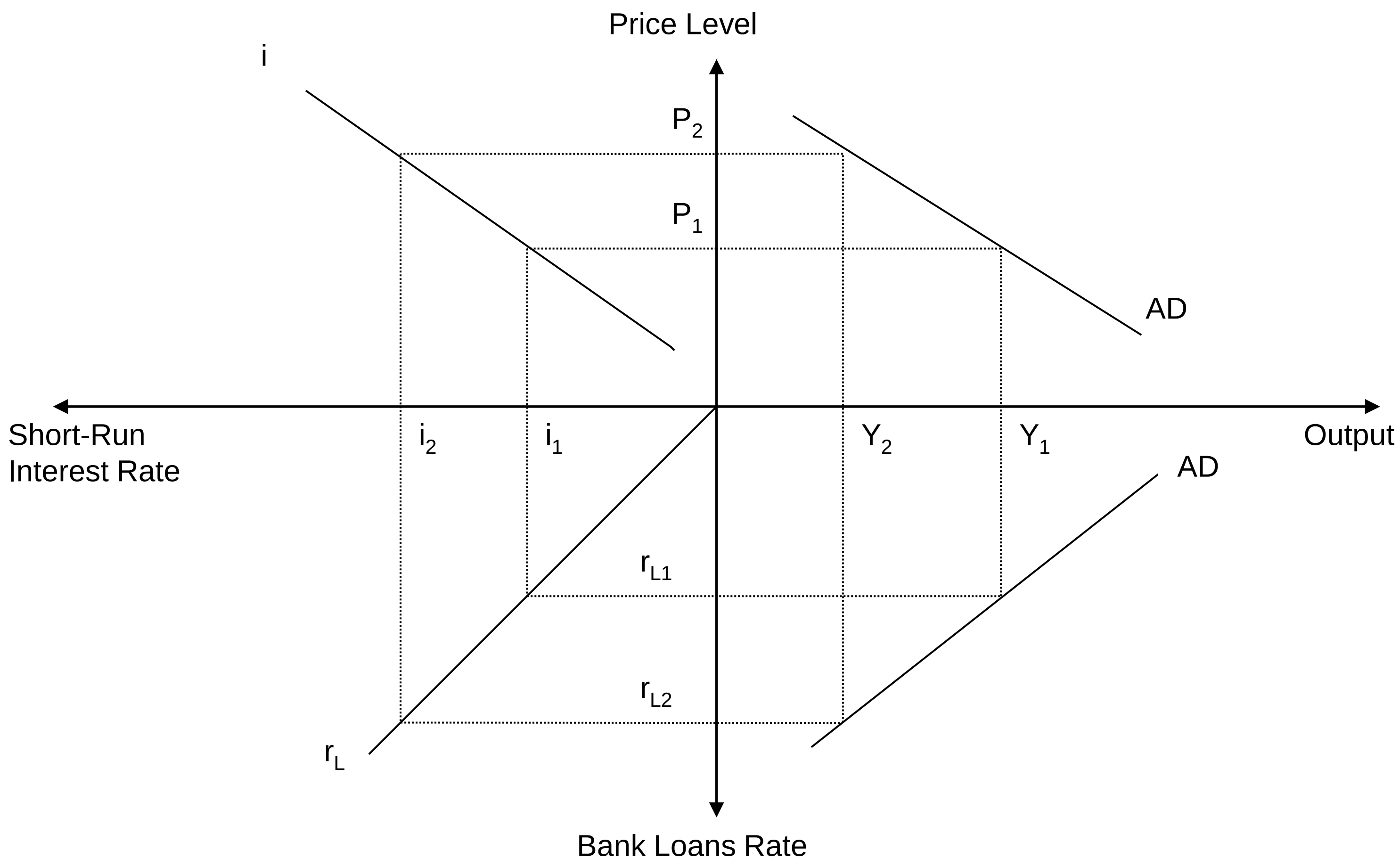
$$D = f(r_L),\ f' < 0$$

$$r_L = (1+m)i$$

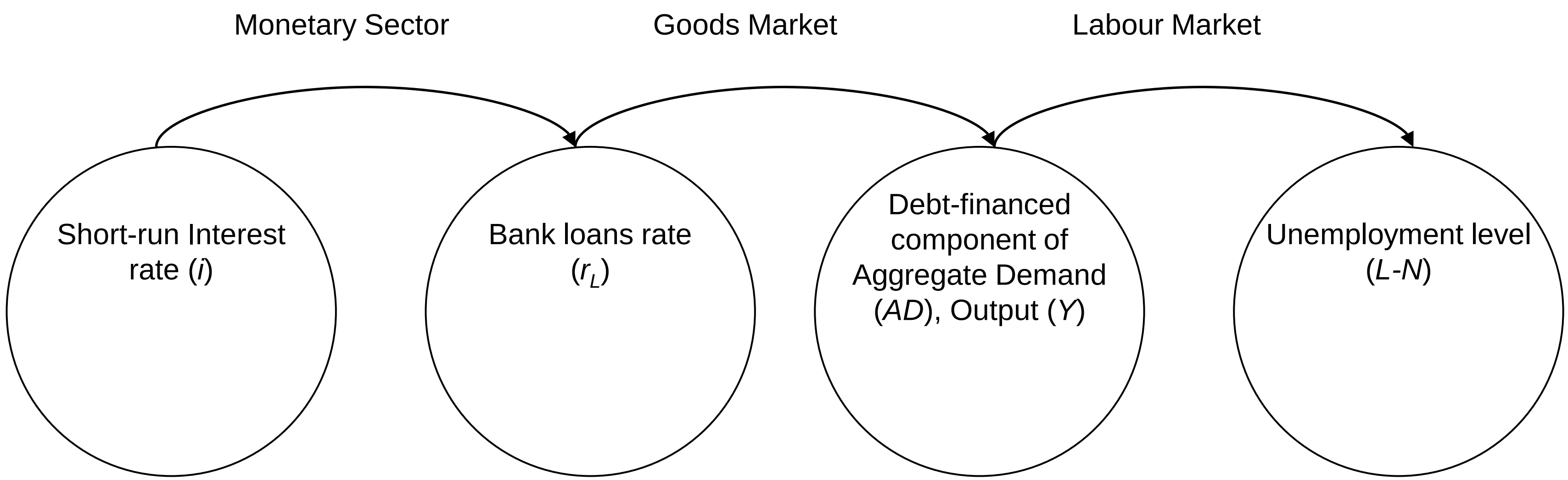
$$AD = ND + cf(r_L)$$

$$i = g(P),\ g' > 0$$

A Conventional (Downward-Sloping) Aggregate Demand Schedule (Fig. 2)



Completing the Endogenous Money Model: Pricing, Production, and the Labour Market



Completing the Endogenous Money Model

- Basic Glossary

  P = firms set prices as a fixed mark-up *n* over the average cost of labour *Wa*

  W= nominal wage (fixed for length of contract)

  a = labour/output ratio, namely *N/Y* (like the capital output ratio *K/Y* this is given in short-run)

