

National Economic Performance

Andrew B. Abel
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Overview

I. Measuring Economic Activity

II. Fundamentals of National Income
Accounting

III. Determinants of Aggregate Demand

I. Measuring Economic Activity

A. Users of Economic Data

B. National Income Accounts

C. Employment Statistics

D. Price Levels and Inflation

E. Wages, Productivity and Unit Labor Costs

I.A. Users of Economic Data

- Policy Makers
 - Guide the direction of policy
- Businesses
 - Forecast demand, costs of materials, and cost of funds
 - Tax consequences of inflation
 - Exchange rates

I.A. Users of Economic Data

(cont'd)

- Labor Unions
 - Need to know unemployment rate and inflation rate when negotiating contracts
 - COLA's
- Voters
 - Political business cycle
- Financial Managers
 - Interest rates, exchange rates

I.B. National Income Accounts

- Gross Domestic Product (GDP)
 - Definition: Market value of final goods and services produced within a country over a period of time
 - market value
 - final goods and services
 - excludes intermediate goods and services
 - avoids double counting
 - equivalent to value-added

Definition of GDP

(cont'd)

- Produced ... over a period of time
 - Excludes trades of assets
 - new vs. existing homes
 - includes commissions on trades of assets
 - Typically annualized
- Produced in a country
 - Produced inside the country
 - GNP: produced by domestic factors of production anywhere in the world
 - $\text{GNP} = \text{GDP} \textit{ plus}$ receipts of factor income from rest of world $\textit{ minus}$ payments of factor income to rest of world

Problems in Construction of GDP Data

- Identification of Final Goods
- Quality Changes
- Underground Economy
- Seasonality

Deficiencies in Concept of GDP

- Ignores Use of Exhaustible Resources
- Ignores Deterioration of Environment
- Does Not Value Leisure
- Government Services Valued at Cost
- Aggregation

I.C. Employment Statistics

- Labor Force
 - Demographic changes
 - Participation rates
 - Secular changes
 - women
 - Cyclical changes
 - secondary earners
 - Seasonal changes
 - teenagers

Employment Surveys

- Household Survey (counts people)
 - Employed
 - Unemployed
 - actively seeking work
 - Not in Labor Force
- Establishment Survey (counts jobs)
 - Cannot be used to measure unemployment

The U.S. Employment Situation

November 1998

	millions	% of LF	% of adult pop
Employed	132.154	95.6%	64.1%
			(Employment ratio)
Unemployed	6.099	4.4%	3.0%
		(Unemployment rate)	
Labor Force	138.253	100.0%	67.1%
			(Participation rate)
Not in Labor Force	67.851		32.9%
Adult Population	206.104		100.0%

Employment Situation South Africa - 1997

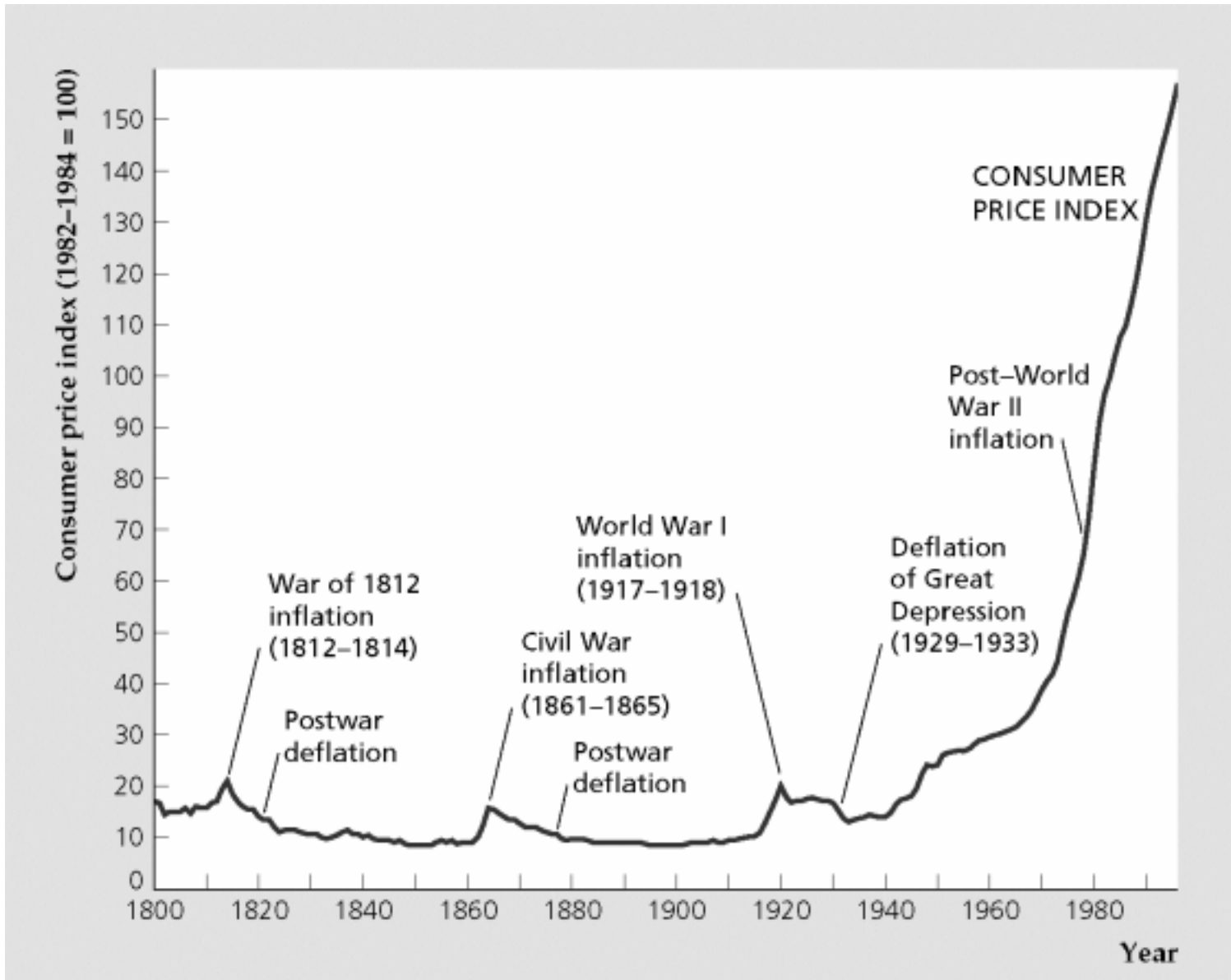
	thousands
Employment in Non-Agricultural Sectors	
Public Sector	1773
Private Sector	3372
Total Non-Agricultural Employment	5145
Registered Unemployed	310
Workdays Lost to Strikes/Work Stoppages	650