  S_N = Labour supply schedule

  L = entire labour force

$$P = (1 + n)\overline{W}a$$

$$w = \frac{W}{P} = \frac{1}{(1 + n)a}$$

$$S_N = L$$

Completing the Model: Pricing, Production, and the Labour Market

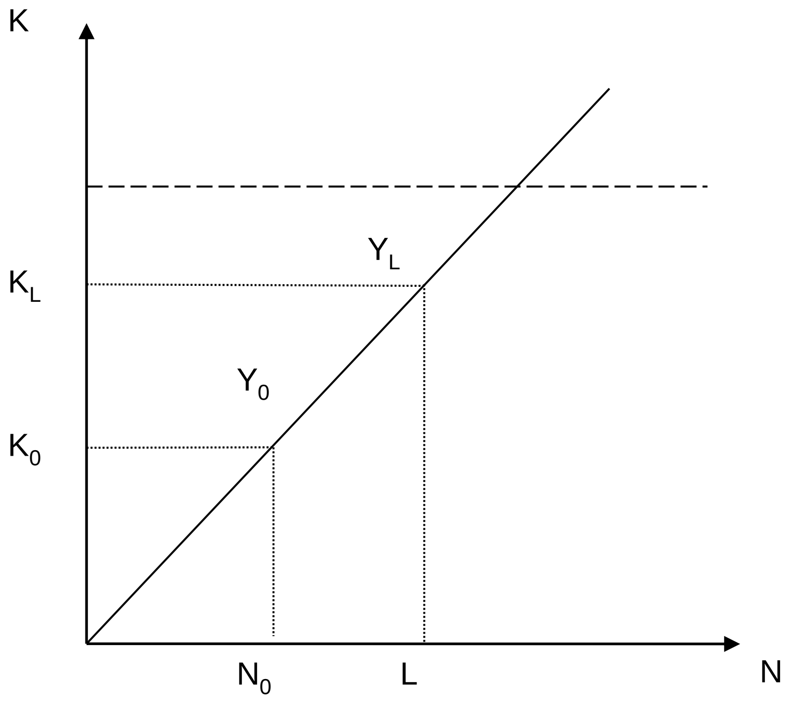
- The Aggregate Production Function (Fig. 3)
- The Aggregate Supply Schedule (Fig. 4)
- The Goods Market (Fig. 5)
- Equilibrium Output and Employment (Fig. 6)
- The Labour Market (Fig. 7)
- A Graphical Illustration: Figures 3-7

$$W_1 \Rightarrow P_1 \text{ (Equ. 4; given } n \text{ and } a) \Rightarrow AS \Rightarrow$$

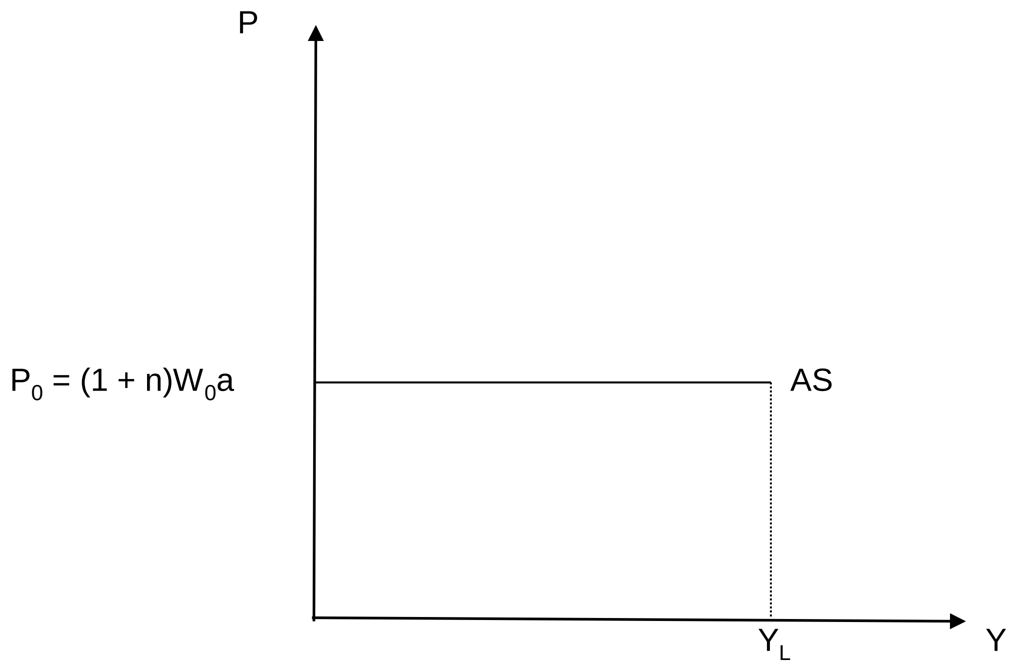
$$AS \text{ (together with } AD \text{ curve)} \Rightarrow Y_1 \text{ (Fig. 5)}$$

$$Y_1 \text{ (via Production Schedule)} \Rightarrow N_1 \text{ (Fig. 6)} \Rightarrow U_1 \text{ (Fig. 7)}$$