Deficiencies with Overall Unemployment Rate

- Masks Differences Across Demographic Groups
- Qualifications of Job Seeker
- Discouraged Workers
- Does Not Measure Duration
- Out-Sourcing Non-Core Activities

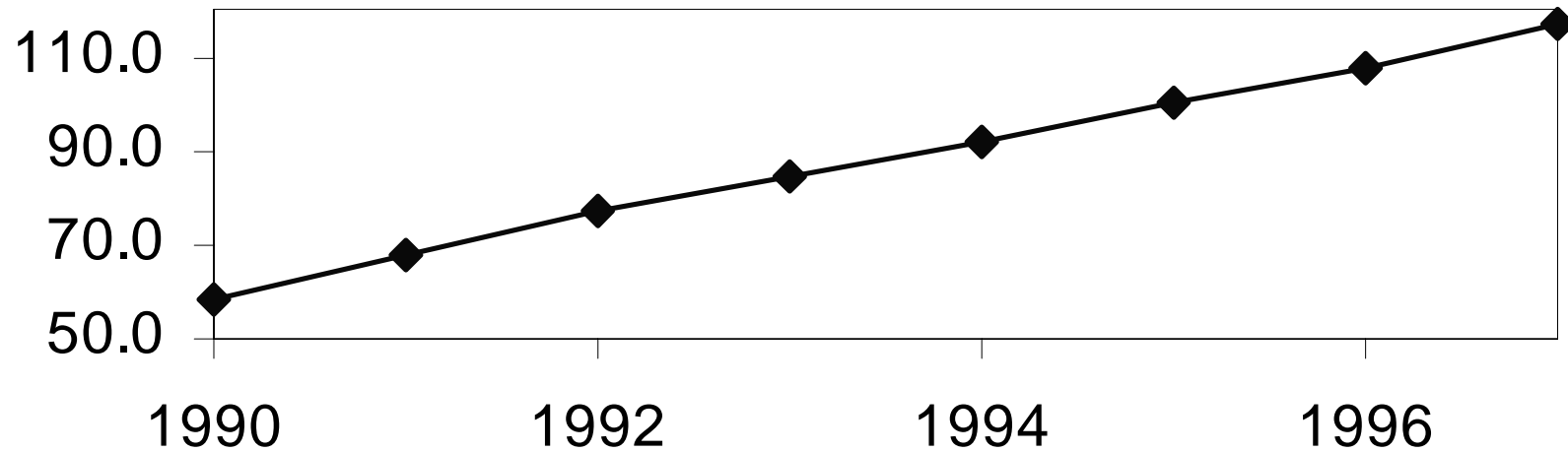
I.D. Price Levels and Inflation

- Major Price Indices
 - Implicit price deflator to deflate nominal GDP
 - CPI - urban household of four
 - PPI



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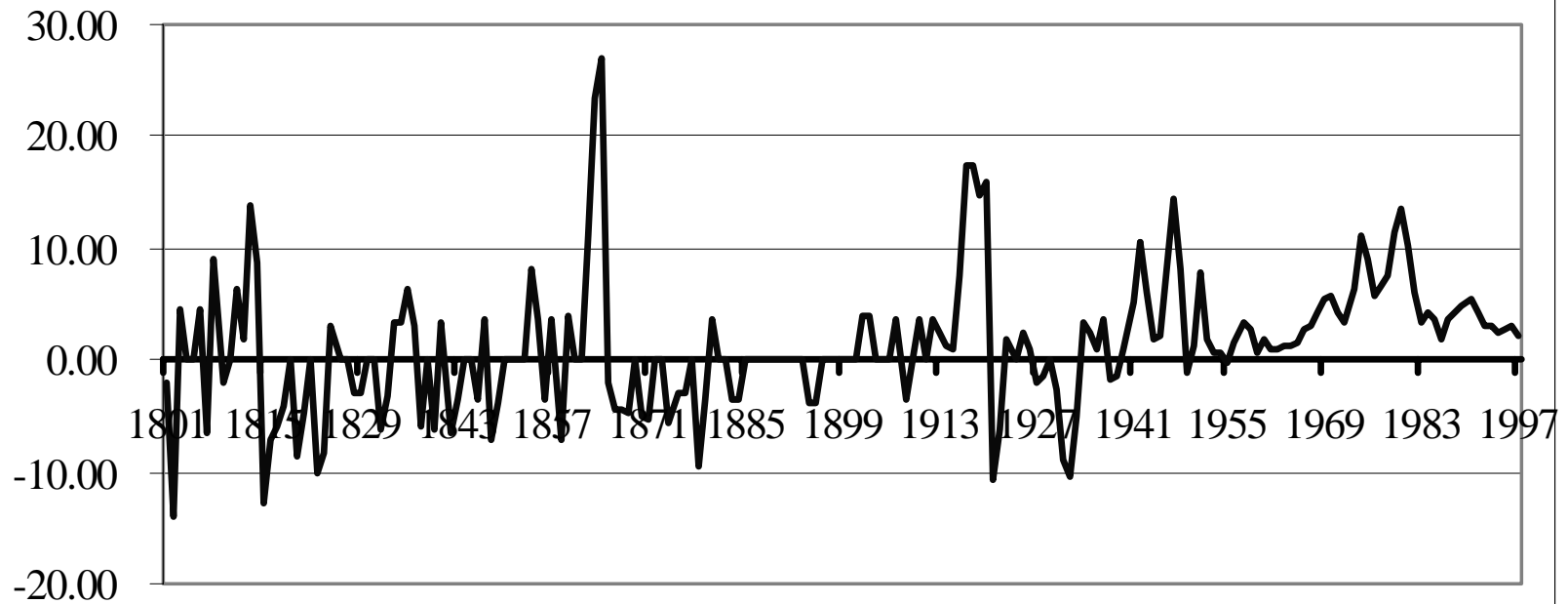
Consumer Price Index in South Africa (1995 = 100)