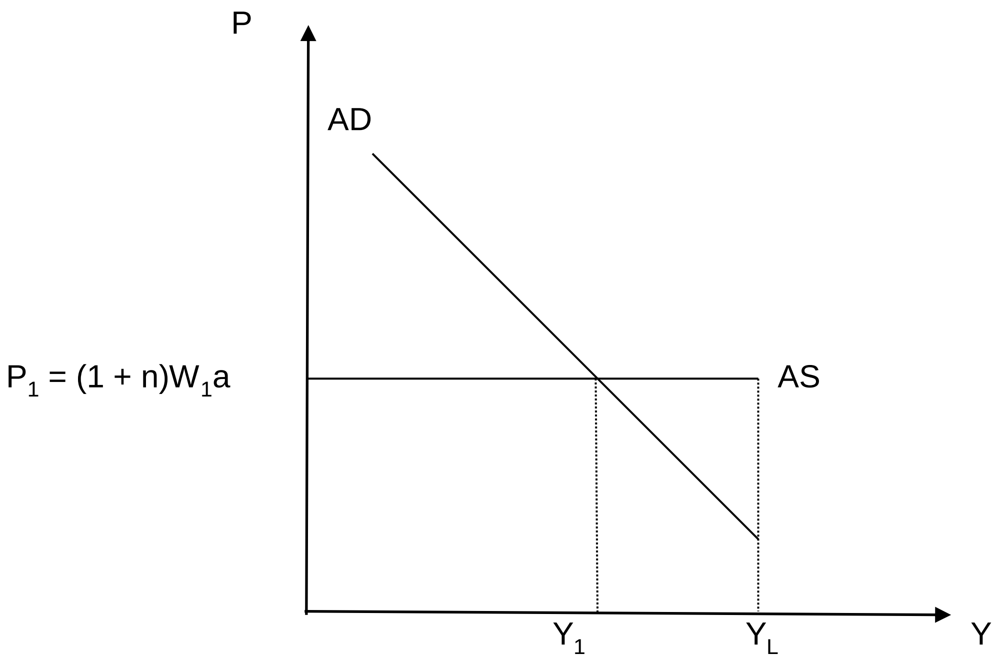
The Aggregate Production Function (Fig. 3)



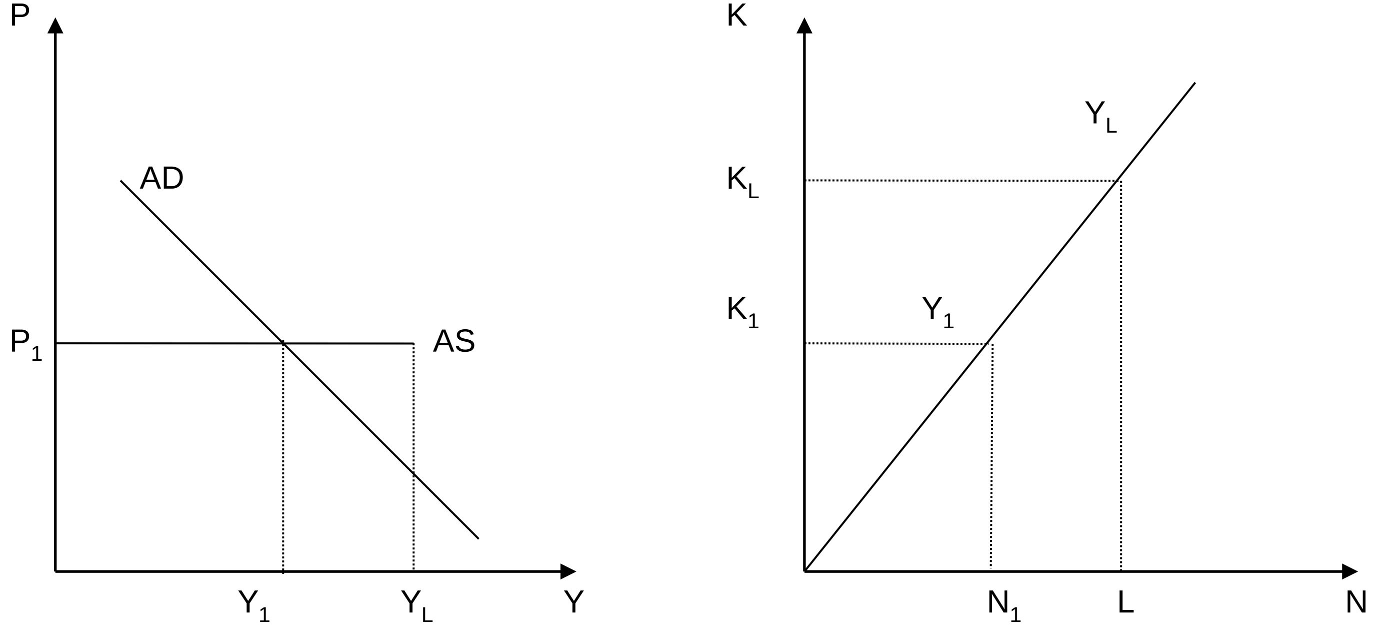
The Aggregate Supply Schedule (Fig. 4)



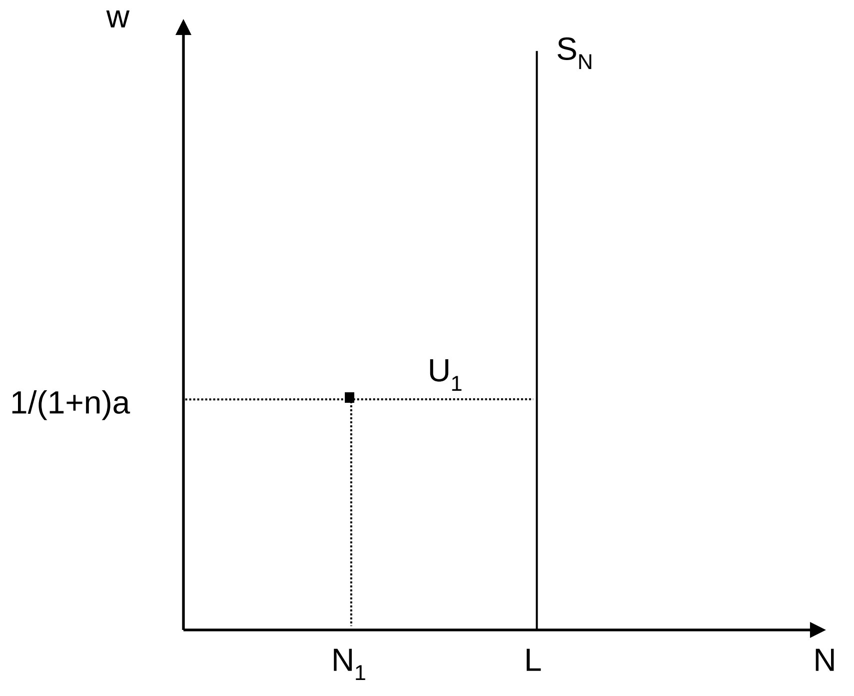
The Goods Market (Fig. 5)