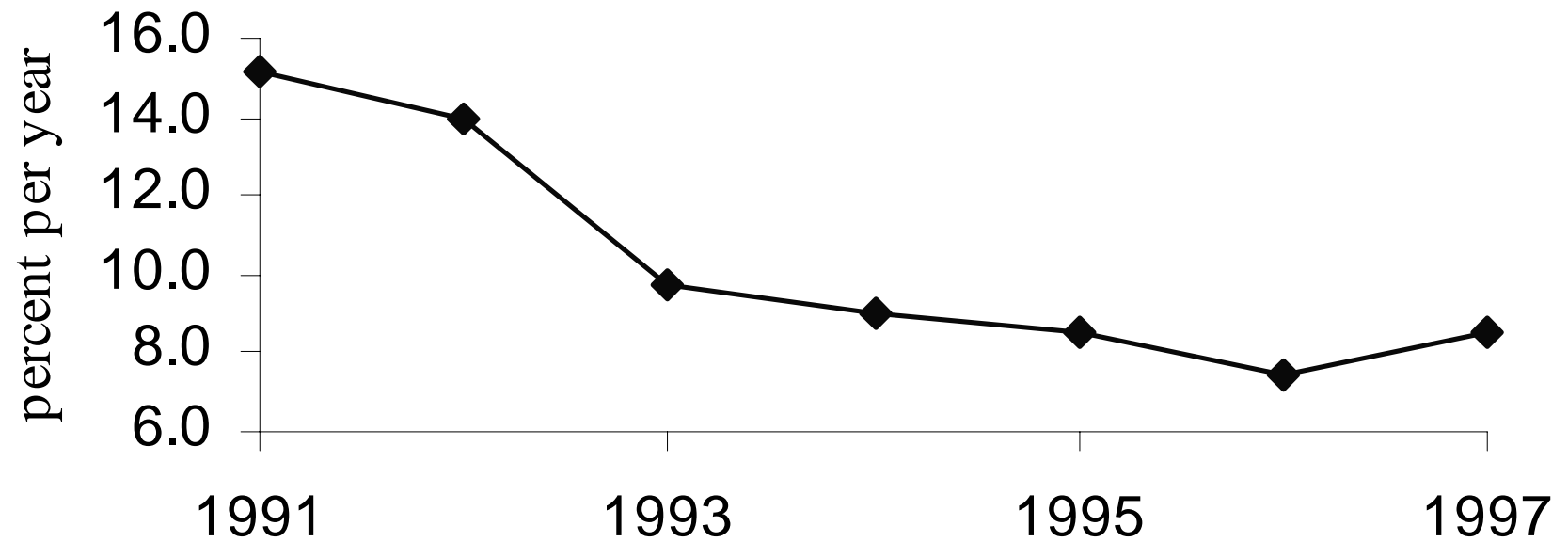
Inflation

- Definition: General and Continual Upward Movement in Prices
 - General: not a single good
 - Continual: not a once-and-for-all change
- Important Distinctions
 - Price level vs. inflation
 - Deflation vs. disinflation

CPI Inflation in the U.S., 1801-1997



Inflation in South Africa



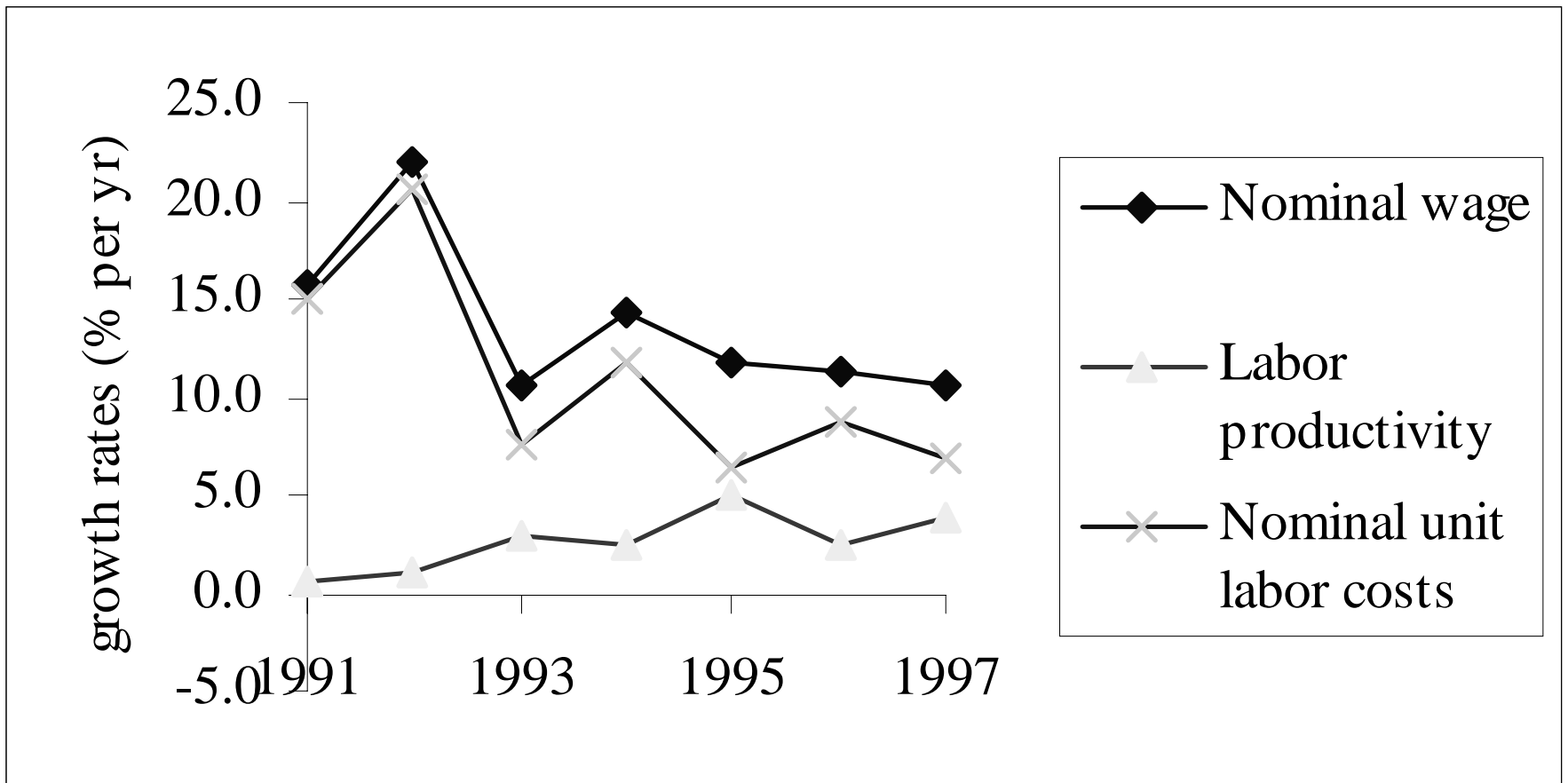
Deficiencies of Price Level and Inflation Measures

- Substitution Bias
- New Product Bias
- Quality Change Bias
- Outlet Bias

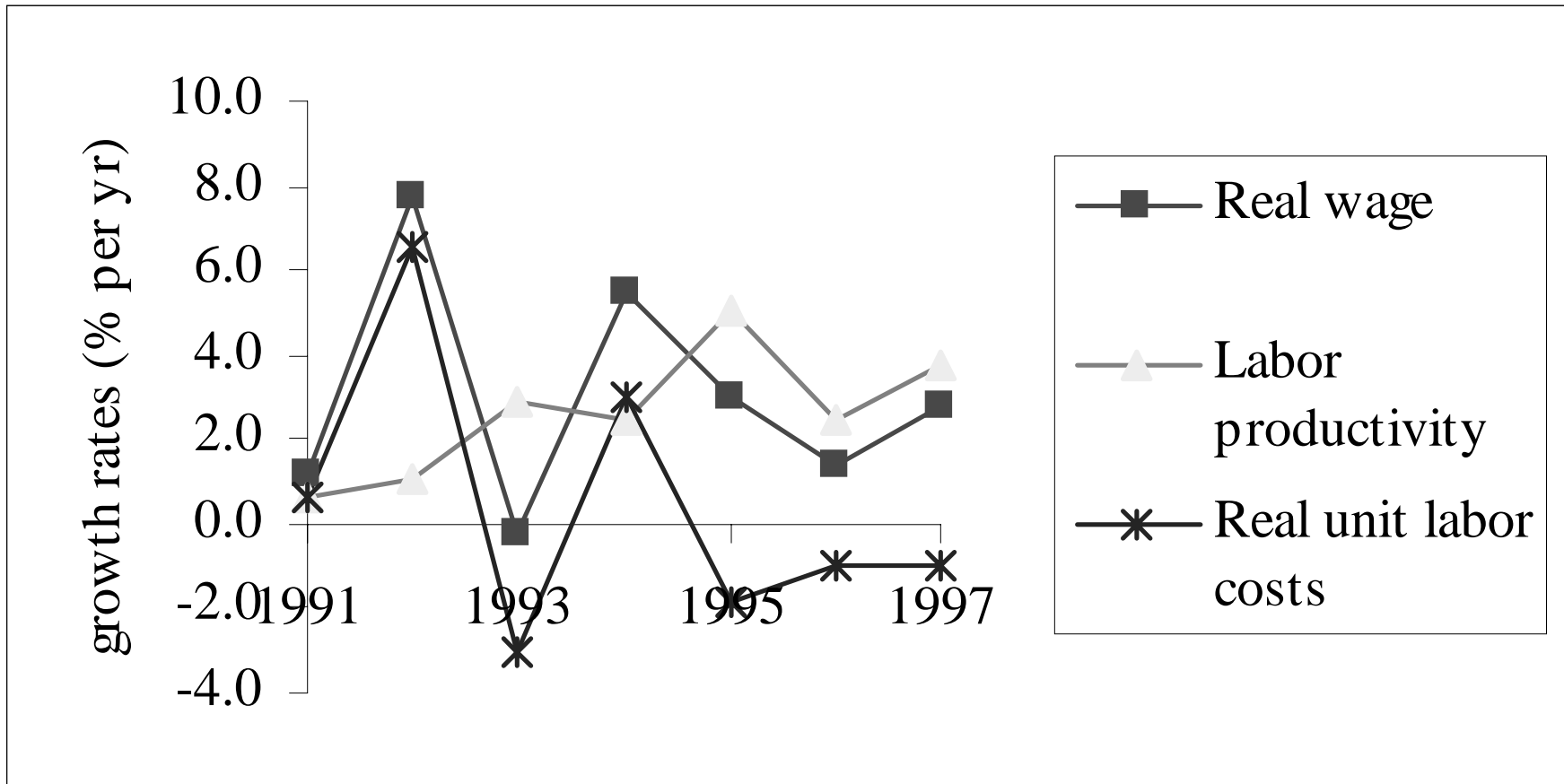
Wages, Productivity, and Unit Labor Costs in South Africa

	1990	1997
(1) Remuneration per worker-current prices	100.0	245.8
(2) Remuneration per worker-constant prices	100.0	123.2
(3) Labor productivity index	100.0	119.7
(4) Nominal unit labor costs $100*(1)/(3)$	100.0	205.5
(5) Real unit labor costs $100*(2)/(3)$	100.0	102.9