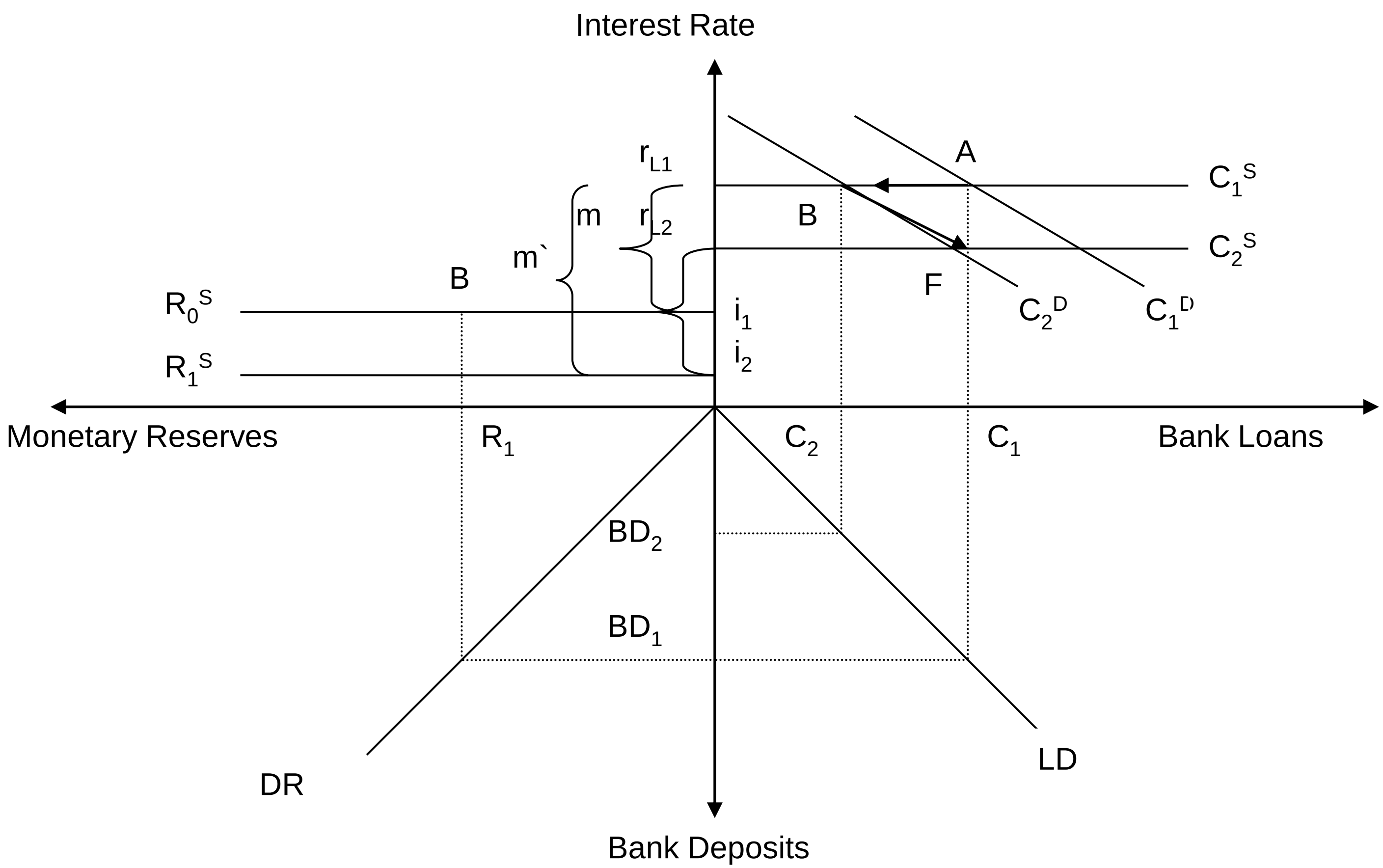
Equilibrium Output and Employment (Fig. 6)



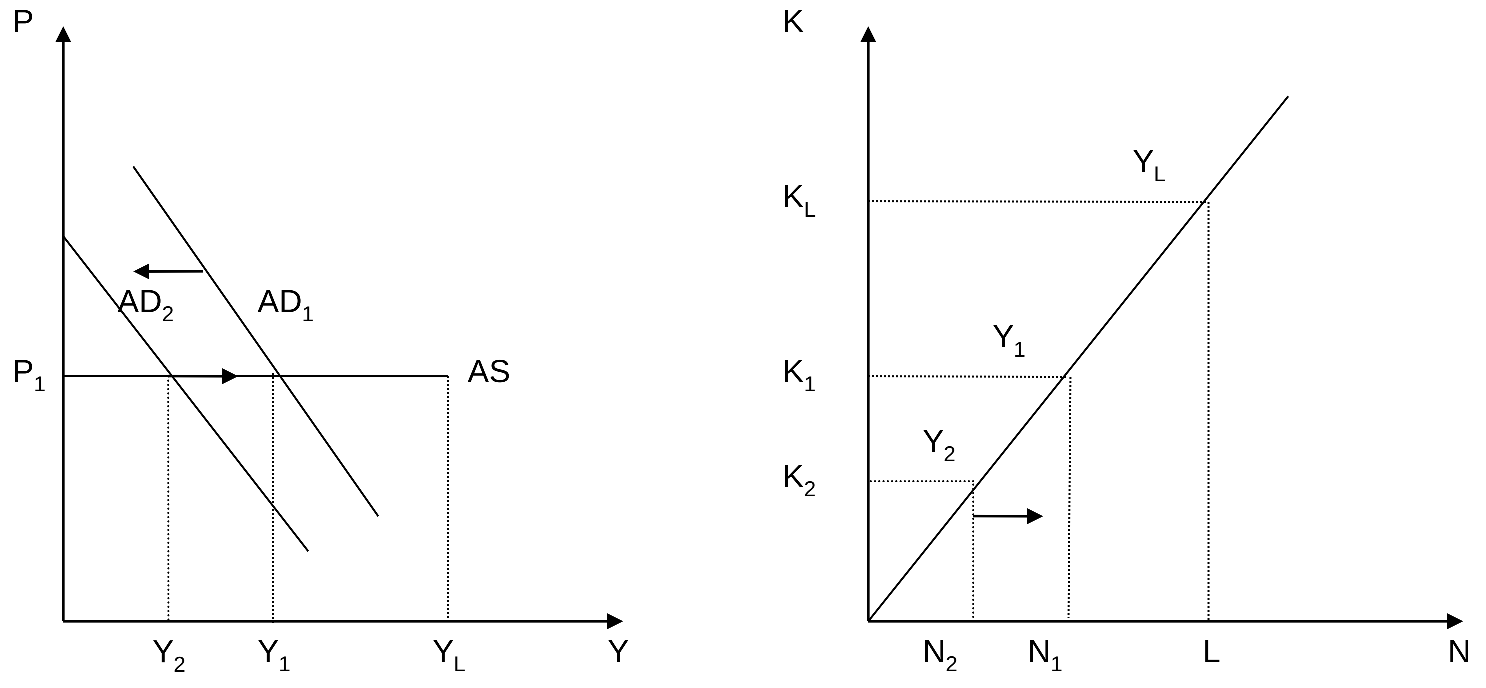
The Labour Market (Fig. 7)