Nominal Growth Rates: Wages, Productivity, ULC



Real Growth Rates: Wages, Productivity, ULC



II. Fundamentals of National Income Accounting

- A. Income and Expenditure
- B. Saving
- C. International Transactions
- D. Saving Identity from Balance Sheets

II.A. Income and Expenditure

- Income
 - Wages
 - Profits
 - Indirect Taxes

Income Approach to Measuring GDP in South Africa - 1997

	R billions	% of GDP
Remuneration of Resident Employees	310.8	52.3
<i>plus</i> : Gross National Operating Surplus	203.6	34.2
<i>equals</i> : GNP at Factor Cost	514.4	86.5
<i>plus</i> : Indirect taxes less subsidies	65.3	11.0
<i>equals</i> : GNP at Market Prices	579.7	97.5
<i>less</i> : NFP	-15.1	-2.5
<i>equals</i> : GDP	594.9	100.0

Expenditure

- Private Consumption
- Private Investment
- Government Purchases
- Net Exports

Expenditure Approach to GDP

South Africa - 1997

	R billions	% of GDP
Private Consumption	366.7	61.6
Investment	99.0	16.6
Government Consumption	127.0	21.3
Net Exports	6.8	1.1
Residual Item	-4.6	-0.8
GDP	594.9	100.0
NFP	-15.1	-2.5
GNP	579.7	97.5

Consumption Expenditures 1997

	R billions	% of Total
Durables	32.3	8.8
Semi-durables	55.7	15.2
Nondurables	175.1	47.8
Services	103.6	28.3
Total Consumption Expenditures	366.7	100.0

Gross Domestic Investment 1997

	R billions	% of Total
Fixed Investment	103.3	104.4
Public Authorities	14.6	14.8
Public Corporations	13.4	13.6
Private Business	75.3	76.1
Change in Inventories	-4.4	-4.4
Total Investment	99.0	100.0

Exports - 1997

Exports	R billions	% of Total
Merchandise	114.1	66.6
Gold (net)	25.8	15.1
Non-Factor Services	25.2	14.7
Exports of Goods & Non-Factor Services	165.2	96.4
Exports of Factor Services	6.2	3.6
Total Exports	171.4	100.0

Imports - 1997

Imports	R billions	% of Total
Merchandise	130.8	72.8
Non-Factor Services	27.5	15.3
Imports of Goods & Non-Factor Services	158.4	88.1
Imports of Factor Services	21.4	11.9
Total Imports	179.7	100.0

Net Exports and Current Account 1997

	R billions
Net Exports of Goods & Non-Factor Serv's	6.8
Net Exports of Factor Services (NFP)	-15.1
Net Transfers	-0.5
Current Account Balance (CA)	-8.8

II.B. Saving

- Private Saving = Income + Transfers - Taxes - Consumption
- Government Saving = Taxes - Transfers - Government Purchases
 - Surplus, if positive
 - Deficit, if negative
- National Saving = Private Saving + Government Saving
 - *equals* Income *minus* Consumption *minus* Government Purchases

Saving Identity

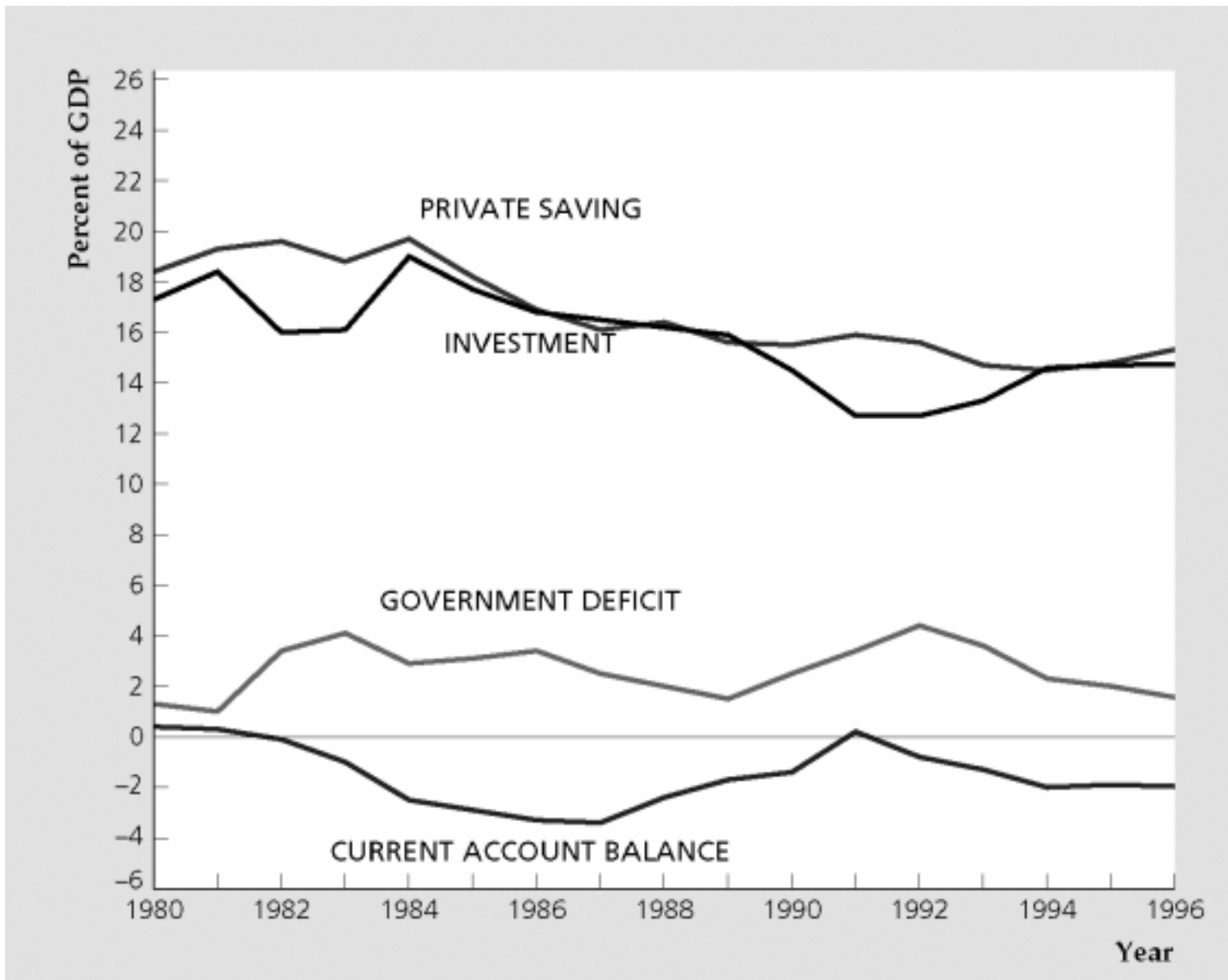
- National Saving = Income - Consumption - Government Purchases
- Income = Consumption + Investment + Government Purchases + Current Account
- National Saving = Investment + Current Account

Government Saving in South Africa - 1997

	R billions	% of GDP
Current Income	173.0	29.1
Current Expenditure	195.1	32.8
Consumption	127.0	21.3
Interest on Public Debt	37.8	6.3
Subsidies	6.7	1.1
Transfers	23.6	4.0
Government Saving	-22.1	-3.7

Saving in South Africa - 1997

	R billions	% of GDP
Gross Private Saving	112.2	18.9
Gross Government Saving	-22.1	-3.7
Gross Domestic Saving	90.1	15.2
Investment	99.0	16.6
Current Account Balance (CA)	-8.8	-1.5
Investment + CA	90.1	15.2



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II.C. International Transactions

- Basic Principles
 - Credit items: generate flow of funds into the country
 - Debit items: generate flow of funds out of the country

Current Account

- Trade Balance = Exports minus Imports
- Current Account Surplus
 - Trade balance *plus*
 - Net factor income from abroad
 - Remittances and unilateral transfers

Capital Account

- Capital Inflow
 - Sale of domestic securities to foreigners
- Capital Outflow
 - Purchase of foreign securities by domestic residents
- Capital Account Surplus
 - Capital inflow minus capital outflow
 - Exports of securities minus imports of securities

Balance of Payments

- Current Account + Capital Account = 0
- Balance of Payments
 - Current account surplus *plus* private capital account surplus
- Floating Exchange Rates
 - "Clean" vs. "dirty" floating
- Clean floating \Rightarrow balance of payments = 0

II.D. Saving Identity from Balance Sheets

- Components of Private Saving
 - Increase in holding of capital
 - investment
 - Increase in holding of government securities
 - government deficit
 - Increase in net holding of foreign assets
 - capital account deficit
 - *equivalently*, current account surplus

III. Determinants of Aggregate Demand

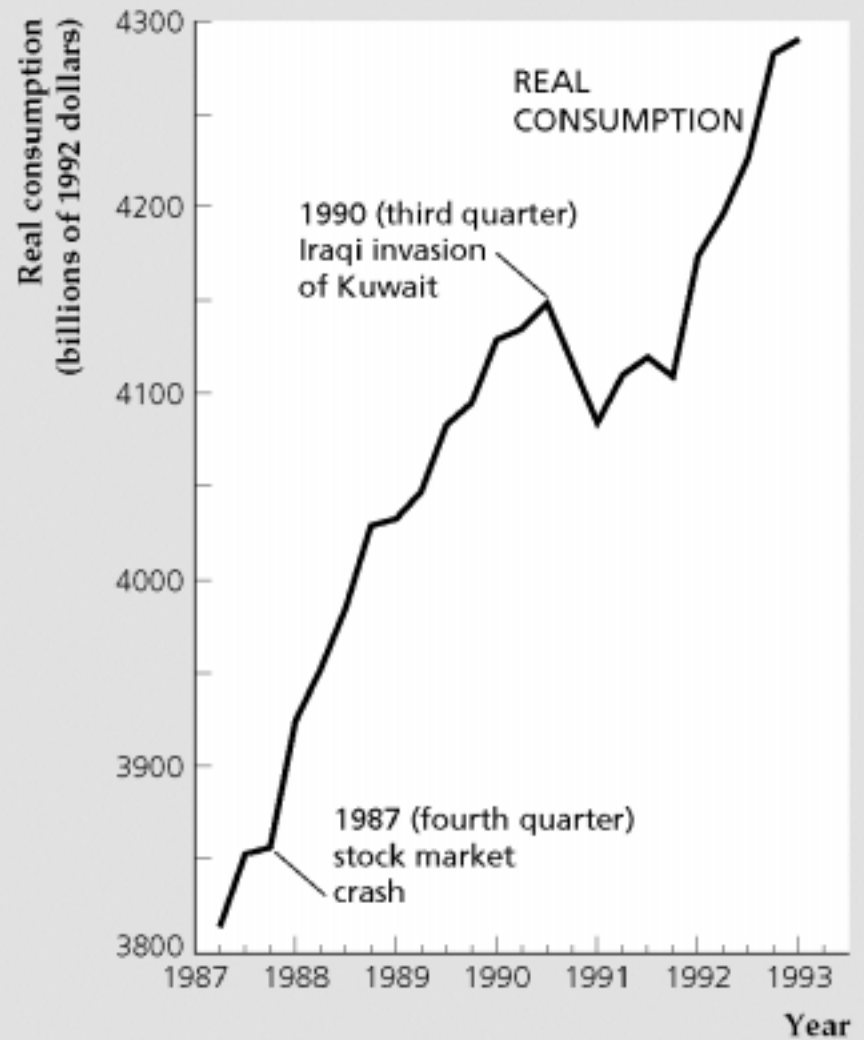
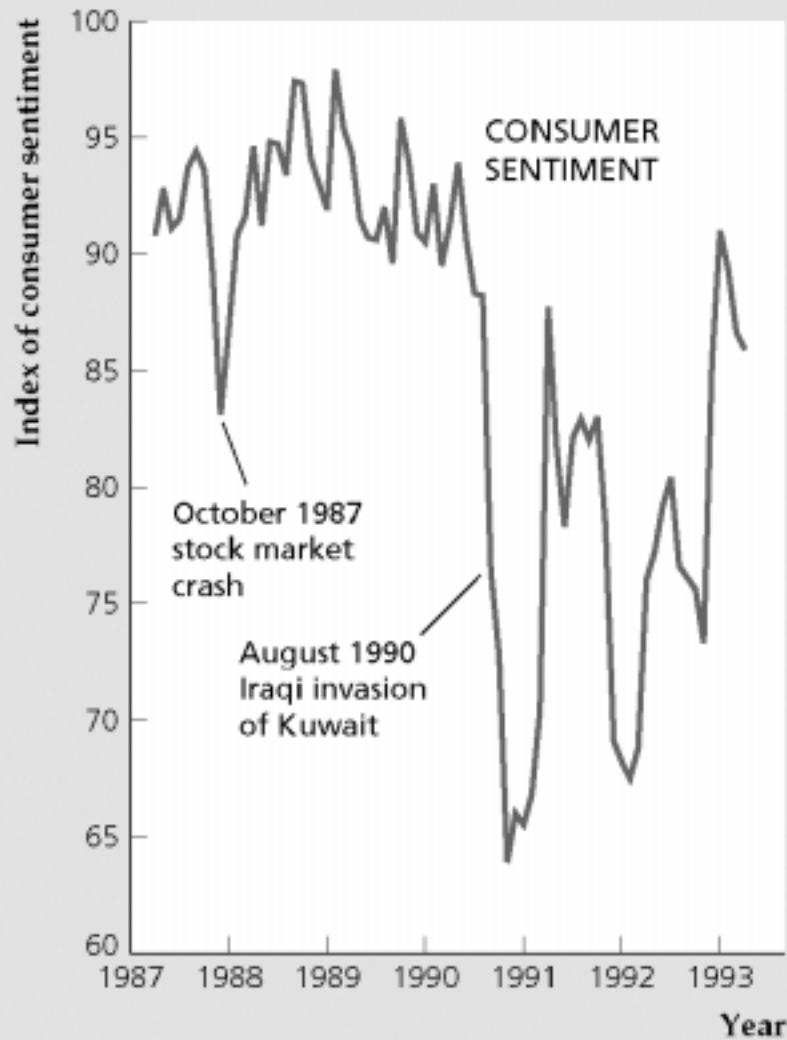
- A. Consumption
- B. Investment
- C. Government Purchases
- D. Net Exports