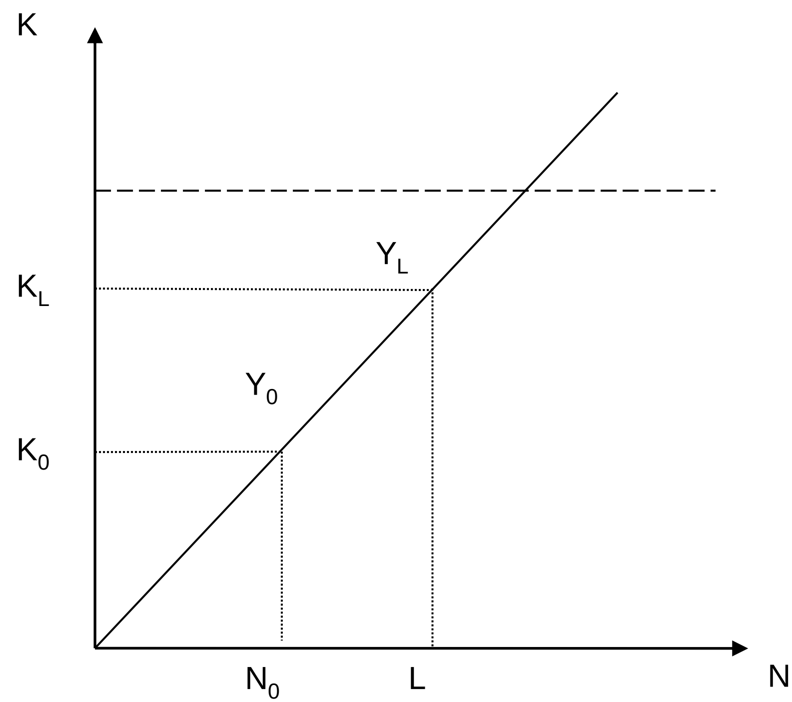
The Contemporaneous Crisis and the Endogenous Money Supply Process (Fig.8a)



Consequences and Some Policy Responses to the Contemporaneous Crisis (Fig. 8b)



The Effects of the Contemporaneous Crisis in the Labour Market (Fig. 8c)



Further Developments

- A Richer Aggregate Demand Function

  $AD = ND + cD + E$

  With $E = \beta_1 V - \beta_2 D$

  $\rightarrow$ ambiguous slope of *AD* curve
- Solvency rule vs. Taylor rule
- Quantitative Easing
- From the ‘Great Recession’ to the ‘Great Stagnation’?

  $\rightarrow$ Is a credit-driven consumption approach to