III.A. Consumption

- Nondurables and Services
 - Life cycle model
 - Allocate lifetime income to consumption over lifetime
 - consumption smoothing
 - Save for bequests and/or retirement
 - role of pensions and annuities

Factors that Affect Consumption of Nondurables

- After-Tax Income
 - Permanent vs. temporary change
- Drop in Stock Market
- Interest Rates
- Inflation
 - Real vs. nominal interest rates
- Liquidity Constraints



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Expenditure on Consumer Durables

- Durables Expenditure vs. Consumption of Services from Durables
- Very Volatile over Business Cycle
 - Timing is often discretionary
- Susceptible to Credit Crunch

III.B. Investment

- Business Fixed Investment
 - Accelerator effect
 - Cost of capital
 - real interest rate
 - depreciation
 - tax considerations
 - investment tax credit
 - depreciation deductions
 - inflation and historical cost depreciation

Inventory Investment

- Planned vs. Actual Inventory Investment
- Overhang of Inventories at End of Recession
- Holding Cost of Inventories

III.C. Government Purchases

- National Defense
- Social Programs
- Infrastructure
- Stabilization Policies

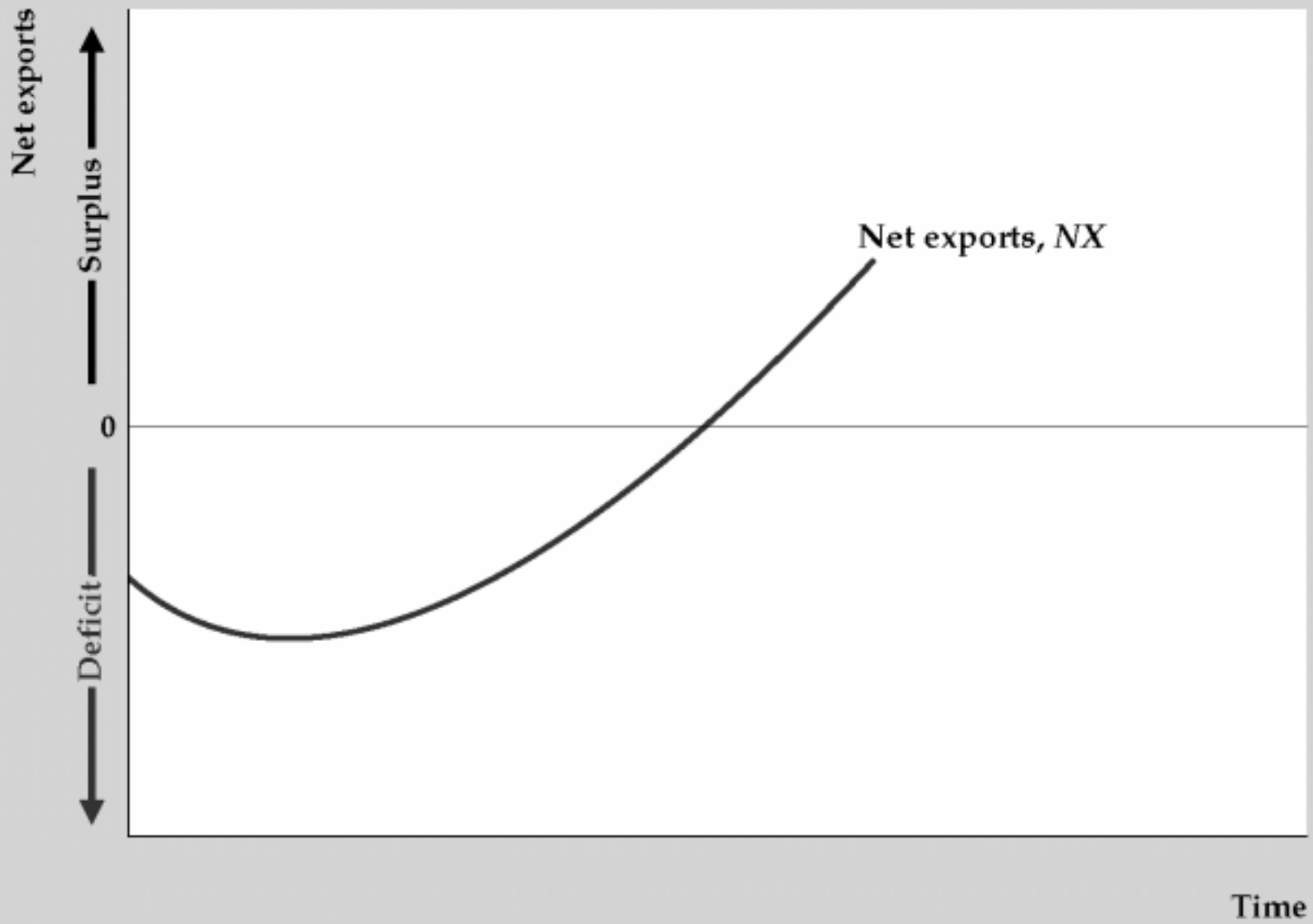
III.D. Net Exports

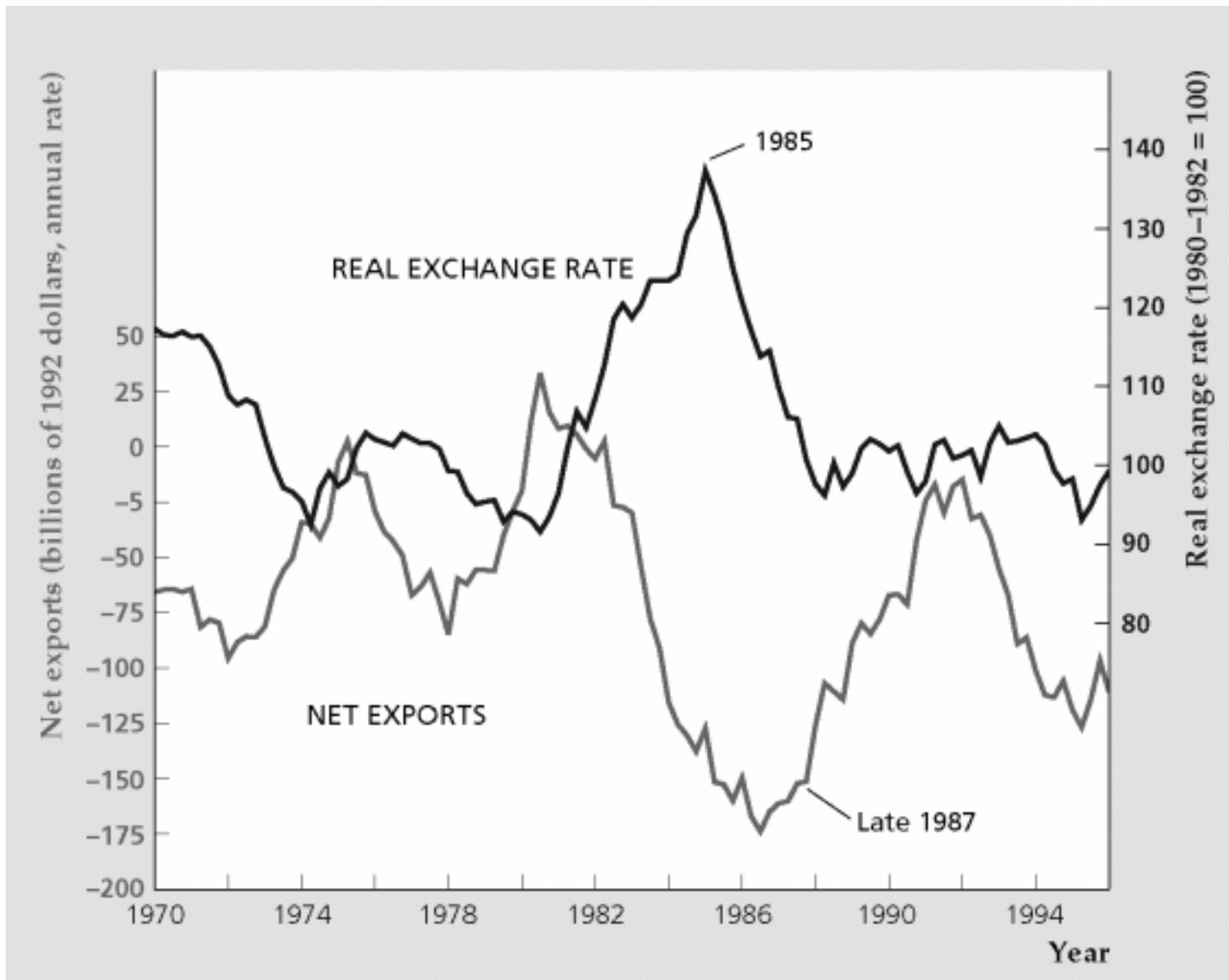
- Exports
 - Effect of exchange rate
 - Effect of foreign income
- Imports
 - Effect of exchange rate
 - Effect of domestic income
 - Tariffs

The J curve

$$\text{Net Exports} = \text{Exports} - \frac{\text{Imports}}{\text{Exchange rate}}$$

- Exchange rate falls
 - Exports increase
 - Imports/exchange rate increases initially
 - Real value of imports increases initially
 - Net exports fall initially





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